

## Input 1

### Thread A - open(O\_CREAT)

/\* In fd\_install() \*/

A1 **fdt->fd[fd]** = file;

### Thread B - close()

/\* In close\_fd() \*/

B1 file = **fdt->fd[fd]**;

## Input 2

### Thread A - ioctl(CREATE\_VCPU)

/\* In kvm\_get\_kvm() \*/

A2 if ((**kvm->refcnt**++) == 0)

A3 BUG()

### Thread B - close()

/\* In kvm\_put\_kvm() \*/

B4 if ((--**kvm->refcnt**) == 0)

B5 destory\_vm(kvm);

## Input 3 (CVE-2019-6974)

### Thread A - ioctl(CREATE\_DEVICE)

A1 **fdt->fd[fd]** = file;

A2 if ((**kvm->refcnt**++) == 0)

A3 BUG()

### Thread B - close()

B1 file = **fdt->fd[fd]**;

B4 if ((--**kvm->refcnt**) == 0)

B5 destory\_vm(kvm);