

top

top - 11:41:30 up 1143 days, 12:37, 2 users, load average: 8.64, 11.12, 11.65
 Tasks: 502 total, 1 running, 499 sleeping, 2 stopped, 0 zombie
 %Cpu(s): 18.9 us, 2.1 sy, 0.0 ni, 78.9 id, 0.0 wa, 0.0 hi, 0.2 si, 0.0 st
 KiB Mem : 13174609+total, 4702436 free, 74912856 used, 52130808 buff/cache
 KiB Swap: 13421772+total, 13212457+free, 2093144 used. 51762280 avail Mem

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
118938	hive	20	0	12.889g	894392	13464	S	106.0	0.7	153212:27	java
13522	ams	20	0	3939980	2.035g	14352	S	78.7	1.6	21237:27	java
145136	root	20	0	23.567g	1.247g	15172	S	24.9	1.0	19354,53	java
30443	root	20	0	29.399g	4.154g	13748	S	9.0	3.3	1070:26	java
144241	root	20	0	73084	4580	3420	S	7.6	0.0	2329:11	openvpn
13604	ams	20	0	22.190g	1.195g	13664	S	5.0	1.0	4274:55	java
33974	root	20	0	25.917g	4.096g	13740	S	3.3	3.3	284:19.69	java
170	root	20	0	0	0	0	S	0.7	0.0	1560:01	ksoftirqd/32
2027	mysql	20	0	5860156	957740	5668	S	0.7	0.7	14232:23	mysqld
49003	root	20	0	158148	2716	1576	R	0.7	0.0	0:04.58	top
162825	root	20	0	485088	61692	7064	S	0.7	0.0	1051:03	prometheus
165673	root	20	0	9306108	486576	13232	S	0.7	0.4	579:38.80	java
10	root	20	0	0	0	0	S	0.3	0.0	6181:12	rcu_sched
50	root	20	0	0	0	0	S	0.3	0.0	1175:26	ksoftirqd/8
128	root	rt	0	0	0	0	S	0.3	0.0	7:59.25	watchdog/24
160	root	20	0	0	0	0	S	0.3	0.0	2300:23	ksoftirqd/30
968	root	20	0	0	0	0	S	0.3	0.0	782:02.84	jbd2/sde5-8
48276	root	20	0	8426268	516244	30288	S	0.3	0.4	2481:41	java
53400	root	20	0	0	0	0	S	0.3	0.0	0:04.02	kworker/10:2
81425	mapred	20	0	2996080	684960	24548	S	0.3	0.5	2618:02	java
84917	root	20	0	9928.7m	474180	7612	S	0.3	0.4	1131:19	java
145715	hive	20	0	49.763g	616740	32500	S	0.3	0.5	2171:57	java
146617	hcat	20	0	2985512	304988	31128	S	0.3	0.2	648:35.04	java
164764	root	20	0	9304060	450560	13196	S	0.3	0.3	583:55.81	java
186315	root	20	0	9172984	491684	15108	S	0.3	0.4	57:09.61	java
1	root	20	0	191288	3776	1916	S	0.0	0.0	321:12.69	systemd
2	root	20	0	0	0	0	S	0.0	0.0	1:14.24	kthreadd
3	root	20	0	0	0	0	S	0.0	0.0	30:41.34	ksoftirqd/0
5	root	0	-20	0	0	0	S	0.0	0.0	0:00.00	kworker/0:0H
8	root	rt	0	0	0	0	S	0.0	0.0	38:00.93	migration/0

