

Automatic device detection

- /dev-directory contains entries for all available devices
- managed by special daemon (udev) in connection with the kernel
- /dev mounted on temporary file system, maintained by kernel
- relies on probing devices at boot time and notifications about inserting and removing devices
- udevd started at boot time, listens to uevents from driver core
- depmod compiles a list of devices each device driver can handle

Sequence of events when new device inserted:

- The driver core (usb, pci ...) reads device id and other attributes
- Kernel sends event to udevd, setting the MODALIAS environment variable
- udev handles event and loads module via modprobe \$MODALIAS.
- udev can take further action (eg setting permissions) via rules in `/etc/udev/rules.d`