

Курсова работа

ТСММ210MPLS Опорни мрежи

Инсталация на Olive

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Системни изисквания:

(инсталация под линукс)

- Linux (в конкретният случай Slackware)
- Qemu + qemu olive patch
- FreeBSD 4.11
- JunOS

Инсталация QEMU

- Изтегляне на QEMU и olive пач
- Разархивиране и пачване
- Компилиране

Инсталация QEMU

- `wget`
`http://download.savannah.gnu.org/releases/qemu/qemu-0.11.0.tar.gz`
- `tar zxvf qemu-0.11.0.tar.gz`
- `cd qemu-0.11.0`
- `wget http://downloads.sourceforge.net/project/gns-3/Qemu/qemu-0.11.0-olive.patch?r=http%3A%2F%2Fsourceforge.net%2Fprojects%2Fgns-3%2Ffiles%2F&ts=1288168579&use_mirror=heanet`
- `patch -p1 -i qemu-0.11.0-olive.patch`
- `./configure --target-list=i386-softmmu & make & make install`

Подготвяне на QEMU

- Създаваме image файл

```
qemu-img create -f qcow2 olive-base.img 10G
```

- Стартираме QEMU

```
qemu -m 256 -hda olive-base.img -cdrom 4.11-RELEASE-i386-miniinst.iso -boot d -localtime
```

Инсталация на FreeBSD

- Стандартна конфигурация на ядрото
- Разделяне на хард диск-а
- Избираме “User” инсталация без портовата колекция

Стартиране на FreeBSD

- Стартиране на новоинсталираната система
- Стартиране на DHCP клиент
- Изтегляне на JunOS

Стартиране на FreeBSD

- `qemu -m 256 -hda olive-base.img -boot c -localtime -net nic,macaddr=00:aa:00:60:01:01,model=e1000 -net user`

- `dhclient em0`

`netstat -r`

`ping 10.0.2.2`

- `scp user@10.0.2.2:/root/jinstall-8.5R1.14-domestic-signed.tgz /var/tmp`

checkpic fix

- The jinstall file after 7.4 version has a binary called checkpic. This binary will fail and the image cannot be installed. Replacing this binary with `/usr/bin/true` fixes the issue.

checkpic fix

- `cd /var/tmp`
`mkdir jinst-signed`
`cd jinst-signed`
`tar zxvf ../jinstall-8.5R1.14-domestic-signed.tgz`
- `mkdir jinst`
`cd jinst`
`tar zxvf ../jinstall-8.5R1.14-domestic.tgz`

checkpic fix

- mkdir pkgtools

```
cd pkgtools
```

```
tar zxvf ../pkgtools.tgz
```

```
cd bin
```

```
cp /usr/bin/true ./checkpic
```

```
cd ..
```

```
tar zcvf ../pkgtools.tgz *
```

```
cd ..
```

```
rm -rf pkgtools
```

```
tar zcvf /var/tmp/jinstall-8.5R1.14-domestic-olice.tgz *
```

Инсталация на Olive

- Инсталиране на пакета:

```
pkg_add -f jinstall-8.5R1.14-domestic-olive.tgz
```

- Стартиране на новата система (същинската инсталация на JunOS):

```
qemu -m 256 -hda olive-base.img -boot c -localtime -  
nographic -serial stdio
```

Стартиране на Olive

- Създаване на “вторичен” image:

```
qemu-img create -b olive-base.img -f qcow2 R1.img
```

- Стартиране на новият Olive:

```
qemu R1.img -m 96 -nographic -daemonize -serial  
telnet::2001,server,nowait -localtime -net  
nic,macaddr=00:aa:00:60:01:01,model=e1000 -net user  
telnet localhost 2001
```

The image shows a QEMU telnet window with a menu bar (File, Edit, View, Bookmarks, Settings, Help) and a terminal area. The terminal displays a help menu for the 'cli' command, listing various actions like 'clear', 'configure', 'file', etc., with their descriptions. Below the telnet window, there is a terminal window showing the execution of 'cat /proc/version' and 'date' commands, and a 'Successfully copied.' notification.

```
QEMU : telnet
File Edit View Bookmarks Settings Help
root@% cli
root> ?
Possible completions:
  clear          Clear information in the system
  configure      Manipulate software configuration information
  file           Perform file operations
  help           Provide help information
  monitor        Show real-time debugging information
  mtrace         Trace multicast path from source to receiver
  op             Invoke an operation script
  ping           Ping remote target
  quit           Exit the management session
  request        Make system-level requests
  restart        Restart software process
  set            Set CLI properties, date/time, craft interface message
  show           Show system information
  ssh            Start secure shell on another host
  start          Start shell
  telnet         Telnet to another host
  test           Perform diagnostic debugging
  traceroute     Trace route to remote host
root>
root> |
```

```
QEMU : telnet
988/ sched_debug
986/ scsi/
987/ self/
acpi/ slabinfo
asound/ softirqs
buddyinfo stat
bus/ swaps
cmdline sys/
config.gz sysrq-trigger
cpuinfo sysvipc/
crypto timer_list
devices timer_stats
diskstats tty/
dma uptime
driver/ version
execdomains vmallocinfo
fb vmstat
filesystems zoneinfo
fs/
```

```
root@r19eu:~# cat /proc/version
Linux version 2.6.35.7-smp (root@midas) (gcc version 4.5.1 (GCC) ) #2 SMP Mon Oct
11 14:52:09 CDT 2010
root@r19eu:~# date
Thu Oct 28 14:22:08 EEST 2010
root@r19eu:~#
```

Successfully copied.

**Благодаря за
вниманието!**