1 显示所有CPU

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top - 11:42:04 up 1143 days, 12:38,  2 users,  load average: 12.53, 11.67, 11.81
Tasks: 497 total,  1 running, 494 sleeping,  2 stopped,  0 zombie
%Cpu0 : 74.5 us, 2.0 sy, 0.0 ni, 23.2 id, 0.0 wa, 0.0 hi, 0.3 si, 0.0 st
%Cpu1 : 32.7 us, 2.0 sy, 0.0 ni, 65.3 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
%Cpu2 : 35.7 us, 3.0 sy, 0.0 ni, 60.9 id, 0.0 wa, 0.0 hi, 0.3 si, 0.0 st
%Cpu3 : 43.3 us, 2.0 sy, 0.0 ni, 54.7 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
%Cpu4 : 30.1 us, 1.0 sy, 0.0 ni, 68.6 id, 0.0 wa, 0.0 hi, 0.3 si, 0.0 st
%Cpu5 : 32.2 us, 1.7 sy, 0.0 ni, 66.1 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
%Cpu6 : 64.1 us, 2.3 sy, 0.0 ni, 33.2 id, 0.0 wa, 0.0 hi, 0.3 si, 0.0 st
%Cpu7 : 24.5 us, 2.3 sy, 0.0 ni, 73.2 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
%Cpu8 : 31.9 us, 2.3 sy, 0.0 ni, 65.4 id, 0.0 wa, 0.0 hi, 0.3 si, 0.0 st
%Cpu9 : 51.5 us, 2.3 sy, 0.0 ni, 46.2 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
%Cpu10 : 27.8 us, 2.3 sy, 0.0 ni, 69.9 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
%Cpu11 : 43.0 us, 1.3 sy, 0.0 ni, 55.7 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
%Cpu12 : 29.6 us, 1.7 sy, 0.0 ni, 68.4 id, 0.0 wa, 0.0 hi, 0.3 si, 0.0 st
%Cpu13 : 35.5 us, 1.7 sy, 0.0 ni, 62.8 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
%Cpu14 : 23.7 us, 3.0 sy, 0.0 ni, 73.0 id, 0.0 wa, 0.0 hi, 0.3 si, 0.0 st
%Cpu15 : 41.3 us, 2.0 sy, 0.0 ni, 56.7 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
%Cpu16 : 30.3 us, 2.3 sy, 0.0 ni, 67.3 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
%Cpu17 : 35.1 us, 1.7 sy, 0.0 ni, 63.2 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
%Cpu18 : 42.7 us, 2.7 sy, 0.0 ni, 54.3 id, 0.0 wa, 0.0 hi, 0.3 si, 0.0 st
%Cpu19 : 25.9 us, 2.7 sy, 0.0 ni, 71.4 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
%Cpu20 : 28.5 us, 3.0 sy, 0.0 ni, 68.2 id, 0.0 wa, 0.0 hi, 0.3 si, 0.0 st
%Cpu21 : 23.6 us, 1.7 sy, 0.0 ni, 74.8 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
%Cpu22 : 29.2 us, 0.7 sy, 0.0 ni, 70.1 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
%Cpu23 : 26.6 us, 0.3 sy, 0.0 ni, 73.1 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
%Cpu24 : 96.0 us, 0.0 sy, 0.0 ni, 4.0 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
%Cpu25 : 38.5 us, 1.0 sy, 0.0 ni, 60.5 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
%Cpu26 : 28.9 us, 0.7 sy, 0.0 ni, 70.4 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
%Cpu27 : 28.2 us, 1.0 sy, 0.0 ni, 70.8 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
%Cpu28 : 20.4 us, 1.3 sy, 0.0 ni, 78.3 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
