extendedPDF
User Guide

Version 1.4

3BView Limited

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Document History

Version	Author	Comments
1.0	Martin Brown	Initial release
1.0.1	Martin Brown	Following review by Hannah Fisher
1.1	Martin Brown	Added info on new entry points
1.2	Martin Brown	Added help on colour selection for hyperlink boxes, plus additional troubleshooting information.
1.3	Martin Brown	Removed section on paragraph sections at page top.
1.3.1	Martin Brown	Added section on installing Universal Edition on OOo 2.0.
1.4	Martin Brown	Updated for extendedPDF 1.4.

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Table of Contents

Introduction

This user guide is intended to help you install and use extendedPDF, the premier solution for producing rich PDF from OpenOffice.org or StarOffice.

Installation on Windows

Installation is in three main stages:

1. Install the software that extendedPDF needs to operate

2. Install extendedPDF

3. Configure extendedPDF

Prerequisite software

Java

Java is recommended for Universal Edition.

You can obtain the Java Runtime Environment (JRE) from Sun Microsystems (http://java.sun.com).

You may already have the JRE on your computer. For example, if you purchased an OpenOffice.org CD, you may find the JRE setup files on that CD.

The Microsoft Java Runtime Environment may work but is unsupported and will not be detected by the extendedPDF Professional Installer.

OpenOffice.org / StarOffice

You will need OpenOffice.org 1.1 or later, or StarOffice 7 or later.

OpenOffice.org can be downloaded from http://www.openoffice.org. Alternatively, there are many vendors who can provide you with a CD containing everything that you need. See http://distribution.openoffice.org/cdrom/sellers.html for details.

OpenOffice.org 1.1 and StarOffice 7 can be installed in two ways:

• Network installation, where all program files are installed to a central location and used by each user. Only the necessary configuration files are stored for each user. This installation is started by running the OpenOffice.org setup program with the '-net' parameter.

• Personal installation, where each user has their own copy of all the program files. This takes up much more hard disk space but is simpler to install.

extendedPDF will work with both network and personal installations.

For network installations, configuration changes can be applied for all users by changing the central configuration files, or just one user by changing that user's configuration files. extendedPDF Universal Edition can be installed in either manner. Professional Edition must be installed separately for each user.

OpenOffice.org 2.0 and StarOffice 8 always install in the *-net* mode by default.

Please read the instructions that came with your version of OpenOffice.org or StarOffice for detailed instructions on installation. For further information, view the OpenOffice.org website.

PostScript Printer Driver

You will need a PostScript Printer Driver. We recommend the extendedPDF Printer Driver, available from http://www.3bview.com/epdf-download.html. This produces good-quality PDF when used in conjunction with OpenOffice.org and Ghostscript. This driver is available for Windows 2000 and Windows XP. Users on other operating systems will need to use another driver. One suggestion is the *Apple Color LW 12/660 PS* supplied with the Windows installation CD, although this driver can result in page size problems.

Instructions for the installation of the 3BView PostScript Printer Driver can be found in Appendix 2.

Ghostscript

You will need to install Ghostscript. This can be obtained from a number of sources. However, for ease of installation we recommend the version available from 3BView at http://www.3bview.com/epdf-download.html.

Installation instructions for the 3BView installation of Ghostscript can be found in Appendix 3.

PDF Viewer

You will need a means of viewing the PDF files produced by extendedPDF. The best options are Adobe Acrobat Reader or Adobe Acrobat. Adobe Acrobat Reader is a free download from http://www.adobe.com.

extendedPDF Universal Edition

Universal Edition is packaged in the form of a zip file, containing the following files:

File Name	*Description*
install.bat	Script to install extendedPDF on Windows for OpenOffice.org 1.1
install.sh	Script to install extendedPDF on UNIX for OpenOffice.org 1.1
uninstall.bat	Script to uninstall extendedPDF on Windows
uninstall.sh	Script to uninstall extendedPDF on UNIX
extendedPDF.zip	OpenOffice.org AddOn Package
COPYING.txt	Software licence
iText.jar	Java module providing PDF security

You should unzip *extendedPDF Universal Edition 1.x.zip* using WinZip or 7-Zip.

Installation on OpenOffice.org 1.1.x

1. Close OpenOffice.org and StarOffice. Check the following:

   - OpenOffice.org and StarOffice applications are not running

   - The OpenOffice.org and StarOffice Quickstarter is not running. This is visible in the system tray.
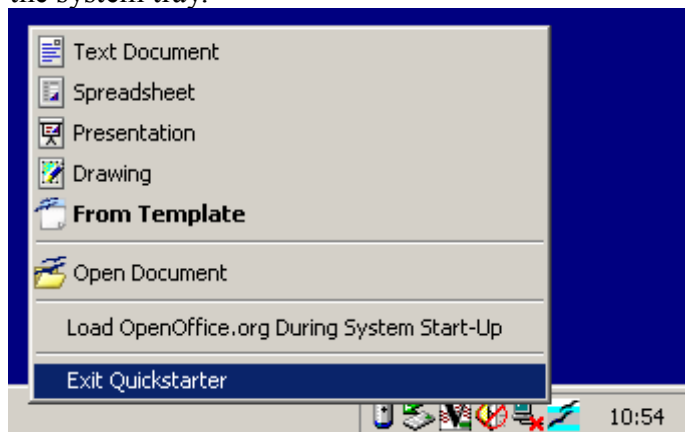
   If it is running right-click on it and select "Exit Quickstarter".

   - If you are installing for every user in a multi-user installation, it is very important that no user is running OpenOffice.org or StarOffice during installation. Failure to enforce this can result in your OpenOffice.org or StarOffice installation becoming corrupted.

2. You need to locate the pkgchk.exe program. This is installed as part of OpenOffice.org or StarOffice in the program sub-folder. For the default install of OpenOffice 1.1.2 this location would be:

```
C:\Program Files\OpenOffice.org1.1.2\program\pkgchk.exe
```
Either look in the folder where you installed OpenOffice or StarOffice, or use the Windows Find utility from the Start menu.

3. Open the install.bat file provided with Universal Edition by right-clicking the file and selecting "Edit".
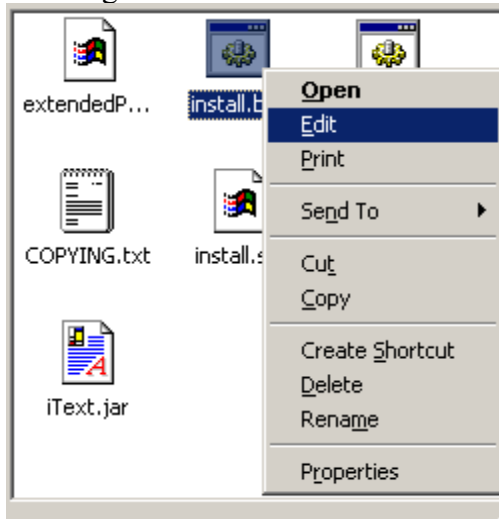
4. Change the lines at the top of install.bat to suit your configuration. Follow the instructions in the file.

5. Save install.bat.

6. Run install.bat by double-clicking on it. If you get any error messages then check your configuration and the lines at the top of install.bat.

7. Open an OpenOffice.org Writer document. You should find extendedPDF installed with a toolbar button to activate it.

Uninstallation on OpenOffice.org 1.1.x

1. Close OpenOffice.org and StarOffice. Check the following:

   - OpenOffice.org and StarOffice applications are not running

   - The OpenOffice.org and StarOffice Quickstarter is not running. This is visible in the system tray.
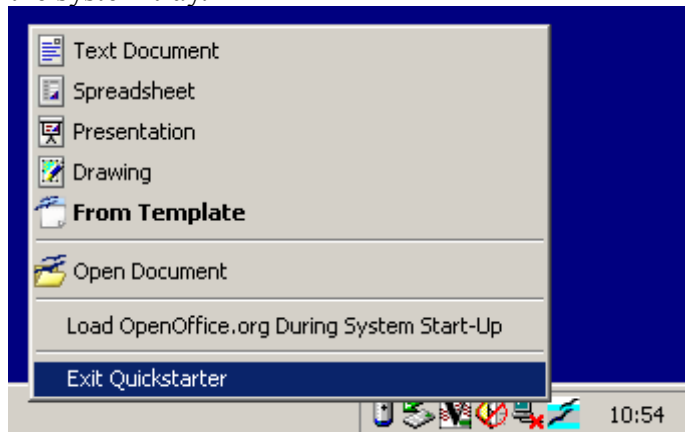

   If it is running right-click on it and select "Exit Quickstarter".

   - If you are uninstalling for every user in a multi-user installation, it is very important that no user is running OpenOffice.org or StarOffice during uninstallation. Failure to enforce this can result in your OpenOffice.org or StarOffice installation becoming corrupted.

2. Find your OpenOffice.org package folder. There are two of these:

   1. If you installed for every user in a multi-user installation then you need to find the *share/uno_packages* folder under your main OpenOffice.org installation folder.

   2. Otherwise you need to find *user/uno_packages* within the OpenOffice.org folder in your Windows *Application Data* folder. Note that you may need to set Explorer to show hidden files before you will be able to see the *Application Data* folder.

3. Within the *uno_packages* folder you will find the file *extendedPDF.zip*. Delete this file.

4. Open the uninstall.bat file provided with Universal Edition by right-clicking the file and selecting "Edit".

5. Change the lines at the top of uninstall.bat to suit your configuration. Follow the instructions in the file.

6. Save uninstall.bat.

7. Run uninstall.bat by double-clicking on it. If you get any error messages then check your configuration and the lines at the top of install.bat.

