

Using LVM Snapshots



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Overview



LVM snapshots

Write-amplification

Creating a snapshot for the thin-volume



Snapshots

LVM snapshots are point in time copies of your live data. Using CoW technology only the changed data is stored in the snapshot



Write-amplification

Multiply snapshots of the same LVM volume can cause "write-amplification". When live data changes the CoW means changes need to be written to each snapshot. Snapshots of thin-volumes overcome this storing changes in the meta-data



```
$ sudo lvcreate -L 100m -s -n data_snap vg1/thin_lv
```

Creating Snapshots

The snapshot can be created at a size needed to support only the changed data whilst the snapshot exists



Demo



The demonstrations illustrates the creation of a file system and snapshotting the data



```
$ ansible-doc lvol
```

Creating Snapshots Using Ansible

This is part of the lvol module don't forget the valuable documentation and searching for EXAMPLES



Snapshot Creation

site.yml

```
- name: Create Snapshot  
  lvol:  
    vg: vg1  
    lv: thin-lv  
    snapshot: data_snap  
    size: 100m
```


Demo



Let's remind ourselves of the power of the documentation in Ansible



Overview



Snapshots are point in time copies of LVM volumes

Using thin-volumes provide better performance where multiple snapshots are required

Snapshot creation employs the -s option to lvcreate

Delete the snapshots when they are no longer required



Migrating Data Within Volume Groups

