WordPerfect Mini−howto

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WordPerfect Mini−howto

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v2.0, 13 August 1997

This document discusses running WordPerfect on Linux, including a brief discussion on the WordPerfect 7.0 beta. This is an update to the previous mini−howto that described notes on setting up WordPerfect 6.0 for SCO UNIX (ODT) on Linux. This document is not endorsed nor sponsored by Corel Corporation or SDC.

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6. The Future

7. For More Information

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1. Introduction

1.1 Overview

The purpose of this document is to discuss WordPerfect on Linux. Discussed are running WP for SCO, WP 6.0 from Caldera, and a discussion on the WordPerfect 7.0 beta.

This document is an update to the previous mini−howto that described notes on setting up WordPerfect 6.0 for SCO UNIX (ODT) on Linux.

This document is not endorsed nor sponsored by Corel Corporation or Software Development Corporation.

1.2 History

- Version 1.0 −− Description on how to use WordPerfect 5.1 and 6.0 for SCO ODT 3.0 on Linux
- Version 2.0 −− Update and inclusion of information on Caldera's WordPerfect 6.0 distribution and the WordPerfect 7.0 beta.

1.3 Future Revisions

New versions of this document will be periodically posted to comp.os.linux.announce, comp.answers, and news.answers. They will also be added to the various anonymous ftp sites who archive such information including sunsite.unc.edu:/pub/Linux/docs/HOWTO.

In addition, you should be generally able to find this document on the Linux WorldWideWeb home page at http://sunsite.unc.edu/mdw/linux.html.

1.4 Feedback

I welcome any feedback, positive or negative, regarding the content of this document via e−mail. Definitely contact me if you find errors or obvious omissions.

I read, but do not necessarily respond to, all e−mail I receive. Requests for enhancements will be considered and acted upon based on my availability.

Flames will quietly go to /dev/null so don't bother.

1.5 Copyright

The WordPerfect mini−HOWTO is copyrighted (c)1995−1997 Wade Hampton.

1.6 Standard Disclaimer

Of course, I disavow any potential liability for the contents of this document. Use of the concepts, examples, and/or other content of this document is entirely at your own risk.

This document is not endorsed nor sponsored by Corel Corporation or Software Development Corporation.

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2. What is WordPerfect

WordPerfect is a popular, fully−featured commercial word processor program that is available for multiple platforms including Linux. It was originally written and sold by WordPerfect Corporation, subsequently purchased by Novell, then purchased about a year or so ago by Corel Corporation (Ottawa, Ontario, CA). Corel has outsourced the development of WordPerfect for UNIX (including Linux) to SDC Corporation, a corporation including former WordPerfect developers, and specializing in development for UNIX and X windows.

Until the release of Microsoft Word, WordPerfect was the most popular word processor for personal computers (it still claims to be by volume of product shipped, some reports indicate that more copies were sold than Microsoft Word during recent months). WordPerfect was originally written for DOS and later ported to the UNIX and Windows environments. Initial versions of WordPerfect for Windows were very late to market and tended to crash a lot, hence opening the floodGATES for Microsoft Word. WordPerfect is still a better word processor than Word for large documents or documents that must be moved between Mac, UNIX, and Microsoft platforms.

WordPerfect provides a WYSWYG environment for editing text documents. One of the best features is the ability to check your spelling as you type. Included are grammar checker, spelling checker, graphics import and export, and the ability to edit HTML documents. Documents created by WordPerfect on one platform may be read, edited, and printed on other platforms (I have generated a lot of documents using WP 6.0 (Caldera's release) and distributed them to Windows 95 users using WP 7.0 or 8.0).

WordPerfect runs on the following platforms (release or beta versions):

- Linux 1.2.13 (WordPerfect 6.0 for Linux, sold by Caldera)
- Linux 2.0.X (WordPerfect 6.0 and WordPerfect 7.0)
- Microsoft DOS, Windows 3.1, Windows 95, Windows NT
- Macintosh
- HP−UX 10.01
- IBM AIX 4.1.4
- SCO OpenServer 5.0.0
- Sun SPARC Solaris 2.5
- SUN SPARC SunOS 4.1.x
- SUN X86 Solaris 2.5.1
- Digital UNIX 3.2 G Alpha
- SCO 3.2.4.2

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3. WordPerfect 7.0 Beta

3.1 Impressions of 7.0

I have been very impressed with the operation of WordPerfect 7.0 for Linux. I only recently downloaded it and tried it. It looks like WP 7.0 for Windows. The features appear to work properly. I especially like the spell−as−you−go feature!