8. Open an OpenOffice.org Writer document. You should find that extendedPDF has been uninstalled.

Installation on OpenOffice.org 2.0

Open the package manager:
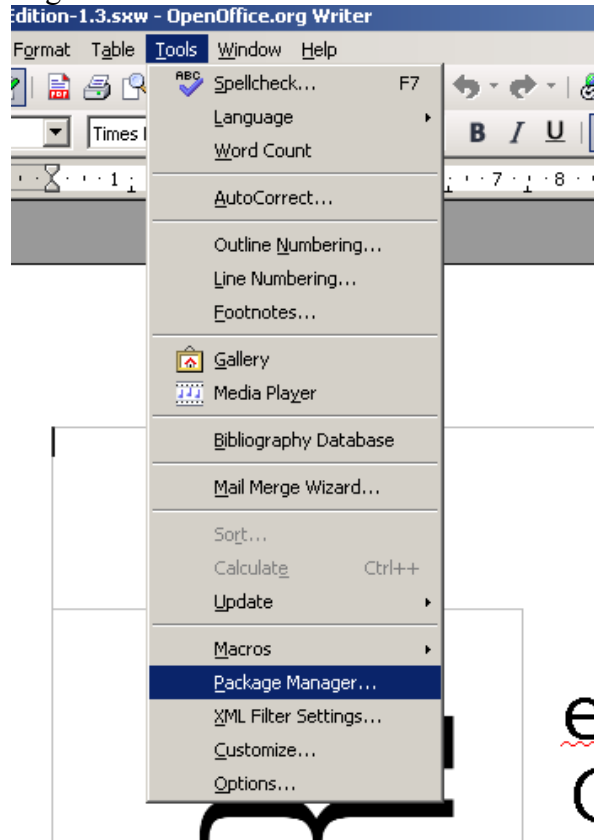
This dialog appears:
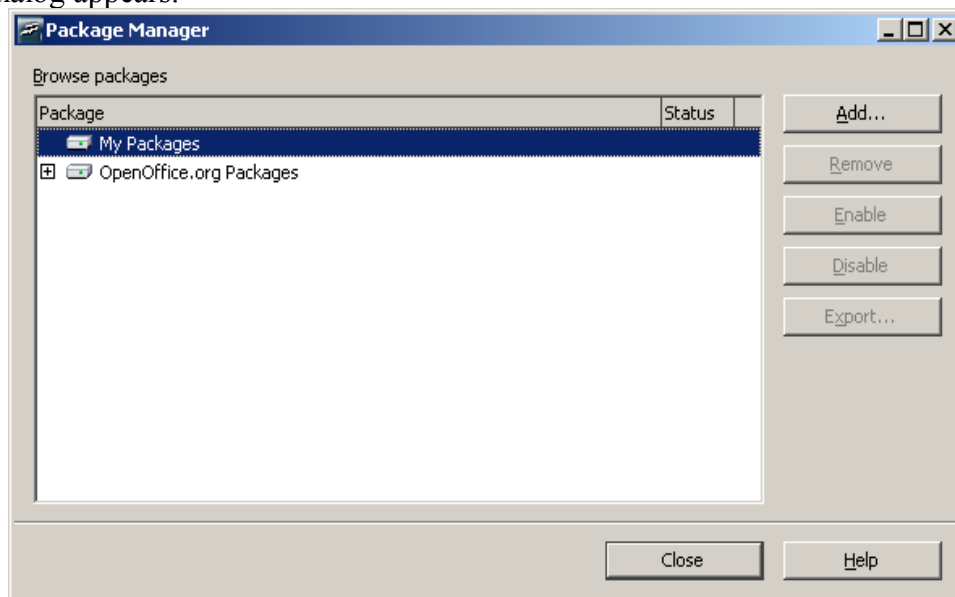
Find extendedPDF.zip and open it:
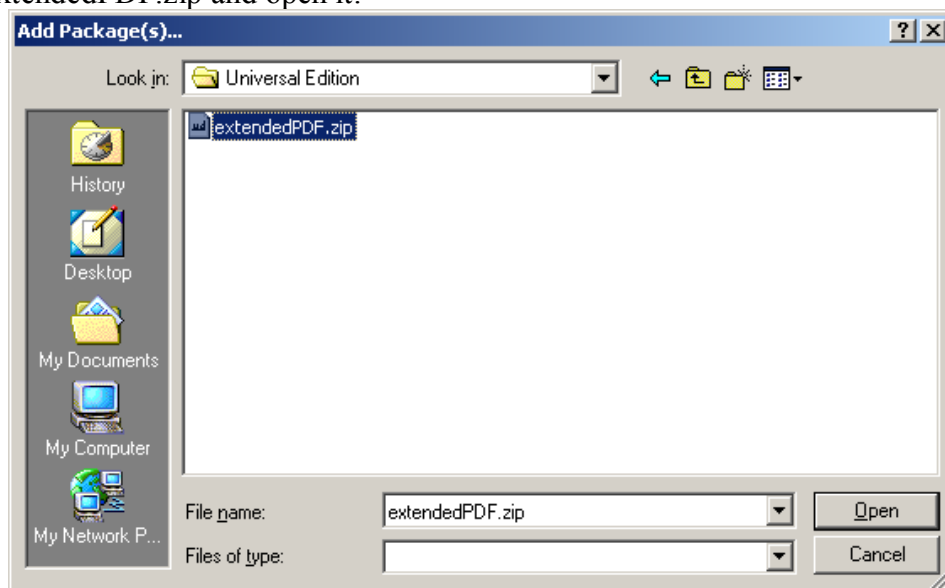
OpenOffice.org will add extendedPDF as an addon. To complete the installation close OpenOffice.org (including the quickstarter) and start it up again. You'll find a new toolbar button and an entry at the bottom of the Tools menu called Addons containing an extendedPDF item. The Addons menu item will start extendedPDF with the User Interface, with the toolbar button running extendedPDF with the last configuration settings.

Before running extendedPDF for the first time, make sure that the entries on the configuration tab are set correctly. See below for details.

Uninstallation on OpenOffice.org 2.0

Open the package manager and find *extendedPDF.zip*:
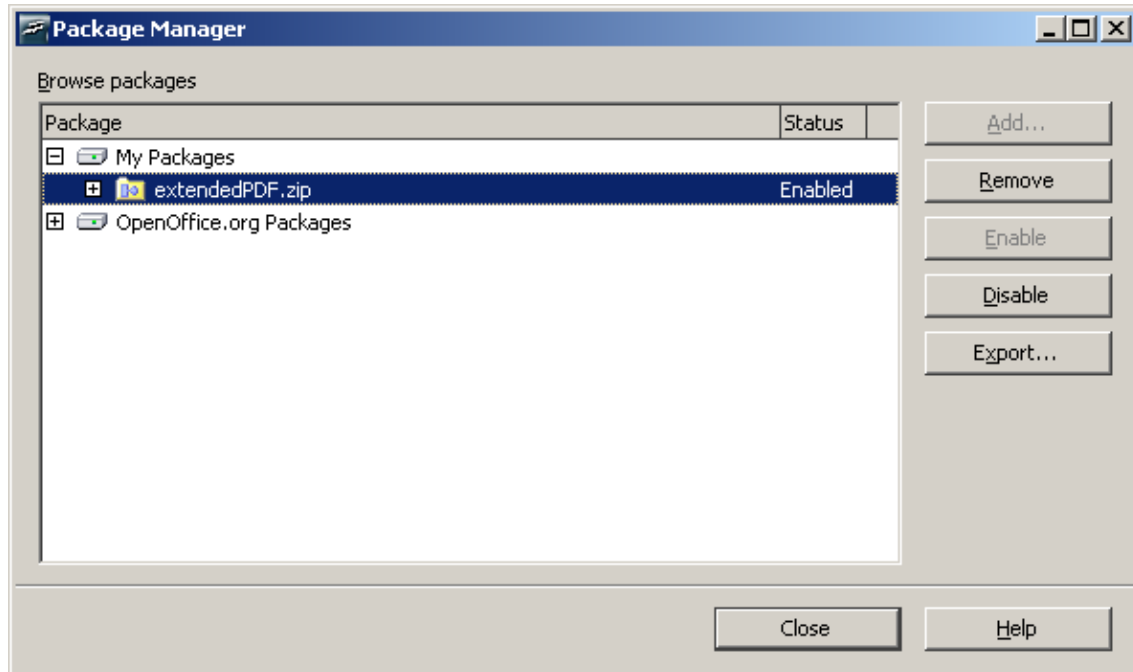
Click the *Remove* button and extendedPDF will be deleted from OpenOffice.org. You may need to restart OpenOffice.org for this to take effect.

Installing extendedPDF on Linux or UNIX

Installation requires three stages:

1. Installing prerequisite software

2. Installing extendedPDF

3. Configuring extendedPDF

Installing prerequisite software

Java or PDFTK

You will want to install either Java or PDFTK to provide support for PDF security.

The Universal Edition package includes the iText JAR to provide PDF security. This must be used in conjunction with a Java Runtime Environment. Alternatively, you can use PDFTK if you prefer.

Java may be provided as an option with your operating system or you may need to download and install Java from http://java.sun.com.

PDFTK may be available as an option with your operating system (e.g. Debian GNU/Linux package) or you can download it from http://www.accesspdf.com/pdftk/.

OpenOffice.org or StarOffice

extendedPDF will work with OpenOffice.org 1.1.0 or later, or StarOffice 7 or later.

We recommend using OpenOffice.org from http://www.openoffice.org, rather than the version supplied with your distribution. OpenOffice.org is under active development and the latest versions have many important bug-fixes.

Some users have had problems with running extendedPDF on Mandrake Linux. This appears to be due to a missing library. See the Troubleshooting section for details.

PostScript Printer Driver

Use the *spadmin* or *oopadmin* utility provided with StarOffice or OpenOffice.org to add a printer for extendedPDF to use.

