## **PRAKTIK INSTAN**

# Server Komplit dengan Fedora Core

Bagaimana membangun sebuah server tangguh dengan Fedora Core 6 (Zod) dengan elemen-elemen yang lengkap?

. . .

#### Persiapan awal

Sebelumnya, diasumsikan Fedora Core 6 sudah terinstalasi pada komputer Anda. Sekarang, masuk ke sistem Fedora Core 6 yang baru diinstalasi. *Login* sebagai user "root", kemudian masukkan DVD Fedora Core 6 ke drive DVD.

*Copy* direktori "Fedora/RPMS/" yang terdapat dalam DVD Fedora Core 6 ke harddisk Anda (lihat gambar 1), pada praktik kali ini dicontohkan ke direktori "/home/" (lihat gambar 2).

Buka program Terminal, masuk ke direktori "/home/RPMS/", lalu lakukan instalasi paket "createrepo" dengan (lihat gambar 3):

# cd /home/RPMS/

# rpm -ivh createrepo-Ø.4.4-2.fc6.noarch.rpm

Sekarang jadikan direktori "/home/RPMS/" sebagai repositori instalasi, dengan perintah (lihat gambar 4):

# createrepo /home/RPMS/ 2242/2242 - zsh-html-4.2.6-1.i386.rpm Saving Primary metadata

Saving file lists metadata

Saving other metadata

Agar instalasi hanya dilakukan melalui direktori "/home/RPMS/", lakukan langkah-langkah (lihat gambar 5):

# mv /etc/yum.repos.d /etc/temp-yum.repos.d

Kemudian edit file "/etc/yum.conf" dan tambahkan pada bagian terakhir baris-baris (lihat gambar 6):

# PUT YOUR REPOS HERE OR IN separate files named
file.repo

## Panduan Gambar



# in /etc/yum.repos.d

[installer]
name=installer
baseurl=file:///home/RPMS/
enabled=1
gpgcheck=Ø

#### Instalasi paket-paket penting

Sebelum mulai membangun server, terlebih dahulu lakukan instalasi paket-paket penting yang nantinya berguna untuk mendukung lancarnya konfigurasi server.

Pertama instalasi paket "kernel-devel" dengan (lihat gambar 7): # yum install kernel-devel

Jika muncul pertanyaan:

Total download size: 4.6 M Is this ok [y/N]: y

Jawab dengan "y" untuk melanjutkan instalasi.

Setelah instalasi paket "kernel-devel" selesai, sekarang instalasi paket-paket penting lainnya dengan (lihat gambar 8):

# yum install gcc gcc-c++ gcc-objc gcc-objc++ cpp
pkgconfig compat-libstdc++-33

Jika proses instalasi berjalan lancar, maka paket-paket pendukung berhasil terinstalasi.

#### Konfigurasi pengaturan network

Sebelumnya, pastikan pengaturan network sistem Fedora Core Anda sesuai dengan jaringan Anda. Pengaturan dapat dilakukan melalui menu 'System' > 'Administration' > 'Network' (lihat gambar 9).

Pada tabulasi 'Devices', pilih device yang akan dikonfigurasi, kemudian klik 'Edit'.

Pada tabulasi 'General', isi kolom 'Address', 'Subnet mask', dan 'Default gateway address' sesuai konfigurasi jaringan Anda. Kemudian klik 'Ok' (lihat gambar 10).

Kemudian, klik tabulasi 'DNS'. Isi kolom-kolom 'Hostname', 'Primary DNS', 'Secondary DNS', dan seterusnya, sesuai dengan konfigurasi jaringan Anda (lihat gambar 11).

Klik menu 'File' > 'Save' untuk menyimpan konfigurasi.

Sekarang, klik pada tabulasi 'Devices'. Kemudian, pilih device yang terkonfigurasi barusan. Klik tombol 'Deactivate', lalu klik tombol 'Activate' untuk mengaktifkan konfigurasi jaringan yang baru.

#### Instalasi server DNS

Pertama lakukan instalasi (lihat gambar 12) :

# yum install bind bind-chroot bind-devel bind-utils
system-config-bind

Kemudian, lakukan beberapa perubahan permission dengan:

- # chmod 755 /var/named/
- # chmod 775 /var/named/chroot/
- # chmod 775 /var/named/chroot/var/
- # chmod 775 /var/named/chroot/var/named/





Konfigurasi alamat IP server.

> Populating transact	tion set w	ith selected pack	ages. Please wait.			
> Package glibc-headers.i386 0:2.5-3 set to be updated						
> Running transaction	n check					
Dependencies Resolved						
Package	Arch	Version	Repository	Size		
Installing:						
compat-libstdc++-33	i386	3.2.3-61	installer	232 k		
gcc	i386	4.1.1-30	installer	4.7 M		
gcc-c++	i386	4.1.1-30	installer	3.3 M		
gcc-objc	i386	4.1.1-30	installer	2.5 M		
gcc-objc++	i386	4.1.1-30	installer	2.7 M		
Installing for depender	ncies:			2 m 2 m 2 m 2 m 2		
glibc-devel	i386	2.5-3	installer	2.0 M		
glibc-headers	i386	2.5-3	installer	602 k		
libgomp	i386	4.1.1-30	installer	62 k		
libobjc	i386	4.1.1-30	installer	83 k		
libstdc++-devel	i386	4.1.1-30	installer	9.5 M		
Transaction Summary						
Install 10 Package	(s)					
Update 0 Package	(s)					
Remove 0 Package	(s)					
Total download size: 20	6 M					
Menginstalasi paket-	-baket be	ntina untuk koi	mpilasi.			

