PDF Dokumente verkleinern

Quelle: https://www.adobe.com/acrobat/hub/how-to-compress-pdf-in-linux.html

```
gs -sDEVICE=pdfwrite -dCompatibilityLevel=1.4 -dPDFSETTINGS=/prepress -dNOPAUSE -dQUIET -dBATCH -sOutputFile=output.pdf input.pdf
```

Dokumente (stapelweise) einscannen

Wenn man keinen Dokumentnscanner mit Vorlageneinzug hat wird das Scannen mehrerer Seiten oder z.B. ganzer Zettelsammlungen schnell zu einer abendfüllenden Angelegnheit und man bekommt vom vielen Klicken in der GUI des Scannprogramms einen lahmen Zeigefinger. Ein kleines Skript schafft hier schnell abhilfe:

batch_scan_to_pdf.sh

```
#!/bin/bash
#  Copyright (c) 2013 Christoph von Thuelen
#
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#
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#
#  Following tools are required to do the job:
#  * sane-utils
#  * libtiff-tools
#  * imagemagick
#  * pdftk
#  * usbreset (workaround for Epson Perfection V300 Photo ;-) )

# config parameters
SCANAREA="-l 0 -t 0 -x 210 -y 297"    # app. DIN-A4 scan area
COUNTER=1                             # page counter, starting at page
"1"
OUTPUTFILE="scan"                     # filename
MYSCANNER=epkowa                      # my scanner: Epson Perfection
V300 Photo aka "epkowa"
CANSHOWPROGRESS=1                     # it is able to show the scan
progress during scan
```

```
# Check some tools we need ...
if [ ! -f /usr/bin/tiff2pdf ]
then
  echo "ERROR - tiff2pdf is not installed. Please install libtiff-
tools"
  exit 1
fi
if [ ! -f /usr/bin/scanimage ]
then
  echo "Error - scanimage is not installed.. Please install sane-utils"
  exit 1
fi
if [ ! -f /usr/bin/pdftk ]
then
  echo "Error - pdftk is not installed. Please install pdftk"
  exit 1
fi
if [ ! -f /usr/bin/convert ]
then
  echo "Error - convert is not installed. Please install imagemagick"
  exit 1
fi

function help {
  echo "Usage: `basename $0` -m {binary,gray,color} -r [resolution in
dpi] -o <outputfile>"
  echo " -m: Scan mode can be: binary, gray or color"
  echo " -r: Resolution in dpi"
  echo " -o: Output file name w/o \".pdf\""
exit 1
}

# Show help text
if [ $# -eq "0" ]; then
  help
elif [ $1 = "--help" -o $1 = "-help" -o $1 = "-?" -o $1 = "-h" ]; then
  help
fi

# read options
while getopts ":m:r:o:" Option
do
  case $Option in
    m) SCANMODE=$OPTARG ;;
    r) RESOLUTION=$OPTARG ;;
    o) OUTPUTFILE=$OPTARG ;;
  esac
done

# scan images
if [ -f $OUTPUTFILE.pdf ]; then
```

```
    echo "Error - Output file: $OUTPUTFILE already exists!"
    exit 1
else
  echo "Batch mode, Output file: $OUTPUTFILE"
  scanimage -d $MYSCANNER --format tiff --mode $SCANMODE $SCANAREA --
resolution $RESOLUTION $PROGRESS --batch --batch-prompt
  while [ -f out$COUNTER.tif ]; do
    # tiff2pdf -z out$COUNTER.tif -o out$COUNTER.pdf
    convert out$COUNTER.tif out$COUNTER.jpg
    convert out$COUNTER.jpg out$COUNTER.pdf
    COUNTER=$[COUNTER+1]
  done

  #concatinate scanned images to one single pdf
  pdftk out*.pdf cat output $OUTPUTFILE.pdf

  ## clean up
  rm out*.tif
  rm out*.pdf

  ## workaround for reset Epson Perfection V300 Photo scanner after
batch scan
  DEVICE=`lsusb | grep -i epson | cut -d' ' -f 4| cut -d: -f1`
  BUS=`lsusb | grep -i epson | cut -d' ' -f 2`
  echo "BUS: $BUS, DEVICE: $DEVICE"
  usbreset /dev/bus/usb/$BUS/$DEVICE
fi
exit 0
```

Nicht vergessen die Datei `batch_scan_to_pdf.sh` mit:

```
chmod +x batch_scan_to_pdf.sh
```

auch ausführbar zu machen 😉

Da sich leider mein Scanner, ein `Epson Perfection V300 Photo`, nach jedem Batch Durchlauf aufgehängt hat verwende ich am Ende des o.a. Skriptes ein kleines Tool namens `usbreset` welches ich hier gefunden habe - funktioniert ausgezeichnet.

usbreset.c

```
/* usbreset -- send a USB port reset to a USB device */
/*
take from here: http://marc.info/?l=linux-usb&m=121459435621262&w=2

compile with: cc usbreset.c -o usbreset

usage:
$ lsusb
 Bus 002 Device 003: ID 0fe9:9010 XXYYZZ
```

```
$ chmod +x usbreset
$ sudo ./usbreset /dev/bus/usb/002/003
*/

#include <stdio.h>
#include <unistd.h>
#include <fcntl.h>
#include <errno.h>
#include <sys/ioctl.h>

#include <linux/usbdevice_fs.h>

int main(int argc, char **argv)
{
const char *filename;
int fd;
int rc;

if (argc != 2) {
fprintf(stderr, "Usage: usbreset device-filename\n");
return 1;
}
filename = argv[1];

fd = open(filename, O_WRONLY);
if (fd < 0) {
perror("Error opening output file");
return 1;
}

printf("Resetting USB device %s\n", filename);
rc = ioctl(fd, USBDEVFS_RESET, 0);
if (rc < 0) {
perror("Error in ioctl");
return 1;
}
printf("Reset successful\n");

close(fd);
return 0;
}
```

Übersetzten kann man das kleine Tool dann mit:

```
cc usbreset.c -o usbreset''
```

From:
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Permanent link:
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