



# System Administration Practice Homework 1-1 : FreeBSD Base

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lctseng

# Requirements

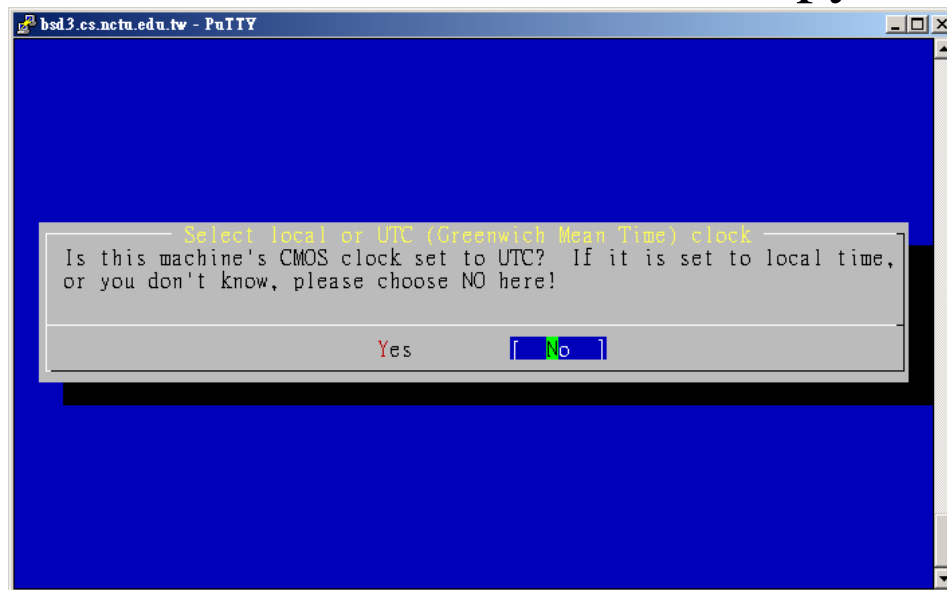
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## ❑ Basic

- FreeBSD Base
  - 10.1-Release
  - Don't use other version
- Add a user
  - User should also be in the 'wheel' group
  - Use this user to do this homework instead of root
- Set your machine to current time zone **and adjust current time**
- Enable *sshd*

# Timezone

- These must be do as **root** or using **sudo**
- bsdconfig
  - or
- tzsetup
  - or
- Find right timezone file in `/usr/share/zoneinfo` and copy to `/etc/localtime`



# Submission

\$ : shell prompt

- ❑ Login with the user you created
- ❑ \$ rm -f /tmp/sahw1-1.tmp
  - Perform this as root if it cried about ‘Permission denied’
- ❑ \$ uname -a >> /tmp/sahw1-1.tmp
- ❑ \$ date >> /tmp/sahw1-1.tmp
  - Please keep your language settings as **English (en-US)**
- ❑ \$ id >> /tmp/sahw1-1.tmp
- ❑ \$ service sshd status >> /tmp/sahw1-1.tmp
- ❑ \$ mail -s '[SAHW1-1] 0005566' [sahw1@nasa.cs.nctu.edu.tw](mailto:sahw1@nasa.cs.nctu.edu.tw)  
< /tmp/sahw1-1.tmp

# Check submission result

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- Web page at <https://nasa.cs.nctu.edu.tw/2015sahw1/>
- You can submit many times, only the last count
- Due: 10/1

# FAQ(1/3)

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## ❑ Adjust current time

- ntpdate(8) //non-continuous  
or
- ntpd(8) //continuous
  - <http://www.freebsd.org/doc/en/books/handbook/network-ntp.html>
- Server
  - time.stdtime.gov.tw
  - tick.stdtime.gov.tw
  - tock.stdtime.gov.tw
  - watch.stdtime.gov.tw
  - clock.stdtime.gov.tw
  - server 0.tw.pool.ntp.org
  - server 1.asia.pool.ntp.org
  - server 2.asia.pool.ntp.org