%Cpu29 : 25.8 us, 3.6 sy, 0.0 ni, 70.5 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
%Cpu30 : 31.3 us, 5.7 sy, 0.0 ni, 60.9 id, 0.0 wa, 0.0 hi, 2.0 si, 0.0 st
%Cpu31 : 35.4 us, 1.3 sy, 0.0 ni, 63.2 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
%Cpu32 : 39.6 us, 11.5 sy, 0.0 ni, 47.6 id, 0.0 wa, 0.0 hi, 1.4 si, 0.0 st
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PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
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z 高亮显示

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top - 11:44:36 up 1143 days, 12:40, 3 users, load average: 11.50, 11.27, 11.62
Tasks: 499 total, 1 running, 496 sleeping, 2 stopped, 0 zombie
%Cpu(s): 33.3 us, 2.2 sy, 0.0 ni, 64.4 id, 0.0 wa, 0.0 hi, 0.1 si, 0.0 st
KiB Mem : 13174609+total, 5321208 free, 75117384 used, 51307508 buff/cache
KiB Swap: 13421772+total, 13212457+free, 2093144 used. 51551960 avail Mem
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PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
31045	root	20	0	8779064	1.287g	37976	S	184.7	1.0	261217:19	java
13522	ams	20	0	3939980	2.035g	14352	S	132.3	1.6	21240:08	java
145136	root	20	0	23.567g	1.247g	15172	S	117.7	1.0	19354,55	java
118938	hive	20	0	12.889g	894384	13464	S	107.3	0.7	153215:48	java
15148	root	20	0	31.363g	6.489g	13700	S	2.4	5.2	4052:19	java
30044	root	20	0	12.620g	1.784g	29888	S	1.6	1.4	9611:40	java
30443	root	20	0	29.399g	4.154g	13748	S	1.6	3.3	1070:39	java
41028	root	20	0	7982736	418544	29864	S	1.6	0.3	7205:46	java
10	root	20	0	0	0	0	S	0.8	0.0	6181:13	rcu_sched
170	root	20	0	0	0	0	S	0.8	0.0	1560:03	ksoftirqd/32
32391	root	20	0	11.542g	1.224g	13152	S	0.8	1.0	827:46.47	java
33974	root	20	0	25.917g	4.096g	13740	S	0.8	3.3	284:22.63	java
45337	root	20	0	9170604	435288	7584	S	0.8	0.3	1093:56	java
49003	root	20	0	158148	2716	1576	R	0.8	0.0	0:06.14	top
67455	nginx	20	0	150316	30568	972	S	0.8	0.0	400:36.08	nginx
165158	root	20	0	9170932	444572	13068	S	0.8	0.3	563:26.66	java
165673	root	20	0	9306108	486576	13232	S	0.8	0.4	579:39.10	java
1	root	20	0	191288	3776	1916	S	0.0	0.0	321:12.72	systemd
2	root	20	0	0	0	0	S	0.0	0.0	1:14.24	kthreadd
3	root	20	0	0	0	0	S	0.0	0.0	30:41.34	ksoftirqd/0
5	root	0	-20	0	0	0	S	0.0	0.0	0:00.00	kworker/0:0H
8	root	rt	0	0	0	0	S	0.0	0.0	38:00.94	migration/0
9	root	20	0	0	0	0	S	0.0	0.0	0:00.00	rcu_bh
11	root	rt	0	0	0	0	S	0.0	0.0	8:17.44	watchdog/0
12	root	rt	0	0	0	0	S	0.0	0.0	9:01.87	watchdog/1
13	root	rt	0	0	0	0	S	0.0	0.0	36:23.67	migration/1
14	root	20	0	0	0	0	S	0.0	0.0	5:09.91	ksoftirqd/1
16	root	0	-20	0	0	0	S	0.0	0.0	0:00.00	kworker/1:0H
18	root	rt	0	0	0	0	S	0.0	0.0	7:45.56	watchdog/2
19	root	rt	0	0	0	0	S	0.0	0.0	44:21.89	migration/2

