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# **Adobe Acrobat - Version 4.0**

## **Running Reader v4 from CD**

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Information about using Windows PCs to create CD-ROMs that will run Acrobat Reader Version 4.0 directly from the CD.

v.1.2.3

December 1999

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## About this PDF

I trust this information is of use to you and 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 of 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 have read this PDF I hope that you do as well.

How did this document come about?

Researching in the CompuServe Adobe forum some of the issues described below, I was asked to write up the resultant thread. A simple digest raised as many questions as it answered and it seemed a little more testing and detail was required. One thing led to another and thus the PDF you are reading.

The information in this document is based on knowledge gained as part of a project to distribute PDF documentation for a Windows application on a (Windows) CD to users who were Mac-based freelancers with access to PCs but little experience with the Windows OS. The sort of constraints we had to address were:

- 1) I was not in a position to mandate software tools. So the user might or might not have the full or Reader version of Acrobat installed. Thus the idea of providing Reader on the CD-R to provide a known viewing application for my PDFs.
- 2) The use of Reader v4 on the CD should not upset the set-up of applications or file type associations on the user's PC.
- 3) The user might have version 3 installed (Exchange and/or Reader) and I needed the flexibility to be able to use v4 features if required.
- 4) As the Windows/PC was a little used OS for the end-user, the project could not rely on the user correctly re-configuring their PC — so the aim was not to install any helper applications.
- 5) Ideally, the CD would be cross-platform so the users could still access the PDFs from their Macs if they wished. Other functionality on the CD would still require a PC.
- 6) The authoring platform was Windows-only with no access to Macs. Ideally, it should still be possible to read the CD and open PDFs on a Mac, albeit without icons.

In summary, my goal was to create a CD primarily for PC users, but which would still allow Mac users to access the PDF files, albeit without icons or using the PC Reader on the CD (they would use their installed Mac version). This document explains the knowledge gained in addressing these issues and will hopefully help you with similar projects of your own. The solutions described have generally been tested 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?

Hopefully everybody, but it will be most useful to those who are entirely PC/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, as yet (September 1999), the PC community is not well served with CD creation software that will create true hybrid CDs such as required for both Mac and PC platform use.

Besides 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 and if you do any work with the Windows Registry please, please back it up before you make any changes.

The document deliberately uses the smaller US Letter page size to aid printing either in the US or Europe (which uses larger A4). I have used `Courier` font 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 before circulating CDs with Reader installed on them. I've included info from some of Adobe's web pages for Acrobat in the Appendices, though if relevant you should check the originals at [www.adobe.com](http://www.adobe.com).

Special thanks go to Steve Rindsberg and Aandi Inston. Steve suggested this article, assisted with testing the many possible installation variations, and helped proof the end result. Aandi also helped the proofing and added some useful Mac and Unix oriented info.

I've endeavoured to make this document as accurate as my 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 pay for suitably qualified external assistance. I am not a programmer and if you want to go deeper into that side of the subject I suggest you download relevant parts of the Acrobat SDK.

If there are any significant errors, omissions or comments please let me know at [mark@yearley.demon.co.uk](mailto:mark@yearley.demon.co.uk). The information is offered as is and I'm afraid I'm not the person to turn to for tech advice. If you need support for Acrobat/PDF see the list of references at Appendix F:

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Portsmouth, UK

September 1999

[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.

Since then Acrobat Reader v4 has been 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 that have been indexed using Acrobat Catalog. To help distinguish between the two configurations, the filenames of the (English language) installers are:

<u>Search?</u>	<u>Installer</u>	<u>File Size</u>
No	ar40eng.exe	5.2 Mb
Yes	rs40eng.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 application CD (this will doubtless be rectified in due course). 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.

What files do Adobe recommend I use?

