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How to: Find Out Hard Disk Specs / Details on Linux

Posted by Vivek Gite <vivek@nixcraft.com>

[1]

Q. Can you tell me Linux command to find out information about my hard disk such as description, product name, bus type, size, cache memory size etc under Linux?

A. There are many tools to get this information. I recommend hdparm command which provides a command line interface to various hard disk ioctls supported by the stock Linux ATA/IDE device driver subsystem.

This command read / request identification information such as disk size, description and much more directly from the drive, which is displayed in a new expanded format.

Open the terminal and type the command:

```
# hdparm -I /dev/sda
```

OR

```
$ sudo hdparm -I /dev/sda
```

Output:

```
/dev/sda:

ATA device, with non-removable media
        Model Number:       ST3500630AS
        Serial Number:      9XXYZ845YZ
        Firmware Revision:  3.AAK
Standards:
        Supported: 7 6 5 4
        Likely used: 7
Configuration:
        Logical         max     current
        cylinders       16383   16383
        heads           16      16
        sectors/track   63      63
        --
        CHS current addressable sectors:   16514064
        LBA    user addressable sectors:  268435455
        LBA48  user addressable sectors:  976773168
        device size with M = 1024*1024:      476940 MBytes
        device size with M = 1000*1000:      500107 MBytes (500 GB)
Capabilities:
        LBA, IORDY(can be disabled)
        Queue depth: 32
        Standby timer values: spec'd by Standard, no device specific minimum
        R/W multiple sector transfer: Max = 16  Current = 16
        Recommended acoustic management value: 254, current value: 0
        DMA: mdma0 mdma1 mdma2 udma0 udma1 udma2 udma3 udma4 udma5 *udma6
             Cycle time: min=120ns recommended=120ns
        PIO: pio0 pio1 pio2 pio3 pio4
             Cycle time: no flow control=120ns  IORDY flow control=120ns
Commands/features:
        Enabled Supported:
           *    SMART feature set
                Security Mode feature set
           *    Power Management feature set
           *    Write cache
           *    Look-ahead
```

```
            *    Host Protected Area feature set
            *    WRITE_BUFFER command
            *    READ_BUFFER command
            *    DOWNLOAD_MICROCODE
                 SET_MAX security extension
            *    48-bit Address feature set
            *    Device Configuration Overlay feature set
            *    Mandatory FLUSH_CACHE
            *    FLUSH_CACHE_EXT
            *    SMART error logging
            *    SMART self-test
            *    General Purpose Logging feature set
            *    SATA-I signaling speed (1.5Gb/s)
            *    SATA-II signaling speed (3.0Gb/s)
            *    Native Command Queueing (NCQ)
            *    Phy event counters
                 Device-initiated interface power management
            *    Software settings preservation
Security:
        Master password revision code = 65534
                supported
        not     enabled
        not     locked
                frozen
        not     expired: security count
        not     supported: enhanced erase
Checksum: correct
```

To get more information about your hard disk, refer to our other articles:

- Howto find out or Learn harddisk size in Linux or UNIX [2]
- How to: Linux check IDE / SATA hard disk transfer speed [3]
- Linux: Monitor hard disks temperature with hddtemp [4]
- How do I test if my Linux server SCSI / SATA hard disk going bad? [5]
- Linux: How to backup hard disk partition table (MBR)