

Step By Step LKS Nasional

oleh
Ahmad Imanudin

Pembimbing
Budi S.Si



LKS SMK

Tingkat Nasional XVIII

Jakarta, 12-17 Mei 2010

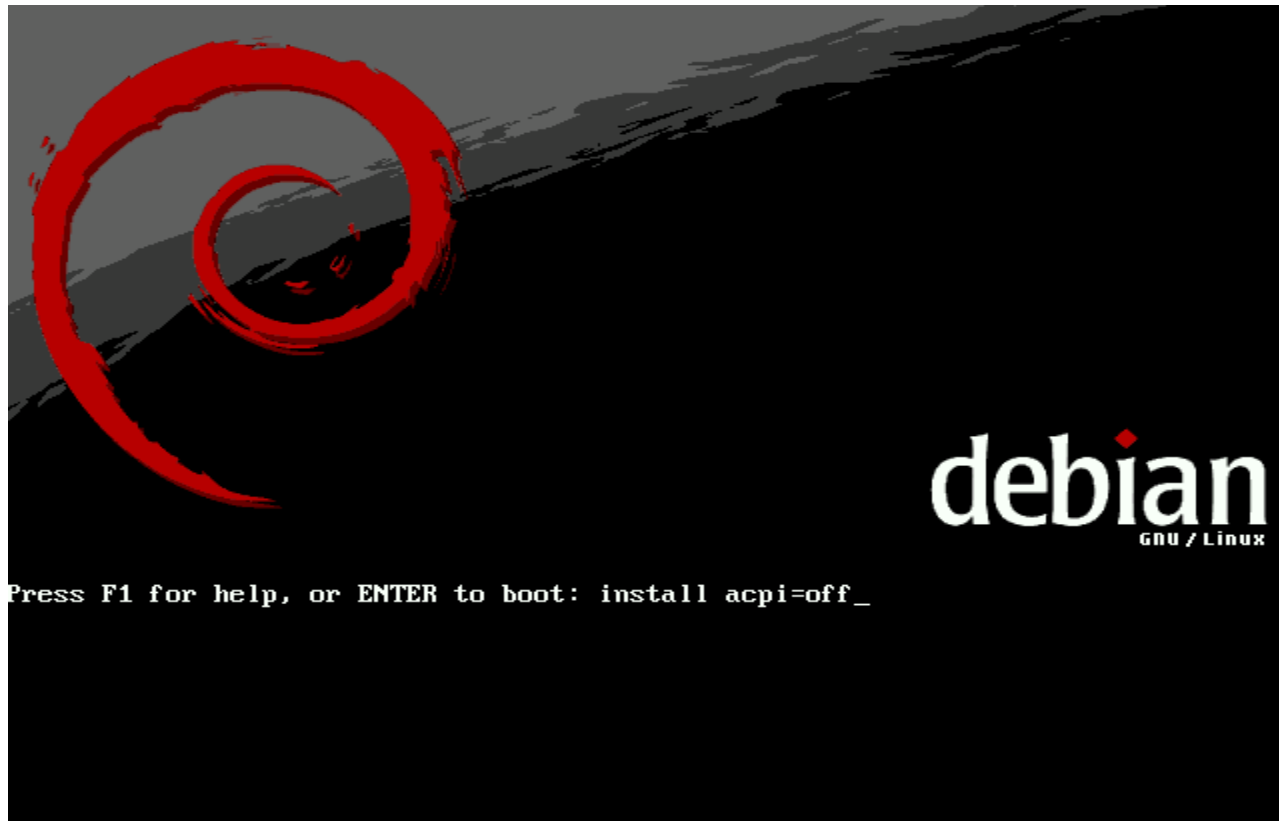
Information Technology
Networking Support

Jakarta, 12-17 Mei 2010

- Keterangan:
 1. Hostname :server11
 2. User :server11
 3. Password :lks2010

Instalasi Debian etch 4 r7

- ★ Lakukan booting dari Cd/Dvd rom pertama kali
- ★ Masukkan Cd/Dvd Binary debian etch 4 r7 kedalam Cd/Dvd rom
- ★ Save dan exit
- ★ Ketika tampil gambar seperti dibawah, anda ketik `install acpi=off` kemudian `ENTER` apabila anda menggunakan mini PC
- ★ Apabila anda Menginstall pada PC Desktop, anda bisa ketik perintah diatas atau langsung tekan `ENTER`



- ★ Biarkan Proses instalasi berjalan

```
activating ISA DMA hang workarounds.
Limiting direct PCI/PCI transfers.
activating ISA DMA hang workarounds.
isapnp: Scanning for PnP cards...
isapnp: No Plug & Play device found
Serial: 8250/16550 driver $Revision: 1.90 $ 4 ports, IRQ :
RAMDISK driver initialized: 16 RAM disks of 8192K size 1024 blocksize
PNP: No PS/2 controller found. Probing ports directly.
serio: i8042 AUX port at 0x60,0x64 irq 12
serio: i8042 KBD port at 0x60,0x64 irq 1
mouse: PS/2 mouse device common for all mice
input: AT Translated Set 2 keyboard as /class/input/input0
EISA: Probing bus 0 at eisa.0ly 17
EISA: Detected 0 cards.
TCP bic registered
NET: Registered protocol family 1
NET: Registered protocol family 17
NET: Registered protocol family 8
NET: Registered protocol family 20
Using IPI Shortcut mode
Freeing unused kernel memory:000:00:06.0
Time: tsc clocksource has been installed.
usbcore: registered new driver usbfs
usbcore: registered new driver hub
```

- ★ Berikutnya anda akan diminta pemilihan bahasa untuk proses instalasi, silahkan pilih bahasa yang anda inginkan kemudian **ENTER**



- ★ Berikutnya adalah pemilihan country atau area anda berada, karena kita berada di indonesia pilih **other**

[!!] Choose language

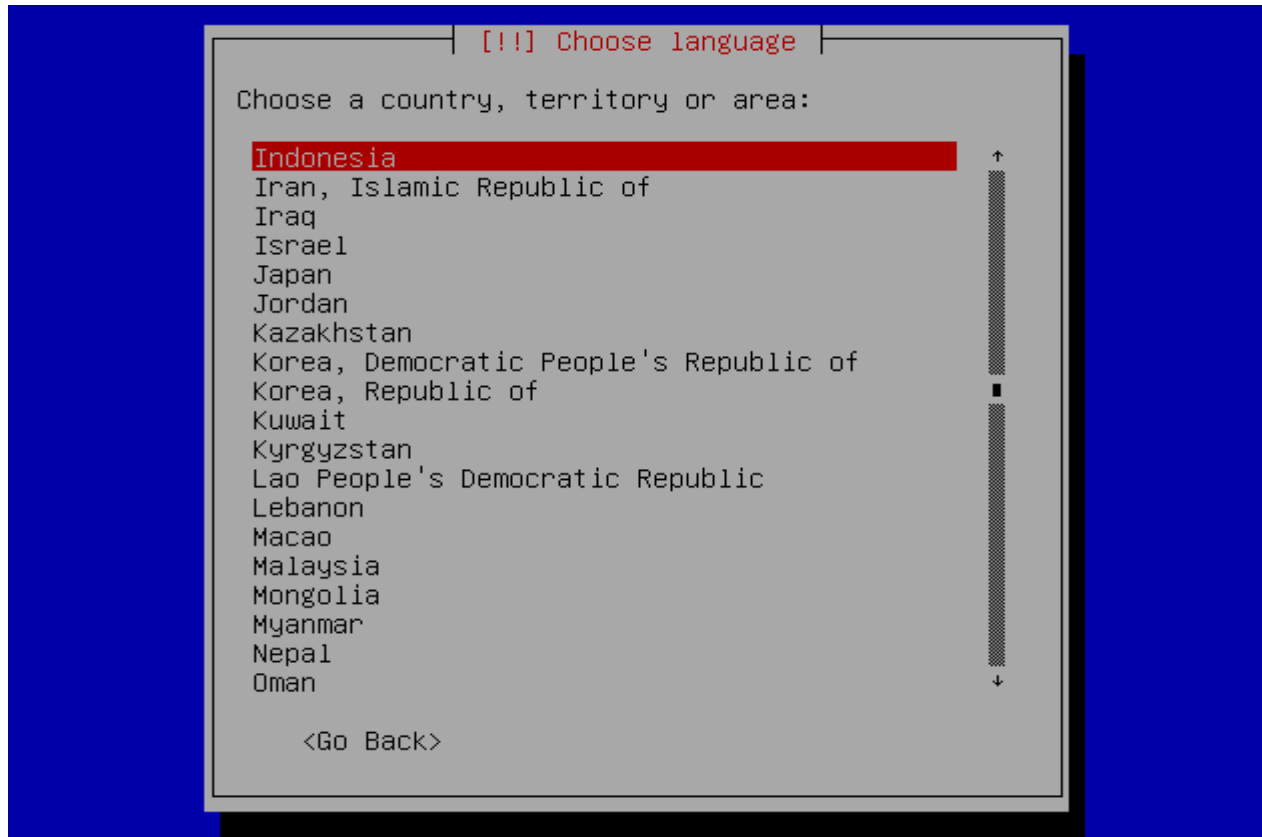
Based on your language, you are probably located in one of these countries or regions.

Choose a country, territory or area:

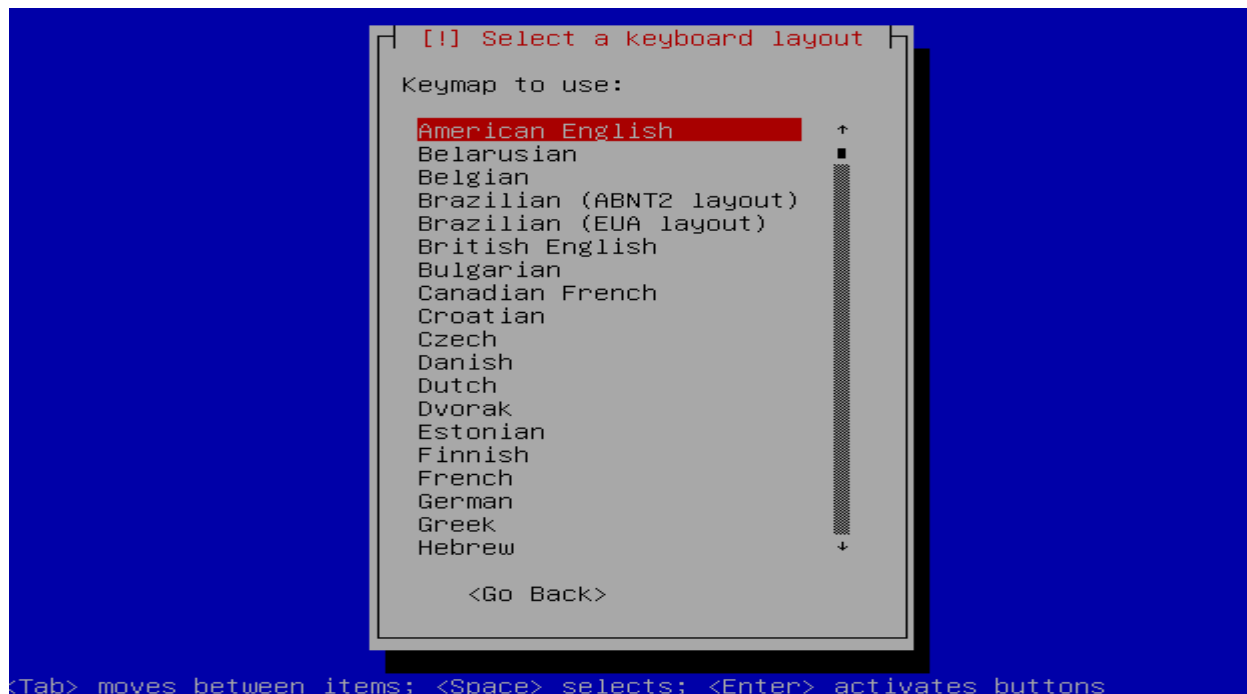
Australia
Botswana
Canada
Hong Kong
India
Ireland
New Zealand
Philippines
Singapore
South Africa
United Kingdom
United States
Zimbabwe
other

<Go Back>

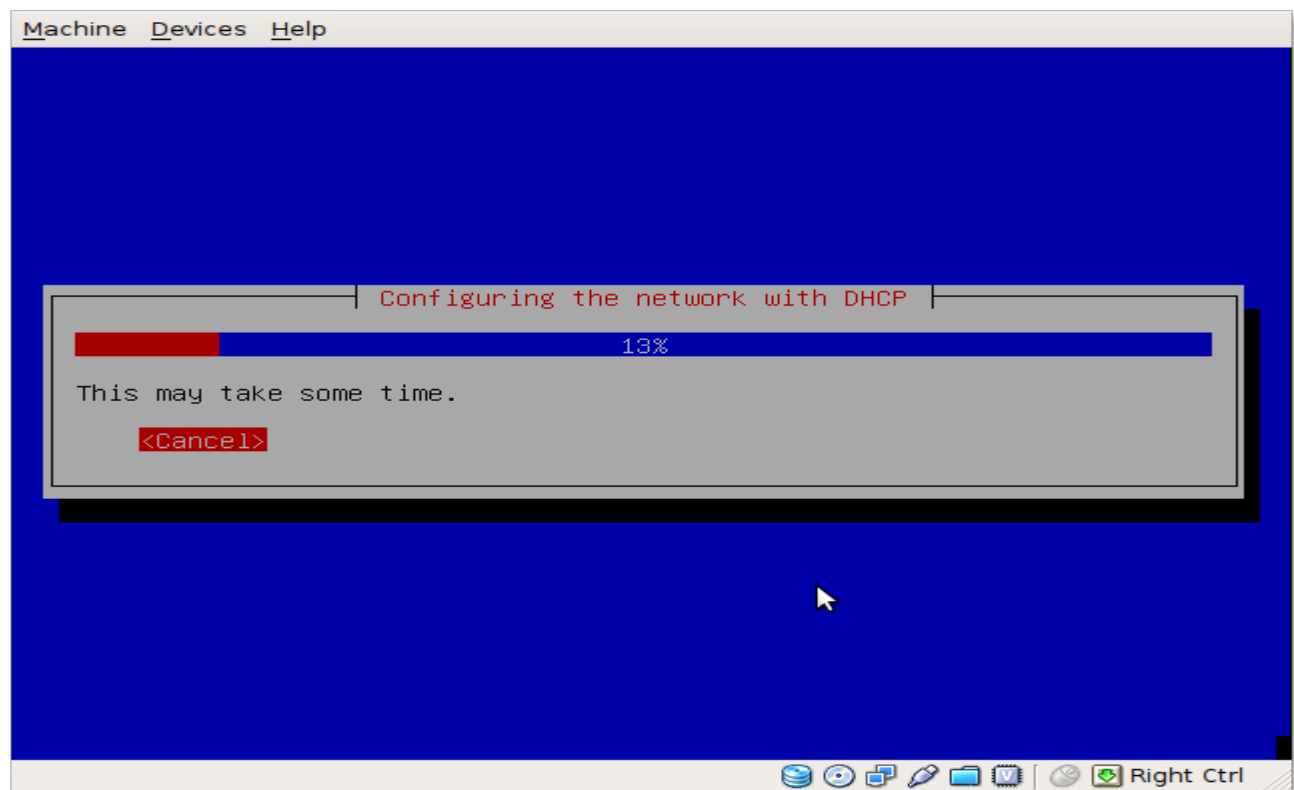
★ Kemudian pilih [Indonesia](#)



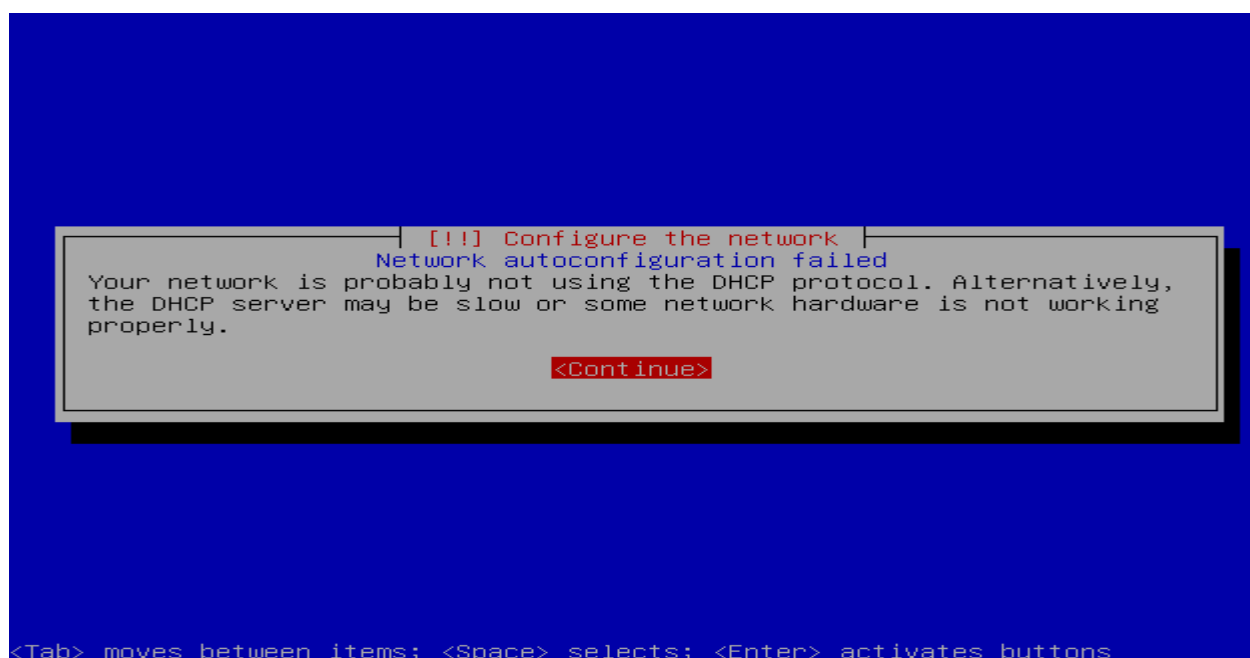
★ Kemudian pemilihan jenis keyboard



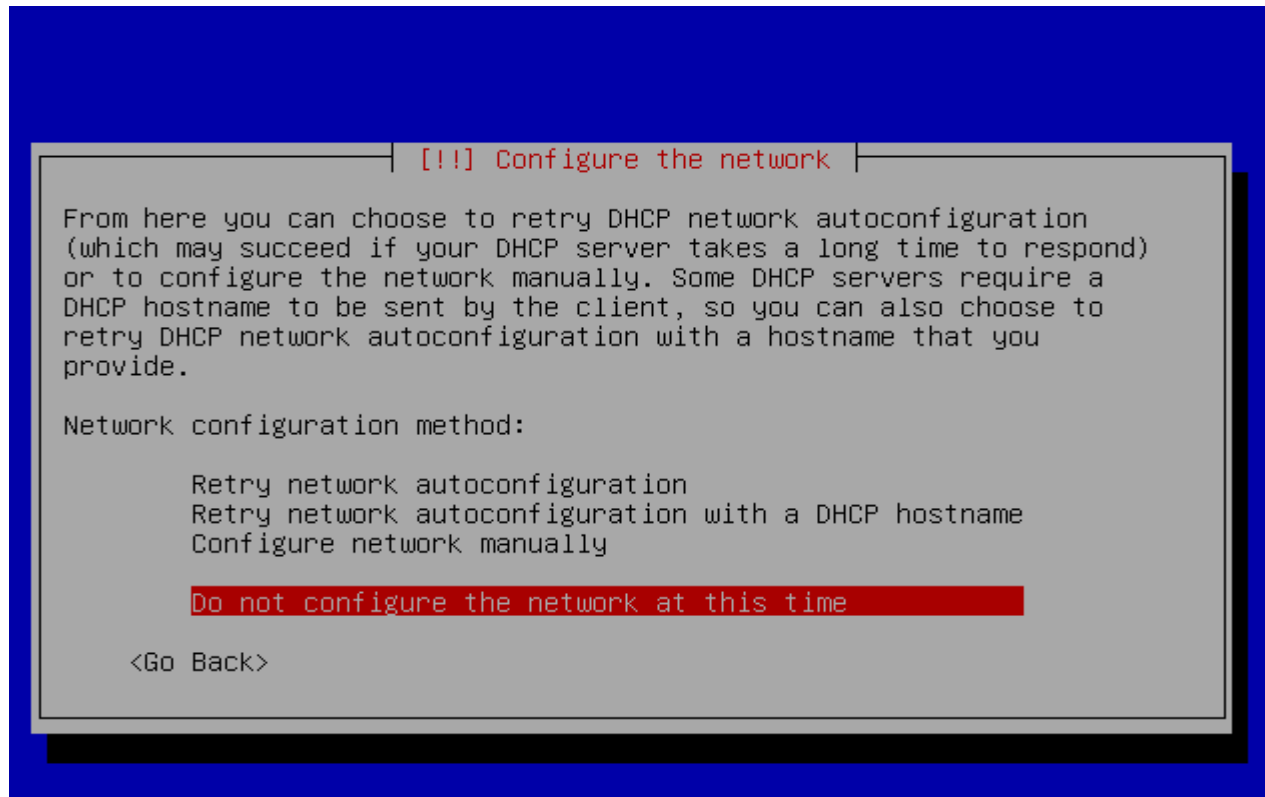
- ★ Ketika ada tampilan seperti dibawah tekan **ENTER**, karena akan mengkonfigurasi ip address setelah instalasi selesai



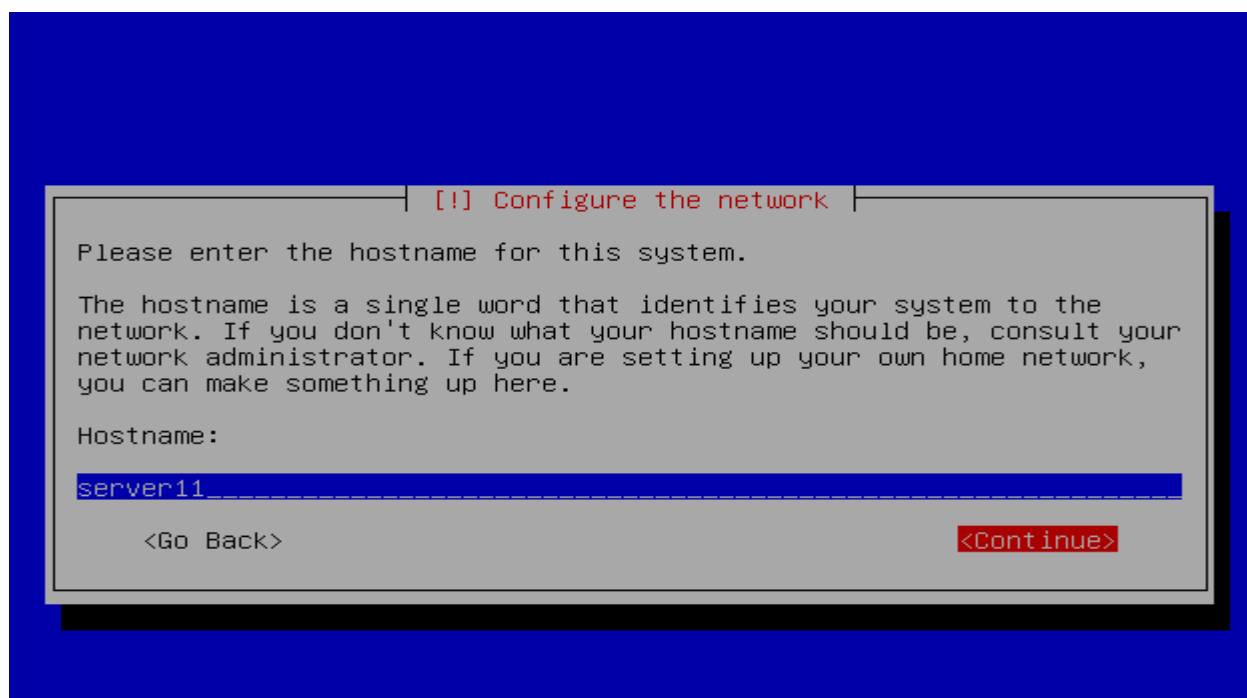
- ★ Akan muncul tampilan seperti dibawah ini, kemudian tekan **ENTER**



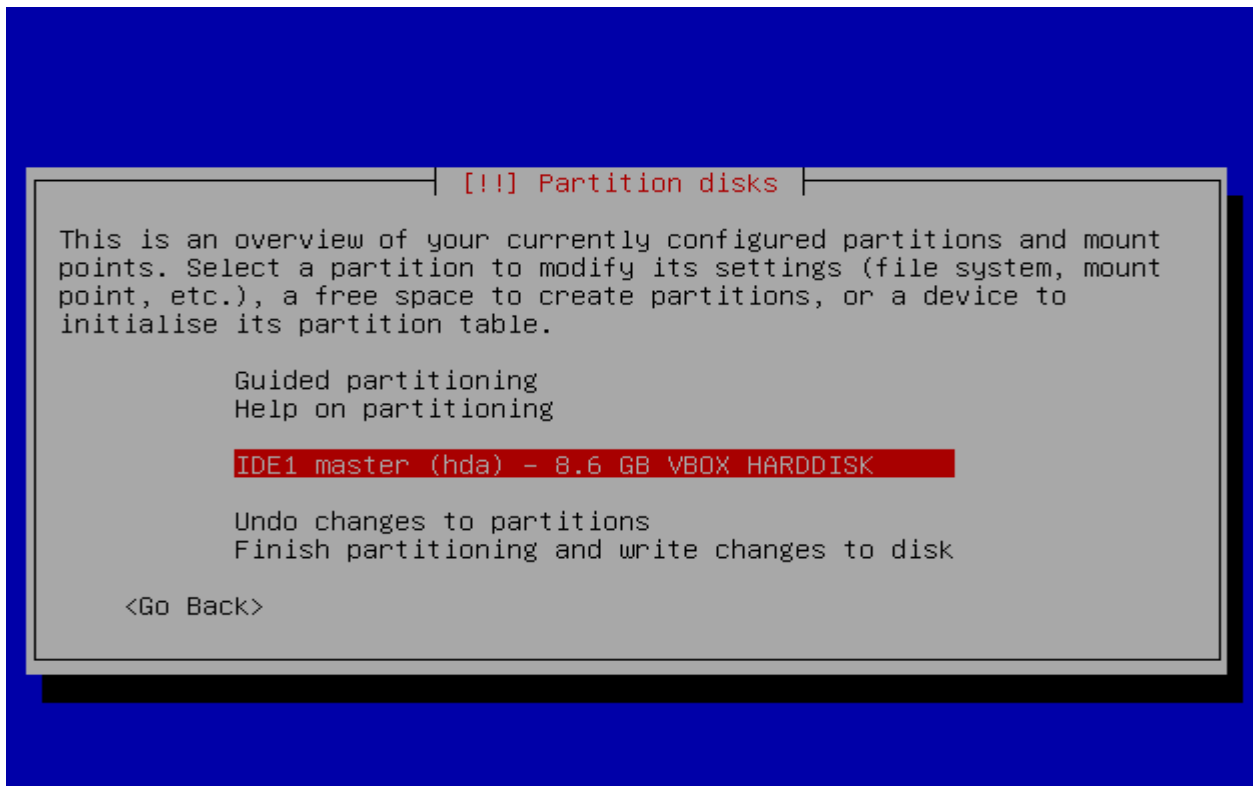
★ Pilih do not configure the network at this time, ENTER



