

Printing

Lab 1: Creating PDF Files

Install the **enscript** package on your system. Using the [enscript](#) command, convert the **/var/log/syslog** or **/var/log/messages** file (or any large text file available on your system) to the Postscript format. Make sure you can read the final Postscript document using a reader such as **evince**.

If the output file is less than 10 pages long, extend the size of the source text file and repeat the steps above.

Convert the PostScript document to PDF using either the [ps2pdf](#) or [pstopdf](#) command. Again, make sure you can read the resulting PDF file using a PDF reader.

Using [pdftinfo](#), determine what is the PDF version used to encode the file as well as the page size.

Lab 2: Modifying PDF Files

Install the **pdftk** and **psutils** packages on your system (under **Fedora** distributions you might have to download **pdftk** separately).

Using [pdf2ps](#), convert the PDF file from the last exercise back to Postscript.

Using [psnup](#), create a document with 2 pages per sheet:

```
$ psnup -2 syslog.ps > syslog-nup.ps
```

Convert the file back to PDF.

Lab 3: Modifying PDF Content

In this exercise we will manually modify the content of a PDF file by using a sequence of conversion tools and editing Postscript content by hand.

First use the `locate` or `find` commands to identify a PDF file on your system. On an **Ubuntu** distribution, for instance, the following PDF file should be available:

`/usr/share/doc/foo2zjs/manual.pdf`

Convert the file from PDF to Postscript using `pdftops` with the `-level1` flag:

```
$ pdftops -level1 /usr/share/doc/foo2zjs/manual.pdf /tmp/manual.ps
```

Compare both file sizes: the Postscript file should be considerably larger than the PDF one since it's pure text (as opposed to PDF, which is compressed).

Make sure you can view the Postscript file you just generated using a Postscript viewer such as **evince**.

Identify an element from the postscript file that you would like to modify and edit it. For example, let's replace all occurrences of 2011 with 2013:

```
$ sed 's/2011/2013/g' manual.ps > manual2013.ps
```

Finally, convert the resulting file back to PDF and make sure, using a PDF viewer, that the result looks as you expected.