b 显示正在运行的进程

```
top - 11:45:22 up 1143 days, 12:41,  3 users,  load average: 15.24, 12.24, 11.93
Tasks: 503 total,  1 running, 500 sleeping,  2 stopped,  0 zombie
%Cpu(s): 37.0 us, 1.5 sy, 0.0 ni, 61.3 id, 0.0 wa, 0.0 hi, 0.1 si, 0.0 st
KiB Mem : 13174609+total, 5072564 free, 75126928 used, 51546612 buff/cache
KiB Swap: 13421772+total, 13212457+free, 2093144 used. 51542068 avail Mem
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PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
118938	hive	20	0	12.889g	894384	13464	S	109.3	0.7	153216:39	java
13522	ams	20	0	3939980	2.035g	14352	S	106.0	1.6	21240:54	java
31045	root	20	0	8779064	1.287g	37976	S	57.1	1.0	261217:53	java
13604	ams	20	0	22.188g	1.195g	13664	S	47.5	1.0	4275:33	java
145136	root	20	0	23.567g	1.247g	15172	S	45.2	1.0	19354:55	java
133995	root	20	0	9255284	1.214g	53628	S	43.9	1.0	249734:57	java
30443	root	20	0	29.399g	4.154g	13748	S	17.9	3.3	1070:42	java
33974	root	20	0	25.917g	4.096g	13740	S	4.7	3.3	284:23.42	java
15148	root	20	0	31.363g	6.489g	13700	S	2.3	5.2	4052:20	java
56522	root	20	0	3078676	353536	32396	S	2.3	0.3	0:32.51	java
30044	root	20	0	12.620g	1.784g	29888	S	1.3	1.4	9611:41	java
2027	mysql	20	0	5860156	957740	5668	S	0.7	0.7	14232:25	mysqld
64917	root	20	0	16.806g	446196	12816	S	0.7	0.3	741:39.01	java
145715	hive	20	0	49.763g	616748	32500	S	0.7	0.5	2171:58	java
10	root	20	0	0	0	0	S	0.3	0.0	6181:13	rcu_sched
160	root	20	0	0	0	0	S	0.3	0.0	2300:24	ksoftirqd/30
170	root	20	0	0	0	0	S	0.3	0.0	1560:03	ksoftirqd/32
190	root	20	0	0	0	0	S	0.3	0.0	1221:04	ksoftirqd/36
45337	root	20	0	9170604	435288	7584	S	0.3	0.3	1093:56	java
49003	root	20	0	158148	2716	1576	R	0.3	0.0	0:06.44	top
63184	root	20	0	10.204g	443412	12792	S	0.3	0.3	788:21.44	java
67456	nginx	20	0	150316	30556	964	S	0.3	0.0	398:18.93	nginx
81425	mapred	20	0	2996080	689940	24548	S	0.3	0.5	2618:03	java
135282	root	20	0	36.663g	1.199g	23620	S	0.3	1.0	15:27.58	java
162069	root	20	0	386752	46664	3960	S	0.3	0.0	87:12.44	python
165158	root	20	0	9170932	444572	13068	S	0.3	0.3	563:26.72	java
186315	root	20	0	9172984	491684	15108	S	0.3	0.4	57:09.95	java
1	root	20	0	191288	3776	1916	S	0.0	0.0	321:12.73	systemd
2	root	20	0	0	0	0	S	0.0	0.0	1:14.24	kthreadd
3	root	20	0	0	0	0	S	0.0	0.0	30:41.34	ksoftirqd/0

Shift+e 切换内存单位 KB->MB->GB->PB-TB->EB

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top - 14:29:19 up 1143 days, 15:25,  3 users,  load average: 10.87, 11.83, 11.40
Tasks: 497 total,   1 running, 494 sleeping,   2 stopped,   0 zombie
%Cpu(s): 16.9 us,  1.6 sy,  0.0 ni, 81.4 id,  0.0 wa,  0.0 hi,  0.1 si,  0.0 st
MiB Mem : 128658.2+total, 6020.875 free, 73454.75+used, 49182.68+buff/cache
MiB Swap: 131072.0+total, 129027.7+free, 2044.219 used. 50247.02+avail Mem
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PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	SWAP	COMMAND
118938	hive	20	0	12.889g	894380	13464	S	112.7	0.7	153397:09	0	java
59110	root	20	0	23.615g	1.266g	13752	S	99.1	1.0	20569,48	90756	java
82883	yarn	20	0	7801724	1.294g	24100	S	85.5	1.0	8617:30	0	java
31520	root	20	0	8779324	1.161g	37972	S	81.8	0.9	714614:39	0	java
13522	ams	20	0	3939980	2.035g	14352	S	19.1	1.6	21390:08	0	java
31045	root	20	0	8779064	1.287g	37976	S	6.4	1.0	261352:20	0	java
158319	root	20	0	158168	2932	1684	R	3.6	0.0	0:08.62	0	top
13604	ams	20	0	22.194g	1.196g	13672	S	1.8	1.0	4308:29	0	java
30443	root	20	0	29.399g	4.154g	13756	S	1.8	3.3	1082:12	0	java
41028	root	20	0	7982736	418544	29864	S	1.8	0.3	7208:24	0	java
45337	root	20	0	9170604	435280	7584	S	1.8	0.3	1094:13	39920	java
145136	root	20	0	23.616g	1.248g	13420	S	1.8	1.0	19356,57	104780	java
10	root	20	0	0	0	0	S	0.9	0.0	6181:53	0	rcu_sched
50	root	20	0	0	0	0	S	0.9	0.0	1175:35	0	ksoftirqd/8
160	root	20	0	0	0	0	S	0.9	0.0	2301:02	0	ksoftirqd/30
170	root	20	0	0	0	0	S	0.9	0.0	1561:19	0	ksoftirqd/32
67834	root	20	0	9170604	427588	7596	S	0.9	0.3	1103:23	47480	java
1	root	20	0	191288	3776	1916	S	0.0	0.0	321:15.26	8	systemd
2	root	20	0	0	0	0	S	0.0	0.0	1:14.25	0	kthreadd
3	root	20	0	0	0	0	S	0.0	0.0	30:41.52	0	ksoftirqd/0
5	root	0	-20	0	0	0	S	0.0	0.0	0:00.00	0	kworker/0:0H
8	root	rt	0	0	0	0	S	0.0	0.0	38:01.12	0	migration/0
9	root	20	0	0	0	0	S	0.0	0.0	0:00.00	0	rcu_bh
11	root	rt	0	0	0	0	S	0.0	0.0	8:17.51	0	watchdog/0
12	root	rt	0	0	0	0	S	0.0	0.0	9:01.92	0	watchdog/1
13	root	rt	0	0	0	0	S	0.0	0.0	36:23.86	0	migration/1
14	root	20	0	0	0	0	S	0.0	0.0	5:09.95	0	ksoftirqd/1
16	root	0	-20	0	0	0	S	0.0	0.0	0:00.00	0	kworker/1:0H
18	root	rt	0	0	0	0	S	0.0	0.0	7:45.59	0	watchdog/2
19	root	rt	0	0	0	0	S	0.0	0.0	44:22.11	0	migration/2

c 显示运行的命令行

