ADMINISTRASI SERVER DEBIAN ETCH 4.0

Mata Kuliah

NETWORK 1

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Part 1

Instalasi Debian etch 4 r7

- 📌 Lakukan booting dari Cd/Dvd rom pertama kali
- Masukan 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 installasi berjalan



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

[!!] Cho	oose language	
Please choose the language used f language will be the default lang	for the installation process. This guage for the final system.	
This list is restricted to langua	ages that can currently be displayed	
Choose a language:		
Albanian Arabic Basque Belarusian Bosnian Bulgarian Catalan Chinese (Simplified) Chinese (Traditional) Croatian Czech Danish Dutch <mark>English</mark>	- Shqip - цлр - цлр - Еuskaraz - Беларуская - Воsanski • - Български - Саtalà - 中文(简体)) - 中文(衛健) - Hrvatski - Čeština - Dansk - Nederlands - English *	
<go back=""></go>		

Rerikutnya 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=""></go>	

★ Kemudian pilih Indonesia

Π	[!!] Choose language	
	Choose a country, territory or area:	
	Indonesia * Iran, Islamic Republic of Iraq Israel Japan Jordan Kazakhstan Korea, Democratic People's Republic of Korea, Republic of Kuwait Kyrgyzstan Lao People's Democratic Republic Lebanon Macao Malaysia Mongolia Myanmar Nepal Oman * Go Back>	

★ Kemudian pemilihan jenis keyboard



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



📩 Akan muncul tampilan seperti dibawah ini,kemudian tekan ENTER



Pilih do not configure the network at this time, ENTER



ጵ Berikutnya adalah pemberian nama hostname

[!] Configure the network
Please enter the hostname for this system.
The hostname is a single word that identifies your system to the network. If you don't know what your hostname should be, consult your network administrator. If you are setting up your own home network, you can make something up here.
Hostname:
server11
<pre> <go back=""> </go></pre>
Proses partisi, pilih hardisk apabila belum terdapat OS apapun pada hardisk anda kemudian
ENTER
[!!] Partition disks
[!!] Partition disks This is an overview of your currently configured partitions and mount points. Select a partition to modify its settings (file system, mount point, etc.), a free space to create partitions, or a device to initialise its partition table.
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ጵ Pilih yes untuk membuat partisi kosong yang baru

[!!] Partition disks
You have selected an entire device to partition. If you proceed with creating a new partition table on the device, then all current partitions will be removed.
Note that you will be able to undo this operation later if you wish.
Create new empty partition table on this device?
<go back=""> <<u><yes></yes></u> <no></no></go>
k Pilih free space hardisk kemudian ENTER
[!!] Partition disks
This is an overview of your currently configured partitions and mount points. Select a partition to modify its settings (file system, mount point, etc.), a free space to create partitions, or a device to initialise its partition table.
Guided partitioning Help on partitioning
IDE1 master (hda) – 8.6 GB VBOX HARDDISK pri/log 8.6 GB FREE SPACE
Undo changes to partitions Finish partitioning and write changes to disk
<go back=""></go>

* Pilih Create a new partition kemudian ENTER

[!!] Partition disks
How to use this free space:
Create a new partition Automatically partition the free space Show Cylinder/Head/Sector information
<go back=""></go>

🜟 Berikan besar partisi yang akan anda gunakan

[!!] Partition d	lisks
The maximum size you can use is 8.6 GB.	
Hint: Use "20%" (or "30%", etc.) for 20% available free space for this partition. the maximum allowed size.	(resp. 30%, etc.) of the Use "max" as a shortcut for
New partition size:	
7.6 GB	
<go back=""></go>	<continue></continue>

★ Pilih primary kemudian ENTER



★ Pilih beginning kemudian ENTER

[!!] Partition disks
Please choose whether you want the new partition to be created at the beginning or at the end of the available space.
Location for the new partition:
Beginning End
<go back=""></go>

☆ Pastikan Use as adalah Ext3 journaling filesystem ☆ Pilih bootable flag, ENTER

	Pant tion dicks
1	
You are editing partition #1 o system was detected in this pa	f ID 1 master (hda). No existing file
Partition settings:	
Use as: Mount point:	Ext3 journaling file system /
Mount options:	defaults
Lapel: Reserved blocks:	none 5%
Typical usage:	standard
Bootable flag:	off
Done setting up the pa Copy data from another Delete the partition	rtition partition
<go back=""></go>	

