[How To Get Text from an Image Only PDF File Using Linux](#)

How to use free software in Linux to convert image-only PDF files to text.

[A Method to Retrieve Data From a Failing Hard Disk](#)

Article first published on Aug. 29, 2015.

One of the hard disks on my Desktop PC failed (probably due to heat), the one with all my data which was the Linux /home partition. To make matters worse, after buying a new HDD and installing Fedora Linux, by mistake during the installation process I deleted the main backup of that data which was on the second hard disk!! I could only do a partial retrieval of files from the failed hard disk. The file transfer would begin well but would stop though only 10% finished. I noticed the HDD got very hot in the process.

Because my most important files are also backed up on a laptop PC, I transferred them to my Desktop PC and had enough data to be able to continue my work. I lost about 150 gigabytes of non-essential files, 15 years of photos, hundreds of music MP3 files which totaled 3 gigabytes, my entire Documents folder of 17 years of documents, and other folders and files. None of the data was vitally important for me, but nevertheless I felt bad to suffer such a loss.

The next day just after waking up in the morning, I realized a way to keep the failed hard disk cool by putting it on a plastic bottle of cold water with a wet towel between the bottle and the hard disk to help transfer heat. Glory to God, it worked! I retrieved 100% of my photos and music!!

I bought a 120 gigabyte SDD to use as the root partition for my Linux OS, and used the healthy second HDD for my new /home partition. The boot time of my PC now is less than half what it was before.

How to Install Elementary Pantheon Desktop on Fedora

My Pantheon Desktop on Fedora

Updated January 18, 2018. I first wrote this article for Fedora 25 but it works for later versions of Fedora as well. I'm currently using Fedora 27.

I read on a blog that the Pantheon Desktop was available for Fedora, and that it was a simple GUI that imitated the Mac OS interface. This is what I did to install it:

1. After logging into root with Terminal, I used gedit to create a file in /etc/yum.repos.d and named the file decathorpe-elementary-stable.repo

```
sudo gedit /etc/yum.repos.d/decathorpe-elementary-stable.repo
```

2. I copied the following code into the file and saved it.

```
[decathorpe-elementary-stable]
name=Copr repo for elementary-stable owned by decathorpe
baseurl=https://copr-be.cloud.fedoraproject.org/results/decathorpe/elementary
-stable/fedora-$releasever-$basearch/
type=rpm-md
skip_if_unavailable=True
gpgcheck=1
gpgkey=https://copr-be.cloud.fedoraproject.org/results/decathorpe/elementary-
stable/pubkey.gpg
repo_gpgcheck=0
enabled=1
enabled_metadata=1
```

3. I ran the command in root:

```
# dnf install -y pantheon-session pantheon-desktop
```

After that I rebooted the PC and was able to log into Pantheon from the login screen.

I figured out how to add more apps to the bottom dock from the application menu in the upper left hand corner. Just find the app you want to add, right click on it, and left click on the Add to Dock option. I also removed the apps in the dock I didn't want by just right clicking on the app and un-checking the Keep in Dock option.

However I did not like the default black background in open applications such as LibreOffice Writer and Bluefish. A tweak program to add different themes is available for Ubuntu, but not yet for Fedora. But by serendipity I found a command on https://elementaryos.stackexchange.com/questions/45/how-can-i-add-more-themes-on-elementary-tweaks that fixed my problem! Now open application backgrounds are white with black fonts!

```
$ gsettings set org.gnome.desktop.interface gtk-theme "CoolestThemeOnEarth"
```

Later I learned that running gnome-tweak-tool can also change the default theme. Just run gnome-tweak-tool (you may need to install it first) and then go to Appearance and change the GTK+ dropdown box to the color scheme that suits you.

The cool thing about Pantheon is that there is no clutter. The bottom dock is always visible when no applications are open or when they are in smaller windows, but when an application is open in full screen, the dock with its icons disappears. It reappears again by moving the mouse to the bottom of the screen.

