Adobe Acrobat - Version 4.x Running Reader v4.05 from CD

Information about using Windows PCs to create CD-ROMs that will run Acrobat Reader Version 4.05 directly from the CD.

v 2.0.0

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About this PDF

I hope you find the PDF useful. I offer it as a small return for all I have learned online from the generosity of others, so please feel free to distribute this document. If you do find it helpful, please return the favour by using your knowledge to help out someone else. I certainly know much more about Acrobat than when I started this project. By the time you've read this I hope you do as well.

How did this document come about?

It arose from my struggles in early 1999 to create a CD (using Windows OS) primarily for Windows users, but which would still allow Mac users to access the PDF files, albeit without icons or use of Reader on the CD (they would use their installed Mac version). This PDF document explains the knowledge I acquired from a number of sources to address these issues. Hopefully, the information will help you with similar projects of your own. The solutions described have generally been tested (under Windows 98SE) unless explicitly noted otherwise. There is very little about Unix here as I know so little about it sorry.

So who is this document aimed at?

Everybody, I hope, but it will be most useful to those who are Windows based and have no in-house access to Macs for CD creation purposes. Most Adobe TS documents assume you have Macs, or PCs and Macs - but rarely only PCs. As one of the latter, I find there is a gap in the documentation that I hope this will fill. A key issue is that presently (March 2001), the Windows community is not well served with CD creation software that will create true hybrid CDs such as required for alternate Mac or Windows platform use.

As well as cross-platform issues, incompatibilities between some CD-R media, CD-R drives and end users CD-ROM drives can produce odd results. This is why I touch on the benefits of ISO 9660 and the problems that come with its use. If you are new to this sort of project, be careful as you proceed. If you do any work directly on the Windows Registry please, please back it up *before* you make any changes.

How was this PDF produced?

With the exception of the flowchart, the entire document was created in Word 97. The flowchart was created in Visio v5.0c and saved as a Windows Meta File (.WMF). The vector format .WMF file was then imported as a graphic into Word allowing the original image to remain editable without needing Visio. All hyperlinks and internal bookmarks were created in Word, and the Word file properties ('Summary' tab) were filled in before the file was completed. Font choices were restricted to a minimum to avoid file bloat and

only common typefaces were used to cut the likelihood of font substitution on the viewer's computer.

The Word document was then turned into a PDF using the 'PDFMaker 4.0' toolbar within Word, noting that PDFMaker's options were set to use Acrobat Distiller with the latter's print options. This configuration was chosen as Distiller is more capable of correctly interpreting graphics, such as the flow chart. As the file is intended mainly for browsing on screen, the 'ScreenOptimized' option was selected to keep the PDF size down.

Apart from checking the file the only remaining task in Acrobat was to add a bookmark to the flowchart page in the PDF and add some links to that page. No specialist desktop publishing software was needed. So, it's not that hard - now you try.

Acknowledgements

To aid printing either in the US or Europe, the document page size uses the US Letter format, this being slightly smaller than European A4. I have used Courier typeface to indicate code or path strings in the text — i.e. what you see or type on your PC.

Acrobat and Acrobat Reader are trademarks of Adobe Systems Inc. Windows is a trademark of Microsoft Corp. You are encouraged to study and abide by the Acrobat Reader End User Licence Agreement (EULA) before circulating CDs with Reader installed on them. I've included information from some of Adobe's web pages for Acrobat in the Appendices, though if relevant you should check the originals at www.adobe.com.

I've endeavoured to make this document as accurate as my limited testing resources allow. I hope there is enough here both to enable ordinary users to do the simple stuff and, as importantly, to see the point at which they should decide to pay for suitably qualified external assistance. If your project includes many PDFs or many inter-PDF links you may wish to look at the various automation plug-ins and utilities available. Though they are not free like this PDF, they may save you a lot of time and frustration on a big or complex project. For those of you wanting to go deeper into this subject I suggest you download relevant parts of the Acrobat SDK and look at the MSDN Library.

If there are any significant errors, omissions or comments please let me know at mark@yeardley.demon.co.uk. The information is offered as is. If you need further support for Acrobat/PDF see the list of references at Appendix F.

Mark Anderson

Portsmouth, UK March 2001

[If you are reading this some while after the original publication date it is worth checking for either changes to the Acrobat apps or new Adobe Tech Support documents on this subject. In addition, the cross-platform limitations of current Windows based CD-R writing software may well have been overcome. It is also worth checking major vendors' web sites and doing a web search for CD-R FAQs.]

Acrobat Reader on CD

Can I put Acrobat Reader on a CD?

Yes, though you **must** be using Version 4. The Winter '98 Q&A section of *Adobe Magazine* (available on their web site) included the following guidance about Reader v3.x:

PC/Mac: Can I put Acrobat Reader 3.0x on a CD and run it from the CD?

No — please don't! It may not work correctly, and Adobe cannot support that configuration. Acrobat reader was developed to be installed locally, on the same system that will be running it. We strongly recommend that you install reader onto the hard drive of any system on which you will be running it (installing it on a network drive is not a good idea. To install reader you should have 10 to 12.5 Mb of hard-disk space.

In Spring 1999, Acrobat Reader v4 was released as part of the new Acrobat v4 suite. Version 4 does offer the flexibility of creating CDs with Reader 'installed' on the CD. This allows the user to access PDFs without having Reader v4 or Acrobat v4 installed on their system.

Do be aware that Reader v4 is distributed in two configurations — with and without the 'Search' facility plug-in. Both operate in exactly the same way except the former is able to use the Search command to perform full-text searches of PDF document collections assuming they have been indexed using Acrobat Catalog. To help distinguish between the two configurations, the filenames of the (English language) installers are:

Search?	Installer	File Size	
No	ar405eng.exe	5.2 Mb	
Yes	rs405eng.exe	6.18 Mb	

The configuration with the Search facility was not ready for the original April 1999 release of Acrobat v4 and only became available for download from July 1999. As a result the newer version is not found on early issues of the Acrobat v4.0 application - since superseded by the v4.05 application CD. I understand that the Reader CD (which has all the different language versions of Reader on one CD) has the Search version available on it

Since initial release there have been a minor version update and number of bug fixes 'updaters' have been released. As at time of writing, the current version number is v4.05c. This full version number is not reported correctly in a number of places on the application. So, to check the true version number, open Reader and select menu 'Help->About Acrobat Reader...' which will bring up the Reader splash screen. At top left will be some text '4.05c xxxx xx:xx' - ignore the xxxx bit, which is a date/time stamp of when you installed Reader. Note If you see references elsewhere to v4.06 this in fact confusingly implies v4.05a in installed.

If you are using v4.05 but the version is not v4.05c you can download a patch which will update your installed version to v4.05c. The file is named 'ac405up2.exe' (c. 2.5 Mb) and can be downloaded from the Adobe website. If you are not a regular used of Acrobat I strongly suggest you check the Adobe site for any updates since this guide was written before starting your project to ensure you are fully up to date.

The download file name will in fact indicate the version number and Reader type. The first two letters indicate if the search plug-in is included, ar = Reader, rs = Reader + Search. The next three characters are the version number, e.g 40 = 4.0, 405 = 4.05, 409 = 4.09 (if there ever is one). Note that minor version number e.g. v.405c is not shown until the program is installed. The last three letters indicate the language used in the program, e.g. eng = English, fra = French, etc. So ar405fra.exe is the installer for the French language version of Reader v4.05 without Search.

What files do Adobe recommend I use?

Adobe has produced a Technical Support document # 323115 (at Appendix A) which explains the official version of how to put Reader v4 on CD. Note that this document has been updated since version 4.0. The document makes some fundamental assumptions that may not help the Windows based user. The default suggested action is installing Reader with Asian font support, help files and installers in English, French and German. Consider this:

Folder sizes on Acrobat v4.05 CD:

- \Acroread\ = 107 Mb (i.e. all subfolders below)
- \Acroread\AsianFontPacks\ = 34.5 Mb
- \Acroread\CD\ folder = 55.4 Mb
- \Acroread\Installers\ = 17.1 Mb (English 5.41 Mb, German 6.03 Mb, French 5.7Mb all v4.05 non-Search, no patch for v4.05c)

Strictly following the instructions in Technote # 323115 you would need to include files which would take up 80 Mb of the CD, or 114 Mb if you include the Asian fonts installer. The layout of the required file set (without Asian fonts) is at Appendix B.

Consider making a hybrid CD — one with both PC and Mac partitions. If the Mac files are as large as the PC ones you could lose 228 Mb of usable data space to Reader.

See also the Acrobat Guide PDF section on 'Distributing PDF Documents on a CD', pp495-497. For on more on this subject see the 'Creating your CD' section below.

Can I reduce the number of program files to save space on the CD for content?

Happily, yes you can. Depending on which version of Reader v4 you use (i.e. with/without Search), the minimum files needed are 11-14 Mb in size. To do this, drag only the Reader v4 files installed on your hard drive to your CD disk image.

If you have a full installation of Acrobat v4.x on your hard drive this can be a bit tricky, but Appendix C lists the files needed (for Reader with Search). Alternatively, install Reader onto a PC without Acrobat and then drag the \Acrobat 4.0\ folder and all its contents directly into your CD disc image files or onto a ZIP and then to your CD disc image files if transferring between PCs. Note that the "Acrobat 4.0" folder is not a fully compliant with some CD format naming rules (as explained later) and that you may need to rename some of your files/folders.

You then need to add a folder with the Reader installer(s) in it; you can get this from the Acrobat application CD, the Reader CD (Appendix G) or download from www.adobe.com.

Note that the licence provisions for Reader demand that you include:

- The Acrobat Reader installer, exactly as provided by Adobe. (Find it on the Acrobat CD only the 'without Search' version or download from Adobe)
- The Acrobat Reader Electronic End User License Agreement. (This is a .TXT file that Reader installs into the \Acrobat 4.0\Reader\ folder.)
- Copyright and other proprietary notices included in Acrobat Reader.

Assuming you copy all the files in \Acrobat\Reader\ folder you should have everything required.

I have not been able to test on a totally 'virgin' Windows 95/98 PC but as far as I can tell, the Reader application does not install files to any other folders such as the \Windows\System\ folder. It creates any Registry entries it needs when run from the CD for the first time on a non-Reader v4.x system (more on Reader and the Registry later).

Does the reduced file set method only work for English language versions?

I don't think so. I have not been able to test this but I assume that for languages not using complex fonts you should be able to use the above method for the language of your choice. For example, you could install French Reader v4 on to your (French) Windows PC, and drag the Acrobat folder to your CD disc image files as described above. This method would probably hold true for any language-specific version except those that use double-byte characters (Chinese/Japanese/Korean) or do other tricky things with type (Hebrew/Arabic/Thai/etc.). That said, the 55 Mb file set referred to in the Adobe TS doc#323115 seems to include the necessary fonts. I'm afraid you will need to test this yourself if you are using other than simple (non double-byte) languages.

It also follows that you ought to be able to create a CD with a number of different languages installed on it (use differently named top-level folders). In this case, AutoPlay becomes more problematic as you will need to have/have access to programming ability or a utility to make a small AutoPlay app that detects the language version of the OS and calls the appropriate version of Reader and PDFs

Do I need to own the complete Adobe Acrobat v4 application?

Yes and no. You need the full Acrobat to create PDFs in the first place, though other PDF-writing utilities (with more limited functionality) are beginning to emerge on the market. To use the official Adobe guidance on creating a CD with Reader, you will need files from the application CD, and thus the full Acrobat application. Note though, you will only be copying the files from the application CD to your CD-R disc image files, so your copy of Acrobat need not be installed onto the PC you are using to create the CD-R. If you wish to create CDs with searchable indexes, the full version of Acrobat is required to get access to Acrobat Catalog that allows you to index your PDFs.

The cut-down installation method I describe can be achieved with only a copy of the freeware Acrobat Reader application, but first you will need to install it on a PC and of course you will not be able to use it to create any PDFs.

If your project requires the use of any third-party plug-ins you should check that:

- they are licensed for use in Reader most only work in the full Acrobat.
- they do not require to be running from a hard disk as opposed to a CD.
- they do not require the presence of any files (DLLs etc.) that may not be installed on the user's system.

Setting up content files for the CD

Where do I put my PDFs and other content files for the CD (Windows OS)?

The way to ensure your content behaves as expected is to work out your layout beforehand. Create the folder/file layout on your staging drive rather than trying to create a layout 'on the fly' in your CD-R software.

As long as **all** your PDFs, media files (movies etc.) and indexes are on the **same** physical partition/hard drive any inter-file links in Acrobat will be relative. It doesn't matter if the drive you are working on is on a server, removable or suchlike. The key point is that all files are on the same drive. This ensures the links are written as relative paths. Thus as long as the relative folder structure of the staging area is maintained on the CD, the links will work when located on a different drive, i.e. your CD.

For example, you create links between your project's PDFs whilst they are scattered across your C: and D: drives and you then run the project on a user's CD drive 'E:'. A file originally linking from D: to C: drive will look will look for the target file on the user's C: drive instead of E:. By comparison, links originally from D: to D: are relative and if run on E: will look on E: for the target and thus work.

It is worth noting that when Reader is run from a hard disk the default folder for Reader's 'Open' menu command is the folder containing its executable (..\Acrobat 4.0\Reader\) but when run from CD, the default folder is the 'root' drive of the CD, i.e. the top level folder of the CD.

If your content involves more than one PDF and you have created links between the PDFs, consider creating a 'contents' PDF with links to PDFs in other folders. It is also good practice to keep the content files separate from the application files, perhaps by placing all the content in a folder \content\. If you are using media such as movie clips you may wish to put them in a content sub folder to keep them apart from your PDF files. If your media clips use helper programs such as QuickTime, check whether this can run from CD or not. If not make sure to include an installer for the helper application on your CD, ideally placed in the folder holding other necessary folders such as those for Reader.

If you need to use ISO 9660 filenames (8.3 names) on your CD, you should take naming limitations into account early on and ensure the content files are generated with suitable file and folder names to avoid more work before being able to create indexes and the CD disc image. If you are using a PDF 'contents' file with links to your other PDFs, user will not need to use Windows Explorer/Mac Finder and so "My Very Long Descriptive Filename.PDF" is no more useful than an 8.3 compliant "CH2_PT3.PDF". However, you might wish to arrange the PDFs in sub-folders to aid the user to find the appropriate files via a 'File->Open' dialog. Don't forget to decide the layout and sub-folder names before you start linking files.

Can I include indexes with my PDFs?

For a more sophisticated CD product, you can also include an Adobe Catalog-generated index file (.PDX) for your PDF(s). The Catalog program is installed as part of the full Acrobat suite. Note that to use these facilities your CD must have the version of Reader that includes the Search plug-in. The plug-in then uses the indexes as the source reference for user defined searches. As well as the PDX file, Catalog creates a series of other folders that are part of the index so don't forget to include these in your CD set up.

If you observe the same caveats about folder structure for your PDFs as explained in the section above, this system will work correctly when burned to CD and can enhance the quality of the information you are supplying. If you are using a Catalog index, there is even more reason to set out your CD with all (content) PDFs in one folder, to reduce the chance of creating broken links when moving the files to your CD disc image.

Having created your index (in the correct location), open your PDF and select File>Document Info->Index... which will pop an 'AutoIndex' Dialog. Click the 'Browse' button and navigate to your .PDX file, click OK, and save the PDF. Repeat as required for an PDFs requiring the indexed search capability. Now, when the PDF is opened with Reader+Search, the index is automatically called into use, so potentially a whole collection of indexed PDFs on the CD can be searched and opened. Note that if you are using indexes you will see briefly a couple of extra dialogs as Reader opens ('Starting Search Engine' and then 'Attaching Indexes'). If you see these dialogs during testing it is a useful tell-back that your PDF has been linked to an index.

Part of the Acrobat v3 suite, Catalog v3.0 was a 16-bit application so it indexed the short form of file names. It was necessary to either stick to short names, or use a CD creation method that preserved the original short file names. If you need to share your PDFs/PDXs with users with Reader 3 consider sticking to 8.3 names. Of course, as long as they use the Reader on your CD they will be using Reader and Search v4.

To make the most of these search features you should take the time to read the sections in the Acrobat Guide about Indexes and links. If you are reading this PDF in Acrobat v4 (not Reader) this link will open the Acrobat Guide which is in PDF format and called from the Help menu or located on your hard disk at (English language version default):

C:\Program Files\Adobe\Acrobat 4.0\Help\ENU\Acrohelp.pdf.

Or on the Acrobat CD at:

[CD drive]:\English\HELP\Acrohelp.pdf

(see Acrobat Guide PDF pages 414-458, 'Indexing Document Collections' and 'Searching Catalog Indexes')

Can I open my PDFs in Reader at a particular page?