★ Berikutnya adalah pemberian nama hostname



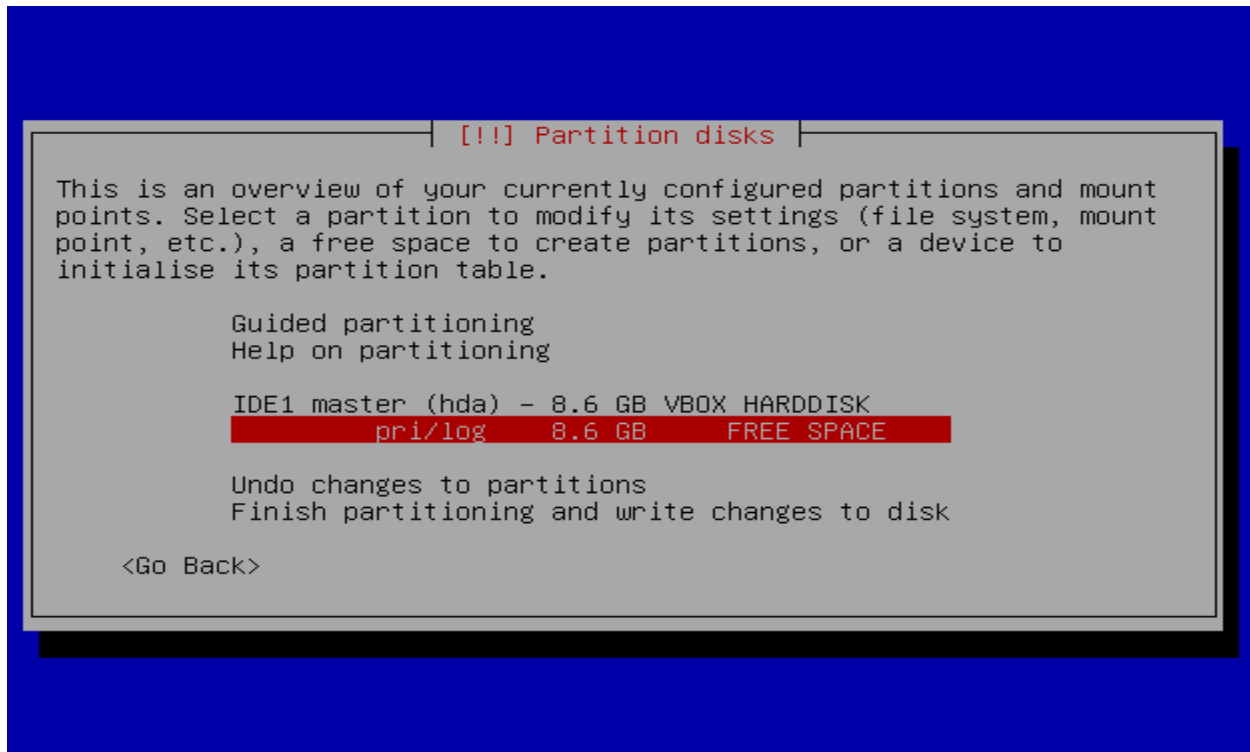
- ★ Proses partisi, pilih hardisk apabila belum terdapat OS apapun pada hardisk anda kemudian ENTER



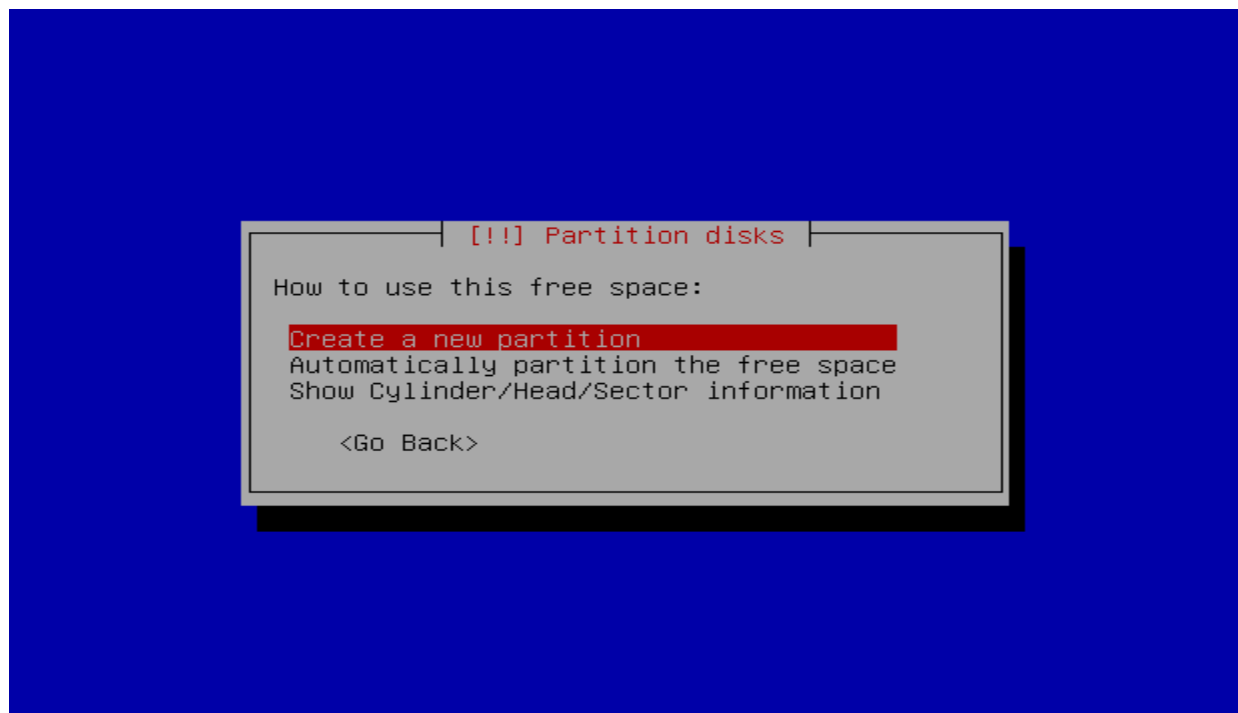
- ★ Pilih yes untuk membuat partisi kosong yang baru



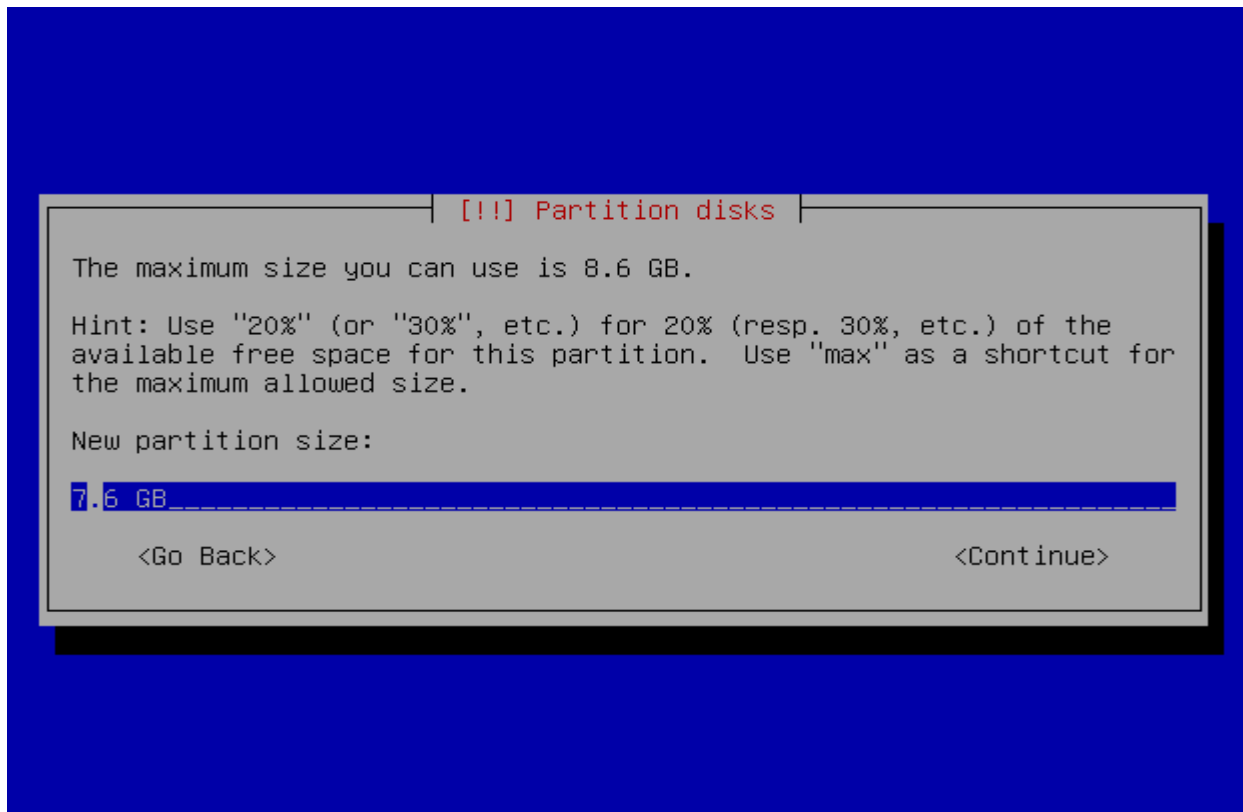
★ Pilih **free space hardisk** kemudian **ENTER**



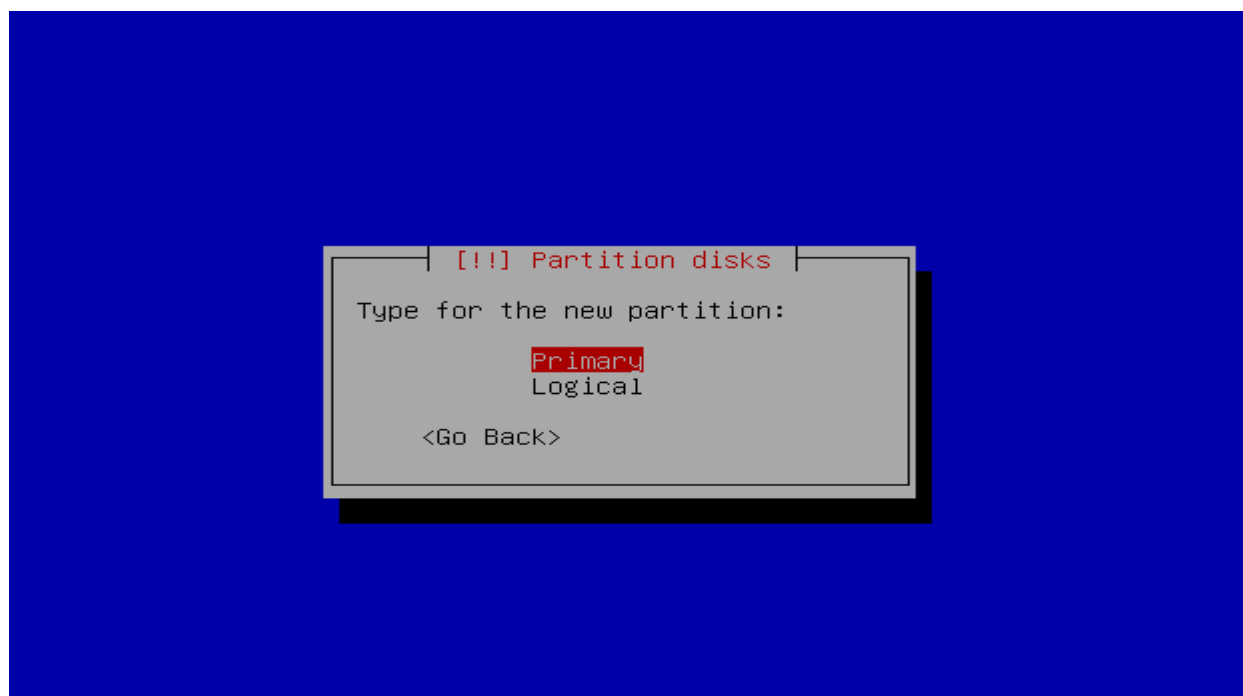
★ Pilih **Create a new partition** kemudian **ENTER**



★ Berikan besar partisi yang akan anda gunakan



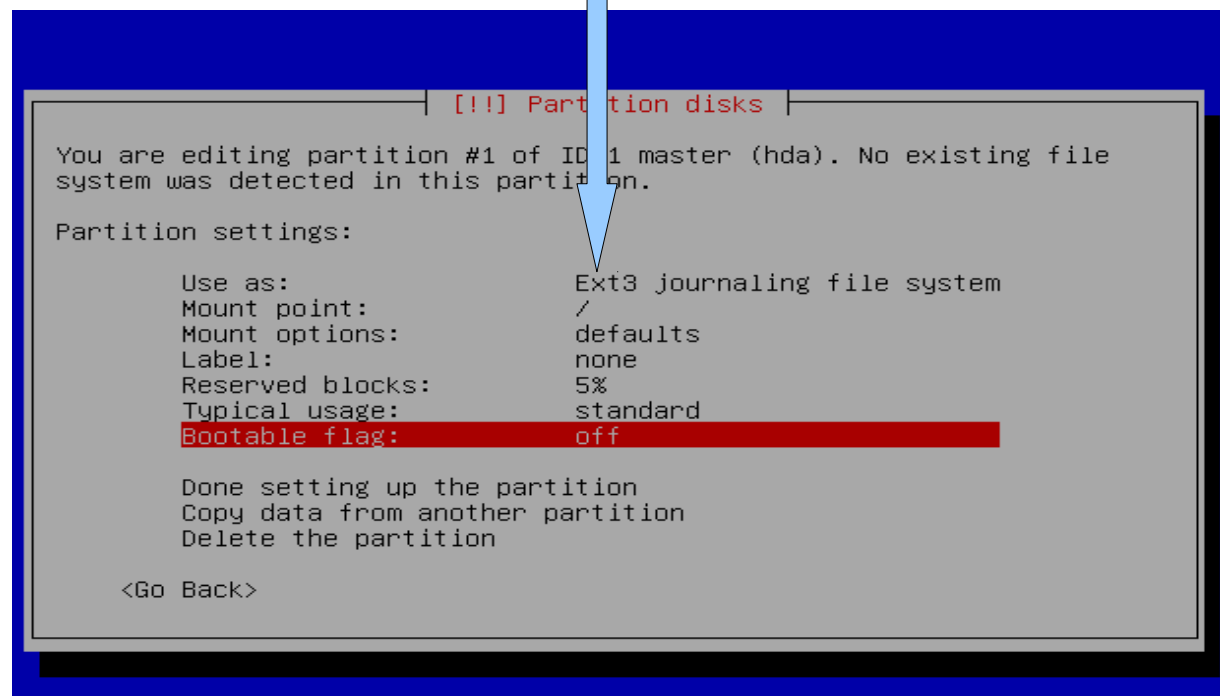
★ Pilih **primary** kemudian ENTER



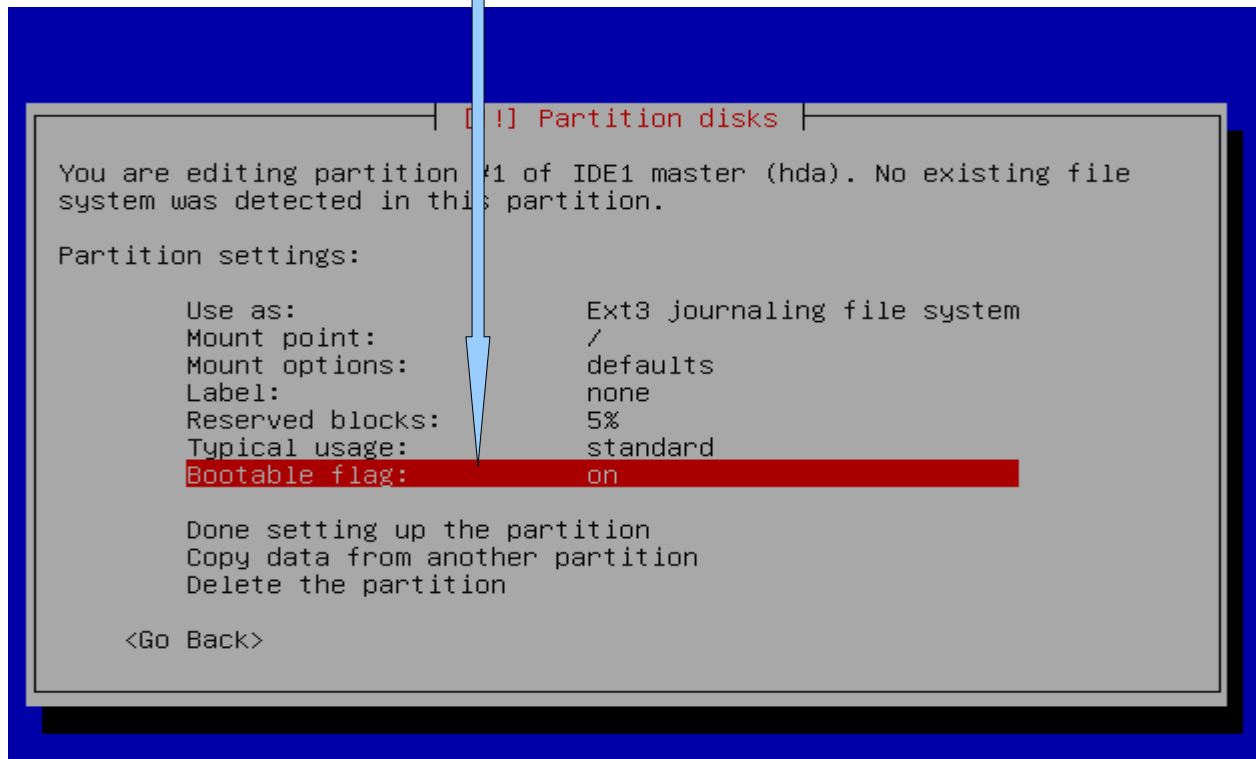
- ★ Pilih **beginning** kemudian **ENTER**



- ★ Pastikan **Use as** adalah **Ext3 journaling filesystem**
- ★ Pilih **bootable flag**, **ENTER**



★ Pastikan bootable flag sudah ON



```
[!!] Partition disks

You are editing partition #1 of IDE1 master (hda). No existing file
system was detected in this partition.

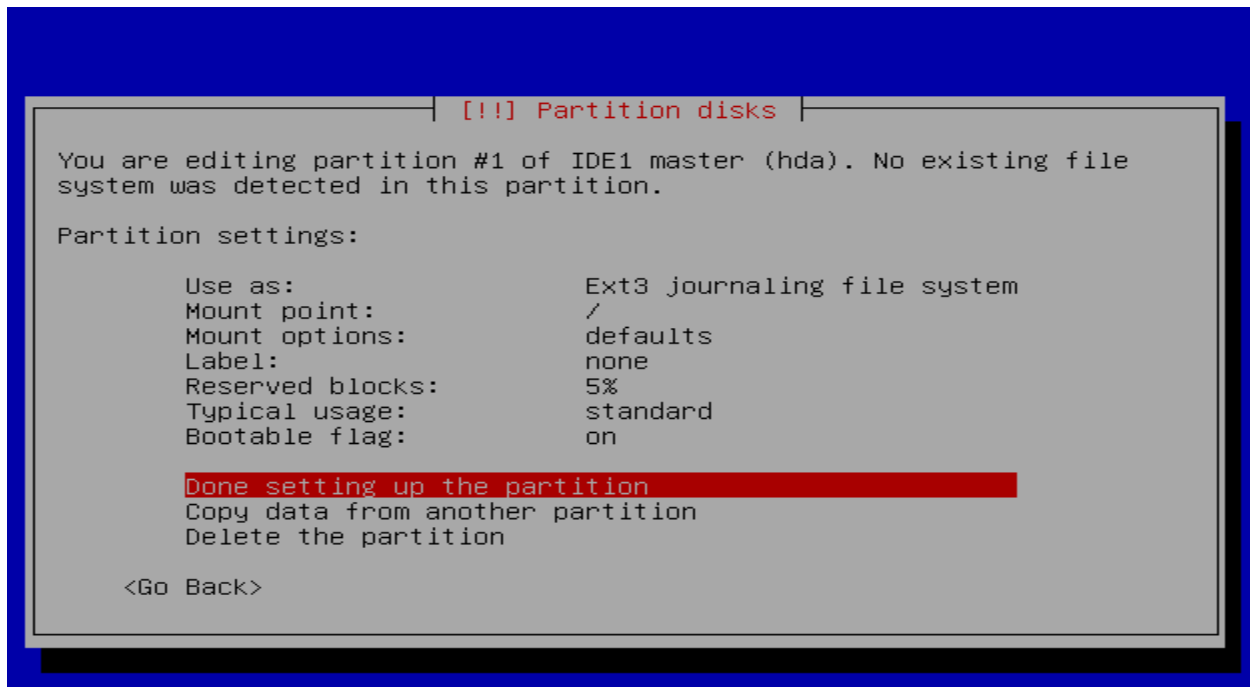
Partition settings:

  Use as:                               Ext3 journaling file system
  Mount point:                           /
  Mount options:                          defaults
  Label:                                   none
  Reserved blocks:                         5%
  Typical usage:                           standard
  Bootable flag:                           on

Done setting up the partition
Copy data from another partition
Delete the partition

<Go Back>
```

★ Pilih done setting up the partition, ENTER



```
[!!!] Partition disks

You are editing partition #1 of IDE1 master (hda). No existing file
system was detected in this partition.

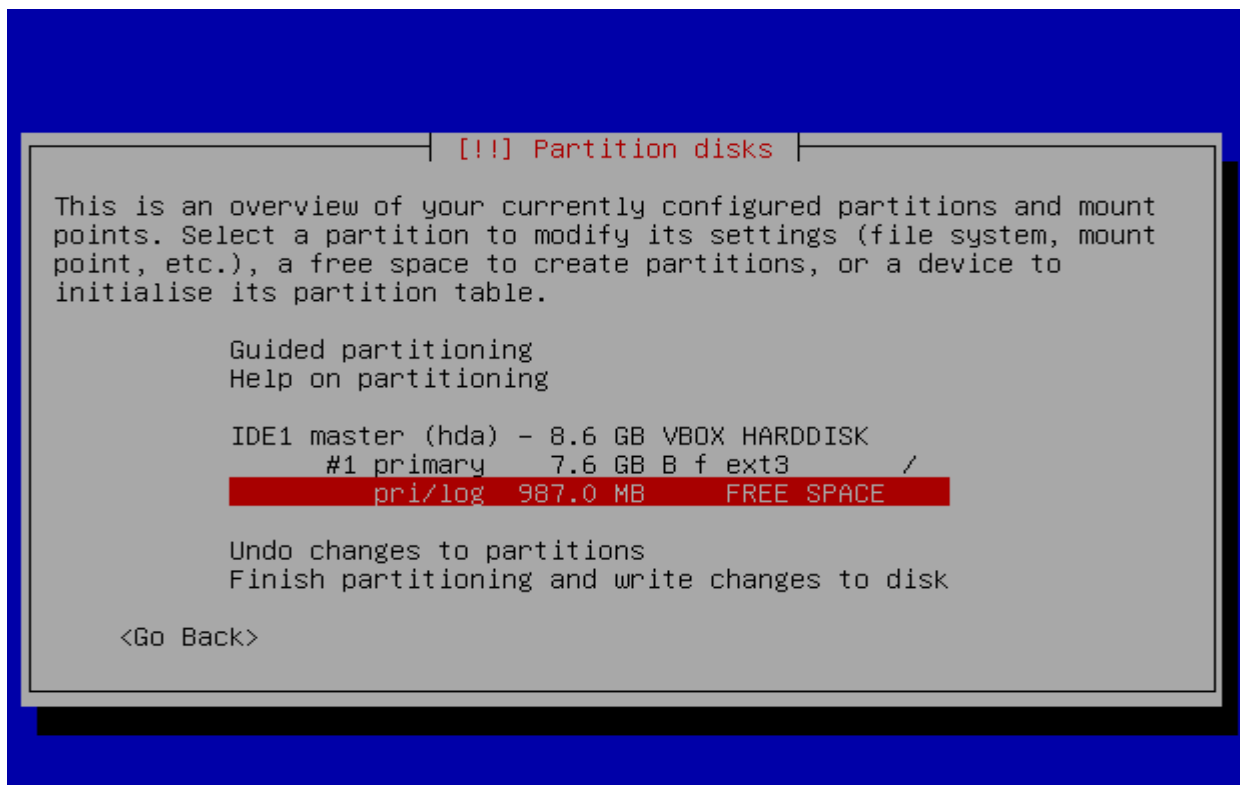
Partition settings:

  Use as:                               Ext3 journaling file system
  Mount point:                           /
  Mount options:                          defaults
  Label:                                   none
  Reserved blocks:                         5%
  Typical usage:                           standard
  Bootable flag:                           on

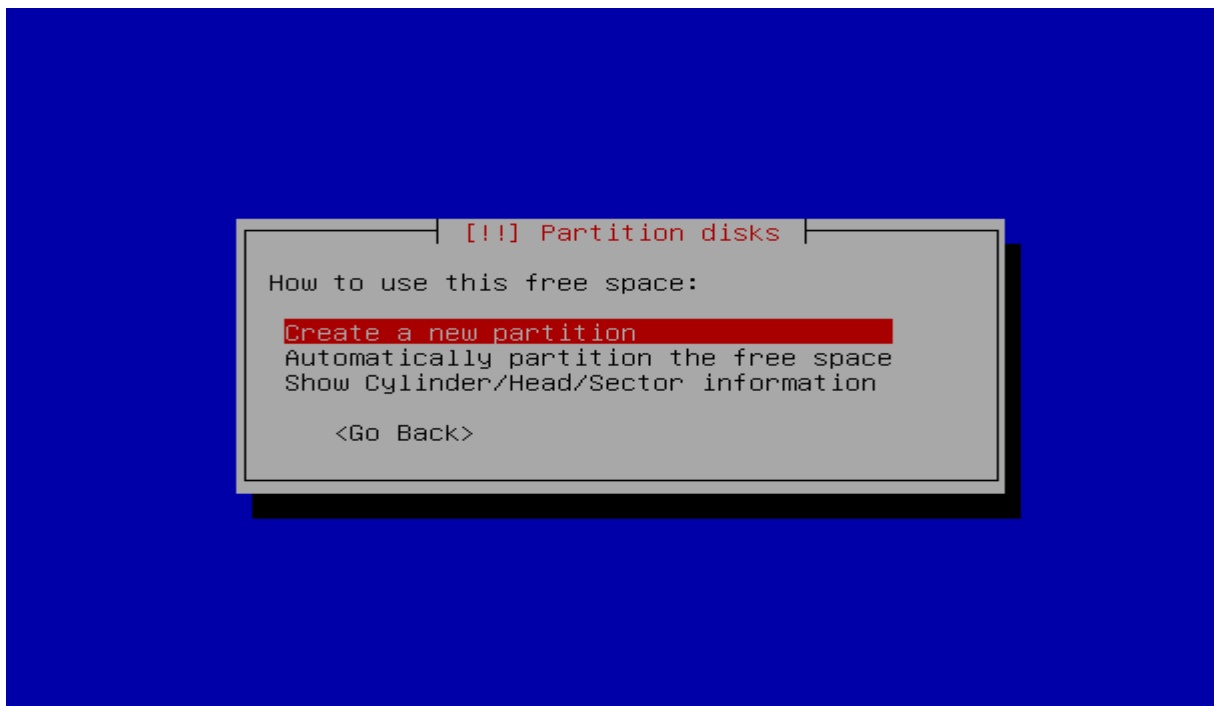
Done setting up the partition
Copy data from another partition
Delete the partition

<Go Back>
```