And if I open another application from the applications menu, it will add the icon of the new running application to the dock! I really think this is cool!

It's better, in my opinion, than adding the open app icon to yet another menu bar as is done in Gnome. But it seems I can only open up one instance of Terminal at a time. This used to be the default in Gnome but I was able to change it with a tweak program. I still cannot figure out how to do that at the time of this post, but I don't mind the default.

[Move from Linux Mint 16 to Fedora 20](#)

Fedora 20 with Mate DE and Mint Menu

For those of you who have been following my Linux posts, you know that I have been a Fedora user since February of 2005 with Fedora Core 3. I tried Ubuntu from time to time but always had problems. However in the middle of last year 2013 I moved to Ubuntu based Linux Mint 15 preferring it over Fedora 19. For some reason I couldn't figure out the Fedora 19 installer correctly. When it did install Fedora 19, my files on my user account were inaccesable. I didn't get the home partition correct. I tried Linux Mint 15 instead and it installed without a hitch.

Linux Mint 15 worked very well for me. But after I upgraded to version 16, suddenly I had problems. I couldn't install any 32 bit apps on my 64 bit system! They worked fine on Linux 15! Specifically those apps were Wine and Skype. Without Wine I cannot run two Windows programs I need that have no Linux counterpart. I could live without Skype on my PC because I can use it on my Google Android tablet, but I wanted Wine back. The Linux Mint application installer (apt-get) kept giving me error messages of unmet dependencies. None of the advice on the Linux Mint forum about how to fix the problem worked. And I couldn't even get Acrobat Reader on Linux Mint 16! It aborted in a error message

The Fedora Linux 20 installer worked well, and all my favorite applications are now back including Acrobat Reader! Fedora always seemed more complete,
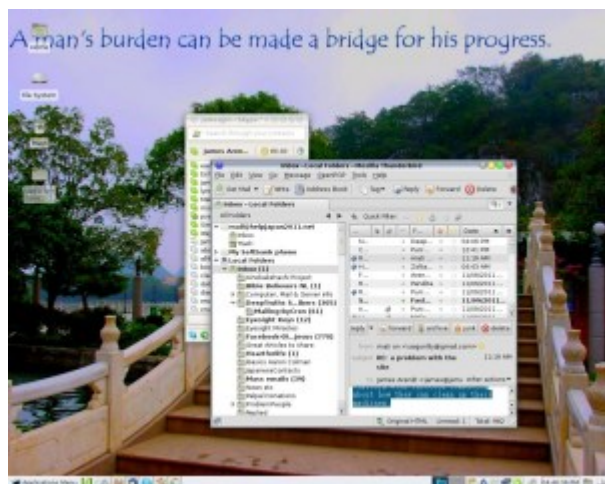
more polished, and more stable.

I tried to use the Mate DE in Fedora 18, but it was buggy. This version of Mate works well now and I could even install the useful Mint Menu in it as you can see from the photograph. I had to use a camera to take the screenshot showing the Mint Menu because the screenshot application does not work with the menu open.

Move to Gnome 3 from Mate!

Update on Feb. 2, 2014: The Mate desktop environment GUI stopped loading for some reason. I logged into the standard Gnome 3, began to use it and started to like it! When Gnome 3 first came out I absolutely hated it. Either the Gnome developers improved it, or perhaps because I've been also using a Google Android tablet for the past half year, I now understand better the reasoning behind the now Gnome interface. I think its simpler and cleaner looking than Mate having no Desktop icons or complicated menus. And I can switch between open windows faster than I could before. I feel comfortable with it and can actually do some real work using it.

[Move to Fedora 18 Beta from Linux Mint Debian](#)

Well, I'm back again to my beloved Fedora Linux. Fedora 18 Beta was not easy to install but is working fine after a few hours of tweaking. I started with LXDE as my default desktop environment. LXDE is lacking in some graphic configuration settings, but after logging into Gnome 3 I was able to configure things I could not configure in LXDE. A few days later I installed KDE and now consider it the easiest Linux desktop environment to configure as well as the prettiest with the most eye candy.