File Frotile Help		
New Edit		
Devices Hardwar	e IPsec DNS Hosts	
You may name ser used to lo	configure the system's hostname, domain, rvers, and search domain. Name servers are bok up other hosts on the network.	
Hostname:	kipul.infolinux.co.id	
Primary DNS:	192.168.0.2	
Secondary DNS:		
Jertiary DNS:		
DNS search path:	infolinux.co.id	



Menu konfigurasi Network pada Fedora Core 6.

						-
Ele Edt Yew	Jerminal Tab	as Help			-	L
Parsing p	ackage in	stall argument:	5			
Resolving	Depender	ncies			_	
> Popul	ating tra	ansaction set w.	ith selected package	s. Please wait.		
> Down	loading H	neader for bind	to pack into transa	ction set.		
bind-9.3.	2-41.fc6	.i386.rp 100%  :		=====  45 kB	00:00	
. Deals	ere bled	1005 00 0 0 0				
> Pack	age bind	1380 30:9.3.2-	1. TC6 Set to be upd	ated		
> Down	Loading i	teader for bind	devel to pack into	transaction set	00.00	
DTHU-GEVE	(-9.3.2-	+1.1CO.1 100%  -		1 /4 KD	00.00	
> Pack	age hind.	devel 1386 38.	3 2-41 fc6 set to	he undated		
> Punni	age bind	ction check	5.5.2-41.100 Set to	be updated		
> Runni	ing crainse	Secton check				
Dopondopo	ior Porol	und				
	TE2 VE20	Lveu				
o epenaene						
Package		Arch	Version	Repository	Size	
Package		Arch	Version	Repository	Size	
Package		Arch	Version	Repository	Size	2
Package Installin bind	g:	Arch i386	Version 30:9.3.2-41.fc6	Repository	Size 934	k
Package Installin bind bind-dev	g: el	Arch 1386 1386	Version 30:9.3.2-41.fc6 30:9.3.2-41.fc6	Repository installer installer	Size 934 2.5	k M
Package Installin bind bind-dev	g: el	Arch 1386 1386	Version 30:9.3.2-41.fc6 30:9.3.2-41.fc6	Repository installer installer	Size 934 2.5	k M
Package Installin bind bind-dev Transacti	g: el on Summan	Arch 1386 1386	Version 30:9.3.2-41.fc6 30:9.3.2-41.fc6	Repository installer installer	Size 934 2.5	k M
Package Installin bind bind-dev Transacti	g: el on Summan	Arch 1386 1386 79	Version 30:9.3.2-41.fc6 30:9.3.2-41.fc6	Repository installer installer	Size 934 2.5	k M
Package Installin bind bind-dev Transacti Install	g: el on Summan 2 Pac A Pac	Arch i386 i386 ry ckage(s)	Version 30:9.3.2-41.fc6 30:9.3.2-41.fc6	Repository installer installer	Size 934 2.5	k M
Package Installin bind bind-dev Transacti Install Update Bemove	g: el on Summan 2 Par 0 Par 0 Par	Arch i386 i386 ry kage(s) ckage(s)	Version 30:9.3.2-41.fc6 30:9.3.2-41.fc6	Repository installer installer	Size 934 2.5	k M
Package Installin bind bind-dev Transacti Install Update Remove	g: el on Summan 2 Pac 0 Pac 0 Pac	Arch i386 i386 i386 stage(s) ckage(s) ckage(s)	Version 30:9.3.2-41.fc6 30:9.3.2-41.fc6	Repository installer installer	Size 934 2.5	k M
Package Installin bind dev Transacti Install Update Remove	g: el on Summan 2 Pac 0 Pac 0 Pac	Arch i386 i386 ry :kage(s) :kage(s) :kage(s) :kage(s)	Version 30:9.3.2-41.fc6 30:9.3.2-41.fc6	Repository installer installer	934 2.5	k M

# PRAKTIK INSTAN

- # chmod 775 /var/named/chroot/var/run/
- # chmod 777 /var/named/chroot/var/run/named/
- # cd /var/named/chroot/var/named/
- # ln -s ../../ chroot
- # chkconfig --levels 235 named on

Sekarang, aktifkan service server DNS dengan: # /etc/init.d/named start

Konfigurasi server DNS sudah selesai.