Adobe have produced a Technical Support document # 323115 (at Appendix A) which explains the official version of how to put Reader v4 on CD. However, the document makes some fundamental assumptions that may not help the Windows based user. They suggest installing Reader with Asian font support, help files and installers in English, French and German. Consider this:

Folder sizes on Acrobat v4 CD:

- \Acroread\ = 114 Mb (i.e. all subfolders below)
- \Acroread\AsianFontPacks\ = 34.5 Mb
- \Acroread\CD\ folder = 63.4 Mb
- \Acroread\Installers\ = 16.3 Mb (English 5.3 Mb, German 5.8 Mb, French 5.5Mb)

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.

The document then goes on to explain how to make 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. Windows users have further hurdle; at present, Windows CD authoring software does not allow easy authoring of true Mac/PC Hybrid CDs. Some software allows the copying of Mac partitions but they do not write a true Mac file system and so file type associations with applications does not work correctly.

See also the Acrobat Guide PDF section on 'Distributing PDF Documents on a CD'. 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, 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 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](http://www.adobe.com).

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

- The Acrobat Reader installer, exactly as provided by Adobe. (On Acrobat CD 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 the Registry entries it needs when run from the CD for the first time on a non Reader v4 system.

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

I don't think so. I am not able to test this but I assume that for languages not using complex fonts (e.g. Chinese) 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.). I'm afraid you will need to test this yourself if you are using other than English language.

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 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. 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 - some 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 my PDFs and other content files go?

The default folder for the 'Open' menu command in Reader is the folder containing its executable (`..\Acrobat 4.0\Reader\`). If you are using several PDFs and have created links between them, consider putting an 'contents' PDF in the `\Reader\` folder with links to PDFs in other folders. For example (where D is the CD drive):

```
D:\Acrobat 4.0          (see also notes on naming top level Reader folder)
    \Help
    \Install
    \Reader
        Contents.pdf
    \Resource
    \Content
        MyFile1.pdf
        MyFile2.pdf
    \Media
        MyMovie1.mov
```

Alternatively, to keep things simpler in navigational terms place the `\Content\` folder in the `\Reader\` folder. That way, if the less experienced user opens Reader and uses the 'File->Open' command, they only have to navigate down into the `\Content\` folder. You could even put all the PDFs in the `\Reader\` folder if need be, it might look messy in Explorer, but an inexperienced user has the greatest chance of finding a file without assistance.

If you are using media such as movie clips you may wish to put them in a sub folder to keep them apart from your PDF files. Whether linking between PDFs or using unembedded media such as QuickTime movies, do ensure that when you create your links and references you use a similar folder structure to that for your CD and that all the folders are on the *same* drive.

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, and thus as long as the relative folder structure is maintained the links will work when located on a different drive, such as you CD.

If you need to use ISO 9660 filenames 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.

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

No, not at present. This functionality is only possible by accessing PDFs through the Acrobat and Reader plug-ins for web browsers. However, using PDFs in this form is beyond the scope of this document. Read the Adobe support documents online or visit the PDF Zone tips page to see how this 'web' method works. Before taking up this approach do consider whether your target audience will have the right browsers and plug-ins that will be required.

## Can I include indexes with my PDFs?

For a more sophisticated approach, 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. To use these facilities your CD must have the version of Reader that includes the Search plug-in.

Having created your index, 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. 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 it is a useful tell-back during testing that your PDF has been linked to an index.

If you observe the same caveats about folder structure for your PDFs as explained above, this system will work nicely 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.

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 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\Acrohlp.pdf.`

Or on the Acrobat CD at:

`[CD drive]\English\HELP\Acrohlp.pdf`

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

## Creating an AutoPlay CD

This chapter is primarily devoted to making CDs AutoPlay on a Windows PC but there is a section at the end about Macs.

How do I make a CD AutoPlay?

32-bit Windows (95, 98, NT 4) has the facility to 'AutoPlay' CDs that allows programs to be run as soon as the CD is inserted and read, without user intervention. To do this you must include a special file named `autorun.inf` in the root folder of your CD. The file name is recognised by the windows OS and the CD will 'AutoPlay' according to the information supplied.

