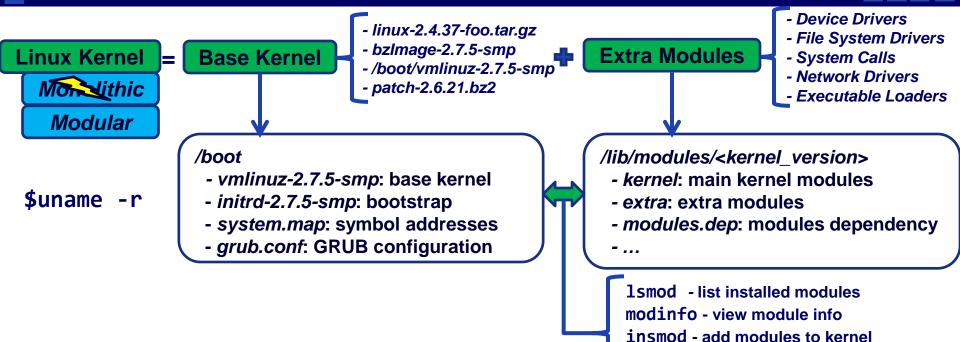


# LPIC-2 TRAINING COURSE

Topic 201: Linux Kernel

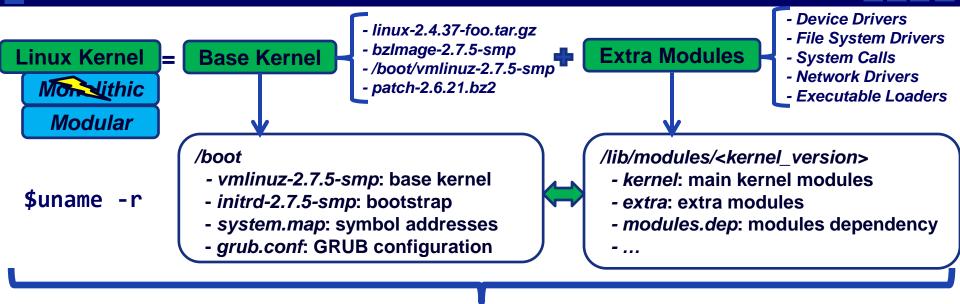
### **Linux Kernel**



rmmod - remove modules from kernel

modprobe - add/remove modules

### **Linux Kernel**



### **Upgrading Kernel**

### From compiled package

- Download suitable compiled kernel
  - Architecture (x86, x86 64, IA64...)
  - Expansion (SMP, Bigmem, PAE...)
- Install new kernel with rpm or dpkg rpm -ivh /path/to/kernel-x.x.x.rpm
  - Install, not upgrade
- Alter the **grub.conf** to change default kernel

#### From source code

- Download kernel source & patches from kernel.org
- 2. Unpack kernel to /usr/src
- 3. Patch the kernel using dowloaded patches with **patch**
- 4. Compiling & installing kernel
- 5. Create an initial ramdisk with mkinitrd
- 6. Alter the **grub.conf** to change default kernel



## **BACKUP SLIDES**

### Install/Upgrade kernel from source

### Required RPMs:

- kernel-source-\*
- glibc-kernheaders-\*
- glibc-devel-\*
- cpp-\*
- binutils-\*
- gcc-\*
- tcl-\*
- tk-\*

# Install/Upgrade kernel from source (cont')

- Steps to compile & install
  - make mrproper
  - make xconfig
  - make dep
  - make clean
  - make bzImage
  - make modules
  - make modules\_install
  - make install