The HTML publisher works a little better than that on WP 6.0, but still has some bugs. Someone reported that WP 7.0 requires a lot of swap space (I have not tested it at this time).

3.2 Getting WordPerfect 7.0

WP 7.0 is available as several LARGE tarballs from sdcorp's FTP site (or via the WWW). I tried for two days to download the 26MB archive using ISDN but only was able to get part of the file. I eventually had to use a commercial account with a T1 to the Internet to get the files. It would be much easier to download if each tarball was split into several smaller files (1−2 MB in size). Note, when you uncompress the tarballs, the result is a small number of medium sized files −− just what is needed.

The current version that you can download is time limited to 15 days. During this time, you can pay them and they will give you a license for it.

```
For WP 7.0 Beta:

     ftp://ftp.sdcorp.com/pub/linux_betab/wp7linuxbetab.tar.gz

           4887525 graphics_tar.gz
          17652138 manual_tar.gz
            450535 wp60ms01_us.all
            290443 wp60ps01_us.all
          26962514 wp7linuxbetab_tar.gz
```

3.3 Installation of 7.0

To install, you must extract the tarballs, run the **Runme** program, answer some questions and then run xwp to start WP 7.0. Note, you need 58 MB just for WP 7.0, prior to the manuals, graphics, etc.

1. Extract the tarball into a temporary directory, need 31M

```
tar xvzf wp7linuxbetab_tar.gz
  creates LINUX* files and Runme, the install program
```

2. As root and with X windows running, run the **Runme** program and you get a series of screens to select the installation type. Answer the questions:

```
./Runme

License Screen:
        Hit OK

Demo Screen:
        Hit OK
          Corel Corporation:  800−772−6735
            UNIX Support:     801−765−4019

Installation Directory:
        Enter directory, e.g., /opt/wp7.0
        Hit OK

Installation Size:
        Full:      71−80M
        Medium:    45−51M
        Minimal:   37−41M

Existing Application:
        If you have WP 6.0 (Caldera installs in
        /opt/wp6.0 by default), you can keep your
        settings for terminal drivers, printer drivers
        and printer ports.  Recommended.

        Enter directory (if present)
        Hit OK

Edit /etc/magic?
        Will add WP files to /etc/magic.  Will backup
          /etc/magic as /etc/magic.bak
        Select YES or NO
        Hit OK

Selection of languages to Install
        Only have English, it is selected
        Hit OK

Select print divers:
        Select your printers, may select more than one.
        Hit OK

Assign Printer Drivers to Destinations:
        Click on a printer
        Click on the destination (name from /etc/printcap)
        Hit OK
        Repeat for each printer you selected in previous step.

        Hit OK

Installation Review List:
        Allows you to go back to any screen and make changes.
        Select screen to make changes, or Hit OK to continue
        Hit OK
```

```
Graphicsl Corel WordPerfect(UNIX) installation screen
        includes progress bar

Readme Review screen:
        Allows you to read any review notes....

        Select item and View to view it, e.g., license

        Note if you entered a license, you need to add the
        license manager startup stuff to /etc/rc.d/rc.local!

        Select Done when finished
```

3. Run xwp:

```
/opt/wp7.0/wpbin/xwp& (or wherever you installed it)
```

Note, I have WP 6.0 from Caldera, the first time I started, I got a prompt to load defaults from 6.0. I selected YES and WP loaded the defaults and exited. I then restarted xwp and my defaults, including the last files I edited with WP 6.0 were used!

3.4 Features

- WordPerfect word processor
- Internet publisher
- QuickCorrect − fix your typos while typing
- Spell−As−You−Go − spell checking while typing
- File compatibility with DOS, UNIX, and other WordPerfect versions on other platforms

3.5 Bugs in 7.0

- HTML export of a WP document with headers and footers sometimes leaves the bottom of the document either centered or bold.
- HTML export of a WP document with a table of contents does not generate cross references.
- HTML export messes up the table of contents and if sections were outlined, they become HTML list items and no longer match the TOC.
- Installation of the manual failed. I have not had time to try to fix this problem.
- Someone reported a problem converting WPG graphics to JPG.
- WP 7.0 **can not** read files from Office97 (this has been a major pain for me as I have received several such files from others and I do not have Office97).
- Someone reported a possible problem with getting printing to work (I had no problems at all).
- Upon starting xwp, I received a message that some backup files existed. Upon clicking on the first backup file, XWP dumped core.

