Fiddling with FreeBSD - Jails examples—examples

Install FreeBSD 14.0-RELEASE on



Setup Host

It's essential to setup host when using shared networking, please refer part_4 at https://t.co/tkrqtdn4GB



192.168.15.1/24 **Create directory structure**

\$ doas mkdir -p /jail/{demo0,demo1,demo2,demo3}

We are going to use

to manipulate jails



Fetch and extract base.txz

fetch and extract base.txz at location demo{1,2,3}, please refer part_2 at https://t.co/tkrqtdn4GB

→Create new jail \$ doas jail -yc jid=100 name=demo persist provide details on what's happening

> list jails \$ doas jls to remove \$ doas jail -vr <jid|name>

1 ID of the jail, there is limit upto what number you can assign JID, if you don't specify this parameter jid=100, system will assign jid for you.

host.hostname=demojail2

interface=em0

path=/jail/demo1

ip4.addr=192.168.15.11/24 \

exec.start="/bin/sh /etc/rc"

host.hostname=demojail3

interface=em0

path=/jail/demo2

command="/bin/sh"

ip4.addr=192.168.15.12/24 \

observe

observe

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JID can't be redfined once jail created

\$ doas jail -vc name=demo1

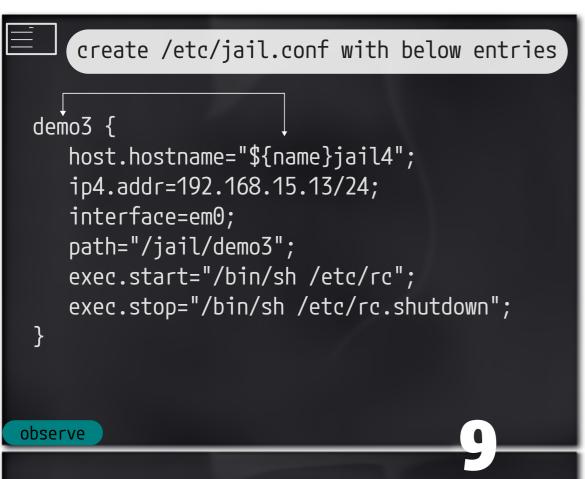
\$ doas jail -vc name=demo2

2 This is alias of jid and can be verified with \$ doas jls -N

modify \$ doas jail -vm jid=100 name=demo_jail

3 Let the jail exist without any process running inside it.





jail(8) refers to the jail.conf, now let's create our 4th jail \$ doas jail -vc demo3

Note

\${name} refers to name of the jail, you can't create variable named \$name, only refer it.

To view ip address of the a jail use

\$ doas jexec <jid|name> ifconfig \$ doas ifconfig -j <jid|name>

when you remove demo0 and demo1 jail, your ip address will not be removed, remove manaully \$ doas ifconfig em0 inet 192.168.x.x/24 -alias

To view process running inside a jail use \$ doas ps -J <jid|name> To update/upgrade packages in a jail use \$ doas pkg -j <jid|name> update Required

List open sockets in a jail \$ doas sockstat -j <jid|name>

To update/upgrade a jail use

\$ doas freebsd-update -j <jid|name> fetch \$ doas freebsd-update -j <jid|name> install

Get to the jail shell

\$ doas jexec <jid|name> /bin/sh

When you create demo2 jail, you will get inside the jail, when you exit from shell, run \$doas jls and observe

\$ doas rm -rf /jail/demo{0,1,2,3}

I want to setup hostname for my jail, you can verify that with \$ doas jexec <jid/name> hostname

I want to share network with host, there are multiple options in networking, ip4=inherit is like get everything what host have, **ip4=new** is like **ip4.addr**, ip4=disable to disable jail from entier IPv4, you can do same for ipv6

interface on which alias should be created, if you haven't assigned alias manually, jail will do for you injunction with ip4.addr, if you don;t mention inteface=em0 and used only ip4.addr then you will not see ip on em0

another thing you should note that it works only while you create jail, after that **ip4.addr=<ip address>** will not have any effect, but you can do it from system using ifconfig

root of the jail, if you don't specify the path it will be mounted on /

let the jail exist without any process, can be replaced with persist exec.start="/bin/sh /etc/rc" but for that you need to extract base.txz on the jail root that way it will work otherwise it won't.

command="/bin/sh", for goes same base.txz should exist on path, this parameter will take you inside jail.

observe

When you remove demo3 jail, observe that your ip address will be removed, that's because of **exec.stop** parameter

Required \$ doas cp /etc/resolv.conf /jail/demo3/etc

\$ doas chflags -R 0 /jail/* Cleanup