Yes, there are 2 possible methods. The first is to set the PDFs open preferences under the menu File->Document->Open. Here you can set a page number and the document will always open at that page, unless called by a link from another PDF - which is the second method.

What it is not possible to do at present is enter a page number into a command line argument when opening Reader & a PDF from Windows (see more on Command line statements).

Can I pre-set non-default preferences for Reader?

Yes and no. Most preferences changed in Reader require the application to be restarted before the change is effective. Such a procedure negates the value of AutoPlaying your CD. There are two other methods you could choose.

The first is to run a document level JavaScript which will allow you to change a very limited number of preferences: full screen mode, display both toolbars, display horizontal toolbar, display vertical toolbar, display cross-doc links in the same window. The last causes each PDF to be closed as the next is opened - if called by an inter-PDF link. A short tutorial on how to create and use a document level script is available on my web site.

More complex, and not for the inexperienced is to pre-write the necessary keys to the users Registry before running Reader. As this is not possible using an autorun.inf file it falls outside the scope of this document.

Creating an AutoPlay CD

This chapter is primarily devoted to making CDs AutoPlay on a Windows PC but there is less information regarding Macs as they tend not to use such a feature. Reflecting feedback from users of v1.x of this PDF I have rewritten much of this chapter, to give a description that non-programming folk can follow. The system used is quite simple but there are a number of caveats you need to understand before you start work.

What are AutoPlay CDs?

In 32-bit versions of Windows (95, 98, 2000, NT4) the is an 'AutoPlay' facility that allows programs to be run as soon as a CD is inserted and read, without user intervention. To access this function your CD must include a special file named autorun.inf in the root folder of your CD (more on the 'root' folder below).

The file name is recognised by the windows OS and the CD will 'AutoPlay' according to the information you supply. Note that your autorun.inf file must be in the Windows partition of your CD if using the hybrid format

Can I create an AutoPlay CD for Macs?

Answer: you don't. This is because:

- it is not the normal style on the Mac.
- many Mac users turn this feature off, as a serious virus was once spread that way.

The Mac layout style is for a folder to open automatically when the CD-ROM is inserted, containing icons that do obvious things. Using Adaptec's Toast (a Mac CD making program), it is just a matter of having the appropriate window open for the source partition when you set up to burn the CD.

Such things may be less easy to achieve authoring hybrid CDs from the PC and will depend on your utilities and degree of access to a Mac to set-up the Mac files and folders. CD formats are discussed further below.

Some things you should understand before starting

If you are familiar with the paragraph headings below, you can skip this section. It is included to help out those with little or no Windows programming experience.

Root Folder.

The term is confusing to many people but is important for this technique. The 'root' folder is the top level folder on your CD and is equivalent location to the C:\ folder on your hard drive. From a layman's perspective you could say the root isn't a folder as you don't see a folder icon in Explorer, just the drive's icon. Whatever way you find comfortable to understand it, the root folder is important as it is the first folder to get read, i.e. the OS has

to read through C:\ on its way to C:\anyfolder\otherfolder\. Thus you put your autorun.inf file in the first folder to get read as your CD spins up in the drive.

CDs and drive letters.

In Windows a CD drive is allocated an identifying letter, like a hard drive, with the CD drive letter sequentially following those of the hard drives. An ordinary desktop with one drive of each type will have hard drive C: and CD drive D:. With two hard drives and a CD this would make the CD drive E:, C: and D: being the hard drives. Your problem as the CD author is that you can't rely on the drive letter of the CD drive being the same on your PC as on the PCs of all your CD's users. This is just one of the reasons for stressing the need for relative links in the earlier section on setting up your content.

Path statements and path syntax.

A path is the system's roadmap to find the location of a file. You may also see a path statement referred to as a 'string'; don't worry, for your purposes it means the same thing. If 'myfile.pdf' is in folder \bar\ inside folder \foo\ on the D: drive, it has the path D:\foo\bar\myfile.pdf. The same location on drive whose name you don't know, e.g. your CD, would be \foo\bar\myfile.pdf (note the backslash at the start of the path). In the autorun.inf, path statements have one important difference - there is **no backslash** at the start of the path. Thus for an autorun.inf file you would use foo\bar\myfile.pdf for the last example. Windows is not case sensitive to upper/lower case characters so don't worry about whether file or folder names are capitalised. The same is not true in other operating systems such as Unix or with web URLs.

Command line and command line arguments.

A command line is a path statement you give to the operating system to allow it to run a program. Try this out now. Click the Windows 'Start' button and select 'Run' from the popup menu. In the run dialog type 'C:\Windows\Notepad.exe' and click the OK button. Notepad opens - you just executed its command line. Some programs also allow 'arguments' as an additional statement to indicate a file to be open by the program when it runs. Create a text file called test.txt and save it in C:\Windows. Now repeat the exercise but type 'C:\Windows\Notepad.exe test.txt'. Notepad runs, displaying your test file (now close Notepad and delete test.txt). In the example the file has no path only because it is in the same folder as the program. Note that the program path and the argument path are always separated by a single space.

Using double quotes in paths.

32-bit Windows bought users the ability to use folder and file names over 8 characters long and with spaces in them, e.g. \foo bar\ and 'my long descriptive name.txt'. However, try using paths with spaces in the names and most likely you will get an error. Why? Because when the system reads the string of characters, it interprets the space as the end of the path, when in fact it is only part way through. How do you get round this? Use double quotes, e.g. "\foo bar\". The quotes tell the system to treat everything between the quotes as one statement. Not surprisingly, you may not use the " character in a file of folder name. You can still use double quotes with 8.3 names/paths - in fact using double quotes is a good habit for the novice to use to avoid difficult to diagnose errors. Thus:

```
\my folder\myexe.exe my file.txt is likely to fail
"\my folder\myexe.exe" "my file.txt" works OK
```

At this point, you may see that to save yourself a lot of trouble there is much sense in sticking with simple folder names with just 8 letter or number characters. My experience is you use more fancy naming - which you may feel is more user-friendly - at your peril.

It is important to understand that the autorun.inf's command syntax is subtly different to that used with either Windows shortcut (.LNK) files or the Windows Start->Run command. These differences can easily catch you out. So, do not use these other methods to test the correctness of your autorun.inf path strings as you will fail to trap errors correctly. I'll give more detail below about AutoPlaying hard drives for test purposes.

That covers the background. Now it is to start programming your autorun.inf file.

What is the general format of an autorun.inf file?

The .INF file uses a basic text format that may be created or opened using Windows' Notepad. The normal default consists of 3 lines of information:

```
[autorun] (required heading - in square braces)
open= (path to program.exe plus optional command line arguments)
icon= (name of icon (.ICO) file in root folder)
```

If the icon is located anywhere other than the root folder you are supposed to use 'defaulticon=' instead of 'icon=' in the second line. However, from experiment 'icon' seems to work in all cases.

The autorun.inf file allows you to specify (open=) the path of an application to run and, if command line arguments are accepted, the file the application should open. Additionally (icon=), an icon can be specified which will show instead of the CD drive icon in Explorer and Windows folders when the CD is mounted.

How do I get my AutoPlay CD to run Reader when the CD is inserted?

In the sections below you will see how to create an autorun.inf file that will open Reader in the default folder location $\Acrobat 4.0\Reader\$ and open a file $\mbox{my.pdf}$ in the folder $\content\$. A cut and paste example of this is given after the explanation.

The 'open' statement - example with only the program opening.

Here you call the program by providing the path to its executable (.EXE) file. For our Acrobat reader layout this is As the autorun.inf path syntax starts **without** a backslash, you use:

```
open="Acrobat 4.0\Reader\AcroRd32.exe"
```

Note that double quotes are required as the folder \Acrobat 4.0\ contains a space. Without the quotes, the system would read the line as 'open=Acrobat' with the argument '4.0\Reader\AcroRd32.exe' which is not what you want.

The 'open' statement - example with program and file opening.

Building on the example above you now add the argument for your PDF file's path:

```
open="Acrobat 4.0\Reader\AcroRd32.exe" "content/my.pdf"
```

Strictly speaking the argument for the file does not need quotes, but I've included then to help highlight the space you must leave between the program path and the file path. Note that each of the statements is enclosed in its own set of double quotes. Using a one set for the whole line would cause the system to see only one (incorrect) statement.

This example assumes 'my.pdf' is in the \content\ folder. What happens if you just put "my.pdf" for the file argument? Here, behaviour differs from hard drive to CD. On the hard drive, no folder information will cause the application to looking the Reader EXE's folder for my.pdf. On the CD, it is the root folder of the CD that the system will look to for my.pdf.

The 'icon' / 'defaulticon' statement.

```
defaulticon="Acrobat 4.0\Reader\AcroRd32.exe,1"
```

This statement is optional and tells Windows what graphical icon to show in Explorer for the CD drive when your CD is mounted. In your example, to save creating an icon you use one of the icons embedded in the Reader application. The notation ',1' at the end of the example line above is to indicate you wish to use icon #2 contained in the AcroRd32.exe file (icons number upwards from 0 not 1). In fact, Reader has 5 embedded icons; you might also like to choose from #0 which is the Reader application's icon, #1 which is a PDF file icon or #4 which is a file icon for an FDF Acrobat Form file.

If you have ready made icon of your own, place it in the root of the CD and replace the defaulticon line with:

```
icon=myicon.ico
```

Note that you don't need to give an icon number with an .ICO file. If you know a little bit about graphics you can have a go at making your own icons. Although the icon image file is in bitmap form, you cannot simply change the extension of a bitmap from .BMP to .ICO and expect it to work.

The quick way to get a professional looking result when using Acrobat Reader on your CD is to use Reader's icons as described.

Putting the statements together.

The example below is for an autorun.inf file which will both AutoPlay Reader and in turn open a PDF. You can create it easily using Windows' Notepad. Open Notepad, then cut and paste the text shown below between the hash marks into the Notepad file and 'Save As' with the name 'autorun.inf'. Now make sure this file is included in the root (top level) folder of your CD when you burn it.

####

####

```
[autorun]
open="Acrobat 4.0\Reader\AcroRd32.exe" content\my.pdf
defaulticon="Acrobat 4.0\Reader\AcroRd32.exe,1"
```

(Important Note: the paths have **no backslash** (\) preceding the first folder or file name. Don't ignore double quotes (") - see previous notes)

Extending the functionality of Autorun.inf

There are also some extensions to the autorun.inf file you can use that will put shortcuts on the context (i.e. right-click) menu of the CD's icon. For example, add this to your autorun.inf (below the icon= line) as lines 3-4:

```
shell\read\command=notepad.exe readme.txt
shell\read=Read M&e First
```

The CD icon context menu will have a new item, "Read Me First" that launches Notepad with the readme.txt file from the CD loaded; 'E' will be set as the hotkey. Don't forget the default folder location on the CD is the root, which is where your readme.txt file should go. The ampersand (&) character in the second line denotes the hotkey letter, which is underlined in the menu. So Rea&d Me First would make 'D' the hotkey, and the menu item would appear as "Read Me First". If you use hot keys (you don't have to), do ensure that the letter you wish to use isn't already assigned to a standard Windows context menu choice, such as Copy, Properties and Rename. The first listed menu entry for any hotkey gets executed.

As for the open command, you can give a path to the file you wish to open (note as for the 'open=' and 'icon=' lines, no leading backslash is used):

```
shell\read\command=notepad.exe mydocs\readme.txt
```

You can add more than one such context menu shortcut by tweaking the 'read' verb:

```
shell\read1\command=notepad.exe readme.txt
shell\read1=Read M&e First
shell\read2\command=notepad.exe acrobat4\reader\(c) adobe.txt
shell\read2=Read Adobe E&ULA
```

This adds "Read Me First" and "Read Adobe EULA" items to the CD's right-click context menu. Items are added in the order they are in the autorun.inf. For more menu entries use ' $shell\read3\...$ ', ' $shell\read4\...$ ' etc. Note that in the EULA path statements no double guotes are required, as both paths are 8.3 compliant with no spaces.

If you want to extend your autorun.inf's functionality further, consult the online Microsoft Knowledge Base and search for "AutoPlay" and "autorun".

For utilities that extend AutoPlay functionality without requiring programming knowledge see Pollen Software's programs.

How do I test my autorun.inf file?

You can test the AutoPlay function by placing the autorun.inf on the root of one of your hard drives. I would not recommend using your boot drive (normally = C:) if you only have the one hard drive and are not familiar with Windows as errors in your autorun.inf could create problems you might find difficult to resolve without assistance.

How do you use the .INF file of your hard drive? First, copy the file to the root of the drive you will use, e.g. to D:\. Next, in Explorer or the 'My Computer' window refresh the view (shortcut = F5 key). This causes the system to re-read the folder/file structure. Now you can:

- Double-click the test drive's icon as you would for a CD and check that the correct application and file open.
- Check the correct icon is shown for the test drive.
- Right-click the drive icon and check for the appearance of any extra menu items you have programmed.
- Check the keyboard shortcuts for the menu items function correctly.
- Check the menu items function as intended, e.g. calling files.
- Check links from your PDF to other content works. If the links are relative (as previously described) then they should work regardless of whether they are on the same drive as you are testing or not.

You can also make floppy, Zip, Jaz drives etc. work as well which is described in MS Knowledge Base article #Q136214 "How to Test Autorun.inf Files". However, this does involve a Windows Registry edit - not recommended to the unfamiliar.

If you try test calling your initial content PDF via a Windows shortcut (.LNK), do realise that you will use slightly different path strings as the .LNK file needs explicit references to the drive letter and includes an opening in the backslash. Thus for the earlier example:

.INF file open=foo\bar\my.pdf

.LNK file, target field D:\foo\bar\my.pdf

Although the .LNK method will check the PDF is in the right place it will not properly check the syntax of your autorun.inf file.

What if AutoPlay has been disabled?

Users, or more likely IT staff, may disable Windows' AutoPlay feature. You can't do anything automatically with your CD to re-enable AutoPlay, as the user's PC will not read the autorun.inf file. In the next section I include tips to get round this problem.

However you can get the user to re-enable AutoPlay. It is only a check box but the trick is finding it. In Windows 98 use Start->Help, select the Index tab and type "To make CDs play automatically when inserted in the CD drive" and you will be given step by step help.

Alternatively (both Windows 95 and 98)

- Click Start->Settings->Control Panel and double-click the System icon
- Select the Device Manager tab of the System Properties dialog box.
- Click the plus sign next to **CD-ROM**, right-click the device you want to use, and then click **Properties**.
- Click the Settings tab.
- Select the Auto insert notification check box. The checkbox is ticked for 'On' and clear for 'Off'

I don't have the details for NT but it should not be dissimilar except that you may need to pay attention to the degree of user permissions allowed and you may need "administrator" privileges to achieve the change (consult your IT staff - if you have any!).

Other Considerations

You should consider putting a "ReadMe" text file in the root of your CD. The primary purpose is to help users who may be having a problem running the CD's contents, so you will help them by making sure the file (or a copy of it) is in basic text form, i.e. .TXT extension. Check you can read the finished file in Notepad - and in Mac's SimpleText if you are working cross-platform. Things you might choose to include in the file are:

- A brief description of what is on the CD and how you intend it to be used.
- An explanation of how to open the Reader v4 on the CD (assuming AutoPlay has failed) from the Windows->Start->Run dialog and how it can be used to read the PDFs on the CD.
- How to enable AutoPlay.
- An explanation of where the content PDF files are, i.e. in Explorer, especially any PDF which acts a table of contents linking to other PDFs.
- An explanation that regardless of the existence of v2 or v3 Acrobat apps on their system, running the Reader v4 installed on the CD will not interfere with their PCs association of PDFs with apps on their hard drive(s).

- An explanation that if the user has v4.x Acrobat and/or Reader on their hard drive, changes to the screen layout (e.g. hiding toolbars) when running from CD will be reflected in the hard drive versions when next used.
- If using multiple languages, an explanation of how to start each language version.
- The location of the Reader installer (see also note below) and how to install Reader on their hard drive. Think about the presence of older versions and how they can be uninstalled.
- Any special instructions, e.g. how to find and install helper apps such as QuickTime.
- A contact or technical support number in case users have problem or an error to report. Also consider relevant URLs (web addresses) for Adobe's Acrobat Tech Support files.

Do note that if you run the on-CD version of Reader without calling a PDF file as well, Reader's File->Open dialog will open looking at the root of the CD. There is thus something to be said for putting some/all of your general .TXT and .PDF info and index files on the root of the CD. This aids the person who is looking at the CD in Explorer or whom has managed to open the Reader on the CD but does no know where the content files reside.

