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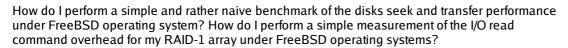
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### FreeBSD: Benchmark The Disks Seek And Transfer Performance

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You need to use the diskinfo command, which displays out information about a disk device, and optionally runs a naive performance test on the device. The -t option is used for a simple performance test.

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## Simple Measurement Of The I/O Read

The -c option triggers a simple measurement of the I/O read command overhead, enter:

```
# diskinfo -c /dev/aacd0
```

#### Sample Outputs:

```
/dev/aacd0
512
              # sectorsize
 299573968896 # mediasize in bytes (279G)
 585105408 # mediasize in sectors
36421
              # Cylinders according to firmware.
255
              # Heads according to firmware.
              # Sectors according to firmware.
I/O command overhead:
                              0.062739 \text{ sec} =
time to read 10MB block
                                                0.003 msec/sector
 time to read 20480 sectors
                              1.169154 sec =
                                                0.057 msec/sector
calculated command overhead
                                    0.054 msec/sector
```

## Simple Benchmark Of The Disks

The -t option triggers a simple and rather naive benchmark of the disks seek and transfer performance, enter:

```
# diskinfo -t /dev/aacd0
```

#### Sample Outputs:

```
/dev/aacd0
512
             # sectorsize
299573968896 # mediasize in bytes (279G)
585105408
           # mediasize in sectors
36421
             # Cylinders according to firmware.
255
             # Heads according to firmware.
63
             # Sectors according to firmware.
Seek times:
Full stroke: 250 iter in
                             0.724105 \text{ sec} =
                                              2.896 msec
Half stroke: 250 iter in
                             0.716784 \text{ sec} =
                                               2.867 msec
Quarter stroke: 500 iter in 2.109663 sec =
                                                4.219 msec
Short forward: 400 iter in 1.621695 sec = 4.054 msec
```

### Other Software Bonnie++ Performance Test of Filesystem I/O [5]: Bonnie tests the speed of file I/O using stars

```
Short backward: 400 iter in 1.624951 sec = 4.062 msec

Seq outer: 2048 iter in 0.119046 sec = 0.058 msec

Seq inner: 2048 iter in 0.217687 sec = 0.106 msec

Transfer rates:

outside: 102400 kbytes in 0.649656 sec = 157622 kbytes/sec

middle: 102400 kbytes in 0.523038 sec = 195779 kbytes/sec

inside: 102400 kbytes in 0.745649 sec = 137330 kbytes/sec
```

## **Other Software**

Bonnie++ Performance Test of Filesystem I/O [5]: Bonnie tests the speed of file I/O using standard C library calls. It does reads and writes of blocks, testing for the limit of sustained data rate (usually limited by the drive or controller) and updates on a file (better simulating normal operating conditions and quite dependent on drive and OS optimisations).

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