

# How To Check Health Status of a Linux System

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This is a small, light-weight script run successfully on RHEL and Oracle Linux 8/7/6, CentOS, Ubuntu 20/18/16 x86 and x86\_64-bit architectures.


These tests were run on virtual machines. which makes use of native Linux utilities to get the required details and doesn't need much space.

This script could be added as a cron job to regularly get system details triggered via an email as desired.


#### Details of the script:

Name Of the Script  health-check.sh

Build To Run On  Oracle Linux, RHEL 8/7/ , CentOS, Ubuntu20/18/16 x86/x86\_64 architecture


Who Can Run This Script  Root User Or sudo user


Depends On  "sysstat" package & Other Native Commands


Output  This Script would dump the details on the console

#### Following checks would be performed:

 Mounted File Systems

 Read-only File System If Any

 File Systems Disk Usage


 I-node Usage


 Zombie Processes If Found

 RAM Utilization

 SWAP Utilization

 Processor Utilization

 Current Load Average

 Most recent reboot and shutdown stamps

 Top 5 memory & CPU consuming resources

**Download and run the script to get the basic health check of a Linux system.**



health-check.sh

Change the file permissions to executable if required. You could run the below command to turn on the execute bit for root user:

**# chmod u+x health-check.sh**

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## Output Report on Linux VM console

```
[root@ol179 opc]# ./health.sh
*****
System Health Status
*****
Hostname : ol179.sub04081216290.autoscale.oraclecn.com
Operating System : Oracle Linux Server 7.9
Kernel Version : 5.4.17-2136.311.6.1.el7uek.x86_64
OS Architecture : 64 Bit OS
System Uptime : up by 9 minutes
Current System Date & Time : Wed 30 Nov 2022 09:06:44 AM GMT

Checking For Read-only File System[s]
-----
....No read-only file system[s] found.

Checking For Currently Mounted File System[s]
-----
/dev/sda3 on / type xfs (rw,relatime,seclabel,attr2,inode64,logbufs=8,logbsize=32k,noquota)

Checking For Disk Usage On Mounted File System[s]
-----
( 0-85% = OK/HEALTHY, 85-95% = WARNING, 95-100% = CRITICAL )
-----
Mounted File System[s] Utilization (Percentage Used):
/dev/sda1 /boot/efi 4% ----- OK/HEALTHY
/dev/sda3 / 10% ----- OK/HEALTHY

Checking For Zombie Processes
-----
No zombie processes found on the system.
```

```
Checking For INode Usage
-----
( 0-85% = OK/HEALTHY, 85-95% = WARNING, 95-100% = CRITICAL )
-----
INode Utilization (Percentage Used):
Filesystem Mounted IUse% (Inode Percentage details not available)
/dev/sda3 / 1% ----- OK/HEALTHY

Checking SWAP Details
-----
Total Swap Memory in MiB : 8192, in GiB : 8
Swap Free Memory in MiB : 8192, in GiB : 8

Checking For Processor Utilization
-----
Current Processor Utilization Summary :
09:06:44 AM CPU %usr %nice %sys %iowait %irq %soft %steal %guest %gnice %idle
09:06:44 AM all 4.38 0.00 1.68 0.18 0.00 0.03 0.22 0.00 0.00 93.52

Checking For Load Average
-----
Current Load Average : 0.15, 0.16, 0.08
```

#### Most Recent 3 Reboot Events

reboot system boot 5.4.17-2136.311. Wed Nov 30 08:57 - 09:06 (00:09)

#### Most Recent 3 Shutdown Events

No shutdown events are recorded.

#### Top 5 Memory Resource Hog Processes

%MEM	PID	PPID	USER	STAT	COMMAND
0.6	2277	2275	root	S1	/usr/libexec/oracle-cloud-agent/plugins/osms/osms-agent
0.2	12788	1	root	S1	/opt/unified-monitoring-agent/embedded/bin/ruby /opt/unified-monitoring-agent/unified-monitoring-agent.log --daemon /var/run/unified-monitoring-agent/unified-monitoring-agent
0.2	12825	12788	root	S	/opt/unified-monitoring-agent/embedded/bin/ruby -Eascii-8bit /opt/unified-monitoring-agent/unified-monitoring-agent.log --daemon /var/run/unified-monitoring-agent/unified-monitoring-agent
0.2	1253	1	root	Ss1	/usr/bin/python2 -Es /usr/sbin/firewalld --nofork --nopid
0.1	2186	2051	oracle-+	S1	/usr/libexec/oracle-cloud-agent/plugins/gomon/gomon

#### Top 5 CPU Resource Hog Processes

%CPU	PID	PPID	USER	STAT	COMMAND
1.3	12825	12788	root	S	/opt/unified-monitoring-agent/embedded/bin/ruby -Eascii-8bit:ascii-8bit /opt/unified-monitoring-agent/unified-monitoring-agent.log --daemon /var/run/unified-monitoring-agent/unified-monitoring-agent
0.4	2277	2275	root	S1	/usr/libexec/oracle-cloud-agent/plugins/osms/osms-agent
0.3	1	0	root	Ss	/usr/lib/systemd/systemd --switched-root --system --deserialize 21
0.2	1218	1	root	Ss	/sbin/rngd -f
0.1	1253	1	root	Ss1	/usr/bin/python2 -Es /usr/sbin/firewalld --nofork --nopid


NOTE:- If any of the above fields are marked as "blank" or "NONE" or "UNKNOWN" or "Not Available" or "Not Specified" that means either there is no value present in the system for these fields, otherwise that value may not be available, or suppressed since there was an error in fetching details.


-----  
[root@oel70-0001 ~]#

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