System Administration HW5 Demo Flow

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Remind

❑ **Machines**

   ❑ **sahome**: NFS server, NIS master & client (itself)

   ❑ **saduty**: NFS client, NIS slave & client (itself)

   ❑ **sabsd**: both NFS / NIS client

❑ **Groups**

   ❑ **samaster**: god, can do anything

   ❑ **sysadm**: can access `/net/data/sata`

   ❑ **nctucs**: normal user

❑ **Netgroups**

   ❑ **sa-adm**: **sysadm**, **samaster**

   ❑ **sa-core**: **saduty**, **sahome**

   ❑ **sa-bsd**: **sabsd**, **saduty**, **sahome**

Preparement

❏ Create these 3 accounts below
- ❏ sauser
    - ❏ group: nctucs
    - ❏ can only login to sabsd
- ❏ saadmin
    - ❏ group: sysadm
    - ❏ can login to sabsd, saduty, sahome
- ❏ sadog
    - ❏ group: samaster
    - ❏ can login to sabsd, saduty, sahome

Base Requirements
80%

NIS / NFS
Rup / Ports Tree / Log Server
Auto-start all services
Auto-mount all folders

WARNING

❑ You have to reboot all the machines at the very beginning of the demo.

❑ Please make sure everything is fine!!

❑ Login to sabsd as saadmin

   ❑ cd /net/data

❑ Login to saduty as saadmin

   ❑ cd /net/data/sata

NIS (45%)

❑ (5%)You have to create a brand new user during demo, its permission will be the same as one of `sa{user,admin,dog}`.

❑ We will replace the pre-created account with that during demo time.

NIS

❏ from public network (5%)
  ❏ sauser / saadmin / sadog
    ❏ ssh saduty / sahome (connection refused)
    ❏ ssh sabsd (successful)
❏ from sabsd (5%)
  ❏ sauser / saadmin / sadog
    ❏ ssh localhost (successful)
  ❏ sauser
    ❏ ssh saduty / sahome (connection refused)
  ❏ saadmin / sadog
    ❏ ssh saduty (successful)
    ❏ ssh sahome (connection refused)

NIS

❑ from saduty (5%)
- ❑ saadmin / sadog
  - ❑ ssh sabsd / saduty / sahome (successful)

❑ from sahome (5%)
- ❑ saadmin / sadog
  - ❑ ssh sabsd / saduty / sahome (successful)

NIS

❑ from sabsd (5%)
   ❑ saadmin / sadog
      ❑ ypwhich (saduty)
      ❑ ypcat passwd (print accounts info)
      ❑ ypcat -x (nickname table)
      ❑ ypcat -k netgroup (three netgroups)
❑ from saduty (5%)
   ❑ saadmin / sadog
      ❑ ypwhich (saduty)
      ❑ ypcat passwd
      ❑ ypcat -x
      ❑ ypcat -k netgroup

NIS

- ❑ from sahome (5%)
  - ❑ saadmin / sadog
    - ❑ ypwhich (sahome)
    - ❑ ypcat passwd
    - ❑ ypcat -x
    - ❑ ypcat -k netgroup
- ❑ from sabsd (5%)
  - ❑ sauser / saadmin / sadog
    - ❑ id (show the correct group names)

NFS (15%)

❏ from sabsd (5%)
  ❏ sauser / saadmin / sadog
    ❏ pwd (show the correct home directory)
  ❏ saadmin
    ❏ showmount -e sahome
❏ from saduty (5%)
  ❏ saadmin
    ❏ showmount -e sahome
❏ from sahome (5%)
  ❏ saadmin
    ❏ showmount -a
   ❏ mount (nullfs)
    ❏ cat `/etc/exports`

Rup (5%)

❏ All the machines should be available in rup list

Ports Tree (10%)

❑ from sahome (4%)
- ❑ sadog
  - ❑ sudo crontab -e (some scripts here)

❑ from saduty (3%)
- ❑ able to install some stuffs from ports
- ❑ cat /etc/make.conf (appropriate settings)

❑ from sabsd (3%)
- ❑ able to install some stuffs from ports
- ❑ cat /etc/make.conf (appropriate settings)

Log Server (5%)

