

Virtual Memory Adjustment

1. Create a swap file

```
fallocate -l 4G /swapfile
```

2. Set permissions and initialize the swap header

```
chmod 600 /swapfile  
mkswap /swapfile
```

3. Enable swap and verify status

```
swapon /swapfile  
swapon --show  
free -h
```

4. Create a systemd service to enable automatic mounting

```
tee /etc/systemd/system/enable-swapfile.service >/dev/null <<'EOF'  
[Unit]  
Description=Enable swapfile via swapon  
After=local-fs.target  
Requires=local-fs.target  
  
[Service]  
Type=oneshot  
ExecStart=/sbin/swapon /swapfile  
RemainAfterExit=yes  
  
[Install]  
WantedBy=multi-user.target  
EOF
```

5. Enable the service at boot

```
systemctl daemon-reload  
systemctl enable enable-swapfile.service
```