

10/02

1. nice 有用 → 找出 nice 如何讓使用者調整 CPU time 或優先權
2. osdi-master qemu 跑不動
3. 更改 cfs，測試 qemu 是否有編譯功能 → 沒有
4. 更改 cfs，測試 makefile 編譯是否能出現 有關於 cfs 的 error
5. 但是編譯: osdi-2019 的 makefile 編譯錯誤

```
hacker@hacker-VirtualBox:~/桌面/osdi2019/kernel-4.0/linux-4.0$ make
HOSTCC  scripts/basic/fixdep
HOSTCC  arch/x86/tools/relocs_32.o
HOSTCC  arch/x86/tools/relocs_64.o
In file included from arch/x86/tools/relocs_64.c:17:
In function 'sort_relocs',
    inlined from 'emit_relocs' at arch/x86/tools/relocs.c:995:2,
    inlined from 'process_64' at arch/x86/tools/relocs.c:1099:2:
arch/x86/tools/relocs.c:953:2: warning: argument 1 null where non-null expected [-Wnonnull]
 953 |   qsort(r->offset, r->count, sizeof(r->offset[0]), cmp_relocs);
      |   ^
In file included from arch/x86/tools/relocs.h:6,
                 from arch/x86/tools/relocs_64.c:1:
arch/x86/tools/relocs.c: In function 'process_64':
/usr/include/stdlib.h:830:13: note: in a call to function 'qsort' declared here
 830 | extern void qsort (void *__base, size_t __nmem, size_t __size,
      |             ^~~~~
HOSTCC  arch/x86/tools/relocs_common.o
HOSTLD  arch/x86/tools/relocs
CHK     include/config/kernel.release
CHK     include/generated/uapi/linux/version.h
CHK     include/generated/utsrelease.h
CC      kernel/bounds.s
In file included from include/linux/compiler.h:54,
                 from include/uapi/linux/stddef.h:1,
                 from include/linux/stddef.h:4,
                 from ./include/uapi/linux/posix_types.h:4,
                 from include/uapi/linux/types.h:13,
                 from include/linux/types.h:5,
                 from include/linux/page-flags.h:8,
                 from kernel/bounds.c:9:
include/linux/compiler-gcc.h:107:1: fatal error: linux/compiler-gcc9.h: 沒有此一檔案或目錄
 107 | #include gcc_header(__GNUC__)
      | ^~~~~~
compilation terminated.
make[1]: *** [Kbuild:43: kernel/bounds.s] 錯誤 1
make: *** [Makefile:995: prepare0] 錯誤 2
```

6. 待做事項:

1. 建立 linux/compiler-gcc9.h
2. 看 qemu 能不能跑

7. 提問:

1. makefile 是用來編譯 source code 的嗎
2. nice 的參考?