#### Instalasi server database

Aplikasi database yang akan kita gunakan adalah MySQL. Instalasi paket-paket MySQL dengan (lihat gambar 13):

# yum install mysql mysql-devel mysql-server mod\_ auth\_mysql

Setelah proses instalasi selesai, aktifkan service MySQL dengan:

# /etc/init.d/mysqld start

Periksa apakah service MySQL benar-benar sudah aktif dengan: # netstat -tap

Pada keluarannya seharusnya memperlihatkan bagian: tcp Ø Ø \*:mysql \*:\* LISTEN 2008/mysqld Jika bagian tersebut tidak muncul, edit file "/etc/my.cnf", dan tambahkan komentar pada opsi "skip-networking", menjadi **#skip-networking** 

Kemudian, *restart* service MySQL.

Sekarang, lakukan pengaturan *password* MySQL untuk user root, agar tidak dapat diakses oleh orang lain, dengan:

# mysqladmin -u root password yourrootsqlpassword

# mysqladmin -h contoh.infolinux.co.id -u root password yourrootsqlpassword

Konfigurasi server database sudah selesai.

#### Instalasi server web dengan PHP

Aplikasi server web yang akan digunakan adalah Apache yang sudah terkenal akan ketangguhannya.

Lakukan instalasi paket-paket Apache dan PHP dengan (lihat gambar 14):

# yum install httpd httpd-devel php php-devel phpmysql mod\_auth\_mysql mod\_perl mod\_ssl system-confighttpd

Setelah proses instalasi di atas selesai, lakukan pengaktifan service Apache dengan:

# /etc/init.d/httpd start

Sekarang server web sudah aktif.