1. Run *spadmin* from the command line to start the OpenOffice.org printer administration tool.

2. Click New Printer...
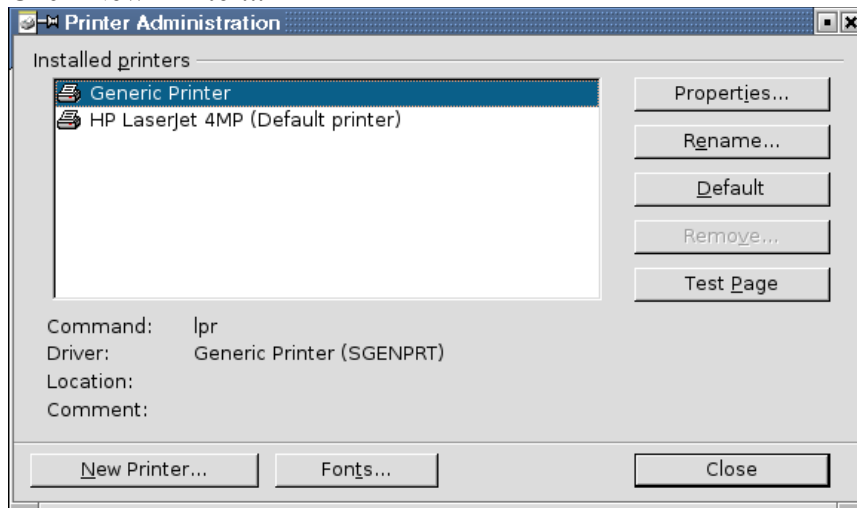
3. Select *Add a printer* and click *Next >>*
    If you do not have the option of adding a printer then choose *Connect a PDF converter*. Click *Next>>*, and on the next page select *A specific driver*.
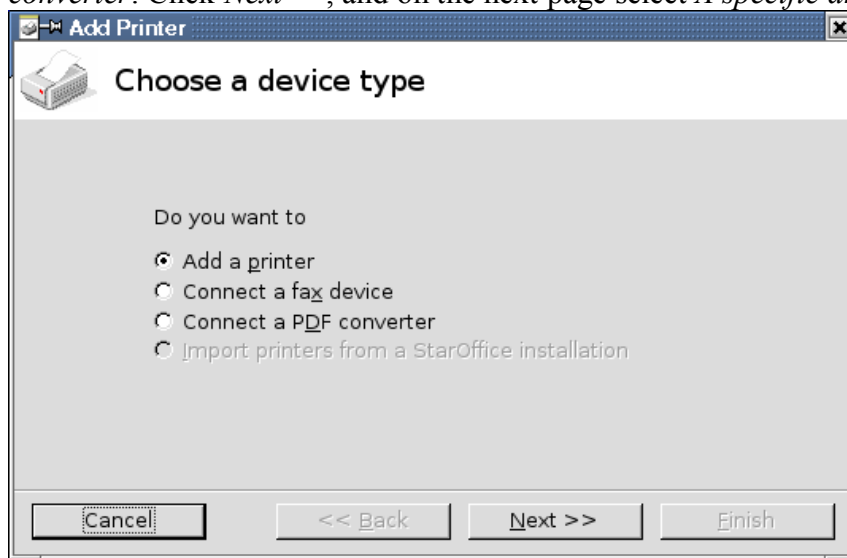
4. Select the driver called *Generic Printer (T42 enabled)* and click *Next >>*
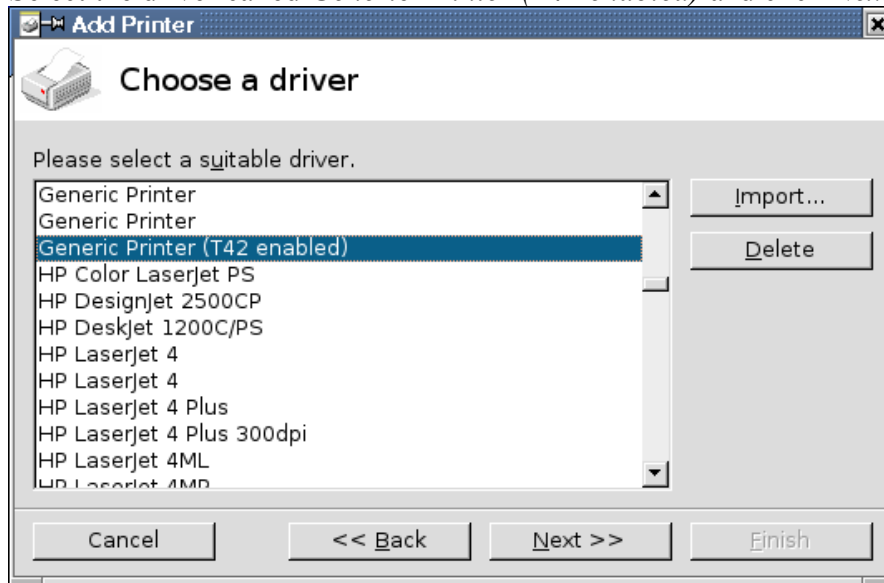
5. The command line will not be used as this printer driver will always be printing to file. A safe command line to use is *cat > "(OUTFILE)"* - this should work correctly whether you've added a printer or a PDF Converter. Click *Next >>*.
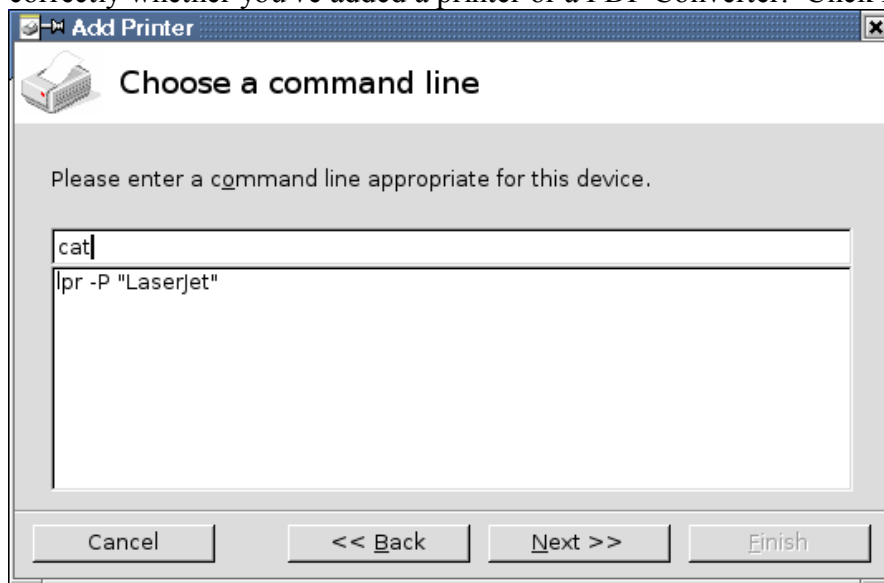
6. You will be asked for a name for the printer. The name does not matter, as long as you can enter it accurately into the configuration dialog for extendedPDF. Here, we've used extendedPDF. Other alternatives might be ePDF or PDF. Once

you've entered the printer's name click *Finish*.
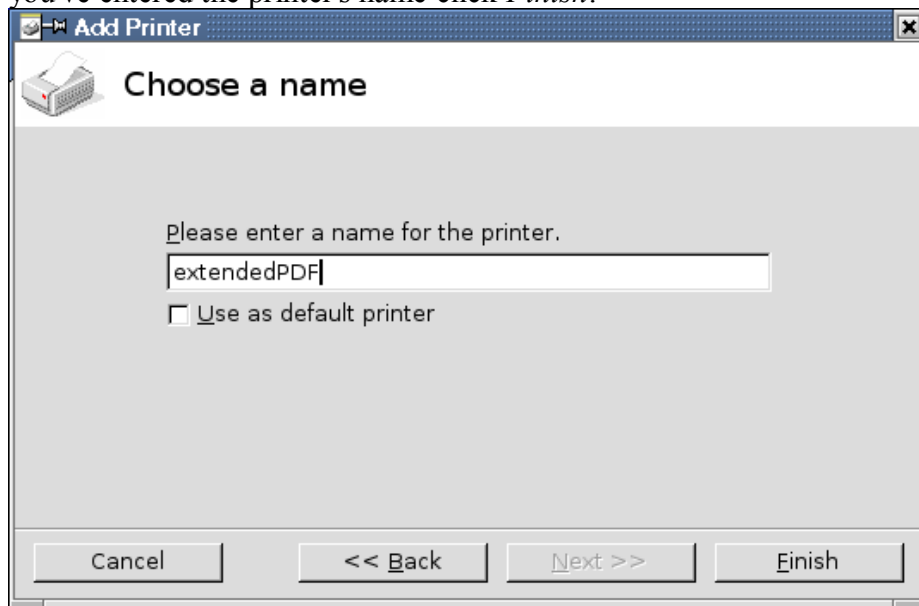
You have now created the printer. You may wish to change some of the printer settings to improve the quality of your PDF files.

1. Select *Properties...* from the *Printer Administration* dialog box.

2. Select the *Device* tab and increase the resolution to at least 600dpi. Change the *Color* setting to "Color".
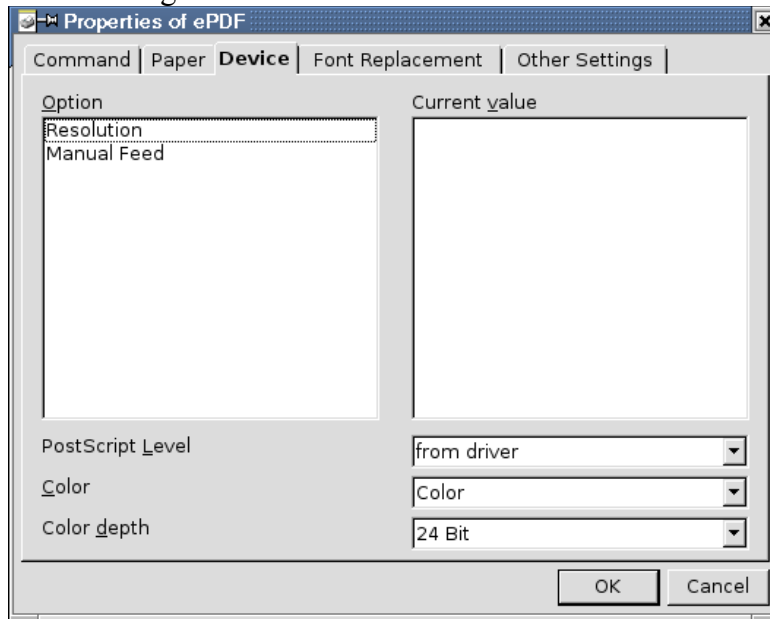
3. Select the *Font* tab and disable font replacement.
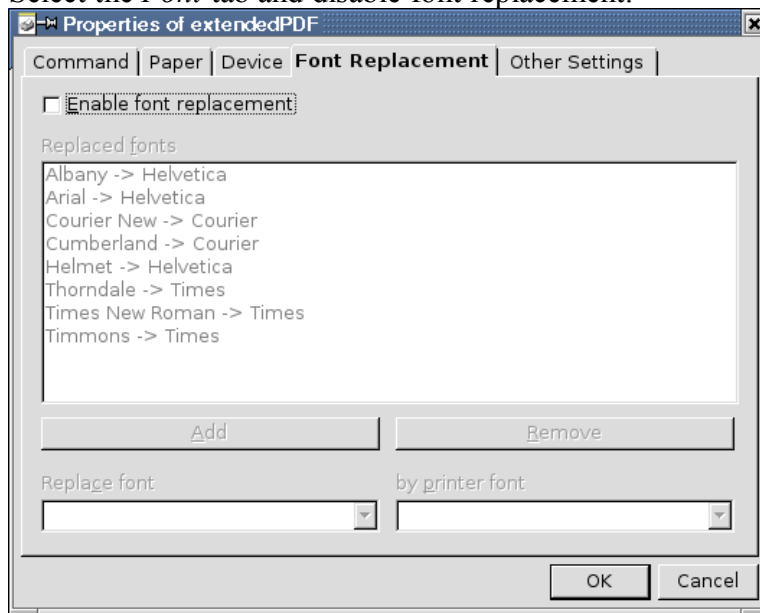
4. Select the *Other Settings* tab and make sure that all the margins are zero.
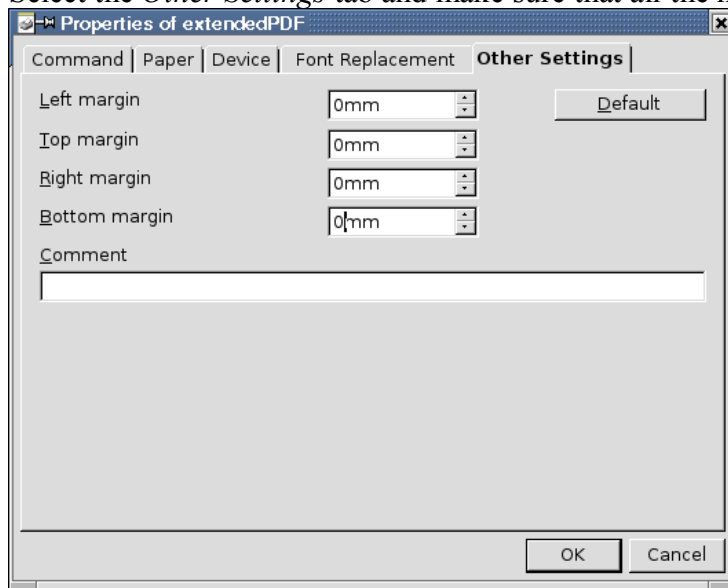
5. Now click *OK* to close the printer settings and click *Close* to close the *Printer Administration* dialog box.

Ghostscript

Almost all GNU/Linux systems have Ghostscript installed by default. If this is not the case you should be able to install the Ghostscript package from your distribution.

Ghostscript is also available from the following URLs:

• http://www.ghostscript.com,

• http://www.cs.wisc.edu/~ghost/

• http://sourceforge.net/project/showfiles.php?group_id=1897.

XPDF / Acrobat Reader

You will need an application to view the PDF files produced. extendedPDF will work with both Xpdf (provided as a package for most GNU/Linux distributions) or Acrobat Reader.

Xpdf is available from http://www.foolabs.com/xpdf/.

Acrobat Reader is available from http://www.adobe.com.

extendedPDF Universal Edition

Universal Edition is packaged in the form of a zip file, containing the following files:

File Name	*Description*
install.bat	Script to install extendedPDF on Windows
install.sh	Script to install extendedPDF on UNIX
uninstall.bat	Script to uninstall extendedPDF on Windows
uninstall.sh	Script to uninstall extendedPDF on UNIX
extendedPDF.zip	Installation Package
COPYING.txt	Software licence
iText.jar	Java module providing PDF security

You should unzip Universal Edition using the command line utility unzip, or the archive management utility on your platform; for example, Ark on KDE.