3.6 Pricing and Availability

Upgrade pricing expected to be $149.99 (US) and retail pricing $199.99.

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4. WordPerfect 6.0 (Caldera)

Caldera sells both a WordPerfect and Motif Bundle ($130 US) and the Caldera Internet Office Suite ($219 US). Both include WordPerfect 6.0 for Linux.

Overall, WP 6.0 has been good to me. I have generated 20−30 large documents and numerous small ones, probably 1000+ pages if I printed them all out. The only problem that I have is that I use WP Times font under Linux and it is not compatible with the WP True Type Times font under Windows.

4.1 Impressions of 6.0

The author has been using WordPerfect for Linux on Caldera Network Desktop (CND) for the past year. The system is a P6/200, 64M RAM, SCSI, CND 1.0 with RiskyHack patches to the Linux 2.0.30 kernel, updated RPM, and many, many RPMS from Redhat and Caldera's WWW sites.

4.2 Getting WordPerfect 6.0

Visit Caldera's WWW site at http://www.caldera.com

4.3 Installation of 6.0

Installation was easy. I just followed the directions provided....

I did have to add **wp** to my fvwm menu (I am using FVWM95 on CND 1.0 with lots of patches) and to looking glass's menus.

My platform is a P6/200, 64M RAM, Caldera CND 1.0, RiskyHacks to libc 5.4.4, kernel 2.0.30 (Joliet and FAT32 patches), dual SCSI, CD−R, etc. WP uses 74 MB of disk space.

4.4 Bugs in 6.0

- Export to HTML has several bugs with complex documents requiring some reformatting.
- Occasional crashes (very rare).
- Occasionally WP loops where it uses all memory and runs out of swap space, then crashes.
- Some fonts are different between Windows and UNIX versions.
- It has been reported to me that some WP macros for UNIX versions are different than those for Windows versions.

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5. WordPerfect 5.1 and 6.0 (SCO release)

I started using WP 5.1 for SCO (which was statically linked) since January, 1995. In the Spring, 1995, I obtained a copy of WP 6.0 for SCO (dynamic linked) and was able to install it with some pain. I subsequently have had some problems with the license manager. I have it running under 1.2.8.

This section is mainly from the original WordPerfect mini−howto. It has not been used in a long time. Note, the more recent versions of WP for SCO included both the dynamic and static linked versions, and hence did

NOT require SCO's shared libraries.

This is mainly for background information! If you really want WP for Linux, get the new WP 7.0!

5.1 Impressions of WP/SCO

WP for SCO seemed to work fine (once the installation problems were overcome). I used this distribution for about 6−12 months until I received a copy of WP 6.0 for Linux (Caldera) and CND 1.0.

5.2 Getting WordPerfect WP/SCO

Contact SCO or visit their WWW page at http://www.sco.com

5.3 Installation of WP/SCO

Requirements

- Linux 1.1.x to 1.2.x
- modules (dynamic module loading software)
- iBCS2 (Intel BCS2 and ELF loader module)
- SCO dynamic libs (if required)
- Domainname should be setup
- Hostname should be setup and be less than 8 characters (localhost is 9)

Kernel Requirements

The kernel should be setup for module support and ELF support. If you have already done this, skip this step, else, do the following as root:

- Load kernel in /usr/src/linux.xxx] and make sure that the symbolic link to the /usr/include/linux and /usr/include/asm directories are setup (see /usr/src/linux/README).
- Build module support and install it (see below)
- Build iBCS2 module and install it (see below)
- Build kernel with module and ELF support (answer Y to BINFMTELF and MODVERSIONS)
- Reboot on new kernel
- Note: you have to build the module support file "genksyms" PRIOR to making your new kernel (telling the kernel to export symbols: CONFIGMODVERSIONS=y).

Modules

Loadable module support is required for iBCS2 and hence to run WP 6.0. Get the latest from the ftp sites, build it, and install it. If you have already setup your system for loadable modules, skip this step. Loadable module support (/sbin/insmod, /sbin/rmmod, /sbin/lsmod) is required. With recent kernels, genksyms is also required.

- File: modules−1.1.87.tar.gz (or latest)
- Put tar file in /usr/src/modules and build module support
- Read the README in /usr/src/modules (or wherever you put it)

* Cd to /usr/src/modules/genksyms and make genksysms, install it in /usr/local/bin (or /sbin)

iBCS2 Emulator

The iBCS2 emulator allows you to run SCO binaries such as WordPerfect 6.0. Get the latest from the ftp sites, build it, and install it.

