

Networking task

Get me IP address of particular domain (guvi.in) How do I find my CPU/memory usage of my server? Test the connectivity between 2 nodes? I have deployed an application in guvi.com:9000, and logs shows my app is running, but I'm unable to view the page. Check whether my port is open or not ?

Get the IP address of a domain (guvi.in)

```
[ec2-user@ip-172-31-20-131 ~]$ nslookup guvi.in
Server:                172.31.0.2
Address:                172.31.0.2#53

Non-authoritative answer:
Name:   guvi.in
Address: 172.67.70.207
Name:   guvi.in
Address: 104.26.4.88
Name:   guvi.in
Address: 104.26.5.88
Name:   guvi.in
Address: 2606:4700:20::681a:558
Name:   guvi.in
Address: 2606:4700:20::ac43:46cf
Name:   guvi.in
Address: 2606:4700:20::681a:458
```

Find CPU/Memory usage of your server:

```
[ec2-user@ip-172-31-20-131 ~]$ top
top - 09:45:33 up 5 min, 1 user, load average: 0.01, 0.16, 0.11
Tasks: 100 total, 1 running, 99 sleeping, 0 stopped, 0 zombie
%Cpu(s): 0.0 us, 0.0 sy, 0.0 ni,100.0 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
MiB Mem : 949.5 total, 601.7 free, 127.9 used, 220.0 buff/cache
MiB Swap: 0.0 total, 0.0 free, 0.0 used. 684.4 avail Mem
```

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
1	root	20	0	105192	16496	10160	S	0.0	1.7	0:00.87	systemd
2	root	20	0	0	0	0	S	0.0	0.0	0:00.00	kthreadd
3	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	rcu_gp
4	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	rcu_par_gp
5	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	slub_flushwq
6	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	netns
7	root	20	0	0	0	0	I	0.0	0.0	0:00.01	kworker/0:0-events
8	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	kworker/0:0H-events_highpri
9	root	20	0	0	0	0	I	0.0	0.0	0:00.11	kworker/u30:0-events_unbound
10	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	mm_percpu_wq
11	root	20	0	0	0	0	I	0.0	0.0	0:00.00	rcu_tasks_kthread
12	root	20	0	0	0	0	I	0.0	0.0	0:00.00	rcu_tasks_rude_kthread
13	root	20	0	0	0	0	I	0.0	0.0	0:00.00	rcu_tasks_trace_kthread
14	root	20	0	0	0	0	S	0.0	0.0	0:00.03	ksoftirqd/0
15	root	20	0	0	0	0	I	0.0	0.0	0:00.03	rcu_preempt
16	root	rt	0	0	0	0	S	0.0	0.0	0:00.00	migration/0
17	root	20	0	0	0	0	I	0.0	0.0	0:00.01	kworker/0:1-cgroup_destroy
18	root	20	0	0	0	0	S	0.0	0.0	0:00.00	cpuhp/0
20	root	20	0	0	0	0	S	0.0	0.0	0:00.00	kdevtmpfs
21	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	inet_frag_wq
22	root	20	0	0	0	0	S	0.0	0.0	0:00.00	kauditd
23	root	20	0	0	0	0	S	0.0	0.0	0:00.00	khungtaskd
24	root	20	0	0	0	0	S	0.0	0.0	0:00.00	oom_reaper
25	root	20	0	0	0	0	I	0.0	0.0	0:00.05	kworker/u30:1-events_unbound
26	root	20	0	0	0	0	I	0.0	0.0	0:00.00	kworker/u30:2-writeback
27	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	writeback
28	root	20	0	0	0	0	S	0.0	0.0	0:00.00	kcompactd0
29	root	39	19	0	0	0	S	0.0	0.0	0:00.00	khugepaged
30	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	kintegrityd
31	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	kblockd
32	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	blkcg_punt_bio
33	root	20	0	0	0	0	S	0.0	0.0	0:00.00	xen-balloon
34	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	tpm_dev_wq
35	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	md
36	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	edac-poller
37	root	-51	0	0	0	0	S	0.0	0.0	0:00.00	watchdogd

Memory usage :

```
[ec2-user@ip-172-31-20-131 ~]$ free -h
```

	total	used	free	shared	buff/cache	available
Mem:	949Mi	127Mi	601Mi	0.0Ki	220Mi	684Mi
Swap:	0B	0B	0B			

Test the connectivity between 2 nodes:

```
[ec2-user@ip-172-31-20-131 ~]$ ping guvi.io
PING guvi.io (172.67.133.41) 56(84) bytes of data.
64 bytes from 172.67.133.41 (172.67.133.41): icmp_seq=1 ttl=53 time=9.81 ms
64 bytes from 172.67.133.41 (172.67.133.41): icmp_seq=2 ttl=53 time=9.88 ms
64 bytes from 172.67.133.41 (172.67.133.41): icmp_seq=3 ttl=53 time=9.85 ms
64 bytes from 172.67.133.41 (172.67.133.41): icmp_seq=4 ttl=53 time=9.88 ms
64 bytes from 172.67.133.41 (172.67.133.41): icmp_seq=5 ttl=53 time=10.2 ms
64 bytes from 172.67.133.41 (172.67.133.41): icmp_seq=6 ttl=53 time=9.88 ms
64 bytes from 172.67.133.41 (172.67.133.41): icmp_seq=7 ttl=53 time=14.1 ms
```

Check if a port is open:

```
[ec2-user@ip-172-31-20-131 ~]$ nc -zv guvi.com 9000
Ncat: Version 7.93 ( https://nmap.org/ncat )
Ncat: Connection to 172.67.146.154 failed: TIMEOUT.
Ncat: Trying next address...
Ncat: Connection to 104.21.79.166 failed: TIMEOUT.
Ncat: Trying next address...
Ncat: Connection to 2606:4700:3031::6815:4fa6 failed: Network is unreachable.
Ncat: Trying next address...
Ncat: Network is unreachable.
```

No we cant communicate with this port.