Installation on OpenOffice.org 1.1.x

1. Close OpenOffice.org and StarOffice. Check the following:

    - OpenOffice.org and StarOffice applications are not running

    - If you are installing for every user in a multi-user installation, it is very important that no user is running OpenOffice.org or StarOffice during installation. Failure to enforce this can result in your OpenOffice.org or StarOffice installation becoming corrupted.

2. You need to locate the *pkgchk.exe* program. This is installed as part of OpenOffice.org or StarOffice in the program sub-folder. For the default install of OpenOffice 1.1.2 this location would be: */usr/local/OpenOffice.org1.1.2/program/pkgchk.exe*

3. Open the install.sh file provided with Universal Edition in a text-editor.

4. Change the lines at the top of install.sh to suit your configuration. Follow the instructions in the file.

5. Save install.sh.

6. Run install.sh. If you get any error messages then check your configuration and the lines at the top of install.sh..

7. Open an OpenOffice.org Writer document. You should find extendedPDF installed with a toolbar button to activate it.

Uninstallation on OpenOffice.org 1.1.x

1. Close OpenOffice.org and StarOffice. Check the following:

   • OpenOffice.org and StarOffice applications are not running

   • If you are uninstalling for every user in a multi-user installation, it is very important that no user is running OpenOffice.org or StarOffice during uninstallation. Failure to enforce this can result in your OpenOffice.org or StarOffice installation becoming corrupted.

2. Find your OpenOffice.org package directory. There are two of these:

   • If you installed for every user in a multi-user installation then you need to find the share/uno_packages directory under your main OpenOffice.org installation directory.

   • Otherwise you need to find user/uno_packages within the OpenOffice.org folder in your home directory.

3. Within the uno_packages directory you will find the file extendedPDF.zip. Delete this file.

4. Open the uninstall.sh file provided with Universal Edition by right-clicking the file and selecting "Edit".

5. Change the lines at the top of uninstall.sh to suit your configuration. Follow the instructions in the file.

6. Save uninstall.sh.

7. Run uninstall.sh. If you get any error messages then check your configuration and the lines at the top of install.sh..

8. Open an OpenOffice.org Writer document. You should find that extendedPDF has been uninstalled.

Installation and Uninstallation on OpenOffice.org 2.0

Please see the instructions for installing Universal Edition on Windows on page 9.

Running extendedPDF

How to start extendedPDF

Before using extendedPDF for the first time, you need to make sure that it is configured correctly. See the Configuration section on page 25 for more details.

Professional and Universal Editions

There are two ways to start extendedPDF:

To start extendedPDF and show the full user interface, press this button:

You can find this button in the *Tools* menu under the *Addons* item, or on the Toolbar under this symbol:

To start extendedPDF without showing the user interface, press this button:

You will find this button at the right hand side of the toolbar.

Note: the Addons toolbar button may be missing in OpenOffice.org 2.0.

Before using extendedPDF for the first time, you need to make sure that it is configured correctly. See the Configuration section on page 25 for more details.

Open Edition

Click the toolbar button that you installed to start extendedPDF.

How to stop extendedPDF

If the extendedPDF User Interface is displayed, then press the Cancel button.

Otherwise, press the following buttons together:

Ctrl - Shift - Q

This will stop any OpenOffice.org macro that is running. This may leave the status bar displaying the extendedPDF progress meter. This is normal and will cause no ill-effects. To restore the status bar restart extendedPDF, then press the Cancel button on the User Interface.

Configuring extendedPDF

extendedPDF is configured through the normal User Interface shown when extendedPDF is started. There are a number of buttons across the top of the dialog box; these select different 'tabs' or pages in the user interface. Each of these pages is described below.

There are also three buttons at the bottom of the dialog box:

OK   Saves the settings and runs extendedPDF
Cancel   Does not save the settings, and exits extendedPDF
About... Displays some information about extendedPDF

Configuration

Windows

If you have installed *Professional Edition* the configuration will have been done for you by the setup program. If you are installing *Universal Edition* or *Open Edition* then you will need to change the settings on the configuration tab before extendedPDF will work correctly.

OpenOffice.org and StarOffice on Windows require the full-path to programs, otherwise they will not run. Therefore you should use the *browse* button to locate the program.

UNIX / Linux

As long as the program is on the PATH, you do not need to enter the full path into the dialog box. In most cases the default value for the dialog box will work.

Settings
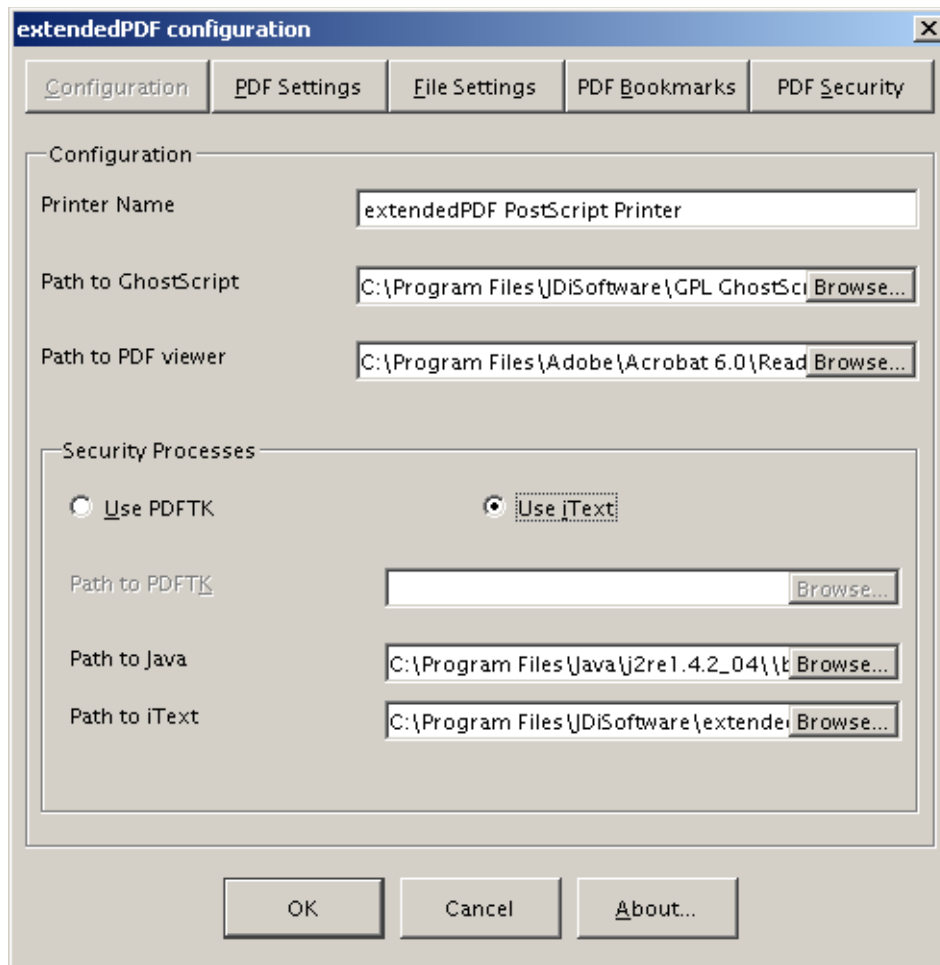
Printer name

> The name of the PostScript printer to use with extendedPDF. This must be exactly correct, otherwise strange errors will occur. Typical values would be
>
> - *Generic Printer*: the default value. Works on most Linux and UNIX installations but does not give good quality fonts.
> - *Generic Printer (T42 enabled)*: The recommended printer to use on Linux and UNIX. You have to install this printer using the *spadmin* tool before you can use it.
> - *extendedPDF PostScript Printer*: Windows users who have installed the 3BView PostScript Printer v2.0.

Path to Ghostscript

> Linux and UNIX users should leave this as the default value of *gs*. Windows users should press the *Browse* button and find the Ghostscript executable *gswin32c.exe*.

Path to PDF viewer

This is the application to use to open the PDF after it has been created. Windows users should use the Browse button to locate the application to use.

Typical values might be:

- *xpdf*: The default value. Works on any UNIX or Linux system where Xpdf has been installed and is on the PATH.
- *acroread*: Works on any UNIX or Linux system where Acrobat Reader 5 has been installed and is on the PATH.
- *C:\Program Files\Adobe\Acrobat 6.0\Reader\AcroRd32.exe*: Works on Windows where Acrobat Reader 6.0 has been installed in the default location.

Security Processes

extendedPDF can drive PDFTK or iText to apply security to documents. They both give the same results; PDFTK is slightly simpler to configure but much larger to download.

PDFTK

Specify the Path to PDFTK.

iText

Specify the Java Runtime Environment to use and the full path to the iText JAR file.

Note: you need the full path to the iText JAR file regardless of whether you are running on Windows or UNIX.

PDF Settings
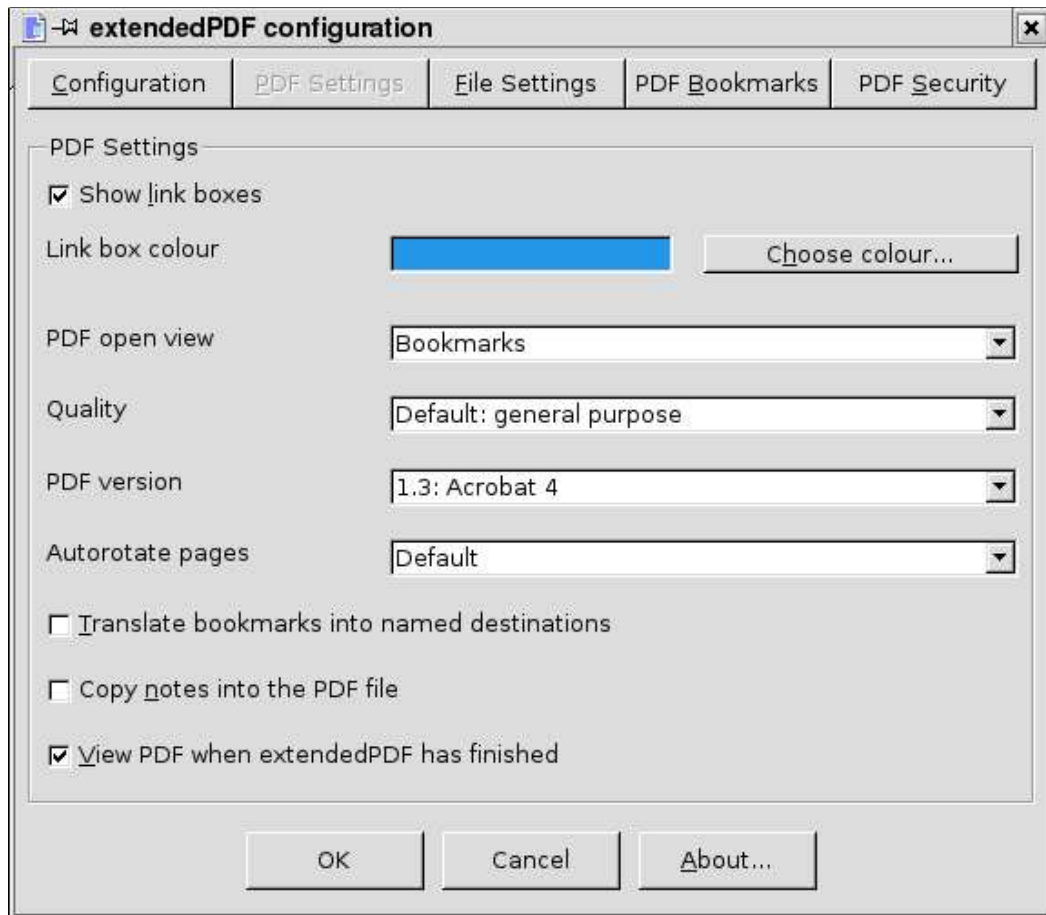
Show link boxes
>   Whether to display boxes round hyperlinks. Useful to show users that the link is active and can be selected.

