

Homework #02

FTP Service

Announce: 2008/10/14

Due: 2008/10/21

Choices of FTPd in FreeBSD

- ⦿ Included in base system

- > ftpd

- /usr/libexec/ftpd

- > lukemftpd

- /usr/libexec/lukemftpd

- ⦿ In ports collections

- > Pure-FTPd

- ftp/pure-ftpd

- > ProFTPD

- ftp/proftpd

- > etc.

Requirement

- ◎ Install Pure-FTPd or ProFTPD
- ◎ Support Anonymous clients
 - > could DOWNLOAD files inside /home/anonyftp
 - > A special property applying to /home/anonyftp/upload, clients could UPLOAD but NOT DOWNLOAD files
- ◎ Anonymous clients are NOT allowed to do DELETE operation
- ◎ Hint:
 - > Pure-FTPd: AntiWarez
 - > Pro-FTPd: AnonRequirePassword

Requirement

- Create a system user “sysadm”
 - > With password of your school ID
 - > Could login by SSH
 - > CHROOTED in its HOME path `~sysadm`. (default is `/home/sysadm/`)
 - > only user “sysadm” could access anonymous directory by accessing `~sysadm/anony/`.
- Create a virtual user “vsysadm”
 - > allowed to only download files in `~sysadm/`, including subdirectories and files included.
- Hint:
 - > Pure-FTPd: using PureDB & purepw
 - > Pro-FTPd: using ftpasswd

Requirement

- ◎ Create a directory `~sysadm/hide`
 - > Which could access by listing
 - > Its sub-dirs will hide from FTP listing
 - > Its sub-dirs can be accessed while directly enter the directory name
 - > Hint:
 - Pure-FTPd: setting perm of hidden dir
- ◎ Access anonymous space
 - > Make ONLY user “sysadm” could access anonymous dir `/home/anonyftp/` by accessing `~sysadm/anony/`
 - > “vsysadm” is disallowed to access.
 - > Hint:
 - Pure-FTPd : using group permission to separate
 - Pro-FTPd : Directory & Limit

Requirement

- ◎ Put your FTP server configuration file and log file to `~sysadm/etc/` with file names “conf” & “log” relatively. (these files should be real-time updated)
- ◎ Hint:
 - > linking

Requirement(Option)

- ◎ UTF-8 Support

- > RFC2640 - Internationalization of the File Transfer Protocol

- > Hint:

- Pure-FTPd: FileSystemCharset, ClientCharset

- ◎ Building a statistics web

- > Modlogan

- > Or any other tools could satisfy our requirement