Homework 4

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前情提要
HOMEWORK 3

ZFS
- Automatic Snapshot Script

❑ Specification

- Usage: ./zbackup [[--list | --delete] target dataset [ID] | target dataset [rotation count]]

- Example

  $ sudo ./zbackup data/to/backup 5

  $ sudo ./zbackup data/to/backup 5

  $ sudo ./zbackup --list data/to/backup

ID	Dataset	Time
1	data/to/backup	2016-10-05 10:12:23
2	data/to/backup	2016-10-05 10:14:25

ZFS
- Automatic Snapshot Script

❑ Specification

- Create (Default)
  - ➢ No more than **rotation count** snapshots per dataset
  - ➢ If no **rotation count** specified, max 20 snapshots are allowed
  - ➢ If **rotation count** has reached, delete the very first one
- List
  - ➢ List the snapshot created by zbackup
  - ➢ If dataset is specified, list only the snapshot of that dataset
  - ➢ Otherwise, list all of the snapshot
- Delete
  - ➢ Delete snapshots created by zbackup
  - ➢ Must specify dataset
  - ➢ If ID is specified, delete that one
  - ➢ Otherwise delete them all

ZFS
- Backup to google drive

❑ Backup your dataset to google drive

❑ Must compress with xz

❑ Must encrypt with aes256

❑ The filename should be dataset/to/backup@2016-10-12.xz.enc

❑ Download it and roll back

HOMEWORK 4

New Features

❑ zbackup

- A service that will automatically create snapshots periodically for you
- --daemon, -d: Background execution (Daemon mode)
- --config, -c: The path to the configuration file. If this option is not specified, the default value would be */usr/local/etc/zbackup.conf*

New Features

❑ zbackup

- Configuration File Syntax

```
# zbackup.conf

[zroot/data]            # Dataset to be snapshot
enabled=no              # (default: yes)
policy=4x15m            # Snapshot policy

[zoot/mail]
policy=5x1d

[zroot/etc]
policy=12x1d

[zroot/home]
policy=4x1w
```

Service Management

❑ You need to provide a rc script that can dynamically start/stop service.

❑ In /etc/rc.conf

- zbackup_enable="YES"

- zbackup_config="/path/to/the/config/file" (Default: /usr/local/etc/zbackup.conf)

❑ Actions that need to be supported

- start/stop/restart/reload

- status/poll

- list

❑ If configuration file doesn't exist, you need to show error message.

❑ **Deadline: 12/21 (Wed.)**