

FreePDF XP

Administration manual

Current Version at finishing this manual: FreePDF XP 1.6

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Setup automation

FreePDF XP RessourceKit

In the FreePDF Resource Kit you will find helpful files for setup automation. you can download the FreePDF XP Resource Kit at <http://shbox.de/FreePDFXPRESSOURCKIT.zip>.

Pre Install

To install FreePDF XP, GhostScript 7.xx or 8.xx must be installed. You can get more information about GhostScript on www.ghostscript.org.

Note: It is strongly recommended to use GhostScript 8, especially 8.13. GhostScript 7 does not support eBooks!

Unattended GhostScript Setup

For batch-installing GhostScript do this:

- Run the GhostScript Setup (gs813w32.exe for example) hit Setup and let it open
- Switch to the explorer and open %temp%
- Search the subdirs for setupgs.exe, copy all Files to another, shared folder
- Run the setup from the user's machine like this:
`\\server\GhostScript$\setupgs.exe C:\Program Files`

Note: You should not install GhostScript over an existing GhostScript Version. To check this you can use fpsetup.exe. Fpsetup.exe will rise a errorlevel 15, if GhostScript was not found. See also the FreePDF Setup sample Batch File

Unattended FreePDF Setup

There are three ways for installing FreePDF XP unattended:

1. Using System Priority

This would be an unorthodox way to install FreePDF, but maybe someone uses it for an Auto-Install Tool.

2. Setting environment-variable fpsetup=1

You can use the setup packet (FreePDFXP*.exe) you downloaded for an unattended setup. If you want to get a feedback from the setup you have to set another variable too: set fpdebug=1

With set fpDebugFile=C:\fpSetup.log you can select the logfile used by fpsetup.exe. This should be a local file or a network share which can be accessed by the installation process!

3. Running fpsetup.exe /q

This is the best way for an autoseup, because you can interact with the setup failures using errorlevel.

To do this you first have to unpack the setup files:

- Run the FreePDFXP*.exe setup file and leave it unused
- Open a explorer window and switch to %temp%
- Search the sub folders for the FreePDF setup files
- Copy all files to another, shared folder

4. Run the downloaded File with *FreePDFXP1.x.EXE /q /c:"fpSetup.exe /q"*

This method should also work using a UNC Path, but you cannot resolve the Errorlevel messages.

Unattended FreePDF Setup sample script

After you have unpacked the GhostScript and FreePDF XP setup files to a network shared folder you can create a batch script for unattended setup of FreePDF XP like this simple example:

```
@echo off
Z:\FreePDF\fpsetup /q
goto Step%errorlevel%

:Step15
REM GhostScript not found
Z:
cd Z:\GhostScript
Z:\GhostScript\setupgs.exe C:\Program Files
Z:\GhostScript\fpsetup /q

:Step0
```

This is just a principal sample. To optimize this script, please see all fpsetup.exe errorlevels and their meanings.

Detailed example

You will find a full sample for a server-based setup in the FreePDF RessourceKit at <http://shbox.de/FreePDFXPRESSOURCKIT.zip>. This sample is based on two BAT files; the 1st is copying the 2nd to C:\, runs the script and cleanup after running. The 2nd script connects a network drive, installs FreePDF XP and GhostScript and disconnects the share then.
1st script: Hier_klicken_für_FreePDF_XP.bat (means: Click_here_for_installing_FreePDF_XP)
2nd script: fpAutoSetup1.bat

Sorry for linking to these German files. But with a little work and this manual it should be not a problem to translate it in your preferred language.

Please note:

- You have to change the paths to your environment
- The %Log% Destination must have public write permissions
- The installing user must have administrative privileges on the destination computer

Uninstallation of FreePDF

For uninstallation please use the Control panel, Software.

After uninstalling there is a directory c:\Program Files\FreePDF_XP which includes the uninstall program fpsetup.exe. It's then safe to delete this folder.

FreePDF on a Terminal Server

FreePDF should work on a Terminal Server in the same way as on Windows XP with multiple users.

Please see the FreePDF Internals for more details how FreePDF works.

There are a few known problems.

Windows Spooler Priority

In case of a new Print-Job, Redmon will write a temporary PS file usually to C:\Windows\Temp (the system Temp folder) and runs fpRedMon.exe.

fpRedMon.exe extracts the original owner of the PDF File and moves it to a common Temp folder -usually All Users\FreePDF. To make sure that all users have permissions to read and delete these files, fpRedMon.exe tries to set the permission everyone:RWXD to each file. Normally this is possible, because fpRedMon.exe is started by Redmon, which is started by the spooler which works with system priority.

