

??? 13, 2009 ??? sunchiahome

KVM Virtual machine ?????? XML ?????? Virtual Machine ?????? /etc/libvirt/qemu.???????????

```
<domain type='kvm'>
  <name>RHEL5</name>
  <uuid>d00cfc2e-12e1-6363-63fc-ba565b71d6d9</uuid>
  <memory>524288</memory>
  <currentMemory>524288</currentMemory>
  <vcpu>1</vcpu>
```

- **name**  
??? virtual Machine ???,????????? virtual Machine ??????????.???????????
- **uuid**  
?????????(Universally Unique Identifier,UUID),????????????? uuid ?????? virtual Machine.
- **maxmem**  
????????????????? virtual Machine ??????????,?????????????????????????????,????????????????????????? virtual Machine ???  
??.
- **currentMemory**  
?? virtual Machine ??????????????.
- **vcpus**  
? virtual Machine ?????? CPU ??.

```
<os>
  <type arch='x86_64' machine='pc'>hvm</type>
  <boot dev='hd' />
</os>
<features>
  <acpi />
  <apic />
  <paе />
</features>
```

- **acpi**  
Advanced Configuration and Power Interface (ACPI) ??????????
- **APIC**  
Advanced Programmable Interrupt Controller (APIC) ??? IRQ ???
- **PAE**  
hysical Address Extension (PAE) ? 32bit ? virtual machine ????? 4GB ???????.

```
<clock offset='utc' />
<on_poweroff>destroy</on_poweroff>
<on_reboot>restart</on_reboot>
<on_crash>restart</on_crash>
```

- **clock offset**

??? RTC(real-time clock) ?? utc ??.

- **on\_poweroff / on\_reboot / on\_crash**

???? poweroff / on\_reboot / on\_crash VM ????????,??? poweroff ?? destory ????? poweroff ??? VM  
????????????????,? reboot/crash ??? VM ?????.

<devices>

<emulator>/usr/libexec/qemu-kvm</emulator>

<disk type='block' device='disk'>

<source dev='/dev/VolGroup01/rhel5' />

<target dev='hda' bus='ide' />

</disk>

<disk type='file' device='cdrom'>

<target dev='hdc' bus='ide' />

<readonly />

</disk>

- **emulator**

?????? Linux ??????????????(components) qemu + kvm ,????? kqemu,??????????????????.

- **disk type**

??? virtual Machine ????????????????????????????? image ???.

1.??? (device='disk') ??? partition (/dev/VolGroup01/rhel5) ??? image ???.

block ??? partition ,file ??? image ???.

2.???? (device='cdrom') ????????? image ?????????? <readonly />.

<target> ??? virtual machine ?????????????????? ??.

<interface type='network'>

<mac address='54:52:00:75:98:d3' />

<source bridge='default' />

</interface>

<interface type='bridge'>

<mac address='54:52:00:75:98:d3' />

<source bridge='bri0' />

</interface>

- **interface type**

interface type ??? . 1.Virtual network (type=network) ?? NAT+ DHCP ????? 2.Shared physical device(type=bridge) ?? bridge ???????,????? <http://benjr.tw/?q=node/537>

<serial type='pty'>

<target port='0' />

</serial>

<console type='pty'>

<target port='0' />

</console>

```
<input type='mouse' bus='ps2' />  
<graphics type='vnc' port='-1' autoport='yes' keymap='en-us' />  
</devices>  
</domain>
```

- **keymap**

????????????????,????????? US keymap.

- **serial**

?????? serial console ?????? pty(Pseudo Tty) ?? vc(Virtual console)