

*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 – boot image | DSM package

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, user admin is preset, its password is empty at first, so should change when login DSM by browser the first time.

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