Reader installer files. Do be aware of the possible issues of Reader v4 being installed before v3 is removed (see section in compatibility between versions). Despite the warning message seen in such a situation, v3 and v4 or reader can happily co-exist. However, a problem does arise when **either** one of the versions is uninstalled as it removes files the other version needs. The remaining version will require reinstalling. If concerned put v3 and v4 installer on your CD.

<u>Using Windows shortcuts on the CD</u>. This method does not work as it is not (or not easily) possible to save the .LNK file without drive letter info - regardless of what you type in the properties dialog. If you try this, Windows 98 gives an error dialog and Windows 95 silently appends the drive letter of the drive you created the file. I believe that with programming tools/expertise you can amend an .LNK file that would link 'internally' from one CD location to another but such expertise is outside the scope of this document. Try to use links between your PDFs to guide users around content. If you have to run more than Reader, then you will need some type of AutoPlay application.

Likely errors when testing your autorun.inf

These are common errors that occur:

- Windows dialog captioned "Program not found" saying it can't find 'acrord32.exe'. Check the syntax of the path to the reader exe file in 'open='. Most likely you have started the path with a backslash when none is required.
- Reader opens and gives one or both of the following "There was an error opening this document. The file does not exist" or "There was an error opening this document. The path does not exist". Check your PDF path statement you are

probably using folder/file names with spaces in them which it appears the AutoPlay function will not accept as valid

- No icon or wrong icon. No icon check the 'icon=' or 'defaulticon=' path and ensure there is no opening backslash. If the icon is wrong, check the icon number (they number from 0 not 1.)
- Changes made to the autorun.inf are not reflected. If editing the file in Notepad, check you saved the changed version before re-running. Always refresh Explorer (press F5 key with Explorer or 'My Computer' window open) before re-testing after changing the autorun.inf.

Cross-platform issues and CD formats

Whilst reading this section, a good external reference to have to hand is Andy McFadden's CD-R FAQ (based on newsgroup postings). The FAQ covers, types of CD, CD formats, software, media and lots of novice's "What is/How do I?" queries. Having no experience of or access to Unix, I have not covered this format though Acrobat does have a Unix version. My comments are mainly addressed at Windows/Mac cross-platform use.

Cross-platform issues

If you are only distributing for a Windows PC audience you can go ahead and skip the rest of this section. However, if your intended audience is cross-platform and you are PC-based you have a few problems. Unfortunately, Macs and PCs use different file systems making it difficult to read media for the other types of computer without some care. Additionally, the Mac and Windows Operating Systems use different methods to identify the application required to open a given file format.

The Mac uses two 4-character tags (file 'type' and file 'creator') to define the file and stores this data in a 'data' fork and the type/icon/etc. information in a 'resource' fork. Windows uses a 3-character extension (the .3 of the 8.3 filename in Windows 3.x) to define the file type and stores all the information in one file.

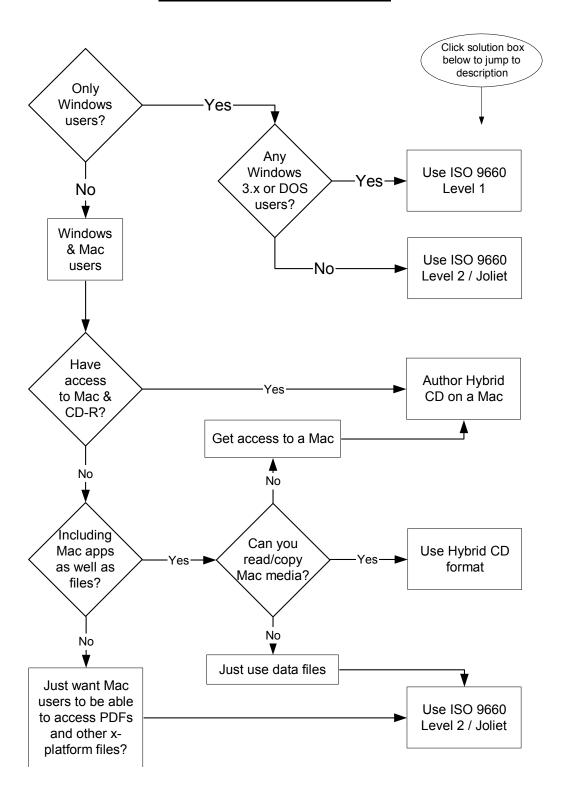
The Mac relies on the Type and Creator data to know what application to launch when the file is double clicked (and which icon to show on screen), whereas the Windows PC depends strictly on the 3-character file extension. Windows cannot create Mac Type and Creator tags without additional utilities, but a Mac user can add a Windows style extension to their Mac file name by simply typing a full stop (period) and the appropriate three letters. Otherwise, you may also find that without PC file extensions on any Mac created PDF files, PC users will need to guess at the correct host application for the file. PCs require a third party utility to be able to read media formatted for the Mac's HFS system (see Appendix F for utility links).

32-bit Windows and Macs both allow long filenames, though the allowable characters differ. Windows will not accept the use of characters \ / : * ? " < > | when used in a file name (even 8.3 ones), though you may use a full stop (period) and up to 255 characters; note this is reduced to a maximum of 64 under the Joliet CD extension. Mac names may be up to 31 characters long. 16-bit Windows requires 8.3 names.

Depending on the extensions loaded, Macs can read PC media and ISO 9660 CDs; with non-default install extensions some OS version can read Joliet format as well. However, without the 'resource forks' of a Mac HFS format, the Mac OS user cannot tell the associated application for a file so normal point & click opening of files does not work, which is confusing for inexperienced users. Also, without the resource forks, it is impossible to include a Mac executable program, so you cannot include either the Mac installer or a self-running executable directly. You can include a SIT archive of the installer, and presume the user has Stufflt Expander (free software, from www.aladdinsys.com) or ask them to download the utility.

Use the diagram on the next page to help you decide the format of CD your project will require.

Choose Your CD's Format



Format compatibility table

As a Windows based user, you may not be able to create a true Hybrid CD on your PC such as that described by Adobe in Appendix A, but careful choice of format will certainly allow you to offer any Mac users access to the PDFs. Using ISO 9660 format, they will not see a file with an Acrobat file icon, but if they have Mac Acrobat/Reader installed on their system they can use it to open the PDFs. Not ideal, but better than no file at all.

You will see from the table below, there is no ideal solution and you need to consider your intended users equipment before selecting a format and any constraints that it imposes on you.

	PC		Мас	
Format:	Read/see files?	Needs extra tools to make?	Read/see files?	Can see correct application icons?
ISO 9660 Level 1	Yes	No	Yes	No
ISO 9660 Level 2 +Joliet	Yes	No	Yes short names seen, FILNA~1.T XT ‡	No
Mac HFS	No	Yes	Yes	Yes
Hybrid	Yes	Yes	Yes	Yes

[‡] If Joliet extension to be installed, full name can be read.

ISO 9660 Format

The ISO 9660 format in its basic form will allow some cross-platform compatibility. There are a number of annoying constraints but without access to a Mac for development, it will allow you to author content such as PDFs which Mac users can access without a conversion program.

In ISO 9660 Level 1 (the lowest common denominator, developed with DOS file naming limitations in mind):

- A filename may not contain more than eight 'd-characters' which are the capitals A to Z, digits 0 to 9, and the underscore symbol (__). The full stop/period (.) character is used to separate the filename from the extension but may not be used in the filename, e.g. "FILE_012.PDF". Lower case letters may not be used in either the file name or extension.
- A filename extension may not contain more than three d-characters.

- A directory name may not contain more than eight d-characters and may not have an extension, e.g. \MYFOLDER\ not \AllMyFold.ers\
- Folders may not be nested to a depth of more than 8 levels, i.e. root folder + 7.

Minimum equipment needed to produce this format:

- 32-bit Windows PC or Mac
- CD-R drive (preferably SCSI)
- CD-R authoring software
- 700 Mb free, hard disk space for disk image

ISO 9660 Level 2 and Joliet Format

The ISO 9660 Level 2 standard removes the naming constraints of strict ISO 9660 Level 1 but is not compatible with MS-DOS or DOS compatible systems (e.g. basic Mac extensions for reading PC media).

Joliet is an extension of the ISO 9660 standard, developed by Microsoft to allow CDs to be recorded using long filenames, and using the Unicode international character set. Joliet allows you to use filenames up to 64 characters in length, including spaces. Under this format a copy of the MS-DOS 8.3 file names is stored to allow other systems that can read 8.3 files.

The combination of ISO 9660 + Joliet is the sensible option for a cross-platform if equipment precludes the production of true hybrid CDs. Note that Joliet only allows 64 character names - as opposed to the 255 characters allowed by 32-bit Windows.

With this format, Mac users will be able to read the CD but will only see Windows short file names - for "ReadThisFile.txt" they will see "Readth~1.txt". In this situation you should consider restricting yourself to 8.3 filenames to assist all users. There is a Mac extension that supports the Joliet format but it is not a default install and in not found in early versions of the Mac OS. If you need wide Mac compatibility it is best not to rely on the presence of this extension.

If you wish to include Mac files such as executables you should consider creating Hybrid CDs.

Minimum PC equipment needed to produce this format:

- 32-bit Windows PC or Mac
- CD-R drive (preferably SCSI)
- CD-R authoring software
- 700 Mb free, hard disk space for disk image

Mac HFS Format

This is the Mac's native system and a Mac only format. Without add-on (non-Microsoft) utilities your PC won't even be able to read the CD. With such utilities you will be able to create an HFS CD though you may require a Mac to create the content. Your PC will require either a hard disk (or partition thereof) that is Mac formatted or fast (SCSI) Mac removable drives.

It is more likely as a PC based user that you will use HFS format indirectly in the context of making a Hybrid CD.

Minimum equipment needed to produce an HFS-only CD:

- 32-bit Windows PC or a Mac
- CD-R drive (preferably SCSI)
- Utilities to allow handling of Mac media by PCs
- CD-R authoring software capable of writing HFS format (only a few applications)
- Cross-platform transfer media to move Mac media to PC or vice versa.
- 700 Mb free, hard disk space for disk image

Hybrid CD Format (for both PC & Mac)

The format combines an ISO 9660 element for PCs and an HFS element for Macs. This is achieved either by putting 2 sets of data on the CD, or in the higher-end applications, certain data is common to both file systems - e.g. cross-platform formats such as PDF files but OS specific partitions for executable files. This sharing of data offers a potential saving of space for more content storage.

PC applications to burn hybrid CDs are just becoming available, though they tend to use the twin partition system. Unless you need more than 325 Mb (half the total 650 Mb) this should not be a concern.

More tiresome is getting the getting the Mac media on to or accessible from your PC. In the section on setting up your CD, I mention several suitable utilities you will need for this task

Should you be working on a Mac, with Adaptec's Toast, you will need to remember to choose the format of the non-Mac partition. If you need long names, you are best advised to select ISO9660+Joliet.

Minimum equipment needed to produce an HFS-only CD:

■ 32-bit Windows PC or Mac

- CD-R drive (preferably SCSI)
- Utilities to allow handling of Mac media by PCs
- CD-R authoring software capable of writing HFS format (only a few applications)
- 700 Mb free, hard disk space for disk image

Using Reader v4 files and ISO 9660 Level 1

If you look at Appendix C you will see certain folder/file names in bold. These are potential problems under ISO 9660 — especially if you use the most restrictive (Level 1) implementation.

The \Acrobat 4.0\ folder is not a problem, as Reader seems happy to run from a folder \ACROBAT4\ — or anything else, I'd say from testing. Note that the \help\ and \resource\ (font) folders are placed at the same folder 'level' as \reader\ though the name of the containing folder appears not to need to be \Acrobat 4.0\. It appears that as long as you get Acrord32.exe started from ..\wherever\reader\ it'll be happy, so long as the folder structure below the starting folder is what it expects and the \help\ and \resource\ folders are co-located with it.

If you use automatic ISO 9660 Level 1 naming in your CD-R software, the default top level folder can get truncated to $\ACROBAT_\$. Although Reader will run from this folder, AutoPlaying from this location fails - it appears the trailing underscore in the path causes a failure when parsing the path; click the 'open' command in Reader and the dialog opens at .. $\ACROBAT_\$ and not $\READER\$ as expected. If using strict ISO 9660 Level 1 then change the top level folder to $\ACROBAT4\$.

The copyright file (..\reader\(c)\adobe.txt) is problematic, as under the licence it is a file required for inclusion yet it is not ISO9660 naming compliant. The closest compliant name match is _C_ADOBE.TXT. In testing, it became apparent that in presenting the EULA on first use Reader either accepts this file name as a source or EULA text used to create the EULA acceptance dialog text the user sees is stored elsewhere in the application files.

The \JavaScripts\ folder name is more problematic, as this is 10 characters long. Interestingly, the pre-installed Reader on the Acrobat CD has the 2 JavaScript plug-in files located one level up in the containing \reader\acroform\ folder. The Forms JavaScript Guide (link requires full Acrobat) says:

Plug-in folder level

JavaScript's can work as individual files with the ".js" extension. The Acrobat Forms plug-in looks for these files on the UNIX platform in the Acrobat plug-ins folder. On the Apple Macintosh and Windows platforms, the files are in a subfolder of the \plug_ins\Acroform\ folder called JavaScripts. Variables and functions that might be generally useful to the application should be kept at the plug-in level.

By that logic, the layout of the 'installed' Reader on the Acrobat v4 application CD is incorrect. Though not tested, I assume that if you use the reduced file set (Appendix C) then you should recreate the file layout of the relevant folders on the Acrobat CD (Appendix B), i.e. place the contents of the \JavaScripts\ folder in the \Acrofrom\ folder and delete the \JavaScripts\ folder. If you are not using JavaScript in any of the PDFs on the CD and need Level 1 format I suspect you could also choose omit this folder altogether, removing JavaScript functionality, though by the strict terms of the licence it should be included.

In summary, I do not generally recommend trying to use strict ISO 9660 Level 1 format — or certainly not for anything other than internal use. However, you may need to access the CD's files from Windows 3.x or MS-DOS, though Reader v3x 16-bit is required for Windows 3.x to actually open PDFs). The reason for describing a method that does not seem to work will hopefully save others the time and trouble of testing it themselves.

ISO 9660 Level 2 with Joliet extensions is generally a better choice for the PC, as you do not need to do so much renaming. Frustratingly, ISO 9660 Level 2 is not fully compatible with 16-bit Windows so if you still want your CD to be accessible to Windows 3x users, you need to consider Level 1 and restrict yourself to 8.3 names.

Setting up your CD image files

Image File Names.

Many CD creation programs make '.ISO' files as source images for burning CD-Rs. While standards were still evolving the ISO extension became synonymous with image files in general and not just disc image files conforming to the ISO standard. Thus the presence of an ISO file extension does not necessarily mean that your CD image file is in ISO format. Irksome as it may be, don't just rely on the application's 'wizard' but check out the help file and program properties to ensure you are creating a CD of the type you intended.

Image Files

Depending on the size and speed of your systems you have number of options. If your system is fast enough, you can probably burn "on the fly" using files from anywhere on your system. More likely you will organise the needed files in one place on your system as an image and/or actually create an ISO image file (necessary for some techniques) to burn from. The term staging drive or folders is sometimes used to imply the area where you bring all your CD's files together.

Don't forget to ensure the partitions used for your source files have been de-fragmented recently to ensure best hard disk file access speeds.

Single or Multisession?

Note that many CD making applications assume as the default that you wish to make a multi-session disk and leave the CD 'open' to allow you to add more data in another session at a later date. Multi-session disks increases the chance of reading problems in 'normal' CD- and DVD-ROM drives. Therefore, you are advised to check the option to 'close' the CD before burning. The location and naming of this varies from CD application to application. Unfortunately you are likely have to set this option every time you burn a

CD, until CD creating apps get smarter. This reinforces the need to check settings and not rely on easy-to-use 'wizards' which tend to apply the default settings.

My users can't read my CDs (at all)

Assuming your files all worked fine in test before burning, then if a large number fail on distribution try the CD-write drive out using a different brand of CD-R blanks. To avoid this situation, if you have access to a number of different types of user PC/Mac, it is worthwhile doing a small-scale test before replicating for your whole audience.

If a very small number fail and only on some PCs you may have encountered the annoyance that some combinations of CD-writer, CD dye type and user hard drive just don't mix. If you have more than one CD-R drive try using it and also try different media/drive combinations. If you have a fast CD-R drive and normally burn at fastest speed, try using a slower setting. If feasible, ask the user to try using a different PC — this can help identify 'bad' CD writer/CD media/CD reader combinations. One of these actions should provide the user with the right experience.

