## **Process and Load Monitoring Utilities**

Utility	Purpose	Package
top	Process activity, dynamically updated	procps
uptime	How long the system is running and the average load	procps
ps	Detailed information about processes	procps
pstree	A tree of processes and their connections	psmisc (or pstree)
mpstat	Multiple processor usage	sysstat
iostat	CPU utilization and I/O statistics	sysstat
sar	Display and collect information about system activity	sysstat
numastat	Information about NUMA (Non-Uniform Memory Architecture)	numactl

Information about all system calls a process	strace
makes	
	·

## **Memory Monitoring Utilities**

Utility	Purpose	Package
free	Brief summary of memory usage	procps
vmstat	Detailed virtual memory statistics and block I/O, dynamically updated	procps
pmap	Process memory map	procps

## I/O Monitoring Utilities

Utility	Purpose	Package
iostat	CPU utilization and I/O statistics	sysstat
iotop	I/O statistics including per process	iotop
sar	Display and collect information about system activity	sysstat
vmstat	Detailed virtual memory statistics and block I/O, dynamically updated	procps

## **Network Monitoring Utilities**

Utility	Purpose	Package
netstat	Detailed networking statistics	netstat
iptraf	Gather information on network interfaces	iptraf
tcpdump	Detailed analysis of network packets and traffic	tcpdump
wireshark	Detailed network traffic analysis	wireshark