The file allows you to specify the path of the application to run and, if command line arguments are accepted, the file to open. Additionally, an icon can be specified which will show instead of the CD drive icon in Explorer and Windows folders when the CD is mounted. The `.inf` file is a basic text file that may be created using Notepad and consists of 3 lines of information:

```
[autorun] (required heading)
open=      (+ path to program.exe and optional command line)
icon=      (name of icon (.ICO) file in root folder, or defaulticon= if file is elsewhere)
```

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

The example below is for an `autorun.inf` file which will AutoPlay Reader and in turn open a PDF. You can create it easily using Windows' Notepad. Open Windows 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'. Ensure 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 mypdf.pdf
defaulticon=Acrobat 4.0\Reader\AcroRd32.exe,1
####
```

(Note the paths have no backslash (\) preceding the first folder or file name.)

The 'open' statement.

This calls Acrobat Reader in folder `\Acrobat 4.0\Reader\` and opens file 'mypdf.pdf'. This assumes 'mypdf.pdf' is in the root folder of the CD - not the Reader exe's folder. To run 'myfile.pdf' from the '\Reader' folder, the syntax would be

```
open=Acrobat 4.0\Reader\AcroRd32.exe Acrobat 4.0\Reader\mypdf.pdf
```

This ought to work. In fact, it runs Reader OK but reports that the path/filename are wrong or do not exist. After some experimentation it appears that 'space' characters in paths to apps are OK but will not work for locations of files. Unlike the above example, this does work, and calls the 'readme.pdf' file.

```
open=Acrobat4.0\Reader\AcroRd32.exe Acrobat4.0\Reader\mypdf.pdf
```

The system copes with the 'dot' in '\Acrobat4.0\' but not a space as in '\Acrobat 4.0\'.

You can use double quotes to enclose your path statements if you prefer without any problems arising though note that if using 'open=' to call the exe and a file, each string has its own open/close quotes and there is a space between each string.

At this point, you may see that to save yourself a lot of hassle 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.

Do bear in mind 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 catch you (indeed they were the cause of errors in the initial release of this document, corrected here). So don't use these other methods to test the correctness of your autorun path strings as most likely you will get caught out. I'll talk below about AutoPlaying hard drives for test purposes.

The 'icon' 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 our example, to save creating an icon we use one of the icons embedded in the Reader application. The notation",1" at the end of the example line above is to indicate we wish to use icon #2 (icons number upwards from 0). Reader has 5 embedded icons; you might also like to choose from #0 which is the Reader app's icon, #1 which is a PDF file icon or #4 which is a file icon for an FDF Acrobat Form.

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
```

If you know a little bit about graphics you can have a go at making your own icons, otherwise the quick way to get a professional looking result is to use Reader's icons as described.

## 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 right-click menu of CD's icon. For example, add this to your autorun.inf (below the icon= line):

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

The CD icon right-click menu will have a new item, “Read Me First” (with E as a hotkey) that launches Notepad with the readme.txt from the CD loaded. 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 use ‘read3’, ‘read4’ etc.

If you want to do more with your autorun.inf, consult the online Microsoft Knowledge Base and search for “AutoPlay”. You can test the AutoPlay function by placing the autorun.inf on the root of one of your hard drives, then double click the drive icon as for a CD. I would not recommend using C: if you only have the one hard drive. You can also make floppy, Zip, Jaz drives etc. work as well which is described in MS KB article #Q136214 “How to Test Autorun.inf Files”. This does involve a Windows registry edit - not recommended to the unfamiliar.

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

## 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 an administrator to achieve the change.

## Other Considerations

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

- Brief description of what is on the CD.
- Explain how to open the Reader v4 on the CD and that it can be used to read the PDFs on the CD.
- Explain 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).
- The location of the Reader installer (see also note below).
- Any special instructions.
- How to enable AutoPlay
- A contact or technical support number in case users have problem or an error to report. Also consider URLs (web addresses) for Adobe's Acrobat Tech Support files.

