

Type 1 and Type 2 Hypervisors (1)

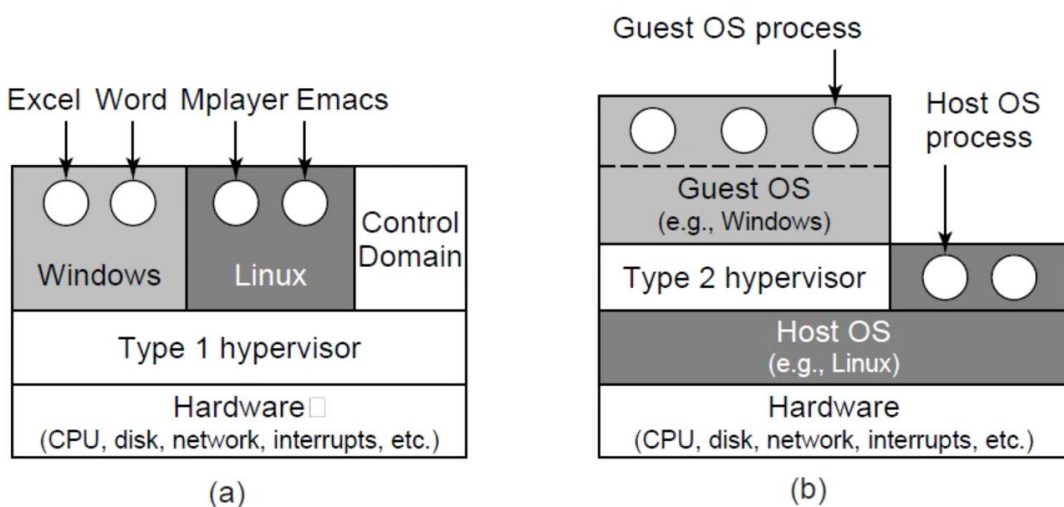


Figure 7-1. Location of type 1 and type 2 hypervisors.

Virtualizing the Unvirtualizable

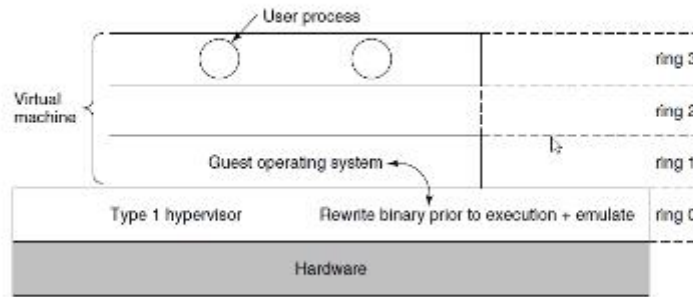


Figure 7-4. The binary translates rewrites the guest operating

按 Esc 即可退出全屏模式

Role of the Host Operating System (1)

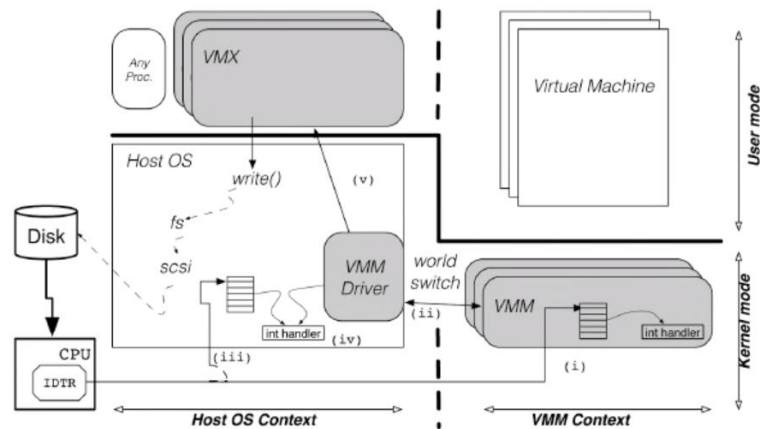


Figure 7-10. The VMware Hosted Architecture and its three components: VMX, VMM driver and VMM.

- Definition

- [Popek & Goldenberg 1974]

- Sensitive instr. e.g. POPF

- Privilege instr.

Prog

I/O

≡

Prog

VM

I/O

(esp. via S)

$$Z = X + Y$$

LD R1, (M_X)

LD R2, (M_Y)

ADD R3, R1, R2

ST R3, M_Z

Marchi

Goldenberg 1974

Sensitive instr. e.g. POPF

Priv. Instr.

I/O (esp. via S/W)

I/O

≡

Java Byte-code

Stack-arch

JVM

Stack (R₁₅)

65 370/JM → Z-series

89/90. JVM R- by Sun

$$Z = X + Y$$

LD R1, (M_X)

LD R2, (M_Y)

ADD R3, R1, R2

ST R3, M_Z

PUSH M_X

PUSH M_Y

ADD

POP M_Z

Citrix