Cpmtools

http://www.moria.de/~michael/cpmtools/

GUI → http://star.gmobb.jp/koji/cgi/wiki.cgi?page=CpmtoolsGUI

https://www.seasip.info/Unix/LibDsk/

Format description

```
diskdef name                  format definition
  seclen n                128,256,512,1024,.. physical Sector length
  tracks n                1.. Number of tracks            = (Cylinders *
Sides)
  sectrk n                1.. Sectors per track
  blocksize n             1024,2048,4096,8192,16384 Block size =
(128*(BLM+1))
  maxdir n                1.. Number of directory entries    = (DRM+1)
  skew n                  0.. Logical sector skew
  skewtab r1,r2,r3,...          skew table
  boottrk n               Number of system tracks           = OFS
  offset n | nK | nM | nT      n Byte|n Kilobyte|n Megabyte|n Tracks
  logicalextents n        Logical extents per physical extent
  os 2.2 | 3 | isx | p2dos | zsys
  libdsk:format name            pcw720,cpcsys, etc.   (Optional kann der Typ
mit übergeben werden: format[,type])
  dirblks n                              to allow reserving blocks after the
directory using an inflated DPB ALV0 (since 2.21)
end


Berechnungen:

size := (secLength*sectrk*(tracks-boottrk))/blksiz;
if (extents==0) extents := ((size>=256 ? 8 : 16)*blksiz)/16384; if
(extents==0) extents := 1;
Allocatabledatablocks := size-(maxdir*32+blksiz-1)/blksiz);

posix:
physical pos := ((sector+track*sectrk)*secLength)+offset;
win32c:
SetFilePointer := ((sector+track*sectrk)*secLength)+offset;

libdisk:
physical sector := track*sectrk + sector + offset/secLength;
```

Viele Hinweise zu libsk, cpmtools, … und zur Analyse unbekannter Disketten gibt's von Larry Kraemer

auf http://forums.debian.net/viewtopic.php?f=16&t=112244

Build

Erzeugen mit MINGW/MSYS

```
#----------------------------------------------------------------------
---
# libdsk
#----------------------------------------------------------------------
---

tar zxvf libdsk-1.3.3.tar.gz
cd libdsk-1.3.3
./configure
make
strip *.exe
make install
cd ..


#----------------------------------------------------------------------
---
# cpmtools
#----------------------------------------------------------------------
---

PDCurses installieren, d:\devtools\MinGW\include\curses.h heißt schon
richtig?

cd d:\devtools\MinGW\lib\
copy libpdcurses.a libcurses.a


#----------------------------------------------------------------------
---

tar zxvf cpmtools-2.13.tar.gz
cd cpmtools-2.13
./configure --with-diskdefs="" --with-defformat="default" --with-
libdsk=/local/
make
make -i install
strip /local/bin/*.exe


#----------------------------------------------------------------------
---

tar zxvf cpmtools-2.18.tar.gz
cd cpmtools-2.18
```

```
es gibt Compiler-Probleme mit den mitgelieferten getopt-Daten, deshalb
    - in Makefile.in "getopt$(OBJEXT) getopt1$(OBJEXT) " überall löschen
    - leere Datei getopt_.h anlegen (oder vorhandene leeren)

./configure --with-diskdefs="" --with-defformat="default" --with-
libdsk=/local/
make
strip *.exe
make -i install
```