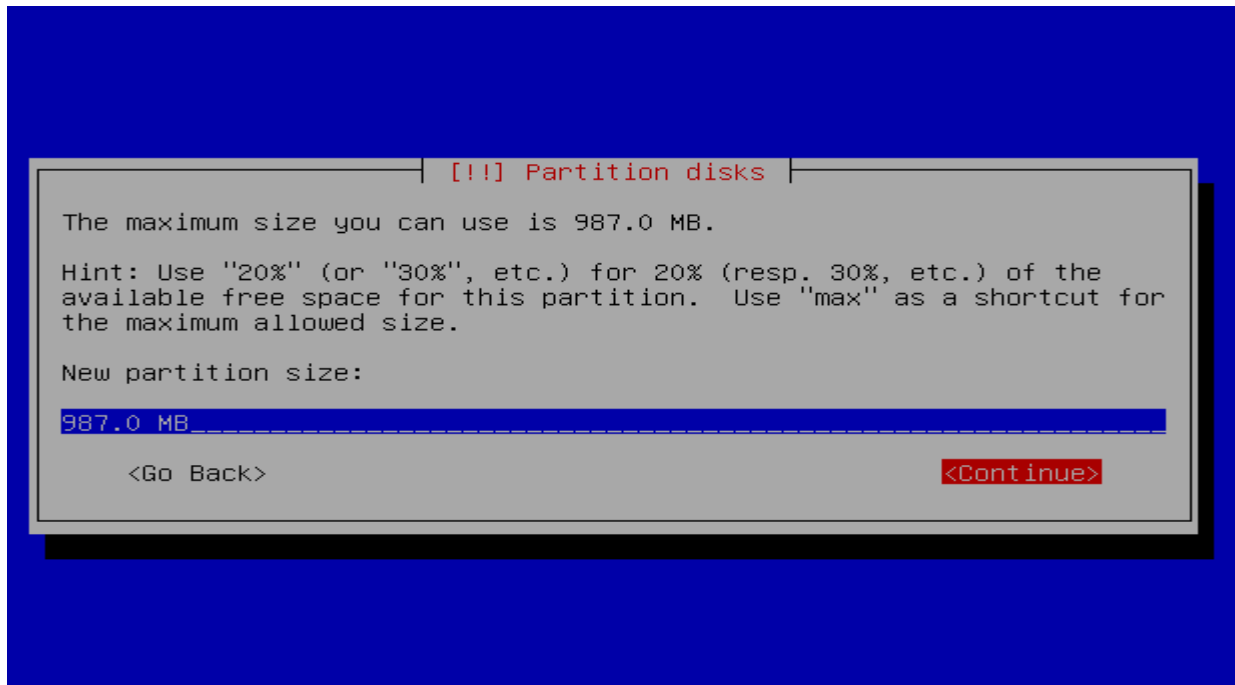
★ Pilih free space hardisk yang tersisa



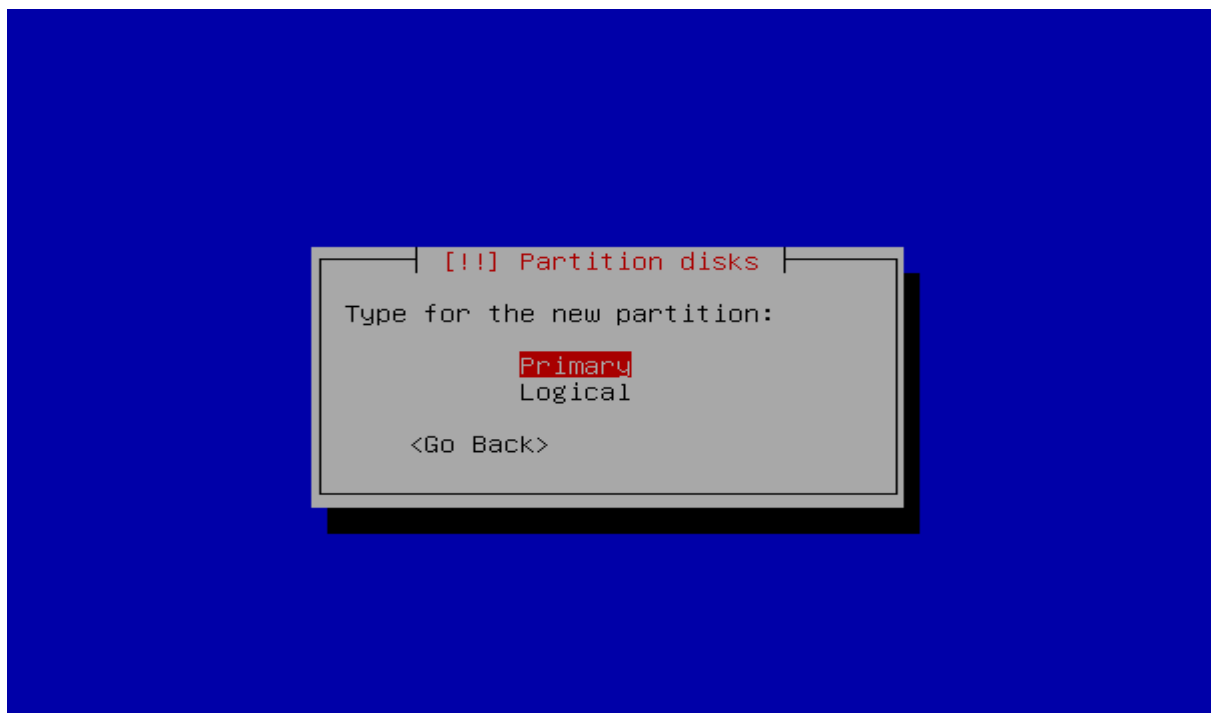
★ Pilih create a new partition, ENTER



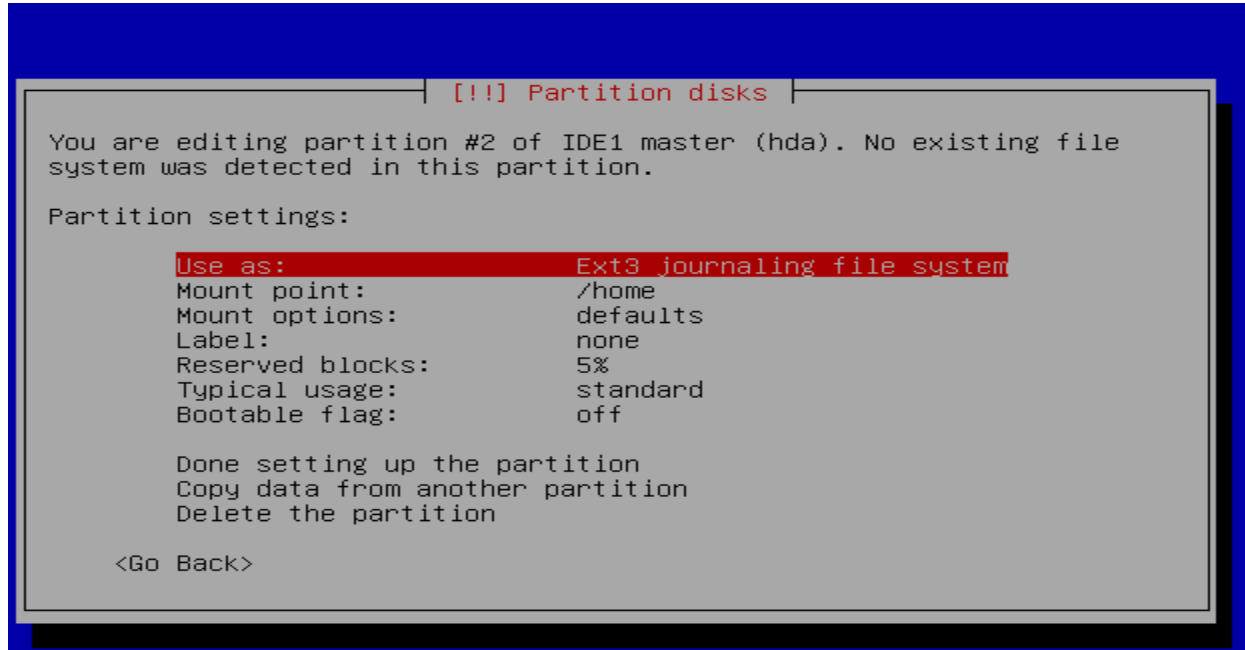
★ Berikan satu GB untuk swap area kemudian [continue](#)



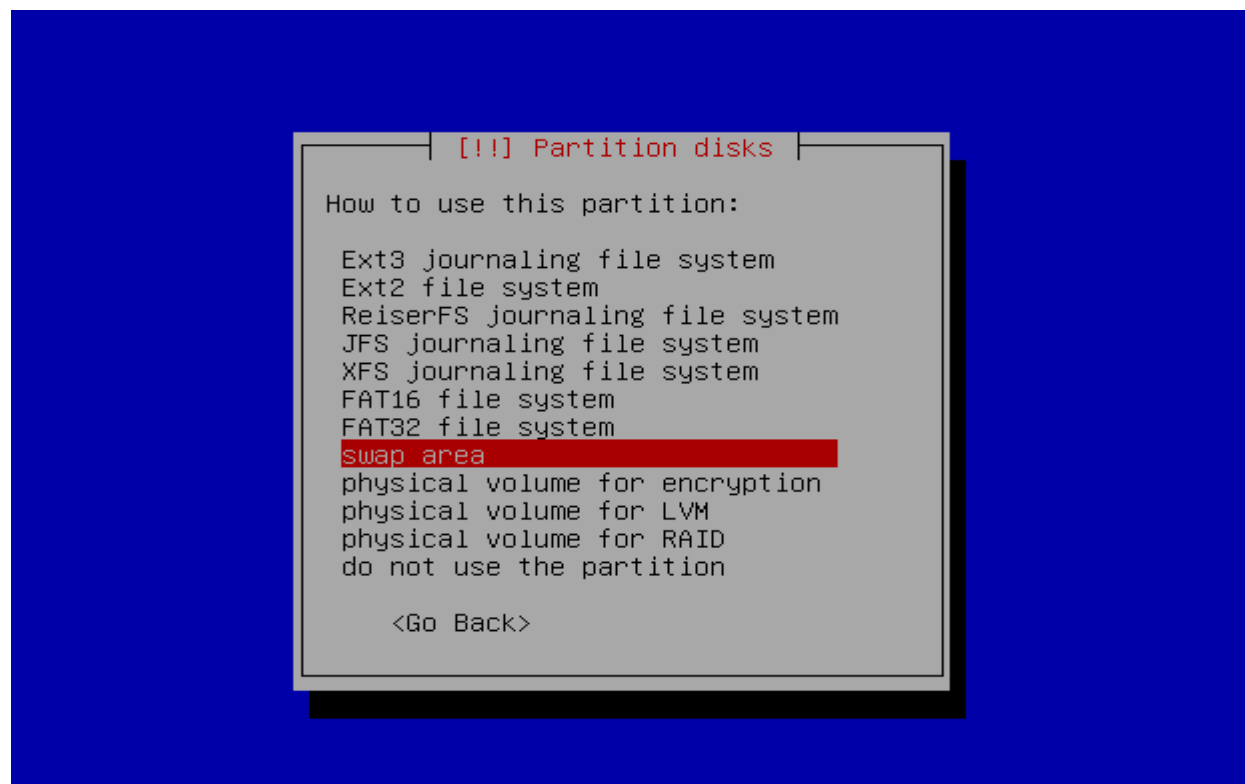
★ Pilih [primary](#), ENTER



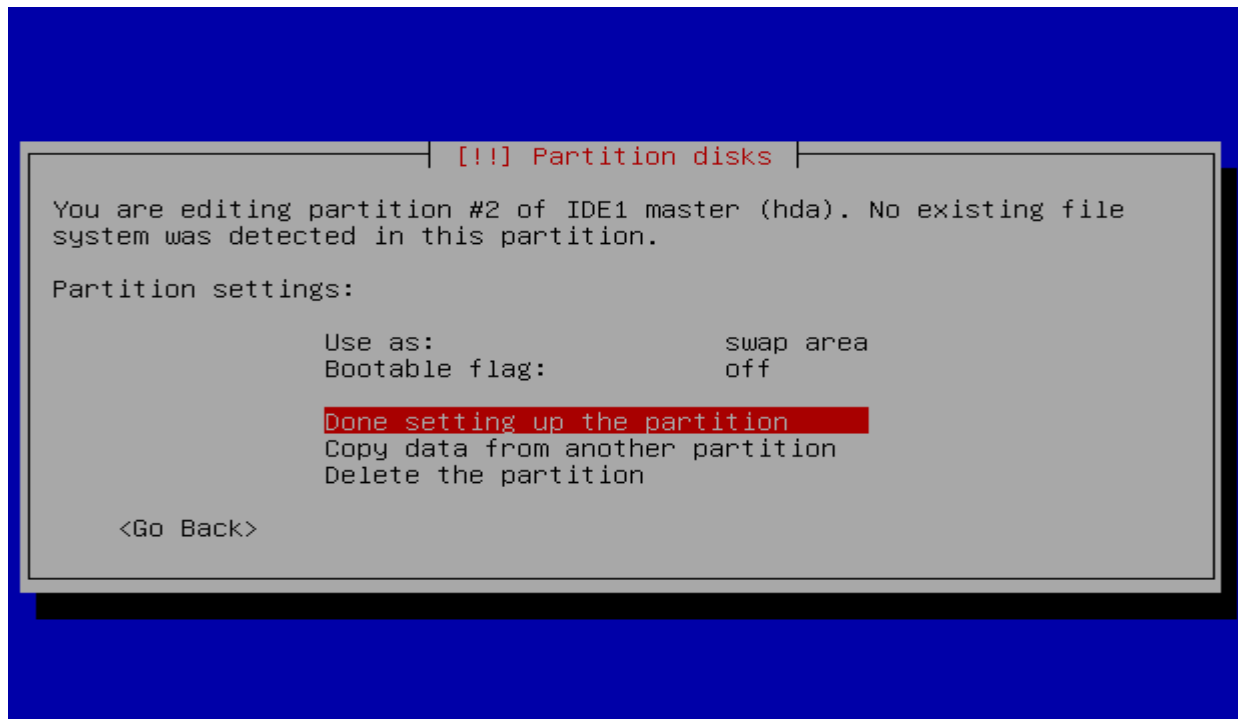
★ Pilih Use as kemudian ENTER



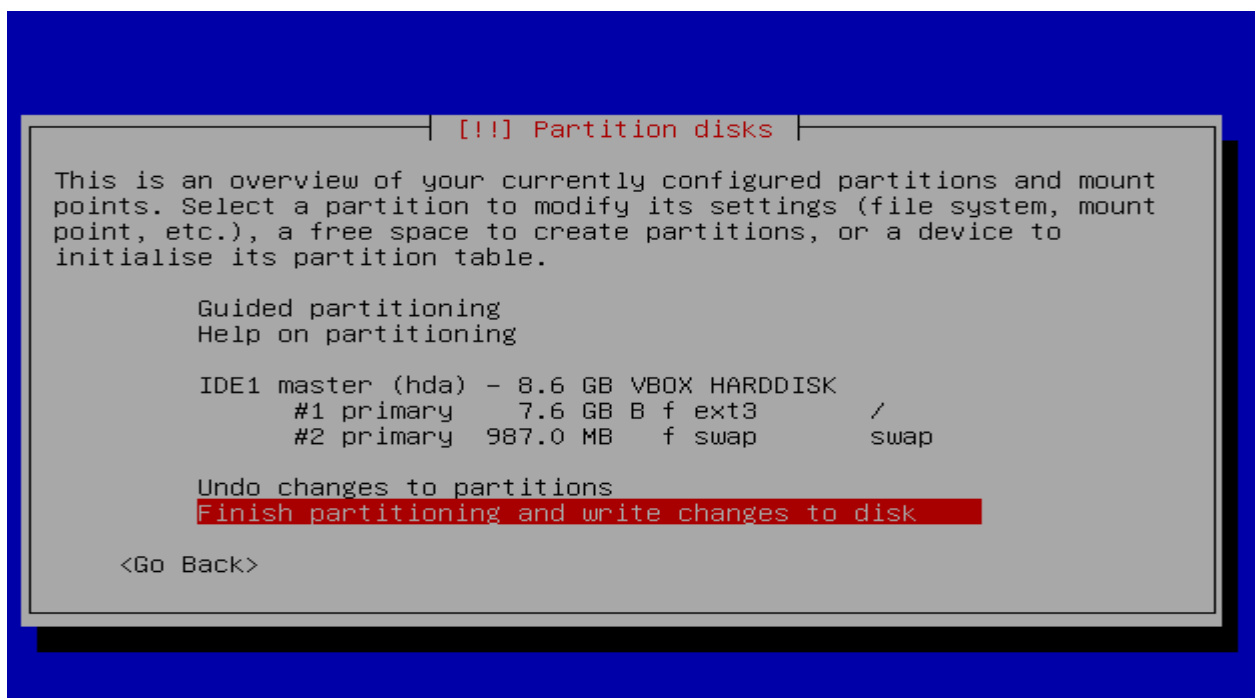
★ Pilih swap area, ENTER



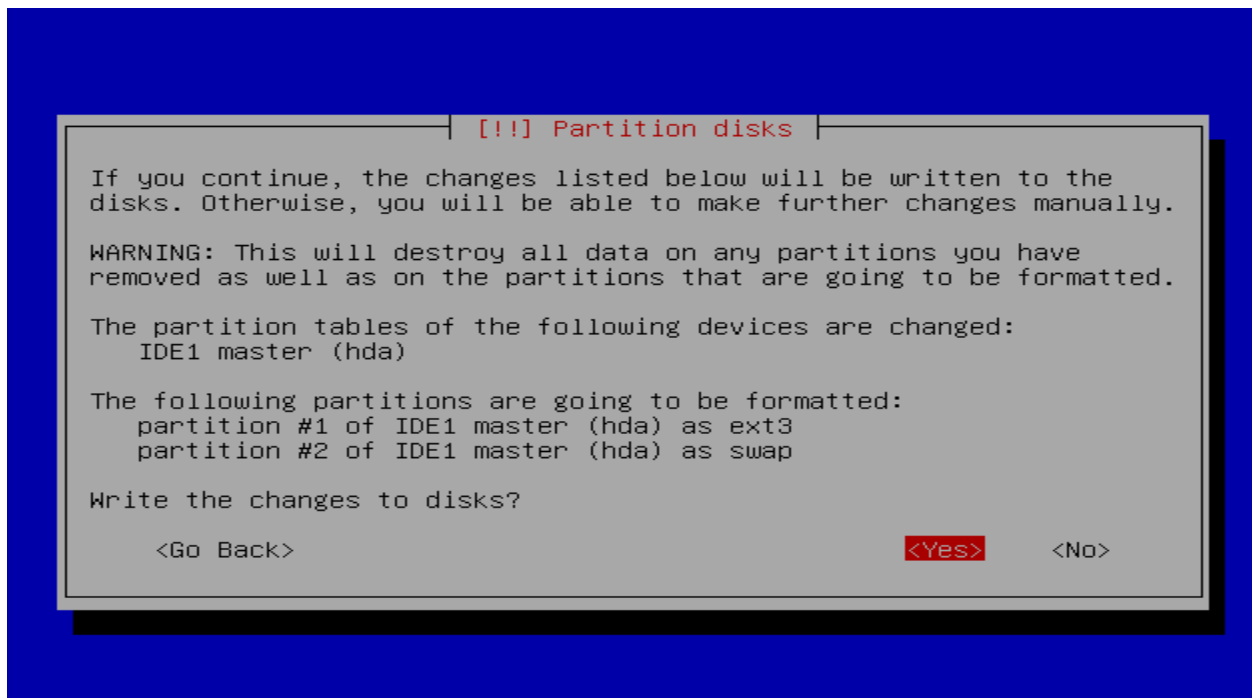
★ Pilih done setting up the partition, ENTER



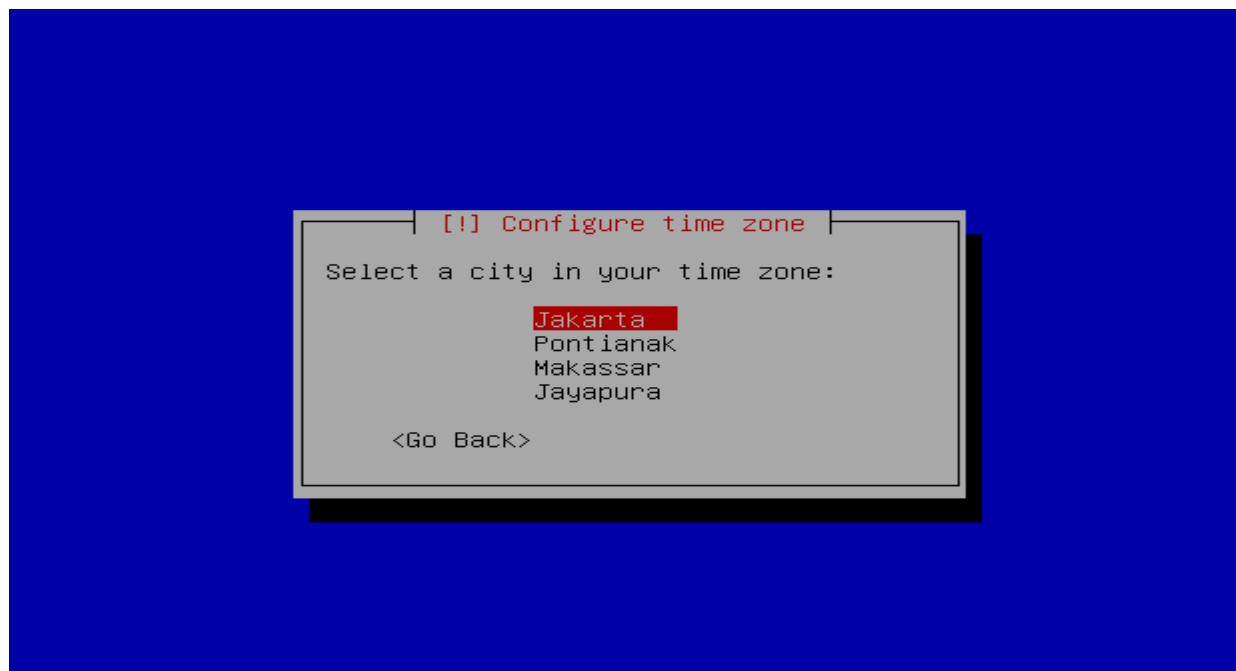
★ Proses partisi sudah selesai, selanjutnya pilih Finish partitioning and write changes to disk



