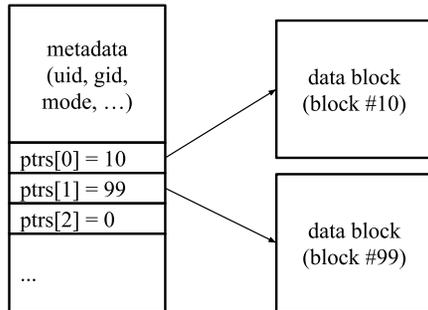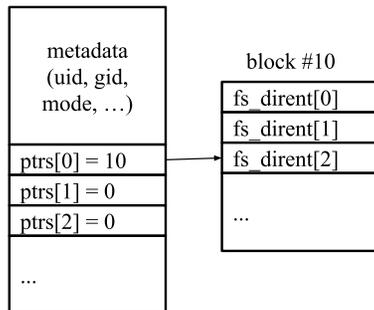OSI handout week10.b

1. egos-rwfs visualization
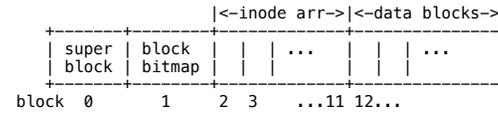
inode (file):

inode (directory):

2. egos-rwfs block layout

```
                      |<-inode arr->|<-data blocks->|
+-------+--------+---+---+-----------+---+---+-------+
| super | block  |   |   |   ...     |   |   |  ...  |
| block | bitmap |   |   |           |   |   |       |
+-------+--------+---+---+-----------+---+---+-------+
  block  0         1    2  3    ...11 12...
```

3. inode mode

```
     file or dir
     |<-    ->|                |<- S-app ->|<- U-app ->|
     +---+---+---+---+---+---+---+---+---+---+---+---+
     | F | D |   |   |   | … |   | R | W | X | R | W | X |
     +---+---+---+---+---+---+---+---+---+---+---+---+
```
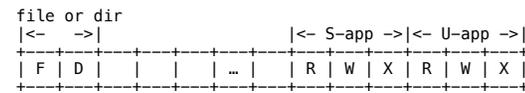
4. page cache

```
    typedef struct fs_struct {
        ...

        // page caches
        uint buffer_blk_id;
        block_t buffer_cache;
    } fs_t;

    inode_t *__load_inode(int ino)
    void flush_inode(int ino)
```

5. fs interfaces

```
   fs_init - constructor (i.e. put your init code here)
   fs_getsize - get size of a file/directory
   fs_read - read data from a file
   fs_write - write data to a file
```