You can probably avoid these sort of problems by passing off the work to a professional replicating house, but then if you could (afford to) do that easily, you don't really need this document.

Labelling CDs

Don't forget that the data layer of a recordable CD is actually the top (label side); scratch the top and your data could be damaged. So, if you are going to write on the CDs, do get a marker designed for this purpose. For larger runs, you can by label kits that allow you to print up label blanks on an inkjet and apply these by hand. Any further requirement in volume/speed and you should look to external professional services as the equipment begins to become too expensive to justify purchase for limited, low volume use.

AutoPlay

If the CD can be read in Windows Explorer but does not AutoPlay, check that this feature has not been turned off on the target PC. For instructions on how to turn the feature on/off, open Windows Help from the start bar and look in the index under "automatically playing CDs when inserted". See also the earlier notes on enabling AutoPlay.

PC utilities for handling Mac media

Remember, if your project requires you to support Mac users, and if it is unacceptable for them not to be able to see the 'correct' icons on screen, you will have to consider using the Hybrid format. In which case, you are advised to set aside a little extra time to familiarise yourself with the process and the extra tools needed.

To read Mac media (floppy, CD, ZIP, Jazz and network) try:

- MacOpener
- MacScuzzy

To create virtual Mac partitions on PC hard drives:

MacImage

To burn CDs with HFS or Hybrid format

- Nero. Can burn a twin partition hybrid with SCSI access to Mac media or via an ISO file using MacImage
- WinOnCD. Can burn HFS and hybrid. (Not tested).
- (Using MacImage to create a virtual partition) Any CD burning application supporting the ISO format e.g. Easy CD Creator Deluxe.

A more radical approach is to consider a cheap or used Macintosh. It will, with the right software applications such as Adaptec's Toast, make burning the CD much easier. More than that, without a Mac you are in an almost impossible situation when dealing with technical support issues. Of course, this method only works if you know a bit about Macs in the first place or you will need the very support you are trying to provide. Remember that if you have an external SCSI CD-writer you can use it with either Macs or PCs.

Compatibility and other issues

What happens if the user has a different version of Acrobat installed on their system?

If you run Reader v4 from the CD you should not have problem, even if older versions of Reader or Acrobat Exchange are on the users system.

Installed Acrobat Elements	Effects of running v4.0 Reader from CD	
Reader not installed	EULA for v4 displayed. Reader v4 writes to Registry.	
	Does not create PDF extension association to Acrobat Reader.	
Reader v2.x	EULA for v4 displayed. Reader v4 writes to Registry.	
	INI for installed version not affected.	
	PDF extension association to v2.x unaffected.	
Reader v3.x	EULA for v4 displayed. Reader v4 writes to Registry.	
	INI for installed version not affected.	
	PDF extension association to v3.x unaffected.	
Reader v4.0	MRU file list updated.	
	Registry keys for Reader's interface settings updated	
	PDF extension remains registered to h/d installed version.	
Acrobat v4.0 (no Reader)*	EULA for v4 displayed. Reader v4 writes to Registry.	
	Some Registry keys for viewer interface settings updated	
	PDF extension association unaffected.	
Acrobat v4.0 (with Reader)	Reader MRU file list updated.	
	Registry keys for viewer interface settings updated	
	PDF extension association unaffected.	

Notes:

1) The EULA (End User License Agreement) is the text contained in the "(C) Adobe.txt" file in the \Reader\ folder of Reader and its display is a required part of the licence conditions. It will only display the first time Reader is run on a 'new' system. If you need to reset this EULA flag for testing purposes, you will find it at:

HKEY_CURRENT_USER\Software\Adobe\Acrobat Reader\4.0\Adobe\Viewer\EULA

2) When first run, Reader v4.0 writes a number of keys to the Windows 95/98 Registry at:

HKEY_CURRENT_USER\Software\Adobe\Acrobat\
and
HKEY_CURRENT_USER\Software\Adobe\Acrobat Reader\

- 3) If Reader v4 is already on the user's system, the CD version will write to the same Registry strings as the hard disk copy, so changes to the Reader toolbars and the MRU (Most Recently Used) file list will get updated by the Reader copy most recently used.
- 4) Though Reader v4 writes to your Windows Registry, it does not change existing associations for the PDF file extension. So if you have Reader 3.0x installed on the hard drive and associated with PDFs, double clicking on a PDF on the hard-drives or CD will open v3.0x of Reader and not v4, as it stores its preferences in C:\Windows\acroread.ini and not the Registry.
- 5) All v4.x Acrobat components Acrobat, Reader, Browser plug-in on a given PC use a common viewer and set of preferences, regardless of being installed or run from CD. If Reader is run from CD, changes made to preferences will be retained when the hard disk versions are next run.

What happens if I install Reader v4 over a previous older version?

It is conceivable that for functionality testing you might want to have both v3.0x and v4 installed on the same PC and this is possible.

If you run the v4 installer and it detects a previous version of the application, it gives this warning message:

Warning

Acrobat 3.0x currently exists on your system. Problems will occur if 3.0 is uninstalled after 4.0 is installed. This would require 4.0 to be reinstalled.

If you choose to uninstall Acrobat 3.0x, please do so and restart your computer before installing Acrobat 4.0

[Note: you also get this with Exchange v3 but no Reader v3 installed.]

The warning is correct; v4 of Reader will co-exist happily with older version but if your subsequently remove the older versions you will need to re-install v4. Thus you should ensure you have a copy of the installer handy, especially if the user does not have easy Internet access to the Adobe web site.

If your user base still makes use of Reader v3, it would be courteous to put the Reader v3 installer somewhere on the CD as well, giving the option as to what they install.

I have not tested configurations using third party plug-ins. If you know your intended audience is using these, I recommend you do some further test of your own to seethe effects of having v3 and v4 Acrobat Reader apps on your hard drive. Given how plug-ins work there ought not to be a problem, though a test is the safest route.

Likewise, using v3 and v4 Reader on the same PC may result in the 'wrong' app acting as the web browser associated plug-in. You may need to provide guidance to your users on how to fix this if it is a likely issue.

If upgrading from v4x to a more recent v4x (e.g. v4.0 to v4.05c) uninstall the old version before installing the newer one.

Does Reader have to be in the \Program Files\Acrobat 4.0\ folder on my CD?

No. As long as the \ensured and \ensured folders are in the same folder as $\ensuremath{\texttt{Reader}}\$ the number and naming of the folders lying above are not important - unless you require ISO 9660 Level 1 naming. Of the folders within $\ensuremath{\texttt{Reader}}\$, the $\ensuremath{\texttt{Optional}}\$ folder is just that and may be deleted. Also, it appears that the $\ensuremath{\texttt{JavaScripts}}\$ folder (note the file name is 10 characters long) in $\ensuremath{\texttt{Reader}}\$ in $\ensuremath{\texttt{Reader}}\$ can be omitted if the files contained in it are moved up in to the $\ensuremath{\texttt{AcroForm}}\$ folder above.

If the default \Acrobat 4.0\ folder name is shortened to DOS/ISO 9660 compliant \ACROBAT_\ the app will run but Windows may experience problems parsing command lines - such as in the autorun.ini - due to the trailing underscore character. Tests using the path \Acrobat\Reader\etc. have shown no problems.

If you do have to shorten the folder name, \ACROBAT4\ is both ISO 9660 Level 1 compliant and self-evident as the application and version.

What plug-ins can I use with Reader on the CD?

If your project depends on anything other than the default set of plug-ins installed by Reader, you should check early on with the vendor/programmer as to whether they will work in Reader (and are so licensed) and will function from a CD. Most Acrobat plug-ins require the full paid-for application to work. Plug-in functionality is deliberately more restricted in the free Reader.

Note the comments in the Adobe tech note (Appendix A) about functions not supported when Reader is running from CD, as the same is likely to apply here.

Can I run Reader v4 across a network?

Though not documented, advised or supported, this does appear possible. Simple Tests have shown a shared CD drive on a Win 9x network able to support two concurrent sessions on different PCs 'run' from the CD on a third. Note the only PDFs tested were simple documents that do not use plug-ins or complex functionality. This experience does make sense if you think of the source PC's hard drive as acting like a shared CD drive.

It is likely that more complicated PDFs using plug-ins may fail, depending on where the local session 'looks' for the plug-in or associated records. In general, it appears that so

long as Reader finds the folders it's looking for *below* the folder it's run from, then all should be well.

Note the comments in the Adobe tech note (Appendix A) about functions not supported when Reader is running from CD, as the same is likely to apply here.

This feature is mentioned for interest only.

Can I run more than one instance of Reader on my PC?

No. Acrobat runs as a single instance application. In fact Acrobat, Reader and the browser plug-in share a common 'viewer'. Opening Acrobat when Reader is open will cause the reader window to gain focus (displaying any PDF called). The reverse is true if Acrobat is open first. If Acrobat or reader is open and the browser plug-in is invoked, either the main app or the plug-in may crash or freeze, based on experience.

Can I run the browser plug-in from the CD?

No. The plug-in is designed for use on the hard disk either linked to or installed with the browser files. Mainstream browsers do not run from CD.

Can I control Reader from other applications?

Yes, you should download and read the Acrobat SDK, especially the section on IAC (Inter Application Communication). Note that Adobe have deliberately designed less functionality into Reader than the full application so you may find you requite the user to have the full application.

Note that the ActiveX control (pdf.ocx) and Type Library (pdf.tlb) are intended by Adobe only for use as a browser plug-in and not as a control for use in other applications. You will not find documentation on its object model in the SDK as it is not intended for development use. The acrobat.tlb Library requires the full application for use, not Reader.

Reader v4 command line options

Reader has more limited options for external control than Acrobat, primarily a small number of command line options. The following is taken from the Acrobat SDK in the section "Using Command Lines with Acrobat and Acrobat Reader under Windows".

These are unsupported command lines, but have worked for some developers. There is no documentation for these commands other than that listed below. You can display and print a PDF file using command lines with Acrobat and Acrobat Reader.

AcroRd32.exe filename - Executes the Reader and displays a file.

AcroRd32.exe /p filename - Executes the Reader and prints a file.

AcroRd32.exe /t path printername drivername portname - Initiates Acrobat Reader, prints a file while suppressing the Acrobat print dialog box, then terminates Reader. The four parameters of the /t option evaluate to path, printername, drivername, and portname (all strings):

printername - The name of your printer.

drivername - Your printer driver's name. Whatever appears in the Driver Used box when you view your printer's properties.

portname - The printer's port. portname cannot contain any "/" characters; if it does, output is routed to the default port for that printer.

If using Acrobat, substitute Acrobat.exe in place of AcroRd32.exe in the command lines.

Appendix A - Adobe Technical Support Documentation on Creating a CD to Distribute Acrobat Reader (#323115)

What's Covered

- Copying Acrobat Reader to Run from a CD
- Copying Acrobat Reader to Install from a CD

Adobe Acrobat Reader 4.0 is freely distributable. Acrobat 4.0 includes two versions of Acrobat Reader 4.0 that you can distribute via CD or other means, such as e-mail or the Web. One version can be run from a CD without having to install it on a local hard disk. This version includes Asian font support. The other version is an Acrobat Reader 4.0 installer, which you can use to install Acrobat Reader to a local hard disk. This installed version does not include Asian font support.

Disclaimer: This document provides an overview of which files to copy onto the CD you're creating. Adobe provides this information as a courtesy. Adobe Technical Support does not support creating CDs or setting up a staging area. (The staging area is the folder or disk to copy onto the CD). If you need assistance creating CDs or setting up a staging area, refer to the documentation included with your CD writer.

Note: If you will be distributing your CD to Mac OS users, you must create it in Mac OS. If you create the CD in Mac OS, you can add both Mac OS and Windows files to it — both Mac OS and Windows will be able to recognise the files. If you create the CD in Windows, you may be able to add both Mac OS and Windows files to the CD, but Mac OS will not recognise the Mac OS files.

Copying Acrobat Reader to Run from a CD

Use this method to distribute a version of Acrobat Reader that runs from a CD without having to be installed.

Note that when Acrobat Reader is run from the CD, rather than from a copy installed on a local hard disk, Acrobat Reader's support files are not installed on the local hard disk. Therefore, the following features are missing or do not work: -

- Adobe Online will not work.
- OLE viewing will not work: If you double-click an embedded PDF file, nothing happens.
- PDF files will not be associated with Acrobat Reader. Therefore, PDF files won't automatically open in Acrobat Reader if you double-click them. You must choose File > Open in Acrobat Reader and select the file you want to open.

Browser windows will not display PDF files, because the Web browser plug-ins and ActiveX control are not installed. (The Web browser plug-ins enable Netscape Navigator for Mac OS and Windows or Microsoft Internet Explorer for Mac OS to display PDF files. The ActiveX Control enables Internet Explorer for Windows to display PDF files). To view PDF files outside of a Web browser, download them to your hard disk and then open them in Acrobat Reader.

To create a CD from which you can run Acrobat Reader 4.0, copy the Acrobat Reader from the Acrobat 4.0 CD to your staging area, and then create a shortcut or alias to the Acrobat Reader application file:

- 1. Do either of the following:
 - From the Acrobat 4.0 for Windows CD-ROM, copy the CD folder from the Acroread folder to your staging area. Files are listed at Appendix B.
 - From the Acrobat 4.0 for Mac OS CD-ROM, copy the CD folder from the Acrobat Reader 4.0 folder to your staging area.
- 2. Do either of the following:
 - (Windows) Create a shortcut to the Acrord32.exe file in the CD\Reader folder in your staging area.
 - (Mac OS) Create an alias for the Acrobat Reader 4.0 file in the CD\Acrobat \Reader 4.0 folder in your staging area.
- 3. Move the shortcut or alias you created in step 2 to the root of the staging area.
- 4. Create the CD from your staging area as usual.

Running Acrobat Reader from a CD

To run the version of Acrobat Reader 4.0 from the CD, double-click the shortcut or alias you created above. You can also double-click the Acrord32.exe file in the CD\Reader folder (Windows) or the Acrobat Reader 4.0 file in the CD:Acrobat Reader 4.0 folder (Mac OS).

Copying Acrobat Reader to Install from a CD

Use this method to distribute a version of Acrobat Reader that can be installed from the CD. Note that Acrobat Reader's Asian font packs do not install, so you will not be able to view PDF files containing non-embedded Asian-language fonts.

To copy Acrobat Reader 4.0 to a CD from which it can be installed, copy the installer from the Acrobat 4.0 CD to your staging area, and then create a shortcut or alias to the Acrobat Reader installer:

1. Do either of the following:

- From the Acrobat 4.0 for Windows CD-ROM, copy the Installers folder from the Acroread folder to your staging area.
- From the Acrobat 4.0 for Mac OS CD-ROM, copy the Installers folder from the Acrobat Reader 4.0 folder to your staging area.

2. Do either of the following:

- (Windows) Create a shortcut to the Acrd4enu.exe file in the Installers folder in your staging area.
- (Mac OS) Create an alias for the Reader Installer file in the Installers folder in your staging area.

3. Do either of the following:

- Move the shortcut to the Acrd4enu.exe file you created in step 2 to the root of the staging area.
- Move the alias for the Installers folder you created in step 2 to the CD folder in the staging area. (If you haven't added the CD folder to your staging area, as described in the "Copying Acrobat Reader to Run from a CD" section above, you'll need to create a CD folder at the root of the staging area to contain this alias.)
- 4. Create the CD from your staging area as usual.

[End of Article]

Appendix B - File listing for \AcroRead\CD folder of Acrobat v4 CD

Files for inclusion as recommended in Tech Note # 323115

The file set listed below will occupy approximately 63.4 Mb + 16.3 Mb for the Reader installers (5.3 Mb for only the English version). Total = approximately 80 Mb. Note this represents over 12% of the 650 Mb available on a normal CD-ROM

Note also that the Reader installers included on the Acrobat CD (as at mid 1999) are the initial release of Reader without the search facility. For comparison the English version with Search is 1 Mb bigger and called rs40eng.exe instead of acrd4enu.exe. If you need the versions with Search and they are not on your Acrobat CD, you will need to download them from Adobe's website (www.adobe.com) or get the Reader CD-ROM.

