

ZFS Small Server Configuration

Serge Y. Stroobandt

Copyright 2015–2017, licensed under Creative Commons BY-NC-SA

TODO: This document requires a rewrite to reflect the Ansible configuration management currently in use.

Ansible

A single Ansible playbook is used to install the pertaining applications and to manage the configuration files on all my computers, according to their roles. This works much better than apt install scripts and offers ample opportunity for commenting. Some YAML excerpts of my playbook are shared below.

Mount script for SSHFS clients

Here is a bash script to mount the server through SSHFS on whatever client computer. It gets executed at login, in my case by specifying the script in Xubuntu's Session and Startup → Application Autostart. However, the script can also be run manually, for example after connecting to a mobile network.

```
# !/usr/bin/env bash
mountpoint="/$server/$USER"

options=' -o reconnect -o cache=yes -o kernel_cache -o compression=yes -o large_read'
options+=" -o idmap=file -o uidfile=$HOME/.uidfile -o gidfile=$HOME/.gidfile -o nomap=ignore"

{ sshfs $server:/home $mountpoint -p 22 $options > /dev/null 2>&1 && echo -e '\nThe server is now mounted over LAN.\n'; } || \
{ sshfs $roam:/home $mountpoint -p 443 $options && echo -e '\nThe server is now mounted over WAN.\n'; }
```

The optimisation parameters are from the following article and tests. As a requisite, the administrator needs to create a /\$server/\$USER mount point directory for every user on the client system.

/etc/ssh/sshd_config



Nokia Asha 210

The antiquated J2ME application MidpSSH for the not so smart but beloved feature phones is still available from boostapps.com. However, recent OpenSSH versions require manually enabling potentially unsafe legacy algorithms and ciphers. Nonetheless, a privacy respecting, virtually undestructible 2.5G mobile SSH terminal with an ergonomic tactile keyboard and 1104 hours standby time on a single battery charge remains to this day hard to beat...

```
---
- name: 'Legacy support for MidpSSH'
blockinfile:
   path: /etc/ssh/sshd_config
   insertafter:
   block: |
     # Legacy support for MidpSSH
     KexAlgorithms +diffie-hellman-group1-shal
     HostKeyAlgorithms +ssh-dss
     Ciphers +3des-cbc
     PubkeyAcceptedKeyTypes +ssh-dss
   notify: restart ssh
- meta: flush_handlers
```

Note to myself: The Nokia Asha 210 requires MidpSSH Polling I/O and is used with the linux terminal type.



This work is licensed under a Creative Commons
Attribution-NonCommercial-ShareAlike 4.0 International License.
Other licensing available on request.

Unattended CSS typesetting with Prince

This work is published at https://hamwaves.com/zfs.server.config/en/.

Last update: Tuesday, August 23, 2022.