Restikan bootable flag sudah ON

You are editing partition 41 of IDE1 system was detected in this partition	n disks ⊨ naster (hda). No existing file
Partition settings: Use as: Ext3 Mount point: / Mount options: defau Label: none Reserved blocks: 5% Typical usage: stand	journaling file system ults dard
Bootable flag: on Done setting up the partition Copy data from another partit Delete the partition <go back=""></go>	ion

Representation with the partition, ENTER

	artition disks
system was detected in this part	tition.
Partition settings:	
Use as: Mount point: Mount options: Label: Reserved blocks: Typical usage: Bootable flag:	Ext3 journaling file system / defaults none 5% standard on
Done setting up the part Copy data from another p Delete the partition <go back=""></go>	tition partition

★ Pilih free space hardisk yang tersisa

[!!] Partition disks
This is an overview of your currently configured partitions and mount points. Select a partition to modify its settings (file system, mount point, etc.), a free space to create partitions, or a device to initialise its partition table.
Guided partitioning Help on partitioning
IDE1 master (hda) – 8.6 GB VBOX HARDDISK #1 primary 7.6 GB B f ext3 / pri/log 987.0 MB FREE SPACE
Undo changes to partitions Finish partitioning and write changes to disk
<go back=""></go>

★ Pilih create a new partition, ENTER



★ Berikan satu GB untuk swap area kemudian continue

[!!] Partition disks
The maximum size you can use is 987.0 MB.
Hint: Use "20%" (or "30%", etc.) for 20% (resp. 30%, etc.) of the available free space for this partition. Use "max" as a shortcut for the maximum allowed size.
New partition size:
987.0 MB
<go back=""> <continue></continue></go>

ጵ Pilih primary, ENTER



★ Pilih Use as kemudian ENTER

[!!] F	Partition disks
You are editing partition #2 of system was detected in this par	f IDE1 master (hda). No existing file ∩tition.
Partition settings:	
Use as:	Ext3 journaling file system
Mount point: Mount options: Label: Reserved blocks: Typical usage: Bootable flag:	∕home defaults none 5% standard off
Done setting up the par Copy data from another Delete the partition	rtition partition
<go back=""></go>	

★ Pilih swap area, ENTER



Pilih done setting up the partition, ENTER

		ion dicke	
You are editing partit system was detected in	ion #2 of IDE1 this partitio	master (hda). No e n.	xisting file
Partition settings:			
Use a Boota	s: ble flag:	swap area off	
<mark>Done</mark> Copy Delet	<mark>setting up the</mark> data from anot e the partitio	p <mark>artition</mark> her partition n	
<go back=""></go>			

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

[!!] Partition disks
This is an overview of your currently configured partitions and mount points. Select a partition to modify its settings (file system, mount point, etc.), a free space to create partitions, or a device to initialise its partition table.
Guided partitioning Help on partitioning
IDE1 master (hda) – 8.6 GB VBOX HARDDISK #1 primary 7.6 GB B f ext3 / #2 primary 987.0 MB f swap swap
Undo changes to partitions Finish partitioning and write changes to disk
<go back=""></go>

📌 Pilih yes untuk menulis perubahan yang telah dilakukan pada hardisk

[!!] Partition disks
If you continue, the changes listed below will be written to the disks. Otherwise, you will be able to make further changes manually.
WARNING: This will destroy all data on any partitions you have removed as well as on the partitions that are going to be formatted.
The partition tables of the following devices are changed: IDE1 master (hda)
The following partitions are going to be formatted: partition #1 of IDE1 master (hda) as ext3 partition #2 of IDE1 master (hda) as swap
Write the changes to disks?
<go back=""> <<mark><yes></yes></mark> <no></no></go>

📌 Pilih kota dimana anda berada, dalam hal ini Jakarta, ENTER



🔆 Masukan password root



🜟 Masukan kembali password root yang anda ketikan diatas

	[!!] Set up users and p	passwords
Please enter th typed it correc	e same root password aga: tly.	in to verify that you have
Re-enter passwo	rd to verify:	
жнонононон		
<go back=""></go>		<continue></continue>