```
top - 11:55:24 up 1143 days, 12:51, 3 users, load average: 16.21, 12.45, 11.85
Tasks: 503 total, 1 running, 500 sleeping, 2 stopped, 0 zombie
%Cpu(s): 31.6 us, 3.1 sy, 0.0 ni, 65.3 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
KiB Mem : 13174609+total, 3650696 free, 75890056 used, 52205348 buff/cache
KiB Swap: 13421772+total, 13212457+free, 2093144 used. 50778312 avail Mem
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t 显示Task/CPU-States详细信息，在1、2、3模式下显示不同

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top - 14:10:44 up 1143 days, 15:06,  3 users,  load average: 13.11, 12.41, 11.59
Tasks: 501 total,   3 running, 496 sleeping,   2 stopped,   0 zombie
%Cpu(s): 34.1/1.8   36[||||||||||||||||||||||||||||||||]
KiB Mem : 13174609+total, 2908396 free, 75086448 used, 53751252 buff/cache
KiB Swap: 13421772+total, 13212441+free, 2093312 used. 51583676 avail Mem
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PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
76216	root	20	0	23.558g	1.716g	7508	S	461.3	1.4	18418,35	java
31520	root	20	0	8779324	1.161g	37972	S	134.8	0.9	714581:50	java
13522	ams	20	0	3939980	2.035g	14352	S	108.3	1.6	21373:33	java
118938	hive	20	0	12.889g	894392	13464	S	104.8	0.7	153376:27	java
145136	root	20	0	23.616g	1.248g	13372	S	82.6	1.0	19356,43	java
59110	root	20	0	23.619g	1.266g	13636	S	82.2	1.0	20569,34	java
133995	root	20	0	9255284	1.213g	52428	S	49.6	1.0	249845:30	java
31045	root	20	0	8779064	1.287g	37976	S	35.7	1.0	261336:55	java
154043	root	20	0	3024988	352840	32412	S	30.9	0.3	0:36.59	java
53963	root	20	0	28.623g	5.493g	30976	S	6.1	4.4	84875:22	java
82387	yarn	20	0	7238948	3.466g	67492	S	6.1	2.8	5728:40	java
2027	mysql	20	0	5860156	957672	5600	S	5.2	0.7	14234:06	mysqld
53992	root	20	0	124688	23540	4232	S	3.9	0.0	7565:55	node_exporter
15148	root	20	0	31.364g	6.489g	13700	S	2.6	5.2	4056:36	java
170	root	20	0	0	0	0	R	0.9	0.0	1561:10	ksoftirqd/32
4896	root	20	0	148152	34988	3204	S	0.9	0.0	2566:04	filebeat
30044	root	20	0	12.620g	1.784g	29888	S	0.9	1.4	9614:36	java
30443	root	20	0	29.398g	4.154g	13756	S	0.9	3.3	1080:55	java
158319	root	20	0	158092	2700	1592	R	0.9	0.0	0:05.10	top
10	root	20	0	0	0	0	S	0.4	0.0	6181:49	rcu_sched
20	root	20	0	0	0	0	S	0.4	0.0	954:23.01	ksoftirqd/2
80	root	20	0	0	0	0	S	0.4	0.0	1741:35	ksoftirqd/14
160	root	20	0	0	0	0	S	0.4	0.0	2300:58	ksoftirqd/30
966	root	20	0	0	0	0	S	0.4	0.0	7:37.99	jbd2/sde3-8
4310	root	20	0	184992	37908	3160	S	0.4	0.0	9625:48	filebeat
13604	ams	20	0	22.477g	1.214g	13672	S	0.4	1.0	4305:43	java
33974	root	20	0	25.917g	4.096g	13740	S	0.4	3.3	286:56.25	java
67834	root	20	0	9170604	427588	7596	S	0.4	0.3	1103:22	java
83969	root	20	0	8057636	307932	29816	S	0.4	0.2	327:15.30	java
134362	root	20	0	36.663g	1.197g	23624	S	0.4	1.0	15:27.69	java

m 更加直观地显示内存信息

```
top - 14:13:23 up 1143 days, 15:09,  3 users,  load average: 10.43, 11.68, 11.47
Tasks: 499 total,   1 running, 496 sleeping,   2 stopped,   0 zombie
%Cpu(s): 29.7 us,  2.2 sy,  0.0 ni, 68.0 id,  0.0 wa,  0.0 hi,  0.2 si,  0.0 st
KiB Mem : 61.1/13174609+|||||||||||||||||||||||||||||||||]
KiB Swap:  1.6/13421772+[]|
```

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
31520	root	20	0	8779324	1.161g	37972	S	166.7	0.9	714586:25	java
145136	root	20	0	23.616g	1.248g	13376	S	144.2	1.0	19356,45	java
59110	root	20	0	23.619g	1.266g	13652	S	113.2	1.0	20569,37	java
118938	hive	20	0	12.889g	894388	13464	S	108.3	0.7	153379:26	java
133995	root	20	0	9255284	1.214g	52664	S	101.7	1.0	249847:32	java
82883	yarn	20	0	7801724	1.275g	24100	S	27.1	1.0	8616:55	java
76216	root	20	0	23.558g	1.716g	7508	S	19.5	1.4	18418,39	java
30443	root	20	0	29.400g	4.154g	13756	S	13.5	3.3	1081:06	java
81425	mapred	20	0	2996080	667728	24552	S	11.2	0.5	2619:19	java
13522	ams	20	0	3939980	2.035g	14352	S	9.2	1.6	21376:00	java
144241	root	20	0	73084	4580	3420	S	7.6	0.0	2336:12	openvpn
41028	root	20	0	7982736	418544	29864	S	6.6	0.3	7208:10	java
82387	yarn	20	0	7238948	3.466g	67584	S	5.9	2.8	5728:43	java
13604	ams	20	0	22.438g	1.201g	13672	S	2.0	1.0	4306:22	java
141322	hbase	20	0	6396412	3.147g	8452	S	2.0	2.5	9460:12	java
33974	root	20	0	25.917g	4.096g	13740	S	1.0	3.3	286:58.95	java
170	root	20	0	0	0	0	S	0.7	0.0	1561:11	ksoftirqd/32
2027	mysql	20	0	5860156	957672	5600	S	0.7	0.7	14234:08	mysqld
86728	root	20	0	12.616g	0.982g	30004	S	0.7	0.8	1491:31	java
131018	root	20	0	36.811g	377852	23392	S	0.7	0.3	14:11.88	java
158319	root	20	0	158092	2700	1592	R	0.7	0.0	0:06.18	top
10	root	20	0	0	0	0	S	0.3	0.0	6181:49	rcu_sched
20	root	20	0	0	0	0	S	0.3	0.0	954:23.15	ksoftirqd/2
160	root	20	0	0	0	0	S	0.3	0.0	2300:58	ksoftirqd/30
180	root	20	0	0	0	0	S	0.3	0.0	1216:55	ksoftirqd/34
190	root	20	0	0	0	0	S	0.3	0.0	1221:21	ksoftirqd/36
4896	root	20	0	148152	34912	3204	S	0.3	0.0	2566:04	filebeat
83969	root	20	0	8057636	307932	29816	S	0.3	0.2	327:15.45	java
84917	root	20	0	9928.7m	474180	7612	S	0.3	0.4	1131:29	java
134362	root	20	0	36.663g	1.197g	23624	S	0.3	1.0	15:27.89	java