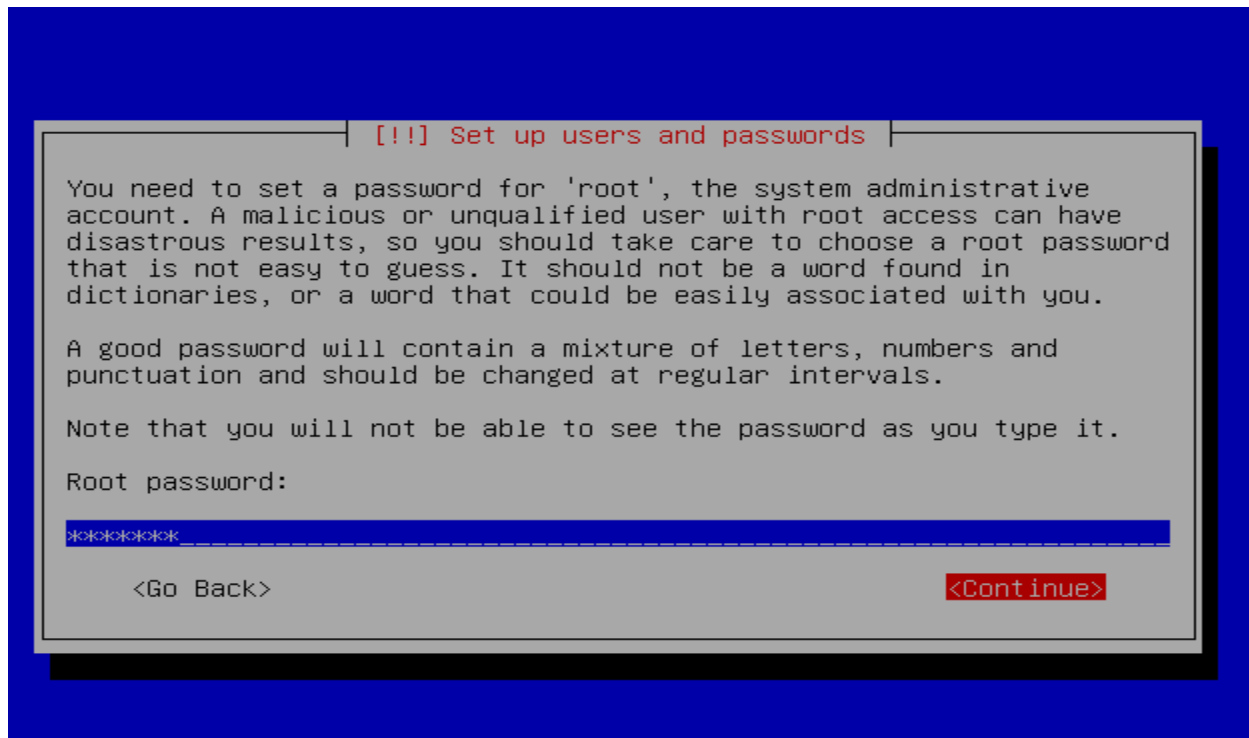
★ Pilih **yes** untuk menulis perubahan yang telah dilakukan pada hardisk



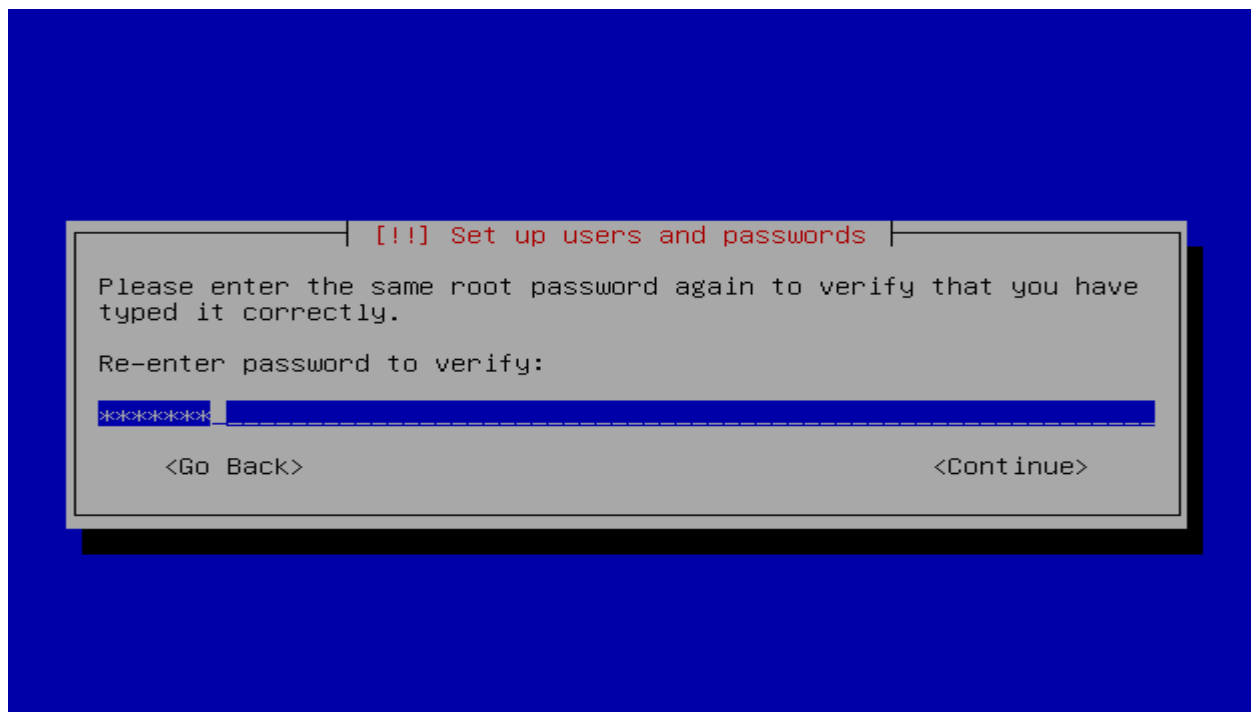
★ Pilih kota dimana anda berada, dalam hal ini **Jakarta**, ENTER



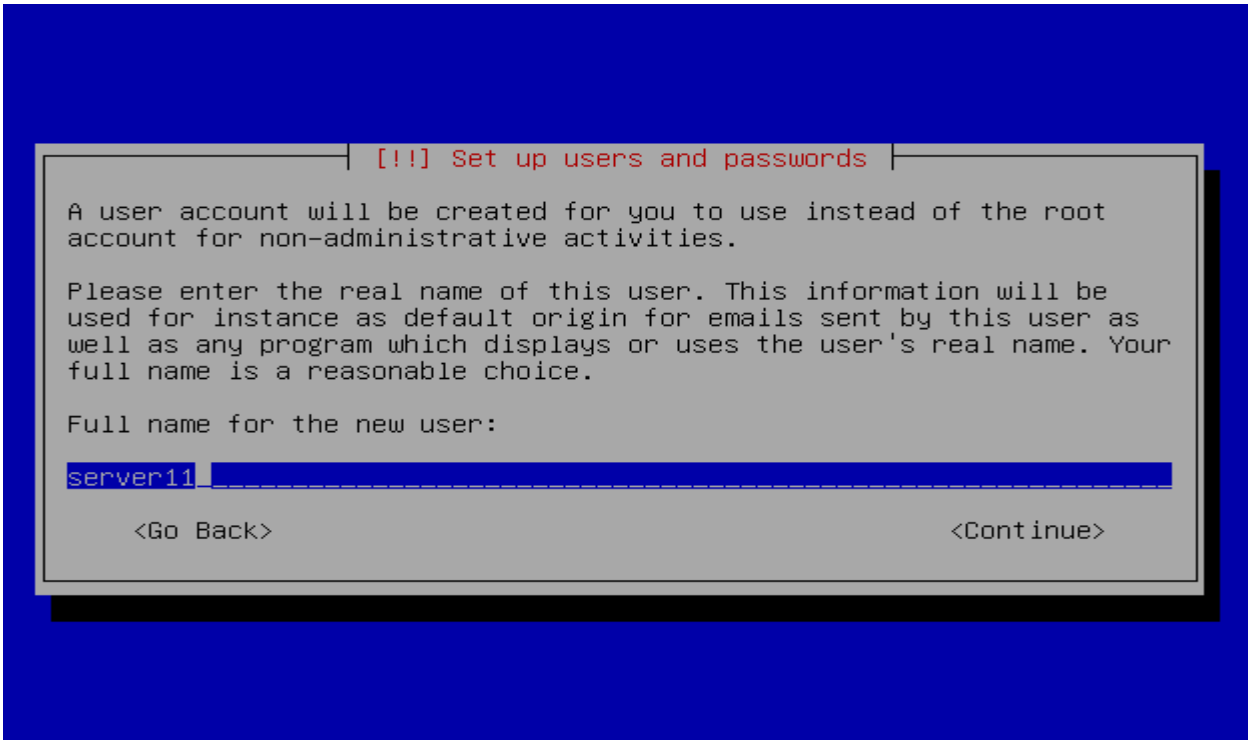
★ Masukan password root



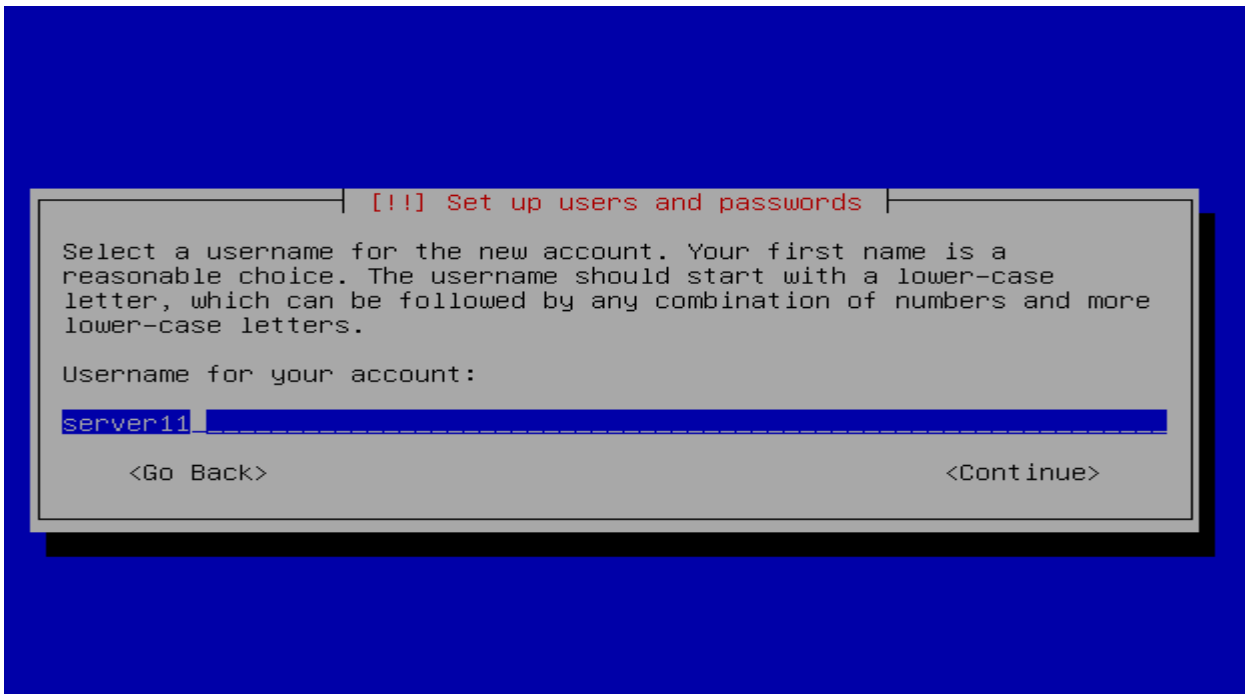
★ Masukan kembali password root yang anda ketikan diatas



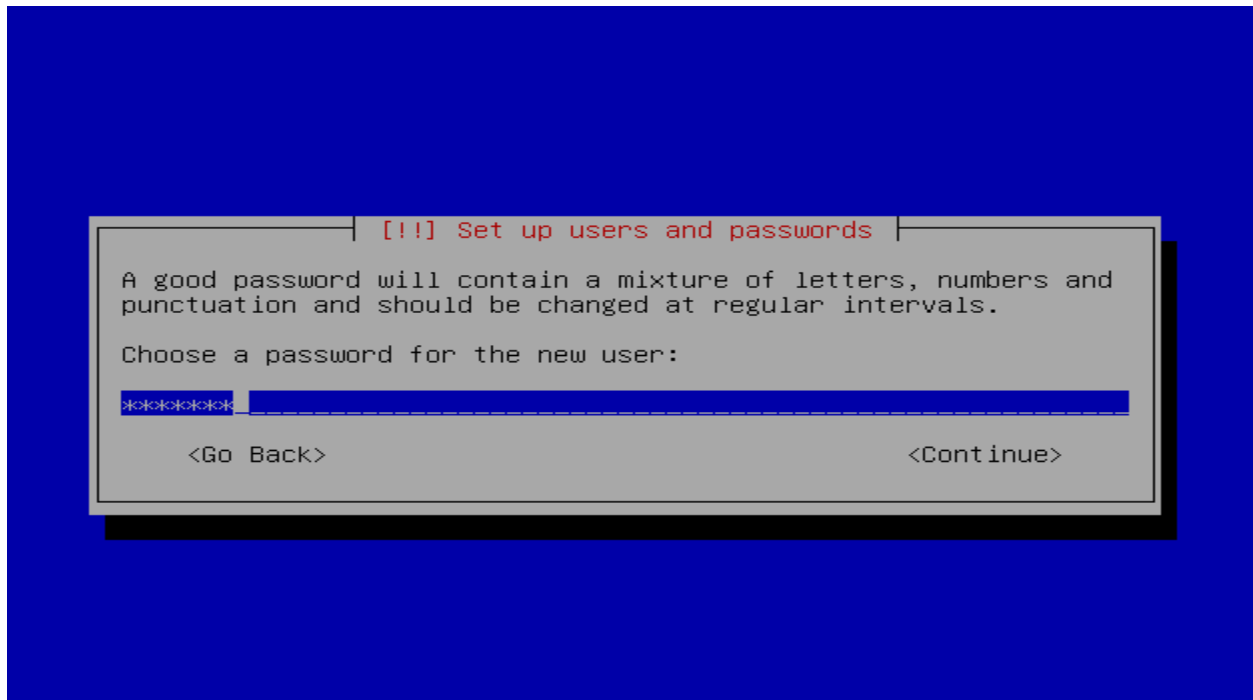
★ Masukan Full username



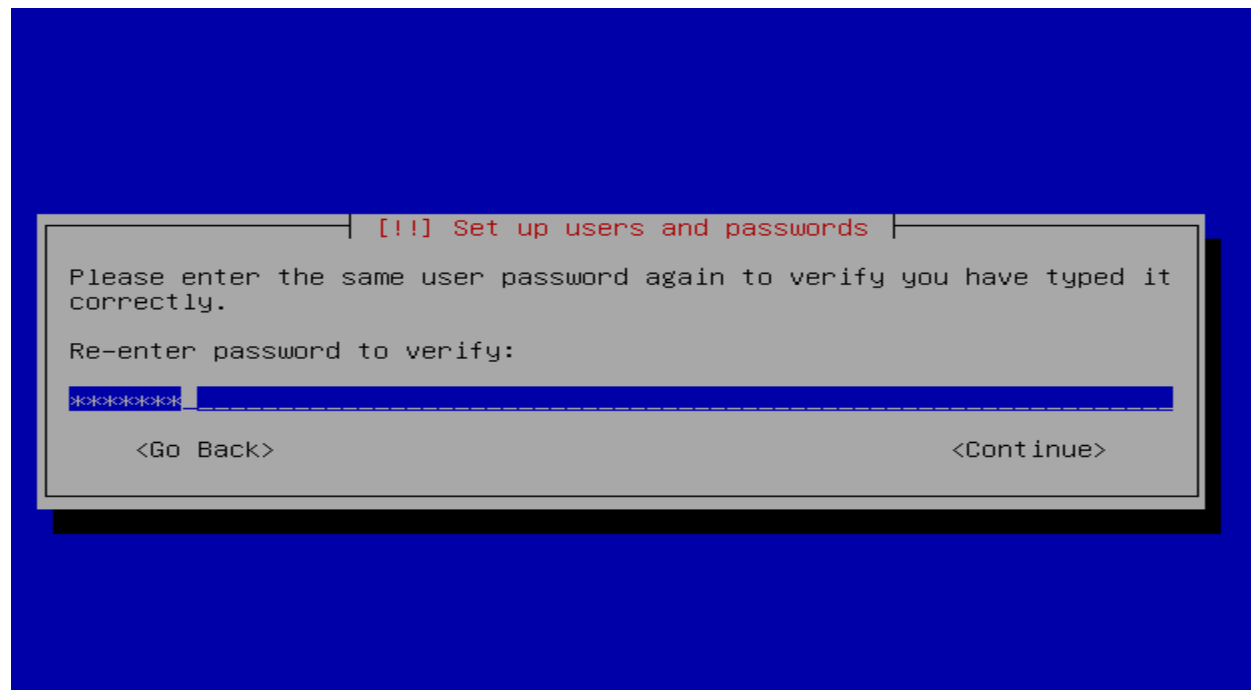
★ Masukan username



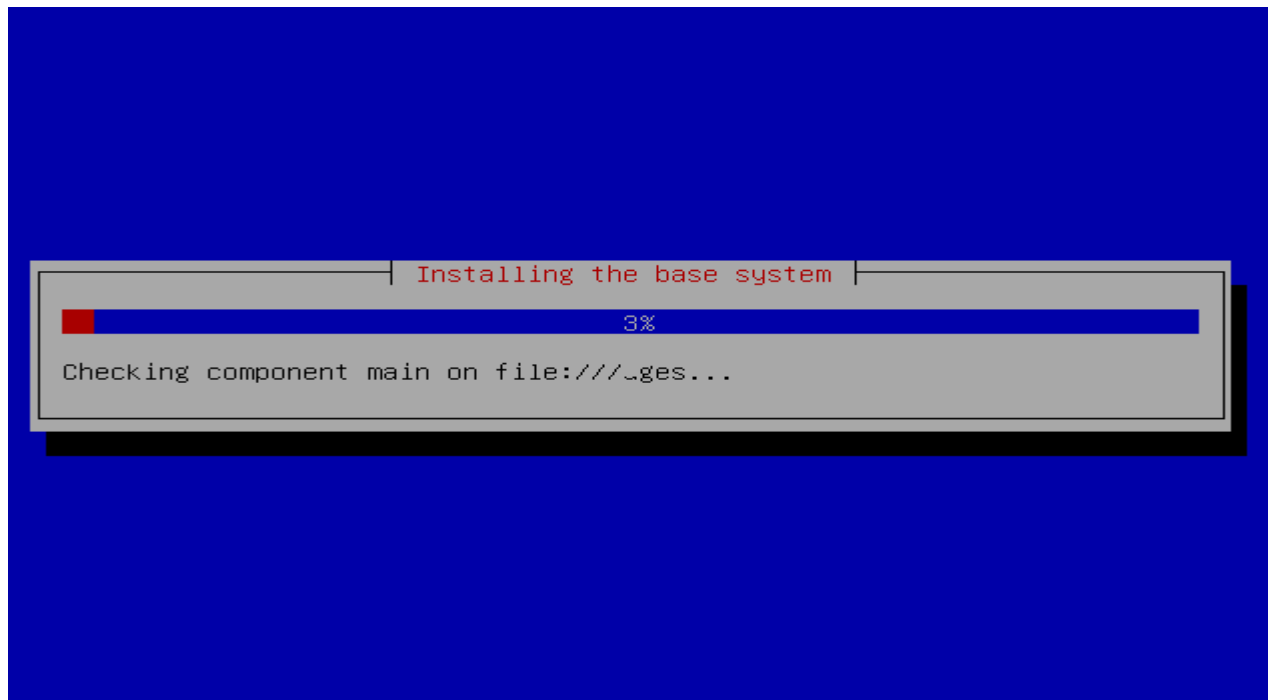
★ Masukan [password](#) untuk username



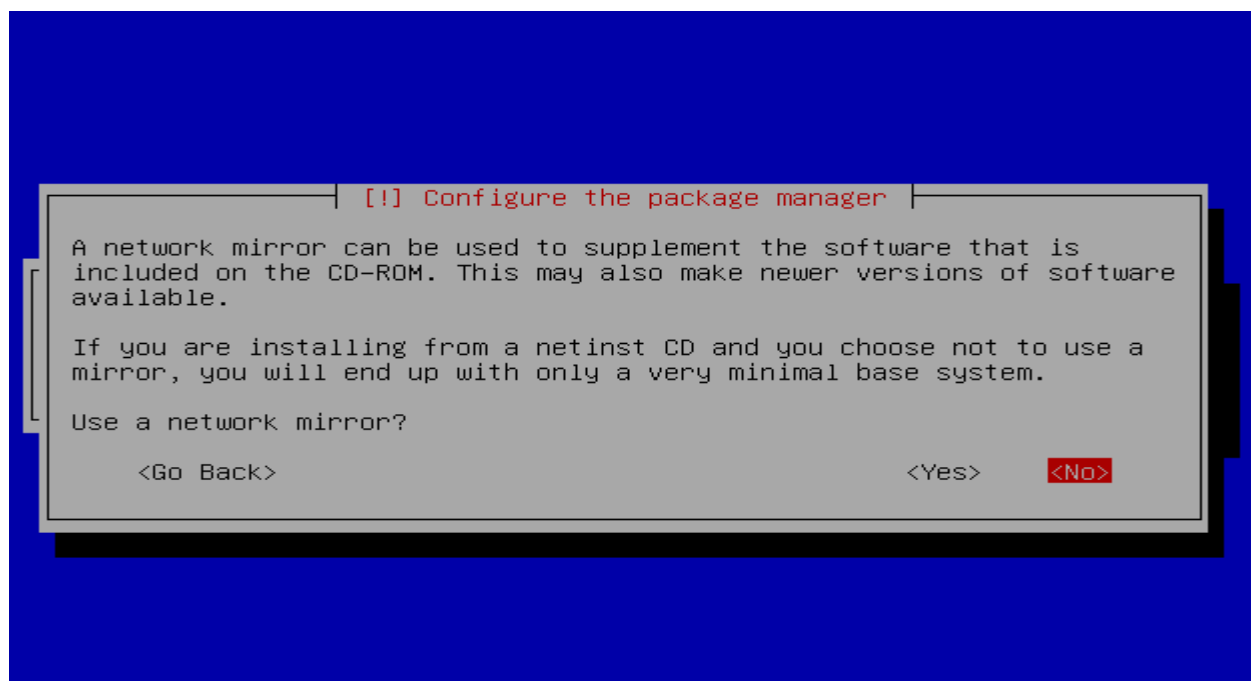
★ Masukan kembali [password](#) yang anda masukan diatas



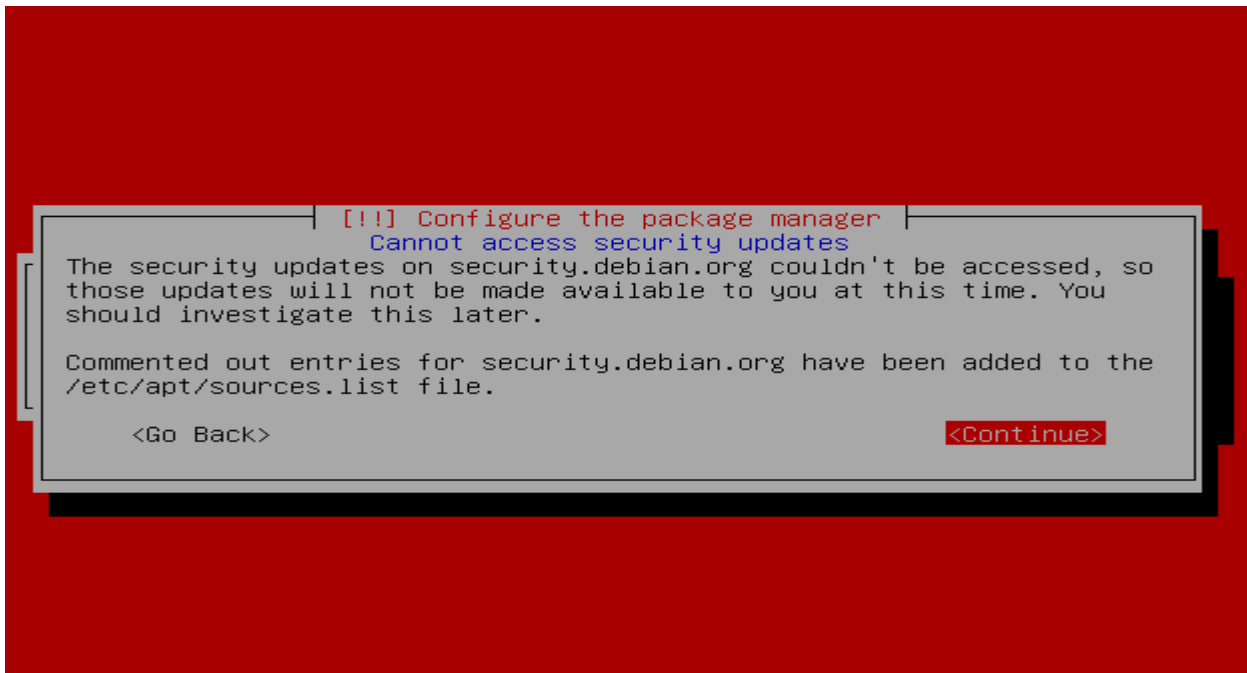
★ Biarkan proses instalasi berjalan seperti gambar dibawah