Name (and Size for files only)

```
[CD]:\Acrobat4\AcroRead
           \CD
              License.txt
                            6,019
                 \HELP
                       \DEU
                          ACROBAT.PDF 62,436
                          READER.PDF 454,333
                       \ENU
                          ACROBAT.PDF 45,836
READER.PDF 304,642
                                         304,642
                       \FRA
                          ACROBAT.PDF 63,724
                          READER.PDF
                                        457,883
                 \READER
                    ACROFX32.DLL 26,624
                    ACROJS32.DLL 155,136
                    ACRORD32.EXE 2,316,288
                    ADMUI316.FON 15,936
                    AdobeBanner.awe
                    AdobeBannerdeu.gif 1,100
                    AdobeBannerenu.gif 1,100
                    AdobeBannerfra.gif 1,100
                    ADOBEFNT.LST 23
                    ADOBEWEB.DLL
                                   212,992
                    AdobeWeb10.awe 3,122
                    AdobeWeb10deu.gif
                                        25,741
                    AdobeWeb10enu.gif
                                        21,693
                                         25,367
                    AdobeWeb10fra.qif
                    AGM.DLL 582,144
                    COOLTYPE.DLL 894,464
LIESMICH.PDF 18,426
                    LISEZMOI.PDF 16,487
                    MFC42.DLL 954,640
                    MSVCRT.DLL 277,776
                    OLEAUT32.DLL 491,792
                    RDLANG32.DEU 327,680
```

APPENDIX B

```
RDLANG32.FRA 327,680
  README.PDF
                22,099
     \ACTIVEX
        PDF.DEU 14,848
        PDF.FRA 14,848
        PDF.OCX 125,712
        PDF.TLB 3,860
     \BROWSER
        NPPDF32.DEU
                    4,096
51,712
                      4,096
        NPPDF32.DLL
        NPPDF32.FRA
                     4,096
     \OPTIONAL
        README.TXT
     \PLUG INS
        AHLS32.API 61,952
AHLS32.DEU 6,144
                    6,144
54,272
        AHLS32.FRA
        EWH32.API
                     9,728
        EWH32.DEU
        EWH32.FRA
                     9,216
        IEWEB32.API
                     6,144
        WEBLNK32.API 73,728
        WEBLNK32.DEU 22,528
        WEBLNK32.FRA
                     21,504
           \ACROFORM
             AFILL32.API 402,432
              AFILL32.DEU 92,160
              AFILL32.FRA
                          92,160
                           33,257
              AFORM.JS
              AFSTRDEU.JS
                           4,690
              AFSTRENU.JS 2,104
              AFSTRFRA.JS 4,779
           \MOVIE
              MOVIE32.API 111,104
              MOVIE32.DEU 15,872
              MOVIE32.FRA
                            15,872
              QT2.DLL 7,680
              QT3.DLL 16,384
\RESOURCE
     \CIDFont
        HeiseiKakuGo-W5-Acro 2,138,544
        HeiseiMin-W3-Acro 3,185,156
        HYGoThic-Medium-Acro 4,119,292
        HYSMyeongJo-Medium-Acro 8,317,064
        MHei-Medium-Acro 4,637,712
        MSung-Light-Acro
                           6,665,200
        STSong-Light-Acro 11,341,944
     \CMAP
        83pv-RKSJ-H
                     6,211
                    5,146
        90ms-RKSJ-H
        90ms-RKSJ-UCS2 160,785
        90ms-RKSJ-V 3,202
        90msp-RKSJ-H 5,075
        90msp-RKSJ-V 3,184
        90pv-RKSJ-H 6,987
        90pv-RKSJ-UCS2 2,165
        90pv-RKSJ-UCS2C 147,030
```

```
14,593
Add-RKSJ-H
Add-RKSJ-V 2,775
                   8,266
Adobe-CNS1-B5pc
Adobe-CNS1-ETen-B5 8,686
Adobe-CNS1-H-CID 1,863
Adobe-CNS1-H-Host
                   8,701
Adobe-CNS1-H-Mac
                   8,232
                   286,858
Adobe-CNS1-UCS2
Adobe-GB1-GBK-EUC
                   94,141
Adobe-GB1-GBpc-EUC 4,537
Adobe-GB1-H-CID
                   1,982
Adobe-GB1-H-Host
                   94,650
Adobe-GB1-H-Mac
                   4,419
Adobe-GB1-UCS2 303,595
Adobe-Japan1-90ms-RKSJ
                         6,664
Adobe-Japan1-90pv-RKSJ
                         8,753
Adobe-Japan1-H-CID 2,101
Adobe-Japan1-H-Host 7,622
Adobe-Japan1-H-Mac 7,641
Adobe-Japan1-PS-H
                   23,289
Adobe-Japan1-PS-V
                   13,657
Adobe-Japan1-UCS2
                   170,429
Adobe-Koreal-H-CID 1,912
Adobe-Koreal-H-Host 16,277
Adobe-Koreal-H-Mac 11,640
Adobe-Koreal-KSCms-UHC
                        16,169
Adobe-Koreal-KSCpc-EUC 11,818
Adobe-Koreal-UCS2 203,656
B5pc-h 6,701
B5pc-UCS2
              1,536
B5pc-UCS2C
              284,917
B5pc-v 1,843
              11,553
CNS-EUC-H
CNS-EUC-V
              12,633
             6,863
ETen-B5-H
ETen-B5-UCS2
              288,774
ETen-B5-V
             1,882
ETenms-B5-H
            1,514
              1,941
ETenms-B5-V
Euc-h 4,099
Euc-v
       2,145
Ext-RKSJ-H
              15,192
Ext-RKSJ-V
              2,415
Gb-euc-h 3,419
Gb-euc-v 2,017
GBK-EUC-H
              86,194
GBK-EUC-UCS2
              233,863
GBK-EUC-V
              2,003
GBpc-EUC-H
              3,449
GBpc-EUC-UCS2 1,623
GBpc-EUC-UCS2C 148,429
GBpc-EUC-V 2,029
GBT-EUC-H
              48,022
GBT-EUC-V
              2,023
Н 3,958
Identity-H 1,614
Identity-V 1,527
```

```
KSC-EUC-H 11,109
KSC-EUC-V 1,949
  KSCms-UHC-H 15,533
  KSCms-UHC-HW-H 15,528
  KSCms-UHC-HW-V 1,959
  KSCms-UHC-UCS2 190,158
  KSCms-UHC-V 1,961
  KSCpc-EUC-H 11,982
  KSCpc-EUC-UCS2 16,639
  KSCpc-EUC-UCS2C 157,136
  UCS2-90ms-RKSJ 155,710
  UCS2-90pv-RKSJ 148,630
  UCS2-B5pc 285,242
  UCS2-ETen-B5 299,470
  UCS2-GBK-EUC 244,146
  UCS2-GBpc-EUC 197,474
  UCS2-KSCms-UHC 196,760
  UCS2-KSCpc-EUC 153,636
  UniCNS-UCS2-H 264,302
  UniCNS-UCS2-V 1,878
  UniGB-UCS2-H 279,907
  UniGB-UCS2-V 2,087
  UniJIS-UCS2-H 143,025
  UniJIS-UCS2-HW-H 1,720
  UniJIS-UCS2-HW-V 4,651
  UniJIS-UCS2-V 4,563
  UniKS-UCS2-H 173,553
  UniKS-UCS2-V 1,988
  V 2,121
     \CMAP
        Identity-H 1,614
        Identity-V 1,527
\Encoding
  Acracns1.dll 55,808
  Acragb1.dll 54,272
  AcRAJPN1.dll 69,120
               55,296
  Acrakor1.dll
\FONT
               32,084
  _A____.PFB
  _AB____.PFB 31,966
   _ABI____.PFB
                 32,019
   AI .PFB
EB .PFB
                 32,115
                 35,377
  _EBI___.PFB
                 38,543
  _EI___.PFB
                 37,518
   _ER___.PFB
                35,380
  COB____.PFB
                35,500
  COBO____.PFB
                 50,532
  COM____.PFB
                 34,585
  COO____.PFB
                48,468
  SY____.PFB
                34,705
     ___.PFB
  ZD
                49,593
  ZX____.PFB 75,573
  ZY____.PFB 96,418
     \FONT
        _A_
        _A____.PFB 32,084
_AB____.PFB 31,966
```

APPENDIX B

```
AI____.PFB
                      32,115
        _EB___.PFB
_EBI___.PFB
                      35,377
                      38,543
        _EI___.PFB
                      37,518
        _ER___.PFB
                      35,380
        COB____.PFB
                     35,500
        COBO____.PFB
                      50,532
        COM____.PFB
                     34,585
        COO____.PFB
                     48,468
        SY____.PFB
                    34,705
        ZD____.PFB 49,593
        ZX____.PFB 75,573
            ____.PFB 96,418
           \PFM
                 ____.PFM
                          5,809
             _AB____.PFM
                          5,330
             _ABI___.PFM
                          5,336
              _AI____.PFM
                          5,816
              _EB____.PFM
                          4,941
              _EBI___.PFM
                          4,683
              EI____.PFM
                          4,815
                          4,692
679
              ER___.PFM
                   ___.PFM
              COB
              COBO___.PFM
                          686
              COM____.PFM
                          674
              COO____.PFM
                           682
              SY____.PFM
                           672
                  ____.PFM
              ZD
                           684
                  ____.MMM
                           7,248
              ZX
                 ____.PFM
              ZX
                           683
              ZY .MMM
                           7,248
              ZY____.PFM
                            684
     \PFM
        _A
             ___.PFM 5,809
            ____.PFM 5,330
        _AB
        _ABI___.PFM 5,336
        _AI____.PFM 5,816
             ___.PFM 4,941
        EB
        _EBI___.PFM
                    4,683
        _EI___.PFM
                    4,815
         _ER____.PFM
                    4,692
        COB____.PFM
                      679
        COBO____.PFM
                      686
        COM____.PFM
                     674
        COO____.PFM
                     682
        SY____.PFM
                      672
        ZD____.PFM
                      684
            ____.MMM
                      7,248
        ZX
           ____.PFM
        ZX
                      683
           ____.MMM
        ΖY
                      7,248
           .PFM
        ΖY
                      684
\HELP
     \ENU
        ACROBAT.PDF
                     45,836
       READER.PDF
                     304,642
     \FRA
```

_ABI___.PFB

32,019

```
ACROBAT.PDF 63,724
        READER.PDF 457,883
\READER
  ACROFX32.DLL 26,624
  ACROJS32.DLL 155,136
  ACRORD32.EXE 2,316,288
  ADMUI316.FON 15,936
  AdobeBanner.awe 9
  AdobeBannerenu.gif 1,100
  AdobeBannerfra.gif 1,100
  ADOBEFNT.LST 23
  ADOBEWEB.DLL 212,992
  AdobeWeb10.awe 3,122
  AdobeWeb10enu.gif 21,693
  AdobeWeb10fra.gif 25,367
  AGM.DLL 582,144
  COOLTYPE.DLL 894,464
  LISEZMOI.PDF
                16,487
  MFC42.DLL 954,640
  MSVCRT.DLL
               277,776
  OLEAUT32.DLL 491,792
  RDLANG32.FRA 327,680
     \ACTIVEX
        PDF.FRA 14,848
        PDF.OCX 125,712
        PDF.TLB 3,860
     \BROWSER
        NPPDF32.DLL 51,712
        NPPDF32.FRA 4,096
     \OPTIONAL
        README.TXT
                    46
     \PLUG INS
       AHLS32.API 61,952
        AHLS32.FRA
                     6,144
       EWH32.API
                     54,272
        EWH32.FRA
                     9,216
        IEWEB32.API
                     6,144
        WEBLNK32.API 73,728
                    21,504
        WEBLNK32.FRA
          \ACROFORM
             AFILL32.API 402,432
             AFILL32.FRA 92,160
                          33,257
             AFORM.JS
                         2,104
             AFSTRENU.JS
             AFSTRFRA.JS 4,779
           \MOVIE
             MOVIE32.API 111,104
             MOVIE32.FRA 15,872
             QT2.DLL 7,680
             QT3.DLL 16,384
\RESOURCE
     \CMAP
        Identity-H
                    1,614
        Identity-V
                     1,527
     \FONT
        _A_
        _A____.PFB 32,084
_AB____.PFB 31,966
```

APPENDIX B

```
_ABI___.PFB
                                  32,019
                    _AI____.PFB
                                  32,115
                    _EB___.PFB
                                   35,377
                     EBI__.PFB
                                   38,543
                    _EI___.PFB
                                  37,518
                    ER____.PFB
                                  35,380
                         ___.PFB
                    COB
                                  35,500
                                  50,532
                    COBO____.PFB
                    COM____.PFB
                                  34,585
                    COO____.PFB
                                  48,468
                    SY____.PFB
                                  34,705
                    ZD____.PFB
                                  49,593
                    ZX____.PFB
                                  75,573
                        ____.PFB
                                  96,418
                       \PFM
                              ____.PFM
                                        5,809
                          _AB
                              ____.PFM
                                        5,330
                          _ABI____.PFM
                                       5,336
                          _AI____.PFM
                                       5,816
                          EB
                               .PFM
                                       4,941
                              .PFM
                                        4,683
                          EBI
                               .PFM
                                        4,815
                           ΕI
                               __.PFM
                                        4,692
                          ER
                               ___.PFM
                          COB
                                        679
                               ___.PFM
                          СОВО
                                       686
                          COM____PFM
                                        674
                          COO____.PFM
                                        682
                               ___.PFM
                          SY
                                        672
                               ___.PFM
                          ZD
                                        684
                               ____.MMM
                                        7,248
                          ZX
                              ____.PFM
                                        683
                          ZX
                              ____.MMM
                          ZY
                                        7,248
                          ZY____.PFM
                                        684
\Installers
  ACRD4DEU.EXE 5,994,880
               5,455,526
  ACRD4ENU.EXE
  ACRD4FRA.EXE 5,653,836
```

[End of Listing/Article]

Appendix C - Reduced file listing for Reader on CD (for English language only users)

Files for inclusion for Reader on CD to minimise space used. Only suitable if distribution is to English language audience only. Only English language version of the application, help files and installer are included

The file set listed below will occupy approximately 7.9 Mb. The English language Reader installer is further 6.2 Mb if included, totalling 14 Mb. Note this represents a 80% space saving on the officially described file set

The files with names including the characters "VDK" are associated with Search and are thus not found in the basic version of Reader.

Name (and Size for files only)

Listing gives folder/file NAME and file SIZE for files only. Filenames which are still non-ISO 9660 compliant when in all uppercase are in shown in **bold**. Files which are probably non-essential to running from CD and which might be omitted are shown in *italics* (not tested by author).

```
[CD]:\Acrobat 4.0
      \Help
             \ENU
                                                  (Flyer for Acrobat)
               Acrobat.pdf
                             45,836
                              415,715
                                                  (Reader Help file)
               Reader.pdf
      \Reader
                                                  (EULA text)
         (c) Adobe.txt 6,019
         Acrofx32.dll 26,624
         AcroJs32.dll 155,136
         AcroRd32.exe 2,316,288
                                                  (Reader's exe file)
         Admui316.fon 15,936
         Agm.dll
                       582,144
         Cooltype.dll 894,464
         ReadMe.pdf 83,513
                                                  (Reader 'Read Me')
         VDK150.DLL
                       878,592
                                                  (Search version file)
         VDK150a.dll
                       8,192
                                                  (Search version file)
            \ActiveX
               pdf.ocx 125,712
               PDF.tlb 3,860
            \browser
               nppdf32.dll 51,712
                                                  (Browser plug-in)
            \Optional
                                                  (optional spare folder)
               Readme.txt
                              46
            \plug ins
               Ahls32.api
                             61,952
               asrch32.api
                             186,368
                                                  (Search version file)
               autidx32.api 28,672
                                                  (Search version file)
                               54,272
               EWH32.api
```

APPENDIX C

```
ieweb32.api
                        6,144
                         73,728
         weblnk32.api
             \AcroForm
                Afill32.api
                               402,432
                   \JavaScripts
                      Aform.js
                                       33,257
                      Afstrenu.js
                                     2,104
             \Movie
                Movie32.api
                                111,104
                OT2.dll
                                7,680
                QT3.dll
                                16,384
             \vdkhome
                                             (Search version file)
                                             (Search version file)
                VDK10.CMP
                                4,044
                VDK10.LIC
                                41
                                             (Search version file)
                VDK10.STD
                                2,070
                                             (Search version file)
                                             (Search version file)
                VDK10.SYX
                                415
                VDK10.THD
                                304
                                             (Search version file)
                   \ENU
                                               (Search version file)
                                       23, 283 (Search version file)
                      VDK10.LNG
                                       61,440 (Search version file)
                      VDK10.RSD
                      VDK10.RST
                                       2,359
                                               (Search version file)
                                       15,103 (Search version file)
                      VDK10.STC
                      VDK10.STP
                                       3,141
                                               (Search version file)
                                       806, 912 (Search version file)
                      VDK10.SYD
\Resource
       \CMap
         AdobeFnt.lst
                         417
                         1,614
         Identity-H
         Identity-V
                         1,527
      \Font
               ___.pfb
         _a
                         32,084
         _ab____.pfb
                         31,966
         _abi___.pfb
                         32,019
         _ai____.pfb
                         32,115
         _eb____.pfb
                        35,377
         _ebi___.pfb
                        38,543
                        37,518
         _ei___.pfb
          er____.pfb
                        35,380
         AdobeFnt.lst
                         6,291
                         35,500
         cob____.pfb
         cobo____.pfb
                         50,532
                         34,585
         com____.pfb
         coo____.pfb
                         48,468
                         34,705
         Sy .pfb
                  _.pfb
                         49,593
                         75,573
             ____.pfb
                         96,418
               ___.pfb
             \PFM
                               5,809
                _a___.pfm
                _ab____.pfm
                              5,330
                _abi____.pfm
                                5,336
                _ai___.pfm
_eb____.pfm
                               5,816
                                4,941
                _ebi___.pfm
                                4,683
                                4,815
                _ei___.pfm
```

APPENDIX C

[End of Listing/Article]

\Install

Appendix D - Adobe Technical Support Documentation - Times and **Helvetica Aren't Installed with Acrobat 4.0 (#322792)**

Adobe Acrobat 4.0 does not include the Type 1 fonts Helvetica and Times, unlike previous versions of Acrobat. Instead, it includes the Type 1 fonts MT Arial and MT Times New Roman from Monotype.