* Build and install in /usr/lib/modules
* Read the HINTS file (/usr/src/ibcs/Doc/HINTS)
* Make sure that iBCS2 sets up /dev/XOR, if not, create a symbolic link from /dev/null to /dev/XOR (cd /dev; ln −s /dev/null /dev/XOR)

The interfaces to some subsystems occur at the device layer and thus you need to create some device files in order to use them:

```
* /dev/socksys and /dev/nfsd - interface for SVr3 STREAMS based
  TCP/IP applications

  # mknod /dev/socksys c 30 0
  # ln -s /dev/socksys /dev/nfsd

[WARNING:  the below may already be setup as /dev/inet,
 /dev/arp, etc., they may have other major/minor numbers,
 if so, skip this step]

* /dev/inet/{arp,icmp,ip,rip,tcp,udp} - more network hooks

  # mknod /dev/inet/arp c 30 2
  # mknod /dev/inet/icmp c 30 2
  # mknod /dev/inet/ip c 30 2
  # mknod /dev/inet/rip c 30 2
  # mknod /dev/inet/tcp c 30 2
  # mknod /dev/inet/udp c 30 2

[THIS IS REQUIRED AND WILL USUALLY HAVE TO BE DONE MANUALLY!]
* /dev/X0R - server side of SVR3 local X interface
  (see comments in Doc/Local-X)

  # ln -s /dev/null /dev/X0R

* /dev/spx - client side of SVR3 local X interface
  (see comments in Doc/Local-X)

  # mknod /dev/spx c 30 1
```

SCO Shared Libraries

DO NOT VIOLATE SCO's COPYRIGHTS! You should get a copy of SCO's shared libraries and install them in /shlib. As root:

* cd /; mkdev /shlib; chmod 755 /shlib
* if required, make a temporary directory and set TMPDIR to it (export TMPDIR=/mytmpdir)
* Copy the following SCO shared libraries from the SCO machine to Linux and put in /shlib:

```
/shlib/libX11R5_s
/shlib/libXtXm*
```

Loading WP60

Make sure that you have LOTS of space in your /tmp directory. If you do not have lots of space, make a tmp directory and set the environment variable TMPDIR to it. As root first try the following:

- Mount the CD (e.g., to /cdrom)
- cd to the CDROM and run the ./install script

If you get the following error you may not have enough space in your /tmp directory, make a new tmp directory and set the environment variable TMPDIR (see above):

```
ERROR:  not enough space in /tmp, or this is an unsupported machine.
```

If all else fails, you may have to do it manually per these notes:

- get iBCS2 running
- copy the $WPDIR/cdrom/install.wp to $WPDIR and edit it I changed it so I could create /tmp/WpTmP on an NFS server (did not have the space locally). I then ran the program and made changes until I got it to startup.]
- change to TMPDIR and run: ifiles/cdlink.sco −r /usr/local/wp60/cdrom This builds links with the proper names but the permissions are not set properly.
- make a temp directory on the server and copy all files to it:
  ```
  cp −r  WpTmP/wp60/SCO/* wp60
  ```
- change to the temp wp60 directory and changed permissions. cd wp60; chmod 555 wpinstall install/*
- run the wpinstall program and answered the questions.
- Because I still have the flexlm license manager for WP51 on the system, I had to manually run wplicense −e and create a new license.dat.
- Start WP60.

License Manager

WordPerfect uses a license manager (see the manuals). This is a tricky beast that sometimes does not work properly under Linux (I have had it fail, done something else then I was able to start it). If you have problems call WordPerfect and they can assist you. Please **RTFM** the documentation section on the license manager.

To start the license manager, as root:

```
# cd $WPDIR/shbin10
# ./wplicense −s
```

Starting WP60

- start iBCS2
- start the license manager
- setup your DISPLAY environment variable (e.g., export DISPLAY=gator:0)
- run xwp ($WPDIR/wpbin/xwp filename.wpf &)

If you get the errors:

```
/dev/XOR: No such file or directory
```

```
Error: Can't open display: :0.0
```

You need to set up your DISPLAY environment variable (per above) and possibly setup the link to the device /dev/XOR (cd /dev; ln −s /dev/null /dev/XOR).

