

Lab 2. Minix, Server and Git

Hu Zhengdong 517370910249

Sept. 24, 2020

I. Minix 3

- How to manage software?

Install: `pkgin install`

Remove: `pkgin remove`

Update: `pkgin update`

- What is the purpose of the commands `ifconfig`, `adduser`, and `passwd`?

`ifconfig`: display the IP address and network information

`adduser`: add new user

`passwd`: reset the password for the user

II. Working on a remote Server

- Setup an SSH server on Minix3

`pkgin install openssh`

- What is the default SSH port?

Port 22

- List and explain the role of each file in the `$HOME/.ssh` directory

`id_rsa`: stores the private key to pair with the public key

`id_rsa.pub`: stores the public key to verify the connection with remote servers

`known_hosts`: records the public keys that have been accessed

- Briefly explain how authentication works in SSH

The host system generates the public key and private key, and the remote server Minix is configured using the public key. Then the Minix can allow the host owning the public key to access, and the role of private key is to verify that the public key is owned by your host.

- Submitted

III. Basic git

git help: display the function of different commands

git init: create an empty Git repository or reinitialize an existing one

git checkout: switch branches

git push: update remote repository

git pull: fetch from and integrate with another repository

git merge: join two or more development histories together

git add: add files to the Git

git diff: show changes between commits

git tag: create, list, delete or verify a tag object

git log: show commit logs

git fetch: download objects and repository from another repository

git commit: record changes to the repository

git clone: create a repository into a new directory

git reset: reset current HEAD to the specified state