[system_call.s]

system function preparation and signal function preparation

0x10 superuser space
0x17 user space

inb ...
outb ...

test ...
and ...

NATURE unit unit_offset

[signal.c]

signal function execution

superuser mode default
superuser mode ignore
user mode customize

put_fs() from superuser space to user space
get_fs() to superuser space from user space

*(&parameter) meaningful in assembly language

typedef void function(int)
void(*function(void(*parameter)(int)))(int)

[fork.c]

use task

write_verify()
page write then write
page not write then copy and write

[exit.c]

task function execution and use signal

task_graph task_node and around_task_node

parent_task
young_sibling_task old_sibling_task
child_task

process_identity
process_identity process_group_identity
process_identity process_group_identity session_identity

1<<(number-1)

for(p=node;p;p=p->next_node)

#ifdef OBJECT
...
#endif

[sys.c]

real_user_identity real_user_group_identity
effective_user_identity effective_user_group_identity
saved_user_identity saved_user_group_identity

resource_limit[RESOURCE]
resource_usage[RESOURCE]

time_value time_zone

past_seconds+past_microseconds+jiffy=present
present_seconds+present_microseconds=present

past_assume+jiffy_seconds=present_seconds
past_assume+jiffy+jiffy_offset=present

function(buffer,buffer_size)

[asm.s]

error function preparation

lea ... [eax] ...
mov ... eax ...

_function:
pushl $_do_function
jmp common
...
common:
...
xchgl %eax,(%esp)
...
call *%eax
...

convert function() to _function
convert do_function() to _do_function

FPU coprocessor

[traps.c]

error function execution

instruction access register memory device
instruction rely on register

movb(8bit) mov(16bit) movl(32bit)

[sched.c]

```
union task_union
{
struct task_struct task_struct ;
char task_superuser_stack[4096] ;
} ;
char task_user_stack[4096] ;

union task_union task_union = { task_struct } ;
struct task_struct * task[64] = { &(task_union.task_struct) } ;
```

several function one data constitute related data
one function several data constitute related data

function_0 time_0 time_segment_0
function_1 time_1 time_segment_0 time_segment_1
function_2 time_2 time_segment_0 time_segment_1 time_segment_2

NATURE unit unit_represent

[mktime.c]

seconds from 1970 year 1(0) month 1 day 0 hour 0 minute 0 seconds

```
#define MINUTE 60
#define HOUR 60*MINUTE
#define DAY 24*HOUR
```

NATURE unit_behind unit_among unit_front

[printk.c]

vsprintf() convert format argument to buffer

tty_write() rely on fs

user rely on fs
superuser not rely on fs

esp(32bit) sp(16bit) top of stack
ebp(32bit) bp(16bit) bottom of stack

extern type name : declare variable : no memory
type name : define variable : memory

static type name : file scope
type name : project scope

[panic.c]

loop