My KDE Desktop as it looks like on December 21, 2012.

Why I left Fedora 17

- Ibus for Japanese input was slow to start.
- Bluefish could not do Find and Replace. It would find what I entered but not replace them with what I wanted.

These have been fixed in Fedora 18!

Why I left Linux Mint Debian

- Wine and Windows applications in Wine loaded exceedingly slow, maybe 5 seconds or more. Wine and Windows applications in Wine in Fedora loads much faster, less than a second! I only run a couple Windows programs with Wine. I need these programs because there is no comparable Linux application for them.
- PulseAudio Server seemed to be buggy. Music and sounds would always start scratchy.

I wasn't able to install Fedora 18 beta from a DVD, The installation ended in error message of, "Error checking storage configuration." I had to do a clean install of Fedora 17 and then up upgrade from the command line:

su -c 'yum update yum'
su -c 'yum clean all'
su -c 'rpm —import https://fedoraproject.org/static/DE7F38BD.txt
su -c 'yum --releasever=18 --disableplugin=presto distro-sync'

Note: If you use RPMFusion, you should also import its key for Fedora 18 before you upgrade or you will end up with an error message.

Preferred Desktop Environment

I switched to the KDE Desktop from Dec. 13 and like it better than ever. I think KDE is the easiest of all the desktop environments to tweak. Apparently Linus Torvalds agrees with me because he too switched to KDE from XFCE.

I never liked XFCE and used LXDE which I recommend for PCs with low resources.

I loved Gnome 2 but the Gnome developers thought they knew better than the users and gave us the hard to use Gnome 3.

Mate Desktop which is supposed to be a replacement for Gnome 2 still seems buggy. If any of you Mate Desktop users recommend it and had success in configuring it to what you like, please tell write your comments about it below. Thank you.

March 28 UPDATE: I'm sorry to say though it's been weeks since Fedora 18 has been released, I'm still finding issues with it. Sometimes the default audio

device is not found during startup. I've never had this problem with previous versions before. It occurs randomly. A reboot often fixes this problem. Once I had a yum update problem and it took me days to figure out how to fix it. KDE Desktop now locks up after startup so I am back to LXDE (which I like because it's fast). So unless you are a geek and like to figure out technical problems, you might give Fedora 18 a pass. The latest Linux Mint (not the Debian spin) seems promising.

How to secure Grub 2 in Fedora Linux

This is an technical article that only Linux users would understand and appreciate.

I like to secure the Grub boot loader to make it harder for anybody but me to get root access to my PC by either a cold startup, or rebooting the system. Grub version 1 had a password option. It was easily implemented by editing the grub.conf configuration file and adding the password option data. But in Fedora 16, Grub version 2 has replaced Grub 1, and Grub 2 doesn't seem to have a password option. At least I haven't figured it out yet. Moreover, Grub 2 makes it even more apparent how to get root access because it gives a system recovery option for each kernel version!

I learned by chance that changing the default Grub time out to 0 in Grub 2 prevents the Grub startup screen from showing even when purposely trying to show it by hitting the ESC key! Grub 1 did show the Grub options screen when hitting ESC just before booting the kernel even though its time out was set to 0, but Grub 2 does not show the Grub options when its time out is set to 0 no matter how many times I hit the ESC key, and even after repeated attempts!

Disclaimer: Do this at your own risk! Fedora does not recommend it

because you have no option to use the previous kernel if a kernel update fails! However you can still use the recovery option from the installation DVD — if you know what you're doing.

To change the default time out in Grub 2, from Terminal log in as a super user with the su command, and with your favorite editor load the /etc/default/grub file. I used Leafpad:

leafpad /etc/default/grub

The first line has: GRUB_TIMEOUT=10
I changed the 10 to zero: GRUB_TIMEOUT=0

Next save the file, exit the editor and run the following command:

grub2-mkconfig -o /boot/grub2/grub.cfg

Next time you boot your PC, you should not see the Grub screen again. Though you don't have recovery options from the startup screen anymore, you can still use your Fedora installation disk for system recovery if you need to.

