

FreeBSD Administration - Feature #809

Install CentOS 6 in a Jail on FreeBSD

05/13/2016 01:25 PM - Daniel Curtis

Status:	Closed	Start date:	05/13/2016
Priority:	Normal	Due date:	
Assignee:	Daniel Curtis	% Done:	100%
Category:	Jails / Containers	Estimated time:	2.00 hours
Target version:	FreeBSD 10	Spent time:	4.00 hours

Description

This is a guide on how I setup CentOS 6 in a jail on FreeBSD 10.2.

Prepare the Environment

- Make sure the system is up to date:

```
pkg update && pkg upgrade
```

- Load the necessary kernel modules:

```
kldload linux fdscfs linprocfs linsysfs tmpfs
```

- Set the linux version compatibility:

```
echo "compat.linux.osrelease=2.6.18" >> /etc/sysctl.conf  
sysctl compat.linux.osrelease=2.6.18
```

- Install the centos linux base:

```
pkg install linux_base-c6
```

Create the CentOS Jail

- Download the precreated centos filesystem:

```
fetch http://download.openvz.org/template/precreated/centos-6-x86.tar.gz
```

- Create the centos jail directory:

```
mkdir /usr/jails/centos6.example.com
```

- Unpack the centos filesystem into the centos6.example.com jail folder:

```
tar xf centos-6-x86.tar.gz -C /usr/jails/centos6.example.com
```

- Mount the necessary virtual file systems into the jail's root directory:

```
mount -t linprocfs /usr/jails/centos6.example.com/linprocfs /usr/jails/centos6.example.com/pro
c
mount -t linsysfs /usr/jails/centos6.example.com/linsysfs /usr/jails/centos6.example.com/sys
mount -t devfs /usr/jails/centos6.example.com/devfs /usr/jails/centos6.example.com/dev
```

- Configure the jail in /etc/jail.conf:

```
vi /etc/jail.conf
```

- And add the following to the end of the file:

```
centos6 {
  path = /usr/jails/centos6.example.com;
  mount.devfs;
  mount.fdescfs;
  mount.procfs;
  host.hostname = centos6.example.com;
  ip4.addr = 192.168.1.202;
  interface = em0;
  exec.start = "/bin/sh /etc/rc.d/rc 3";
  exec.stop = "/bin/sh /etc/rc.d/rc 0";
  mount.fstab = "/usr/jails/fstab_centos6";
}
```

- Write some basic CentOS configuration files:

```
cp /etc/resolv.conf /usr/jails/centos6.example.com/etc/resolv.conf
echo "NETWORKING=yes" >> etc/sysconfig/network
echo "linproc /usr/jails/centos6.example.com/proc linprocfs rw 0 0" >> /usr/jails/fstab_centos
6
echo "192.168.6.6 localhost localhost.localdomain localhost4 localhost4.localdomain4 centos6 c
entos6.example.com" >> /usr/jails/centos6.example.com/etc/hosts
```

- Create the password database for the jail:

```
cd /usr/jails/centos6.example.com/etc
echo "root::0:0::0:0:Charlie &:/root:/bin/bash" > master.passwd
pwd_mkdb -d ./ -p master.passwd
```

- Chroot into the centos6.examepl.com jail directory:

```
chroot /usr/jails/centos6.example.com /bin/bash
```

- And prepare the environment:

```
cd /etc
pwconv
grpconv
passwd
touch /etc/fstab
touch /etc/mtab
cd /sbin
mv consoletype consoletype.orig
ln -s /bin/true consoletype
cd /bin
mv umount umount.prev
ln -s /bin/true umount
```

```
chkconfig httpd off
chkconfig iptables off
exit
```

- Enable jails to start at boot:

```
echo 'jail_enable="YES"' >> /etc/rc.conf
```

- And start the jail

```
service jail start centos6.example.com
```

- Check that the jail is running:

```
jls
```

Resources

- <https://bluehatrecord.wordpress.com/2015/09/19/the-midnight-oil-jailing-centos6-in-freebsd-10-2/>
- <https://www.freebsd.org/doc/handbook/linuxemu-lbc-install.html>

History

#1 - 05/13/2016 05:33 PM - Daniel Curtis

- Status changed from *New* to *In Progress*
- % Done changed from *0* to *30*

#2 - 05/14/2016 11:20 AM - Daniel Curtis

- Description updated
- Status changed from *In Progress* to *Resolved*
- % Done changed from *30* to *100*

#3 - 07/10/2016 10:03 AM - Daniel Curtis

- Status changed from *Resolved* to *Closed*