Make sure: If you have changed the user, which runs the spooler service to a non-administrator, you have to make sure on your own that all users of the computer have permission to list the directory psDir (see Registry Parameters of fpAssist.exe).

Also they need permission to read and delete each file stored into this folder.

Because these files can only be moved from C:\Windows\Temp, they may have an access control list with the permission of C:\Windows\Temp, so that you have to change the permission for new files in this folder too.

Common PS files folder

FreePDF uses a common file folder, where all PS Files will be moved. By default this would be User Profiles\All Users\FreePDF. To change this, please use the registry Key listed at fpAssis.exe Registry Keys.

If the common PS files folder is a problem or a security issue, please let me know.

msvbvm50.dll and Server 2003

Because of a non-understandable reason Microsoft includes the msbvm50.dll in Windows 2000 and Windows XP, but not in Server 2003.

This dll is needed by FreePDF XP and must be copied into the System32 folder before installing. Because the dll is available nearly everywhere, I will not deliver it with FreePDF XP.

Distributed Applications (Version 1.1)

If you use a terminal Server just for distribute single applications you can redirect the printer output to the destination PC. Use the following steps:

1. Share the folder C:\Documents and Settings\All Users\FreePDF on the Terminal Server as \\Server\FreePDF\$
2. Add this two Keys in the users Registry:
 - HKCU\Software\shbox\FreePDFXP\TsPath = \\Server\FreePDF\$
 - HKCU\Software\shbox\FreePDFXP\TsName = TS Username

If TS Username is the same than the local Username it can be blank.

Note The User must have permissions to read and delete files on the Share

Tip If you use more than one Terminal Server load balanced, redirect the FreePDF PsDir to a central share by changing HKLM\Software\shbox\FreePdfXP\PsdDir to \\CentralServer\FreePDF\$\ (With a closing Backslash). fpRedMon.exe will move the files there.

Please know, that fpRedMon.exe is running with System Account. You should enable Guest-Write ability to \\CentralServer\FreePDF\$ to make it work in usable way.

FreePDF Internals

FreePDF.exe can be run in several ways. The normal way -File / Print -would start this process:

1. The spooler

The Windows spooler will store the print-job and forward the data's to the Port PDF1:. This Port is controlled by Redmon (<http://www.cs.wisc.edu/~ghost/redmon/>).

2. Redmon

Redmon will run the redmon-tool redrun.exe, witch writes the print-job to a temporary file. This would be stored usually in the %temp% folder. If the spooler runs as System, this would be C:\Windows\temp for example.

3. fpRedMon.exe

fpRedMon.exe is a part of FreePDF XP and will be started with the PS file as command. fpRedMon.exe opens the PS file and extracts the original owner. fpRedMon.exe then moves the file to the psDir, wich usually is Profiles\All Users\FreePDF and rename it to USERNAME000001.ps (in case it's the first File for the User). After this, fpRedMon.exe tries to set the NTFS Permission Everyone:RWXD (if its a NTFS Drive).

4. fpAssist.exe

This tool searches every second for a new file named USERNAME*.ps. If found, the dialog box will rise.

Now a user has to press one of the buttons to run FreePDF.exe.

5. FreePDF.exe

FreePDF.exe will be called with the special command „/3“ (see FreePDF shell switches). FreePDF will make a PDF file by calling gswin32c.exe and do the commands after this -open the PDF or open a email for example

6. fpMailer.exe

In case the user selected the email-button, fpMailer will be run by FreePDF.exe. This will read the default Email Application in HKey_Local_Machine\Software\Clients\Mail. This Application will be called to open an new mail attached with the PDF File.

FreePDF Setup Resources

Known environment variables

fpsetup.exe can use this environment variables. You can, but do not have to use these settings.

<i>Variable</i>	<i>value</i>	<i>meaning</i>
fpDebug	1	Setup will try to create a log file c:\fpsetup.log
fpDebugFile	Filename	if fpDebug=1, setup will try to create a log file [Filename]. If filename contains spaces, it must be included in "- characters
fpsetup	1	Unattended setup
fpsetup	remove	Unattended remove

Shell switches

fpsetup.exe can be run with this switches. You can, but do not have to use these settings. You need to unpack the FreePDFXP*.exe packet and run fpsetup with these switches.