🜟 Masukan Full username

[!!] Set up users and passwords
A user account will be created for you to use instead of the root account for non–administrative activities.
Please enter the real name of this user. This information will be used for instance as default origin for emails sent by this user as well as any program which displays or uses the user's real name. Your full name is a reasonable choice.
Full name for the new user:
server11
<go back=""> <continue></continue></go>



🜟 Masukan password untuk username

A good percented will contain a minture of latters, numbers	
punctuation and should be changed at regular intervals.	and
Choose a password for the new user:	
<go back=""> <continue:< td=""><td>></td></continue:<></go>	>

🜟 Masukan kembali password yang anda masukan diatas

Please enter the same user pas correctly. Re–enter password to verify:	users and passwords sword again to verify you have typed it
<go back=""></go>	<continue></continue>

🜟 Biarkan proses instalasi berjalan seperti gambar dibawah

Installing the base system 3% Checking component main on file:///_ges

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

Γ	[!] Configure the package manager
Γ	A network mirror can be used to supplement the software that is included on the CD–ROM. This may also make newer versions of software available.
	If you are installing from a netinst CD and you choose not to use a mirror, you will end up with only a very minimal base system.
L	Use a network mirror?
	<go back=""> <yes> <<mark><no></no></mark></yes></go>

★ Maka tampilannya seperti dibawah ini, pilih Continue, ENTER

		[!!] Configure the package manager Cannot access security updates The security updates on security.debian.org couldn't be accessed, so those updates will not be made available to you at this time. You should investigate this later. Commented out entries for security.debian.org have been added to the /etc/apt/sources.list file. <go back=""></go>
--	--	---

📩 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)

[!] Software selection
At the moment, only the core of the system is installed. To tune the system to your needs, you can choose to install one or more of the following predefined collections of software.
Choose software to install:
<pre>[*] Desktop environment [] Web server [] Print server [] DNS server [] DNS server [] File server [] Mail server [] Mail server [] SQL database [] Laptop [*] Standard system</pre>
<continue></continue>

Restikan tanda * (bintang) pada Desktop environment sudah hilang

[! At the moment, only the co system to your needs, you following predefined colle Choose software to install	Software selection e of the system is installed. To tune the an choose to install one or more of the ions of software. Desktop environment Web server Print server DNS server File server Mail server SQL database Laptop Standard system
	<continue></continue>

🜟 Biarkan proses instalasi berjalan

l	Select an	d install	software	
		5%		
Retrieving file 81 of	81			

📩 Instalasi grub, pilih yes untuk dijadikan MBR (Master Boot Record)

[!] Install the GRUB boot loader on a hard disk
It seems that this new installation is the only operating system on this computer. If so, it should be safe to install the GRUB boot loader to the master boot record of your first hard drive.
Warning: If the installer failed to detect another operating system that is present on your computer, modifying the master boot record will make that operating system temporarily unbootable, though GRUB can be manually configured later to boot it.
Install the GRUB boot loader to the master boot record?
<go back=""> <<u><yes></yes></u> <no></no></go>

ጵ Proses Installasi selesai, pilih Continue

	[!!] Finish the installation Installation complete Installation is complete, so it is time to boot into your new system. Make sure to remove the installation media (CD–ROM, floppies), so that you boot into the new system rather than restarting the installation.
L	<go back=""> <continue></continue></go>

🜟 Tampilan hasil Instalasi yang sudah dilakukan

Debian Debian	GNU/Linux, GNU/Linux,	kerne l kerne l	2.6.18-6-k7 2.6.18-6-k7	(single-user	mode)	
Use t	he ↑ and ↓]	keys to	select whicl	n entry is hig	ghlighted.	
Press	enter to bu	oot the	selected OS,	, 'e' to edit	the	
comma	nds before]	booting	, or 'c' for	a command-lin	ne.	