Note if WP "steals" the colors from your X server (a problem if the depth is only 256 colors), disable the display of the graphics banner page by doing the following:

- Start XWP
- From the control window, click on Preferences
- from the Preferences window, select ENVIRONMENT
- From the ENVIRONMENT window, turn off the checkbox for "Graphical Banner and Startup Screen"

RC Scripts

You will need to add a line to your /etc/rc.d/rc.local script (or similar) to start iBCS2 and the WP license manager (if desired).

```
        # /sbin/insmod /usr/lib/modules/iBCS &
        # $WPDIR/shbin10/wplicense −s &
```

Changes to install

This was extracted from my original notes and includes changes to **install.wp** that are reported to work:

The install.wp on the CDROM did not work out of the box. I had to modify it to get it to work by moving all files to a temporary directory and changing this install script. The changes are:

```
48c48,49
<       mkdir $LNK_DIR 2> /dev/null
---
> echo making LNK_DIR=$LNK_DIR
>       mkdir $LNK_DIR
51c52
<
---
> echo removing /tmp/TMPTMP
53a55,57
> echo /tmp/TMPTMP=
> cat /tmp/TMPTMP
> echo /tmp/TMPTMP -- to here
62,63c66,83
<       for i in $myfiles
<       do
---
> echo MYFILES=$myfiles  THISDIR=$thisdir
> ls $myfiles
> echo making LNK_DIR=$LNK_DIR/ifiles
> mkdir $LNK_DIR/ifiles
> chmod 777 $LNK_DIR/ifiles
> cp $thisdir/ifiles/* $LNK_DIR/ifiles
> chmod 777 $LNK_DIR/ifiles/*
> ls −l $LNK_DIR/ifiles
>
> # echo making links....
```

```
> # $LNK_DIR/ifiles/cdlink.sco -r $thisdir
> # echo links should be done...
> # exit
>
>
> #     for i in $myfiles
>         i=$thisdir/ifiles/cdlink.sco
> #     do
65a86,87
> echo /tmp/TMP=
> cat /tmp/TMP
73c95
<                       rm -f /tmp/TMPTMP
---
>               rm -f /tmp/TMPTMP
77c99
<       done
---
> #     done
368a391,394
> echo THISDIR=$thisdir
> thisdir=/usr/local/wp60/cdrom
> echo THISDIR=$thisdir
>
469a496,498
> echo INIT DONE, THISDIR=$thisdir
> ls $thisdir/ifiles/cdinst.*
>
493a523,526
>
> echo RUN_ME=$RUN_ME
> RUN_ME=$thisdir/ifiles/cdinst.sco
> echo RUN_ME=$RUN_ME
```

5.4 Bugs in WP/SCO

I did not keep a detailed list of bugs for WP/SCO, however:

- The initial version had install problems.
- The initial version used SCO shared libraries, hence required a copy of them on Linux.

---

6. The Future

Sometime in August, WordPerfect 7.0 for Linux should ship. It should be available from SDC for about $149.99 for a competitive upgrade or $199.99 retail.

Corel is working on porting their entire office suite to Java and releasing it as Corel Office for Java(TM). This currently is in Beta and works on Linux (I tried the first beta −− very slow). Check out http://officeforjava.corel.com/about.htm for more information. This promises to be something to watch.

SDC is currently working on WPLinux 8 with an expected beta mid 1998 and a release following by about 5 months. SDC has indicated that if there is not sufficient demand for WP for Linux, they will probably not ship it (they already stopped shipping for SGI and UNIXWare) −− **so if you like it, buy it!**

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7. For More Information

Software Development Corporation is the developer of WordPerfect for UNIX. Corel has outsourced the development of WordPerfect for UNIX to SDC. I have been in touch with the SDC product manager for WP for LINUX and he has been very helpful (I have provided him with a review copy of this document).

```
Software Development Corporation
512 East 1860 South
Provo, Utah 84606 USA

Phone: (801) 370−9600
Fax: (801) 370−9696
Email: info@sdcorp.com
```

WWW: http://www.sdcorp.com/wpunix.html

Corel Corporation is the new owner of WordPerfect, having purchased it from Novell. They develop and market excellent products such as Corel Draw and WordPerfect.

```
Corel Corporation
Ottawa, Ontario, CA

Technical Support (WP UNIX): (801) 765−4019
```

WWW: http://www.corel.com

< **Caldera Corporation** sells WordPerfect 6.0 for Caldera Network Desktop (CND) for $129.99 (WordPerfect and Motif Bundle). Note, at this time, I have no information on if Caldera is planning to sell WP 7.0.

```
  Caldera, Inc.
633 South 550 East
Provo, Utah 84606 USA

  (888) GO LINUX
  (801) 377=7687
```

WWW: http://www.caldera.com

As a last resort, email me at whampton@staffnet.com.
