

Using kernel modules to support many different devices and setups

Kernel

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graph TD; A[Kernel] --> B["Intermediate root filesystem (initramfs)"]; B --> C["Final root filesystem"]; B --> D["Regular system startup"];
```

Intermediate root filesystem (initramfs)

No special driver required to access it
Contains all the modules to access the specific storage and filesystem of the device
Load such modules
and mount the new root filesystem
Switch to the new root filesystem (switch_root)

Final root filesystem

Regular system startup

The modules in the initramfs are updated every time a kernel upgrade is available.