Note that if you call the on-CD version of Reader without a PDF file as well, it opens looking at the root of the CD. Thus, there is much to be said for putting any/all your TXT and PDF info and index files on the root of the CD. This aids both the person who is looking at the CD in Explorer or whom has managed to open the Reader on the CD but does not 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 v3 and v4 or reader can happily co-exist. The problem comes 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.

Shortcuts on the CD. An earlier version of this document described using Windows shortcut files on the CD to assist the user with navigating contents. 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. Windows 98 gives an error dialog if you try this and Windows 95 silently appends the drive letter of the drive you created the file. I believe with programming tools/expertise you can create an LNK file that would link 'internally' from one CD location to another but such expertise is outside the scope of this document.

## Likely errors when testing your autorun.inf

Always refresh Explorer (press F5 key with Explorer or 'My computer' window open) before re-testing. There are three 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. Check the 'icon=' path and ensure there is no opening backslash. If the icon is wrong, check the icon number (they start at #0 not #1.)

## How do I create an AutoPlay CD for Macs?

Answer: you don't. This is because:

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

The Mac style is to automatically open a folder 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.

This 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

## 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, formats, software, media and lots of novice's "What is/How do I?" queries. With no experience of Unix, I have not covered this format though Acrobat does have a Unix version.

### 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 type 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 Creator) to define the file type and stores its 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. Furthermore, Windows cannot create Mac Type and Creator tags without additional utilities. However, 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.

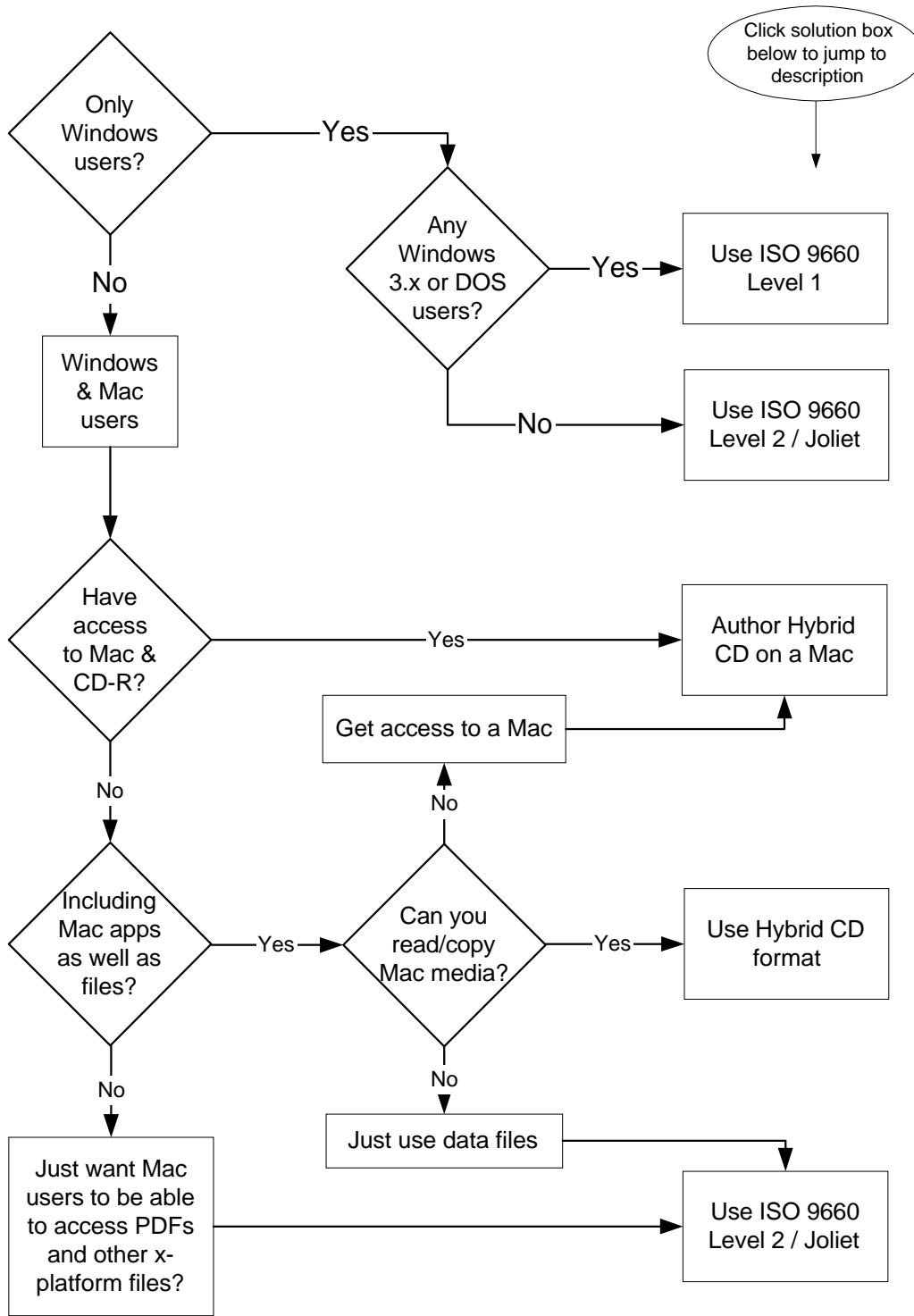
32-bit Windows and Macs both allow long filenames, though the allowable characters differ. Windows will not accept the use of characters \ / : \* ? " < > | used in a file name (even 8.3 ones), though you may use a full stop (period) and up to 255 characters; note this is reduced to a maximum of 64 under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

