

Cpuinfo

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There is a lot of useful information in `/proc/cpuinfo`. However, modern server boards have many CPUs and sometimes even more cores. In order to keep track of this long information, sometimes this information needs to be pre-processed a bit. This article is about some small scripts to get specific information.

1 Model Name

```
grep -i 'model name' /proc/cpuinfo|uniq
```

```
Machine      Model Name
```

```
=====
```

```
X200 Tablet Intel(R) Core(TM)2 Duo CPU          L9400 @ 1.86GHz
```

```
Super Micro Intel(R) Xeon(R) CPU E5-2658 0 @ 2.10GHz
MIC 0b/01
```

2 Number Of Calculation Cores

```
grep -i 'processor' /proc/cpuinfo|wc -l
```

Machine	Model Name	Value
X200 Tablet	Intel(R) Core(TM)2 Duo CPU L9400 @ 1.86GHz	2
Super Micro	Intel(R) Xeon(R) CPU E5-2658 0 @ 2.10GHz	16
MIC	0b/01	244

3 Number Of Real Cpu Cores:

3.1 Physical ID

```
grep -i "physical id" /proc/cpuinfo|sort -u|uniq|wc -l
```

Machine	Model Name	Value
X200 Tablet	Intel(R) Core(TM)2 Duo CPU L9400 @ 1.86GHz	1
Super Micro	Intel(R) Xeon(R) CPU E5-2658 0 @ 2.10GHz	2
MIC	0b/01	1

3.2 Core ID

```
grep -i 'core id' /proc/cpuinfo|uniq|wc -l
```

Machine	Model Name	Value
X200 Tablet	Intel(R) Core(TM)2 Duo CPU L9400 @ 1.86GHz	2
Super Micro	Intel(R) Xeon(R) CPU E5-2658 0 @ 2.10GHz	16
MIC	0b/01	62

However, the `cpu cores` value for MIC is set to 61. And 244 cores divided by 4 is 61, not 62.

3.3 CPU Cores

```
grep -i 'cpu cores' /proc/cpuinfo|uniq|sed -e 's%cpu cores.*: %%'
```

Machine	Model Name	Value
X200 Tablet	Intel(R) Core(TM)2 Duo CPU L9400 @ 1.86GHz	2
Super Micro	Intel(R) Xeon(R) CPU E5-2658 0 @ 2.10GHz	8
MIC	0b/01	61

3.4 The Number Of Cores

To make the situation unambiguous, the number of real cores should be calculated as

```
echo $((`grep -i "physical id" /proc/cpuinfo|sort -u|uniq|wc -l` * \
`grep -i 'cpu cores' /proc/cpuinfo|uniq|sed -e 's%cpu cores.*: %%'`))
```

Machine	Model Name	Value
X200 Tablet	Intel(R) Core(TM)2 Duo CPU L9400 @ 1.86GHz	2
Super Micro	Intel(R) Xeon(R) CPU E5-2658 0 @ 2.10GHz	16
MIC	0b/01	61

4 History

Version	Date	Notes
0.1.2	2023-05-19	Improve writing
0.1.1	2022-07-02	Commands meta data, shell->bash
0.1.0	2016-06-22	Initial release

5 Disclaimer of Warranty

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