

Tuesday, April 29. 2008

Playing around with Opensolaris 2008.05 Release Candidates

Today, i upgraded my workstations at home to Opensolaris 2008.05 as the primary operating system. Went smoothly. When you don't have to keep the Nvidia drivers out of your code because of political reasons, even installing and configuring the graphic card is a no-brainer. You have to do nothing. Correct settings out of the box.

ZFS snapshot based boot environments I've started with the Release Candidate 2

```
jmoekamp@glamdring:~# cat /etc/release
```

```
Open Solaris 2008.05 snv_86_rc2 X86
```

```
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```

```
Use is subject to license terms.
```

```
Assembled 21 April 2008 Okay, now i've updated the package list and started the update of my
```

```
installation.jmoekamp@glamdring:~# pkg refresh
```

```
jmoekamp@glamdring:~# pkg image-update
```

```
DOWNLOAD          PKGS    FILES  XFER (MB)
```

```
Completed          4/4     3/3   1.24/1.24
```

```
PHASE              ACTIONS
```

```
Update Phase      13/13
```

A clone of opensolaris exists and has been updated and activated.

On next boot the Boot Environment opensolaris-1 will be mounted

on '/. Reboot when ready to switch to this updated BE. A really neat feature of the package manager is the automatic generation of an zfs-snapshot based boot environment: jmoekamp@glamdring:~# zfs list

```
NAME              USED AVAIL REFER MOUNTPOINT
rpool             2.37G 142G 56.5K /rpool
rpool@install     18.5K - 55K -
rpool/ROOT        2.28G 142G 18K /rpool/ROOT
rpool/ROOT@install 0 - 18K -
rpool/ROOT/opensolaris 122K 142G 2.23G legacy
rpool/ROOT/opensolaris-1 2.28G 142G 2.23G legacy
rpool/ROOT/opensolaris-1@install 4.66M - 2.22G -
rpool/ROOT/opensolaris-1@static::-2008-04-29-17:59:13 562K - 2.23G -
rpool/ROOT/opensolaris-1/opt 3.60M 142G 3.60M /opt
rpool/ROOT/opensolaris-1/opt@install 0 - 3.60M -
rpool/ROOT/opensolaris-1/opt@static::-2008-04-29-17:59:13 0 - 3.60M -
rpool/ROOT/opensolaris/opt 0 142G 3.60M /opt
rpool/export      85.8M 142G 19K /export
rpool/export@install 0 - 19K -
rpool/export/home 85.8M 142G 85.8M /export/home
rpool/export/home@install 18K - 21K -
```

The update automatically triggers the creation of a new boot-environment and the integration of this boot-environment to GRUB. Next time when you start your system, it will start with this boot environment. jmoekamp@glamdring:~# beadm list

```
BE      Active Active on Mountpoint Space
```

```
Name      reboot      Used
```

```
----      -
opensolaris-1 yes yes legacy 2.29G
```

```
opensolaris no no - 57.37MI rebooted here, and after the reboot the operating system came up as a
```

Release Candidate 2a system:

```
jmoekamp@glamdring:~$ cat /etc/release
```

```
Open Solaris 2008.05 snv_86_rc2a X86
```

```
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```

```
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```

```
Assembled 23 April 2008 Nice ... switching to the old environment is really easy
```

```
jmoekamp@glamdring:~# beadm activate opensolaris Now we can reboot again. Et voila, after the reboot you are back in your Release Candidate 2 operating system. jmoekamp@glamdring:~# cat /etc/release
```

```
Open Solaris 2008.05 snv_86_rc2 X86
```

```
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```

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When you look into the list of boot environments, you will see that the both environment swapped their roles.
jmoekamp@glamdring:~# beadm list
BE Name Active reboot Active on Mountpoint Used Space

opensolaris-1 no no - 63.57M
opensolaris yes yes legacy 2.30G
Of course, you can jump back to the newer installation again.
jmoekamp@glamdring:~# beadm activate opensolaris-1
Reboot the system and afterwards you have your Release Candidate 2a operating system online again.
jmoekamp@glamdring:~\$ cat /etc/release
Open Solaris 2008.05 snv_86_rc2a X86
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Assembled 23 April 2008

A nice side effect of snapshot based boot environments
Every now and then even a experienced admin tends to do really dumb errors. Like me i've accidentally deleted the /etc/hosts:
jmoekamp@glamdring:~# echo "192.168.1.xxx fileserver.internal" > /etc/hosts
Fsck! But then i thought: "The system makes snapshots when upgrading packages".
Okay, snapshots are accessible by using the .zfs directory in the root of the filesystem. So i just had to go into a snapshot directory and gather an older /etc/hosts version.
jmoekamp@glamdring:~# cd .zfs
jmoekamp@glamdring:~/.zfs# ls
snapshot
jmoekamp@glamdring:~/.zfs# cd snapshot/
jmoekamp@glamdring:~/.zfs/snapshot# ls
install static--:2008-04-29-17:59:13
jmoekamp@glamdring:~/.zfs/snapshot# cd static\--:2008-04-29-17:59:13/
jmoekamp@glamdring:~/.zfs/snapshot/static--:2008-04-29-17:59:13# cd etc/
jmoekamp@glamdring:~/.zfs/snapshot/static--:2008-04-29-17:59:13/etc# cat hosts
CDDL HEADER START

[..]

::1 localhost
127.0.0.1 glamdring glamdring.local localhost loghost
jmoekamp@glamdring:~/.zfs/snapshot/static--:2008-04-29-17:59:13/etc# cp hosts /etc/hosts
jmoekamp@glamdring:~/.zfs/snapshot/static--:2008-04-29-17:59:13/etc# cd /
And now i was able to add the hostname in a correct way without deleting it:
jmoekamp@glamdring:~# echo "192.168.1.xxx fileserver.internal" >> /etc/hosts

Posted by Joerg Moellenkamp in Solaris at 22:13

Maybe I miss a something obvious but where can I download OpenSolaris 2008.5? DP2 is the latest I find on opensolaris.org?

Can you give me a hint?

Cheers from a very regular reader
Anonymous on Apr 30 2008, 14:14

You will find the torrent url in this mail: <http://opensolaris.org/jive/thread.jspa?threadID=58463&tstart=0>
Anonymous on Apr 30 2008, 15:41