## Panduan Gambar

File Fulk Manny Terry 1 7				
Eve Eax Yew Terminal It	Abs Help			
> Populating tr	ansaction set wit	th selected packag	es. Please wait.	
> Downloading	header for e2fspi	rogs-devel to pack	into transactio	on set.
e2fsprogs-devel-1	.39-7.13 100%  ==		======  23 KB	00:00
· Dealinea abéa	and the second second	0.1.20.7		
> Package ezts	progs-devel.1386	0:1.39-7 set to D	e updated	
> Running trans	action check			
	aa			
Dependencies Reso	Lved			
Packago	Arch	Vorcion	Bonocitory	Sizo
Раскаде	Arch	version	Repository	5120
Installing				
mysal-devel	1286	5 0 22-2 1	installer	2 4 M
mysql-server	1386	5 0 22-2.1	installer	10 M
Installing for de	nendencies:	5.0.22-2.1	Instacter	10 11
e2fsprogs-devel	1386	1.39-7	installer	558 k
krb5-devel	1386	1.5-7	installer	1.0 M
openssl-devel	1386	0.9.8b-8	installer	1.8 M
perl-DBD-MySOL	1386	3.0007-1.fc6	installer	147 k
zlib-devel	1386	1.2.3-3	installer	100 k
Transaction Summa	ry			
Install 7 Pa	ckage(s)			
Update 0 Pa	ckage(s)			
Remove 0 Pa	ckage(s)			
				-
Total download si	ze: 16 M			-
Instalasi naket-	naket MvSOL			
notanior panot	panoe mjoata			
-				
		1. South States		- 10
File Edit View Jerminal To	n <u>þs</u> Help			<b>— 16</b>
Bie Edit View Jerminal T	NDS Help			16
Bie Edit View Jerminal To	tboot.noarch 0:1.	4.23-1 set to be	updated	16
Bie Edt View Jerminal To > Package firs > Downloading	tboot.noarch 0:1. header for ntp to	4.23-1 set to be pack into transa	updated ction set.	<b>16</b>
Die Edit View Jerminal Te > Package firs > Downloading ntp-4.2.2p1-3.138	tboot.noarch 0:1. header for ntp to 6.rpm 100%  ==	4.23-1 set to be pack into transa	updated ction set. ======  35 kB	
Die Edit View Terminal Te > Package firs > Downloading ntp-4.2.2p1-3.i38	NDS HMP tboot.noarch 0:1. header for ntp to 6.rpm 100%  ==	.4.23-1 set to be pack into transa	updated ction set. ======  35 kB	80:00
EW Edt Vow Jerminal To > Package firs > Downloading ntp-4.2.2pl-3.i38 > Package ntp.	ws H*P tboot.noarch 0:1. header for ntp to 6.rpm 100%  == i386 0:4.2.2p1-3	.4.23-1 set to be pack into transa set to be updated	updated ction set. ======  35 kB	00:00
<pre>Be Eat View Jerminal 1&gt; Package firs&gt; Downloading ntp-4.2.2p1-3.i38&gt; Package ntp&gt; Downloading</pre>	tboot.noarch 0:1. header for ntp to 6.rpm 100%  == 1386 0:4.2.2p1-3 header for syster	4.23-1 set to be o pack into transa set to be updated n-config-date to p	updated ction set. ======  35 kB ack into transad	00:00
<pre>Dec Ext Yoew Jerminal T &gt; Package firs &gt; Downloading ntp-4.2.2p1-3.i38 &gt; Package ntp. &gt; Downloading system-config-dat</pre>	tboot.noarch 0:1. header for ntp tu '6.rpm 100%  == i386 0:4.2.2p1-3 header for system e-1.8.7- 100%  ==	4.23-1 set to be pack into transa set to be updated n-config-date to p	updated ction set. ======  35 kB ack into transac ======  37 kB	00:00 tion set. 00:00
De Edt View Derminal 1 > Package firs > Downloading ntp-4.2.2p1-3.13E > Package ntp. > Downloading system-config-dat	tboot.noarch 0:1 header for ntp to 6.rpm 100%  == i386 0:4.2.2p1-3 header for syster e-1.8.7- 100%  ==	4.23-1 set to be pack into transa set to be updated n-config-date to p	updated ction set. ======  35 kB ack into transac ======  37 kB	00:00 tion set. 00:00
De Est View Jerminal 3 > Package firs > Downloading ntp-4.2.2pl-3.i3E > Package ntp. > Downloading system-config-dat > Package system	the Heep thoot.noarch 0:1. header for ntp tr 16.rpm 100%  == 1386 0:4.2.2p1-3 header for syster e-1.8.7-100%  == em-config-ate.no	.4.23-1 set to be pack into transa set to be updated n-config-date to p pacch 0:1.8.7-1 se	updated ction set. ======  35 kB ack into transac ======  37 kB t to be updated	00:00 tion set. 00:00
De Eat Vew Jerman 1 > Package firs > Downloading ntp-4.2.2pl-3.13E > Package ntp- > Downloading system-config-dat > Package syst > Running trans	<pre>HMP HMP tboot.noarch 0:1 header for ntp to 6.rpm 100%  == i386 0:4.2.2p1-3 header for syster e-1.8.7- 100%  == em-config-date.no action check</pre>	4.23-1 set to be o pack into transa set to be updated n-config-date to p warch 0:1.8.7-1 se	updated ction set. ======  35 kB ack into transad =======  37 kB t to be updated	00:00 tion set. 00:00
De Est yew Jemmal 1 > Package firs > Downloading ntp-4.2.2pl-3.i3E > Package ntp. > Package syst > Package syst > Running trans	<pre>Hep Hep tboot.noarch 0:1. header for ntp tc fo.rpm 100%  == i386 0:4.2.2pl-3 header for syster e-1.8.7- 100%  == em-config-date.nc action check Jund</pre>	4.23-1 set to be pack into transa set to be updated a-config-date to p parch 0:1.8.7-1 se	updated ction set. ======  35 kB ack into transac ======  37 kB t to be updated	00:00 tion set. 00:00
Dw Lot Yew Jemmal 1 > Package firs > Downloading hr 4.2.2P1-3.13E > Package ntp. > Downloading system-config-dat > Package syst > Running trans Dependencies Resc	the Hee thoot.noarch 0:1, header for ntp tr 6.rpm 100%  == i386 0:4.2.2p1-3 header for syster e-1.8.7- 100%  == em-config-date.no action check lved	4.23-1 set to be p pack into transa set to be updated n-config-date to p parch 0:1.8.7-1 se	updated ction set. ======  35 kB ack into transac ======  37 kB t to be updated	00:00 tion set. 00:00
De Est Vew Jemmal 1 > Package firs > Downloading ntp-4.2.2pl-3.13E > Package ntp. > Downloading system-config-dat > Package syst > Package syst > Package syst > Package syst > Running trans	the Hee thoot.noarch 0:1. header for ntp tt 6.rpm 100%  == 1366 0:4.2.2p1-3 header for syster e-1.8.7- 100%  == em-config-date.nn action check i\ved	4.23-1 set to be pack into transa set to be updated n-config-date to p barch 0:1.8.7-1 se	updated ction set. ======  35 kB ack into transac ======  37 kB t to be updated	00:00 :tion set. 00:00
