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Linux Performance Tools To Troubleshoot Problems

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Q. I am new to Linux. What tools or commands are recommended to troubleshoot performance related problems?

A. Following are the basic or essential tools that every Linux or UNIX system admin should be aware of:

- a) top
- b) sar
- c) vmstat
- d) iostat
- e) free



[1]

top command

The top program provides a dynamic real-time view of a running system. It can display system summary information as well as a list of tasks currently being managed by the Linux kernel. Type the top command:

```
$ top
```

sar command

The sar command is performance monitoring tool. It can find out what Linux is doing all the time. It can generate report and email them to sys admin. In order to use sar you need to install sysstat package. sar displays performance data for:

- CPU and Queue,
- Disk I/O
- Swap and Memory
- CPU interrupts, Networking and much more

vmstat command

vmstat reports information about processes, memory, paging, block IO, traps, and cpu activity. See the detailed article "[How do I find out Linux Resource utilization to detect system bottlenecks?](#)" [2]

iostat command

The iostat command is used for monitoring system input/output device loading by observing the time the devices are active in relation to their average transfer rates i.e. it is useful to monitor disk throughput. See the detailed article: "[How do I find out Linux CPU utilization?](#)" [3]

free command

The free command displays the total amount of free and used physical and swap memory in the system, as well as the buffers used by the kernel. See the detailed article: "[Linux check memory usage](#)" [4]

Read the man pages of all of these tools. Always remember, you need to spend some time using these tools, and then only you will be able to understand the output of these commands.

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URLs in this post:

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

[2] How do I find out Linux Resource utilization to detect system bottlenecks?: <http://www.cyberciti.biz/tips/linux-resource-utilization-to-detect-system-bottlenecks.html>

[3] How do I find out Linux CPU utilization?: <http://www.cyberciti.biz/tips/how-do-i-find-out-linux-cpu-utilization.html>

[4] Linux check memory usage: <http://www.cyberciti.biz/faq/2006/04/linux-check-memory-usage.php>

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