

Security: How do I disable USB?

How do I disable USB?

Short answer: Two options:

1. BIOS configuration (with or without password protection)
2. kernel configuration (with or without password protection)

Detail answer:

BIOS configuration

Several BIOS configuration utilities offer the option to disable the USB system. The manuals can be referred to, or the hardware vendor can be contacted to find out if that option is available.

Most BIOSes do provide an option to disable USB.

```
[root@node003 ~]# dmesg | grep -i usb
Command line: BOOT_IMAGE=vmlinuz initrd=initrd nousb
ip=10.141.0.3:10.141.255.254:10.141.255.254:255.255.0.0 BOOTIF=01-48-5b-39-c9-9b-3c
DMI: System manufacturer System Product Name/M4A88TD-V EVO/USB3, BIOS 1015
03/31/2010
Kernel command line: BOOT_IMAGE=vmlinuz initrd=initrd nousb
ip=10.141.0.3:10.141.255.254:10.141.255.254:255.255.0.0 BOOTIF=01-48-5b-39-c9-
9b-3c
usbcore: USB support disabled
```

Kernel Configuration

If the system BIOS does not offer that option, or if the system administrator would like an additional safeguard against BIOS misconfiguration, then the USB subsystem subsystem can be disabled altogether by adding the 'nousb' option to the kernel comand line of GRUB:

For the head node:

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Edit `/etc/grub.conf` and append `nosub` to the end of each kernel line:

Change

```
title Red Hat Enterprise Linux Server (2.6.32-431.17.1.el6.x86_64)
  root (hd0,0)
  kernel (hd0,0)/vmlinuz-2.6.32-431.17.1.el6.x86_64
root=UUID=0f2962af-fa73-4543-9c0e-f999237b7025 selinux=0
rdblacklist=nouveau
crashkernel=auto SYSFONT=latarcyrheb-sun16 LANG=en_US.UTF-8
KEYTABLE=us
  initrd /initramfs-2.6.32-431.17.1.el6.x86_64.img
```

to

```
title Red Hat Enterprise Linux Server (2.6.32-431.17.1.el6.x86_64)
  root (hd0,0)
  kernel (hd0,0)/vmlinuz-2.6.32-431.17.1.el6.x86_64
root=UUID=0f2962af-fa73-4543-9c0e-f999237b7025 selinux=0
rdblacklist=nouveau
crashkernel=auto SYSFONT=latarcyrheb-sun16 LANG=en_US.UTF-8
KEYTABLE=us nosub
  initrd /initramfs-2.6.32-431.17.1.el6.x86_64.img
```

For the nodes the `kernelparameters` property of the software image must be modified:

```
[root@demo ~]#
[root@demo ~]# cmsg
[demo]% softwareimage use default-image
[demo->softwareimage[default-image]]% get kernelparameters
rdblacklist=nouveau
[demo->softwareimage[default-image]]% set kernelparameters
"rdblacklist=nouveau nosub"
[demo->softwareimage*[default-image*]]% commit
```

The changes described in the preceding require a system reboot.

Password protection can be considered by the system administrator:

- to protect access to the BIOS configuration menu
- to protect the GRUB menu

Unique solution ID: #1202

Author: Panos Labropoulos

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