<i>Switch</i>	<i>value</i>	<i>meaning</i>
/u	none	Unvisible run of setup
/q	none	Unattended setup
/q /r	none	Unattended uninstall
debugfile=	Filename	Setup will try to create a log file [Filename]. If Filename contains spaces, it must be included in "- characters
setup	none	Interactive setup
/r	none	Interactive remove
/IsAcrobatInstalled	none	Returns Errorlevel 1, if a PDF Reader is installed
/IsGhostScriptInstalled	[Version]	Errorlevel 0 = not installed, 1 = installed, 2 = newer version installed
/IsFreePDFInstalled	none	Errorlevel 1 = FreePDF is installed
/IsFreePDFXPInstalled	none	Errorlevel 1 = FreePDF XP is installed
/RegVal	Key=Value	Saves Key and its Value under HKey_Local_Machine\Software\shbox\FreePdfXp
/RegUserVal	Key=Value	Same as /RegVal, but using HKey_Current_User

Registry Keys

Setup can be customized by the following Registry keys.

- CU means HKey_Current_User\Software\shbox\FreePdfXp
- LM means HKey_Local_Machine\Software\shbox\FreePdfXp

<i>key</i>	<i>value</i>	<i>meaning</i>
LM Debug	1	Setup will try to create a log file c:\fpsetup.log

Setup Errorlevels

Setup reports the following errorlevels:

Errorlevel	Cause
0	Setup successful
4	Copy error: Source file not found
5	Copy Error: Permission denied
6	Copy Error: Drive not found
10	FreePDF XP do not run on Windows 9x
11	FreePDF cannot be installed on Windows NT
15	No GhostScript found
40	Folder C:\Program Files\FreePDF_XP could not be created („C:\Program Files“ depends on you Windows version and could be something similar).
110	Cannot enumerate Printers
1000	Cancel button pressed

FreePDF Assistant Resources

Registry Keys

fpassist.exe can be customized by using the following registry settings.

- CU means HKey_Current_User\Software\shbox\FreePdfXp
- LM means HKey_Local_Machine\Software\shbox\FreePdfXp
- Fat printed keys can be changed by using freepdf.exe
- All other keys are for special customization of FreePDF and should be used with care!

<i>key</i>	<i>value</i>	<i>meaning</i>
CU Debug	1	fpassist will try to create a log file desktop\fpassist.log
CU/LM APol	see below	Disable some fpassist features. see below.
CU/LM ADefault	email	Like pushing the Email button. Dialog will not rise!
CU/LM ADefault	saveas	Like pushing the Save As button. Dialog will not rise!
CU/LM ADefault	desktop	Like pushing the Desktop button. Dialog will not rise!
CU/LM Desktop	Path	Replacing path for the desktop button. Path must end with a backslash (Like C: \ PDF \)
CU/LM DesktopCaption	Name	Replacing caption for the desktop button. Please make sure, that Name fits in the button. With „&“ before a character you can set a hokey to use with <i>Alt</i> .
LM fpDir	Path	Setup path of FreePDF XP. Path must end with a backslash (Like C: \ PDF \). <ul style="list-style-type: none"> • Not intended for change by User!
CU LastDir	Path	Last folder used by the save button. Path must end with a backslash (Like C: \ PDF \). <ul style="list-style-type: none"> • Not intended for change by User!
CU OpenPDF	1 or 0	Selects, whether or not to open the new PDF file. If not exist OpenPDF will get 1. This value is the same as the OpenPDF check box in the dialog box.
CU/LM DefaultProfile	Profile Name	Name of the default profile. A profile containing PDF settings. If not exist, the first profile will be used.
LM psDir	Path	Source folder for ps files. Set by fpRedMon.exe. Path must end with a backslash (Like C: \ PDF \). <ul style="list-style-type: none"> • Not intended for change by User!
CU Language	Number	The current language of FreePDF XP. 1 means German 2 means English 3 means external language File
CU Pagemaker5 (V1.1)	1 or 0	1 = Pagemaker 5 will be supported: The current user takes all files, that have the username "unknown". This is a Bug of Pagemaker 5.
CU TsPath	Path	Path (Drive/Path or UNC) of a shared PsDir on a Terminal Server. See the chapter "Terminal Server"
CU TsName	Username	The Username, witch the Desktop-fpRedMon should take on TsPath.
LM Style	grey	Uses Greyscale Style. Useful vor 256 Color Displays on Terminal Server Sessions.

