

Kernel = System calls + Interrupt handler  
+ Booting code + Internal management.



text section of kernel

sys-1 : k1 :  $f_1()$ ,  $f_2()$ , ...,  $f_{k1}()$ .

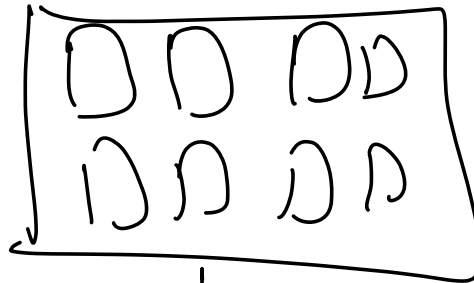
sys-n : k<sub>n</sub> :  $f_{n1}()$   $f_{n2}()$   $f_{n3}()$  ...  $f_{nk_n}()$ .

kernel

linux-6.4.0.zip

unzip

linux-6.4.0



Configure

VM linux2

oko oko .ko  
- / .kon

text  
3GB

rodata

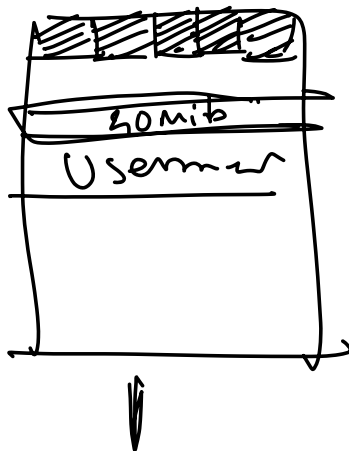
data

bss

40MB

44

34



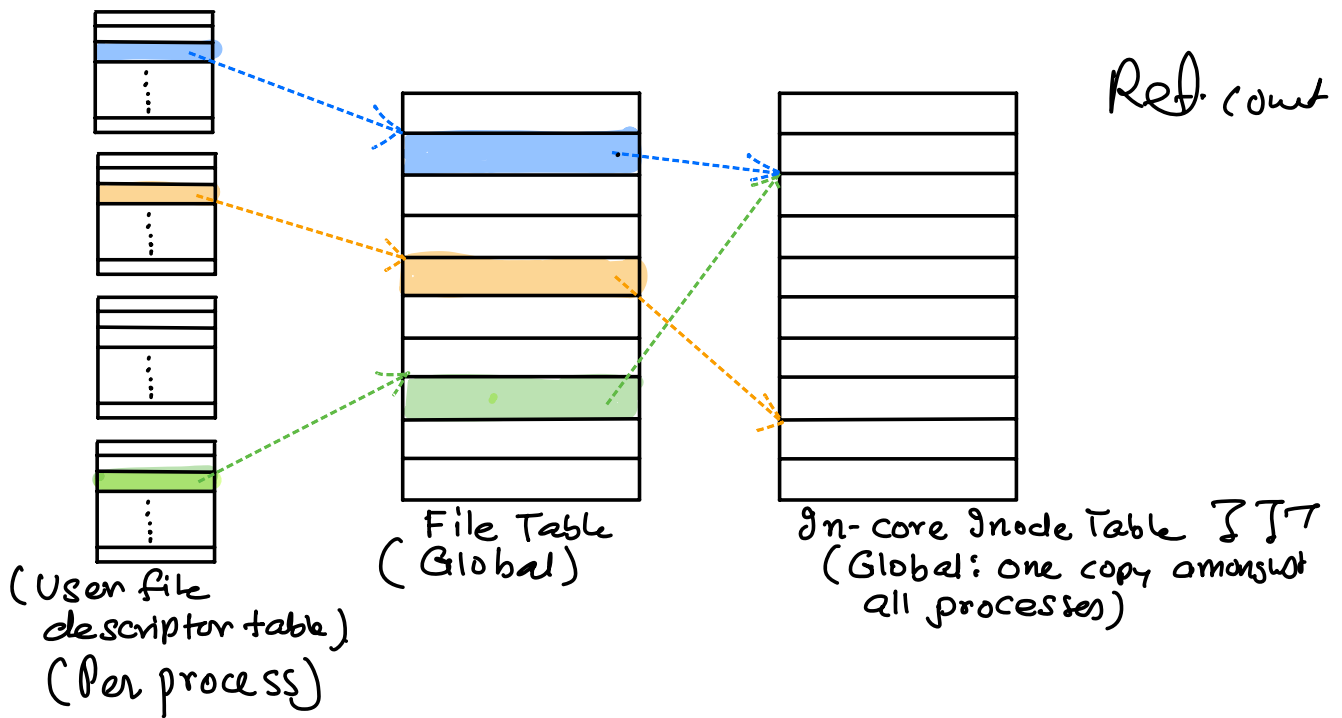
$8k \times n (8n)k$

16MiB

1GB - 40MB - 16M

- 1024MB - 56M

= 968MB



prog.c.  $\rightarrow$  prog.exe.

abs.exe  $\rightarrow$

prog.exe

(open() %eax)

int \$0x80

Schedule:  $\rightarrow$  User mode  $\rightarrow$  kernel mode.  
Kernel control path

⑥

prog.exe  $\rightarrow$  Schedule.

100ms

20ms

80ms

User mode

Kernel running

KCP

Suspend



to k