M 按照内存从大到小排序

```
top - 14:15:41 up 1143 days, 15:11, 3 users, load average: 11.59, 10.97, 11.20
Tasks: 503 total, 1 running, 500 sleeping, 2 stopped, 0 zombie
%Cpu(s): 14.6 us, 1.5 sy, 0.0 ni, 83.7 id, 0.0 wa, 0.0 hi, 0.2 si, 0.0 st
KiB Mem : 13174609+total, 2773736 free, 75374544 used, 53597816 buff/cache
KiB Swap: 13421772+total, 13212441+free, 2093312 used. 51295740 avail Mem
```

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
26842	hdfs	20	0	11.922g	7.385g	7228	S	0.0	5.9	2453:36	java
15148	root	20	0	31.364g	6.489g	13700	S	2.6	5.2	4056:43	java
53963	root	20	0	28.623g	5.493g	30976	S	0.0	4.4	84880:46	java
30443	root	20	0	29.399g	4.154g	13756	S	30.8	3.3	1081:15	java
33974	root	20	0	25.917g	4.096g	13740	S	2.6	3.3	287:01.11	java
82387	yarn	20	0	7239012	3.482g	67732	S	0.0	2.8	5728:56	java
141322	hbase	20	0	6396412	3.147g	8452	S	0.0	2.5	9460:14	java
57466	root	20	0	50.278g	2.626g	7508	S	0.0	2.1	43343,29	java
13522	ams	20	0	3939980	2.035g	14352	S	59.0	1.6	21378:02	java
30044	root	20	0	12.620g	1.784g	29888	S	0.0	1.4	9614:43	java
76216	root	20	0	23.558g	1.716g	7508	S	2.6	1.4	18418,42	java
69933	root	20	0	15.274g	1.647g	7632	S	0.0	1.3	3431:04	java
4203	root	20	0	42.921g	1.443g	2944	S	0.0	1.1	1643:56	java
59030	root	20	0	23.628g	1.288g	14088	S	0.0	1.0	28655,06	java
31045	root	20	0	8779064	1.287g	37976	S	0.0	1.0	261341:35	java
59110	root	20	0	23.619g	1.266g	13672	S	2.6	1.0	20569,39	java
82883	yarn	20	0	7801724	1.263g	24100	S	0.0	1.0	8617:02	java
145136	root	20	0	23.616g	1.248g	13376	S	0.0	1.0	19356,48	java
32391	root	20	0	11.542g	1.224g	13152	S	0.0	1.0	828:03.10	java
133995	root	20	0	9255284	1.214g	52908	S	74.4	1.0	249849:26	java
13604	ams	20	0	22.433g	1.200g	13672	S	0.0	1.0	4306:34	java
135282	root	20	0	36.663g	1.199g	23620	S	0.0	1.0	15:39.25	java
134362	root	20	0	36.663g	1.197g	23624	S	0.0	1.0	15:28.07	java
31520	root	20	0	8779324	1.161g	37972	S	74.4	0.9	714590:21	java
86728	root	20	0	12.616g	0.982g	30004	S	0.0	0.8	1491:31	java
2027	mysql	20	0	5860156	957672	5600	S	2.6	0.7	14234:09	mysqld
118938	hive	20	0	12.889g	894380	13464	S	0.0	0.7	153381:58	java
81425	mapred	20	0	2996080	664092	24552	S	0.0	0.5	2619:20	java
145715	hive	20	0	49.763g	618756	32500	S	0.0	0.5	2173:00	java
48276	root	20	0	8426268	516244	30288	S	0.0	0.4	2481:53	java

P 按照CPU使用率从大到小排序

```
top - 14:16:24 up 1143 days, 15:12,  3 users,  load average: 12.11, 11.13, 11.24
Tasks: 503 total,  1 running, 500 sleeping,  2 stopped,  0 zombie
%Cpu(s): 17.1 us,  1.2 sy,  0.0 ni, 81.5 id,  0.0 wa,  0.0 hi,  0.1 si,  0.0 st
KiB Mem : 13174609+total, 2671144 free, 75374464 used, 53700492 buff/cache
KiB Swap: 13421772+total, 13212441+free, 2093312 used. 51295352 avail Mem
```

