

????????? VMware ESX ??????

?????

1. ??????? ??????????

2. ??????????

3. ??????????

4. ??????????

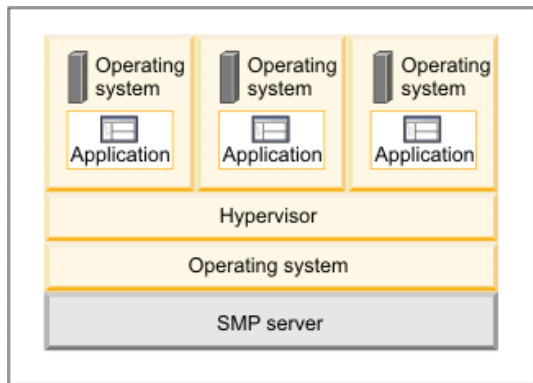
5. ??? VMware Esx 3.5 ?Esx 3.5i

6. ???VI ?? VM.??OS ?VM

7. VM?? ????

8. ????

?????



EICAY502-3

?????????????,INTEL?AMD ????????,??????????????????????????.

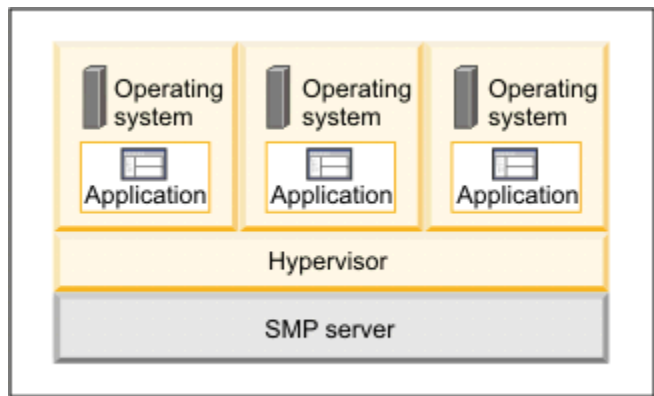
????????? [Hypervisor Type 2](#)?Virtual Box,VMware WorkStation? Server.?????????.?????????.

???????????????

[Hypervisor Type 1](#) (????????)??

???Hypervisor Type 1,??100%? ??????????????.??Hypervisor Type 1 ???,????????????????????.

- ??????????,????????????????&???OS???.(??????,???OS???)
- Hypervisor Type 1???????????,???????????



EICAY501-2

Hypervisor Type 1?????????

- ??? VMware

- ??? Xen
- KVM
- Windows 2008 Hyepr V

?.????

1.??

???\$\$\$

2.????

a????????????????????,??1?1?KVM????????,????????????????,?????, ?????6-8???(?????)  
 ?),????????????????????  
 b??????

3.????????,????

????,????SERVER??,????IBM X3650????HP DL380??,??server 2003????,????????????,??,????,??  
 zman????????,????????,???????????????? ??????,????????1????????,?IBM X3650?guest os??HP DL380?  
 ?????,????????????????,??,????????????,????,????????????backup,???? ?production,?5-6????,????????  
 ?,????????????,????????OS????????,????5?? ?????????,?????clone?migration????????,?????

4.??????

????????,???????????????????? ????

?.????

1.Know HOW????,????????????????

?.??

1.ESX????????????Storage HBA ,Network Device ,Fibre ,Backup Agent

2.??????,????

3.Raid 10,5,6 ??????

**DIY**

ESX????????

usb drive

Cf

sata ssd

??

????(???)

CPU: Intel(Q6 Q9?VT) or amd(all?????)

Ram: DDR2 , FB-DIMM , DDR2-REG

Disk Control: LSI,DELL,Adaptec(raid mode),ICH 7(update 3)

Diskless:CF(????,????????),SATA\_SSD(????,???SATA???,EX:ICH7,???) ,usb(????????,?????????????)

Network card: intel dual port , jumbo frame , Tso(switch ???)

- Intel ??

????

?????:???,DELL raid ??????(PCI-E 8X??)

1WAY 3000?:3000,3210(?:????,4??CPU???:????8G)

2WAY 5000?:5100-5400(?:????16-128G,???8??,?PCI-X?:???? C/P????)

?:?DDR3 CPU(????????.?CPU???)

- AMD ??

1WAY:AMD(ATI): 780G?(?????,ex:690G)(?,?????,????16G???,bus????)

2WAY:AMD(NVIDIA): nVidiaR MCP55 Pro (????,????)

????(????)

QSSC: il152TH(??CF) , il152AH(LSI 1064E onboard)(diskless ??)

TYAN: ??adaptec raid(????,???)

SuperMicro: Diy best solution

????

????(HP.DELL.IBM)

HP:(??HCL & ???P400,????I/O??)

DELL:(??HCL????thx)

IBM:(x3650?x3200M2)

????

Tower or rack mount

ram limit

storage????????

????

???Storage

???????iSCSI??fibre(path failover)

NFS(????????),?????,????

iSCSI(??cluster??),diskless??  
SAN(path failover)

???

