Dmidecode COMMAND

Dmidecode also referred as **Desktop Management Interface** table decoder, record data from **DMI** table and produce it in human readable format. *dmidecode* command is used when the user wants to retrieve system's hardware related information such as Processor, RAM(DIMMs), BIOS detail, Memory, Serial numbers etc. of Linux system in a readable format. *dmidecode* command not only displays the system's current hardware configuration but also the maximum supported CPU and memory.

Syntax:

```
dmidecode [OPTIONS]
```

Running a simple dmidecode command to get hardware information

```
[root@vivek ~]# dmidecode | more
# dmidecode 3.2
Getting SMBIOS data from sysfs.
SMBIOS 2.7 present.
620 structures occupying 29956 bytes.
Table at 0x000E0010.
```

To get information about Processor.

```
[root@vivek ~]# dmidecode -t processor
```

```
# dmidecode 3.2
Getting SMBIOS data from sysfs.
SMBIOS 2.7 present.

Handle 0x0004, DMI type 4, 42 bytes
Processor Information
        Socket Designation: CPU #000
        Type: Central Processor
        Family: Unknown
```

To get BIOS information.

```
[root@vivek ~]# dmidecode -t bios
# dmidecode 3.2
Getting SMBIOS data from sysfs.
SMBIOS 2.7 present.

Handle 0x0000, DMI type 0, 24 bytes
BIOS Information
        Vendor: Phoenix Technologies LTD
        Version: 6.00
        Release Date: 07/22/2020
        Address: 0xEA480
        Runtime Size: 88960 bytes
        ROM Size: 64 kB
        Characteristics:
```


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Dmidecode COMMAND

Display hardware information about the chassis

```
[root@vivek ~]# dmidecode -t chassis
# dmidecode 3.2
Getting SMBIOS data from sysfs.
SMBIOS 2.7 present.

Handle 0x0003, DMI type 3, 21 bytes
Chassis Information
        Manufacturer: No Enclosure
        Type: Other
        Lock: Not Present
        Version: N/A
        Serial Number: None
        Asset Tag: No Asset Tag
        Boot-up State: Safe
        Power Supply State: Safe
        Thermal State: Safe
        Security Status: None
        OEM Information: 0x00001234
        Height: Unspecified
        Number Of Power Cords: Unspecified
        Contained Elements: 0
```

Display hardware information about the baseboard

```
[root@vivek ~]# dmidecode -t baseboard
# dmidecode 3.2
Getting SMBIOS data from sysfs.
SMBIOS 2.7 present.

Handle 0x0002, DMI type 2, 15 bytes
Base Board Information
        Manufacturer: Intel Corporation
        Product Name: 440BX Desktop Reference Platform
        Version: None
        Serial Number: None
        Asset Tag: Not Specified
        Features: None
        Location In Chassis: Not Specified
        Chassis Handle: 0x0000
        Type: Unknown
        Contained Object Handles: 0

Handle 0x019F, DMI type 10, 8 bytes
On Board Device 1 Information
        Type: Video
        Status: Disabled
        Description: VMware SVGA II
On Board Device 2 Information
        Type: Sound
        Status: Disabled
        Description: ES1371
```

Display hardware information about the system

```
[root@vivek ~]# dmidecode -t system
# dmidecode 3.2
Getting SMBIOS data from sysfs.
SMBIOS 2.7 present.

Handle 0x0001, DMI type 1, 27 bytes
System Information
        Manufacturer: VMware, Inc.
        Product Name: VMware Virtual Platform
        Version: None
        Serial Number: VMware-56 4d 59 87 82 0a ff c4-db 6a b6 a9 fd 01 90 46
        UUID: 87594d56-0a82-c4ff-db6a-b6a9fd019046
        Wake-up Type: Power Switch
        SKU Number: Not Specified
        Family: Not Specified
```


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Dmidecode COMMAND

Display information of about installed physical memory and DIMMs

```
[root@vivek ~]# dmidecode -t 17
```

```
Handle 0x01C2, DMI type 17, 34 bytes
Memory Device
        Array Handle: 0x01A2
        Error Information Handle: No Error
        Total Width: Unknown
        Data Width: Unknown
        Size: No Module Installed
        Form Factor: DIMM
        Set: None
        Locator: RAM slot #31
        Bank Locator: RAM slot #31
        Type: DRAM
        Type Detail: Unknown
        Speed: Unknown
        Manufacturer: Not Specified
        Serial Number: Not Specified
        Asset Tag: Not Specified
        Part Number: Not Specified
        Rank: Unknown
        Configured Memory Speed: Unknown
```

Display information of about 64 -bit memory error

```
[root@vivek ~]# dmidecode -t 33
# dmidecode 3.2
Getting SMBIOS data from sysfs.
SMBIOS 2.7 present.

Handle 0x0269, DMI type 33, 31 bytes
64-bit Memory Error Information
        Type: OK
        Granularity: Unknown
        Operation: Unknown
        Vendor Syndrome: Unknown
        Memory Array Address: Unknown
        Device Address: Unknown
        Resolution: Unknown
```

Dump dmidecode command output in hexadecimal

```
[root@vivek ~]# dmidecode -u -t 4
# dmidecode 3.2
Getting SMBIOS data from sysfs.
SMBIOS 2.7 present.

Handle 0x0004, DMI type 4, 42 bytes
        Header and Data:
                04 2A 04 00 01 03 02 02 81 0F 86 00 FF FB 8B 07
                03 02 00 00 30 75 34 08 41 04 94 00 14 01 FF FF
                00 00 00 01 01 00 24 00 02 00
        Strings:
                43 50 55 20 23 30 30 30 00
                "CPU #000"
                41 75 74 68 65 6E 74 69 63 41 4D 44 00
                "AuthenticAMD"
                41 4D 44 20 52 79 7A 65 6E 20 35 20 35 35 30 30
                55 20 77 69 74 68 20 52 61 64 65 6F 6E 20 47 72
                61 70 68 69 63 73 20 20 20 20 20 20 20 20 20 00
                "AMD Ryzen 5 5500U with Radeon Graphics         "
```

Display demi decode version

```
[root@vivek ~]# dmidecode -V
3.2
```


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