

# How to uninstall the NVMe patch and restore original kernel modules

This section explains how to uninstall the NVMe patch and restore the original kernel modules.

If you need to revert to the original configuration, you can uninstall the patch and restore the original kernel modules.

To uninstall the NVMe patch under CentOS, execute the command:

```
rpm -e nvmmf_host_fast_io_fail_patch_4.18.0-305.7.1.el8_4-1.0-1.x86_64
```

To uninstall the NVMe patch under Ubuntu, execute the command:

```
sudo apt-get remove nvmmf-host-fast-io-fail-patch-5.4.0-91-generic
```

## To restore the original kernel modules

1. Define bash variables:

```
KVER=$(uname -r)
SAVED_DIR="/root/tmp/orig_`$KVER`"
MODULES_DIR="/lib/modules/`$KVER`/kernel/drivers/nvme/host"
```

2. Restore original kernel modules from the saved tar:

```
cd ${MODULES_DIR}
rm -f *.ko*
tar -xvf ${SAVED_DIR}/"$KVER"_kos.tar
```

3. Regenerate dependencies and initrd:

```
/sbin/depmod -ae -F /boot/System.map-$(uname -r)
dracut --force -H
```

4. If nvme (pci) module cannot be unloaded, reboot the machine:

```
reboot
```

Otherwise, unload the patched modules and load the original versions:

```
modprobe -r nvme-tcp
modprobe -r nvme-rdma
modprobe -r nvme-fc
modprobe -r nvme-fabrics
modprobe -r nvme
modprobe -r nvme-core
modprobe nvme-core
modprobe nvme
modprobe nvme-fabrics
modprobe nvme-tcp
modprobe nvme-rdma
```

