How to clone or copy your harddisk over the network

Method 1 (tested!)

On the bron/zender/source:

```
#dd if=/dev/sda | gzip -c | netcat -l -q 0 -p 2222
```

On the ontvanger/doel/target:

```
#netcat  2222 | gzip -cd | dd of=/dev/sda
```

This way we get a throughput of 14,1 MB/s, 160 GB in 11543 seconds (3,2 hour)

Methode 2 (niet getest!)

How do I use netcat to copy hard disk image?

Our sample setup

```
HostA // 192.168.1.1
          sda
       NETWORK
          sdb
HostB // 192.168.1.2
```

Your task is copy HostA /dev/sda to HostB's /dev/sdb using netcat command. First login as root user Command to type on hostB (receiving end ~ write image mode)

You need to open port on hostB using netcat, enter :

```
# netcat -p 2222 -l |bzip2 -d | dd of=/dev/sdb
```

Where,

```
   * -
p 2222 : Specifies the source port nc should use, subject to privilege restrictions and availabilit
y.   Make sure port 2222 is not used by another process.
```

```
   * -
l : Used to specify that nc should listen for an incoming connection rather than initiate a connect
ion to a remote host.
   * bzip2 -d : Compresses image using the Burrows-
Wheeler block sorting text compression algorithm, and Huffman coding. This will speed up network tr
ansfer ( -d : force decompression mode)
   * dd of=/dev/sda : /dev/sda is your hard disk. You can also specify partition such as /dev/sda1
```

Command to type on hostA (send data over a network ~ read image mode)

Now all you have to do is start copying image. Again login as root and enter:

```
# bzip2 -c /dev/sda | netcat hostA 2222
```

OR use IP address:

```
# bzip2 -c /dev/sda | netcat 192.168.1.1 2222
```

This process takes its own time. A note about latest netcat version 1.84-10 and above

If you are using latest nc / netcat version above syntax will generate an error. It is an error to use -l option in conjunction with the -p, -s, or -z options. Additionally, any timeouts specified with the -w option are ignored. So use nc command as follows.

On hostA, enter:

```
# nc -l 2222 > /dev/sdb
```

On hostB, enter:

```
# nc hostA 2222< /dev/sda
```

OR

```
# nc 192.168.1.1 2222< /dev/sda
```

Using a second machine (hostB), connect to the listening nc process at 2222 (hostA), feeding it the file (/dev/sda)which is to be transferred. You can use bzip2 as follows. On hostA, enter:

```
# nc -l 2222 | bzip2 -d > /dev/sdb
```

On hostB, enter:

```
# bzip2 -c /dev/sda | nc 192.168.1.1 2222
```

Revision #3
Created 2026-04-01 17:11:24 CEST by Philip
Updated 2026-04-13 19:24:55 CEST by Philip