### ESX vs ESXi

- 1.Tools?????
- 2.thin client?????
- 3.Virtual Center
- 4.Cost

?????,os

???

1?esx Ranger <http://amtsoft.com/esx-ranger>

2?VM Explorer [http://www.trilead.com/Products/VM\\_Explorer/](http://www.trilead.com/Products/VM_Explorer/) (??ESX & ESXi)  
????????????VM????????ESX A????VM???ESX B???

3?VMware Converter (??ESX & ESXi)  
????????????????????????????VM????????

4?Tools??

??vnkfstools????VM????????????????

5?exXpress <http://www.phdvirtual.com>

??v3.1???ESXi,????v3.5???????

???????????? <http://vmprofessional.com/index.php?content=esx3backups>

???

- **VMware Infrastructure Client**

- 1????????VM

- 2????VMware ESX Server???



### ??Storage??

- iSCSI
- Open-E
- Openfiler
- ZFS

?????

????????

????(???????,network , dns)

DR,BC(?????????)

????????????

NFS(AP02)

I-SCSI

FC

????(TA03)

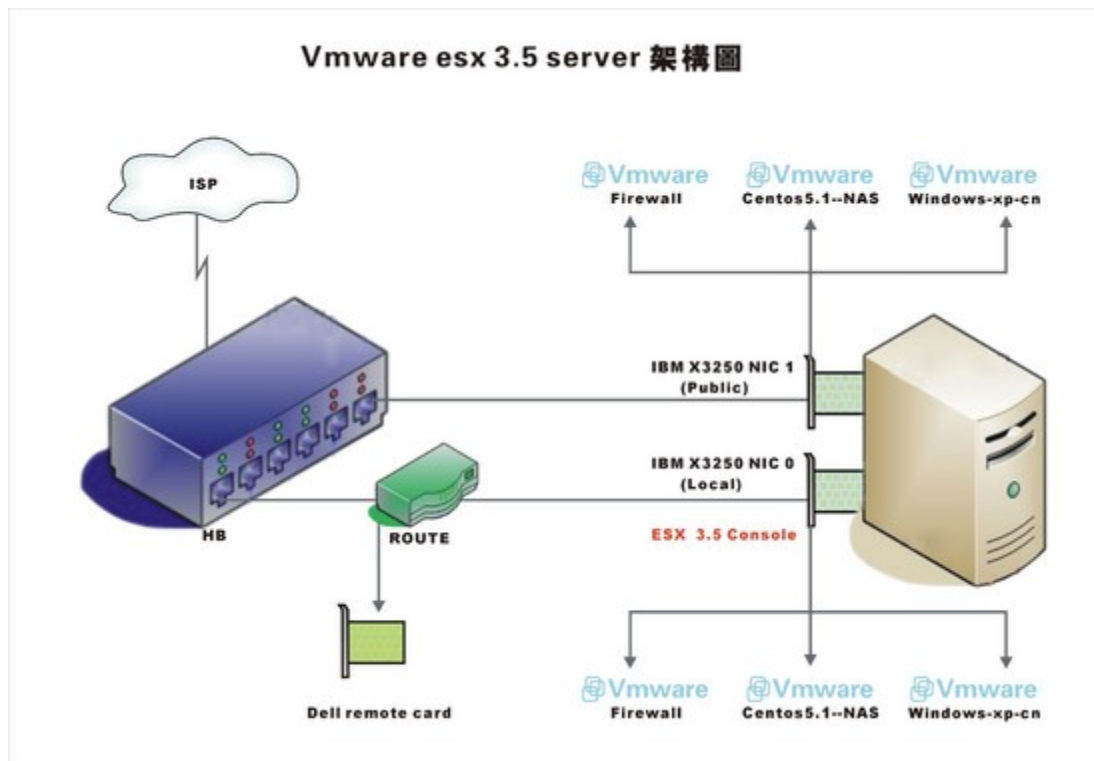
### ?OSSLab

??????

1???2????local NIC 0 ?route????public NIC 1???ISP????HB??

2?Console ??????local NIC 0

?????



????????

- 1???VM?host??? NFS ??SAMBA????????????????NAS
- 2????????VM????????pfsense ?????? local VM????
- 3????????????????????????????????
- 4????VM?host????????????????

????

- thx?wiki <http://wiki.osslab.org.tw>
- ??? <http://s852254.blogspot.com/>
- VMTN-VMware???? <http://communities.vmware.com/>
- VMware???(?????) <http://www.vmware.cn/>
- ???HCL <http://www.vmware.com/resources/compatibility/search.php>
- ESX DIY <http://www.vm-help.com/index.html>

### Books

- VI3 FOR DUMMIES <http://findbook.tw/book/9780470277935/basic>

????

- CBT Nuggets <http://www.cbtnuggets.com/webapp/product?id=401>

????esx??

1.vmfs file system

????????

2. os ?????

3. linux base()

4.why not microsoft

5. ?????

6. ?HCL?????,debug,troubleshooting

7. ?????