MT Arial and MT Times New Roman have spacing and character shapes nearly identical to those of Helvetica and Times, respectively. MT Arial and MT Times New Roman are different from the Microsoft versions of Arial and Times New Roman (e.g., the MT versions include the Euro character, which is the symbol for the currency of the European Union).

While you usually you won't notice any change with these new fonts, either on-screen or in print, you may see unexpected font behaviour.

Some different behaviour with the new fonts may be obvious to the trained eye. If you're viewing a PDF file containing Helvetica or Times, and the font is neither embedded in the PDF file nor installed on your system, Acrobat 4.0 viewers will substitute the font using either MT Arial or MT Times New Roman. While MT Arial and MT Times New Roman are very similar to Helvetica and Times, respectively, they are not identical.

For example, a PDF file containing Helvetica or Times that was created with Acrobat 3.0x or earlier will not have the font embedded. If you view that PDF file in an Acrobat 4.0 viewer, the viewer will substitute Helvetica or Times with MT Arial or MT Times New Roman. If you print that PDF file to a PostScript printer, the Acrobat viewer won't download MT Arial or MT Times New Roman; instead, it will print the file using the printer's installed version of Helvetica or Times. The printed file will, therefore, look identical to the original. (The Acrobat viewer will automatically download the Euro character if needed.) If you print to a non-PostScript printer, the Acrobat viewer will download MT Arial or MT Times New Roman font information. The printed file will, therefore, probably look slightly different from the original.

An Acrobat 4.0 viewer will substitute Helvetica or Times with MT Arial or MT Times New Roman even if Helvetica or Times is installed on your system. The Acrobat viewer searches for fonts first in the PDF files. If the fonts aren't embedded, the viewer checks the Acrobat:Resource:Font folder (Mac OS) or the Acrobat4\Resource\Font folder (Windows). If the fonts aren't there, the viewer checks the system. If the fonts aren't installed, the viewer simulates the fonts using its multiple master fonts. The viewer searches for fonts in this order to ensure that the newest versions of Acrobat's multiple master substitution fonts are read before any older versions in the System Folder (Mac OS) or the Windows\System folder (Windows) are read. Older versions of the multiple master substitution fonts, such as those included with Adobe Type Manager (ATM), don't include the Euro character.

If your workflow requires that your PDF file contain Helvetica or Times, do either of the following:

■ Re-create the PDF file using Acrobat Distiller 4.0, and embed Helvetica and Times. For information on embedding fonts, see "Embedding fonts in PDF files with Distiller" in the Acrobat 4.0 User Guide.

■ View and print the PDF file in an Acrobat 3.0x viewer. Acrobat 3.0x viewers don't include MT Arial and MT Times New Roman, so they won't substitute them for Helvetica and Times.

[End of Article]

Appendix E - Adobe Technical Support Documentation **How Acrobat 4.x Viewers Handle Fonts and Font Information (#322902)**

What's Covered

- Fonts Installed by Acrobat
- How Acrobat Viewers Retrieve Font Information
- How to View a PDF File's Font Information
- Testing How Fonts Will Appear Using Acrobat

This document describes how Adobe Acrobat 4.0 viewers handle fonts and font information. For more information about how Acrobat 4.0 viewers handle fonts, see the Acrobat User Guide or the Acrobat Reader online guide.

Fonts Installed by Acrobat

Acrobat installs the following Type 1 fonts, which are called the Base 14 fonts, into its Resources\Fonts folder:

- Courier (Regular, Bold, Italic, and Bold Italic)
- Arial MT (Regular, Bold, Oblique, and Bold Oblique)
- Times New Roman PS MT (Roman, Bold, Italic, and Bold Italic)
- Symbol
- ZapfDingbats

These Base 14 fonts are usually not embedded in PDF files, because they're commonly installed on most computers. Acrobat installs them to ensure they're available to Acrobat viewers, even if they're not installed on a given computer.

Acrobat also installs its multiple master substitution fonts, Adobe Sans and Adobe Serif, in the Acrobat Resources\Fonts folder.

How Acrobat Viewers Retrieve Font Information

An Acrobat viewer completes a series of steps to retrieve font information when opening a PDF file. It first checks the PDF file for font information, such as embedded or subsetted

fonts, then uses that font information to display text. If there is no font information in the PDF file, the viewer checks to see if the fonts specified in the PDF file are in its Resources\Fonts folder. If they are in the Resources\Fonts folder, the viewer uses them.

Note: If the PDF file contains text formatted with Helvetica or Times, and these fonts are not embedded, the viewer will use Arial MT or Times New Roman PS MT from the Resources\Fonts folder for Helvetica or Times, respectively. The viewer will do this even if Helvetica or Times is active on the system.

If the fonts aren't in the Resources\Fonts folder, the viewer checks to see if the fonts are active on the system. Fonts are active if they're installed in the system's Fonts folder or activated in a font management utility, such as Adobe Type Manager (ATM). If the fonts are active, the viewer uses them.

If the viewer doesn't find any of the fonts in specified in the PDF file, it simulates fonts using its Adobe Sans and Adobe Serif multiple master fonts. The approximate shapes and spacing for the fonts are defined in font metrics saved within the PDF file.

How to View a PDF File's Font Information

To view the font information for a PDF file, open the PDF file in an Acrobat viewer and choose File > Document Info > Fonts. The Font Info dialog box displays font information for only the text that has been viewed in the PDF. To see a list of all the fonts used in the document, click List All Fonts.

The Font Info dialog box displays the following information. For more information about the Font Info dialog box in Acrobat 4.0 viewers, see the Acrobat User Guide or the Acrobat Reader online guide.

Original Font

This column lists the font used in the original document from which the PDF file was created.

Type

This columns lists the Original Font type. The font type is typically Type 1 or TrueType, but you may also see T3 and T4 listed, which are typically Type 3 fonts.

Encoding

This column indicates the type of encoding used in the Original Font. Font encoding is typically Windows, MacRoman, Custom, or Built-in:

Windows and MacRoman are the standard font encoding types for Windows and Mac OS, respectively. (To improve cross-platform results, most applications that create PDF files use Windows encoding.)

Custom encoding means that the encoding vector for the font is in the PDF file -- that every character in the font and its font metrics are listed in the PDF file. Custom encoding is typically used with expert fonts.

Built-in encoding means that the information for every character in the font and its code point are included, rather than defined by the system or with custom encoding. Built-in

encoding is generally used with embedded system and TrueType fonts, particularly symbol fonts (e.g., pi).

Used Font

This column indicates whether the font that the viewer uses is embedded or subsetted, installed on the system, or is a multiple master font substitution.

Type

This column indicates what type of font the Used Font is.

Testing How Fonts Will Appear Using Acrobat

In Acrobat 4.0 (but not Acrobat Reader 4.0), you can see how the fonts your PDF file will look on a system that does not have the fonts installed. Choose View > Use Local Fonts to specify whether Acrobat should ignore the fonts installed on your system. (The command has a check mark by it when Acrobat is using the fonts and no check mark when Acrobat is ignoring the fonts.) When Use Local Fonts is off (that is, it does not have a check mark by it), Acrobat displays the PDF file with substitute fonts for all fonts that are not embedded. If a font cannot be substituted, the text formatted with that font appears as bullets, and Acrobat displays an error message.

If the text in your PDF file appears as bullets when Use Local Fonts is off, you should embed the fonts used to format that text in your PDF file.

[End of Article]

Appendix F - Useful references

Acrobat & PDF:

CompuServe Adobe forums - Go ADOBEA - (where this project started).

Adobe web site (www.adobe.com) [Links are correct for Oct '99 new Adobe site]

Technical Support - technotes etc.

Developer info - SDK.

General downloads - Acrobat patches, etc.

Reader installers - different (platform/language) versions of Acrobat Reader.

Reader CD-ROM - Info on a CD-ROM containing all language versions of Reader for a given platform (1 CD each for Windows, Mac and Unix).

Adobe user forums (Good, but note you have to register (free) and log in and to use. You can only read the forums online).

PDF Zone (www.pdfzone.com)

Tips, info on tools/plug-ins, discussion forums (run as a list, not a newsgroup, though there are searchable archives available online).

Planet PDF (www.planetpdf)

Tips, info on tools/plug-ins, news. Partner sites: CodeCuts, AcroBuddies

CodeCuts (www.codecuts.com)

Acrobat programming tips, code examples.

AcroBuddies (www.acrobuddies.com)

User-to-User help forum - requires registration and log-in

PDF newsgroup (comp.text.pdf)

AutoPlay CDs on the PC:

Microsoft (www.microsoft.com) (www.msdn.microsoft.com)

Info on AutoPlay CDs. Use Search page, Knowledge Base and MSDN.

Pollen Software (www.pollensoftware.com)

Various shareware utilities to extend AutoPlay

CD-R software

Adaptec (www.adaptec.com)

Easy CD Creator Deluxe (PC) and Toast (Mac) CD-R software SCSI info.

Ahead (www.ahead.de)

Nero CD-R software

CeQuadrat (www.Cequadrat.com)

WinOnCD CD-R software

Cross-platform Utilities

MacDisk (www.macdisk.com)

Software for preparing hybrid CDs, reading Mac media on a PC:

MacDisk MacScuzzy MacImage

Dataviz (www.dataviz.com)

Utilities for reading Mac media on a PC

Information about CD-R

CD Info (www.cd-info.com)

Andy McFadden's CD-R FAQ - a good reference

Appendix G - The Adobe Reader CD-ROM

What is on the Reader CD-ROM?

[Drawn from information at www.adobe.com/products/acrobat/cdrom40.html]

The Adobe® Acrobat® Reader 4.0 CD-ROM, which contains all 54 versions of Acrobat Reader. This CD-ROM includes versions of Acrobat Reader for the Windows®, Macintosh®, and UNIX® platforms, in all supported languages (see table below), plus Acrobat Reader with Search for those languages that currently have Search support. (Note: The UNIX versions are in English only. Linux and SunTM SolarisTM X86 versions do not include Search.)

Acrobat Reader 4.0 with Search consists of Acrobat Reader and two Acrobat plug-ins: Acrobat Search and AutoIndx. This alternate configuration of Acrobat Reader lets you search through a collection of Adobe PDF files on a CD-ROM or a local file system. (The PDF files must have been indexed using Acrobat Catalog, a tool included with Adobe Acrobat 4.0.)

The Acrobat Reader 4.0 CD-ROM also includes all four of Adobe's Asian Font Packs, so you can view documents created in Japanese, Chinese (Traditional and Simplified), and Korean.

Language	Reader	Reader + Search
English	Yes	Yes
French	Yes	Yes
German	Yes	Yes
Dutch	Yes	Yes
Italian	Yes	Yes
Swedish	Yes	Yes
Spanish	Yes	Yes
Japanese	Yes	
Portuguese	Yes	
Chinese Simplified	Yes	
Chinese Traditional	Yes	
Korean	Yes	

Hebrew	Yes	
Arabic	Yes	

Note: The Arabic and Hebrew versions of Acrobat Reader install with an English or French user interface.

Pricing and Availability

[As at September 1999 - check Adobe's web site for new/local pricing]

Adobe® Acrobat® Reader 4.0 is a free download. However, if you wish to purchase the Acrobat Reader 4.0 CD-ROM, which includes Acrobat Reader with Search, there is a charge. The CD comes in Windows, Mac and Unix versions and each costs online US\$ 14.95 or US\$ 19.95 ordered over the phone. There is a charge per CD/platform, so ordering the windows and Mac CDs online would cost US\$ 29.90, etc.

System Requirements

See Appendix I.

Distributing Acrobat Reader

You can distribute the free Adobe Acrobat Reader software to anyone inside or outside your company who needs to view, navigate, and search PDF files.

You may make unlimited copies of this software and give copies to other persons or entities as long as those copies contain the Electronic End-User License Agreement and the same copyright and other proprietary notices that appear on or in the software. The license agreement, copyright notices, and other notices are contained in the Acrobat Reader installer program; so as long as you do not alter the installer program in any way you will be in compliance with the agreement. You can also see the online version of the license agreement.

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Note: The Get Acrobat Reader button and PDF file icons may not be modified in any manner, including text, size, and colour.

Appendix H - TechDocs Document Index: Acrobat (#250099)

[Based on Adobe TS Document number 250099 with additions]

The Adobe technical support documents listed below are available from the following sources:

- Adobe Technical Solutions database on the World Wide Web at www.adobe.com/support/database.html
- Adobe's automated faxing system, FaxYI, at 650-556-8481
- Adobe's auto-response e-mail system, Techdocs, at techdocs@adobe.com

Each document's number appears to the left of its title. You'll need the number to order a document from FaxYI or Techdocs, and you can use the number to search for a document on the Adobe Web site. To order a document from Techdocs, include only the document number in the subject line and address the e-mail to techdocs@adobe.com.

All Products

110099 Mac OS and Windows Products (Document Index)
322902 How Acrobat 4_x Viewers Handle Fonts and Font Information
322792 Times and Helvetica Aren't Installed with Acrobat 4_0

Acrobat Capture for Mac OS

320327 Error "PDF page contains graphics other than images or text..." in Acrobat Capture

Acrobat Capture for Windows

- 316732 Acrobat Capture 2.0 Returns Error or Freezes When Processing Pages
- 320432 Acrobat Capture 2.01 for Windows New Features
- 315622 Capture 2.0 Doesn't Recognize Files in Input Folders and OLE Error Occurs
- 310475 Error "Acrobat PDF Writer Error. Insufficient room" in Acrobat Capture or Capture Reviewer
- 310271 Error "Another application is using the file MSVCRT20.DLL..." When Installing Capture 1.01
- 310840 Error "Can't open system level scanner driver...[-4428]" When Scanning in Acrobat Capture or Exchange
- 314940 Error "Capture Server failed to respond" or "Acrobat PDFWriter Error" in Acrobat Capture 2.0
- 321678 Error "Could not initialize OLE" When Starting Acrobat Capture 2.01
- 322376 Error "Font...cannot be found or system resources are too low" in Acrobat Capture or Exchange for Windows
- 310175 Error "Hardware key not found" When Processing in Acrobat Capture 2.0x
- 311790 Error "mem bad pointer" When Processing TIFF in Acrobat Capture
- 320327 Error "PDF page contains graphics other than images or text..." in Acrobat Capture
- 311333 Error "PDFWriter: Out of memory" in Acrobat Capture Reviewer 2.0 or Acrobat Capture 2.0

- 319803 Error "...problem reading this document (9)" Opening PDF File in Acrobat 2.1 Viewer
- 315642 Fonts Installed with Acrobat Capture
- 312431 Installed Fujitsu Scanner Does Not Appear in Capture's Scanner Device List
- 317214 ISIS Drivers General Information and Availability
- 316167 ISIS Drivers Installed by Acrobat Capture 2.0 in Windows 95
- 313927 ISIS Drivers Installed by Acrobat Capture 2.0 in Windows NT
- 312311 Manually Removing Acrobat Capture 1.01 for Windows from Your System
- 320033 Manually Removing Acrobat Capture 2.0 from Windows 95 and Windows NT 4.0
- 320085 Optimizing Performance in Acrobat Capture 2.0 for Windows
- 320337 Simplifying Windows 95 or Windows 98 to Troubleshoot System Errors in Acrobat Applications
- 313100 Troubleshooting ISIS Scanning Problems with Acrobat Capture Scan Command and Exchange Scan Plug-in
- 316483 Troubleshooting TWAIN Scanning Problems in Acrobat
- 310929 Uninstalling Acrobat Capture 2.0 for Windows