Working with the policy

The Registry keys APol can be used to customize the FreePDF Assistant. The listed values are known by fpassist.exe and will be loaded each time the dialog rise.

- Both values - LM and CU will be added to a single string
 - If a „|“ is found in this string, the values after the sting will be ignored. This can be used for restrictions, that can't be revoked.
 - First the disable options will be set
 - Second the enable options will be set
 - A enable-value in HKey_Local_Machine make no sense.
-
- All values ca be used as disablevalue or enablevalue. There must be no separator between values.
 - You can set this values by using *FreePDF / Edit / Options* much easier.

value	meaning
quality	Disable/enable the <i>Profiles</i> combo box
filename	Disable/enable the <i>Filename</i> field
openpdf	Disable/enable the <i>open PDF</i> check box
email	Disable/enable the <i>email</i> button
saveas	Disable/enable the <i>save as</i> button
desktop	Disable/enable the <i>to Desktop</i> button
multidoc	Disable/enable the <i>add to next PDF</i> button
settings	Disable/enable the configuration page in <i>FreePDF / Edit / Options</i>
encryption	Disable/enable the <i>Encryption</i> check box (Using GhostScript 8.14 or higher)

Note: Disabling all items means the user gets a empty blue window in state of the dialog.

Example 1: Disable Desktop button for all users but Administrator

- Add at HKey_Local_Machine\Software\shbox\FreePdfXP a value APol containing the following string:

disabledesktop

- Login as Administrator
- Add at HKey_Current_User\Software\shbox\FreePdfXP a value APol containing the following string:

enabledesktop

Example 2: Disable the Profile combo box for all users no matter what they set to
HKey_Current_User\shbox\FreePdfXP\APol

- Add at HKey_Local_Machine\Software\shbox\FreePdfXP a value APol containing the following string:

disablequality|

FreePDF.exe Resources

Shell switches

freepdf.exe can be run with this switches. Some of this parameters was intended for internal use. „Filename“ means a full path notation. If Filename includes spaces, Filename must written as “C:\My PDF Files\Filename.pdf” between “-characters.

Switch	meaning
/a	<p>Usage 1: Filename.ps /a</p> <ul style="list-style-type: none"> • Calls FreePDF.exe to create a Filename.pdf <p>Usage 2: Filename.ps /a /d</p> <ul style="list-style-type: none"> • Calls FreePDF.exe to create a Filename.pdf and delete Filename.ps <p>Usage 3: Filename.ps /a /x</p> <ul style="list-style-type: none"> • Calls FreePDF.exe to create a Filename.pdf and end FreePDF
/q /o	<p>Usage: /q /o Filename.pdf Filename.ps</p> <ul style="list-style-type: none"> • Create Filename.pdf and exit FreePDF. Filenema.ps will not be deleted. • This way is used by Interleaf / Quicksilver using publishing a document • Compatible to Adobe Distiller.
/m	<p>Usage: /m Filename.pdf Filename1.ps Filename2.ps Filenamen.ps</p> <ul style="list-style-type: none"> • Creates Filename.pdf. Filename*.ps will not be deleted. • Filename*.ps also can be a PDF file, if its not encrypted <p>This call is used by fpjoin.exe</p>
Filename.ps	<p>Usage: Filename.ps</p> <ul style="list-style-type: none"> • Opens FreePDF and displays Make_PDF button • After create Filename.pdf, a Open button will be shown
/3	<p>Usage 1: /3 ToDo “Profile“ Filename.pdf Filename.ps</p> <ul style="list-style-type: none"> • Creates Filename.pdf with profile “Profile“ and run ToDo commands <p>Usage 2: /3 ToDo “Profile“ Filename.pdf File1.ps File2.ps FileN.ps</p> <ul style="list-style-type: none"> • Creates Filename.pdf with profile “Profile“ and run ToDo commands <p>ToDo can be:</p> <ul style="list-style-type: none"> • delps Deletes the Filename.ps file(s) • email Open PDF in a new email • open Open PDF in Acrobat for preview • save Exit FreePDF • end Exit FreePDF • encode Opens a Dialog Box to encode the PDF • nocode Supress all encoding <p>If “Profile“ is not present or misspelled, the internal fail back profile will be used.</p>

Registry Keys

freepdf.exe can be customized by using the following registry settings.

