

Ex no: 2

Date:02-03-2024

System Monitoring Using Shell Script

Aim:

To write a Shellsript to to display system information.

Program:

```
#!/bin/bash

# Sample script written for Part 4 of the RHCE series
# This script will return the following set of system
information: # -Hostname information:

echo -e "\e[31;43m***** HOSTNAME INFORMATION
*****\e[0m" hostnamectl echo ""

# -File system disk space usage:

echo -e "\e[31;43m***** FILE SYSTEM DISK SPACE USAGE
*****\e[0m" df -h echo

""

# -Free and used memory in the system:

echo -e "\e[31;43m ***** FREE AND USED MEMORY
*****\e[0m" free echo

""

# -System uptime and load:

echo -e "\e[31;43m***** SYSTEM UPTIME AND LOAD *****\e[0m"
uptime
echo ""
```

-Logged-in users:

echo -e "\e[31;43m***** CURRENTLY LOGGED-IN USERS

*****\e[0m" who echo

""

-Top 5 processes as far as memory usage is concerned

echo -e "\e[31;43m***** TOP 5 MEMORY-CONSUMING PROCESSES

*****\e[0m" ps -eo %mem,%cpu,comm --sort=-%mem | head -n 6

echo "" echo -e

"\e[1;32mDone.\e[0m"

Output:

```
(shanthosh@kali)~[os_lab]
$ ./sysmonitor.sh
-e*****HOSTMAN INFORMATION*****
Static hostname: kali
Icon name: computer-vm
Chassis: vm
Machine ID: 64ad420d92944fbab63ee07afc0b5ca
Boot ID: f7a79e25812d440298548fd88795dc83
Virtualization: oracle
Operating System: Kali GNU/Linux Rolling
Kernel: Linux 6.6.15-amd64
Architecture: x86_64
Hardware Vendor: innotek GmbH
Hardware Model: VirtualBox
Firmware Version: VirtualBox
Firmware Date: Fri 2006-12-01
Firmware Age: 17y 6month

-e*****FILE SYSTEM DISK SPACE USAGE*****


| Filesystem | Size | Used | Avail | Use% | Mounted on     |
|------------|------|------|-------|------|----------------|
| udev       | 1.9G | 0    | 1.9G  | 0%   | /dev           |
| tmpfs      | 393M | 1.1M | 392M  | 1%   | /run           |
| /dev/sda1  | 58G  | 19G  | 36G   | 35%  | /              |
| tmpfs      | 2.0G | 0    | 2.0G  | 0%   | /dev/shm       |
| tmpfs      | 5.0M | 0    | 5.0M  | 0%   | /run/lock      |
| tmpfs      | 393M | 140K | 393M  | 1%   | /run/user/1000 |



-e*****FREE AND USED MEMORY*****


|       | total   | used   | free    | shared | buff/cache | available |
|-------|---------|--------|---------|--------|------------|-----------|
| Mem:  | 4019152 | 974620 | 2197772 | 9736   | 1091836    | 3044532   |
| Swap: | 998396  | 0      | 998396  |        |            |           |



-e*****SYSTEM UPTIME AND LOAD*****
07:26:56 up 40 min, 1 user, load average: 0.06, 0.07, 0.20

-e*****CURRENTLY LOGGED IN USERS*****
shanthosh tty7 2024-06-01 06:47 (:0)

-e*****TOP 5 MEMORY CONSUMING PROCESSES*****


| %MEM | %CPU | COMMAND   |
|------|------|-----------|
| 3.6  | 3.1  | Xorg      |
| 3.0  | 0.7  | xfwm4     |
| 2.5  | 0.4  | qterminal |
| 1.4  | 0.0  | xfdesktop |
| 1.3  | 0.1  | Thunar    |


-e DONE.
```

Result:

Hence the shell script program to monitor the system status has been successfully executed and completed.