🜟 Masukan 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....
Starting console screen modes and fonts.
INIT: Entering runlevel: 2
Starting system log daemon: syslogd.
Starting kernel log daemon: klogd.
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
```

🔆 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:~#

Masukan 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 2009020 9-23:09' 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 20090209-23:091/ 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

Part 2 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



• Mengedit file /etc/hostname

#nano/etc/hostname



- 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

Part 3 SETTING DNS SERVER

• Install paket dns yang diperlukan

#apt-getinstallbind9

• 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 <u>lks11.sch.id</u> 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 <u>*Caching*</u> 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

#nanodb.lks11.sch.id

\$TTL	604800			
ė	IN	SOA	server11.lks1	1.sch.id. admin.lks11.sch.id. (
			2010060110	; Serial
			604800	; Refresh
			86400	; Retry
			2419200	; Expire
			604800)	; Negative Cache TTL
;				
0	IN	NS	server11.lks1	1.sch.id.
e	IN	Ĥ	192.168.11.1	
e	IN	MX	1 mail.lks11.	sch.id.
server	11	IN	A 192.1	.68.11.1
ma i l	IN	Ĥ	192.168.11.1	
աաա	IN	CNAME	server11	
_				

- Di save dan exit
- Mengedit file db.192

#nanodb.192

<u>\$</u> TTL	604800	004			
Ľ	14	20A	server1	L.IKS11.8	sch.id. admin.lksll.sch.id. (
			20100601	10	; Serial
			604800		; Refresh
			86400		; Retry
			2419200		; Expire
			604800)	; Negative Cache TTL
;					
0	IN	NS	server11	l.1ks11.s	sch.id.
1.11.168	3	IN	PTR	server11	1.lks11.sch.id.
1.11.168	3	IN	PTR	mail.lks	s11.sch.id.

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

#nano/etc/resolv.conf



- Di save dan exit
- Restart hasil konfigurasi tersebut

#/etc/init.d/bind9restart

• Cek hasil konfigurasi DNS dengan perintah nslookup atau dig

#nslookuplks11.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
```

#nslookupwww.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
```

#nslookup192.168.11.1

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

	pengecekan serial number untuk mengetahui apakah ada perubahan file zona. Jika ada perubahan serial maka dilakukan zona transfer (copy file).
86400 (satu hari)	Retry 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.
2419200 (satu bulan)	Expire 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).
604800	Negative cache TTL
(satu minggu)	Menetukan nilai awal time to live (TTL) bagi semua (RR) resources record pada file zona.
()	Nilai <i>serial, refresh, retry, expire, negative cache TTL</i> dituliskan diantara tanda kurung . Artinya apapun yang ada didalam tanda kurung dianggap satu baris .
NS	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

	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.
А	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 priotity. 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.

Part4 SETTING WEB SERVER

• Menginstall paket yang dibutuhkan Web Server

#apt-getinstallapache2php5links

• 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 \#\underline{R}edirectMatch ^/$ /apache2-default/
         </Directory>
```

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

#cd/var/www

• buang directory apache2-default

#rm-rfapache2-default

• membuat index.html

touch index.html # nano index.html

• isi seperti gambar dibawah

<u><</u> html>		
<pre><head><title>LKS NASIONAL </title></head></pre>	>	
<body></body>		
<center><h1>Welcome To Lomba Keterampila</h1></center>	n Siswa Tingkat	Nasional

- Di save dan exit
- membuat index untuk php

touch info.php # nano info.php

• isi seperti gambar dibawah

<u><</u>? phpinfo(); ?>

- Di save dan exit
- restart web server

#/etc/init.d/apache2restart

• chek hasil konfigurasi web server

#links192.168.11.1

• apabila muncul seperti gambar dibawah berarti sudah benar

LKS NASIONAL Welcome To Lomba Keterampilan Siswa Tingkat Nasional

• mengecek apakah sudah support php

#links192.168.11.1/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
ttp://www.php.net/	

SETTING DHCP SERVER

• install paket dhcp server

#apt-getinstalldhcp3-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-serverrestart

• 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

Internet Protocol (TCP/IP) Prope	erties 🔹 💽 🔀			
General Alternate Configuration				
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.				
Obtain an IP address automatica	- vul			
IP address:				
Subnet mask:				
Default gateway:	· · · ·			
 Obtain DNS server address auto 	matically			
Use the following DNS server ad	dresses:			
Preferred DNS server:				
Alternate DNS server:	· · ·			
	Advanced			
	OK Cancel			