- CU means HKey_Current_User\Software\shbox\FreePdfXp
- LM means HKey_Local_Machine\Software\shbox\FreePdfXp
- Fat printed keys can be changed by using freepdf.exe
- All other keys are for special customization of FreePDF and should be used with care!

<i>key</i>	<i>value</i>	<i>meaning</i>
CU Debug	1	freepdf.exe will try to create a log file desktop\freepdf.log
CU/LM FPoi	see below	Disable some freepdf features. see below.
CU/LM DefaultProfile	Profile Name	Name of the default profile. A profile containing PDF settings. If not exist, the first profile will be used. This setting will be overwritten by fpassist.exe.
CU Language	Number	The current language of FreePDF XP. 1 means German 2 means English 3 means Italian (Not this time) 4 means Dutch (Not this time)
LM FPdir	Path	Setup path of FreePDF XP. Path must end with a backslash (Like C:\PDF\). Not intended for change by User!
CU/LM psFor	Username	The PDF user name. If not found or empty the Windows user name will be used.
CU/LM gswin32c	Path + .exe	The gswin32c.exe used by FreePDF XP. If you have more than one GhostScript installed you can switch between the versions. Please note, that it is not recommended to install more than one GhostScript! With CU you can use a user-specific GhostScript (not recommended)
CU NoGsLog	1	Use no GhostScript log file. Usually the log file of GhostScript with the used FreePDF call will rise, if a PDF could not be created.
LM FpMailer	Path + .exe	Filename of fpmailer.exe. Only be used, if Outlook Express is the standard mailer. Otherwise program files\FreePDF_XP\fpmailer.exe will be used.
LM Style	grey	Uses greyscale Style. Usefull for 256 Color Displays. Not implemented for the Profile editor Window.

Working with the policy

The Registry keys FPol can be used to customize freepdf.exe. The listed values are known by FreePDF and will be loaded each time FreePDF starts.

- Both values - LM and CU will be added to a single string
- If a „|“ is found in this string, the values after the sting will be ignored. This can be used for restrictions, that can't be revoked.
- First the disable options will be set
- Second the enable options will be set
- A enable-value in HKey_Local_Machine make no sense.

- All values ca be used as disable*value* or enable*value*. There must be no separator between values.
- You can set this values by using *FreePDF / Edit / Options* much easier.

value	meaning
joinpdf	Disable/enable the Menu <i>Join PDF</i>
profiles	Disable/enable the <i>profiles</i> combo box
file	Disable/enable the menu <i>File</i>
options	Disable/enable the menu Options
encryptpdf	Disable/enable the menu <i>Encrypt PDF file</i>

Example 1: Disable menu Options for all users but Administrator

- Add at HKey_Local_Machine\Software\shbox\FreePdfXP a value FPol containing the following string:

disableoptions

- Login as Administrator
- Add at HKey_Current_User\Software\shbox\FreePdfXP a value FPol containing the following string:

enableoptions

Example 2: Disable the Profile Combo box for all users no matter what they set to HKey_Current_User\shbox\FreePdfXP\FPol

- Add at HKey_Local_Machine\Software\shbox\FreePdfXP a value FPol containing the following string:

disableprofiles|

Configure FreePDF

Options

FreePDF can be configured by opening Edit, Options:

- With *Identification* you can set the user name, that will be stored in each PDF file.
- With *Common Options* you can set the FreePDF XP Language and activate a Debug-Mode
- With *Paths* the GhostScript version can be changed
- With *FreePDF Assistant* and *FreePDF main application* you can disable some FreePDF features.
- With *Profiles* you can create and delete PDF Settings.

More Information for FreePDF XP

Under <http://shbox.de/fpxpen.htm> you will find this:

- FreePDF XP FAQ (German, online translated by Google)

Frequently asked questions about FreePDF XP

- FreePDF XP Administration Manual

This manual.

- FreePDF XP Ressourcekit (German, but easy to understand without the comments).

Helpful Codes for programming (VBA Microsoft Access) or making a network Setup.

- In the past i have had a large amount of emails asking questions, that already has been written in the manual. Therefore, if you like to get email support from me, i will like to get a donate within the range of **10 Euro/US\$**. My Email for this is the FreePDFXP@shbox.de

Stefan Heinz, 2004