Event - Step: Master Boot Record

```
chmod 400 key-pari-name.pem
ssh -i /path/key-pair-name.pem instance-user-name@instance-IPv4-address
```

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|---|---|
| vmstat | (virtual memory statistics) - part of sysstat package. Command used to obtain information about swapped memory, free memory, system processes, paging, interrupts, block I/O, disk, and CPU scheduling. |
| ps | Check the status of active processes on a system, such as main memory usage as a percentage of the total in the system, resident set size in KB and virtual set size in KB. |
| top | A real-time view of running processes in Linux and displays kernel-managed tasks. |
| atop | Historical logging of memory usage on a per process basis, as well as CPU, network usage, etc. |
| sar | Part of sysstat, over all system details, including memory, CPU, interrupts, I/O, etc. |

**Master Boot Record**

```
lsblk
dd if=/dev/xvda of=/tmp/mbr.bin bs=512 count=1
        create a backup of the Master Boot Record (MBR) from a disk or storage device. to tmp/mbr.bin with size 512
file -s /tmp/mbr2.bin
        for quickly identifying the type of a file and gathering additional information about its contents
hexdump -C /tmp/mbr2.bin
        read content from /tmp/mbr.bin file and display it in a format
```

```
[root@ip-172-31-19-80 ec2-user]# lsblk
NAME    MAJ:MIN RM SIZE RO TYPE MOUNTPOINT
xvda    202:0    0   8G  0 disk
└─xvda1 202:1    0   8G  0 part /
[root@ip-172-31-19-80 ec2-user]# dd if=/dev/xvda of=/tmp/mbr2.bin bs=512 count=1
1+0 records in
1+0 records out
512 bytes (512 B) copied, 0.000203498 s, 2.5 MB/s
[root@ip-172-31-19-80 ec2-user]#
[root@ip-172-31-19-80 ec2-user]#
[root@ip-172-31-19-80 ec2-user]#
[root@ip-172-31-19-80 ec2-user]# file -s /tmp/mbr2.bin
/tmp/mbr2.bin: x86 boot sector; partition 1: ID=0xee, starthead 0, startsector 1, 16777215 sectors, extended partition table (last)\011, code offset
0x63
[root@ip-172-31-19-80 ec2-user]#
[root@ip-172-31-19-80 ec2-user]#
[root@ip-172-31-19-80 ec2-user]#
[root@ip-172-31-19-80 ec2-user]# hexdump -C /tmp/mbr2.bin
00000000  eb 63 90 00 00 00 00 00  00 00 00 00 00 00 00 00  |.c..............|
00000010  00 00 00 00 00 00 00 00  00 00 00 00 00 00 00 00  |................|
*
00000050  00 00 00 00 00 00 00 00  00 00 00 80 00 08 00 00  |................|
00000060  00 00 00 00 ff fa 90 90  f6 c2 80 74 05 f6 c2 70  |...........t...p|
00000070  74 02 b2 80 ea 79 7c 00  00 31 c0 8e d8 8e d0 bc  |t....y|..1......|
00000080  00 20 fb a0 64 7c 3c ff  74 02 88 c2 52 be 05 7c  |. ..d|<.t..R..||
00000090  b4 41 bb aa 55 cd 13 5a  52 72 3d 81 fb 55 aa 75  |.A..U..ZRr=..U.u|
000000a0  37 83 e1 01 74 32 31 c0  89 44 04 40 88 44 ff 89  |7...t21..D.@.D..|
000000b0  44 02 c7 04 10 00 66 8b  1e 5c 7c 66 89 5c 08 66  |D.....f..\|f.\.f|
000000c0  8b 1e 60 7c 66 89 5c 0c  c7 44 06 00 70 b4 42 cd  |..`|f.\..D..p.B.|
000000d0  13 72 05 bb 00 70 eb 76  b4 08 cd 13 73 0d 5a 84  |.r...p.v....s.Z.|
000000e0  d2 0f 83 de 00 be 85 7d  e9 82 00 66 0f b6 c6 88  |.......}...f....|
000000f0  64 ff 40 66 89 44 04 0f  b6 d1 c1 e2 02 88 e8 88  |d.@f.D..........|
00000100  f4 40 89 44 08 0f b6 c2  c0 e8 02 66 89 04 66 a1  |.@.D.......f..f.|
00000110  60 7c 66 09 c0 75 4e 66  a1 5c 7c 66 31 d2 66 f7  |`|f..uNf.\|f1.f.|
00000120  34 88 d1 31 d2 66 f7 74  04 3b 44 08 7d 37 fe c1  |4..1.f.t.;D.}7..|
00000130  88 c5 30 c0 c1 e8 02 08  c1 88 d0 5a 88 c6 bb 00  |..0........Z....|
00000140  70 8e c3 31 db b8 01 02  cd 13 72 1e 8c c3 60 1e  |p..1......r...`.|
00000150  b9 00 01 8e db 31 f6 bf  00 80 8e c6 fc f3 a5 1f  |.....1..........|
00000160  61 ff 26 5a 7c be 80 7d  eb 03 be 8f 7d e8 34 00  |a.&Z|..}....}.4.|
00000170  be 94 7d e8 2e 00 cd 18  eb fe 47 52 55 42 20 00  |..}.......GRUB .|
00000180  47 65 6f 6d 00 48 61 72  64 20 44 69 73 6b 00 52  |Geom.Hard Disk.R|
00000190  65 61 64 00 20 45 72 72  6f 72 0d 0a 00 bb 01 00  |ead. Error......|
000001a0  b4 0e cd 10 ac 3c 00 75  f4 c3 00 00 00 00 00 00  |.....<.u........|
000001b0  00 00 00 00 00 00 00 00  00 00 00 00 00 00 00 00  |................|
000001c0  02 00 ee ff ff ff 01 00  00 00 ff ff ff 00 00 00  |................|
000001d0  00 00 00 00 00 00 00 00  00 00 00 00 00 00 00 00  |................|
*
000001f0  00 00 00 00 00 00 00 00  00 00 00 00 00 00 55 aa  |..............U.|
00000200
[root@ip-172-31-19-80 ec2-user]#
```