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). You may also find that without PC file extensions, you may need to guess at the correct host application for the file.

Depending on the extensions loaded, Macs can read PC media and ISO 9660 CDs. However, without the 'resource forks' of a Mac HFS format, the Mac OS cannot tell the associated application for a file so normal point & click opening of files does not work (confusing for inexperienced users). Also, without the resource forks, it is impossible to include a Mac executable program, so you cannot include either the installer OR a self-running executable directly. You can include a SIT archive of the installer, and presume the user has Stuffit Expander (free software, from [www.aladdinsys.com](http://www.aladdinsys.com)). You cannot provide an installer for this software for the same reason.

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 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 without 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.

Format:	PC		Mac	
	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.TXT	No
Mac HFS	No	Yes	Yes	Yes
Hybrid	Yes	Yes	Yes	Yes

## 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\
- Folders may not be nested to a depth of more than 8 levels.

Minimum equipment needed to produce this format:

- 32-bit Windows PC
- 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 but is not compatible with MS-DOS or DOS compatible systems (e.g. some Mac facilities 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.

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

Minimum equipment needed to produce this format:

- 32-bit Windows PC
- 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
- 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

## Hybrid CD Format (for both PC & Mac)

This 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. This sharing of data offers a potential saving of space for more data 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
- 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

## 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 guess 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 `Acro32.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 ISO 9660 Level 1 naming the 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.

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 stored elsewhere in the application files is used to create the dialog text the user sees.

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). If you are not using JavaScript in any of the PDFs on the CD and need Level 1 format I suspect you could omit this folder altogether, removing JavaScript functionality, though by the strict terms of the licence it should be included.

In summary, I do not 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 (Reader v3x 16-bit is required for Windows 3.x ). 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, as you do not need to do so much renaming. ISO 9660 Level 2 is not 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.

## Setting up your CD image file

### Image File Names.

Many CD making programs create '.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 'wizard' but check on 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 you can burn "on the fly" from files anywhere on your system. More likely you will organise the needed files in one place on your system as an image or actually create an ISO image file (necessary for some techniques) to burn from.

Don't forget to ensure the partitions used for your source files have been de-fragmented recently.

### Single or Multisession?

Note that many CD making applications assume you wish to make a multi-session disk and by default 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.