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

👍 Local Area Connection Status	? 🛛
General Support	
Connection status	
Address Type:	Assigned by DHCP
IP Address:	192.168.11.10
Subnet Mask:	255.255.255.240
Default Gateway:	192.168.11.1
Details	
Windows did not detect problems with this connection. If you cannot connect, click Repair.	8 Repair
	Close

SETTING MAIL SERVER DAN WEBMAIL

• install paket mail server dan webmail yang dibutuhkan

#apt-getinstallpostfixsquirrelmailcourier-imapcourier-pop

- proses pada saat installasi 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 an 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

<<u>(0k></u>k>

• pilih internet site dan ENTER



• isi mail server yang akan digunakan

Your `mail name' is the hostname por outgoing news and mail messages (fol	tion of the address to be shown on lowing the username and @ sign).
This name will be used by other prog the single, full domain name (FQDN) originate.	rams besides Postfix; it should be from which mail will appear to
Mail name?	
mail. <u>l</u> ks11.sch.id	
<0k>	<cancel></cancel>

• mengedit file main.cf yang berada di directory postfix

nano /etc/postfix/main.cf

```
myhostname = mail.lks11.sch.id
mydomain = 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

#adduseradmin

• masukan password untuk admin sebagai contoh passwordnya saya mengetikan 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 --**Organization Preferences** 1. Server Settings 2. 3. Folder Defaults **General Options** 4. 5. Themes Address Books 6. 7. Message of the Day (MOTD) 8. Plugins 9. Database 10. Languages Set pre-defined settings for specific IMAP servers D. Turn color on С S Save data O 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.
                         : lks11.sch.id
   Domain
2. Invert Time
                         : false
   Sendmail or SMTP : SMTP
3.
A. Update IMAP Settings : localhost:143 (courier)
Β.
   Update SMTP Settings : localhost:25
   Return to Main Menu
R
   Turn color on
   Save data
2
   Quit
Command >> 1
The domain name is the suffix at the end of all email addresses.
                                                                Ιf
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
    Domain : lks11.sch.id
Invert Time : false
Sendmail or SMTP : SMTP
1.
2.
З.
A. Update IMAP Settings   : localhost:143 (courier)
B. Update SMTP Settings   : localhost:25
    Return to Main Menu
R
С
    Turn color on
S
    Save data
Q
    Quit
Command >> r_
```

• tekan d kemudian ENTER

Squ i 	rrelMail Configuration : Read: config.php (1.4.0)
Main	Menu
1.	Organization Preferences
2.	Server Settings
З.	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
С	Turn color on
S	Save data
Q	Quit
Comm	and >> 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>
    <IfModule>
    </IfModule>
    <//d>
```

- 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/<u>a</u>pache.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

#telnetmail.lks11.sch.id25

- 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 '^l'.
220 mail.lks11.sch.id ESMTP Postfix (Debian/GNU)
mail from: tes0yahoo.com
250 2.1.0 Ok
rcpt to:admin0lks11.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
^l
telnet> q
Connection closed.

• tes dengan webmail

#linksmail.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	
Bu the SquirrelMail Project Team	
SquirrelMail Login	
Name: admin	
Passuord: *****	

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

Refresh:	Current Folder: IN	RNX		SquirrelMail Sign Out
left_main.php	Compose Addresses Search Helm	s Folders	Options	SquirrelMail
Folders Last Refresh:	Select All		Viewing Me	ssage: 1 (1 total)
Wed, 3:00 am (Check mail)	Move Selected To: [INBOX] [Move]	[Forward]	Transform S [Read] [U	elected Messages: nread] [Delete]
- INBOX (1) Drafts Sent	From sort [] tes@yahoo.com	Date <mark>sort</mark> 2:58 am	Subject sort (no subject)	ssame' 1 (1 total)
Trash			VIEWING HE	ssaye, I (I tutal)

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



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

#cd/etc/apache2

• mengedit ports.conf

#nanoports.conf

• tambahkan NameVirtualHost ip-anda

