Docker & LVM

https://docs.docker.com/storage/storagedriver/device-mapper-driver/#configure-direct-lvm-mode-for-production

Install prerequisites

```
apt-get install -y lvm2 thin-provisioning-tools && reboot
```

Set variables

```
export device=/dev/xvdf
export vgname=docker
export lvname=thinpool
```

Create physical Volume

```
pvcreate $device
```

Create volume group

```
vgcreate $vgname $device
```

Create logical volumes =====

```
lvcreate --wipesignatures y -n ${lvname} ${vgname} -l 95%VG
lvcreate --wipesignatures y -n ${lvname}meta ${vgname} -l 1%VG
```

Convert logical volumes to thinpools

```
sudo lvconvert -y --zero n -c 512K --thinpool ${vgname}/${lvname} --
poolmetadata ${vgname}/${lvname}meta
```

Create thinpool monitoring policy

```
mkdir -p /etc/lvm/profile/
tee /etc/lvm/profile/${vgname}-${lvname}.profile << EOF
activation {
  thin_pool_autoextend_threshold=80
  thin_pool_autoextend_percent=20
}
EOF

lvchange --metadataprofile ${vgname}-${lvname} ${vgname}/${lvname}
lvs -o+seg_monitor
```

Add Storage Options to /etc/docker/daemon.json

```
{
    "storage-driver": "devicemapper",
    "storage-opts": [
    "dm.thinpooldev=/dev/mapper/docker-thinpool-tpool",
      "dm.use_deferred_removal=true",
      "dm.use_deferred_deletion=true",
      "dm.mountopt=mand"
    ]
}
```

“-tpool” important on debian systems.

From:
http://fortytwo.adurias.org/ - **Fortytwo - Answer to the Ultimate Question of Life, the Universe, and Everything**

Permanent link:
http://fortytwo.adurias.org/docker-lvm?rev=1518452054

Last update: **2018/02/12 17:14**