Acrobat Catalog for Mac OS

- 314561 Top Issues: Adobe Acrobat 3.0
- 318504 Manually Removing Acrobat 3.0x from Mac OS 7.x or 8.0.x
- 316082 Networks Supported by Acrobat Catalog 3.0
- 321627 Searching the Contents of PDF Files on a Web Site
- 312303 System Error or Freeze When Building Index in Acrobat Catalog for Mac OS
- 320976 Troubleshooting Installation Problems in Acrobat 4.0 for Windows
- 320271 Troubleshooting System Errors and Freezes in Mac OS 8.0 When Starting an Acrobat Application
- 320139 Why the Title in Search Results Doesn't Always Match the PDF Filename

Acrobat Catalog for UNIX

- 316082 Networks Supported by Acrobat Catalog 3.0
- 320237 Using Acrobat Catalog to Create Indexes That Work in UNIX

Acrobat Catalog for Windows

- 314561 Top Issues: Adobe Acrobat 3.0
- 311326 Acrobat Catalog Returns an Error When Building an Index
- 311426 Adding a List of Stopwords to an Acrobat Catalog Index
- 310434 Error "Cannot read/access" Index or "Index not available" for PDF File on Network Drive
- 312839 Error "General Protection Fault in module Compcore.dll at 0001.03DF" Building Index in Acrobat Catalog
- 316616 Error "Internal Error has Occurred. Can't Retrieve Results. Sorry." When Searching Index With Exchange
- 312368 Error "The index is currently unavailable..." When Attaching To or Searching Index in Acrobat Exchange or Reader
- 315219 Files Associated with an Acrobat Catalog Index
- 314459 Modifying Acrobat Catalog Settings Using the SDK or the Acrocat.ini File
- 323421 Must Be Logged In to Windows NT as Administrator to Install Acrobat 4.0 Applications
- 316082 Networks Supported by Acrobat Catalog 3.0
- 321627 Searching the Contents of PDF Files on a Web Site

- 320337 Simplifying Windows 95 or Windows 98 to Troubleshoot System Errors in Acrobat Applications
- 320976 Troubleshooting Installation Problems in Acrobat 4.0 for Windows
- 321798 Troubleshooting Problems with PDF Ifilter
- 320139 Why the Title in Search Results Doesn't Always Match the PDF Filename

Acrobat Distiller for Mac OS

- 314561 Top Issues: Adobe Acrobat 3.0
- 320214 Acrobat Distiller 3.02 Doesn't Start When You Export a PDF from PageMaker 6.x
- 320112 Acrobat Distiller 3.02 Upgrade Information and Installation Instructions
- 313928 Acrobat Distiller Returns an Error When Distilling a PostScript File
- 315034 Captured Screen Images in Acrobat PDF Files
- 321454 Characters Missing in PDF File Created from LaTeX or TeX PostScript File
- 311854 Creating a PDF File from a FrameMaker 5 Document
- 315353 Creating a PostScript File from PageMaker for Use with Acrobat Distiller
- 316464 Creating a PostScript File from QuarkXPress 3.x for Mac OS for Use with Acrobat Distiller
- 322140 Creating a PostScript File to Use With Acrobat Distiller or Printing to PDF from QuarkXPress 4.x in Windows
- 312143 Creating quality Adobe PDF files from TeX with DVIPS by Kendall Whitehouse/EMERGE
- 317218 Distiller Displays Messages About Destinations When Creating PDF from FrameMaker 5.0 5.2
- 321630 Embedded Fonts from Some Foundries Don't Appear in PDF Files As Expected
- 310493 Error "Invalidfont: OffendingCommand: findfont" in Acrobat Distiller 3.0x
- 319266 How Acrobat Distiller and PDF Writer Handle Fonts
- 321885 How to Prevent Acrobat Distiller 3.0x from Simulating or Substituting Fonts
- 318504 Manually Removing Acrobat 3.0x from Mac OS 7.x or 8.0.x
- 319339 PDF File from Acrobat Distiller 3.02 Doesn't Contain Color Separation Information
- 320438 Recommendations for Creating PDF Files in Word 97
- 319033 Recommendations for High-End Settings in Acrobat Distiller 3.02
- 320976 Troubleshooting Installation Problems in Acrobat 4.0 for Windows
- 320271 Troubleshooting System Errors and Freezes in Mac OS 8.0 When Starting an Acrobat Application
- 320690 Using Cyrillic Fonts in Acrobat PDF Files
- 318674 Using Runfilex and Rundirex in Acrobat Distiller to Create One PDF from Multiple PostScript Files

Acrobat Distiller for UNIX

- 321478 Top Issues: Acrobat 3.0x for UNIX
- 320315 Acrobat Availability on UNIX Platforms
- 321572 Acrobat Distiller for UNIX Parameters for the Preferences File or Command Line
- 317218 Distiller Displays Messages About Destinations When Creating PDF from FrameMaker 5.0 5.2
- 321630 Embedded Fonts from Some Foundries Don't Appear in PDF Files As Expected
- 320562 Error "No configurations found...aborting" When Installing Acrobat 3.x for UNIX
- 320835 PostScript Files Take a Long Time to Distill in Acrobat Distiller for UNIX
- 319033 Recommendations for High-End Settings in Acrobat Distiller 3.02

Acrobat Distiller for Windows

- 314561 Top Issues: Adobe Acrobat 3.0
- 320112 Acrobat Distiller 3.02 Upgrade Information and Installation Instructions
- 311407 Acrobat Distiller 3.0x Checks Watched Folders Too Soon
- 320716 Acrobat Distiller Assistant 3.0x for Windows 95, Windows 98, and Windows NT 4.0
- 312949 Acrobat Distiller Assistant Doesn't Appear in Printers Folder in Windows 95, Windows 98, or Windows NT 4.0
- 313928 Acrobat Distiller Returns an Error When Distilling a PostScript File
- 315034 Captured Screen Images in Acrobat PDF Files
- 321454 Characters Missing in PDF File Created from LaTeX or TeX PostScript File
- 320715 Colors Are Incorrect in a PDF File Created from a PowerPoint Presentation
- 311854 Creating a PDF File from a FrameMaker 5 Document
- 315353 Creating a PostScript File from PageMaker for Use with Acrobat Distiller
- 313598 Creating a PostScript File from QuarkXPress 3.x for Windows for Use with Acrobat Distiller
- 315478 Creating a PostScript File from Ventura Publisher 5.0 for Use with Acrobat Distiller
- 322140 Creating a PostScript File to Use With Acrobat Distiller or Printing to PDF from QuarkXPress 4.x in Windows
- 312143 Creating quality Adobe PDF files from TeX with DVIPS by Kendall Whitehouse/EMERGE
- 317218 Distiller Displays Messages About Destinations When Creating PDF from FrameMaker 5.0 5.2
- 321630 Embedded Fonts from Some Foundries Don't Appear in PDF Files As Expected
- 310450 Error "\Distasst.ps' is an invalid port name" When Installing Acrobat Distiller 3.0x
- 310124 Error "Could not launch Distiller. Distiller Assistant will Terminate" in Windows NT 4.0
- 310493 Error "Invalidfont: OffendingCommand: findfont" in Acrobat Distiller 3.0x
- 317205 Error "Low Printer VM" When Saving a FrameMaker 5.5 for Windows 95 Book as PDF
- 317205 Error "Low Printer VM" When Saving a FrameMaker 5.5 for Windows 95 Book as PDF
- 323931 Error "No timers available" When Starting Acrobat Distiller 4.0 in Windows NT
- 319266 How Acrobat Distiller and PDF Writer Handle Fonts
- 321885 How to Prevent Acrobat Distiller 3.0x from Simulating or Substituting Fonts
- 323421 Must Be Logged In to Windows NT as Administrator to Install Acrobat 4.0 Applications
- 319339 PDF File from Acrobat Distiller 3.02 Doesn't Contain Color Separation Information
- 320438 Recommendations for Creating PDF Files in Word 97
- 319033 Recommendations for High-End Settings in Acrobat Distiller 3.02
- 320337 Simplifying Windows 95 or Windows 98 to Troubleshoot System Errors in Acrobat Applications
- 323662 Text in Grouped Text Boxes Is Missing from PDF Files Created with PDFMaker in Word 97
- 320976 Troubleshooting Installation Problems in Acrobat 4.0 for Windows
- 320690 Using Cyrillic Fonts in Acrobat PDF Files
- 318674 Using Runfilex and Rundirex in Acrobat Distiller to Create One PDF from Multiple PostScript Files

Acrobat (Exchange) for Mac OS

314561 Top Issues: Adobe Acrobat 3.0

- 314180 Acrobat Exchange 3.0x and Acrobat 4.0 Security Settings
- 320255 Acrobat Forms Author Plug-in and Forms Fill-in Plug-in Information and Availability
- 323708 Acrobat Viewer Doesn't Print Pages with Multiple Page Sizes to Multiple Paper Trays
- 323838 Can't Print Pages with Non-Numeric Page Numbers in Acrobat Viewers for Mac OS
- 315034 Captured Screen Images in Acrobat PDF Files
- 323084 Characters Appear as Bullets in Acrobat PDF File
- 314807 Configuring Internet Explorer for Mac OS to Display PDF Files
- 314544 Configuring Netscape Navigator for Mac OS to Display PDF Files
- 313114 Configuring Netscape Navigator for Mac OS to Recognize Acrobat Reader or Acrobat Exchange 2.1 or Earlier
- 315385 Creating Link to a Specific PDF Page Using Named Destinations
- 321630 Embedded Fonts from Some Foundries Don't Appear in PDF Files As Expected
- 322066 Error or Freeze When Starting Acrobat Exchange 3.0x in Mac OS 8.5 or Later
- 316374 Error "Capture Server could not process page(s)" When Capturing in Acrobat Exchange or Acrobat 4.0
- 323505 Error "DXTN 'watermark' reports an error..." When Printing from Acrobat 4.0 with AdobePS
- 322960 Error "File does not begin with '%PDF-" When Clicking a Downloadable File in a Web Browser
- 311277 Error "No scanners available" in Acrobat Exchange 3.01 or Later for Mac OS
- 311596 Error "The Symbol font must be installed . . . " in Acrobat Reader or Acrobat Exchange 3.0x
- 316430 Exchange Incorrectly Reports Fonts in a PDF File as Embedded
- 311633 Graphics Print Blurry from Acrobat 3.01 Viewer to a PCL Printer
- 321474 How Acrobat 3.x Viewers Handle Fonts and Font Information
- 323695 How to Extract Text and Graphics from a PDF File
- 318504 Manually Removing Acrobat 3.0x from Mac OS 7.x or 8.0.x
- 320487 PDF Embedded in HTML Document Displays Only One Page in Netscape Navigator
- 311184 PDF Pages Are Blank Inside Web Browser Window
- 313827 PostScript Error "typecheck" When Printing from Acrobat Reader 3.01 or Exchange 3.01
- 312047 Screen Capture Image Looks Worse in Acrobat Viewer than in Microsoft Office
- 321627 Searching the Contents of PDF Files on a Web Site
- 313228 Text Attributes Aren't Retained When Copied from Exchange
- 311237 Text in PDF File Appears Blurry in Acrobat Viewer
- 322551 Text Is Jagged in PDF File Created from LaTeX or TeX PostScript File
- 320976 Troubleshooting Installation Problems in Acrobat 4.0 for Windows
- 315727 Troubleshooting Printing Problems in Acrobat for Mac OS
- 320271 Troubleshooting System Errors and Freezes in Mac OS 8.0 When Starting an Acrobat Application
- 320418 Unable to Fill in Form Fields of a PDF File
- 320690 Using Cyrillic Fonts in Acrobat PDF Files
- 315645 Weblinks Don't Work Using Acrobat Viewer as Helper Application in a Web Browser

Acrobat (Exchange) for UNIX

321478 Top Issues: Acrobat 3.0x for UNIX 320315 Acrobat Availability on UNIX Platforms

- 320255 Acrobat Forms Author Plug-in and Forms Fill-in Plug-in Information and Availability
- 323708 Acrobat Viewer Doesn't Print Pages with Multiple Page Sizes to Multiple Paper Trays
- 323084 Characters Appear as Bullets in Acrobat PDF File
- 321630 Embedded Fonts from Some Foundries Don't Appear in PDF Files As Expected
- 322960 Error "File does not begin with '%PDF-" When Clicking a Downloadable File in a Web Browser
- 320562 Error "No configurations found...aborting" When Installing Acrobat 3.x for UNIX
- 323695 How to Extract Text and Graphics from a PDF File
- 318675 Printing from Acrobat Reader and Exchange for UNIX Using the LP or LPR Command
- 322551 Text Is Jagged in PDF File Created from LaTeX or TeX PostScript File

Acrobat (Exchange) for Windows

- 314561 Top Issues: Adobe Acrobat 3.0
- 320325 Acrobat's ActiveX Control Is Not Full-Featured Control
- 314180 Acrobat Exchange 3.0x and Acrobat 4.0 Security Settings
- 320255 Acrobat Forms Author Plug-in and Forms Fill-in Plug-in Information and Availability
- 311134 Acrobat PDFWriter 3.0x or 4.0 Doesn't Appear in Windows Printers Control Panel
- 323708 Acrobat Viewer Doesn't Print Pages with Multiple Page Sizes to Multiple Paper Trays
- 315034 Captured Screen Images in Acrobat PDF Files
- 323084 Characters Appear as Bullets in Acrobat PDF File
- 315029 Configuring Internet Explorer and AOL for Windows 95, Windows 98, and Windows NT 4.0 to Display PDF Files
- 313692 Configuring Netscape Navigator for Windows to Display PDF Files
- 315385 Creating Link to a Specific PDF Page Using Named Destinations
- 321630 Embedded Fonts from Some Foundries Don't Appear in PDF Files As Expected
- 310840 Error "Can't open system level scanner driver...[-4428]" When Scanning in Acrobat Capture or Exchange
- 316374 Error "Capture Server could not process page(s)" When Capturing in Acrobat Exchange or Acrobat 4.0
- 310345 Error "Document could not be printed...drawing error" in an Acrobat Viewer
- 322960 Error "File does not begin with '%PDF-" When Clicking a Downloadable File in a Web Browser
- 322376 Error "Font...cannot be found or system resources are too low" in Acrobat Capture or Exchange for Windows
- 311995 Error "Invalid Page Fault in Module Kernel32.dll" When Viewing PDF in Exchange 3.0x
- 311408 Error "No scanners available or error querying available scanners" When Scanning in Acrobat Exchange 3.0
- 323047 Error "Nothing Done. Timed Out" When Trying to Capture Web Pages in Acrobat
- 310521 Freeze or Error in Internet Explorer for Windows NT When Viewing PDF File
- 311633 Graphics Print Blurry from Acrobat 3.01 Viewer to a PCL Printer
- 321474 How Acrobat 3.x Viewers Handle Fonts and Font Information
- 312906 How to Bypass Acrobat PDFWriter's Save As Dialog Box
- 313363 How to Embed PDF Files in Lotus Notes 3.x Using Notes/FX
- 323695 How to Extract Text and Graphics from a PDF File
- 311040 HP Scanner Drivers Installed with Acrobat Exchange 3.01 and Acrobat Capture 2.0 for Windows