De Lot Vew Jemma 1 > Package firs > Downloading thr-4.2.2P1-3.13E > Package ntp. > Downloading system-config-dat > Running trans Dependencies Resc Package	the Hep thoot.noarch 0:1, header for ntp tt 6.rpm 100% [== i386 0:4.2.2p1-3 header for syster em-config-date.nc action check lyved Arch	4.23-1 set to be pack into transa set to be updated n-config-date to p parch 0:1.8.7-1 se	updated ction set. ======  35 kB ack into transac ======  37 kB t to be updated	00:00 tion set. 00:00
De Eat View Jerman 1 > Downloading ntp-4.2.2p1-3.138 > Downloading system-config-dat > Package syst > Package syst Dependencies Reso Package	No Help tboot.noarch 0:1. header for ntp tc 16.rpm 100%  == 1386 0:4.2.2p1-3 header for system c=1.8.7-100%  == em-config-date.nc action check lved Arch	4.23-1 set to be pack into transa set to be updated a-config-date to p barch 0:1.8.7-1 se Version	updated ction set. ======  35 kB ack into transac ======  37 kB t to be updated Repository	00:00 tion set. 00:00 Size
De Est Vew Jemma 1 > Package firs > Downloading ntp-4.2.2pl-3.138 > Package ntp- > Package syst > Package syst Dependencies Resc Package Package Database	<pre>Not Etemp tibot.noarch 0:1 header for ntp to f6.rpm 100%  == i386 0:4.2.2pl-3 header for syster te-1.8.7 100%  == em-config-date.nt action check lved Arch</pre>	<pre>.4.23-1 set to be p pack into transa set to be updated n-config-date to p parch 0:1.8.7-1 se Version</pre>	updated ction set. ======  35 kB ack into transaa ======  37 kB t to be updated 	00:00 tion set. 00:00 Size
De Let Vere Jerned 1 > Package firs- > Package firs- > Package ntp- > Package ntp- > Package syst- > Package syst- Package Package Installing: firstbort	thoot.narch 0:1 header for ntp tr 6c.rpm 100% == 1386 0:4.2.2p.13 header for syst header for syst header for syst header for syst header for syst header for syst em-config-date.nc action check lved 	4.23-1 set to be pack into transa set to be updated a-config-date to p barch 0:1.8.7-1 se Version	updated ction set. ====================================	00:00 ttion set. 00:00 Size
De Let Vere Jerman 1 > Package firs- > Package firs- > Package ntp- > Package ntp- > Package system-config-dat ysstem-config-dat package Package Package InstalLing: firstboot	thoot.noarch 0:1 header for ntp tt header for ntp tt header for ntp tt i386 0:4.2.2p1-3 header for system e-1.8.7 100%  === em-config-date.nt action check lved noarch i386	4.23-1 set to be pack into transa set to be updated -config-date to p barch 0:1.8.7-1 se Version 1.4.23-1 4.2.20-13	updated ction set. ======= 35 kB ack into transaa ack into transaa t to be updated Repository installer	16 00:00 :tion set. 00:00 Size 374 k
De Let Ver Demon 1 > Package firs- > Downloading ntp-4.2.2pl-3.13 > Package ntp- > Package ntp- > Package technologies Package Package Installing: firstboot nvytm.comfirs.di	thoot.noarch 0:1. header for ntp tt header for ntp tt i386 0:4.2.21-3 header for syster en-config-date.nt action check lved	4.23-1 set to be pack into transa set to be updated -config-date to p barch 0:1.8.7-1 se Version 1.4.23-1 4.2.2013 1.6.7-1	updated ction set. ======  35 kB ack into transac second to transac to be updated Repository installer installer	16 00:00 :tion set. 00:00 Size 374 k 1.3 M
De Let Ver Jerner 1 > Package firs > Package firs > Package ntp. > Package ntp. > Package system-config-dat ysstem-config-dat Package Package Installing: firstbot ntp system-config-dat	en Heme tiboot.noarch 0:1. Header for ntp tt Header for ntp tt 1366 0:4.2.201-3 header for system een.config-date.nc action check lved noarch 1386 te noarch	4.23-1 set to be pack into transa set to be updated aconfig-date to p arch 0:1.8.7-1 se Version 1.4.23-1 4.2.201-3 1.8.7-1	updated ction set. ack into transa ack into transa t to be updated Repository installer installer installer	16 00:00 ction set. 00:00 Size 374 k 1.3 M 1.2 M
The left year permet 1 > Package fir- > Package tip- > Package ntp- > Package syst- > Package syst- > Package syst- > Package syst- > Package syst- > Running trans Package Installing: firstboot ntp system-config-dat	thoot.noard 0:1 header for ntp tt 6.rpm 100% [=: 1366 0:4.2.2p1-3 header for syster c-18.7 100% [=: em-config-date.nc action check lved 	4.23-1 set to be pack into transa set to be updated n-config-date to p barch 0:1.8.7-1 se Version 1.4.23-1 4.2.2p1-3 1.8.7-1	updated ction set. ======  35 kB ack into transac second to transac t to be updated Repository installer installer installer	16 00:00 :tion set. 00:00 Size 374 k 1.3 M 1.2 M
De Let Ver Jernet 1 > Package firs- > Downloading ntp-4.2,2pl-3.13 > Downloading system-config-dat > Package syst- > Running trans Dependencies Resc Package Mistalling: firstbot ntp system-config-dat Transaction Summ	theot.noarch 0:1 header for ntp ti header for ntp ti 1386 0:4.2.2pl-3 header for system cen.confjactate.ni action check lved noarch 1386 te noarch fy	4.23-1 set to be pack into transa set to be updated -config-date to p parch 0:1.8.7-1 se Version 1.4.23-1 4.2.201-3 1.8.7-1	updated ction set. ack into transa ack into transa into transa 37 KB t to be updated Repository installer installer	16 00:00 ction set. 00:00 Size 374 k 1.3 M
The fet year permet 1 > Package firs- > Dawnloading ntp-4.2.2pl-3.13 system-config-dat > Package system- > Package syst	ee Hee thoot.noarch 0:1. header for ntp tt 6.rpm 100% [= 1366 0:4.2.2pl-3 header for syster een-config-date.nt action check lved moarch 1386 te noarch 1386 te noarch 1386	4.23-1 set to be pack into transa set to be updated accorfig-date to p barch 0:1.8.7-1 se Version 1.4.23-1 4.2.2p1-3 1.8.7-1	updated ction set. ======  35 kB ack into transa ===================================	16 00:00 tion set. 00:00 5ize 374 k 1.3 M 1.2 M