[Fedora 15 review](#)

In a post I wrote on February 7, I said I moved from Fedora 14 to Linux Mint Debian. Well, less than two weeks later I moved back to Fedora 14. I'm familiar with the Fedora way of tweaking the system, and I just couldn't figure out how to set up certain things in Linux Mint Debian. Fedora is not only cutting edge, it's more user friendly than Debian based distros for technicians in my opinion.

I've been with Fedora since Fedora Core 3 and have witnessed significant

improvements with every new version. However because Fedora 15 comes with Gnome 3 as the default desktop environment, I had some misgivings when I upgraded. I knew that Gnome 3 is a radical departure from Gnome 2, but I wanted to at least give it a shot.

Improvements over Fedora 14

- Since upgrading my AMD Phenom quad core CPU to a Phenom 2 six core CPU, Fedora 14 would often hang during boot at udev. I had to press the ESC key a couple times to continue the boot process. This doesn't happen anymore in Fedora 15
- While playing music and running Skype at the same time in Fedora 14, a Skype login by one of my Skype friends would pause the music player. The next login by somebody else would start it again. Needless to say this was a bit irksome but now with Fedora 15 the problem seems to be fixed.
- So far I haven't felt a need to install the third party proprietary Nvidia video driver for my Nvidia card. The default open source driver seems to be doing an acceptable job. It plays Youtube videos at full screen without obvious jerking of motion.
- LibreOffice seems better than OpenOffice in some ways. I used to get weird behavior from OpenOffice Calc of menus popping up though I was only filling in the cells with my data. This didn't happen in LibreOffice. However, I could not read the Japanese fonts in a .docx file, a problem I didn't have in OpenOffice.
- Startup and shutdown, especially shutdown, is significantly faster.

What I don't like about the default Fedora 15

I think the developers of Gnome 3 made a major mistake in such a radical change from Gnome 2. All my cool Gnome 2 applets now gone forever! The coolest thing about Gnome 2 for me was that it was a mixture of the look and feel of both Windows and Macs. Gnome 3 is nothing like either. How can I therefore recommend Windows users to try it when I couldn't even figure it out? Gnome 2 made it less painful for a Windows user to switch to Linux. The analogy of the Gnome 3 interface is that it makes it easier for users to access apps from smaller screens. Fine. Why not then have it only for hand-held devices? Why use such an interface now when PC screens as large as 24 inches have become easily affordable by most users? Hardly anybody these days has a screen size smaller than 15″, especially if they use a Desktop PC.

Alternatives to Gnome 3

I tried out KDE4 for a few days. It was certainly more intuitive and comfortable for me to use compared to Gnome 3. But KDE4 also seems slow at times.

I tried out XFCE which is similar to Gnome, but it seemed to lack certain features.

I also tried LXDE. It's fast, has a Gnome 2 look (but still no Gnome 2 applets) and the default File Manager PCManFM seems to be better than Nautilus in some ways. It has configuration tweaks that Nautilus doesn't

have, and it sorts my Desktop Icons automatically every time I erase a file from my Desktop. Way to go LXDE developers! However it doesn't seem to have a Favorites section for me to add frequently used software.

I'm back again to KDE4. Though its startup is slower than LXDE or XFCE, it seems to be the most configurable and easiest to use Desktop environment available now for Linux.

[Moved from Fedora 14 to Linux Mint Debian](#)

The other day I discovered that [Linux Mint recently came out with a Debian edition](#) with features that are still lacking in Ubuntu. One of the main features that caught my interest is the ability to install Linux Mint Debian on a PC with **multiple hard disk drives**. It has been my practice for a few years now to have the /home partition on a second hard disk, and to use the first hard disk for the OS on a 40 gigabyte first partition and the second partition as a backup of the /home directory on the second drive. Ubuntu's installer still does not recognize more than one hard disk during installation.