# FAQ(2/3)

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- ❑ My network is not working
  
- ❑ VM
  - Make sure you have correct VirtualBox/VMWare settings
  - Make sure your host computer has Internet access
  
- ❑ Install on a real machine
  - In your dormitory, switch to windows and authenticate
  - Use w3m command line browser
    - `www/w3m`

# FAQ(3/3)

## ❑ My WinXP / Win7 / Win8 is gone...

- # sysctl kern.geom.debugflags=16
- # sade => Partition

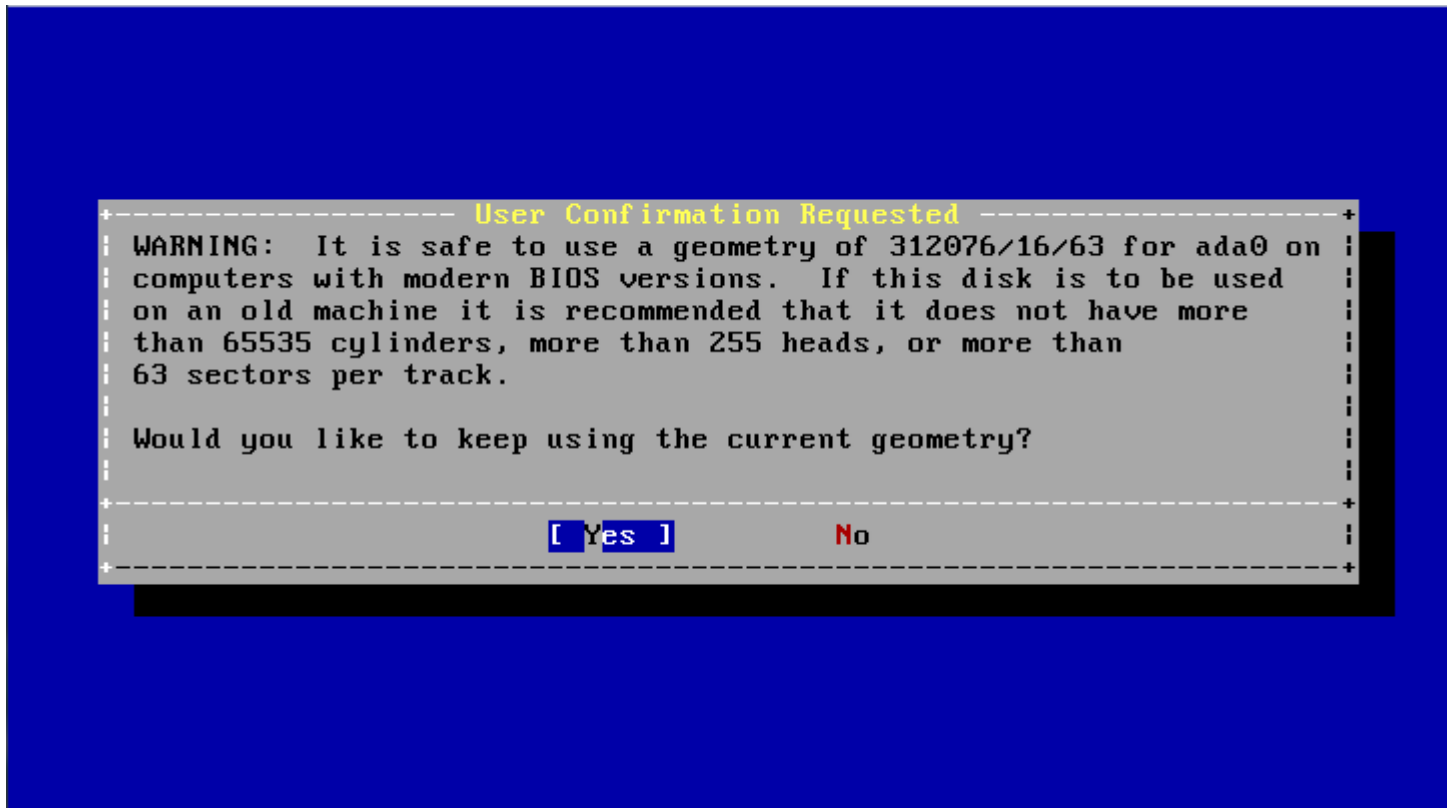
```
----- Disklabel and partitioning utility -----+
This is a utility for partitioning and/or labelling your disks. |
+-----+
| 1 Partition  Managing disk partitions |
| 2 Label      Label allocated disk partitions |
+-----+
[ OK ]      Cancel
----- [ DISKUTIL ] -----
```