```
<u>N</u>ameVirtualHost 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

#nanodefault

• edit seperti pada gambar dibawah ini

- Di save dan exit
- mengkopi file default

cp default mail # nano mail • edit seperti pada gambar dibawah ini

```
<u>
<</u>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

#a2ensitemail

• 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>
</IfModule>
<//IfModule>
<//IfModule>
<//IfModule>
<//IfModule>
<//IfModule>
<//IfModule>
<//IfModule>
<//IfModule>
<//IfModule>
<///>
<///>
<///>
<///>
<///>
<///>
<///>
<///>
<//>
```

- Di save dan exit
- restart apache

#/etc/init.d/apache2restart

• silahkan anda coba hasil konfigurasi tersebut

#linksmail.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



🗿 SquirrelMail 1.4.9a - Microsoft Internet Explorer				
File Edit View Favorites	: Tools Help	20		
🕝 Back 🝷 🕥 👻 💌	😰 🏠 🔎 Search 🤺 Favorites 🤣 🔗 🍃 🖄			
Address 🕘 http://mail.lks11.s	ch.id/src/webmail.php	Go Links 🎽		
Folders Last Refresh: Fri, 6:11 pm (Check mail) - INBOX Drafts Sent Trash	Current Folder: INBOX Compose Addresses Folders Options Search Help Toggle All Move Selected To: INBOX Move Forward From Date Subject tes@yahoo.com Wed, 2:58 am (no subject) Toggle All	Sign Out SquirrelMail Viewing Message: 1 (1 total) Transform Selected Messages: Read Unread Delete Viewing Message: 1 (1 total)		
ê		🥥 Internet		



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

🗿 SquirrelMail 1.4.9a - i	Microsoft Internet Explorer	
File Edit View Favorites	s Tools Help	A.
🕞 Back 🝷 🛞 – 📘	🔁 🏠 🔎 Search 🤺 Favorites 🤣 😥 🍓 🔜 🦓	
Address 🙆 http://mail.lks11.s	sch.id/src/webmail.php	🔽 🄁 Go 🛛 Links 🎽
Folders Last Refresh: Fri, 8:51 pm (Check mail)	Current Folder: INBOX Compose Addresses Folders Options Search Help	<u>Sign Out</u> SquirrelMail
- INBOX Drafts Sent Trash	To: server11@lks11.sch.id Cc: Bcc: Subject: tes yang ke 2	E
	Priority Normal Y Receipt: On Read On Delivery Signature Addresses Save Draft Send tes yang ke dua	
	 III 	

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

#linksmail.lks11.sch.id

SquirrelMail Logo SquirrelMail version 1.4.9a By the SquirrelMail Project Team

> SquirrelMail Login Name: server11_____ Password: ****** [Login]

SquirrelMail - Login

SquirrelMail **Refresh**: Current Folder: INBOX Sign Out Compose Addresses Folders SquirrelMail left_main.php Options Search Help m Folders Last Refresh: Select All Viewing Messages: 1 to 2 (2 total) Fri, 8:54 pm Move Selected To: Transform Selected Messages: [INBOX_] [Move] [Forward] [Read] [Unread] [Delete] (Check mail) From sortDate sortSub.[] admin@lks11.sch.id8:54 pmtes[] admin11:12 am+ tes INBOX (1) Subject sort tes yang ke 2 Select All Viewing Messages: 1 to 2 (2 total)

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

Internet Connection Wizard	l	×
Your Name		ž Ž
When you send e-mail, you Type your name as you wo	r name will appear in the From field of the outgoing message uld like it to appear.	ə.
Display name:	admin	
	For example: John Smith	
	< Back Next > Car	ncel

Internet Connection Wizard	d	
Internet E-mail Address		×
Your e-mail address is the a	address other people use to send e-mail messages to you.	
E-mail address:	admin@lks11.sch.id	
	For example: someone@microsoft.com	
	< Back Next > C	ancel

Internet Connection Wizard	
E-mail Server Names	
My incoming mail server is a POP3 💉 server.	
Incoming mail (POP3, IMAP or HTTP) server:	
mail.lks11.sch.id	
An SMTP server is the server that is used for your outgoing e-mail. Outgoing mail (SMTP) server:	
mail.lks11.sch.id	
< Back Next > Ca	ancel