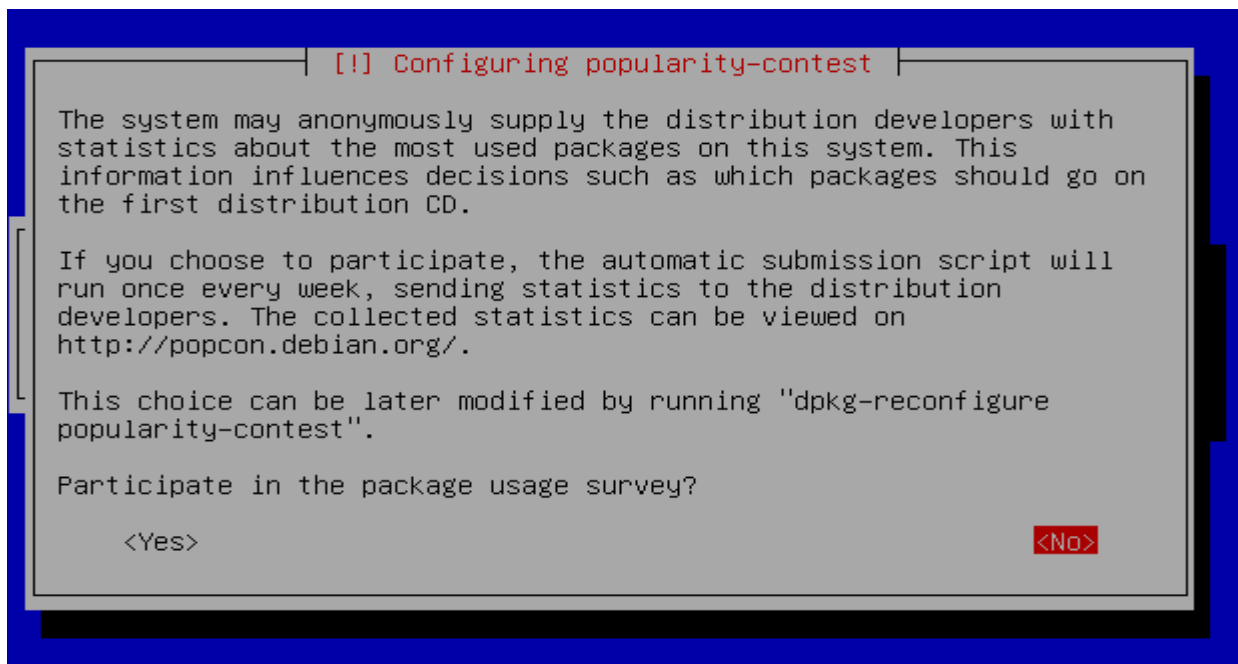
★ Pada saat tampilan seperti dibawah, anda pilih **NO** karena tidak menggunakan mirror yang berada dalam jaringan



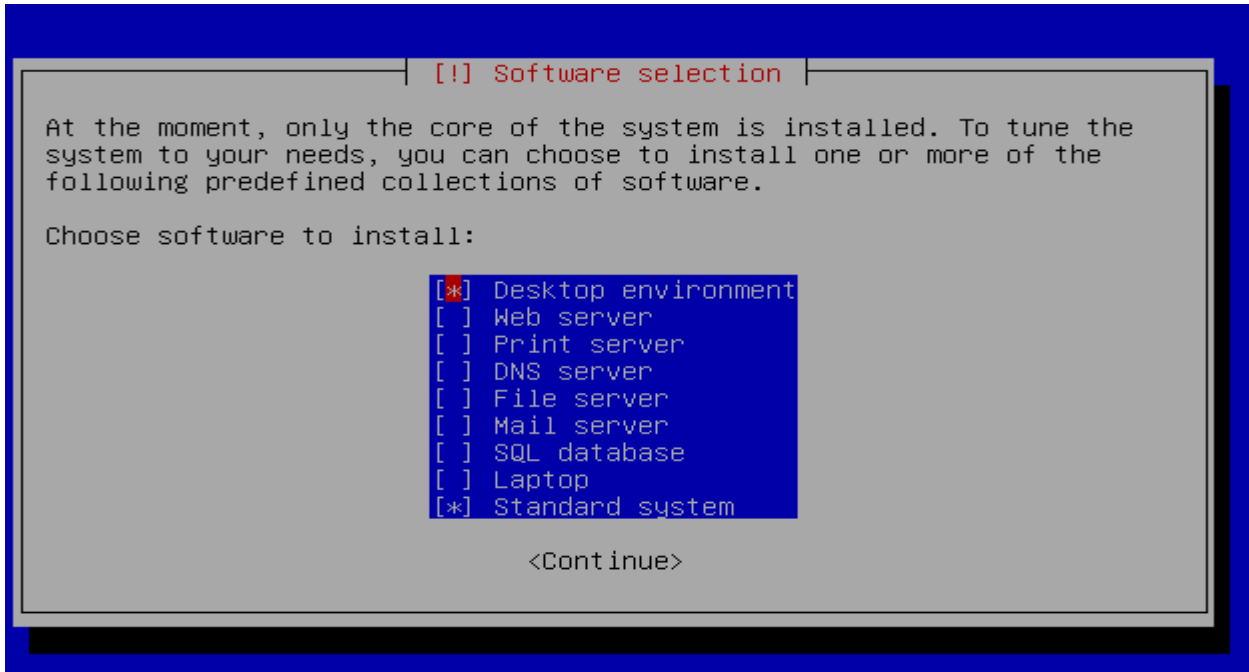
★ Maka tampilannya seperti dibawah ini, pilih **Continue**, **ENTER**



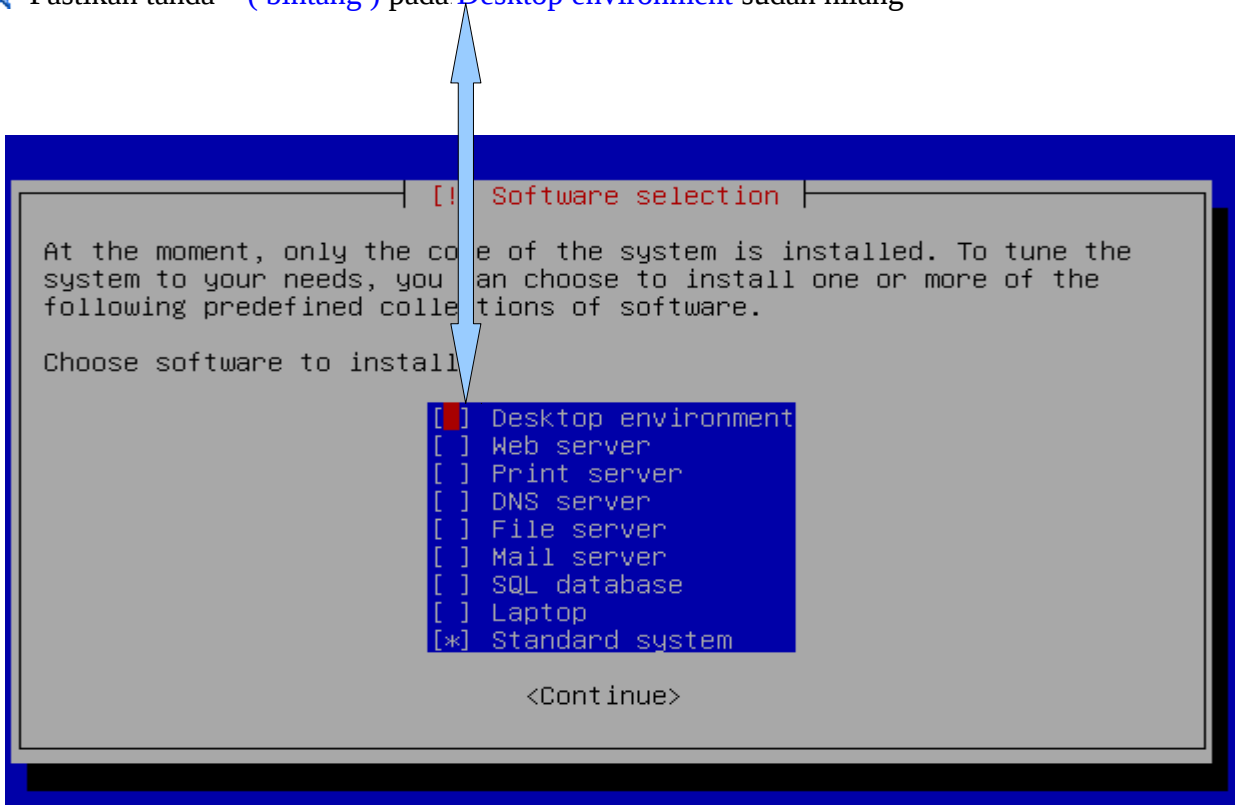
★ Pada saat tampilan seperti dibawah anda pilih **NO**



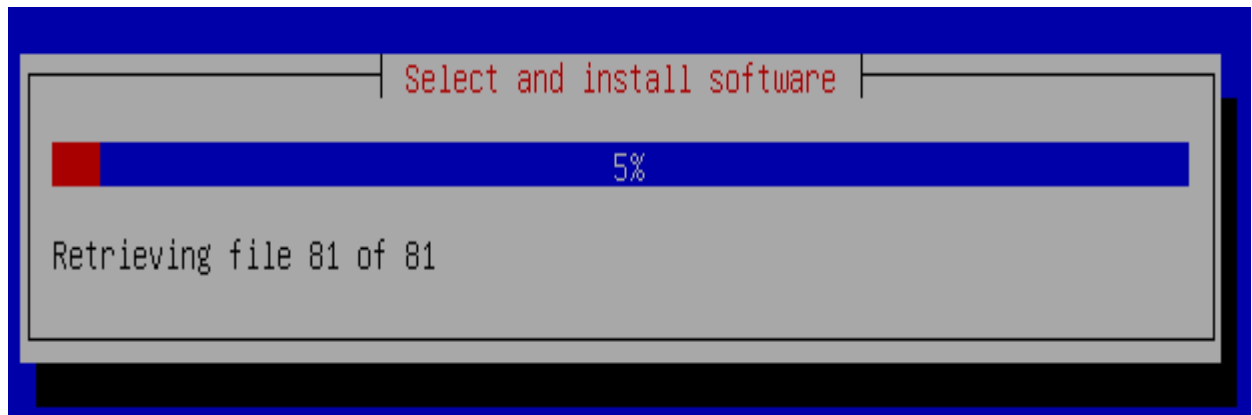
- ★ Karena kita tidak akan menginstall GUI, seperti KDE,GNOME Arahkan tanda merah pada Desktop Environment, kemudian tekan space bar (spasi)



- ★ Pastikan tanda * (bintang) pada Desktop environment sudah hilang



- ★ Biarkan proses instalasi berjalan



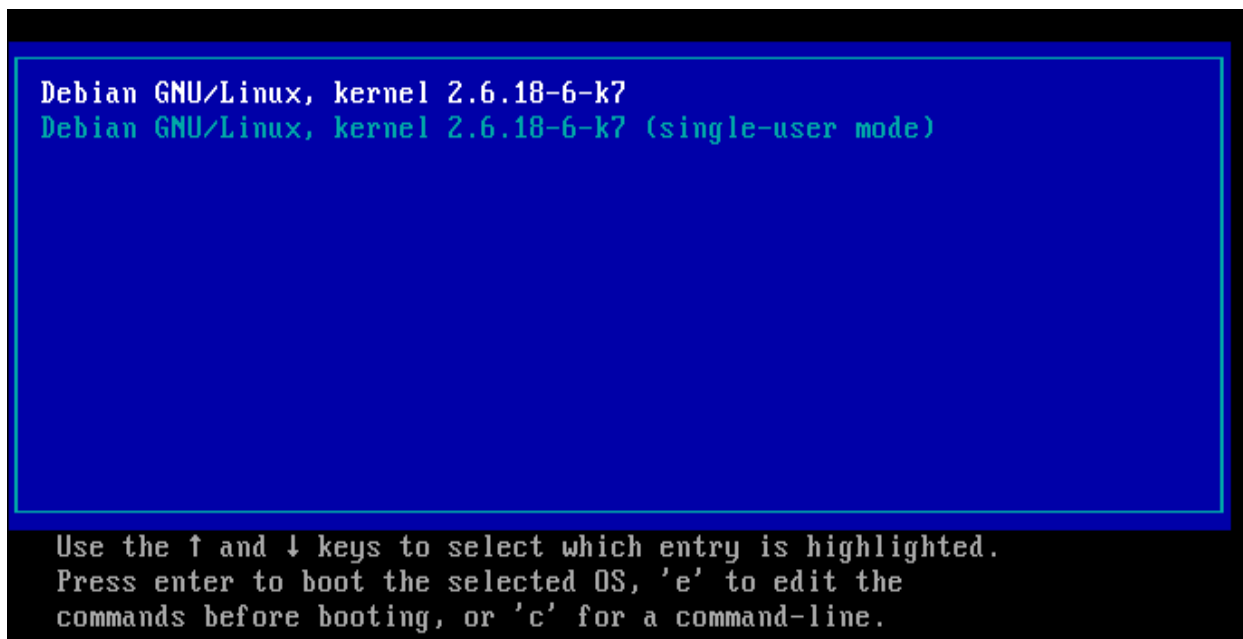
- ★ Instalasi grub, pilih **yes** untuk dijadikan MBR (Master Boot Record)



- ★ Proses Installasi selesai, pilih [Continue](#)



- ★ Tampilan hasil Instalasi yang sudah dilakukan



★ Masukkan user dan password

```
Checking file systems...fsck 1.40-WIP (14-Nov-2006)
done.
Setting kernel variables...done.
Mounting local filesystems...done.
Activating swapfile swap...done.
Setting up networking...
Configuring network interfaces...done.
Starting portmap daemon...
Setting console screen modes and fonts.
INIT: Entering runlevel: 2
Starting system log daemon: syslogd.
Starting kernel log daemon: klogd.
Starting portmap daemon...Already running..
Starting MTA: exim4.
Starting internet superserver: inetd.
Starting NFS common utilities: statd.
Starting deferred execution scheduler: atd.
Starting periodic command scheduler: crond.

Debian GNU/Linux 4.0 server11 tty1
server11 login: root_
```

★ Tampilan pada saat anda berhasil memasukan [user](#) dan [password](#) dengan benar

```
INIT: Entering runlevel: 2
Starting system log daemon: syslogd.
Starting kernel log daemon: klogd.
Starting portmap daemon...Already running..
Starting MTA: exim4.
Starting internet superserver: inetd.
Starting NFS common utilities: statd.
Starting deferred execution scheduler: atd.
Starting periodic command scheduler: crond.

Debian GNU/Linux 4.0 server11 tty1

server11 login: root
Password:
Linux server11 2.6.18-6-k7 #1 SMP Sat Dec 27 10:04:42 UTC 2008 i686

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
server11:~# _
```

- ★ Masukkan Cd/Dvd binary yang lainnya kedalam Cd/Dvd rom kemudian ketik `apt-cdrom add` untuk menscan Cd/Dvd tersebut , `ENTER`

```
server11:~# apt-cdrom add
Using CD-ROM mount point /cdrom/
Unmounting CD-ROM
Waiting for disc...
Please insert a Disc in the drive and press enter
Mounting CD-ROM...
Identifying.. [81539d3c9b9dfd4a441705c2e4f7d4ed-2]
Scanning disc for index files..
Found 2 package indexes, 0 source indexes and 0 signatures
Found label 'Debian GNU/Linux 4.0 r7 _Etch_ - Official i386 DVD Binary-2 20090209-23:09'
This disc is called:
'Debian GNU/Linux 4.0 r7 _Etch_ - Official i386 DVD Binary-2 20090209-23:09'
Reading Package Indexes... Done
Writing new source list
Source list entries for this disc are:
deb cdrom:[Debian GNU/Linux 4.0 r7 _Etch_ - Official i386 DVD Binary-2 20090209-23:09]/ etch contrib main
Unmounting CD-ROM...Repeat this process for the rest of the CDs in your set.
server11:~# _
```

Keterangan :

Ip address :192.168.11.1/28

Hostname :server11.lks11.sch.id (FQDN)

Domain :lks11.sch.id

SETTING IP ADDRESS DAN HOSTNAME

```
# nano /etc/network/interfaces
```

```
# This file describes the network interfaces available on your system
# and how to activate them. For more information, see interfaces(5).

# The loopback network interface
auto lo
iface lo inet loopback

auto eth0
iface eth0 inet static
address 192.168.11.1
network 192.168.11.0
netmask 255.255.255.240
broadcast 192.168.11.15_
```

- Di save dan exit
- gateway tidak ditulis karena pc/komputer kita akan dijadikan server sekaligus gateway
- Mengedit file /etc/hosts

```
# nano /etc/hosts
```

```
127.0.0.1    localhost
192.168.11.1 server11.lks11.sch.id server11_

# The following lines are desirable for IPv6 capable hosts
::1        ip6-localhost ip6-loopback
fe00::0    ip6-localnet
ff00::0    ip6-mcastprefix
ff02::1    ip6-allnodes
ff02::2    ip6-allrouters
ff02::3    ip6-allhosts
```

IP ADDRESS

HOSTNAME

ALIAS ATAU CANONICAL

- Di save dan exit
- Mengedit file /etc/hostname

```
# nano /etc/hostname
```

```
server11.lks11.sch.id
```

- Di save dan exit
- Restart hasil konfigurasi tadi dengan perintah:

```
# /etc/init.d/networking restart
```

```
# /etc/init.d/hostname.sh start
```

- pengecekan hostname

```
# hostname
```

```
# hostname -f
```

SETTING DNS SERVER

- Install paket dns yang diperlukan

```
# apt-get install bind9
```

- Mengedit file `/etc/bind/named.conf.local`

```
# cd /etc/bind
```

```
# nano named.conf.local
```

```
//  
// Do any local configuration here  
//  
  
// Consider adding the 1918 zones here, if they are not used in your  
// organization  
//include "/etc/bind/zones.rfc1918";  
  
zone "lks11.sch.id" {  
    type master;  
    file "/etc/bind/db.lks11.sch.id";  
};  
  
zone "192.in-addr.arpa" {  
    type master;  
    file "/etc/bind/db.192";  
};_
```

- Di save dan exit

Keterangan:

- `zone "lks11.sch.id" {`
Merupakan awal dari zona *lks11.sch.id*. Jika kita ingin membuat NS untuk zona *smkpancakarya.sch.id* maka perintahnya menjadi `zone "smkpancakarya.sch.id" {`
Segala sesuatu yang berhubungan dengan zona *lks11.sch.id* harus ditulis di dalam tanda kurung kurawal ({.....}).
- `type master;`
Baris ini untuk primary atau master NS. Jika anda ingin membangun Secondary NS perintahnya menjadi `type slave;`

Untuk *Caching* NS perintahnya menjadi
`type hint;`

- `file "/etc/bind/db.lks11.sch.id";`

Mendefinisikan nama *file* untuk zona *lks11.sch.id*.

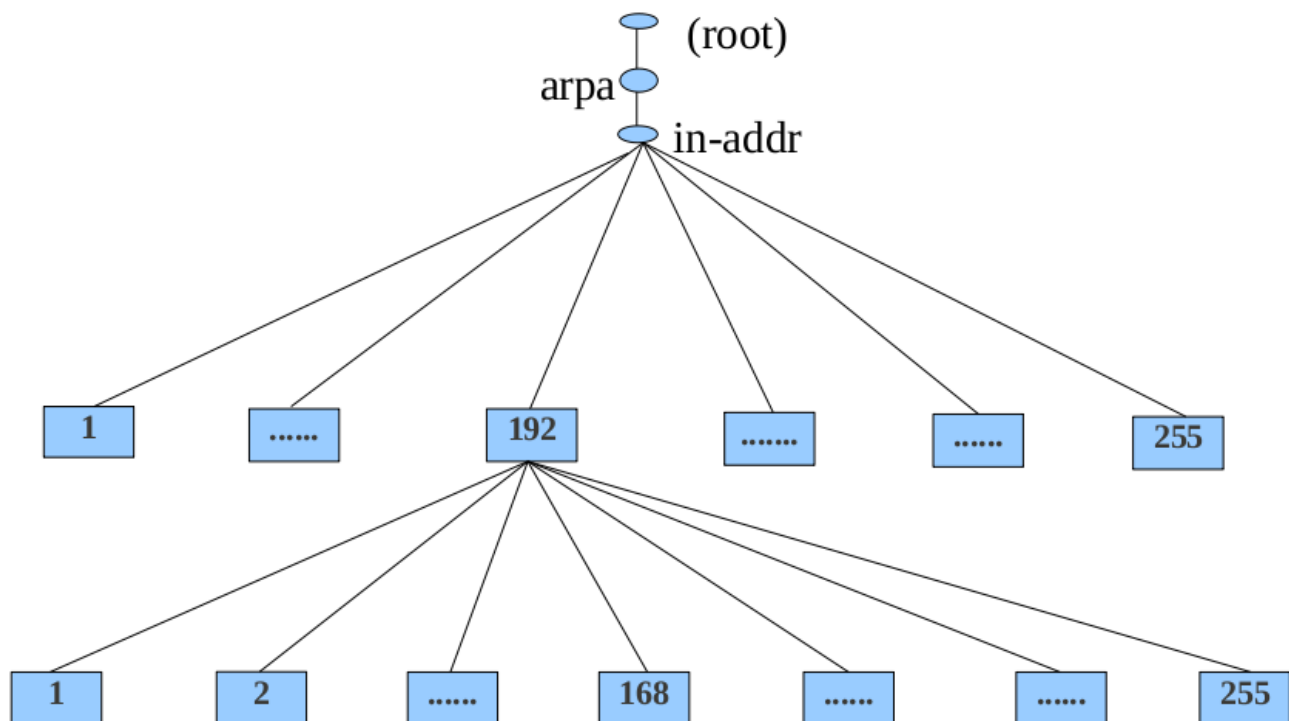
- `};`

Akhir dari sebuah zona selalu ditutup dengan `};`

- `zone "192.in-addr.arpa" {`

Awal dari zona reverse. Merupakan kebalikan network address dari zona *lks11.sch.id*. Network address *lks11.sch.id* adalah 192.168.11.1, jika ditulis terbalik menjadi 1.11.168.192. Jika 3 angka didepan dihapus menjadi 192. Jika ditambahkan *in-addr.arpa* maka hasilnya menjadi *192.in-addr.arpa*.

Ilustrasi dari sebuah reverse domain dapat dilihat dibawah



- Penjelasan yang lainnya sama seperti penjelasan diatas
- Mengkopi file `db.local` dan `db.127`

```
# cd /etc/bind
# cp db.local db.lks11.sch.id
# cp db.127 db.192
```

- Mengedit file db.lks11.sch.id

```
# nano db.lks11.sch.id
```

```
$TTL      604800
@         IN      SOA      server11.lks11.sch.id. admin.lks11.sch.id. (
                2010060110      ; Serial
                604800      ; Refresh
                86400      ; Retry
                2419200      ; Expire
                604800 )      ; Negative Cache TTL
;
@         IN      NS       server11.lks11.sch.id.
@         IN      A        192.168.11.1
@         IN      MX       1 mail.lks11.sch.id.
server11  IN      A        192.168.11.1
mail      IN      A        192.168.11.1
www_      IN      CNAME    server11
```

- Di save dan exit
- Mengedit file db.192

```
# nano db.192
```

```
$TTL      604800
@         IN      SOA      server11.lks11.sch.id. admin.lks11.sch.id. (
                2010060110      ; Serial
                604800      ; Refresh
                86400      ; Retry
                2419200      ; Expire
                604800 )      ; Negative Cache TTL
;
@         IN      NS       server11.lks11.sch.id.
1.11.168  IN      PTR      server11.lks11.sch.id.
1.11.168  IN      PTR      mail.lks11.sch.id.
```

- Di save dan exit
- Setting file /etc/resolv.conf

```
# nano /etc/resolv.conf
```

```
search lks11.sch.id  
nameserver 192.168.11.1
```

- Di save dan exit
- Restart hasil konfigurasi tersebut

```
# /etc/init.d/bind9 restart
```

- Cek hasil konfigurasi DNS dengan perintah *nslookup* atau *dig*

```
# nslookup lks11.sch.id
```

```
server11:/etc/bind# nslookup lks11.sch.id  
Server:          192.168.11.1  
Address:         192.168.11.1#53  
  
Name:   lks11.sch.id  
Address: 192.168.11.1
```

```
# nslookup www.lks11.sch.id
```

```
server11:/etc/bind# nslookup www.lks11.sch.id  
Server:          192.168.11.1  
Address:         192.168.11.1#53  
  
www.lks11.sch.id      canonical name = server11.lks11.sch.id.  
Name:   server11.lks11.sch.id  
Address: 192.168.11.1
```

```
# nslookup 192.168.11.1
```

```
server11:/etc/bind# nslookup 192.168.11.1  
Server:          192.168.11.1  
Address:         192.168.11.1#53  
  
1.11.168.192.in-addr.arpa      name = server11.lks11.sch.id.  
1.11.168.192.in-addr.arpa      name = mail.lks11.sch.id.
```


- Apabila tampil seperti diatas berarti anda berhasil membuat sebuah DNS server
- Tidak ada titik atau spasi ataupun yang lainnya hasil konfigurasi bisa salah atau gagal

Keterangan:

@	Bagian ini identik dengan zona yang telah didefinisikan di file <code>named.conf.local</code> . Dalam hal ini @ adalah <code>lks11.sch.id</code> . Kita dapat menggantikan simbol @ dengan <code>lks11.sch.id</code> .
IN	Singkatan dari <i>Internet Name</i> . Digunakan jika kita menggunakan protokol TCP/IP.
SOA	Menyatakan bahwa NS ini authoritative bagi zona <code>lks11.sch.id</code> .
server11.lks11.sch.id.	Mendeklarasikan hostname yang menjadi master server. Hostname biasanya ditulis secara FQDN, misal <code>server11.lks11.sch.id</code> . Perhatikan setelah hostname harus ada titik (“.”).
admin.lks11.sch.id.	Mendeklarasikan email admin NS server. Namun simbol “@” diganti dengan “.”. Misalnya admin@lks11.sch.id ditulis menjadi <code>admin.lks11.sch.id</code> . Perhatikan setelah email address harus ada titik (“.”).
2010060110	<i>Serial</i> biasanya ditulis dalam format tahun-bulan-tanggal-jam
604800 (satu minggu)	<i>Refresh</i> Mendeklarasikan selang waktu (dalam detik) yang diperlukan oleh <i>secondary server</i> untuk melakukan pengecekan terhadap perubahan file zona <i>primary server</i> . <i>Secondary server</i> akan melakukan

	<p>pengecekan serial number untuk mengetahui apakah ada perubahan file zona. Jika ada perubahan serial maka dilakukan zona transfer (copy file).</p>
<p>86400 (satu hari)</p>	<p><i>Retry</i></p> <p>Menentukan berapa lama (dalam detik) secondary server menunggu untuk mengulangi pengecekan terhadap primary server apabila primary server tidak memberikan respon pada saat proses Refresh. Jangan menggunakan nilai retry yang terlalu kecil karena pengulangan dalam waktu singkat tidak menghasilkan apa-apa.</p>
<p>2419200 (satu bulan)</p>	<p><i>Expire</i></p> <p>Menentukan berapa lama file zona dipertahankan pada secondary server apabila secondary server tidak dapat melakukan zona refresh. Apabila setelah masa expire, secondary server tidak dapat melakukan zona refresh maka secondary server akan menghapus file zona miliknya. Sebaiknya nilai expire cukup besar (lebih dari 30 hari) .</p>
<p>604800 (satu minggu)</p>	<p><i>Negative cache TTL</i></p> <p>Menentukan nilai awal time to live (TTL) bagi semua (RR) resources record pada file zona.</p>
<p>(.....)</p>	<p>Nilai <i>serial, refresh, retry, expire, negative cache TTL</i> dituliskan diantara tanda kurung . Artinya apapun yang ada didalam tanda kurung dianggap satu baris .</p>
<p>NS</p>	<p>NS (Name Server) adalah catatan yang menentukan server mana yang akan menjawab atau melayani informasi seputar DNS untuk sebuah domain. Sebuah domain bisa memiliki banyak NS record. Semakin banyak NS server yang Anda definisikan, berarti semakin banyak pula yang bisa melayani (tentunya harus di setup juga proses master/slave untuk proses</p>

	propagasi data). Disarankan lokasi NS yang satu dan lainnya, ada di jaringan yang berbeda. Jadi kalau ada satu network yang terputus, NS server di jaringan yang lain masih bisa memberikan layanan.
A	A (atau biasa disebut sebagai host record) merupakan inti dari DNS. A record adalah pemetaan dari nama ke alamat ip .
MX	MX (Mail Exchange) adalah catatan yang menentukan kemana sebuah email akan dikirim. Dalam record MX ini, ada variabel tambahan yaitu priority. Priority ini adalah angka yang menunjukkan skala prioritas, yang bisa Anda isi dari mulai 0 s.d 65536. Semakin kecil angkanya, semakin tinggi prioritasnya.
CNAME	CNAME (Canonical Name) adalah alias. Jadi www adalah nama lain untuk host server11 .
PTR	PTR record adalah kebalikan dari A record. Jika A record adalah mapping hostname ke IP address, maka PTR record adalah mapping dari IP address ke hostname.