### My users can't read my CDs

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

If a very small number fail and only on some PCs you 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 another and try different media. 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 avoid these sort of problems by passing off the work to a professional replicating house, but if you could do (afford) 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 buy 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 expensive.

## 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

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 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, if you have an external SCSI CD-writer you can use it with either Macs or PCs.

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 extra tools needed.

## 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. PDF extension association unaffected.
Acrobat v4.0 (with Reader)	Reader MRU file list 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\AdobeViewer\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

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 see the 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.

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

No. As long as the \Resource\ and \Help\ folders are in the same folder as \Reader\ the number and naming of the folders lying above are not important. Of the folders within \Reader\, the \Optional\ folder is just that and may be deleted. Also, it appears that the \JavaScripts\ folder (note the file name is 10 characters long) in

`\Reader\plug_ins\AcroForm\` can be omitted if the files contained in it are moved up in to the `\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.

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.

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.

### Reader v4 command line options

Reader has a 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 drivename 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, drivename, and portname (all strings):

printername - The name of your printer.

drivename - 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 Acro32.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 Acro32.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](http://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
      \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      9
    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
    AdobeWeb10fra.gif   25,367
    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
```

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
NPPDF32.DLL	51,712
NPPDF32.FRA	4,096
\OPTIONAL	
README.TXT	46
\PLUG_INS	
AHL32.API	61,952
AHL32.DEU	6,144
AHL32.FRA	6,144
EWH32.API	54,272
EWH32.DEU	9,728
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
AFORM.JS	33,257
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
90ms-RKSJ-H	5,146
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

Add-RKSJ-H	14,593
Add-RKSJ-V	2,775
Adobe-CNS1-B5pc	8,266
Adobe-CNS1-ETen-B5	8,686
Adobe-CNS1-H-CID	1,863
Adobe-CNS1-H-Host	8,701
Adobe-CNS1-H-Mac	8,232
Adobe-CNS1-UCS2	286,858
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-Korea1-H-CID	1,912
Adobe-Korea1-H-Host	16,277
Adobe-Korea1-H-Mac	11,640
Adobe-Korea1-KSCms-UHC	16,169
Adobe-Korea1-KSCpc-EUC	11,818
Adobe-Korea1-UCS2	203,656
B5pc-h	6,701
B5pc-UCS2	1,536
B5pc-UCS2C	284,917
B5pc-v	1,843
CNS-EUC-H	11,553
CNS-EUC-V	12,633
ETen-B5-H	6,863
ETen-B5-UCS2	288,774
ETen-B5-V	1,882
ETenms-B5-H	1,514
ETenms-B5-V	1,941
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
H	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
AcraKor1.dll	55,296
\FONT	
_A_____.PFB	32,084
_AB_____.PFB	31,966
_ABI____.PFB	32,019
_AI_____.PFB	32,115
_EB_____.PFB	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
_ZD_____.PFB	49,593
_ZX_____.PFB	75,573
_ZY_____.PFB	96,418
\FONT	
_A_____.PFB	32,084
_AB_____.PFB	31,966

_ABI_____ .PFB	32,019
_AI_____ .PFB	32,115
_EB_____ .PFB	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
ZD_____ .PFB	49,593
ZX_____ .PFB	75,573
ZY_____ .PFB	96,418

## \PFM

_A_____ .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
_ER_____ .PFM	4,692
COB_____ .PFM	679
COBO_____ .PFM	686
COM_____ .PFM	674
COO_____ .PFM	682
SY_____ .PFM	672
ZD_____ .PFM	684
ZX_____ .MMM	7,248
ZX_____ .PFM	683
ZY_____ .MMM	7,248
ZY_____ .PFM	684

## \PFM

_A_____ .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
_ER_____ .PFM	4,692
COB_____ .PFM	679
COBO_____ .PFM	686
COM_____ .PFM	674
COO_____ .PFM	682
SY_____ .PFM	672
ZD_____ .PFM	684
ZX_____ .MMM	7,248
ZX_____ .PFM	683
ZY_____ .MMM	7,248
ZY_____ .PFM	684

## \HELP

## \ENU

ACROBAT .PDF	45,836
READER .PDF	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	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
WEBLNK32.FRA	21,504
\ACROFORM	
AFILL32.API	402,432
AFILL32.FRA	92,160
AFORM.JS	33,257
AFSTRENU.JS	2,104
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_____.PFB	32,084
_AB_____.PFB	31,966

_ABI_____ .PFB	32,019
_AI_____ .PFB	32,115
_EB_____ .PFB	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
ZD_____ .PFB	49,593
ZX_____ .PFB	75,573
ZY_____ .PFB	96,418
\PFM	
_A_____ .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
_ER_____ .PFM	4,692
COB_____ .PFM	679
COBO_____ .PFM	686
COM_____ .PFM	674
COO_____ .PFM	682
SY_____ .PFM	672
ZD_____ .PFM	684
ZX_____ .MMM	7,248
ZX_____ .PFM	683
ZY_____ .MMM	7,248
ZY_____ .PFM	684
\Installers	
ACRD4DEU.EXE	5,994,880
ACRD4ENU.EXE	5,455,526
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
      Acrobat.pdf      45,836      (Flyer for Acrobat)
      Reader.pdf      415,715      (Reader Help file)
  \Reader
    (c)Adobe.txt    6,019      (EULA text)
    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
      Readme.txt      46      (optional spare folder)
    \plug_ins
      Ahls32.api     61,952
      asrch32.api    186,368      (Search version file)
      autidx32.api   28,672      (Search version file)
      EWH32.api      54,272
```