Other features of Linux Mint Debian that interested me are said to be:

- Better sound support (addressing conflicts between Pulse Audio and Flash) — This is something Fedora still has a problem with. Sometimes the microphone for Skype works, and sometimes it doesn't.
- Performance boost using cgroup, the notorious 4 lines of code better than 200 in user-space.
- The fact it is a "rolling distribution", meaning there will be no major releases every 6 months, just one constant upgrade over time. This means I won't have to do a clean re-install twice a year as I did with Fedora..

So far so good! The installation procedure is different than Fedora, but pretty straightforward and easy to follow. The PC didn't boot after installation, but changing the BIOS settings of the primary boot drive fixed the problem.

I am now working in Debian for the very first time thanks to Linux Mint!

The good thing I've seen so far:

- All multimedia codecs seem to be already installed. MP3 and WMF files played with no further tweaks. I have to add a third party repository in Fedora to make most multimedia play.
- Skype was installable from the package manager.
- Flashplayer is part of the default installation. Youtube videos played at full screen even without having to install the device driver of my Nvidia card.
- Nvidia drivers were installable from the package manager without further tweaks. Fedora needs the RPM fusion repository for this.
- Fedora 14 used to hang during a certain point in booting. This happened after upgrading my CPU to a newer one. Pressing the Esc key would continue the process. I don't have to do this now.
- Performance does seem to be better. Openoffice writer and Gimp load faster.

I read so far one negative user experience of an upgrade breaking Linux Mint Debian. He couldn't fix it. Perhaps I'll have a better experience.

I've been using Fedora since Fedora Core 3. So far Fedora has been the only Linux distro that has worked consistently well for me. Ubuntu live CDs have come in handy to fix certain Windows problems, but I never could quite get everything to my liking using a Ubuntu installation on my own PC. Fedora has had it's own quirks from time to time, but I learned either how to fix them or they ironed out over time. Everything I need to do on a PC, Fedora and its friends have provided both the software and the know how. Will Linux Mint Debian be better overall for me? Will I eventually get sick of it and go back to Fedora? Will Linux Mint Debian eventually break so bad that I won't be able to fix it? In a few weeks I'll know for sure!

[Upgrade to Fedora 12 beta](#)

November 2: [Fedora Linux](#) version 12 is due to come out on November 18, but I couldn't wait to try it out and installed the yet beta version.

Improvements from Fedora 11 that I've noticed:

- The default video driver recognized my dual monitor setup and automatically gave me the correct screen resolution and spanning monitors.
- Gnome seems to run faster. Terminal now comes up instantaneously.
- Many of the applications appear to load faster.
- Pulse audio now works as it should without quirks. In Fedora 10-11 I could not use other audio applications when Firefox was accessing a flash media file.
- Mplayer plays my MP3 files without the irksome shuddering sound it used to have during the first couple seconds when playing the file. This was a problem in Fedora 10 and 11 but now seems fixed.
- Bluefish HTML editor doesn't crash anymore when I do a spell check as it used to do in Fedora 10 and 11
- The new version of [Dansguardian](#) Internet content filter now runs. I couldn't get the latest version to work in Fedora 11. Dansguardian has improved with options to weed out unwanted pop-ups and advertisements. Using the Fedora Linux — Firefox — Dansguardian combination gives me the safest browsing imaginable! Eat your heart out, Windows 7!

The downsides of upgrading to Fedora 12 beta:

- In the beginning Firefox crashed a couple of times. It seems to be stable now after a week.
- I can't yet install the Nvidia video driver. But this only means I can't run applications that take a lot of video power such as Google Earth. Video files play perfectly fine.
- Wine doesn't run anymore. I have to wait for a Wine upgrade to fix a conflict with Pulse audio.

  All of the above are fixed now after Fedora 12 came out with the final

release, and also thanks to the good advice on [Fedora Forum](). I found a fix for Wine by installing the 64 bit version with the command:

```
yum install wine.i686 -y
```