SETTING WEB SERVER

- Menginstall paket yang dibutuhkan Web Server

```
# apt-get install apache2 php5 links
```

- Mengedit file default pada directory apache

```
# nano /etc/apache2/sites-available/default
```

```

NameVirtualHost *
<VirtualHost *>
    ServerAdmin webmaster@localhost

    DocumentRoot /var/www/
    <Directory />
        Options FollowSymLinks
        AllowOverride None
    </Directory>
    <Directory /var/www/>
        Options Indexes FollowSymLinks MultiViews
        AllowOverride None
        Order allow,deny
        allow from all
        # This directive allows us to have apache2's default start page
        # in /apache2-default/, but still have / go to the right place
        #RedirectMatch ^/$ /apache2-default/
    </Directory>

```

- beri tanda # didepan RedirectMatch
- Di save dan exit
- berpindah ke directory /var/www/

```
# cd /var/www
```

- buang directory apache2-default

```
# rm -rf apache2-default
```

- membuat index.html

```
# touch index.html
```

```
# nano index.html
```

- isi seperti gambar dibawah

```

<html>
<head><title>LKS NASIONAL </title></head>
<body>
<center><h1>Welcome To Lomba Keterampilan Siswa Tingkat Nasional</h1></center>
</body></html>

```

- Di save dan exit
- membuat index untuk php

```
# touch info.php  
# nano info.php
```

- isi seperti gambar dibawah

```
<? phpinfo(); ?>
```

- Di save dan exit
- restart web server

```
# /etc/init.d/apache2 restart
```

- cek hasil konfigurasi web server

```
# links 192.168.11.1
```

- apabila muncul seperti gambar dibawah berarti sudah benar

```
                                LKS NASIONAL  
Welcome To Lomba Keterampilan Siswa Tingkat Nasional
```

- mengecek apakah sudah support php

```
# links 192.168.11.1/info.php
```

- apabila muncul seperti gambar dibawah berarti sudah support

```
phpinfo() (p1 of 26)
PHP Logo
PHP Version 5.2.0-8+etch13
System Linux server11.lks11.sch.id 2.6.18-6-k7 #1 SMP Sat
Dec 27 10:04:42 UTC 2008 i686
Build Date Oct 2 2008 08:13:20
Server API Apache 2.0 Handler
Virtual Directory disabled
Support
Configuration File /etc/php5/apache2/php.ini
(PHP.ini) Path
Scan this dir for /etc/php5/apache2/conf.d
additional .ini files
additional .ini files /etc/php5/apache2/conf.d/pdo.ini
parsed
PHP API 20041225
PHP Extension 20060613
Zend Extension 220060519
Debug Build no
Thread Safety disabled
Zend Memory Manager enabled
IPv6 Support enabled
http://www.php.net/
```

SETTING DHCP SERVER

- install paket dhcp server

```
# apt-get install dhcp3-server
```

- mengedit file dhcp.conf

```
# nano /etc/dhcp3/dhcpd.conf
```

- cari kata slightly
- hapus tanda # dibawah tulisan slightly sampai tanda }
- edit subnet, range dll

```
# A slightly different configuration for an internal subnet.
subnet 192.168.11.0 netmask 255.255.255.240 {
    range 192.168.11.3 192.168.11.10;
    option domain-name-servers server11.lks11.sch.id;
    option domain-name "lks11.sch.id";
    option routers 192.168.11.1;
    option broadcast-address 192.168.11.15;
    default-lease-time 600;
    max-lease-time 7200;
}
```

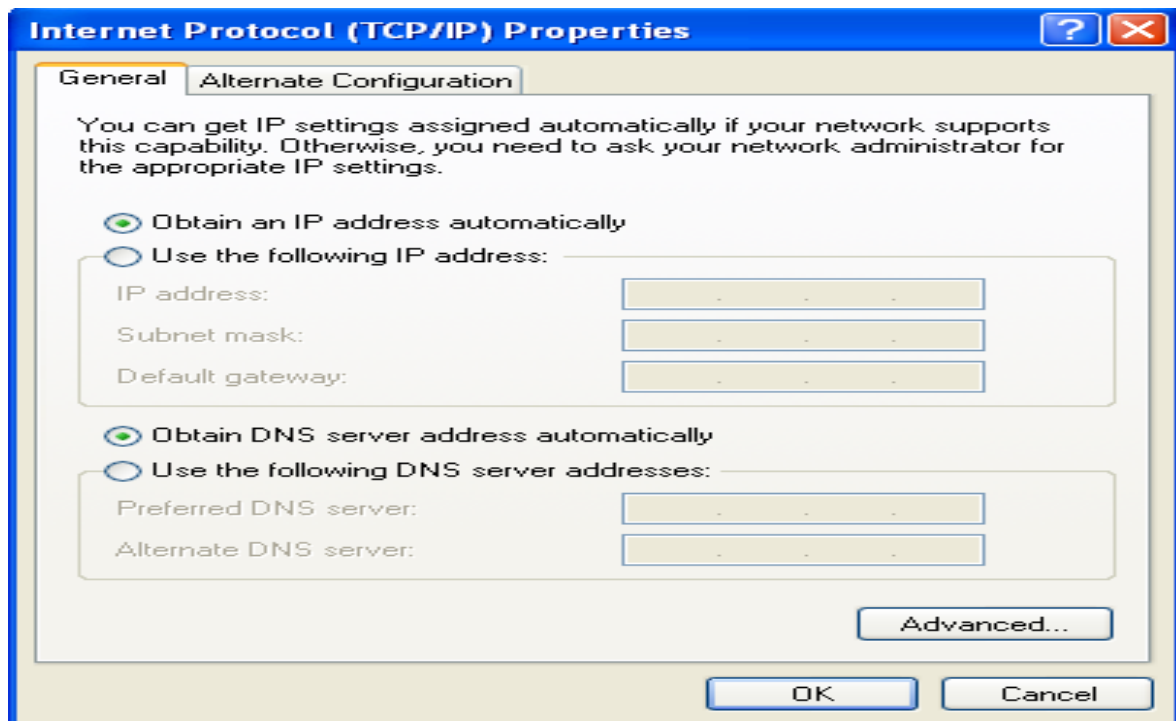
- Di save dan exit
- restart dhcp server

```
# /etc/init.d/dhcp3-server restart
```

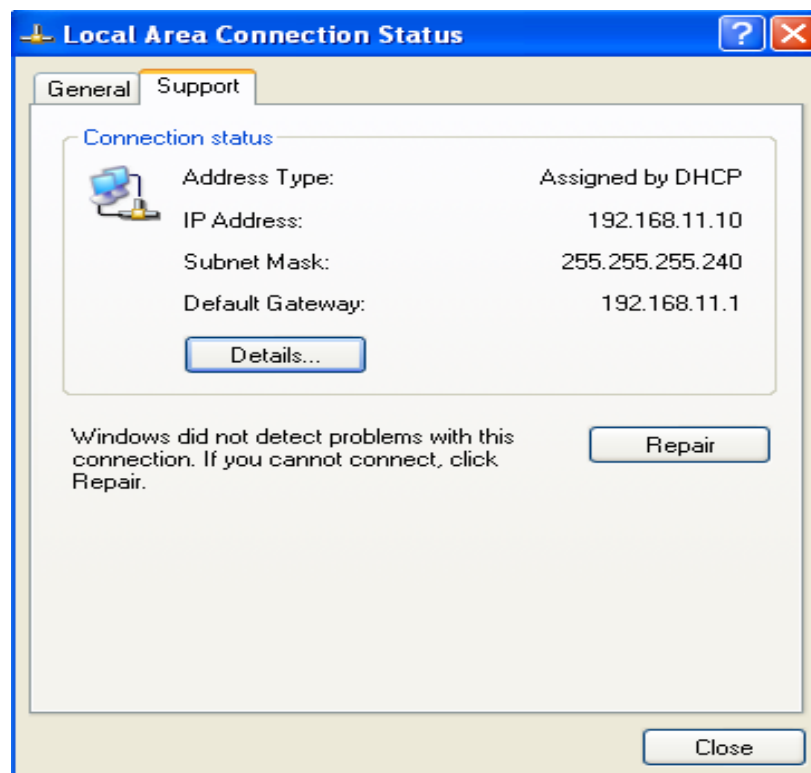
- Uji coba DHCP menggunakan client linux

```
# dhclient
```

- Uji coba DHCP menggunakan client windows
- klik start => control panel => Network and Internet Connections => Network Connections
- klik kanan pada gambar komputer jaringan, pilih properties, pilih internet protocol (TCP/IP)
- kosongkan semua, tampak seperti gambar dibawah ini
- kemudian OK



- Klik kanan kembali gambar komputer jaringan tadi, kemudian pilih status
- Lihat gambar dibawah Terlihat mendapat DHCP dari Server



SETTING MAIL SERVER DAN WEBMAIL

- install paket mail server dan webmail yang dibutuhkan

```
# apt-get install postfix squirrelmail courier-imap courier-pop
```

- proses pada saat instalasi postfix
- apabila ada gambar seperti dibawah tekan tab kemudian ENTER

```
You have several choices for general configuration at this point. If you have your debconf priority set to 'low' or 'medium', you will be asked more questions later. You can always run "dpkg-reconfigure --priority=low postfix" at a later point if you want to see these questions again.
```

```
No configuration - IF YOU WANT THE INSTALL TO LEAVE YOUR CONFIG ALONE, CHOOSE THIS OPTION. No configuration changes will be done now: If you have not already configured Postfix, your mail system will be broken and should not be used. You must then do the configuration yourself by editing /usr/share/postfix/main.cf.dist and saving your changes as /etc/postfix/main.cf, or by running dpkg-reconfigure Postfix. main.cf will not be modified by the Postfix install process.
```

```
Internet site - mail is sent and received directly using SMTP. If your
```

```
<Ok>k>
```

- pilih internet site dan ENTER

```
General type of configuration?
No configuration
Internet Site
Internet with smarthost
Satellite system
Local only

<Ok>          <Cancel>
```

- isi mail server yang akan digunakan

Your 'mail name' is the hostname portion of the address to be shown on outgoing news and mail messages (following the username and @ sign).

This name will be used by other programs besides Postfix; it should be the single, full domain name (FQDN) from which mail will appear to originate.

Mail name?

mail.lks11.sch.id

<Ok>

<Cancel>

- mengedit file main.cf yang berada di directory postfix

```
# nano /etc/postfix/main.cf
```

```
myhostname = mail.lks11.sch.id
mydomain = lks11.sch.id
myorigin = lks11.sch.id
alias_maps = hash:/etc/aliases
alias_database = hash:/etc/aliases
mydestination = $mydomain, $myhostname, localhost.localdomain, , localhost
relayhost =
mynetworks = 127.0.0.0/8 192.168.11.0/28
#mailbox_command = procmail -a "$EXTENSION"
mailbox_size_limit = 0
recipient_delimiter = +
inet_interfaces = all
home_mailbox = Maildir/
```

- file yang di ganti dan ditambahkan adalah
 1. myhostname
 1. mydomain
 2. myorigin
 3. mydestination
 4. mynetworks
 5. memberikan tanda # didepan mailbox_command
 6. home_mailbox = Maildir/
- Di save dan exit
- membuat directory email

```
# cd /etc/skel
```

```
# maildirmake Maildir/
```

- membuat user baru

adduser admin

- masukan password untuk admin sebagai contoh passwordnya saya mengetikkan **admin**

```
server11:/var/www# cd /etc/skel/  
server11:/etc/skel# maildirmake Maildir/  
server11:/etc/skel# adduser  
adduser: Only one or two names allowed.  
server11:/etc/skel# adduser admin  
Adding user `admin' ...  
Adding new group `admin' (1001) ...  
Adding new user `admin' (1001) with group `admin' ...  
Creating home directory `/home/admin' ...  
Copying files from `/etc/skel' ...  
Enter new UNIX password:  
Retype new UNIX password:  
passwd: password updated successfully  
Changing the user information for admin  
Enter the new value, or press ENTER for the default  
  Full Name []:  
  Room Number []:  
  Work Phone []:  
  Home Phone []:  
  Other []:  
Is the information correct? [y/N]
```

- mengedit squirrelmail

squirrelmail-configure

- muncul tampilan seperti dibawah
- tekan 2 kemudian ENTER

```
SquirrelMail Configuration : Read: config.php (1.4.0)
-----
Main Menu --
1.  Organization Preferences
2.  Server Settings
3.  Folder Defaults
4.  General Options
5.  Themes
6.  Address Books
7.  Message of the Day (MOTD)
8.  Plugins
9.  Database
10. Languages

D.  Set pre-defined settings for specific IMAP servers

C  Turn color on
S  Save data
Q  Quit

Command >> 2_
```

- tekan 1 kemudian ENTER dan isi dengan domain anda, ENTER

```
SquirrelMail Configuration : Read: config.php (1.4.0)
-----
Server Settings

General
-----
1.  Domain                : lks11.sch.id
2.  Invert Time           : false
3.  Sendmail or SMTP      : SMTP

A.  Update IMAP Settings  : localhost:143 (courier)
B.  Update SMTP Settings  : localhost:25

R  Return to Main Menu
C  Turn color on
S  Save data
Q  Quit

Command >> 1

The domain name is the suffix at the end of all email addresses.  If
for example, your email address is jdoe@example.com, then your domain
would be example.com.

[lks11.sch.id]: lks11.sch.id_
```

- tekan r dan ENTER

```
SquirrelMail Configuration : Read: config.php (1.4.0)
```

```
-----  
Server Settings
```

```
General
```

```
-----  
1. Domain : lks11.sch.id  
2. Invert Time : false  
3. Sendmail or SMTP : SMTP  
  
A. Update IMAP Settings : localhost:143 (courier)  
B. Update SMTP Settings : localhost:25  
  
R Return to Main Menu  
C Turn color on  
S Save data  
Q Quit
```

```
Command >> r_
```

- tekan d kemudian ENTER

```
SquirrelMail Configuration : Read: config.php (1.4.0)
```

```
-----  
Main Menu --
```

```
1. Organization Preferences  
2. Server Settings  
3. Folder Defaults  
4. General Options  
5. Themes  
6. Address Books  
7. Message of the Day (MOTD)  
8. Plugins  
9. Database  
10. Languages  
  
D. Set pre-defined settings for specific IMAP servers  
  
C Turn color on  
S Save data  
Q Quit
```

```
Command >> d_
```

- isi dengan courier

```

SquirrelMail Configuration : Read: config.php
-----
While we have been building SquirrelMail, we have discovered some
preferences that work better with some servers that don't work so
well with others.  If you select your IMAP server, this option will
set some pre-defined settings for that server.

Please note that you will still need to go through and make sure
everything is correct.  This does not change everything.  There are
only a few settings that this will change.

Please select your IMAP server:
  bincimap      = Binc IMAP server
  courier       = Courier IMAP server
  cyrus         = Cyrus IMAP server
  dovecot       = Dovecot Secure IMAP server
  exchange     = Microsoft Exchange IMAP server
  hmailserver   = hMailServer
  macosx       = Mac OS X Mailserver
  mercury32    = Mercury/32
  uw           = University of Washington's IMAP server

  quit         = Do not change anything
Command >> courier_

```

- tekan ENTER 2 kali
- tekan s kemudian ENTER 2 kali
- tekan q ENTER
- mengedit apache.conf yang berada di directory squirrelmail

```
# nano /etc/squirrelmail/apache.conf
```

- ganti squirrelmail menjadi webmail

```

Alias /webmail_/usr/share/squirrelmail

<Directory /usr/share/squirrelmail>
  Options Indexes FollowSymLinks
  <IfModule mod_php4.c>
    php_flag register_globals off
  </IfModule>
  <IfModule mod_php5.c>
    php_flag register_globals off
  </IfModule>
  <IfModule mod_dir.c>
    DirectoryIndex index.php
  </IfModule>

```

- Disave dan exit
- mengedit file apache2.conf pada directory apache

```
# nano /etc/apache2/apache2.conf
```

- tambahkan Include `/etc/squirrelmail/apache.conf` pada baris paling bawah

```
# Include the virtual host configurations:  
Include /etc/apache2/sites-enabled/  
Include /etc/squirrelmail/apache.conf
```

- Di save dan exit
- restart hasil konfigurasi tersebut

```
# /etc/init.d/postfix restart  
# /etc/init.d/courier-imap restart  
# /etc/init.d/courier-pop restart  
# /etc/init.d/apache2 restart
```

- tes hasil konfigurasi mail server dan webmail

```
# telnet mail.lks11.sch.id 25
```

1. ketik `mail from:tes@yahoo.com` ENTER
2. ketik `rcpt to:admin@lks11.sch.id` ENTER
3. ketik `data` untuk tes kirim email
4. ketik `tes email` ENTER
5. akhiri dengan tanda titik (`.`) untuk selesai menulis,ENTER
6. tekan `ctrl+}` untuk keluar
7. tekan `q` ENTER

```
server11:/etc/skel# telnet mail.lks11.sch.id 25
Trying 192.168.11.1...
Connected to mail.lks11.sch.id.
Escape character is '^]'.
220 mail.lks11.sch.id ESMTP Postfix (Debian/GNU)
mail from: tes@yahoo.com
250 2.1.0 Ok
rcpt to:admin@lks11.sch.id
250 2.1.5 Ok
data
354 End data with <CR><LF>.<CR><LF>
tes email
.
250 2.0.0 Ok: queued as 740F120041
^]
telnet> q
Connection closed.
```

- tes dengan webmail

```
# links mail.lks11.sch.id/webmail
```

- masukan user dan password yang telah dibuat kemudian pilih login dan ENTER

```
SquirrelMail - Login
SquirrelMail Logo
SquirrelMail version 1.4.9a
By the SquirrelMail Project Team

SquirrelMail Login
Name: admin_____
Password: *****_____
[ Login ]
```


- hasil dari telnet terlihat ada dalam folder **INBOX**

```

Refresh:                               SquirrelMail
left_main.php                           Sign Out
                                           SquirrelMail

  Folders
Last Refresh:
Wed, 3:00 am
(Check mail)

- INBOX (1)
  Drafts
  Sent
  Trash

Current Folder: INBOX
Compose  Addresses  Folders  Options
Search  Help

Select All
Move Selected To:
[ INBOX ] [ Move ] [ Forward ] [ Read ] [ Unread ] [ Delete ]

From sort      Date sort      Subject sort
[ ] tes@yahoo.com  2:58 am      (no subject)
Select All
Viewing Message: 1 (1 total)
Transform Selected Messages:
Viewing Message: 1 (1 total)

```

- buka folder inbox tersebut dan lihat isinya
- terlihat hasil pengiriman email berhasil dikirim

```

Refresh:                               SquirrelMail
left_main.php                           Sign Out
                                           SquirrelMail

  Folders
Last Refresh:
Wed, 3:00 am
(Check mail)

- INBOX (1)
  Drafts
  Sent
  Trash

Current Folder: INBOX
Compose  Addresses  Folders  Options
Search  Help

Message      Previous | Next
List | Delete      Attachment | Reply | Reply All

From:      tes@yahoo.com
Date:      Wed, June 2, 2010 2:58 am
To:        undisclosed-recipients:;
Priority:   Normal
Options:   View Full Header | View Printable Version
           | Download this as a file

tes email

```

- tekan Ctrl + C untuk exit
- bagaimana jika webmail tersebut tanpa tanda / seperti <http://mail.lks11.sch.id/webmail> tetapi langsung <http://mail.lks11.sch.id> muncul halaman webmail....?
- Virtualhost lah solusinya...
- pertama pindah ke directory apache

```
# cd /etc/apache2
```

- mengedit ports.conf

```
# nano ports.conf
```

- tambahkan NameVirtualHost ip-anda

```
NameVirtualHost 192.168.11.1  
Listen 80
```

- Di save dan exit
- pindah ke directory sites-available yang terdapat pada directory apache
- pastikan anda berada di directory apache

```
# pwd
```

- maka akan muncul

```
/etc/apache2
```

```
# cd sites-available
```

- edit file default yang berada pada directory sites-available tersebut

```
# nano default
```

- edit seperti pada gambar dibawah ini

```
<VirtualHost 192.168.11.1>  
    ServerAdmin admin@lks11.sch.id  
    ServerName www.lks11.sch.id  
    DocumentRoot /var/www/  
    ErrorLog /var/log/apache2/lks11.sch.id-error.log  
    CustomLog /var/log/apache2/lks11.sch.id-access.log combined  
</VirtualHost>
```

- Di save dan exit
- mengkopi file default

```
# cp default mail
```

```
# nano mail
```

- edit seperti pada gambar dibawah ini

```
<VirtualHost 192.168.11.1>
  ServerAdmin admin@lks11.sch.id
  ServerName mail.lks11.sch.id
  DocumentRoot /usr/share/squirrelmail/
  ErrorLog /var/log/apache2/lks11.sch.id-error.log
  CustomLog /var/log/apache2/lks11.sch.id-access.log combined
</VirtualHost>
```

- Di save dan exit
- jalankan perintah a2ensite agar file mail berjalan

```
# a2ensite mail
```

- edit file apache.conf yang berada pada directory squirrelmail

```
# nano /etc/squirrelmail/apache.conf
```

- berikan tanda # sebelum tulisan alias

```
#Alias /webmail /usr/share/squirrelmail
<Directory /usr/share/squirrelmail>
  Options Indexes FollowSymLinks
  <IfModule mod_php4.c>
    php_flag register_globals off
  </IfModule>
  <IfModule mod_php5.c>
    php_flag register_globals off
  </IfModule>
  <IfModule mod_dir.c>
    DirectoryIndex index.php
  </IfModule>
```

