Extending LVM Storage on Linux VM to 15TB

This document outlines the steps to extend the LVM volume `/dev/mapper/vg01-1decpack` to 15TB.

1. Add New Disk (15 TB) to the VM

- If you're using a cloud environment (e.g., OCI, GCP, VMware), first attach a new 15 TB disk to the VM.

2. Identify the New Disk

Run:

```
lsblk
```

- Look for the new disk, usually named /dev/sdb, /dev/sdc, etc.

3. Create a Physical Volume (PV)

Replace /dev/sdX with your new disk name:

```
pvcreate /dev/sdX
```

4. Extend the Volume Group

Assuming the Volume Group is named `vg01`:

```
vgextend vg01 /dev/sdX
```

5. Extend the Logical Volume

Extend `vg01-1decpack` to 15 TB (15360 GB):

```
lvextend -L 15T /dev/mapper/vg01-1decpack
```

Or to use all available space:

```
lvextend -l +100%FREE /dev/mapper/vg01-1decpack
```

6. Resize the Filesystem

If using ext4:

```
resize2fs /dev/mapper/vg01-1decpack
```

If using xfs:

```
xfs_growfs /var/netwitness/logdecoder/packetdb
```

7. Verify the Changes

Run:

```
df -h
lvdisplay /dev/mapper/vg01-1decpack
```

Note: Ensure you have a valid backup and are performing these steps in a maintenance window if this is a production system.