System Administration HW2
- File System Server

FTP

❑ Install a FTP server for FreeBSD

- Pure-FTPd: */usr/ports/ftp/pure-ftpd*
- ProFTPD: */usr/ports/ftp/proftpd*

❑ Settings

1. Anonymous Login

   ❑ Can download from */home/ftp/public*
   ❑ Can upload & mkdir from */home/ftp/upload*
   ❑ Can't delete from */home/ftp/upload*
   ❑ *Can only download the files which owner isn't "ftp"*
   ❑ Hidden directory */home/ftp/hidden*
      ➢ There is a directory called "treasure" inside
      ➢ Client can't list in */home/ftp/hidden/* but can in *hidden/treasure*

FTP

❑ Settings (cont'd)

2. Create a virtual user "ftp-vip"

   ❑ Chrooted (*/home/ftp* is your root directory)

   ❑ Password is your student-id

   ❑ Can login from 140.113.17.225 & your ip only

   ❑ Full access to */home/ftp*

   ❑ Hidden directory is visible to ftp-vip

3. Create a system user "sysadm"

   ❑ Could login by ssh

   ❑ Password is your student id

   ❑ Permission is same as ftp-vip

4. Your ftp server should support FTP over TLS

5. All accounts are chrooted (*/home/ftp* is the root directory)

Samba

❑ Install Samba

- *·* */usr/ports/net/samba36*

❑ Location

- *·* Samba share */home/ftp/public* to Windows
- *·* Mount Windows directory at */home/ftp/windows*

❑ You should create at least 4 accounts

❑ Admin

- *·* Full access (read, download, delete, rename, mkdir, upload) to all files and directories

❑ Guest

- *·* Can only list the files and directories
- *·* Can't perform (read, download, delete, rename, mkdir, upload) to all files and directories

Samba

❑ Test1

- Can (read, rename, delete, download) to Test1's files
- Can mkdir
- Can upload files to Test1's directory and root directory */home/ftp/public*
- Can't do (read, rename, delete, download) to other files and directories

❑ Test2

- Can (read, download, delete, rename) to Test2's files
- Can mkdir
- Can upload files to Test2's directory and root directory */home/ftp/public*
- Can't do (read, download, delete, rename) to other files and directories

ZFS

❑ ZFS on /home/ftp

❑ Create a zfs file system with mirror

❑ Do zfs snapshot

❑ Do zfs rollback

❑ Set compression

❑ Reboot and everything is fine (zfs still mounted)

Reminder

❑ Demo with root is not allowed

❑ Please use sudo

- */usr/ports/security/sudo*

❑ File/directory permissions are important

- Owner, group, other

- Read, write, execute

- Set UID, set GID, sticky bit

❑ Setting port forwarding to allow your services to be accessible over the Internet

Deadline

❑ Demo sheet will be available next week

❑ Demo week: 10/27~10/31

Need Help?

- ❑ IRC channel #nctuNASA on freenode
- ❑ Newsgroup cs.course.sysadmin
- ❑ BBS bs2.to board CS-SysAdmin
- ❑ Email ta@nasa.cs.nctu.edu.tw
- ❑ Goto CSCC to ask professional 3F!