The Let yee Jerman 1 > Package fir- > Downloading ntp-4.2.2pl-3.13 system -config-dat > Package syst >> Package syst >> Package syst >> Package Package Installing: firstboot mpt system -config-dat Transaction Summa	en         How           tboot.noarth 0:1.         Header for ntp tt           header for ntp tt         168 [st.2.2pl.3]           header for system         1080 [st.2.2pl.3]           header for system         casted attention to the system           action check         1086 [st.2.2pl.3]           work         Noarch           action check         1086 [st.2.2pl.3]           te         noarch           noarch         to anch           ry         Chage(s)	4.23-1 set to be pack into transa set to be updated -config-date to p Darch 0:1.8.7-1 se Version 1.4.23-1 4.2.2p1-3 1.6.7-1	updated ction set. =====  35 kB ack into transac ====================================	16 00:00 :tion set. 00:00 Size 374 k 1.3 M 1.2 M
De Les Yure Jermen 1 > Package fir- > Downloading ntp-4, 2, 2pi-3, 3i > Package ntp. > Package ntp. > Package system-config-dat > Package Package Installing: firstboot ntp system-config-dat Transaction Summer Install 3 Pe	tboot.noard 0:1 header for ntp tt 6.rpm 100%  =- 1386 0:4.2.2p1-3 header for syster c-1.8.7 100%  =- ent.8.7 100%  =- ent.8.7 100%  =- moarch 1386 te noarch ry ckage(s) ckage(s)	4.23-1 set to be pack into transa set to be updated -config-date to p arch 0:1.8.7-1 se Version 1.4.23-1 4.2.2p1-3 1.8.7-1	updated ction set. ack into transa memmen 37 kB t to be updated Repository installer installer	16 00:00 ction set. 00:00 512e 374 k 1.3 k 1.2 M
The Let Yave Journal 1 > Package fip: > Downloading ntp-4,2,2p1-3,13 system-config-dat > Package ntp. > Package syst > Running trans System-config-dat Installing: firstboot ntp system-config-dat Transaction Summe Install 3 Pe Update 0 PP Remove 0 PP	en         How           tboot.noart 0:1         header for ntp tt           feader for ntp tt         header for ntp tt           fas6 0:4.2.2p1-3         header for system           header for system         naction check           llved         noarch           i366         te           ry         ry           ckage(s)         ckage(s)	4.23-1 set to be pack into transa set to be updated a-config-date to p barch 0:1.8.7-1 se Version 1.4.23-1 4.2.2p1-3 1.8.7-1	updated ction set. ======  35 kB ack into transa ===================================	00:00 tion set. 00:00 5ize 374 k 1.3 M 1.2 M
De Les Yes Jerman 1 > Package fir- > Dantlading ntp-4,2,2pl-3,13 ystem-config-dat > Package ntp. > Pac	ex         How           tboot.noarth 0:1         Header for ntp it           6.rpm         100%  =           1386         et.2.2p1-3           header for syster         ene.config.date.nt           action check         Hived           Narch           Narch           Arch           Charter in action check           Narch           Charter in action           Narch           Charter in action           Narch           Charter in action	4.23-1 set to be pack into transa set to be updated -config-date to p parch 0:1.8.7-1 se Version 1.4.23-1 4.2.201-3 1.8.7-1	updated ction set. 	16 00:00 :tion set. 00:00 512e 374 k 1.2 H 1.2 H
The left year permed 1 > Package fip- > Downloading ntp-4.2.2pl-3.128 system-config-dat > Package syst > Package syst > Package Package Package Thistalling: firstboot ntp system-config-dat Install 3 Pe Update 0 Pe Remove 0 Pe Total download si	en Hen thoot.noarch 0:1. header for ntp tt 6.rpm 100% [=: 1366 0:4.2.2p1-3 header for syster een-config-date.nc action check lived Arch 1366 te noarch 1366 te noarch 1366 te check 1366 te check 1367 te check 137 te check	4.23-1 set to be pack into transa set to be updated a-config-date to p barch 0:1.8.7-1 se Version 1.4.23-1 4.2.2p1-3 1.8.7-1	updated ction set. ======  35 kB ack into transa ===================================	16 00:00 :tion set. 00:00 374 k 1.2 M
De Les Yes Jerman 1 > Package fir- > Downloading ntp-4.2.2pl-3.13 system-config-dat > Package system- > Package system- > Running trans Dependencies Resc Package Installing: firstboot risstalling: firstboot risstalling: firstboot risstalling: firstboot risstalling: firstboot system-config-dat System-config-dat Package Total download si Total download si Total download si Total download si Total download si Total download si Package Additioner State Package Additioner State Additioner Sta	en         How           tboot.noarth 0:1.         header for nyp tt           header for nyp tt         100%  =-           header for system         100%  =-           is86 0:4.2.2p1-3         header for system           header for system         cation check           istem         cation check           istem         nearch           istem         nearch           istem         cation check	4.23-1 set to be pack into transa set to be updated -config-date to p wersion 	updated ction set. 	16 00:00 ction set. 00:00 512e 374 k 1.3 M 1.2 M
Die Get Were Termen 1 	tboot.noard 0:1 header for ntp tt 6.rpm 100% [= 1386 0:4.2.2p1-3 header for syster c-1.8.7 100% [= e-1.8.7.100% [= action check lived Arch moarch 1386 te noarch ry ckage(s) ckage(s) ckage(s) ckage(s) ckage(s) ckage(s) ckage(s)	4.23-1 set to be pack into transa set to be updated config-date to p parch 0:1.8.7-1 se version 1.4.23-1 4.2.2p1-3 1.8.7-1 kronisasi waktu	updated ction set. 	16 00:00 tion set. 00:00 <u>512c</u> <u>714 k</u> 1.2 M
Die Get Vere Jermen 1 	en         How           tboot.noarth 0:1.         header for nyp tt           feader for nyp tt         100% [=:           fasde 1:4.2.21:3         header for system           header for system         en:           en:         s.7.10% [=:           em:         cnfija.date.nt           action check         i366           tweet         moarch           ry         ckage(s)           ckage(s)         ckage(s)           ckage(s)         ckage(s)           ze: 2.9 M         paket untuk sin	4.23-1 set to be pack into transa set to be updated -config-date to p barch 0:1.8.7-1 se Version 1.4.23-1 4.2.2p1-3 1.8.7-1 kronisasi waktu	updated ction set; =====  35 kB ack into transa ====================================	16 00:00 tion set. 00:00 374 k 1.3 M 1.2 M

