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Linux taskset to retrieve or set a processess CPU affinity

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[1]

Q. How do I use Linux (RHEL) taskset command to set or get the CPU affinity of a running process given its PID or to launch a new COMMAND with a given CPU affinity?

A. You need to use taskset command. CPU affinity is a scheduler property that "bonds" a process to a given set of CPUs on the system. The Linux scheduler will honor the given CPU affinity and the process will not run on any other CPUs. Note that the Linux scheduler also supports natural CPU affinity: the scheduler attempts to keep processes on the same CPU as long as practical for performance reasons. Therefore, forcing a specific CPU affinity is useful only in certain applications.

Retrieve the CPU affinity of an existing task

The general syntax is as follows:
taskset -p [pid]
To retrieve the CPU affinity of an existing task (PID 12345), enter:

```
# taskset -p 12345
```

Use taskset command to CPU affinity

The general syntax is as follows:
taskset -c [0,1,2,3..N] [pid]
Where,

- **-c 0,1,2,..N** : The masks are typically given in hexadecimal. For example, 0x00000001 is processor #0, 0x00000003 is processors #0 and #1 etc. However -c option allows you to specifiy a numerical list of processors instead of a bitmask. The list may contain multiple items, separated by comma, and ranges. For example, 0,5,7,9-11.
- **pid** : Process / program ID

For example set PID 12345 on 2-3 CPU, enter:

```
# taskset -c 2,3 12345
```


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[1] Image: **http://www.cyberciti.biz/faq/faq/category/linux/**