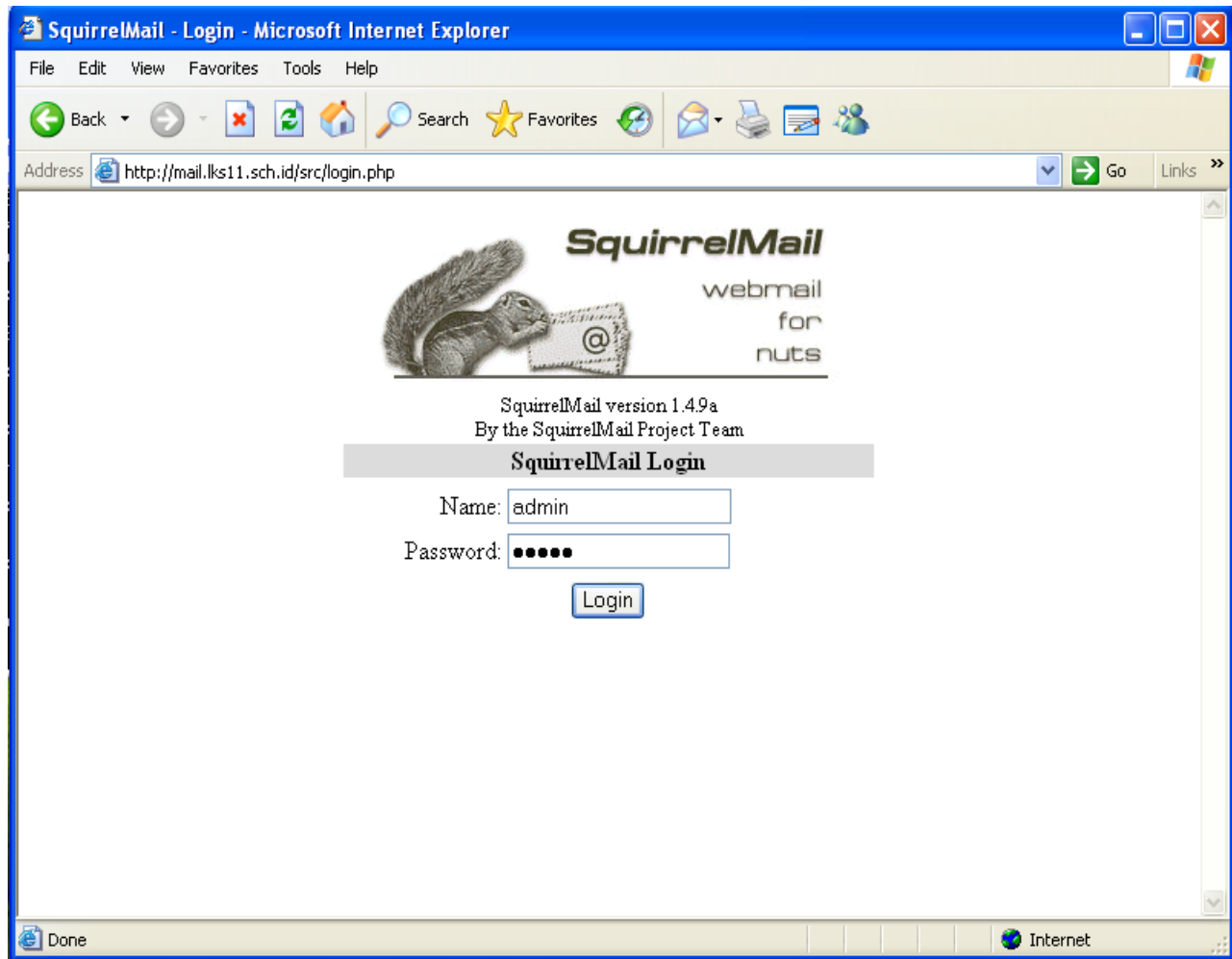
- Di save dan exit
- restart apache

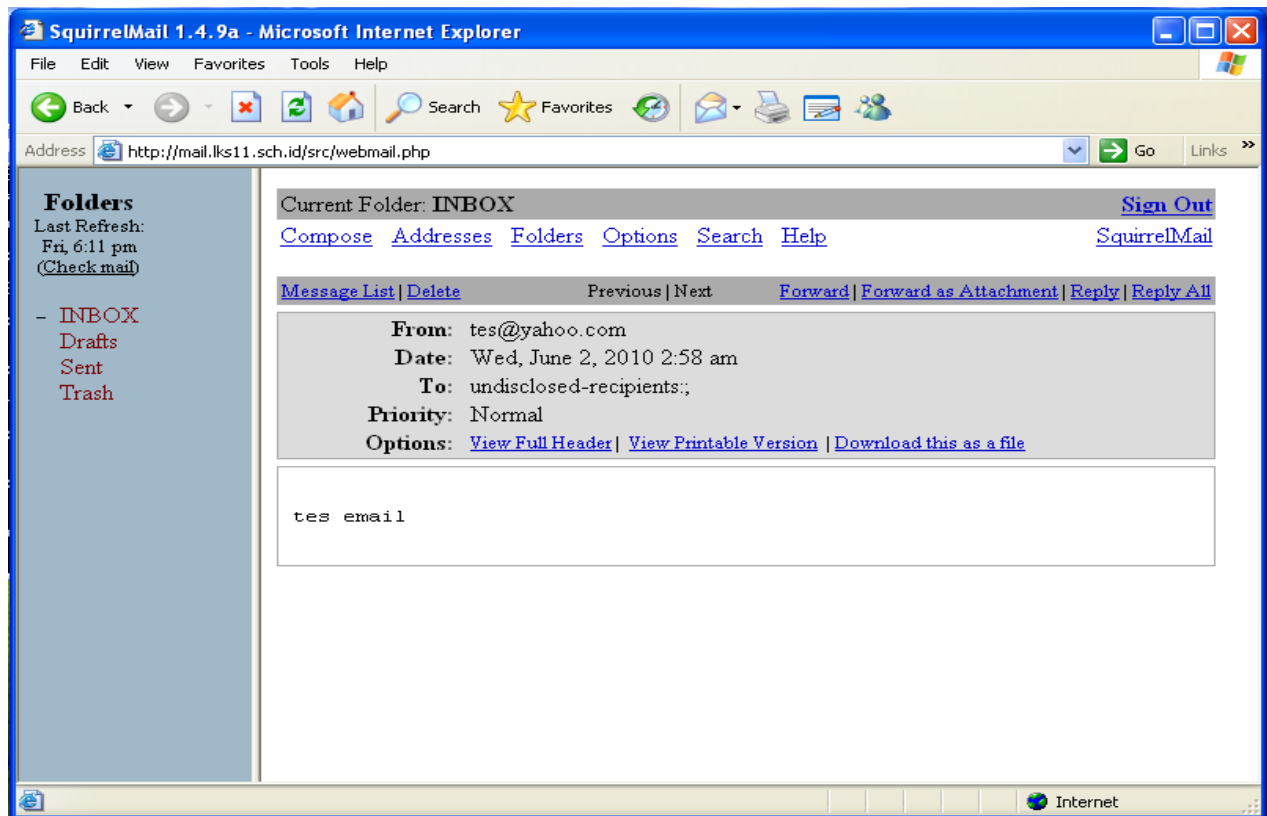
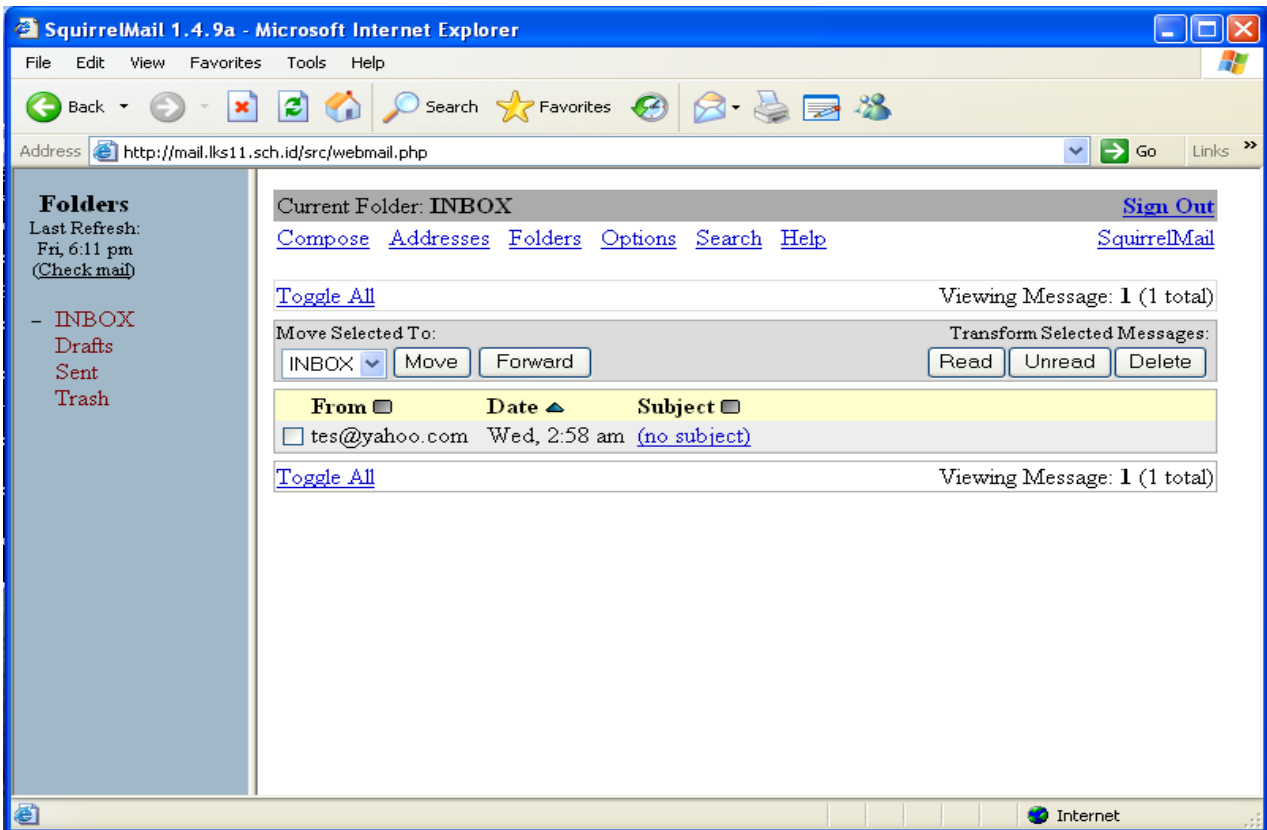
```
# /etc/init.d/apache2 restart
```

- silahkan anda coba hasil konfigurasi tersebut

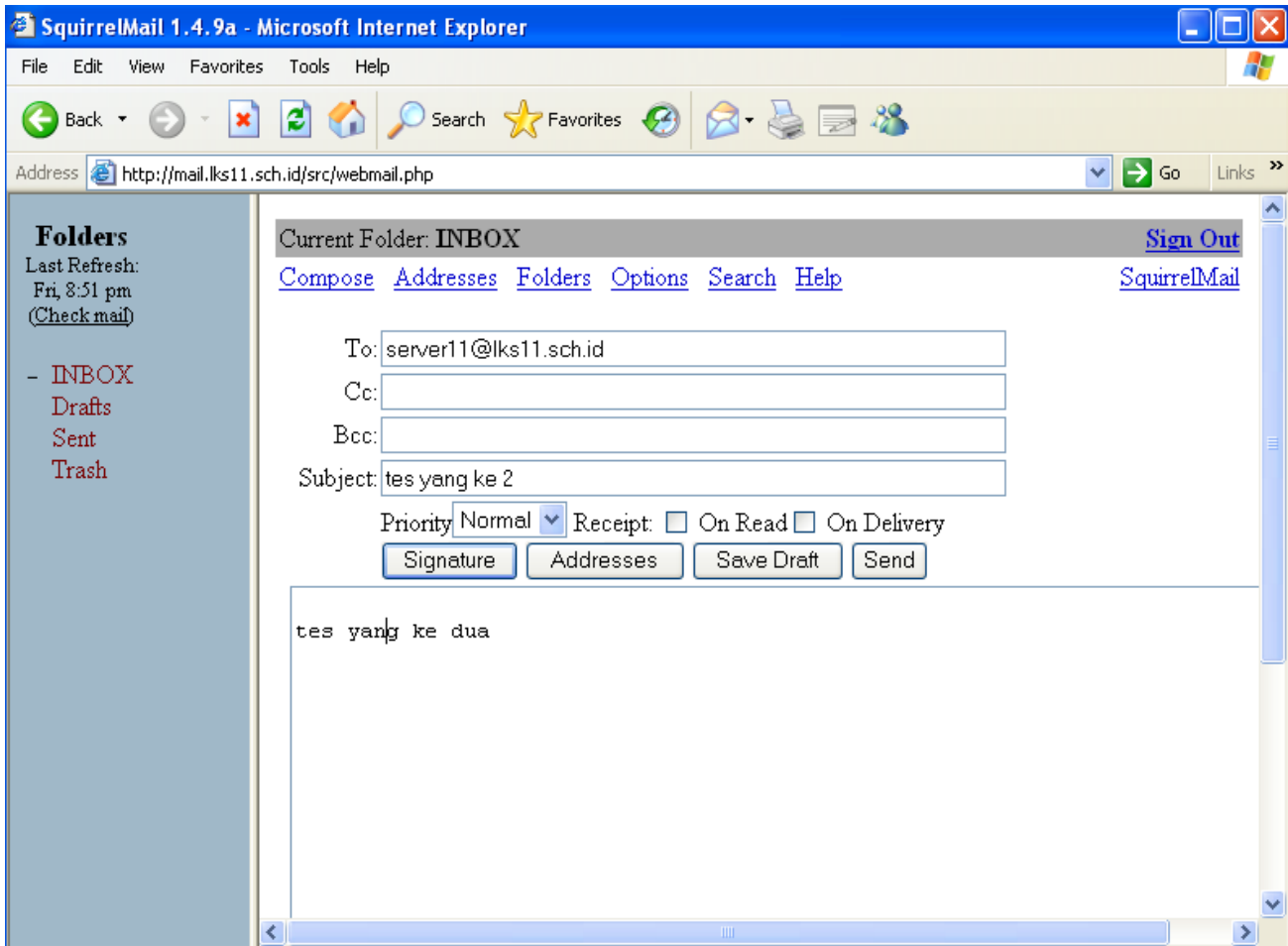
links mail.lks11.sch.id

- uji coba dengan windows
- buka web browser seperti IE atau mozilla firefox
- ketikan alamat mail.lks11.sch.id
- isi username dan password
- klik login





- kirim email menggunakan webmail
- masuk dengan user *admin*
- klik compose dan isi



- *server11* adalah username ketika anda menginstall server
- buka tes email tersebut dengan server

links mail.lks11.sch.id

```
SquirrelMail - Login
SquirrelMail Logo
SquirrelMail version 1.4.9a
By the SquirrelMail Project Team


SquirrelMail Login
Name: server11_____
Password: *****_____
[ Login ]
```


```
Refresh:                               SquirrelMail
left_main.php                           Compose  Addresses  Folders  Options  Sign Out
Search  Help                             m        SquirrelMail

Folders
Last Refresh:                            Select All          Viewing Messages: 1 to 2 (2 total)
Fri, 8:54 pm                               Move Selected To:  Transform Selected Messages:
(Check mail)  [ INBOX_] [ Move ] [ Forward ] [ Read ] [ Unread ] [ Delete ]

- INBOX (1)      From sort          Date sort          Subject sort
Drafts          [ ] admin@lks11.sch.id  8:54 pm          tes yang ke 2
Sent            [ ] admin            11:12 am          + tes
Trash          Select All          Viewing Messages: 1 to 2 (2 total)
```

- tes email menggunakan microsoft outlook
- klik start => all programs => outlook express


Internet Connection Wizard 


Your Name 

When you send e-mail, your name will appear in the From field of the outgoing message.
Type your name as you would like it to appear.

Display name:

For example: John Smith


Internet Connection Wizard 


Internet E-mail Address 

Your e-mail address is the address other people use to send e-mail messages to you.

E-mail address:

For example: someone@microsoft.com


Internet Connection Wizard 


E-mail Server Names 

My incoming mail server is a server.

Incoming mail (POP3, IMAP or HTTP) server:

An SMTP server is the server that is used for your outgoing e-mail.
Outgoing mail (SMTP) server:

Internet Connection Wizard 

Internet Mail Logon 

Type the account name and password your Internet service provider has given you.

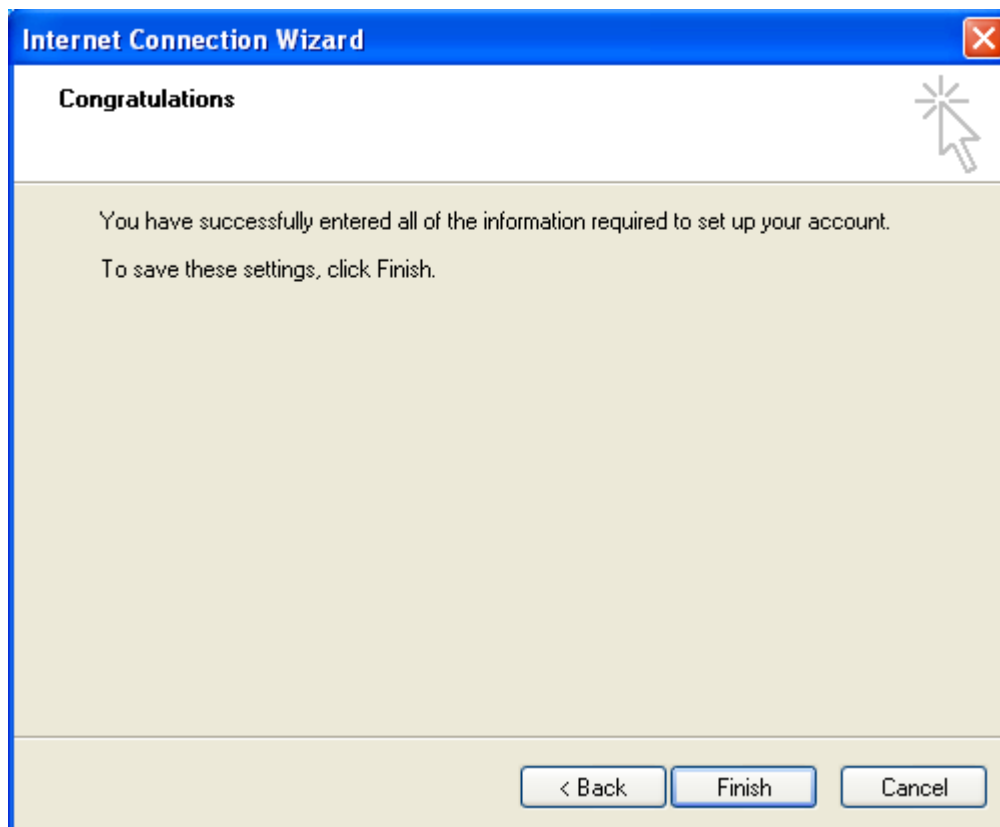
Account name:

Password:

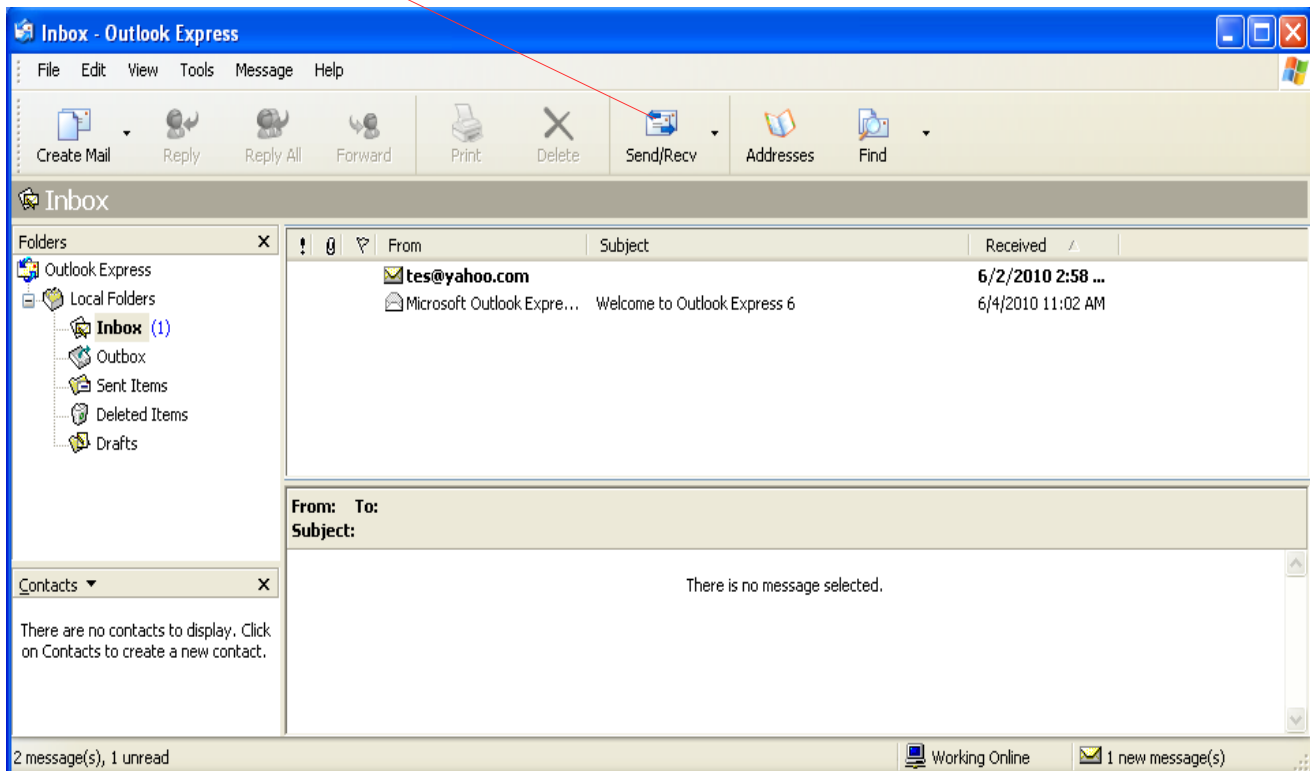
Remember password

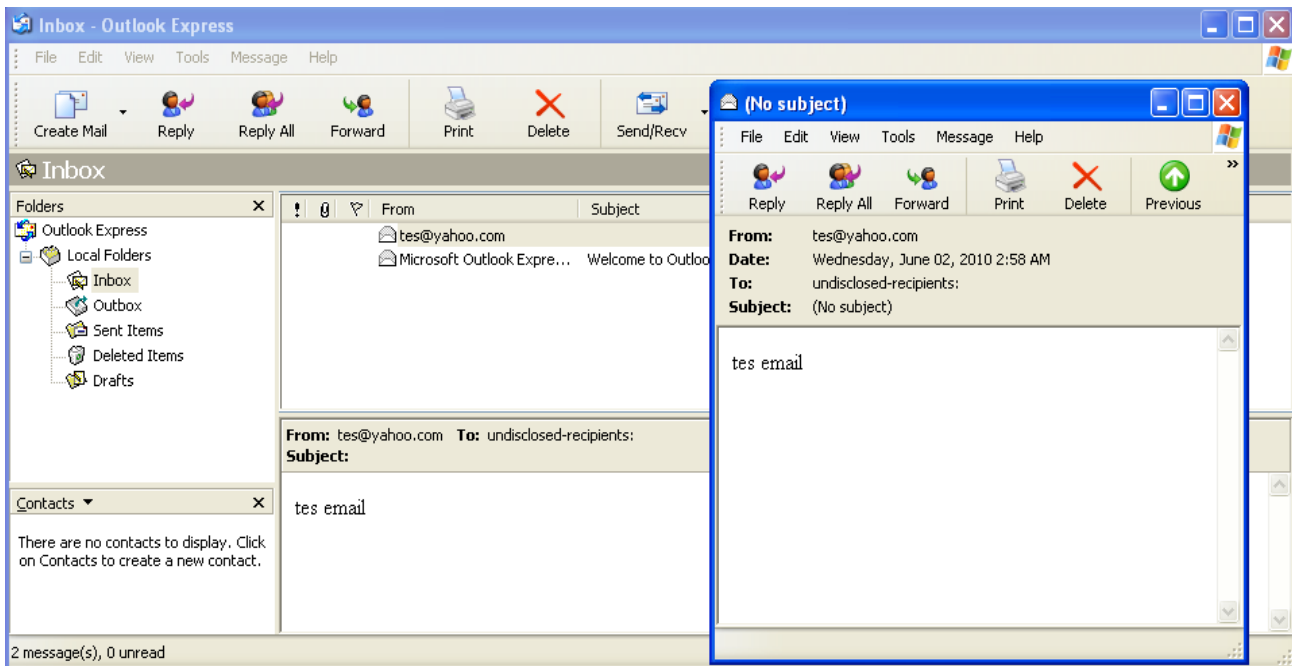
If your Internet service provider requires you to use Secure Password Authentication (SPA) to access your mail account, select the 'Log On Using Secure Password Authentication (SPA)' check box.

