

*Ip-based network*: client server router switch/wireless

*Virtualization - hypervisor*: VMware VMware ESX hyper-v Xenserver Xen

*Operation System*: FreeBSD macos solaris linux windows synology-xpenology

Xpenology installation important:

- 1.virtual disk type: sata (recommend)
- 2.xx.vmx add bios.bootOrder = "cdrom"
- 3.guest operation system version: other linux 2.6.x kernel 64-bit
- 3.default *root* password is the code typed when system initial
- 4.the organized type of data is *volume*

network adapt – network interface (more) : terminal router

In one broadcast domain:

network interface in same network segment – directly communicate

network interface in different network segment – communicate by router

forwarding procedure – forwarding table: *outside access IP:Port <-> inside resource IP:Port*

from outside to inside – IP:Port *IP:Port* -> IP:Port *IP:Port*

from inside to outside – IP:Port *IP:Port* <- IP:Port *IP:Port*

NAT – origin from inside

Port forwarding – origin from outside