Changes

```
Changes since 2.22:

o  Use 16 bit block pointers for file systems > 256 blocks, not >= 256
o  Translate CP/M file name character '/' to ',' for the host and back
o  dirblks in Kaypro format fixed
o  Misc fixes for directory listing
o  Added bootsec diskdefs option
o  Check Device_close return value
o  Check for too small block number when reading file data
o  Replaced obsolete macros in configure.in
o  Cygwin/Windows support did not build any more and likely not for quite
   some time, so it was removed.


Changes since 2.21:

o  Refactored curses terminal calls into own module
o  Many autoconf changes with the hope to improve portability and
   likely just breaking things
o  New diskdef for HP200
o  Added dirblks to allow reserving blocks after the directory
   as used by Kaypro
o  Fixed user number output for cpmls -d
o  Added option -u to show all CP/M file names in uppercase


Changes since 2.20:

o  rc759 diskdef renamed to rc75x, as it works for the series
o  diskdefs.5 added
o  Many disk formats from Larry Kraemer added
o  Renamed ampdsdd to ampro400d for consistency with libdsk and because
   ampdsdd very likely was wrong
o  Check for invalid block size
o  Output line number for diskdefs errors
o  Correctly output create or access time for CP/M 3 in cpmls
o  Spectravideo SVI-728 diskdef added
```

```
o   $DESTDIR support
o   Correctly handle empty files
o   Fix block allocation for large directories.
o   Fix time stamp conversion
o   Allow user number 16-31 for CP/M 2.2
o   Intel MDS/22 formats added
o   Crash when using blocksize 16384 fixed


Changes since 2.19:


o   Fixed bug in cpmfs leading to wrongly allocated blocks



Changes since 2.18:


o   More diskdefs entries
o   New diskdefs option to set the libdsk format
o   Fixed various warnings
o   Fixed Makefile if building without curses

Changes since 2.17:


o   Make timestamps in mkfs.com optional and add date stamper creation
o   Better cpm.5 documentation
o   Updated config.guess
o   Fixed error handling for corrupt images or diskdefs
o   Fixed off by one bug in fsck not detecting a wrong block number
o   Fixed too short directory buffer for directory sizes not matching
    whole blocks

Changes since 2.16:


o   Improved filesystem documentation
o   Many new diskdefs
o   device_win32.c fixed by Bill Buckels

Changes since 2.15:


*   Various small fixes
*   Datestamper support
*   Image offset to access disk slices
```

libdisk-Formate und Typen

```
d:>dskdump.exe -formats
Disk formats supported:

   pcw180     : PCW / IBM 180k
   cpcsys     : CPC System
```

```
    cpcdata     : CPC Data
    pcw720      : PCW / IBM 720k
    pcw1440     : PcW16 / IBM 1440k
    ibm160      : IBM 160k (CP/M-86 / DOSPLUS)
    ibm320      : IBM 320k (CP/M-86 / DOSPLUS)
    ibm360      : IBM 360k (CP/M-86 / DOSPLUS)
    ibm720      : IBM 720k (144FEAT)
    ibm1200     : IBM 1.2M (144FEAT)
    ibm1440     : IBM 1.4M (144FEAT)
    acorn160    : Acorn 160k
    acorn320    : Acorn 320k
    acorn640    : Acorn 640k
    acorn800    : Acorn 800k
    acorn1600   : Acorn 1600k
    pcw800      : PCW 800k
    pcw200      : PCW 200k
    bbc100      : BBC 100k
    bbc200      : BBC 200k
    mbee400     : Microbee 400k
    mgt800      : MGT 800k
    trdos640    : TR-DOS 640k
    ampro200    : Ampro 40 track single-sided
    ampro400d   : Ampro 40 track double-sided
    ampro400s   : Ampro 80 track single-sided
    ampro800    : Ampro 80 track double-sided
    pcw1200     : PcW16 / IBM 1200k
    mac400      : Macintosh GCR 400k
    mac800      : Macintosh GCR 800k
    myz80       : MYZ80 8Mb
    pcpm320     : IBM 320k (CP/M-86 / DOSPLUS)
d:>dskdump.exe -types
Disk image types supported:

    ntwdm       : NT WDM floppy driver
    floppy      : Win32 floppy driver
    gotek       : Gotek 1440k disc image collection
    gotek72     : Gotek 720k disc image collection
    remote      : Remote LibDsk instance
    rcpmfs      : Reverse CP/MFS driver
    dsk         : CPCEMU .DSK driver
    edsk        : Extended .DSK driver
    apridisk    : APRIDISK file driver
    copyqm      : CopyQM file driver
    tele        : TeleDisk file driver
    ldbs        : LibDsk block store
    sap         : SAP file driver
    qrst        : Quick Release Sector Transfer
    imd         : IMD file driver
    ydsk        : YAZE YDSK driver
    raw         : Raw file driver (alternate sides)
    rawoo       : Raw file driver (out and out)
```

```
   rawob       : Raw file driver (out and back)
   myz80       : MYZ80 hard drive driver
   simh        : SIMH disc image driver
   nanowasp    : NanoWasp image file driver
   logical     : Raw file logical sector order
   jv3         : JV3 file driver
   dc42        : Disk Copy 4.2
   cfi         : CFI file driver
```

From:

https://hc-ddr.hucki.net/wiki/ - **Homecomputer DDR**

Permanent link:

https://hc-ddr.hucki.net/wiki/doku.php/cpm/cpmtools?rev=1672732373

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