Link box colour
>   The colour to use to display link boxes. Pressing the *Choose colour...* button will display the following dialog box:
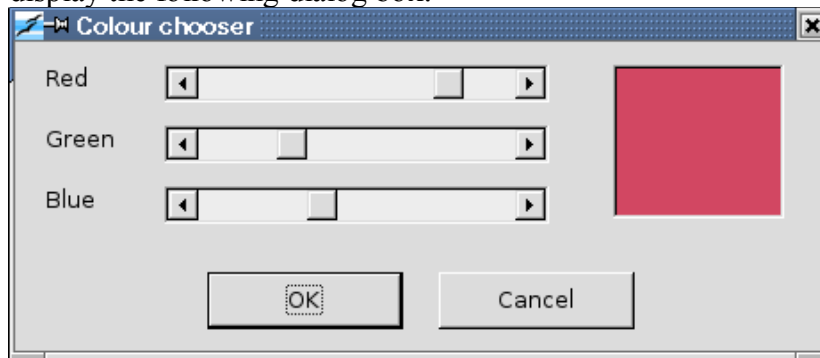
The current colour is displayed in the panel on the right. You can vary each colour component (red, green and blue) until the colour that you desire is displayed. Press *OK* to use that colour or *Cancel* to abandon the change.

PDF open view

You can set how you want your document to be presented when opened:

- Page only, where only the page is shown. This is the view to use when no bookmarks are included, or where the document is only a single page.
- Bookmarks, where the bookmark tree is shown to the left of the document page. This is the view to use when bookmarks are present.
- Thumbnails, where small pictures of each page are shown to the left of the document page. Useful with graphical content such as presentations.
- Full screen, where the PDF viewer will open in full-screen mode. Useful for publishing presentations.

Quality

This quality setting relates to the resolution of images and the accuracy of positioning of items on the page. In general, lower quality means smaller file size. Please note that this setting will not change the appearance of characters. If your fonts look terrible then you need to check your printer driver settings.

PDF version

You can choose the level of back-compatibility you need for your PDF files. PDF version 1.3 (compatible with Acrobat 4) is a good compromise and is set by default.

Autorotate pages

The pages can be rotated for on-screen viewing based on the text direction. There are four options:

- Default: use the preset value for the PDF Quality setting;
- Page by page: rotate each page based on its text direction;
- All pages the same: rotate all pages based on the dominant text direction;
- No rotation: do not rotate any pages.

Translate bookmarks into named destinations

A *named destination* is a name for a location in a PDF document, much as a bookmark is a name for a location in an OpenOffice.org or StarOffice document. They both allow you to create a link to something without knowing exactly where that thing is.

This allows you to create new versions of a PDF document and have existing links to that document continue to work, even though the layout is totally different. There are certain restrictions imposed by Adobe Acrobat Reader if this is to work correctly:

1. Your OpenOffice.org/StarOffice bookmarks should only contain ASCII letters and numbers. extendedPDF will change characters it considers invalid to the underscore character (_). This may result in name clashes and invalid PDF files.

2. You should refer to your PDF files from HTML using the following syntax:
    `<a href="file.pdf#name">link to named destination</a>`
    where `name` is the name of the bookmark in OpenOffice.org or StarOffice.
    You will then be able to update `file.pdf`, and, as long as `name` continues to exist
    and refer to the same content, all your links will continue to work.

Copy notes into the PDF file
    You can add Notes to an OpenOffice.org or StarOffice document to comment on
the content. If you want the Notes to be transferred to the PDF version tick this
box.

View PDF when extendedPDF has finished
    Tick to open the PDF file using the PDF viewer configured on the
"Configuration" tab. If you don't want to view the PDF, leave the checkbox clear.

File Settings

Output folder
    If you want to create all your PDF files in one folder then you should specify that
folder here.
    If you want to create the PDF file in the same folder as the original file then leave
this entry blank.
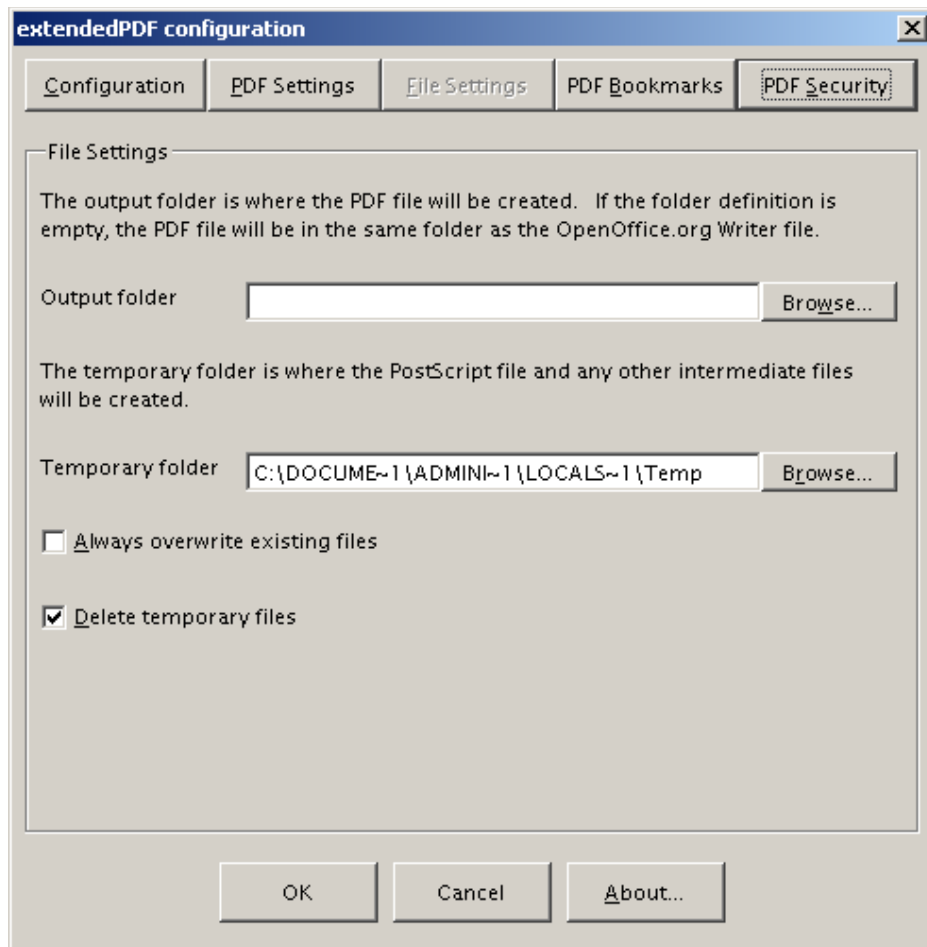
Temporary folder
> This is where the temporary files created by extendedPDF will be stored. This defaults to the temporary folder configured for OpenOffice.org or StarOffice, but you can change it if you wish. Temporary files will have the same name as the file you are converting, but with the extensions *.ps* and *.tmp*.

Always overwrite existing files
> If you want to recreate PDF files without being asked then select this checkbox. Note: if you select this any existing PDF and temporary files will be overwritten without confirmation, so use this checkbox with caution.

Delete temporary files
> With this checkbox selected extendedPDF will delete any temporary files produced during the creation of the PDF file. It is sometimes helpful to have access to the temporary files when trying to diagnose problems with extendedPDF. If you wish to examine these files clear this checkbox. The temporary files will be in the temporary folder described above.

PDF Bookmarks
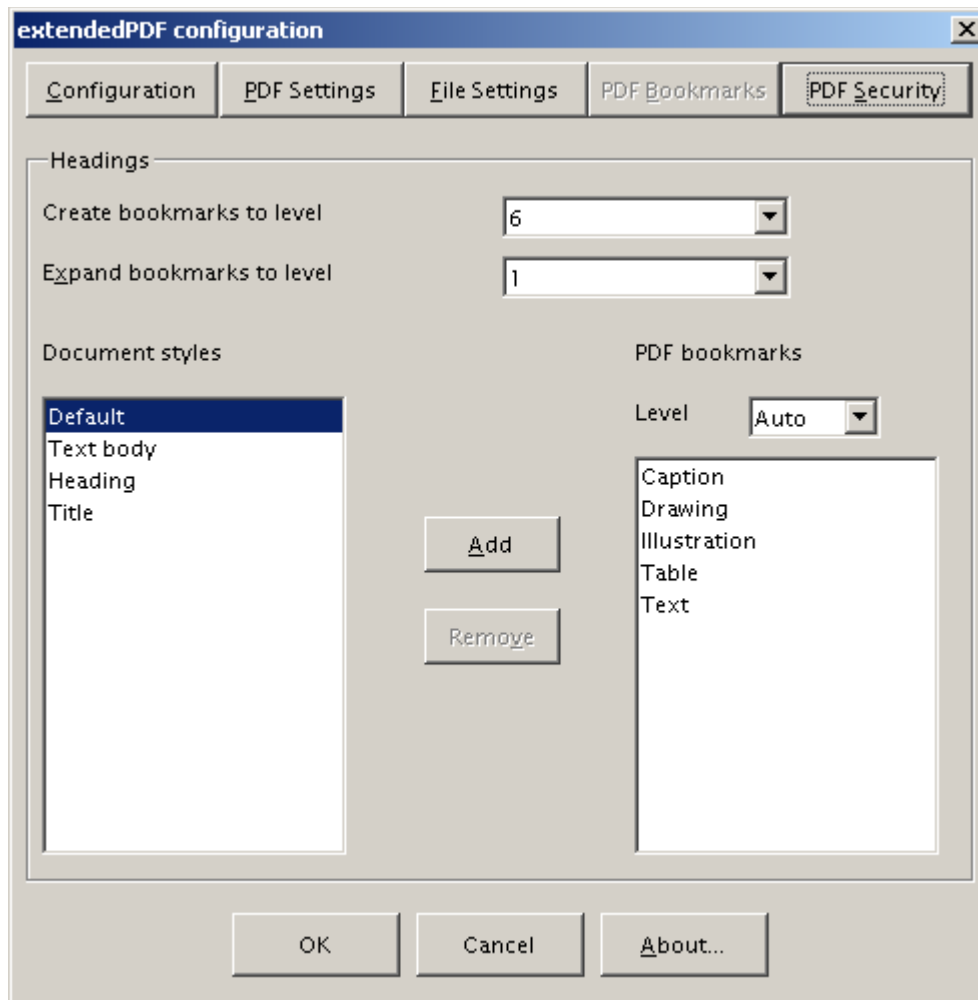
Create bookmarks to level

> Sets the depth of bookmarks to create. If you don't want any bookmarks at all set this to "None". Bookmarks will be created for all items in the "PDF bookmarks" list down to the level set.

