

# Kernel Configuration

## From BLFS

### Use Linux Control Group to Limit the Resource Usage

```

General setup --->
  [*] Control Group support --->
[CGROUPS]
  [*] Memory controller
[MEMCG]
  [*] Cpuset controller
[CPUSETS]

```

### Include Firmware Blobs in the Kernel Image

```

Device Drivers --->
  Generic Driver Options --->
    Firmware loader --->
      <*>          Firmware loading facility
[FW_LOADER]
  (xx/aa.bin xx/bb.bin)  Build named firmware blobs into the kernel
binary
                                                                ...
[EXTRA_FIRMWARE]
  (/lib/firmware)       Firmware blobs root directory
                                                                ...
[EXTRA_FIRMWARE_DIR]

```

```

echo CONFIG_EXTRA_FIRMWARE='''${( cd /lib/firmware; echo amdgpu/* )}''' >>
.config
make oldconfig

```

### cryptsetup-2.7.0

cryptsetup is used to set up transparent encryption of block devices using the kernel crypto API.

```

Device Drivers --->
  [*] Multiple devices driver support (RAID and LVM) --->
[MD]

```

```
<*/M> Device mapper support
[BLK_DEV_DM]
<*/M> Crypt target support
[DM_CRYPT]

-*- Cryptographic API --->
[CRYPTO]
  Block ciphers --->
    <*/M> AES (Advanced Encryption Standard)
[CRYPTO_AES]
    # For tests:
    <*/M> Twofish
[CRYPTO_TWOFISH]
    Length-preserving ciphers and modes --->
    <*/M> XTS (XOR Encrypt XOR with ciphertext stealing)
[CRYPTO_XTS]
    Hashes, digests, and MACs --->
    <*/M> SHA-224 and SHA-256
[CRYPTO_SHA256]
    Userspace interface --->
    <*/M> Symmetric key cipher algorithms
[CRYPTO_USER_API_SKCIPHER]
```

## iptables-1.8.10

iptables is a userspace command line program used to configure the Linux 2.4 and later kernel packet filtering ruleset.

```
[*] Networking support --->
[NET]
  Networking options --->
    [*] Network packet filtering framework (Netfilter) --->
[NETFILTER]
    [*] Advanced netfilter configuration
[NETFILTER_ADVANCED]
    Core Netfilter Configuration --->
    <*/M> Netfilter connection tracking support
[NF_CONNTRACK]
    <*/M> Netfilter Xtables support (required for ip_tables)
    ...
[NETFILTER_XTABLES]
    <*/M> LOG target support
[NETFILTER_XT_TARGET_LOG]
    IP: Netfilter Configuration --->
    <*/M> IP tables support (required for filtering/masq/NAT)
    ...
[IP_NF_IPTABLES]
```

## btrfs-progs-6.7.1

The btrfs-progs package contains administration and debugging tools for the B-tree file system (btrfs).

```
File systems --->
  <*/M> Btrfs filesystem support
[BTRFS_FS]
```

## dosfstools-4.2

The dosfstools package contains various utilities for use with the FAT family of file systems.

```
File systems --->
  DOS/FAT/EXFAT/NT Filesystems --->
    < */M> MSDOS fs support
[MSDOS_FS]
    <*/M> VFAT (Windows-95) fs support
[VFAT_FS]
```

====

From:  
<https://www.gamu.kr/dokuwiki/> -

Permanent link:  
<https://www.gamu.kr/dokuwiki/linuxfromscratch/kernelconfiguration?rev=1713199671>

Last update: **2024/04/15 16:47**

