

Table Of Contents

Table Of Contents 1

Task: Add a module called foo 2

Task: List all loaded modules 2

Task: Remove a module called foo 3

[Home](#) > [Faq](#) > [Debian / Ubuntu](#)

Howto: Linux add remove a Linux kernel modules / drivers

Posted by [Vivek Gite](#) <vivek@nixcraft.com>



[1]

Q. How do I add or remove hardware device driver from running Linux kernel?

A. Linux comes with modprobe command to add and remove modules from the Linux Kernel.

=> Under MS-Windows you use term device driver.

=> Under Linux you use term modules

=> The Linux kernel has a modular design.

=> At boot time, only a minimal resident kernel is loaded into memory.

=> If you add new hardware you need to add driver aka modules

=> modprobe intelligently adds or removes a module from the Linux kernel

=> Usually modules stored in the module directory /lib/modules/\$(uname -r)

```
$ ls /lib/modules/$(uname -r)
```

Output:

```
boot  initrd  misc          modules.ccwmap  modules.ieee1394map  modules.isapnpmap  modul
build kernel  modules.alias  modules.dep      modules.inputmap    modules.pcimap      modul
```

Task: Add a module called foo

Type the command as root user:

```
# modprobe foo
```

Task: List all loaded modules

Use lsmod command to show the status of modules in the Linux Kernel:

```
# lsmod
```

Output:

Module	Size	Used by
smbfs	75465	0
md5	5953	1
ipv6	284193	10
ipt_TOS	4033	2
iptable_mangle	4545	1
ip_conntrack_ftp	74801	0
ip_conntrack_irc	74033	0
ipt_REJECT	8897	43
ipt_LOG	8513	2
ipt_limit	4033	6
iptable_filter	4673	1
ipt_multiport	3521	4
ipt_state	3393	16
ip_conntrack	54297	3 ip_conntrack_ftp, ip_conntrack_irc, ipt_state
ip_tables	21825	8 ipt_TOS, iptable_mangle, ipt_REJECT, ipt_LOG, ipt_limit, iptable

```
i2c_dev      13889  0
i2c_core     28865  1 i2c_dev
dm_mirror    32721  0
dm_mod       68609  1 dm_mirror
button       9313   0
battery     11465   0
ac           6985   0
ohci_hcd     24529   0
ehci_hcd     33989   0
tg3          109381  0
floppy       66065   0
ext3         137937  2
jbd          69105   1 ext3
sata_svw     10053   3
libata       78345   1 sata_svw
sd_mod       19393   4
scsi_mod     141457  2 libata,sd_mod
```

Task: Remove a module called foo

Pass -r option to modprobe command to remove a module

```
# modprobe -r foo
```

You can also use rmmod command, which is simple program to remove a module from the Linux Kernel

```
# rmmod foo
```

4000+ howtos and counting! Want to read more Linux / UNIX howtos, tips and tricks? Subscribe to our [daily email](#) newsletter or [weekly newsletter](#) to make sure you don't miss a single tip/tricks. Alternatively, subscribe via [RSS/XML](#) feed.

Article printed from Frequently Asked Questions About Linux / UNIX: <http://www.cyberciti.biz/faq/>

URL to article: <http://www.cyberciti.biz/faq/add-remove-list-linux-kernel-modules/>

URLs in this post:

[1] Image: <http://www.cyberciti.biz/faq/faq/category/linux/>

Copyright © 2006-2010 [nixCraft](#). All rights reserved. This print / pdf version is for personal non-commercial use only. More details <http://www.cyberciti.biz/tips/copyright>.