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315064 Install Structure Acrobat Reader 3 0 (CD-ROM)
310719 Installed Structure Acrobat 3 0 Installed for Windows
312902 Installed Structure Acrobat 3 01 in Windows NT 4 0
313779 Installed Structure Acrobat 3 01 in Windows 95
311875 Installed Structure Acrobat Capture 2_0 in Windows NT 4_0
314501 Installed Structure Acrobat Capture 2 0 in Windows 95
310855 Installed Structure Acrobat Reader 3 0 for Windows 3 1 (Onefile Installer)
311391 Installed Structure Acrobat Reader 3 0 in Windows 95 and NT 4 0 (Onefile
        Installer)
311163 Installed Structure Acrobat Reader 3 0 with Search for Windows 95
313847 Installed Structure Acrobat Reader 3 01 for Windows 95
323968 Installed Structure Acrobat Reader 3 01 for Windows NT 4 0
323196 Installed Structure Acrobat 4 0 for Windows 95 and Windows 98
314068 Internet Explorer 4.0 for Windows Doesn't Download PDF Files a Page at a Time
319909 Internet Explorer Displays PDF Files as Blank Pages with Personal Web Server
317214 ISIS Drivers General Information and Availability
314485 ISIS Drivers Installed by Acrobat 3.0 in Windows 95
314722 ISIS Drivers Installed by Acrobat 3.0 under Windows NT 4.0
323284 Keyboard Shortcuts for Acrobat 4.0 for Windows
323421 Must Be Logged In to Windows NT as Administrator to Install Acrobat 4.0
        Applications
310824 New Features in Adobe Acrobat 3.0
320487 PDF Embedded in HTML Document Displays Only One Page in Netscape
        Navigator
314437 PDF Files Do Not Print Or Print Only Partially to a PostScript Printer
311184 PDF Pages Are Blank Inside Web Browser Window
313827 PostScript Error "typecheck" When Printing from Acrobat Reader 3.01 or
        Exchange 3.01
312047 Screen Capture Image Looks Worse in Acrobat Viewer than in Microsoft Office
321627 Searching the Contents of PDF Files on a Web Site
320337 Simplifying Windows 95 or Windows 98 to Troubleshoot System Errors in Acrobat
        Applications
313062 Some Objects and Text in a PDF Don't Print to PCL Printers
313228 Text Attributes Aren't Retained When Copied from Exchange
311237 Text in PDF File Appears Blurry in Acrobat Viewer
322551 Text Is Jagged in PDF File Created from LaTeX or TeX PostScript File
323407 Text Prints with No Spaces from Acrobat 4.0 Viewer to HP PCL Printers
320976 Troubleshooting Installation Problems in Acrobat 4.0 for Windows
311705 Troubleshooting PostScript Printer Problems and Improving Printer Performance
316508 Troubleshooting Printing Problems in Acrobat for Windows
316483 Troubleshooting TWAIN Scanning Problems in Acrobat
320418 Unable to Fill in Form Fields of a PDF File
321263 Using Acrobat Forms and Form Data on the Web
320690 Using Cyrillic Fonts in Acrobat PDF Files
313219 Using HP ScanJet 6100 with Acrobat Exchange 3.0x or Acrobat Capture 2.0
315645 Weblinks Don't Work Using Acrobat Viewer as Helper Application in a Web
        Browser
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Acrobat Reader for Mac OS

314561 Top Issues: Adobe Acrobat 3.0

311837 Top Issues: Adobe Acrobat Reader 3.0x for Mac OS

310327 Acrobat Reader Support Resources

- 323708 Acrobat Viewer Doesn't Print Pages with Multiple Page Sizes to Multiple Paper Travs
- 323838 Can't Print Pages with Non-Numeric Page Numbers in Acrobat Viewers for Mac OS
- 323084 Characters Appear as Bullets in Acrobat PDF File
- 314807 Configuring Internet Explorer for Mac OS to Display PDF Files
- 314544 Configuring Netscape Navigator for Mac OS to Display PDF Files
- 313114 Configuring Netscape Navigator for Mac OS to Recognize Acrobat Reader or Acrobat Exchange 2.1 or Earlier
- 323115 Creating a CD to Distribute Acrobat Reader
- 320287 Determining Which Acrobat Reader Installer to Run on Acrobat 3.01 for Mac OS CD-ROM
- 321630 Embedded Fonts from Some Foundries Don't Appear in PDF Files As Expected
- 322960 Error "File does not begin with '%PDF-" When Clicking a Downloadable File in a Web Browser
- 311596 Error "The Symbol font must be installed . . ." in Acrobat Reader or Acrobat Exchange 3.0x
- 319294 Error "...File does not begin with '%PDF-" When Opening PDF File Sent Via E-Mail
- 311633 Graphics Print Blurry from Acrobat 3.01 Viewer to a PCL Printer
- 321474 How Acrobat 3.x Viewers Handle Fonts and Font Information
- 318006 How to Select and Copy Text in Acrobat Reader and Acrobat Exchange
- 315823 Introduction to Acrobat Reader
- 318504 Manually Removing Acrobat 3.0x from Mac OS 7.x or 8.0.x
- 316271 Operating Systems Supported by Acrobat Reader 3.0
- 320487 PDF Embedded in HTML Document Displays Only One Page in Netscape Navigator
- 311184 PDF Pages Are Blank Inside Web Browser Window
- 313827 PostScript Error "typecheck" When Printing from Acrobat Reader 3.01 or Exchange 3.01
- 312047 Screen Capture Image Looks Worse in Acrobat Viewer than in Microsoft Office
- 311805 Search Button Dimmed in Acrobat Reader 3.x or Exchange 3.x for PDF Files on Adobe FAQ CD
- 321627 Searching the Contents of PDF Files on a Web Site
- 311237 Text in PDF File Appears Blurry in Acrobat Viewer
- 322551 Text Is Jagged in PDF File Created from LaTeX or TeX PostScript File
- 320976 Troubleshooting Installation Problems in Acrobat 4.0 for Windows
- 315727 Troubleshooting Printing Problems in Acrobat for Mac OS
- 314803 Troubleshooting Problems When Downloading or Installing Acrobat Reader
- 320271 Troubleshooting System Errors and Freezes in Mac OS 8.0 When Starting an Acrobat Application
- 320418 Unable to Fill in Form Fields of a PDF File
- 320690 Using Cyrillic Fonts in Acrobat PDF Files
- 315645 Weblinks Don't Work Using Acrobat Viewer as Helper Application in a Web Browser

Acrobat Reader for UNIX

321478 Top Issues: Acrobat 3.0x for UNIX

314773 Top Issues: Acrobat Reader 3.0x for UNIX

320315 Acrobat Availability on UNIX Platforms

310327 Acrobat Reader Support Resources

- 323708 Acrobat Viewer Doesn't Print Pages with Multiple Page Sizes to Multiple Paper Trays
- 323084 Characters Appear as Bullets in Acrobat PDF File
- 321630 Embedded Fonts from Some Foundries Don't Appear in PDF Files As Expected
- 322960 Error "File does not begin with '%PDF-" When Clicking a Downloadable File in a Web Browser
- 320562 Error "No configurations found...aborting" When Installing Acrobat 3.x for UNIX
- 317421 How to Install and Configure the Acrobat Plug-in in Netscape for UNIX
- 318006 How to Select and Copy Text in Acrobat Reader and Acrobat Exchange
- 315823 Introduction to Acrobat Reader
- 320426 No Find Button in Acrobat Reader in Web Browser Window
- 316271 Operating Systems Supported by Acrobat Reader 3.0
- 318675 Printing from Acrobat Reader and Exchange for UNIX Using the LP or LPR Command
- 322551 Text Is Jagged in PDF File Created from LaTeX or TeX PostScript File

Acrobat Reader for Windows

- 314561 Top Issues: Adobe Acrobat 3.0
- 312599 Top Issues: Adobe Acrobat Reader 3.0 for Windows
- 320325 Acrobat's ActiveX Control Is Not Full-Featured Control
- 311769 Acrobat Reader Installer Doesn't Use Abcpy.ini Procedures
- 310327 Acrobat Reader Support Resources
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- 323084 Characters Appear as Bullets in Acrobat PDF File
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- 313692 Configuring Netscape Navigator for Windows to Display PDF Files
- 315406 Copy File To Clipboard Command Not Available in Acrobat Reader 3.0x for Windows
- 323115 Creating a CD to Distribute Acrobat Reader
- 321630 Embedded Fonts from Some Foundries Don't Appear in PDF Files As Expected
- 321789 Error When Installing Acrobat Reader 3.01 Update for PCL Printing
- 310345 Error "Document could not be printed...drawing error" in an Acrobat Viewer
- 322960 Error "File does not begin with '%PDF-" When Clicking a Downloadable File in a Web Browser
- 310444 Error "Internal error has occurred" When Opening PDF in Internet Explorer
- 317734 Error "Severe, unable to update the registry" When Installing Acrobat Reader 4.0 for Windows NT
- 319294 Error "...File does not begin with '%PDF-" When Opening PDF File Sent Via E-Mail
- 310521 Freeze or Error in Internet Explorer for Windows NT When Viewing PDF File
- 311633 Graphics Print Blurry from Acrobat 3.01 Viewer to a PCL Printer
- 321474 How Acrobat 3.x Viewers Handle Fonts and Font Information
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- 319909 Internet Explorer Displays PDF Files as Blank Pages with Personal Web Server
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- 321712 Manually Removing Acrobat Reader 3.0x from Windows 95, Windows 98, and Windows NT 4.0
- 323180 McAfee VirusScan 4.x Incorrectly Reports Virus in Ar40.exe or Ar40eng.exe
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- 320426 No Find Button in Acrobat Reader in Web Browser Window
- 316271 Operating Systems Supported by Acrobat Reader 3.0
- 312170 Password Requested by Acrobat Reader Installer
- 320487 PDF Embedded in HTML Document Displays Only One Page in Netscape Navigator
- 314437 PDF Files Do Not Print Or Print Only Partially to a PostScript Printer
- 311184 PDF Pages Are Blank Inside Web Browser Window
- 313827 PostScript Error "typecheck" When Printing from Acrobat Reader 3.01 or Exchange 3.01
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- 321627 Searching the Contents of PDF Files on a Web Site
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- 320418 Unable to Fill in Form Fields of a PDF File
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- 321263 Using Acrobat Forms and Form Data on the Web
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- 315034 Captured Screen Images in Acrobat PDF Files

- 312143 Creating quality Adobe PDF files from TeX with DVIPS by Kendall Whitehouse/EMERGE
- 319266 How Acrobat Distiller and PDF Writer Handle Fonts
- 323421 Must Be Logged In to Windows NT as Administrator to Install Acrobat 4.0 Applications
- 320438 Recommendations for Creating PDF Files in Word 97
- 320337 Simplifying Windows 95 or Windows 98 to Troubleshoot System Errors in Acrobat Applications
- 320976 Troubleshooting Installation Problems in Acrobat 4.0 for Windows
- 320690 Using Cyrillic Fonts in Acrobat PDF Files

Acrobat (multi-component) for Mac OS

321730 How Bookmarks Are Arranged in PDF Files Created from FrameMaker Documents

Acrobat (multi-component) for UNIX

321730 How Bookmarks Are Arranged in PDF Files Created from FrameMaker Documents

Acrobat (multi-component) for Windows

320520 Bookmarks Missing in PDF File Created with PDFMaker 1.0 in Word 97 321730 How Bookmarks Are Arranged in PDF Files Created from FrameMaker Documents

Appendix I - Adobe Acrobat Reader System Requirements

Acrobat Reader 4.0

Windows System Requirements

- i486TM or Pentium® processor-based personal computer
- Microsoft® Windows® 95, Windows 98, or Windows NT® 4.0 with Service Pack 3 or later
- 10 MB of available RAM on Windows 95 and Windows 98 (16 MB recommended)
- 16 MB of available RAM on Windows NT (24 MB recommended)
- 10 MB of available hard-disk space
- 50 MB of additional hard-disk space for Asian fonts (required for Acrobat Reader 4.0 CD-ROM, otherwise optional)

Macintosh System Requirements

- Apple® Power Macintosh® or compatible computer
- MacOS software version 7.1.2 or later
- 4.5 MB of available RAM (6.5 MB recommended)
- 8 MB of available hard-disk space
- 50 MB of additional hard-disk space for Asian fonts (required for Acrobat Reader 4.0 CD-ROM, otherwise optional)

IBM AIX System Requirements

- AIX® 4.1 or later
- Common Desktop Environment (CDE) 1.0 or Motif®
- 32 MB of available RAM
- 12 MB of available hard-disk space

DEC OSF/1 System Requirements

- DEC OSF/1 version 4.0 or later
- 32 MB of available RAM
- 12 MB of available hard-disk space

HP-UX System Requirements

- HP 9000 Series Workstations model 700 or higher
- Hewlett-Packard HP-UX version 9.0.3 or later
- X Window System X11R5 with HP-VUE or Common Desktop Environment (CDE) 1.0 or later
- 32 MB of available RAM
- 12 MB of available hard-disk space

SGI IRIX System Requirements

- Silicon Graphics® IRIXTM; 5.3 or later
- 32 MB of available RAM
- 12 MB of available hard-disk space

LINUX System Requirements

- Red Hat Linux® 5.1 or later (non-glibc versions) or Slackware Linux 2.0 or later (non-glibc versions)
- 32 MB of available
- 12 MB of available hard-disk

Sun Solaris X86 and Sun Solaris SPARCstation® System Requirements

- SunTM SolarisTM 2.3 or
- Sun OpenWindowsTM 3.0 or later, Motif 1.2.3 or later, OpenLook 3.0, or Common Desktop Environment (CDE) 1.0 or later
- 32 MB of available RAM
- 12 MB of available hard-disk space
- Note: Acrobat Reader will not run under SunOSTM or Solaris 2.0, 2.1, or 2.2.

Acrobat Reader 3.0

Windows 95 System Requirements

- i386[™], i486, Pentium, or Pentium Pro processor-based personal computer
- Microsoft Windows 95, or Windows NT 3.51 or later
- 8 MB of RAM (16 MB recommended) available to Acrobat Reader
- 10 MB of available hard-disk space

Windows NT System Requirements

- i386, i486, Pentium, or Pentium Pro processor-based personal computer
- Windows NT 3.51 or later
- 16 MB of RAM (24 MB recommended) for Acrobat Reader
- 10 MB of available hard-disk space

Windows 3.1 and 3.11 for Workgroups System Requirements

- i386, i486, Pentium, or Pentium Pro processor-based personal computer
- Microsoft Windows 3.1 or Windows 3.11 or later
- 8 MB of RAM available to Acrobat Reader
- 5 MB of available hard-disk space (12 MB recommended)

Macintosh and Power Macintosh System Requirements

- Macintosh® with a 68020 or greater processor, or Power Macintosh
- 3.5 MB of RAM (5 MB for Power Macintosh) available to Acrobat Reader (8 MB recommended)
- Apple System Software version 7.0 or later (version 7.1.2 recommended)
- 12.5 MB of available hard-disk space

Web Browsing Issues

Netscape Navigator 3.0 or later is recommended for viewing PDF files inside a Web browser. Netscape Navigator 2.0 can be used with limitations; for example, it will not allow you to submit a PDF form, and operations such as printing PDF files from within Netscape Navigator 2.0 can crash your Mac. You may also be able to use other Web browsers that fully support the Netscape APIs.

If you have more than one Navigator folder on your hard disk or you wish to view PDF files within the window of another Netscape-compatible browser, copy PDFViewer to its plugins folder. If you have multiple versions of Netscape Navigator, be sure that the plugins folder associated with the version of Netscape you'll be using contains PDFViewer version 1.0. (You can see the version using the Finder's Get Info command.)

To access URLs embedded in PDF files when using Acrobat Reader outside of a Web browser, you must specify your preferred Web browser in Acrobat Reader's Weblink Preferences dialog box. From the Edit menu, choose Preferences/Weblink/WWW Browser Application.

UNIX® System Requirements

- 12 MB of disk space for Acrobat Reader
- System with 32 MB of RAM

Sun SPARCstation System Requirements

- SunOS 4.1.3 or 4.1.4 or Solaris 2.3, 2.4, or 2.5
- OpenWindows (version 3.0 or later), Motif window manager (1.2.3 or later), OpenLook version 3.0, or Common Desktop Environment (CDE) 1.0 and above

HP Series 9000 Workstation, Model 700 or Greater System Requirements

- HP-UX 9.0.3 or later
- X Window System[™] X11R5 with HP-VUE or CDE 1.0
- 12 MB of available hard-disk space
- A 32-MB machine

IBM RS/6000 Workstation System Requirements

- AIX 4.1 or later operating system
- Common Desktop Environment (CDE) or the Motif window manager

Silicon Graphics Workstation System Requirements

- IRIX 5.3 or later operating system software
- 12 MB of available hard-disk space
- A 32-MB machine

Linux* Workstation System Requirements

- Intel® 80x86-based computer
- Linux 1.2.13 or later kernel
- (The Acrobat Reader for Linux was built on a 2.0.0 kernel.)
- *Reader with Search not available for Linux.

Digital UNIX Workstation System Requirements

- Digital 21x64-based computer
- Digital UNIX 4.0 or later
- 16 MB of available hard-disk space
- 32 MB of RAM

OS/2 System Requirements

- i386, i486, Pentium, or Pentium Pro processor-based personal computer
- IBM OS/2 Warp or Warp Connect 3.0 or later (IBM OS/2 Warp 4.0 recommended)
- Fixpak 26 required for printing using OS/2 Warp 3.0 or Warp Connect 3.0
- 4 MB of application RAM available to Acrobat Reader
- 8 MB of RAM available for system
- 5 MB of hard-disk space, plus 5 MB of temporary space available during installation
- Netscape Navigator 2.02E or later for viewing PDF files inside a Web browser

Installation Issues

You can't install into the same directory from which you run the install program. You can't execute the installer from a path that has spaces in it.