File Edit View Terminal Tabs Hel	p			
mod ssl	i386	1:2.2.3-5	installer	8
php	i386	5.1.6-3	installer	1.2 M
php-devel	i386	5.1.6-3	installer	509 k
php-mysql	i386	5.1.6-3	installer	82 k
Installing for depende	encies:			
apr-devel	i386	1.2.7-10	installer	773 k
apr-util-devel	i386	1.2.7-3	installer	280 k
autoconf	noarch	2.59-12	installer	646 k
automake	noarch	1.9.6-2.1	installer	484 k
cyrus-sasl-devel	i386	2.1.22-4	installer	1.4 M
db4-devel	i386	4.3.29-9.fc6	installer	2.0 M
distcache	i386	1.4.5-14.1	installer	120 k
expat-devel	i386	1.95.8-8.2.1	installer	130 k
imake	i386	1.0.2-3	installer	318 k
mysql	i386	5.0.22-2.1	installer	3.0 M
openldap-devel	1386	2.3.27-4	installer	1.6 M
perl-BSD-Resource	i386	1.28-1.fc6.1	installer	29 k
perl-DBI	i386	1.52-1.fc6	installer	605 k
php-cli	i386	5.1.6-3	installer	2.2 M
php-common	i386	5.1.6-3	installer	138 k
php-pdo	i386	5.1.6-3	installer	60 k
Transaction Summary				
Install 23 Package	e(s)			
Update 0 Package	e(s)			
Remove 0 Package	e(s)			
Total download size:	20 M			
inter demittede bizzer i				
Inetalaci nakot_nako	t Anacha d	an PHP		
motunuoi paket-pake	re apaone u	an r m s		