Expand bookmarks to show level

> PDF bookmarks can be expanded or closed. If they are expanded they show the bookmarks underneath them.
>
> A closed bookmark:
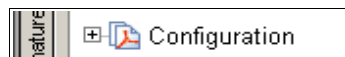
The same bookmark, expanded to show the bookmarks underneath it:
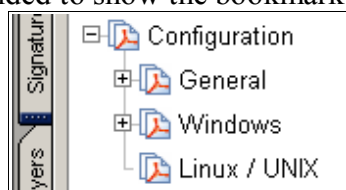
You can set which levels of bookmarks you want to show when the document is first opened. You will always see the top-level bookmarks (level 1). The default is two levels: the top level - normally chapter headings - plus the first level sub-headings.

Normally, these two settings are all you will want to change. The remaining settings allow you to completely customise the translation of headings into bookmarks. First, we'll introduce the user interface elements. Then adding and removing conversions will be described.

Document Styles

 This is a list of all the styles found in your document, minus those that are already set for conversion to bookmarks.

PDF bookmarks

 This is a set of lists of styles that will be converted to PDF bookmarks at a given level.

Level

 The level at which this list of bookmarks will be created. There are 11 possibilities: the normal levels of 1 to 10, plus Auto.

 • If the style that you want has a well-defined level, such as a normal heading style (Heading 1, Heading 2 etc) or a document title (you'd always want this at level 1) then you would insert the style at that level of 1 to 10.

 • If the style does not have its own level, such as a table or figure, you would normally want the bookmark inserted underneath the bookmark for the preceding heading. This is what the Auto level does. Use Auto level for anything whose level might vary - Captions, Drawings, Illustrations, Tables and so on.

Customisation examples

I want to add the title of my document to the bookmark tree:

 A document title should always be in the top level bookmarks, therefore you want to add it at level *1*.

 1. Click on *Title* from the *Document styles* list on the left-hand-side. If *Title* does not appear in the list then you don't have any paragraphs formatted with the *Title* style. Press *Cancel* to exit from extendedPDF, insert a paragraph in *Title* style and start extendedPDF again.

 2. Select *1* from the *Level* drop-down list on the right-hand-side.

3. Click the *Add* button. The *Title* style now appears on the right-hand-side.
4. Any paragraphs in the *Title* style will be converted to PDF bookmarks at the top-level.

I want to remove the title of my document from the bookmark tree:
1. Select *1* from the *Level* drop-down list on the right-hand-side.
2. Select *Title* from the list on the right-hand-side.
3. Click the *Remove* button. The *Title* style now appears in the *Document Styles* list again.

I want to add the *List Heading* style to the bookmark tree:
A *List Heading* doesn't have any intrinsic level within a document. It needs to take its level from its context, therefore you want to add it in the *Auto* level.
1. Select *List Heading* from the *Document styles* list on the left-hand-side.   If *List Heading* does not appear in the list then you don't have any paragraphs formatted with the *List Heading* style. Press *Cancel* to exit from extendedPDF, insert a paragraph in *List Heading* style and start extendedPDF again.
2. Select *Auto* from the *Level* drop-down list on the right-hand-side.
3. Click the *Add* button. The *List Heading* style now appears on the right-hand-side.
4. Any paragraphs in the *List Heading* style will be converted to bookmarks, one level down from the previous bookmark.

I want to remove the *List Heading* style from the bookmark tree:
1. Select *Auto* from the *Level* drop-down list on the right-hand-side.
2. Select *List Heading* from the list on the right-hand-side.
3. Click the *Remove* button. The *List Heading* style now appears in the *Document Styles* list again.

PDF Security

PDF security allows you to control what the readers of your document can do with it. In general, if you wish to apply any security you will need to set the *Owner password*.
This stops readers changing the security settings. You can then apply any other settings you feel necessary.
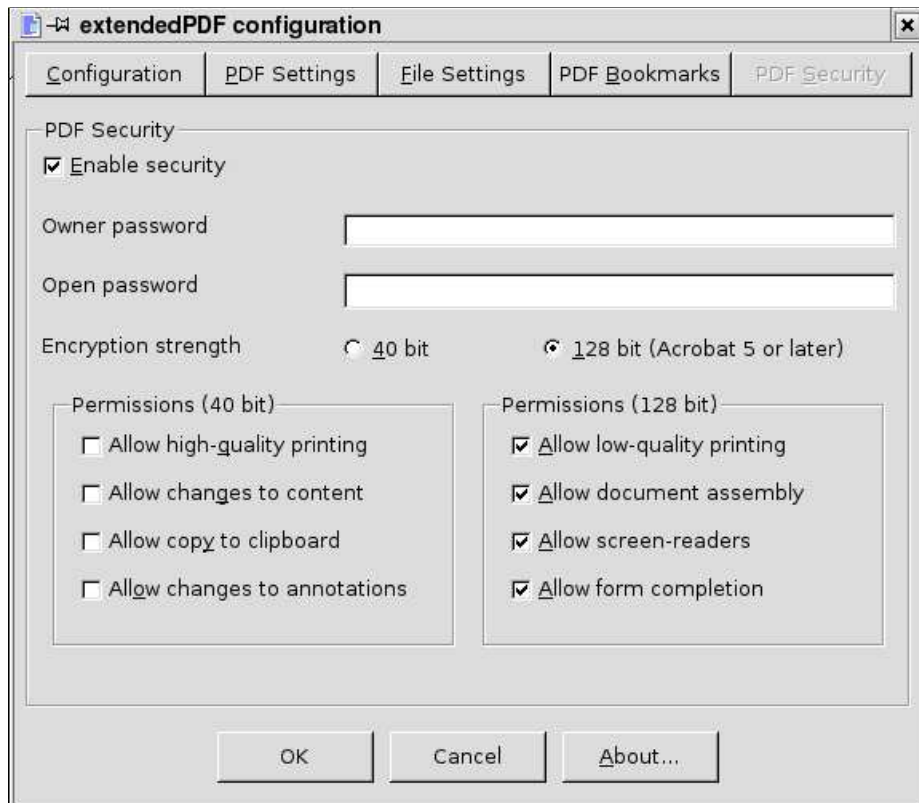
Enable security
> Allows you to switch the security settings on or off.

Owner password
> The password that is required to change security settings in Adobe Acrobat. If the reader of the document knows this password they can change any security settings, including all passwords.
> Note: This password is stored on your hard disk in unencrypted form.

Open password
> The password that is required to read the document. This password does not give the reader the ability to change any security setting.
> Note: This password is stored on your hard disk in unencrypted form.

Encryption strength
> 40 bit encryption is back-compatible with Adobe Acrobat versions before 5.0. However, it is relatively insecure and does not provide as many features as 128 bit encryption.
> 128 bit encryption is more secure than 40 bit. It offers extra security features, such as the ability to allow low-quality printing, but only works with Acrobat 5 and above.

Allow printing

> If not selected, readers will not be able to print the document in optimal quality. If *Allow low-quality printing* is not selected, readers will not be able to print the document at all.

Allow changes to content

> Readers using Adobe Acrobat can edit PDF files. If this item is not selected they will not be able to do so. If you allow changes to content, you also allow your document to be assembled into other documents.

Allow copy to clipboard

> If this checkbox is not ticked readers will not be able to copy document content by copying text or graphics to the clipboard and then pasting into another application. If you allow copying to clipboard you also allow screen-readers and other accessibility tools access to the content of your document.

Allow changes to annotations

> extendedPDF inserts two types of annotations: hyperlinks and notes. If you don't want readers of your document to be able to change these then clear this checkbox. If you allow changes to annotations then you automatically allow filling in forms.

Allow form completion

> PDF supports interactive forms; if this is selected then readers of your document can fill in the form even if they can't do anything else. Note: the current version of extendedPDF cannot create PDF forms.

Allow screen readers

> In the interests of accessibility it is generally a good idea to permit screen readers and other accessibility tools to interact with your document. However, this does represent a potential security loophole.

Allow document assembly

> If you allow document assembly then it is possible to combine your document with other documents.

Allow low-quality printing

> If you clear *Allow printing* but select this checkbox then users will be able to print your document, but not in high-quality.

Troubleshooting

Hyperlink issues

My tables of contents are not hyperlinked

> Tables of Contents are not hyperlinked by default in OpenOffice.org. The hyperlink must exist in OpenOffice.org for it to be transferred to PDF.
>
> Enable hyperlinks using the Context Menu item *Edit Index/Table*, *Entries* tab, and play with the *hyperlink* button. This dialog isn't very intuitive, but it does work and is flexible.

Hyperlinks go from or to the wrong place

> There are a number of possible causes for this:
>
> 1. Is the document in HTML? If you have "Online Layout" selected OpenOffice.org thinks that you only have one, very long, page, whereas the printer and PDF think that you have lots of pages. This means that most of the hyperlinks disappear. The cure is to make sure "Online Layout" turned off. However, make sure that you wait for the pagination to settle down before trying to run extendedPDF. OpenOffice.org can take a long time to repaginate the document.
> 2. Most other problems are caused by extendedPDF having difficulty finding the start of a page. extendedPDF needs to be able to put the cursor on the first line of the page to calculate where that page starts. If there is a graphic or other non-text item there this can fail. One workaround is to add a header that contains a text position at the start. Any graphics in the header should be anchored to a character, and have *wrap* set to *Wrap through in background*.
> 3. Does the page header contain a table? If so, and your document is not editable, then extendedPDF may not be able to find the page start position.
> 4. Make sure that you don't click on or otherwise interact with the document while extendedPDF is running.

What type of links are supported?

> - Links to web-pages (starting *http://*, *https://*, *ftp://*, *mailto:*) are supported.
> - Absolute links to other files (starting *file://*) are supported.
> - Internal links to outline elements (headings etc) are supported.
>   Links to outline elements inside text boxes won't be resolved, unless the text-box is anchored to a character rather than paragraph or page.
> - Links to bookmarks are resolved.
> - Links to graphics anchored at or as a character are resolved. Note that, for now, the link will jump to the anchor point, not the graphic.
> - Links are generated for some text-fields: references to bookmarks, field-references and pages should be hyperlinked.
> - Other links are not supported.

I've got links in headers, footers, and text boxes that are not copied to the PDF
> These items are not scanned for links or link destinations in the current version. This is on the list of things to do.

I'm using a language that runs right-to-left and the link boxes are wrong
> The link source bounds algorithm does assume that the document is top-to-bottom, left-to-right. Other orientations may produce unexpected results. If you have this problem please let us know.

The hyperlink boxes are much bigger than they should be
> Are you using non-default line spacing? If so the line spacing is added to the vertical size of the hyperlink box. The workaround is to turn off visible hyperlink boxes.