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
59110	root	20	0	23.619g	1.266g	13680	S	120.0	1.0	20569,39	java
118938	hive	20	0	12.889g	894384	13464	S	115.0	0.7	153382:45	java
31520	root	20	0	8779324	1.161g	37972	S	78.8	0.9	714591:41	java
76216	root	20	0	23.558g	1.716g	7508	S	75.0	1.4	18418,43	java
13522	ams	20	0	3939980	2.035g	14352	S	65.0	1.6	21378:26	java
144241	root	20	0	73084	4580	3420	S	18.8	0.0	2336:20	openvpn
82387	yarn	20	0	7239012	3.493g	67788	S	15.0	2.8	5729:00	java
133995	root	20	0	9255284	1.214g	52920	S	7.5	1.0	249849:51	java
10	root	20	0	0	0	0	S	1.2	0.0	6181:50	rcu_sched
170	root	20	0	0	0	0	S	1.2	0.0	1561:13	ksoftirqd/32
2027	mysql	20	0	5860156	957672	5600	S	1.2	0.7	14234:10	mysqld
13604	ams	20	0	22.424g	1.200g	13672	S	1.2	1.0	4306:35	java
15148	root	20	0	31.364g	6.489g	13700	S	1.2	5.2	4056:45	java
30443	root	20	0	29.399g	4.154g	13756	S	1.2	3.3	1081:18	java
86728	root	20	0	12.616g	0.982g	30004	S	1.2	0.8	1491:31	java
135282	root	20	0	36.663g	1.199g	23620	S	1.2	1.0	15:39.30	java
157239	root	20	0	73084	4588	3420	S	1.2	0.0	135:13.85	openvpn
158319	root	20	0	158092	2724	1596	R	1.2	0.0	0:07.73	top
1	root	20	0	191288	3776	1916	S	0.0	0.0	321:15.14	systemd
2	root	20	0	0	0	0	S	0.0	0.0	1:14.25	kthreadd
3	root	20	0	0	0	0	S	0.0	0.0	30:41.51	ksoftirqd/0
5	root	0	-20	0	0	0	S	0.0	0.0	0:00.00	kworker/0:0H
8	root	rt	0	0	0	0	S	0.0	0.0	38:01.10	migration/0
9	root	20	0	0	0	0	S	0.0	0.0	0:00.00	rcu_bh
11	root	rt	0	0	0	0	S	0.0	0.0	8:17.48	watchdog/0
12	root	rt	0	0	0	0	S	0.0	0.0	9:01.91	watchdog/1
13	root	rt	0	0	0	0	S	0.0	0.0	36:23.85	migration/1
14	root	20	0	0	0	0	S	0.0	0.0	5:09.95	ksoftirqd/1
16	root	0	-20	0	0	0	S	0.0	0.0	0:00.00	kworker/1:0H
18	root	rt	0	0	0	0	S	0.0	0.0	7:45.58	watchdog/2

f 进入字段管理模式，上下键选中对应的字段

Fields Management for window 1:Def, whose current sort field is %CPU

Navigate with Up/Dn, Right selects for move then <Enter> or Left commits,
'd' or <Space> toggles display, 's' sets sort. Use 'q' or <Esc> to end!

* PID	= Process Id	WCHAN = Sleeping in Function
* USER	= Effective User Name	Flags = Task Flags <sched.h>
* PR	= Priority	CGROUPS = Control Groups
* NI	= Nice Value	SUPGIDS = Supp Groups IDs
* VIRT	= Virtual Image (KiB)	SUPGRPS = Supp Groups Names
* RES	= Resident Size (KiB)	TGID = Thread Group Id
* SHR	= Shared Memory (KiB)	ENVIRON = Environment vars
* S	= Process Status	vMj = Major Faults delta
* %CPU	= CPU Usage	vMn = Minor Faults delta
* %MEM	= Memory Usage (RES)	USED = Res+Swap Size (KiB)
* TIME+	= CPU Time, hundredths	nsIPC = IPC namespace Inode
* COMMAND	= Command Name/Line	nsMNT = MNT namespace Inode
PPID	= Parent Process pid	nsNET = NET namespace Inode
UID	= Effective User Id	nsPID = PID namespace Inode
RUID	= Real User Id	nsUSER = USER namespace Inode
RUSER	= Real User Name	nsUTS = UTS namespace Inode
SGID	= Saved User Id	
SUSER	= Saved User Name	
GID	= Group Id	
GROUP	= Group Name	
PGRP	= Process Group Id	
TTY	= Controlling Tty	
TPGID	= Tty Process Grp Id	
SID	= Session Id	
nTH	= Number of Threads	
P	= Last Used Cpu (SMP)	
TIME	= CPU Time	
SWAP	= Swapped Size (KiB)	
CODE	= Code Size (KiB)	
DATA	= Data+Stack (KiB)	
nMaj	= Major Page Faults	
nMin	= Minor Page Faults	
nDRT	= Dirty Pages Count	

f 进入字段管理模式，右键选中j进入上下移动模式

Fields Management for window 1:Def, whose current sort field is %CPU

Navigate with Up/Dn, Right selects for move then <Enter> or Left commits,
'd' or <Space> toggles display, 's' sets sort. Use 'q' or <Esc> to end!

