

THINK CYBER CYBERIUM ARENA SIMULATOR TRAINING

XE103 – LINUX FUNDAMENTALS

TITLE: LINUX OPERATING SYSTEM INFORMATION

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A Simple bash script displaying a summary of my Kali Linux OS information and refreshing every 10 seconds. The script was written using Nano shell environment.

BASH Script

```
#!/bin/bash
```

```
while [ 1==1 ] #condition for maintaining a loop sequence
```

do

```
echo "Linux Version: $(uname -a | awk '{print $2,$3}');
```

```
echo "Private IP: $(ifconfig|grep inet|head -n1|awk '{print $2}')
```

```
echo -e "Public IP: $(curl -s ifconfig.co)"
```

```
echo "Default Gateway: $(route -n | grep UG | awk '{print $2}')
```

```
echo "Disk Size: $(fdisk -l|grep Disk|head -n1|awk '{print $3$4}'|tr "," " ")"
```

```
echo "Disk Size: $(df -H | grep sda | awk '{print $2}')
```

```
echo "Used Disk Space: $(df -H|grep sda|awk '{print $3}')
```

```
echo "Available Disk Space: $(df -H | grep sda | awk '{print $4}')
```

```
echo "Top 5 Directories By Size: "
```

echo "-----"

```
echo "$(ls / -lSah | grep root | head -5 | awk '{print $5,$9}')
```

```
echo "CPU Usage Statistics:"
```

echo "-----"

```
echo -e "$(mpstat)"
```

sleep 10

clear

done

SCREEN SHOTS from nano shell environment

```
GNU nano 5.9 /LNF-Project.sh
#!/bin/bash

while [ 1=1 ]
do
echo "Linux Version: $(uname -a |awk '{print $2,$3}');"
echo "Private IP: $(ifconfig|grep inet|head -n1|awk '{print $2}')"
echo -e "Public IP: $(curl -s ifconfig.co)"
echo "Default Gateway: $(route -n|grep UG |awk '{print $2}')"
echo "Disk Size: $(fdisk -l|grep Disk|head -n1|awk '{print $3$4}'|tr " " " ")"
echo "Disk Size: $(df -H|grep sda|awk '{print $2}')"
echo "Used Disk Space: $(df -H|grep sda|awk '{print $3}')"
echo "Available Disk Space: $(df -H|grep sda|awk '{print $4}')"
echo "Top 5 Directories By Size: "
echo "_____ "
echo "$ls / -lSah |grep root|head -5|awk '{print $5,$9}')"
echo "CPU Usage Statistics:"
echo "_____ "
echo -e "$(mpstat)"
sleep 10
clear
done
```

SCREEN SHOTS of script running on the terminal refreshing every 10 seconds

```
(root@kali)-[/home/kali]
# ./LNF-Project.sh

Linux Version: kali 5.14.0-kali4-amd64
Private IP: 192.168.198.134
Public IP: 102.67.19.209
Default Gateway: 192.168.198.2
Disk Size: 80GiB
Disk Size: 83G
Used Disk Space: 63G
Available Disk Space: 16G
Top 5 Directories By Size:
_____
36K .
36K ..
16K lost+found
12K etc
4.0K boot
CPU Usage Statistics:
_____
Linux 5.14.0-kali4-amd64 (kali)      08/23/2022      _x86_64_      (4 CPU)

06:38:46 AM  CPU    %usr   %nice    %sys %iowait    %irq   %soft  %steal  %guest  %gnice   %idle
06:38:46 AM  all     0.79    0.00    2.07   0.19    0.00   0.15   0.00   0.00   0.00   96.79
```

```

Linux Version: kali 5.14.0-kali4-amd64
Private IP: 192.168.198.134
Public IP: 102.67.19.209
Default Gateway: 192.168.198.2
Disk Size: 80GiB
Disk Size: 83G
Used Disk Space: 63G
Available Disk Space: 16G
Top 5 Directories By Size:
36K .
36K ..
16K lost+found
12K etc
4.0K boot
CPU Usage Statistics:
Linux 5.14.0-kali4-amd64 (kali)      08/23/2022      _x86_64_      (4 CPU)

06:38:57 AM  CPU      %usr    %nice    %sys %iowait    %irq    %soft    %steal    %guest    %gnice   %idle
06:38:57 AM  all      0.79     0.00     2.07    0.19     0.00     0.15     0.00     0.00     0.00    96.79