Visited hyperlinks appear in red rather than blue
> Change the character style for visited internet link to be the same as the internet link style. You can set this via the menu item *Format/Styles/Catalog*. Ensure *Character Styles* is set at the top of the dialog box, and *All* is set at the bottom. Then find *Visited Internet Link*, click *Modify...* and change the colour of the characters to blue.
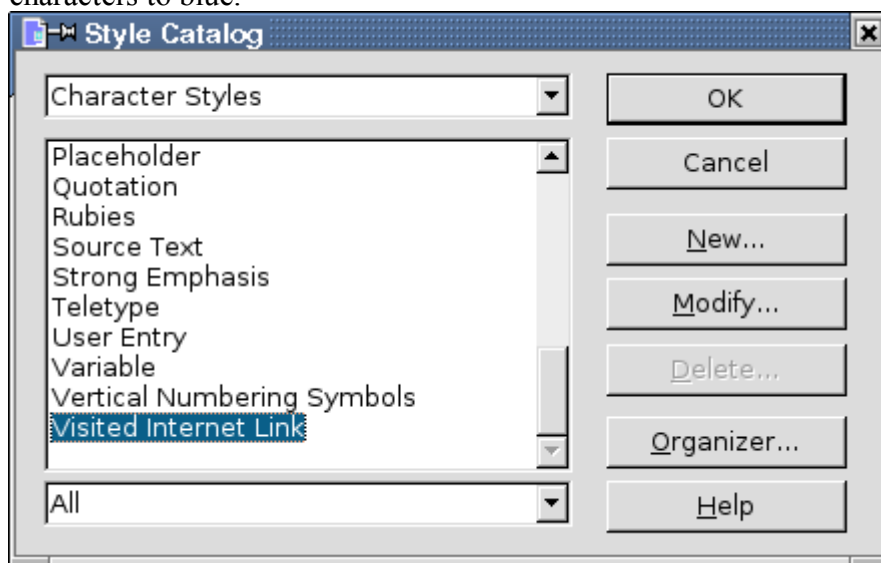
extendedPDF tells me that my links were resolved to the first of multiple matches
> Links to outline elements work in two different ways:
>
> 1. Manually inserted links include just the name of the outline element
>
> 2. Automatically inserted links (generated by Tables of Content) include a branch count.
>
> The first kind will always resolve to the first matching outline element. The second should always go to the right place. However, the branch count isn't always correct. If extendedPDF can't find the right element using the branch count it just matches using the name of the outline element.

If you have more than one outline element with the same name in your document then extendedPDF will issue a warning about the link. You should then check your links carefully to ensure that they go to the right place. For manually inserted links, you could replace the outline link with a bookmark. For automatic links, please send us the document so that we can analyse the problem.

Bookmark issues

I get extra empty PDF bookmarks
> Extra blank bookmarks are added to the tree to pad it out to the correct logical structure. For example, if you have a *Heading 3* directly below a *Heading 1*, then an extra blank bookmark will be added to represent the missing *Heading 2*.
> If this is a problem let us know and we'll see what we can do to change it.

Bookmarks go to the wrong place
> See the entries under hyperlink issues above.

Bookmarks jump to the heading without taking account of the number before it, so the text down the left of the page is hidden
> This will be fixed in future versions.

Font issues

I get huge PDF files with ugly fonts
> Characters in non-standard fonts (i.e. not ASCII, not in basic Serif or Sans-Serif fonts) may be translated into bitmaps by the combination of your PostScript printer driver and GhostScript.

> Windows
>> Make sure that your printer driver is set to send the fonts to the "printer" as *Type 42*.

> Linux/UNIX
>> Install a new printer using *spadmin* - the printer administration tool. Use the *Generic Printer (T42 enabled)* printer driver. Change the **extendedPDF** configuration to use your new printer. Your fonts should now be converted correctly.

The font encoding is wrong: text is unreadable when copied to the clipboard
> This is a Ghostscript issue. Using AFPL Ghostscript version 8.51 resolves the problem.

Other issues

All my PDFs are produced in black and white
> Try changing the PPD file that you are using for your printer driver. If your printer driver is producing PostScript in black and white then your PDF will be in black and white too.

Landscape pages are not processed correctly
> Make sure that you are using the correct printer driver. The *extendedPDF PostScript printer driver v2.0* for Windows does not have this problem. On Linux, we recommend the PPD *Generic Printer (T42 enabled)*. You can set this using *spadmin*.

The PDF files are empty; Acrobat complains that it cannot open the file as it has no pages
> This is almost certainly a problem with your printer driver. Check that the printer exists in the OpenOffice.org print menu, that it is a PostScript printer, and that the printer name appears **exactly** the same in the printer menu and the extendedPDF user interface. extendedPDF cannot detect whether the printer actually exists, so it is up to you to ensure that your configuration is correct.
>
> If the PDF files are still empty, check your Ghostscript installation. If you are running on Windows 98 or ME you should check the PATH setup in your C:\Autoexec.bat. Some versions of the 3BView Ghostscript installer didn't set the PATH correctly. Downloading and installing the latest version of the Ghostscript installer should fix the problem.

The PDF file cannot be saved in Adobe Acrobat
> Our best guess is that Ghostscript and Adobe Acrobat differ in their interpretation of the PDF specification. The PDF files produced by Ghostscript appear correct but cause problems for Acrobat.
>
> The workaround is to set extendedPDF so that it does not delete temporary files, then run Acrobat Distiller on the '.ps' file to convert it to PDF. It will still contain the bookmarks and hyperlinks.

The PDF file is in the wrong order

Check the OpenOffice.org printer settings, available from the *Tools/Options* menu item. They should look like this:
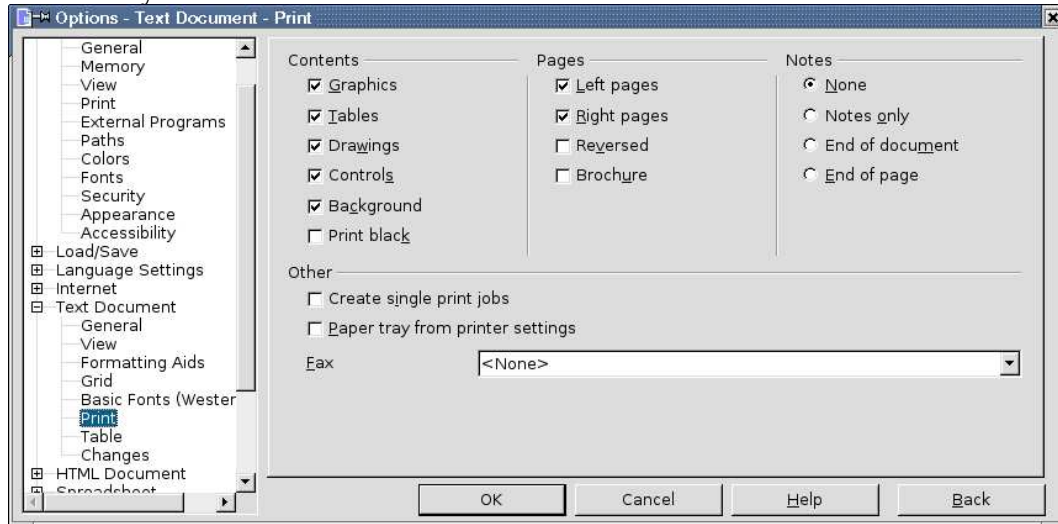
I'm running OpenOffice.org from my Linux distribution, and I can't add printers

This problem has been found on Debian; it may also be present on other distributions. When CUPS is running, the printer administration tool will only allow CUPS printers to be specified. To work around this issue:

1. Run spadmin (or oopadmin)

2. Click "New Printer"

3. Select "Connect a PDF Converter" and click Next

4. Select "A specific driver" and click Next

5. Select "Generic Printer (T42 Enabled)" and click Next

6. Enter this command line: `cat - > "(OUTFILE)"`. Click Next.

7. Choose a name for your printer (e.g. ePDF) and click Finish.

You can also import the SGENT42.PS and SGENPRT.PS file from your OpenOffice.org installation into CUPS. Change the file extensions to .ppd and setup your extendedPDF PostScript printer in CUPS. The files may require tweaking to get this to work properly.

I'm running Mandrake Linux and I keep getting errors

Dr Armin Lange suggested the following:

I think I solved the problem: when I started OO from the command line and tried use extendedPDF there was the error message:
/opt/OpenOffice.org1.1.2/program/libgcc_s.so.1: version `GCC_3.3' not found (required by /usr/lib/libstdc++.so.5)
Then I replaced the Mandrake default package libstdc++5 with a Redhat 9 version from rpmfind.net - and it works!!

How can I stop **extendedPDF**?

>   Hit Ctrl-Shift-Q - this will stop any OpenOffice.org macro running.

I want to set PDF security but I get the message ""The output file is not encrypted because encryption has not been configured."

>   You must tell extendedPDF about your Java installation and how to find iText or PDFTK. Check your settings on the configuration tab.

I get an error when running the PDF encryption process

>   Check your configuration settings. If you are running on Windows XP you might be affected by a Windows command line issue. In this case download PDFTK and reconfigure extendedPDF to use it in place of Java and iText.
>   If you still have issues you may need to rename the file. extendedPDF sometimes has problems encrypting files with unusual characters in the file name. Please let us know what characters cause you problems.

extendedPDF does not appear in non-writer documents

>   This is a feature. While extendedPDF can process such documents, the native PDF export tends to produce better results.

Why does **extendedPDF** make the document jump around like that?

>   It is finding *interesting things*. See Appendix 4 for further details.

Why does **extendedPDF** zoom the document?

>   The more that is shown on the screen at any one time, the less the document must be re-drawn as the cursor jumps around. Thus **extendedPDF** is faster. The original zoom will be restored at the end of the processing.

Errors and warnings

This document is not editable. This can cause hyperlink misalignment.
> In some cases extendedPDF needs to temporarily change the contents of a document to help it find page start positions.   If your document is readonly it cannot do this. If you receive this warning you should check that the hyperlinks are correct.

System error <number> occurred: <message> at line: <line>
> An error occurred within the OpenOffice.org BASIC interpreter. Please report this error to 3BView, together with enough information to allow us to reproduce the error.

Error <number > occurred: <message> (at line: <line>)
> An error occurred within the OpenOffice.org BASIC interpreter. Please report this error to 3BView, together with enough information to allow us to reproduce the error.

This document must be saved before it can be converted to PDF
> extendedPDF requires the document's filename before it can convert the document. You need to save the document, then try to convert it again.

This document is in "online layout". Use the View menu to change the document to paged layout. Ensure that the page count is correct before restarting extendedPDF.
> PDF files are displayed on normal sized pages. If OpenOffice.org is displaying in online layout, extendedPDF cannot match the displayed version with the version in the PDF file, thus hyperlinks cannot be located. You need to use the View menu to switch off online layout and wait for the document to repaginate before attempting to convert it.
>
> Please note that it can take many minutes for a large document to be completely repaginated after changing from online layout.

Unrecognised initialisation file setting: <key>

Unknown quality selected: <setting>

Unknown quality setting: <setting>

Unknown colour setting: <setting>

Unknown link colour selected: <setting>

Unknown page view mode selected: <setting>

Unknown PDF open view selected: <setting>

Unknown PDF version: <setting>

Incorrect lower bound of heading styles array: <setting>

Incorrect upper bound of heading styles array: <setting>
> extendedPDF found something that it didn't recognise in the initialisation file. You might get this error if you regularly use more than one version of extendedPDF: later version create keys that earlier versions don't recognise. You can edit the initialisation file using a text editor (notepad, vi, emacs) to delete the unrecognised key, or simply delete the whole and re-create the configuration again using the extendedPDF user interface.
> You can find the initialisation file in your OpenOffice.org user configuration directory. The filename is extendedPDF.ini.

The PostScript to PDF conversion process failed: it returned <result>. Please check your configuration. (Command line: <command line>)
> There was an error running Ghostscript. Check that the settings on the configuration tab of the user interface are correct, and that Ghostscript is installed correctly. If you still have problems please contact 3BView.

The PDF file has not been created. Please check your configuration. (Command line: <command line>)
> Ghostscript ran without problems, but the PDF file was not produced. Check that the settings on the configuration tab of the user interface are correct, and that Ghostscript is installed correctly. If you still have problems please contact 3BView.