ieweb32.api	6,144	
weblnk32.api	73,728	
\AcroForm		
Afill32.api	402,432	
\ <b>JavaScripts</b>		
Aform.js	33,257	
Afstrenu.js	2,104	
\Movie		
Movie32.api	111,104	
QT2.dll	7,680	
QT3.dll	16,384	
\vdkhome		(Search version file)
VDK10.CMP	4,044	(Search version file)
VDK10.LIC	41	(Search version file)
VDK10.STD	2,070	(Search version file)
VDK10.SYX	415	(Search version file)
VDK10.THD	304	(Search version file)
\ENU		(Search version file)
VDK10.LNG	23,283	(Search version file)
VDK10.RSD	61,440	(Search version file)
VDK10.RST	2,359	(Search version file)
VDK10.STC	15,103	(Search version file)
VDK10.STP	3,141	(Search version file)
VDK10.SYD	806,912	(Search version file)
\Resource		
\CMap		
AdobeFnt.lst	417	
Identity-H	1,614	
Identity-V	1,527	
\Font		
_a____.pfb	32,084	
_ab____.pfb	31,966	
_abi____.pfb	32,019	
_ai____.pfb	32,115	
_eb____.pfb	35,377	
_ebi____.pfb	38,543	
_ei____.pfb	37,518	
_er____.pfb	35,380	
AdobeFnt.lst	6,291	
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	
Zy____.pfb	96,418	
\PFM		
_a____.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	

_er_____ .pfm	4,692
Cob_____ .pfm	679
Cobo_____ .pfm	686
Com_____ .pfm	674
Coo_____ .pfm	682
Sy_____ .pfm	672
Zd_____ .pfm	684
Zx_____ .mmm	7,248
Zx_____ .pfm	683
Zy_____ .mmm	7,248
Zy_____ .pfm	684

\Install

rs40eng.exe 6,486,144

(Eng. Installer with Search)

[End of Listing/Article]

## 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 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 column 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](http://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](http://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](http://www.planetpdf.com))

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

CodeCuts ([www.codecuts.com](http://www.codecuts.com))

Acrobat programming tips, code examples.