# FAQ(3/3)

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Yes



# FAQ(3/3)

- ❑ Select your XP / Win7 / Win8 partition and click **S** to set it bootable

note: Win7's boot partition will be about 100MB

```

Disk name:      ada0                      FDISK Partition Editor
DISK Geometry: 312076 cyls/16 heads/63 sectors = 314572608 sectors (153599MB)

Offset          Size(ST)          End          Name  PType      Desc  Subtype  Flags
-----
      0           2048           2047        -     12      unused      0
  2048         204800         206847    ada0s1     4  NTFS/HPFS/QNX  7  A
 206848     204595200     204802047  ada0s2     4  NTFS/HPFS/QNX   7
204802048           53     204802100        -     12      unused      0
204802101     109051803     313853903  ada0s3     8   freebsd     165
313853904         718896     314572799        -     12      unused      0

The following commands are supported (in upper or lower case):

A = Use Entire Disk      G = set Drive Geometry      C = Create Slice
D = Delete Slice         Z = Toggle Size Units       S = Set Bootable      | = Expert m.
T = Change Type          U = Undo All Changes        W = Write Changes     Q = Finish

Use F1 or ? to get more help, arrow keys to select.

```

# FAQ(3/3)

- ❑ Press **W** to Write your Changes ; **Q** to finish

```

Disk name:      ada0                      FDISK Partition Editor
DISK Geometry: 312076 cyls/16 heads/63 sectors = 314572608 sectors (153599MB)

Offset      Size(ST)      End      Name  PType      Desc  Subtype  Flags
-----
           0         2048      2047    -     12      unused    0

+----- User Confirmation Requested -----+
2| WARNING: This should only be used when modifying an EXISTING |
2048| installation.  If you are installing FreeBSD for the first time |
2048| then you should simply type Q when you're finished here and your |
3138| changes will be committed in one batch automatically at the end of |
| these questions.  If you're adding a disk, you should NOT write |
| from this screen, you should do it from the label editor. |
The f| Are you absolutely sure you want to do this now? |
+-----+
A = U|                                     [ Yes ]      No |
D = D+-----+
T = Change Type      U = Undo All Changes      W = Write Changes      Q = Finish

Use F1 or ? to get more help, arrow keys to select.

```

# FAQ(3/3)

## ❑ Install FreeBSD Boot Manager

```
+----- Install Boot Manager for drive ada0? -----+
| FreeBSD comes with a boot manager that allows you to easily |
| select between FreeBSD and any other operating systems on your machine |
| at boot time.  If you have more than one drive and want to boot |
| from the second one, the boot manager will also make it possible |
| to do so (limitations in the PC BIOS usually prevent this otherwise). |
| If you have other operating systems installed and would like a choice when |
| booting, choose "BootMgr".  If you would prefer to keep your existing |
| boot manager, select "None". |
+-----+
| |
| Standard  Install a standard MBR (non-interactive boot manager) |
| BootMgr   Install the FreeBSD Boot Manager |
| None     Do not install a boot manager |
+-----+
|                                     [ OK ]          Cancel |
+-----+
|                                     [ ] |
+-----+
```

# Help!

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- Newsgroup `cs.course.sysadm`
- BS2 board `CS-SysAdmin`
- CSCC
- `ta@nasa.cs.nctu.edu.tw`
- IRC channel `#nctuNASA` on freenode