<b>28</b>		rootgkipul:		
Ele Edit View Termina	al Tabs Help			17
[root@kipul ~]#	# yum install dhcp			
Loading "instal	llonlyn" plugin			
Setting up Inst	tall Process			
Setting up repo	ositories			
Reading reposit	tory metadata in from	n local files		
Parsing package	e install arguments			
Resolving Deper	ndencies			
> Populating	transaction set with	h selected package	s. Please wait.	
> Downloadin	ng header for dhcp to	o pack into transa	ction set.	00.00
ancp-3.0.4-21.	100.1386.Pp 100% [===		=====  33 KB	00:00
Package di	hen 1296 12:2 0 4-21	fr6 rat to be und	ated	
> Running tra	ansaction check	. ico sec co be upu	aceu	
- Running ere	ansacción check			
Dependencies Re	esolved			
Package	Arch	Version	Repository	Size
	******************	******************		
Installing:				
dhcp	1386	12:3.0.4-21.fc6	installer	869 k
Terresting Com				
Transaction Sur	nina r y			
Install 1	Package(s)			
lindate A	Package(s)			
Remove 0	Package(s)			
	/			
Total download	size: 869 k			

Instalasi paket server DHCP.

			root@kipuk~		
Elle Edit View	Jerminal Tabs Help				-
[root@kip	ul ~]# yum ir	stall vsftp	bd		
Loading "	installonlyn'	plugin			
Setting u	p Install Pro	cess			
Setting u	p repositorie	15			
Reading r	epository met	adata in Tr	rom local files		
Parsing p	ackage instal	. L arguments	5		
Resolving	oting transe	tion cot w	th colocted pag	kages Blease wait	
DOWD	loading heads	r for veft	nd to nack into	transaction set	
vsftnd-2.	0.5-8.1386.rr	m 100% L		======================================	88:88
		2000 1-		10 10	
> Pack	age vsftpd.i3	86 0:2.0.5	-8 set to be upd	ated	
> Runni	ng transactio	on check			
Dependenc	ies Resolved				
Packago		Arch	Vorcion	Deperitory	Cizo
Fackage		ATCI	VE151011	Repository	5126
Installin	a.				
Installin	g :	i386	2.0.5-8	installer	137 k
Installin vsftpd	g:	i386	2.0.5-8	installer	137 k
Installin vsftpd Transacti	g: on Summary	1386	2.0.5-8	installer	137 k
Installin vsftpd Transacti	g: on Summary	i386	2.0.5-8	installer	137 k
Installin vsftpd Transacti Install	g: on Summary 1 Package	i386	2.0.5-8	installer	137 k
Installin vsftpd Transacti Install Update	g: on Summary 1 Package 0 Package	i386 :(s) :(s)	2.0.5-8	installer	137 k
Installin vsftpd Transacti Install Update Remove	g: on Summary 1 Package 0 Package 0 Package	i386 :(s) :(s) :(s)	2.0.5-8	installer	137 k
Installin vsftpd Transacti Install Update Remove	g: on Summary 1 Package 0 Package 0 Package	i386 :(s) :(s) :(s)	2.0.5-8	installer	137 k

		gdata -	-
Elle Edit View Terminal Tabs	Help		18
ddns-update-style inter	cim;		
ignore client-updates;			
subnet 192.168.0.0 net#			
# default gateway			
option routers			
option subnet-			
option nis-doma		"infolinux.co.id";	
option domain-r			
option domain-r			
option time-off		-18000; # Eastern Standard Time	
<pre># option ntp-serv</pre>			
option netbios-			
# Selects point-to-			nless
# you understand Net			
# option netbios-			
range dynamic-h			
default-lease-t			
max-lease-time			
# we want the r		ppear at a fixed address	
<pre># host ns {</pre>			
# next-se			
# hardwar			

Konfigurasi server DHCP.

#### Instalasi server FTP

Pada praktik kali ini, aplikasi server FTP yang akan kita gunakan adalah vsftpd. Aplikasi ini juga banyak digunakan di Internet, termasuk oleh situs *www.kernel.org.* 

Paket vsftpd dapat diinstalasi dengan (lihat gambar 15):

# yum install vsftpd

Jika proses instalasi berhasil, aktifkan service vsftpd dengan: # /etc/init.d/vsftpd start

#### Instalasi server sinkronisasi waktu

Agar pengaturan waktu di setiap komputer client tersinkronisasi dengan server, lakukan instalasi (lihat gambar 16):

# yum install ntp system-config-date firstboot

Kemudian atur agar waktu server mengikuti waktu server lainnya di Internet, dimisalkan ke 0.pool.ntp.org:

# ntpdate Ø.pool.ntp.org

Sekarang aktifkan service NTP dengan: # /etc/init.d/ntpd start

#### **Instalasi server DHCP**

Server DHCP sangat diperlukan bagi jaringan yang sangat besar, agar konfigurasi client dilakukan secara otomatis.

Instalasi server DHCP dengan (lihat gambar 17):

# yum install dhcp

Kemudian, edit file "/etc/dhcpd.conf". Lakukan pengaturan sesuai konfigurasi jaringan Anda (alamat IP server DNS, NTP, dan Router), dan atur range alamat IP yang akan disiapkan untuk client jaringan (lihat gambar 18).

Setelah pengaturan selesai, aktifkan service DHCP dengan:

# /etc/init.d/dhcpd start

#### Konfigurasi akhir

Sekarang, kita perlu mengatur agar service-service server tersebut aktif pada saat *booting*. Hal ini dapat dilakukan dengan mengakses menu 'System' > 'Administration' > 'Server Settings' > 'Services' (lihat gambar 19).

Pada tabulasi 'Background Services', tandai service-service yang akan diaktifkan, seperti "dhcpd", "httpd", "mysqld", "named", dan "vsftpd". Klik 'Save' untuk menyimpan (lihat gambar 20).

Kemudian kita lakukan konfigurasi firewall server. Masuk ke menu 'System' > 'Administration' > 'Security Level and Firewall' (lihat gambar 21).

Pada tabulasi 'Firewall Options', tandai service-service yang akan dibolehkan firewall untuk diakses dari luar, seperti "WWW (HTTP)", "Secure WWW (HTTPS)", dan "FTP" (lihat gambar 22).

Sekarang, klik tabulasi 'SELinux', ubah opsi 'SELinux Setting' sesuai yang diinginkan. Pada gambar dicontohkan opsi "Permissive" (lihat gambar 23).

Klik 'OK' untuk mengakhiri. Jika ada pertanyaan yang muncul, klik 'Yes' untuk melanjutkan proses (lihat gambar 24).  $\Diamond$ 

E. Wiryadi Salim [wiryadi@infolinux.co.id]