* PID	= Process Id	WCHAN = Sleeping in Function
* USER	= Effective User Name	Flags = Task Flags <sched.h>
* PR	= Priority	CGROUPS = Control Groups
* NI	= Nice Value	SUPGIDS = Supp Groups IDs
* VIRT	= Virtual Image (KiB)	SUPGRPS = Supp Groups Names
* RES	= Resident Size (KiB)	TGID = Thread Group Id
* SHR	= Shared Memory (KiB)	ENVIRON = Environment vars
* S	= Process Status	vMj = Major Faults delta
* %CPU	= CPU Usage	vMn = Minor Faults delta
* %MEM	= Memory Usage (RES)	USED = Res+Swap Size (KiB)
* TIME+	= CPU Time, hundredths	nsIPC = IPC namespace Inode
* COMMAND	= Command Name/Line	nsMNT = MNT namespace Inode
PPID	= Parent Process pid	nsNET = NET namespace Inode
UID	= Effective User Id	nsPID = PID namespace Inode
RUID	= Real User Id	nsUSER = USER namespace Inode
RUSER	= Real User Name	nsUTS = UTS namespace Inode
SUID	= Saved User Id	
SUSER	= Saved User Name	
GID	= Group Id	
GROUP	= Group Name	
PGRP	= Process Group Id	
TTY	= Controlling Tty	
TPGID	= Tty Process Grp Id	
SID	= Session Id	
nTH	= Number of Threads	
P	= Last Used Cpu (SMP)	
TIME	= CPU Time	
SWAP	= Swapped Size (KiB)	
CODE	= Code Size (KiB)	
DATA	= Data+Stack (KiB)	
nMaj	= Major Page Faults	
nMin	= Minor Page Faults	
nDRT	= Dirty Pages Count	

f 进入字段管理模式，右键选中,然后上下移动到指定位置

Fields Management for window 1:Def, whose current sort field is %CPU

Navigate with Up/Dn, Right selects for move then <Enter> or Left commits,
'd' or <Space> toggles display, 's' sets sort. Use 'q' or <Esc> to end!

* PID	= Process Id	WCHAN = Sleeping in Function
* USER	= Effective User Name	Flags = Task Flags <sched.h>
* PR	= Priority	CGROUPS = Control Groups
* NI	= Nice Value	SUPGIDS = Supp Groups IDs
* VIRT	= Virtual Image (KiB)	SUPGRPS = Supp Groups Names
* RES	= Resident Size (KiB)	TGID = Thread Group Id
* SHR	= Shared Memory (KiB)	ENVIRON = Environment vars
* S	= Process Status	vMj = Major Faults delta
* %CPU	= CPU Usage	vMn = Minor Faults delta
* %MEM	= Memory Usage (RES)	USED = Res+Swap Size (KiB)
* TIME+	= CPU Time, hundredths	nsIPC = IPC namespace Inode
SWAP	= Swapped Size (KiB)	nsMNT = MNT namespace Inode
* COMMAND	= Command Name/Line	nsNET = NET namespace Inode
PPID	= Parent Process pid	nsPID = PID namespace Inode
UID	= Effective User Id	nsUSER = USER namespace Inode
RUID	= Real User Id	nsUTS = UTS namespace Inode
RUSER	= Real User Name	
SUID	= Saved User Id	
SUSER	= Saved User Name	
GID	= Group Id	
GROUP	= Group Name	
PGRP	= Process Group Id	
TTY	= Controlling Tty	
TPGID	= Tty Process Grp Id	
SID	= Session Id	
nTH	= Number of Threads	
P	= Last Used Cpu (SMP)	
TIME	= CPU Time	
CODE	= Code Size (KiB)	
DATA	= Data+Stack (KiB)	
nMaj	= Major Page Faults	
nMin	= Minor Page Faults	
nDRT	= Dirty Pages Count	

f 进入字段管理模式，然后按左键取消选中，按d设置为显示(字段加*)

Fields Management for window 1:Def, whose current sort field is %CPU

Navigate with Up/Dn, Right selects for move then <Enter> or Left commits,
'd' or <Space> toggles display, 's' sets sort. Use 'q' or <Esc> to end!

* PID	= Process Id	WCHAN = Sleeping in Function
* USER	= Effective User Name	Flags = Task Flags <sched.h>
* PR	= Priority	CGROUPS = Control Groups
* NI	= Nice Value	SUPGIDS = Supp Groups IDs
* VIRT	= Virtual Image (KiB)	SUPGRPS = Supp Groups Names
* RES	= Resident Size (KiB)	TGID = Thread Group Id
* SHR	= Shared Memory (KiB)	ENVIRON = Environment vars
* S	= Process Status	vMj = Major Faults delta
* %CPU	= CPU Usage	vMn = Minor Faults delta
* %MEM	= Memory Usage (RES)	USED = Res+Swap Size (KiB)
* TIME+	= CPU Time, hundredths	nsIPC = IPC namespace Inode
* SWAP	= Swapped Size (KiB)	nsMNT = MNT namespace Inode
* COMMAND	= Command Name/Line	nsNET = NET namespace Inode
PPID	= Parent Process pid	nsPID = PID namespace Inode
UID	= Effective User Id	nsUSER = USER namespace Inode
RUID	= Real User Id	nsUTS = UTS namespace Inode
RUSER	= Real User Name	
SUID	= Saved User Id	
SUSER	= Saved User Name	
GID	= Group Id	
GROUP	= Group Name	
PGRP	= Process Group Id	
TTY	= Controlling Tty	
TPGID	= Tty Process Grp Id	
SID	= Session Id	
nTH	= Number of Threads	
P	= Last Used Cpu (SMP)	
TIME	= CPU Time	
CODE	= Code Size (KiB)	
DATA	= Data+Stack (KiB)	
nMaj	= Major Page Faults	
nMin	= Minor Page Faults	
nDRT	= Dirty Pages Count	