Update

The below method doesn't work anymore.
SSH is inaccessible/unsetable on the iso (2014-09)

Introduction

Purpose: test if it's easily installable, using ZFS avoiding SystemD 😬
Main web site: https://www.archbsd.net/
Wiki: https://wiki.archbsd.net/index.php/Main_Page

VM creation

From VIrtualBOX: New / BSD / FreeBSD 64
RAM: 1024MB
Edit the VM for:

- bidirectional clipboard
- Bridged Adapter
- Remove IDE disk
- Add SATA controller
- Add SATA disk ~ 5GB
- Set as SSD hard drive
- Mount ArchBSD iso in CD

Save and launch the VM

Install

SSH access

Network

Find the ip of your VM:

```
ifconfig
dhclient em0
```

Root Password

Change root password

```
passwd
```

SSHD config

Setup sshd

```
vi /etc/ssh/sshd_config
```

Then change/uncomment

```
[…]
PermitRootLogin yes
[…]
PasswordAuthentication yes
[…]
ChallengeResponseAuthentication no
```

Start SSHD

Then Launch sshd:

```
/etc/init.d/sshd start
```

Then remote connect to it

Setup keyboard

```
kbdmap
```

GPT partition

```
gpart create -s gpt ada0
gpart add -s 128k -t freebsd-boot ada0
gpart add -s 1g -t freebsd-swap ada0
gpart add -t freebsd-zfs ada0
```

ZFS Pool

```
zpool create tank /dev/ada0p3
```

Interesting output:

```
cannot mount '/tank': failed to create mountpoint
Exit 1
```

Bootloader

```
gpart bootcode -b /boot/pmbr -p /boot/gptzfsboot -i1 ada0
```

ZFS Pool

Reimport

```
mdmfs -t swap -s 128m md /boot/zfs
```

Interesting output:

```
mdmfs: mdconfig (attach) exited with error code 1
Exit 1
```

```
zpool export tank
```

```
zpool import -o altroot=/mnt -o cachefile=/boot/zfs/zpool.cache -f tank
```

Interesting output:

```
cannot mount '/mnt/tank': failed to create mountpoint
Exit 1
```

Checksum (optional)

```
zfs set checksum=fletcher4 tank
```

Datasets

```
zfs create -o canmount=off -o mountpoint=legacy tank/ROOT
zfs create -o canmount=on -o compression=on -o mountpoint=/
tank/ROOT/archbsd-0
```

```
zfs create -o compression=on -o mountpoint=/home tank/HOME
zfs create -o compression=off -o mountpoint=/root tank/HOME/root
```

Installing Base

```
pacstrap /mnt base
```

Interesting output ...

```
downloading required keys...
:: Import PGP key 2048R/, "Claudiu Traistaru <claudiu2004@gmail.com>",
created: 2013-09-11? [Y/n]
error: key "Claudiu Traistaru <claudiu2004@gmail.com>" could not be imported
error: required key missing from keyring
error: failed to commit transaction (unexpected error)
Errors occurred, no packages were upgraded.
==> ERROR: Failed to install packages to new root
Exit 1
```

Fix Me! Workaround:

```
cp /etc/pacman.conf /tmp/.
```

modifiy /etc/pacman.conf like:

```
#SigLevel    = Required DatabaseOptional
SigLevel = Never
```

then re-run pacstrap as:

```
pacstrap -C /tmp/pacman.conf /mnt base
```

Errors / warnings:

```
[…]
( 6/27) installing bash
[########################################################################]
100%
install-info: No such file or directory for /usr/share/info/bash.info.gz
[…]
(24/27) installing pacman
[########################################################################]
100%
 >>> Run  `pacman-key --init; pacman-key --populate archlinux`
 >>> to import the data required by pacman for package verification.
 >>> See: https://www.archlinux.org/news/having-pacman-verify-packages
```

System configuration

Chroot

```
  chroot /mnt
```

/etc/fstab

```
cat << EOF > /etc/fstab
# Device    Mountpoint FStype Options Dump Pass #
proc        /proc      procfs rw      0    0
/dev/ada0p2  none      swap   sw      0    0
EOF
```

/boot/loader.conf

```
cat << EOF >> /boot/loader.conf
vfs.root.mountfrom="zfs:tank/ROOT/archbsd-0"
EOF
```

⚠ no need to add this (already in the file ⚠

```
     25 # Load File-System Support
     26 zfs_load="YES"
```

timezone

```
ln -s /usr/share/zoneinfo/Europe/Paris /etc/localtime
```

hostname

```
echo 'HOSTNAME="archBSD"' > /etc/conf.d/hostname
```

Root passwd

```
passwd
```

Exit chroot

Exit from chroot

```
exit
```

zpool save

```
cp /boot/zfs/zpool.cache /mnt/boot/zfs/zpool.cache
```

Fails ... of course :@

```
cp: /boot/zfs/zpool.cache: No such file or directory
Exit 1
```

Bootfs

```
zpool set bootfs=tank/ROOT/archbsd-0 tank
```

FreeBSD init

```
echo zfs_enable="YES" > /mnt/etc/rc.conf
```

Reboot

Cross fingers ...

Post Install

The adventure begun

base-devel

```
pacman -S base-devel
```

Fix Me! Work in progress !

References

- Install guide
- Install guide ZFS

From:
https://wiki.fortier-family.com/ - **Warnaud's Wiki**

Permanent link:
https://wiki.fortier-family.com/vm/virtualbox/archbsd

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