There was an error running GhostScript. Please check that your configuration is correct. (Command line: <command line>)
> There was an error running Ghostscript. Check that the settings on the configuration tab of the user interface are correct, and that Ghostscript is installed correctly. If you still have problems please contact 3BView.

The following links could not be resolved: <list of links>

> extendedPDF couldn't find the targets for the links in the list. Check that the link targets are supported (see the Troubleshooting section for details) and that you haven't miss-typed any web-links: these must start with http://, https://, ftp://, mailto: or file:// as appropriate. If these prefixes are not present the link will not be recognised.

The following links were resolved to the first of multiple matches: <list of links>

> The links in the list were ambiguous, so extendedPDF followed what OpenOffice.org does in such cases and resolved the links to the first match. You should check that the link resolution is correct.
>
> If you've checked the links and extendedPDF produces different link targets to OpenOffice.org, please send your document to 3BView with an explanation of your problem.

"<message>" contains invalid characters and cannot be encoded properly. Invalid characters were replaced by "_".

> You may receive this warning if you are using non-ascii characters in hyperlink targets. If this causes problems please contact JDiSofware, with a description of the links that you wish to use.

"<message>" contains invalid characters and cannot be encoded as a PDF name. Invalid characters were replaced by "_".

> You will receive this warning if you have selected "Translate bookmarks into named destinations" and your bookmarks contain non-ASCII characters. PDF imposes strict limits on the characters that can be in a named destination, thus your bookmarks must follow those limits if you want to use this feature.

You are trying to convert an unknown document type. Please report this bug to http://www.3bview.com

> extendedPDF converts Writer documents to PDF; other document types it converts using the standard OpenOffice.org PDF export facilities. If you receive this error please contact us with details of the type of document that you were attempting to convert.
>
> You can convert HTML documents if you first save them to an OpenOffice.org file (.sxw). You will then get all the features of extendedPDF.

Unknown line spacing mode: <mode>

> extendedPDF did not recognise the line spacing mode within a paragraph. Please send the document that you were trying to convert to 3BView.

No page style information for <page style name>

> extendedPDF could not find any page style information for the given page style name. Please send the document that you were trying to convert to 3BView.

Bounds detection algorithm failure on pages <start page> to <end page>

> The code for working out where a hyperlink is on a page failed. Please send the document that you were trying to convert to 3BView.

No PostScript file was created. It should be located at <filename>. Check the configuration of extendedPDF.

    No file was produced by the printer. Check your configuration; in particular check that the printer exists, is a PostScript printer and has exactly the same name in extendedPDF and the OpenOffice.org print menu.

Internal error: page start cache is too small

    Please report this error to 3BView, and include the document that caused the error.

Internal error: page start cache storing negative value on page <page number>

    Please report this error to 3BView, and include the document that caused the error.

Fatal error: A table has been found with no elements.

    You have a table in your document that contains no elements. This should be impossible. Please report this error to 3BView, and include the document that caused the error.

Invalid bookmark with no level: <name>

    Something was found that should be inserted as a PDF bookmark, but is has no level attached to it. Please report this error to 3BView, and include the document that caused the error.

<name> is not a filename and cannot be added to a directory

    This error is shown if extendedPDF cannot determine how to change the filenames for the temporary files. Check the Files settings tab in the extendedPDF user interface. If you still get problems please report this to 3BView.

Error opening the PDF viewer: it returned <result>. Please check your configuration. (Command line: <command line>)

    There was a problem running the PDF viewer (Acrobat, Acrobat Reader or XPDF). Check that the settings on the Configuration tab of the extendedPDF user interface are correct.

There was an error running the PDF viewer. Please check that your configuration is correct. (Command line: <command line>)

    There was a problem running the PDF viewer (Acrobat, Acrobat Reader or XPDF). Check that the settings on the Configuration tab of the extendedPDF user interface are correct.

Appendix 1: Glossary

Java Runtime Environment (JRE)	Interprets Java programs, allowing them to run on a particular computer.
CUPS	Common Unix Printing System. Quoting from the website http://www.cups.org: The Common UNIX Printing System is a cross-platform printing solution for all UNIX environments. It is based on the "Internet Printing Protocol" and provides complete printing services to most PostScript and raster printers.
Meta-Data	Data about other data. In the case of extendedPDF, the document meta-data is the author, subject, title, keywords, date created and date modified.
PDF	Portable Document Format; a file format that attempts to present the same document appearance regardless of the computer on which it is viewed.
PDFMark	PostScript command that can be interpreted by a PostScript to PDF converter to add PDF-specific features to the resulting document. extendedPDF generates PDFMarks to specify PDF bookmarks, hyperlinks and document meta-data.
PPD	File that describes the capabilities of a printer, and how the printer driver should access them.
PostScript	Computer programming language used for drawing text and graphics on a page.

Appendix 2: The installation of the extendedPDF PostScript Printer Driver

The *extendedPDF PostScript Printer Driver* is suitable for use on Windows 2000 and Windows XP. It can be downloaded from http://www.3bview.com.

Installation

Installation is in two main stages. First, the automatic installer Wizard is run. Then you use the Windows Printer Installer Wizard to complete the process.

Run the file you downloaded by double-clicking on it. Follow the instructions in the setup Wizard.

When you get to the last page don't clear the checkboxes; click Finish. A web-page will be displayed showing further instructions and the Windows Printer Installer Wizard will be started. Follow the instructions on the web-page to complete the installation.

Uninstallation

Uninstallation is also a two stage process:

1. Open the printer explorer window from the Start Menu
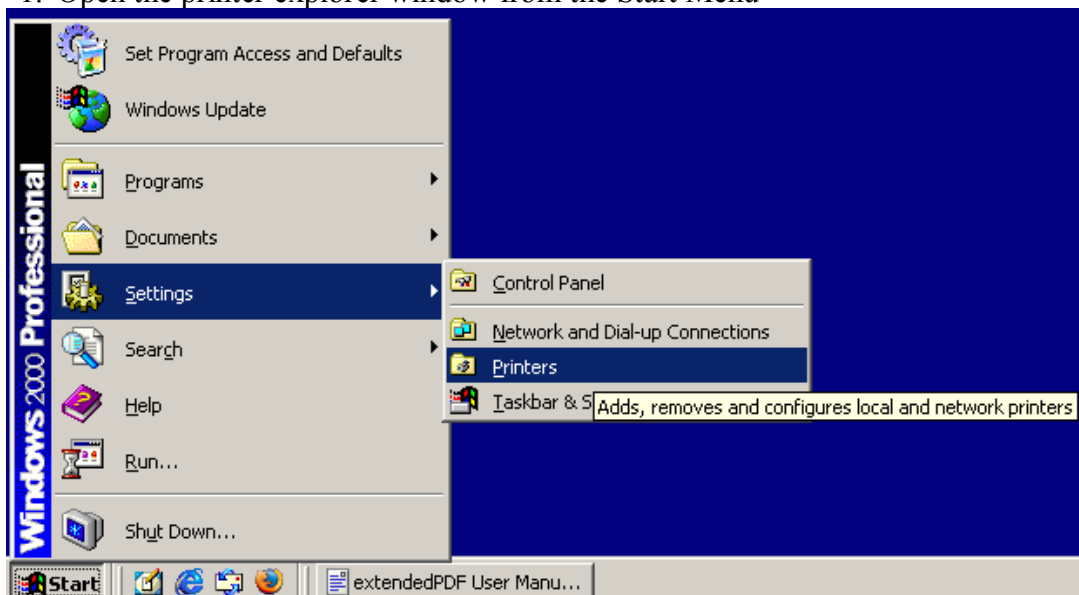
2. Right-click the extendedPDF PostScript Printer and select "Delete".

3. From the Start Menu, select the item "Uninstall extendedPDF PostScript Printer". Reply "Yes" when Windows asks you if you are sure that you want to uninstall the extendedPDF PostScript Printer driver.
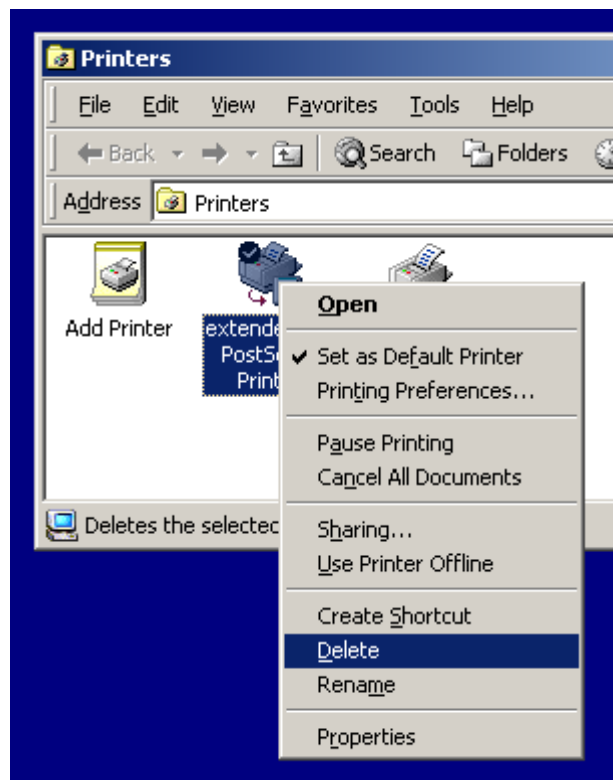
4. The extendedPDF PostScript Printer Driver is now uninstalled.

If you find any problems or errors in the extendedPDF PostScript Printer Driver please contact 3BView with details.

Appendix 3: The Installation of the 3BView version of GPL Ghostscript

Download and run the Ghostscript Installer from http://www.3bview.com. Follow the instructions in the setup Wizard.

Windows NT/2000/XP

You must be logged on to the machine as an Administrator to install the software.

Windows 98/ME

The installer will add an extra section to the end of the Autoexec.bat file to change the PATH environment variable. This will not be removed by the uninstaller. In the normal course of events this does not matter and will not affect the operation of your machine.

You will normally have to reboot your machine after installation completes.

Appendix 4: How extendedPDF Works

Almost all PDF creation systems work in the same way:

1. Print the document to PostScript

2. (Optional) Mark up the PostScript for PDF added features such as bookmarks or hyperlinks

3. Convert the PostScript to PDF using Adobe Distiller or GNU GhostScript

Exceptions are the OpenOffice.org 1.1 PDF creation module and Adobe PDFWriter. These produce PDF directly by rendering to PDF instead of to screen.

Most PDF creation systems miss out marking up the PostScript. The other two are fairly easy: if you can print to a PostScript printer and you have access to Adobe Distiller or GNU GhostScript then you can build a PDF creation system.

Adding the second step requires custom work. This is where extendedPDF comes in. It works like this, in the normal three steps:

1. Print the document to a PostScript file, via a printer driver.

2. Mark up the PostScript file:

    - Iterate through every object in the document
    - Find out where objects of interest are drawn: page number, bounding box on page
    - Store data for objects of interest
    - Open PostScript file, to append to the end of it
    - Write out bookmarks as PDFMarks
    - Iterate through all the links that were found and work out where they go to.
    - Write out links as PDFMarks
    - Write out document meta-information as PDFMarks
    - Close the PostScript file

3. Run GhostScript on the PostScript file to produce the PDF file.

The only way to find out where things are drawn on the page is via a ViewCursor. As this is moved around the document, the display of the document moves too. This is why the document scrolls when extendedPDF is running.

Appendix 5: Licence for installation instructions for Open Edition

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Appendix 6: GNU Free Documentation License

Version 1.2, November 2002

```
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```

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