Log on using Secure Password Authentication (SPA)

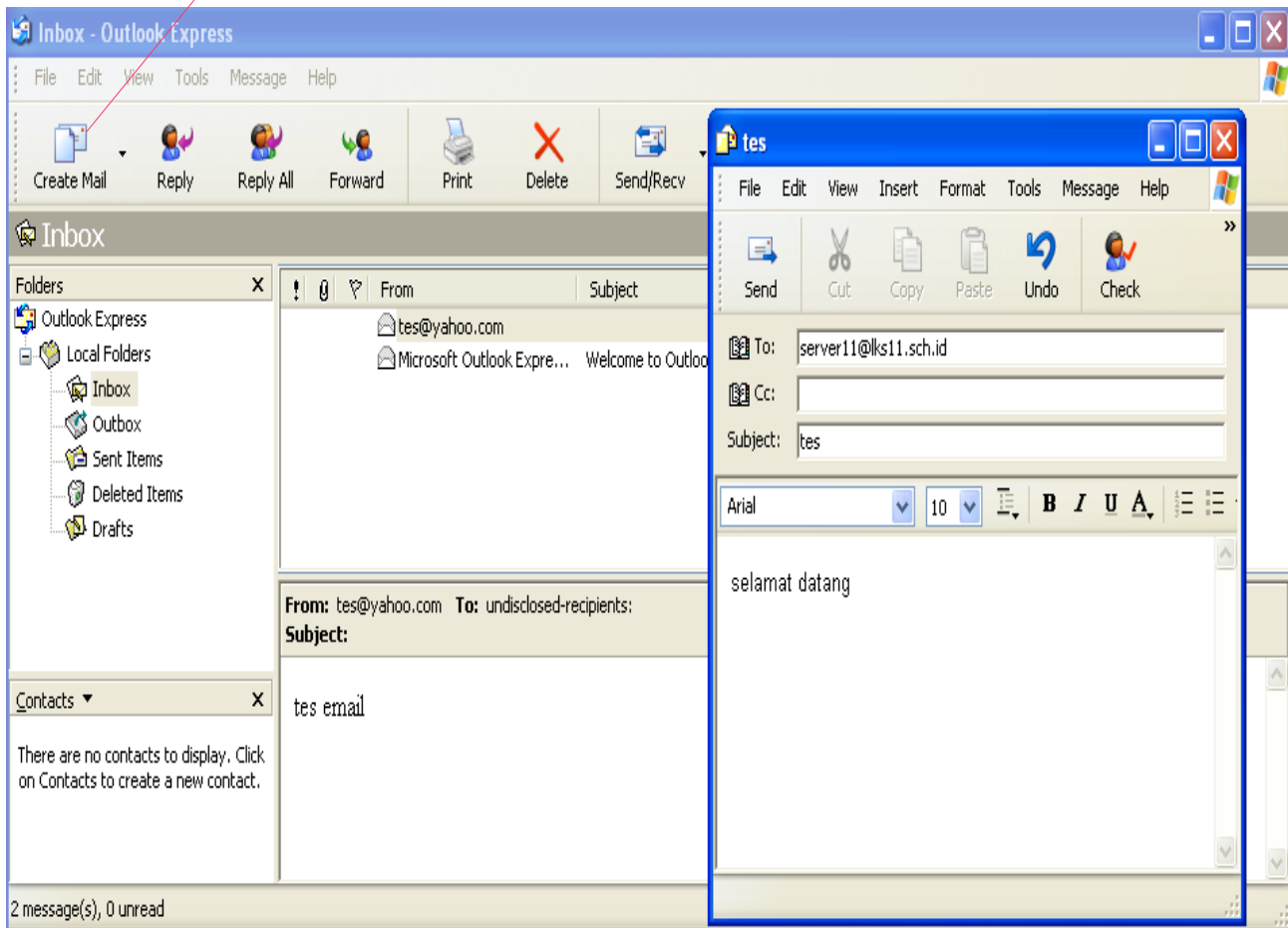


- klik Send/recv, untuk mendownload email

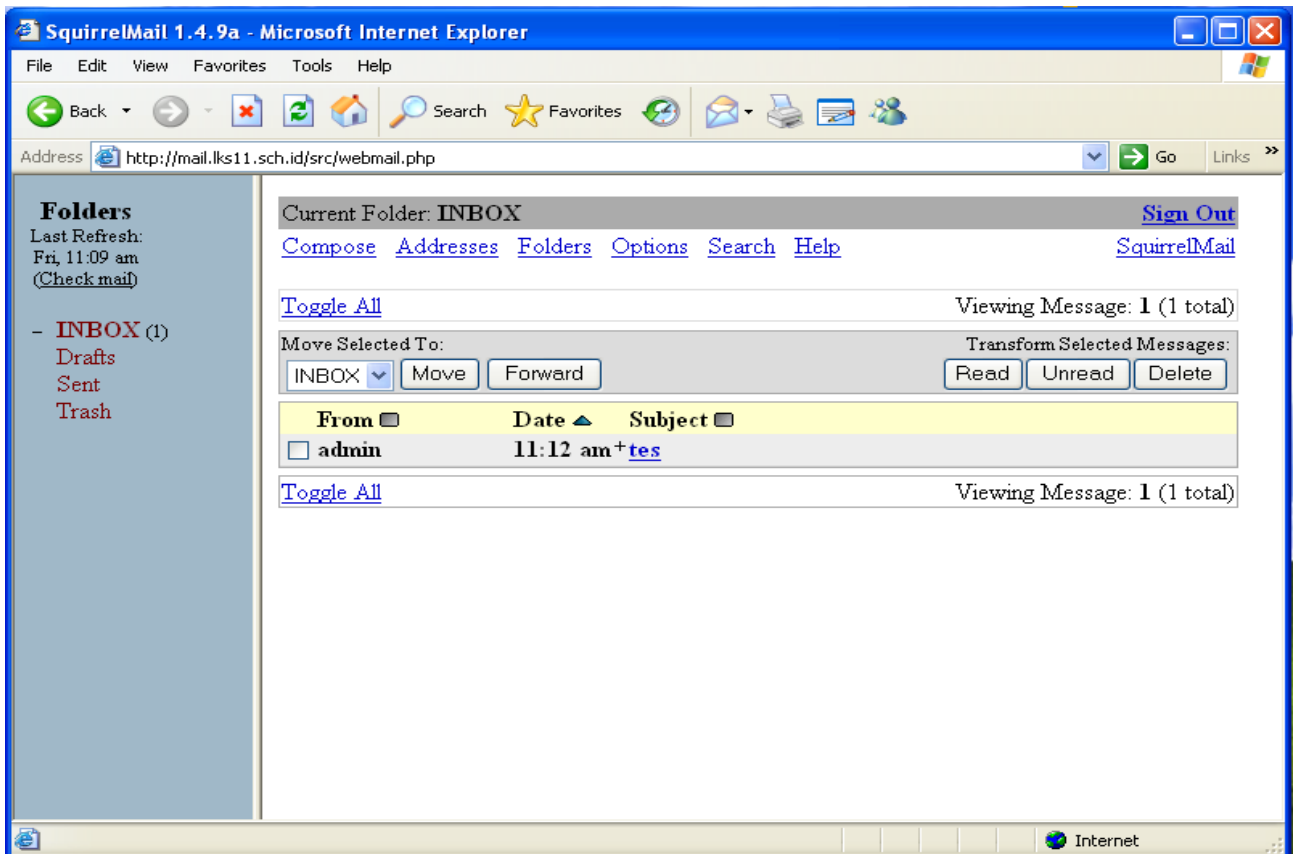
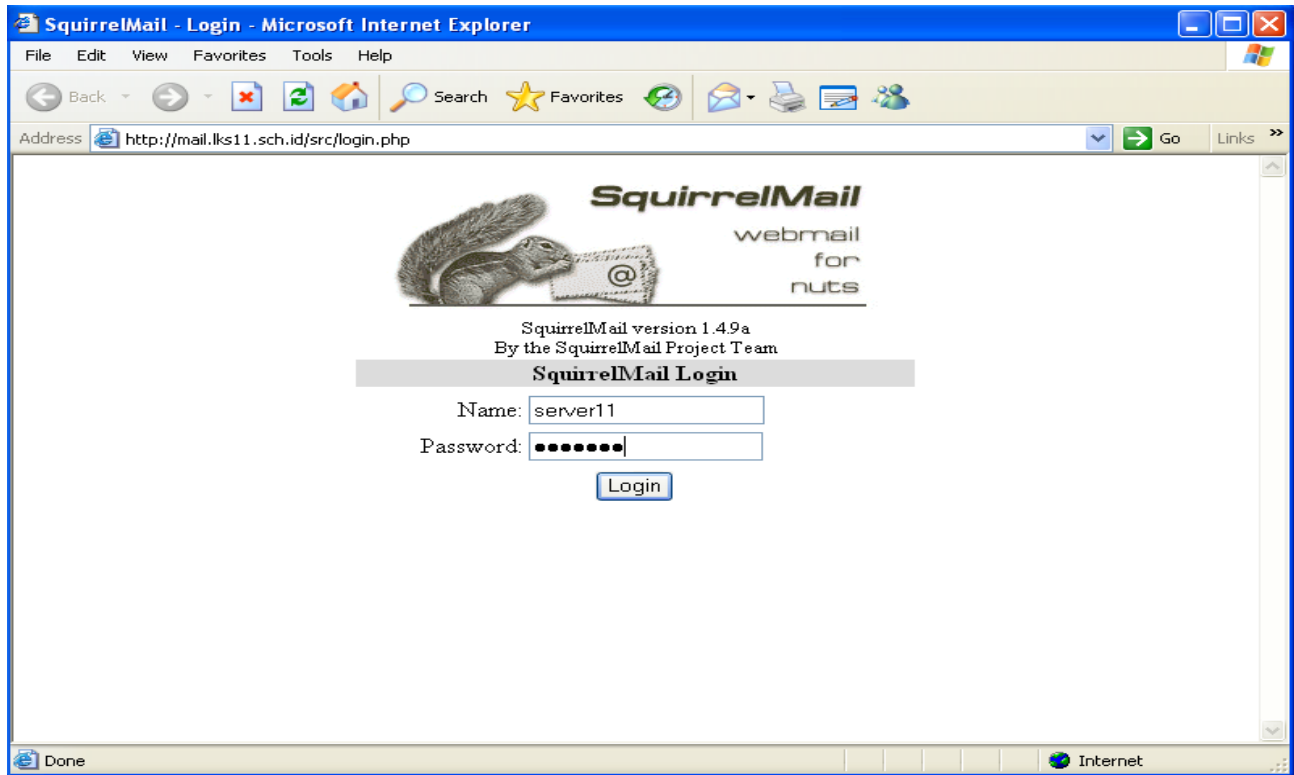


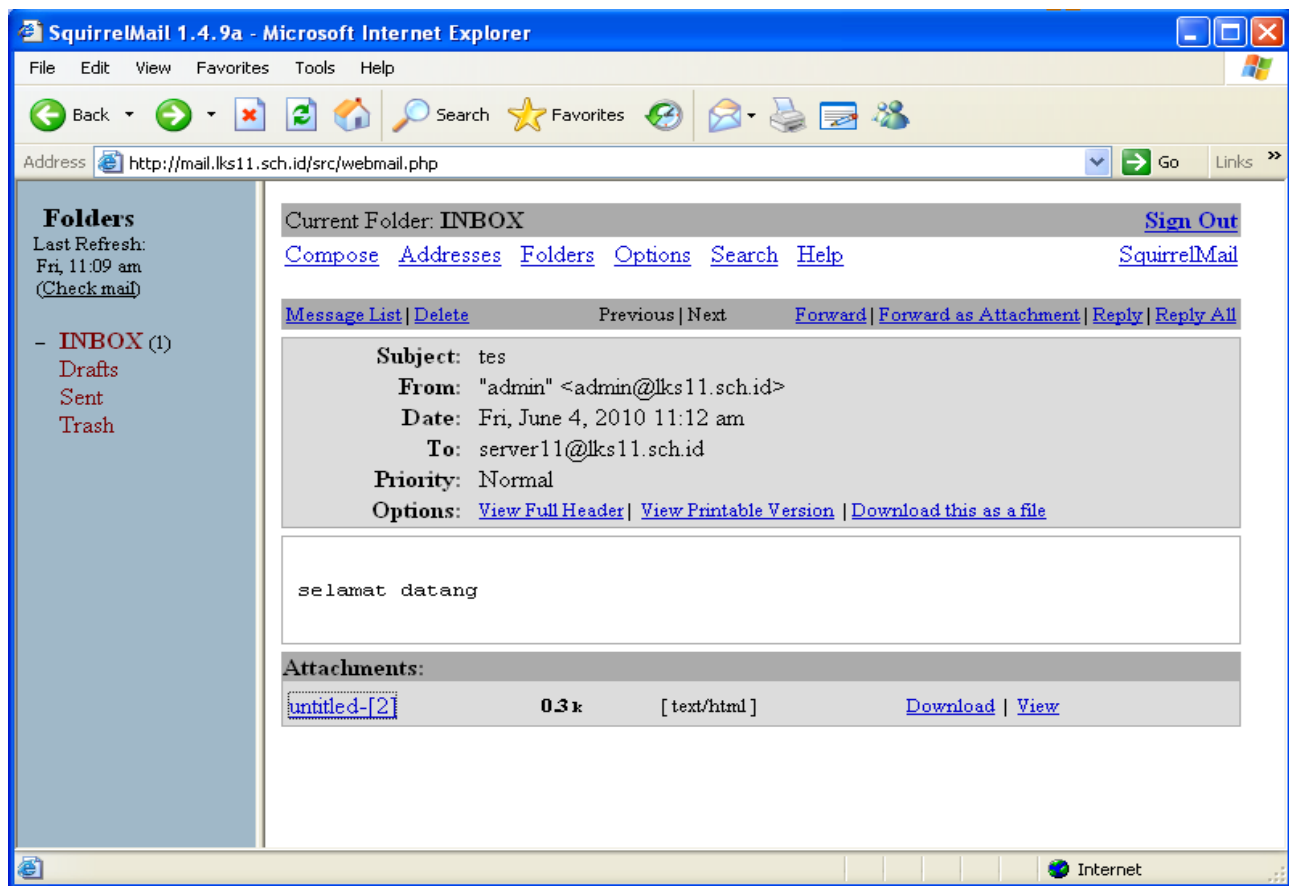


- tes kirim email menggunakan outlook
- klik Create Mail, isi form tersebut dan send



- buka webmail dengan browser, isi Name dan Passwordnya





SETTING PROXY SERVER

- menginstall paket yang dibutuhkan

```
# apt-get install squid
```

- Karena server ini tidak terhubung dengan internet, maka cara untuk mengetest transparent proxy adalah dengan cara membuat Virtual Domain untuk situs-situs yang akan diblock .

daftar situs yang akan diblock:

www.debian.org

www.redhat.org

www.google.com

www.susefaq.sourceforge.net

www.linux.or.id

- Membuat virtual domain

```
# cd /etc/bind  
# nano named.conf.local
```

- Tambahkan zona untuk domain2 diatas pada baris paling bawah

```
zone "debian.org" {  
    type master;  
    file "/etc/bind/db.debian.org";  
};  
  
zone "redhat.ofg" {  
    type master;  
    file "/etc/bind/db.redhat.ofg";  
};  
  
zone "google.com" {  
    type master;  
    file "/etc/bind/db.google.com";  
};  
  
zone "susefaq.sourceforge.net" {  
    type master;  
    file "/etc/bind/db.susefaq.sourceforge.net";  
};  
  
zone "linux.or.id" {  
    type master;  
    file "/etc/bind/db.linux.or.id";  
};
```

- Di save dan exit
- membuat database debian.org

```
# cp db.local db.debian.org  
# nano db.debian.org
```

```

$TTL 604800
@ IN SOA      server11.debian.org. admin.debian.org. (
                2010060110    ; Serial
                604800      ; Refresh
                86400       ; Retry
                2419200     ; Expire
                604800 )    ; Negative Cache TTL
;
@ IN NS       server11.debian.org.
@ IN A        192.168.11.1
server11 IN A  192.168.11.1
www IN CNAME  server11

```

- membuat database redhat.ofg, google.com, susefaq.sourceforge.net, linux.or.id

```

# cp db.debian.org db.redhat.ofg
# cp db.debian.org db.google.com
# cp db.debian.org db.susefaq.sourceforge.net
# cp db.debian.org db.linux.or.id
# nano db.redhat.ofg

```

```

$TTL 604800
@ IN SOA      server11.redhat.ofg. admin.redhat.ofg. (
                2010060110    ; Serial
                604800      ; Refresh
                86400       ; Retry
                2419200     ; Expire
                604800 )    ; Negative Cache TTL
;
@ IN NS       server11.redhat.ofg.
@ IN A        192.168.11.1
server11 IN A  192.168.11.1
www IN CNAME  server11

```

- membuat database google.com

```
# nano db.google.com
```

```
$TTL 604800
@ IN SOA server11.google.com. admin.google.com. (
    2010060110 ; Serial
    604800 ; Refresh
    86400 ; Retry
    2419200 ; Expire
    604800 ) ; Negative Cache TTL
;
@ IN NS server11.google.com.
@ IN A 192.168.11.1
server11 IN A 192.168.11.1
www IN CNAME server11
```

- Membuat database susefaq.sourceforge.net

```
# nano db.susefaq.sourceforge.net
```

```
$TTL 604800
@ IN SOA server11.susefaq.sourceforge.net. admin.susefaq.sourceforge.net. (
    2010060110 ; Serial
    604800 ; Refresh
    86400 ; Retry
    2419200 ; Expire
    604800 ) ; Negative Cache TTL
;
@ IN NS server11.susefaq.sourceforge.net.
@ IN A 192.168.11.1
server11 IN A 192.168.11.1
www IN CNAME server11
```

- Membuat database linux.or.id

```
# nano db.linux.or.id
```



```

$TTL 604800
@ IN SOA      server11.linux.or.id. admin.linux.or.id. (
                2010060110    ; Serial
                604800        ; Refresh
                86400         ; Retry
                2419200       ; Expire
                604800 )      ; Negative Cache TTL
;
@ IN NS       server11.linux.or.id.
@ IN A        192.168.11.1
server11 IN A  192.168.11.1
www IN CNAME  server11

```

- restart DNS server dan cek domain diatas menggunakan *nslookup*
- mengedit file squid.conf pada directory squid

```
# nano /etc/squid/squid.conf
```

Mencari dan Menghilangkan tanda # di depan scripts dibawah ini :

http_port 3128 transparent => port default proxy

```
# Squid normally listens to port 3128
http_port 3128 transparent
```

cache_mem 128 MB => 1/4 dari RAM

```
#Default:
cache_mem 128 MB
```

cache_dir ufs /cache 250 32 512

```
#Default:
# cache_dir ufs /var/spool/squid 100 16 256
cache_dir ufs /cache 250 32 512
```

note:

apabila cache_mem anda besar maka sesuaikan dengan cache_dir ufs nya

contoh : cache_mem 256 MB

cache_dir ufs /cache 1000 128 512

cache_effective_user proxy

```
#Default:  
cache_effective_user proxy
```

cache_effective_group proxy

```
# TAG: cache_effective_group  
# If you want Squid to run with a specific GID regardless of  
# the group memberships of the effective user then set this  
# to the group (or GID) you want Squid to run as. When set  
# all other group privileges of the effective user is ignored  
# and only this GID is effective. If Squid is not started as  
# root the user starting Squid must be member of the specified  
# group.  
  
cache_effective_group proxy
```

access_log /var/log/squid/access.log

cache_log /var/log/squid/cache.log

cache_store_log /var/log/squid/store.log

```
access_log /var/log/squid/access.log squid  
  
# TAG: cache_log  
# Cache logging file. This is where general information about  
# your cache's behavior goes. You can increase the amount of data  
# logged to this file with the "debug_options" tag below.  
#  
#Default:  
cache_log /var/log/squid/cache.log  
  
# TAG: cache_store_log  
# Logs the activities of the storage manager. Shows which  
# objects are ejected from the cache, and which objects are  
# saved and for how long. To disable, enter "none". There are  
# not really utilities to analyze this data, so you can safely  
# disable it.  
#  
#Default:  
cache_store_log /var/log/squid/store.log
```

cache_mgr admin@lks11.sch.id

```
# TAG: cache_mgr
#     Email-address of local cache manager who will receive
#     mail if the cache dies. The default is "webmaster".
#
#Default:
cache_mgr admin@lks11.sch.id
```

visible_hostname server11

```
# TAG: visible_hostname
#     If you want to present a special hostname in error messages, etc,
#     define this. Otherwise, the return value of gethostname()
#     will be used. If you have multiple caches in a cluster and
#     get errors about IP-forwarding you must set them to have individual
#     names with this setting.
#
#Default:
# none
visible_hostname server11
```

error_directory /usr/share/squid/errors/Indonesia

```
# TAG: error_directory
#     If you wish to create your own versions of the default
#     (English) error files, either to customize them to suit your
#     language or company copy the template English files to another
#     directory and point this tag at them.
#
#Default:
error_directory /usr/share/squid/errors/Indonesia
```

Dibawah *acl CONNECT method CONNECT* tambah scripts dibawah ini :

acl lks src 192.168.11.0/28

acl webblock dstdomain -i "/etc/squid/webblock.txt"

```
acl Safe_ports port 488          # gss-http
acl Safe_ports port 591          # filemaker
acl Safe_ports port 777          # multiling http
acl Safe_ports port 631          # cups
acl Safe_ports port 873          # rsync
acl Safe_ports port 901          # SWAT
acl purge method PURGE
acl CONNECT method CONNECT
acl lks src 192.168.11.0/28
acl webblock dstdomain -i "/etc/squid/webblock.txt"
```

Dibawah *INSERT YOUR OWN RULE* tambah script dibawah ini:

```
http_access deny webblock
```

```
http_access allow lks
```

```
# INSERT YOUR OWN RULE(S) HERE TO ALLOW ACCESS FROM YOUR CLIENTS
http_access deny webblock
http_access allow lks
```

- Di save dan exit
- berpindah ke directory error

```
# cd /usr/share/squid/errors
# cp -rf English Indonesia
# cd Indonesia
# nano ERR_ACCESS_DENIED
```

- edit file tersebut menjadi

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
```

```
<HTML><HEAD><META HTTP-EQUIV="Content-Type"
CONTENT="text/html;
charset=iso-8859-1">
```

```
<TITLE>MAAF: permintaan anda tidak dapat terpenuhi</TITLE>
```

```
<STYLE type="text/css"><!--BODY {background-color:#ffffff;font-
family:verdana,sans-serif}PRE {font-family:sans-serif}--></STYLE>
```

```
</HEAD><BODY>
```

```
<H1><font color="red">MAAF</font></H1>
```

```
<H2>Permintaan anda tidak dapat terpenuhi</H2>
```

```
<HR noshade size="1px">
```

```
<P>
```

```
Silahkan coba URL/Website selain:
```

```
<A HREF="%U">%U</A>
```

```
<P>
```

```
Karena.
```

```
<UL>
```

```
<LI>
```


Akses Ditolak

<P>

<P>Informasi lebih lanjut silahkan hubungi %w.

file yang di edit adalah yang berwarna kuning
silahkan bereksperimen sendiri.....

- membuat directory cache

```
# mkdir -p /cache
```

memberikan user khusus hak milik proxy

```
# chown -R proxy:proxy /cache
```

- stop terlebih dahulu layanan squid untuk membuat cache

```
# /etc/init.d/squid stop
```

- membuat cache

```
# squid -z
```

- tunggu sampai selesai
- membuat file webblock.txt

```
# cd /etc/squid/
```

```
# touch webblock.txt
```

```
# nano webblock.txt
```

- isi dengan domain yang akan diblock

```
.debian.org  
.redhat.ofg  
.google.com  
.susefaq.sourceforge.net  
.linux.or.id
```

- Di save dan exit
- restart layanan squid

```
# /etc/init.d/squid restart
```

- memberikan aturan firewall untuk dialihkan ke port squid

```
# iptables -t nat -A PREROUTING -p tcp - -dport 80 -j REDIRECT - -to-port 3128
```

maksudnya:

Setiap user atau client yang merequest port 80 (web server) akan dialihkan ke port 3128 (port squid) dimana squid sudah menunggu request

- uji coba proxy server dengan client windows
- buka web browser dan isi dengan alamat yang di block



SETTING NTP SERVER

- menginstall paket yang dibutuhkan

```
# apt-get install ntp ntpdate
```

- mengedit ntp.conf

```
# nano /etc/ntp.conf
```

- memberikan tanda # didepan server 0 sampai server 3
- menambahkan script *server 127.127.1.0 iburst* dan *fudge 127.127.1.0 stratum 10* dibawah script diatas

```
# pool.ntp.org maps to more than 300 low-stratum NTP servers.
# Your server will pick a different set every time it starts up.
# *** Please consider joining the pool! ***
# *** <http://www.pool.ntp.org/join.html> ***
#server 0.debian.pool.ntp.org iburst
#server 1.debian.pool.ntp.org iburst
#server 2.debian.pool.ntp.org iburst
#server 3.debian.pool.ntp.org iburst
server 127.127.1.0 iburst
fudge 127.127.1.0 stratum 10
```

- Di save dan exit
- restart ntp

```
# /etc/init.d/ntp restart
```

note:

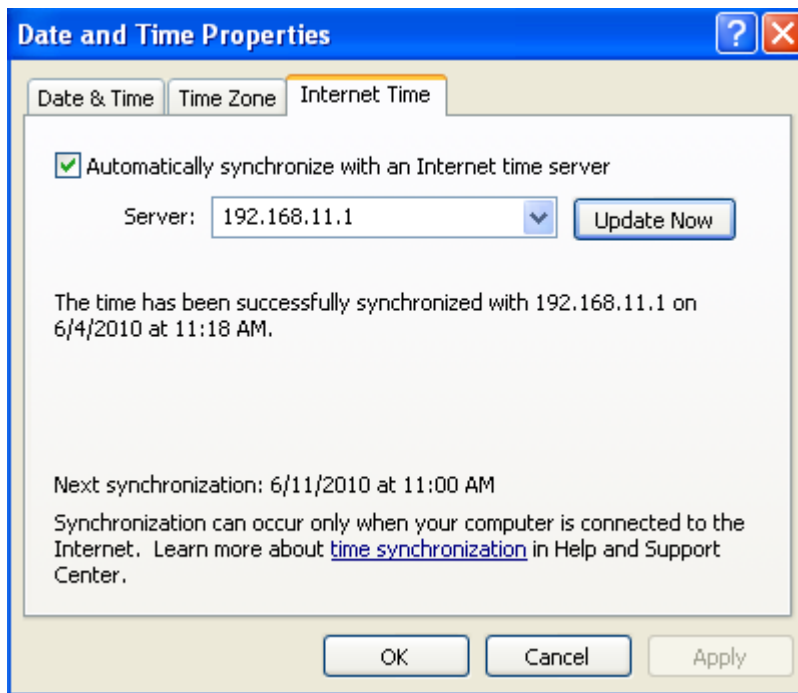
server ntp diatas apabila kita ingin membuat server ntp sendiri (intranet).
iburst diatas untuk mempercepat waktu sinkron dengan server ntp.
fudge diatas untuk memperakurat waktu dengan server ntp.
stratum 10 adalah stratum yang digunakan.

- Gambar ketika sudah sinkron dengan ntp server local terdapat tanda * didepan LOCAL (0)
- ketik perintah

```
# ntpq -p
```

```
server11:/etc/bind# ntpq -p
      remote           refid      st t when poll reach  delay  offset  jitter
-----
*LOCAL(0)        .LOCL.         10 1   50   64  377   0.000   0.000   0.004
```

- tes *NTP Server* dengan windows
- klik start => Control Panel => Date ,Time, Language and Regional => Date and Time
- Pastikan Time Zone sama dengan Server (Jakarta)
- masukan alamat ip-server, klik *update Now*
- setelah sinkron klik *Apply*



- samakan dengan server, apakah waktunya sudah *Sinkron*

```
# date
```

```
server11:~# date
Fri Jun  4 11:01:01 WIT 2010
server11:~# _
```

WIT adalah *Western Indonesian Time (WIB)*

SELAMAT MENCOBA DAN SUKSES

Terima kasih kepada:

1. ALLAH SWT
2. Nabi MUHAMMAD SAW
3. Kedua orang tua
4. Guru pembimbing (Bpk Budi S.Si, M.Syukrie)
5. Iwan Sofana (Membangun server dengan fedora)
6. Teman-teman
7. Google

