

Ramdisk

Creating a ramdisk for fast read/write and comparing it with HDD/SSD drive using dd:

```
# Creating a directory to mount RAM disk
mkdir /mnt/ramdisk

# mounting ramdisk
sudo mount -t tmpfs -o size=1G tmpfs /mnt/ramdisk

# Dropping caches before testing for fair disk results
sudo sh -c 'echo 3 > /proc/sys/vm/drop_caches'

# Running write speed test on RAM disk
sudo dd if=/dev/zero of=/mnt/ramdisk/testfile bs=1M count=1024 conv=fdatasync status=progress

# Running write speed test on HDD/SSD disk
sudo dd if=/dev/zero of=/root/testfile bs=1M count=1024 conv=fdatasync status=progress

# Running read speed test on RAM disk
sudo dd if=/mnt/ramdisk/testfile of=/dev/null bs=1M status=progress

# Running read speed test on HDD/SSD disk
sudo dd if=/root/testfile of=/dev/null bs=1M status=progress
```

More information (IOPS, latency) using fio:

```
# Installing fio
sudo apt install fio

# Basic write test (both paths):
fio --name=write --directory=/mnt/ramdisk --size=1G --bs=1M --rw=write --direct=1 --numjobs=1
```

Cleaning up:

```
# Cleaning up
rm /mnt/ramdisk/testfile /root/testfile

# unmounting ramdisk
```

```
sudo umount /mnt/ramdisk
```

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