❏ from sahome
- ❏ tree /net/data/ssh
- ❏ cat one of the log files
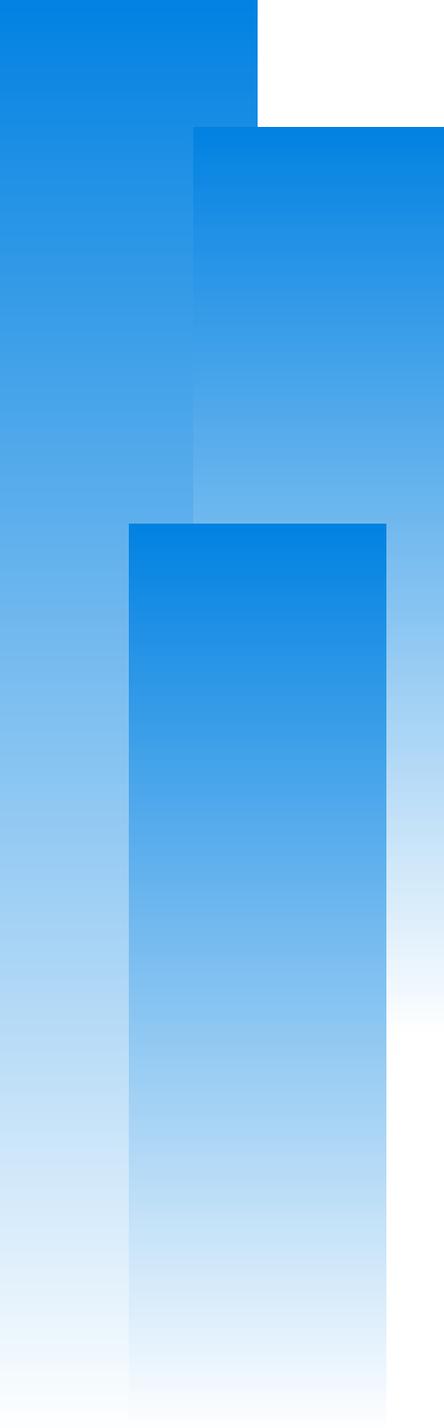
Advance Requirements 20%

Sudo
FTP
Web Server
Backup Service
Build Kernel

sudo (4%)

❏ from sabsd
  ❏ sauser / saadmin / sadog
    ❏ sudo -l (corresponding permissions)

FTP (4%)

❏ use FileZilla with ftps/ftpes to connect sabsd with sauser
❏ Check if it chroots to user directory correctly.

Web Server (4%)

❏ create index.html under ~/public_html on saduty (saadmin)
❏ use browser to check your ${saduty_domain}/~saadmin/ if it shows the right page

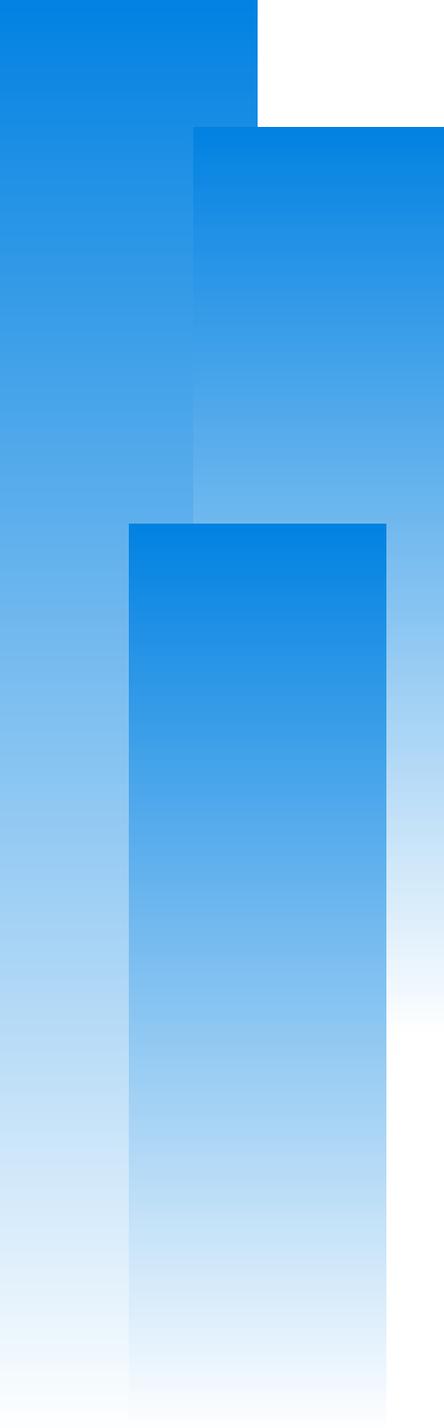# Backup Service (4%)

❏ from sahome
  ❏ sadog
    ❏ ls -l /net/data/backup

Build Kernel (4%+5%Bonus)

❏ show your new kernel size

```
chcbsd :) ~
starbops $ ls -l /boot/kernel/kernel
-r-xr-xr-x  1 root  wheel  14646999 Dec 10 19:59 /boot/kernel/kernel*
chcbsd :) ~
starbops $ ls -l /boot/kernel.old/kernel
-r-xr-xr-x  1 root  wheel  20524796 Dec 10 19:20 /boot/kernel.old/kernel*
```

Bonus
15%

High Availability Web Server

Steps

❏ Show your web server configuration files on both saduty & sahome

❏ Stop the web server on saduty & sahome respectively, your service should keep available.