Internet Connection Wizard		×
Internet Mail Logon		×
Type the account name and	password your Internet service provider has given you.	
Account name:	admin	
<u> </u>		_
Password:		
	Remember password	
If your Internet service provide (SPA) to access your mail acc Authentication (SPA)' check b	r requires you to use Secure Password Authentication ount, select the 'Log On Using Secure Password ox.	
Log on using Secure Pass	word Authentication (SPA)	
	< Back Next > Ca	ancel

Internet Connection Wizard	
Congratulations	
You have successfully entered all of the informatio To save these settings, click Finish.	n required to set up your account.
	Back Finish Cancel

• klik Send/recv, untuk mendownload email

🗐 Inbox - Outlook Express						
File Edit View Tools Messag	e Help		A.			
Create Mail Reply Reply	All Forward Print Delete Send/	Recv Addresses Find				
🕸 Inbox						
Folders X	! 🖁 🌾 From 🛛 Subject		Received 🛆			
 Outlook Express Outlook Express Coal Folders Inbox (1) Outbox Outbox Sent Items Deleted Items Drafts 	₩ tes@yahoo.com) Outlook Express 6	6/2/2010 2:58 6/4/2010 11:02 AM			
	From: To: Subject:					
Contacts ▼ X There are no contacts to display. Click on Contacts to create a new contact.		There is no message selected.	~			
2 message(s), 1 unread		💂 Workir	ng Online 🛛 1 new message(s)			

🗐 Inbox - Outlook Express					
File Edit View Tools Messa	je Help		A		
Create Mail Reply Reply	All Forward Print Delete Send/Recv	(No subject) File Edit View Tools Message Help			
Folders X Folders X Image: Construction of the second s	! 0 ♡ From Subject	Sev Sev Sev Print Delete From: tes@yahoo.com Print Delete Date: Wednesday, June 02, 2010 2:58 AM To: undisclosed-recipients: Subject: (No subject) tes email	Previous *		
Contacts ▼ X There are no contacts to display. Click on Contacts to create a new contact.	From: tes@yahoo.com To: undisclosed-recipients: Subject: tes email		X		
2 message(s), 0 unread					

/

tes kirim email menggunakan outlookklik Create Mail, isi form tersebut dan send

🗐 Inbox - Outlook Express	🕄 Inbox - Outlook Express					
File Edit Wew Tools Messag	je Help	.				
Create Mail Reply Reply	All Forward Print Delete Send/Recv	👔 tes 💽 💽 🔀				
🛱 Inbox		🖬 X B B 🖌 🕵 🎽				
Folders X	! 이 ♡ From Subject	Send Cut Copy Paste Undo Check				
Cuticok Express Cuticok Expre	│ tes@yahoo.com │ Microsoft Outlook Expre Welcome to Outloo	Image: Constraint of the server 11 (milles 11. sch.id) Image: Constraint of the server 11 (milles 11. sch.id) Subject: tes				
- 💮 Deleted Items 🔊 Drafts		Arial 🔽 10 🔽 🗒 🖌 🗓 🗛 🗄 🗄 .				
	From: tes@yahoo.com To: undisclosed-recipients: Subject:	selamat datang				
Contacts ▼ X There are no contacts to display. Click on Contacts to create a new contact.	tes email					
		v				
2 message(s), 0 unread						

• buka webmail dengan browser, isi Name dan Passwordnya

File Edit View Favorites Tools Help Image: Contract of the provides Tools Help <	🕙 SquirrelMail - Login - Microsof	t Internet Explorer	
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Address the https://mail.ks11.sch.id/src/login.php velocity in the second velocity in the s	🕞 Back 👻 🕥 👻 🛃 🧲	🏠 🔎 Search 🤺 Favorites 🚱 🔗 - 嫨 🔜 🔏	
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SETTING PROXY SERVER

• menginstall paket yang dibutuhkan

#apt-getinstallsquid

• 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.ofg 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 6	604800				
@ <i>IN</i>	SOA	serv	server11.debian.org. admin.debian.org		
		2010	0060110	; Serial	
		604	4800	; Refresh	
		80	5400	; Retry	
		2419	9200	; Expire	
		604	4800)	; 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

