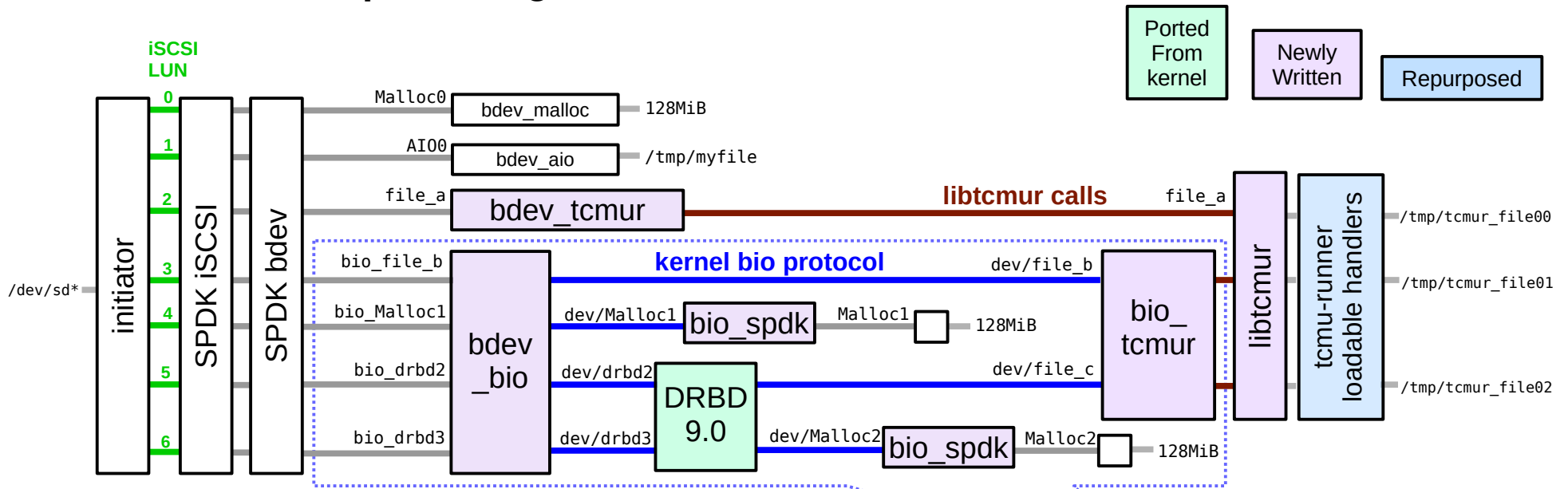


SPDK+DRBD Example Configuration

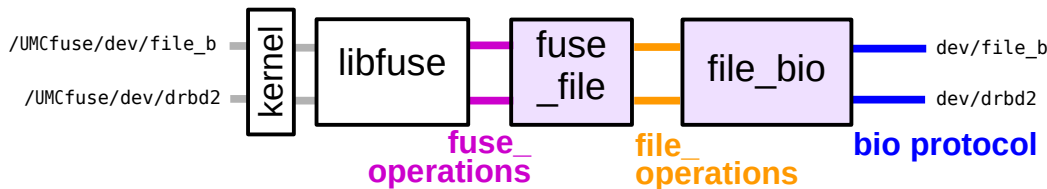


Module **bdev_tcmur** translates SPDK bdev requests into libtcmur calls
 Module **bdev_bio** translates SPDK bdev requests into kernel bio-protocol requests
 Module **bio_spdk** translates kernel bio-protocol requests into SPDK bdev requests

iscsi_drbd_tcmur.conf.sh.in configures all seven LUNs shown above (via JSON RPC)
iscsi_drbd.conf.sh.in configures LUNs 0, 4, and 6 only (no tcmu-runner) (via JSON RPC)
iscsi_tcmur.conf.in configures LUNs 0, 1, and 2 only (no DRBD/bio) (via `spdk_iscsi -c`)

Kernel code and bio support depend on
MTE: Multithreaded Event Engine
UMC: Usermode Compatibility
 (Linux 2.6.32 emulated kernel functions)

bio devices are also accessible via nodes under a FUSE mount, e.g.



```
$ ls -ld `find /UMCfuse`
dr-xr-xr-x 4 root root          3 Sep 26 10:25 /UMCfuse
dr-xr-xr-x 9 root root          8 Sep 26 10:26 /UMCfuse/dev
-rw-rw---- 1 root root 1073672192 Sep 26 10:26 /UMCfuse/dev/drbd2
-rw-rw---- 1 root root 134176768 Sep 26 10:26 /UMCfuse/dev/drbd3
-rw-rw---- 1 root root 1073741824 Sep 26 10:26 /UMCfuse/dev/file_b
-rw-rw---- 1 root root 1073741824 Sep 26 10:26 /UMCfuse/dev/file_c
-rw-rw---- 1 root root 134217728 Sep 26 10:26 /UMCfuse/dev/Malloc1
-rw-rw---- 1 root root 134217728 Sep 26 10:26 /UMCfuse/dev/Malloc2
...
$ mount /UMCfuse/dev/Malloc1 /mnt/x
```

Script to download repositories and build the server in an empty directory

wget https://raw.githubusercontent.com/DavidButterfield/spdk/tcmu-runner/BUILD_spdk_drbd.sh

URL: https://raw.githubusercontent.com/DavidButterfield/spdk/tcmu-runner/spdk_drbd.pdf

(Not drawn to scale)
 David Butterfield 27-Sep-2019