```

```

Linux Version: kali 5.14.0-kali4-amd64
Private IP: 192.168.198.134
Public IP: 102.67.19.209
Default Gateway: 192.168.198.2
Disk Size: 80GiB
Disk Size: 83G
Used Disk Space: 63G
Available Disk Space: 16G
Top 5 Directories By Size:
36K .
36K ..
16K lost+found
12K etc
4.0K boot
CPU Usage Statistics:
Linux 5.14.0-kali4-amd64 (kali)      08/23/2022      _x86_64_      (4 CPU)

06:39:18 AM  CPU      %usr    %nice    %sys %iowait    %irq    %soft    %steal    %guest    %gnice   %idle
06:39:18 AM  all      0.78     0.00     2.07    0.20     0.00     0.15     0.00     0.00     0.00    96.79

```

```

Linux Version: kali 5.14.0-kali4-amd64
Private IP: 192.168.198.134
Public IP: 102.67.19.209
Default Gateway: 192.168.198.2
Disk Size: 80GiB
Disk Size: 83G
Used Disk Space: 63G
Available Disk Space: 16G
Top 5 Directories By Size:
36K .
36K ..
16K lost+found
12K etc
4.0K boot
CPU Usage Statistics:
Linux 5.14.0-kali4-amd64 (kali)      08/23/2022      _x86_64_      (4 CPU)

06:39:29 AM  CPU      %usr    %nice    %sys %iowait    %irq    %soft    %steal    %guest    %gnice   %idle
06:39:29 AM  all      0.78     0.00     2.07    0.20     0.00     0.15     0.00     0.00     0.00    96.80

```

```

Linux Version: kali 5.14.0-kali4-amd64
Private IP: 192.168.198.134
Public IP: 80.248.2.5
Default Gateway: 192.168.198.2
Disk Size: 80GiB
Disk Size: 83G
Used Disk Space: 63G
Available Disk Space: 16G
Top 5 Directories By Size:
36K .
36K ..
16K lost+found
12K etc
4.0K boot
CPU Usage Statistics:
Linux 5.14.0-kali4-amd64 (kali)      08/23/2022      _x86_64_      (4 CPU)

06:39:39 AM  CPU    %usr  %nice    %sys %iowait    %irq   %soft  %steal  %guest  %gnice   %idle
06:39:39 AM  all     0.78   0.00    2.06   0.20    0.00   0.15   0.00   0.00   0.00   96.80

```

```

Linux Version: kali 5.14.0-kali4-amd64
Private IP: 192.168.198.134
Public IP: 80.248.2.5
Default Gateway: 192.168.198.2
Disk Size: 80GiB
Disk Size: 83G
Used Disk Space: 63G
Available Disk Space: 16G
Top 5 Directories By Size:
36K .
36K ..
16K lost+found
12K etc
4.0K boot
CPU Usage Statistics:
Linux 5.14.0-kali4-amd64 (kali)      08/23/2022      _x86_64_      (4 CPU)

06:39:51 AM  CPU    %usr  %nice    %sys %iowait    %irq   %soft  %steal  %guest  %gnice   %idle
06:39:51 AM  all     0.78   0.00    2.06   0.20    0.00   0.15   0.00   0.00   0.00   96.81

```

```

Linux Version: kali 5.14.0-kali4-amd64
Private IP: 192.168.198.134
Public IP: 197.253.30.154
Default Gateway: 192.168.198.2
Disk Size: 80GiB
Disk Size: 83G
Used Disk Space: 63G
Available Disk Space: 16G
Top 5 Directories By Size:
36K .
36K ..
16K lost+found
12K etc
4.0K boot
CPU Usage Statistics:
Linux 5.14.0-kali4-amd64 (kali)      08/23/2022      _x86_64_      (4 CPU)

06:40:01 AM  CPU    %usr  %nice    %sys %iowait    %irq   %soft  %steal  %guest  %gnice   %idle
06:40:01 AM  all     0.77   0.00    2.06   0.20    0.00   0.15   0.00   0.00   0.00   96.81

```