AcroBuddies ([www.acrobuddies.com](http://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](http://www.microsoft.com)) ([www.msdn.microsoft.com](http://www.msdn.microsoft.com))

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

Pollen Software ([www.pollensoftware.com](http://www.pollensoftware.com))

Various shareware utilities to extend AutoPlay

## CD-R software

Adaptec ([www.adaptec.com](http://www.adaptec.com))

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

Ahead ([www.ahead.de](http://www.ahead.de))

Nero CD-R software

CeQuadrat ([www.Cequadrat.com](http://www.Cequadrat.com))

WinOnCD CD-R software

## Cross-platform Utilities

MacDisk ([www.macdisk.com](http://www.macdisk.com))

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

MacDisk  
MacScuzzy  
MaImage

Dataviz ([www.dataviz.com](http://www.dataviz.com))

Utilities for reading Mac media on a PC

## Information about CD-R

CD Info ([www.cd-info.com](http://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](http://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 Sun™ Solaris™ X86 versions do not include Search.)

Acrobat Reader 4.0 with Search consists of Acrobat Reader and two Acrobat plug-ins: Acrobat Search and AutoIdx. 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.

If you are redistributing the Acrobat Reader in your product, you may include the "Includes Adobe Acrobat" logo. Download the EPS "Includes Adobe Acrobat" logo files in Macintosh or Windows format and fill out the logo agreement by following the directions (Readerlo.pdf) in the archived package.

All of the Acrobat Readers can be redistributed without any further permission from Adobe. Adobe are very interested in keeping track of who is distributing the Acrobat Reader and ask that as part of your distribution registration you provide the following information at their web site:

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- Company
- Product it is shipping with
- Shipping date of product
- Estimated end of life of product
- Email contact
- Phone contact

## Using Adobe Acrobat Trademarks: Adobe Product Signatures and the Acrobat Button and PDF Icons

To use Adobe product signatures and the icons shown at the top of their distribution page, you must license them from Adobe Systems Incorporated. Complete the Adobe Trademark License Agreement for the product signatures and PDF and Get Acrobat Reader icons above by filling out the license agreement online.

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](http://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](mailto: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](mailto: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 lfilter
- 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

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

## 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 Trays
- 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  
 323708 Acrobat Viewer Doesn't Print Pages with Multiple Page Sizes to Multiple Paper Trays  
 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  
 315444 Configuring Navigator for Windows to Recognize Acrobat Reader or Acrobat Exchange 2.1 or Earlier  
 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  
 318006 How to Select and Copy Text in Acrobat Reader and Acrobat Exchange  
 314822 Installing Acrobat 2.1 Viewer on Diskless Workstations or from Disk Images  
 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  
 315823 Introduction to Acrobat Reader  
 316396 Manually Removing Acrobat Reader 2.1 in Windows

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

323421 Must Be Logged In to Windows NT as Administrator to Install Acrobat 4.0 Applications

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

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

320337 Simplifying Windows 95 or Windows 98 to Troubleshoot System Errors in Acrobat Applications

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

314803 Troubleshooting Problems When Downloading or Installing Acrobat Reader

320418 Unable to Fill in Form Fields of a PDF File

322064 Using a Setup.iss File for a Silent Installation of Acrobat Reader in Windows

321263 Using Acrobat Forms and Form Data on the Web

320690 Using Cyrillic Fonts in Acrobat PDF Files

315645 Weblinks Don't Work Using Acrobat Viewer as Helper Application in a Web Browser

## Acrobat Writer for Mac OS

314561 Top Issues: Adobe Acrobat 3.0

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

318504 Manually Removing Acrobat 3.0x from Mac OS 7.x or 8.0.x

320438 Recommendations for Creating PDF Files in Word 97

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

## Acrobat Writer for Windows

314561 Top Issues: Adobe Acrobat 3.0

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

- i486™ 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® IRIX™; 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

- Sun™ Solaris™ 2.3 or
- Sun OpenWindows™ 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 plug-ins folder. If you have multiple versions of Netscape Navigator, be sure that the plug-ins 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.