

Unikernel任务调度-抢占式、块设备与文件系统

U.6.0FairSched

U.7.0 ReadBlock

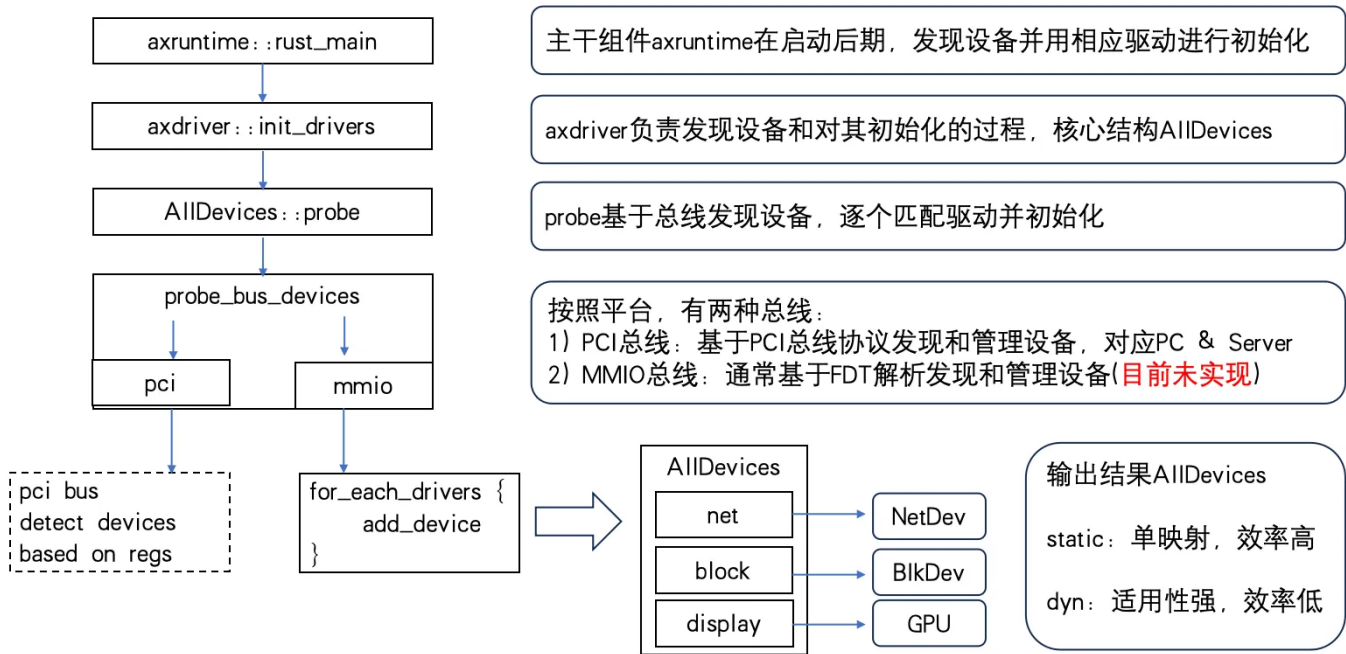
U.8.0 LoadApp

U.6.0FairSched

抢占式调度：调度器依据策略，可以打断当前任务的执行，移交CPU执行权给当前“更”有资格 的任务。不是无条件抢占，需要满足内外条件

U.7.0 ReadBlock

设备发现与初始化过程



U.8.0 LoadApp

文件系统mount的意义

- 文件系统在内存中的展开操作（unflatten）把易于存储的扁平化的形态转化为易于搜索遍历的立体化形态。
- 一棵目录树的“根”"嫁接"到另一棵树的某个结点

课后练习，实现rename和mv，由于测例较为简单，没有进行过多检查

```
examples > shell > src > cmd.rs > do_mv > path2

272
273 fn do_exit(_args: &str) {
274     println!("Bye~");
275     std::process::exit(0);
276 }
277 fn do_rename(args: &str) {
278     if args.is_empty() {
279         print_err!("rename", "missing operand");
280         return;
281     }
282     let (path1, path2) = split_whitespace(args);
283
284     if let Err(e) = fs::rename(path1, path2) {
285         print_err!("rename", &format!("failed to rename '{}': {}", path1, e));
286     }
287 }
288 fn do_mv(args: &str) {
289     if args.is_empty() {
290         print_err!("rename", "missing operand");
291         return;
292     }
293 }
```

```
arch = riscv64
platform = riscv64-qemu-virt
target = riscv64gc-unknown-none-elf
smp = 1
build_mode = release
log_level = warn

[ 1.682390 0 fatfs::dir:139] Is a directory
[ 1.768380 0 fatfs::dir:139] Is a directory
[ 1.867688 0 fatfs::dir:139] Is a directory
[ 2.086613 0 fatfs::dir:139] Is a directory
Available commands:
cat
cd
echo
exit
help
ls
mkdir
pwd
rm
uname
rename
mv
arceos:/ $ ls dirb
[ 6.587914 0 fatfs::dir:139] Is a directory
[ 6.609812 0 fatfs::dir:139] Is a directory
-rwxr-xr-x      8 b.txt
arceos:/ $
```

To run BITO seamlessly while connected to a remote host, click 'Ok'." + "This will prompt you to input port 37791 and allow " + "for temporary port forwarding throughout the session.

来源: ChatGPT GPT-4o - Bito AI Code Assistant