<i>\$TTL 6</i>	04800			
@ IN	SOA	serv	er11.redha	nt.ofg. admin.redhat.ofg. (
		2010	0060110	; Serial
		604	4800	; Refresh
		80	5400	; Retry
		2419	9200	; Expire
		604	4800)	; 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

#nanodb.google.com

<i>\$TTL 60</i>	4800				
@ <i>IN</i>	SOA	serve	er11.google.com. admin.google.com. (
		2010	060110	; Serial	
		604	800	; Refresh	
		86	6400	; Retry	
		2419	200	; Expire	
		604	.800)	; Negative Cache TTL	
,					
@	IN	NS	server11.	google.com.	
@	IN	Α	192.168.	11.1	
server11	IN	Α	192.168.	11.1	
WWW	IN	CNAME	server11		

• Membuat database susefaq.sourceforge.net

#nanodb.susefaq.sourceforge.net

\$TTL 60	4800					
@ IN	SOA	server11.susefaq.sourceforge.net. admin.susefaq.sourceforge.net. (
		201	0060110	; Serial		
		604	4800	; Refresh		
		80	5400	; Retry		
		241	9200	; Expire		
		604	4800)	; Negative Cache TTL		
;						
@	IN	NS	server11.	susefaq.sourceforge.net.		
@	IN	A	192.168.11.1			
server11	IN	Α	192.168.1	11.1		
WWW	IN	CNAME	server11			

• Membuat database linux.or.id

#nanodb.linux.or.id

<i>\$TTL 60</i>	4800			
@ <i>IN</i>	SOA	serve	er11.linux.	or.id. admin.linux.or.id. (
		2010	060110	; Serial
		604	800	; Refresh
		86	6400	; Retry
		2419	0200	; Expire
		604	(800	; Negative Cache TTL
,				
@	IN	NS	server11.	linux.or.id.
@	IN	Α	192.168.1	11.1
server11	IN	Α	192.168.1	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
<u>h</u>ttp_port 3128 transparent
```

cache_mem 128 MB

=> 1/4 dari RAM

#Default: <u>c</u>ache_mem 128 MB

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_ef<u>f</u>ective_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_ef<u>f</u>ective_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
```

TAG: cache_mgr # Email-address of local cache manager who will receive # mail if the cache dies. The default is "webmaster". # #Default<u>:</u> 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.
#	
#Defau	lt:
# none	
visibl	e_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 # rsunc 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:permintaanandatidakdapatterpenuhi</TITLE>
<STYLE type="text/css"><!--BODY{background-color:#ffffff;font-
family:verdana,sans-serif}PRE{font-family:sans-serif}--></STYLE>
</HEAD><BODY>
<hr/><H1><font color="red">MAAF</font></H1>
<H2>Permintaan anda tidak dapat terpenuhi</H2>
<HR noshade size="1px">
\langle P \rangle
SilahkancobaURL/Websiteselain:
<A HREF="%U">%U</A>
<P>
Karena.
<UL>
< LI >
```

 <fontcolor="red">AksesDitolak <P> <P>Informasilebihlanjutsilahkanhubungi<AHREF="mailto:%w"> %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-Rproxy:proxy/cache

• stop terlebih dahulu layanan squid untuk membuat cache

#/etc/init.d/squidstop

• 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 .<u>l</u>inux.or.id

- Di save dan exit
- restart layanan squid

#/etc/init.d/squidrestart

• 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-getinstallntpntpdate

• mengedit ntp.conf

#nano/etc/ntp.conf

- memberikan tanda # didepan server 0 sampai server 3
- menambahkan script *server 127.127.1.0 iburst* dan f*udge 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/ntprestart

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/bi remote	nd# ntpq -p refid	st t	when	poll	reach	delay	offset	jitter
======================================		10 l	====== 50		====== 377	.000.0	.000 0	0.004 0

- 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*

Date and Time Properties						
Date & Time Time Zone Internet Time						
Automatically synchronize with an Internet time server						
Server: 192.168.11.1 VIDate Now						
The time has been successfully synchronized with 192.168.11.1 on 6/4/2010 at 11:18 AM.						
Next synchronization: 6/11/2010 at 11:00 AM						
Synchronization can occur only when your computer is connected to the Internet, Learn more about <u>time synchronization</u> in Help and Support Center.						
OK Cancel 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)