## MODUL PRAKTIKUM 04 REMOTE ACCESS

## TUJUAN

Setelah praktikum dilaksanakan, peserta praktikum diharapkan memiliki kemampuan

- 1. Melakukan konfigurasi SSH Server pada Linux
- 2. Melakukan remote access berbasis text-mode dengan SSH menggunakan Windows dan Linux
- 3. Melakukan konfigurasi Telnet Server pada Windows
- 4. Melakukan remote access berbasis text-mode dengan Telnet menggunakan Windows dan Linux
- 5. Melakukan konfigurasi Windows Remote Desktop Connection (RDC) pada Windows
- 6. Melakukan remote access berbasis GUI dengan Windows RDC menggunakan Windows
- 7. Melakukan konfigurasi Virtual Network Computing (VNC) pada Linux dan Windows
- 8. Melakukan remote access berbasis GUI dengan VNC menggunakan Linux dan Windows

## PERANGKAT

Perangkat yang digunakan untuk praktikum adalah sbb :

- 1. CD Linux Ubuntu 8.10
- 2. OpenSSH Server (openssh-server\_5.1p1-3ubuntu1\_i386.deb)
- 3. Putty (SSH-client pada windows)
- 4. Windows XP (dengan service RDC dan Telnet)
- 5. RealVNC (install pada Windows)
- 6. Kabel UTP Straight atau Cross
- 7. Switch

## **PROSEDUR PRAKTIKUM**

- 1. Melakukan konfigurasi SSH Server pada Linux (serta melakukan remote access berbasis text-mode dengan SSH menggunakan Windows dan Linux)
  - a. Berikut topologi yang akan dibuat



- b. Salin file openssh-server\_5.1p1-3ubuntu1\_i386.deb pada Desktop di Ubuntu-1
- c. Lakukan proses instalasi openssh-server dengan menggunakan perintah "dpkg-i"



d. Tambahkan user untuk akses pada SSH-server

1	New user account	×
Account l	Jser Privileges Advanced	
Basic S	ettings	
<u>U</u> serna	ame: tim I	
<u>R</u> eal na	ime:	
Profile:	Desktop user 🗸 🗸	
Contact	Information	
O <u>ffi</u> ce l	ocation:	
<u>W</u> ork p	hone:	
<u>H</u> ome	phone:	
Passwo	rd	
<ul> <li>Set</li> </ul>	password by hand	
User	password:	
Con <u>f</u> i	rmation:	
O Ger	nerate <u>r</u> andom password	
Pass	word set to:	

e. Akses SSH menggunakan Linux-client menggunakan perintah "ssh user@hostname/ip"

	tim@ubuntu: ~	_ <b> </b>
<u>F</u> ile	e <u>E</u> dit <u>V</u> iew <u>T</u> erminal <u>T</u> abs <u>H</u> elp	
roo The RSA Are War tim Lin The the ind Ubu app	<pre>t@ubuntu:/home/ubuntu# ssh tim@192.168.1.1 e authenticity of host '192.168.1.1 (192.168.1.1)' can't be established. key fingerprint is 2d:91:96:7b:74:d3:e6:20:ab:38:04:3d:d2:6d:ae:c2. you sure you want to continue connecting (yes/no)? yes ning: Permanently added '192.168.1.1' (RSA) to the list of known hosts. @192.168.1.1's password: ux ubuntu 2.6.27-7-generic #1 SMP Fri Oct 24 06:42:44 UTC 2008 i686 e programs included with the Ubuntu system are free software; e exact distribution terms for each program are described in the ividual files in /usr/share/doc/*/copyright. ntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by licable law.</pre>	
To htt tim	access official Ubuntu documentation, please visit: p://help.ubuntu.com/ @ubuntu:~\$ ∎	
		≡
		~

f. Akses SSH menggunakan putty di Windows-client

- Session		Basic options for your PuTTY s	ession
Logging		Specify your connection by host name or	IP address
- Teminal		Host Name (or IP address)	Port
Bell		tim@192.168.1.1	22
Features Window		Protocol:	© <u>S</u> SH
Appearance Behaviour Translation		Load, save or delete a stored session Sav <u>e</u> d Sessions	
Selection	E	2000	
Connection		Default Settings	Load
Data			Save
Proxy			Delete
Rlogin			
Rlogin SSH			
- Riogin - SSH - Kex - Auth ×11		Close <u>wi</u> ndow on exit:	clean exit





- 2. Melakukan konfigurasi Telnet Server pada Windows (serta melakukan remote access berbasis text-mode dengan Telnet menggunakan Windows dan Linux)
  - a. Berikut topologi yang akan dibuat



b. Jalankan servis telnet pada telnet-server (untuk menjalankan service telnet dapat dilakukan melalui Start - Control Panel - Administrative Tools - Services )

Services (Local)		Telnet Properties (Local Computer)		
		General Log On Recovery Dependencies		
Telnet	Name /			
Start the service	Remote Pr	Service name: TIntSvr		
	Removable Removable	Display name: Telnet		
Description: Enables a remote user to log on to this computer and run programs, and	Routing an	Description: Enables a remote user to log on to this computer and Arrive run programs, and supports various TCP/IP Telnet		
supports various TCP/IP Telnet clients, including UNIX-based and Windows-	Security C	Path to executable:		
based computers. If this service is	Server	C:\WINDOWS\system32\tintsvr.exe		
programs might be unavailable. If this service is disabled, any services that	Shell Hardu	Startup type:		
	System Ev System Re Task Scher TCP/IP Nel	Service status: Stopped Start Stop Pause Resume		
	Telnet	You can specify the start parameters that apply when you start the service from here.		
	🖏 Themes 🆏 Uninterrup	Start parameters:		
	WirtualBox	OK Cancel Apply		
Extended Standard				

c. Tambahkan user baru pada Local Users and Groups (dapat diakses dari **Start – Control Panel –** Administrative Tools – Computer Management)



New User		?×			
User name:	tim2				
Full name:					
Description:					
Password:	•••••				
Confirm password:	•••••				
User must char	nge password at next logon				
User cannot change password					
Account is disabled					
	Create	ise			

d. Tambahkan Group "**TelnetClients**" pada Local Users and Groups dan daftarkan user yang baru dibuat dalam group TelnetClients

📕 Computer Management		
E File Action View Window H	lelp	X
Computer Management (Local) System Tools Users Cocal Users and Groups Cocal Users and Groups Cocal Users Device Manager Storage Storage Disk Defragmenter Disk Management Services and Applications	Name Administrators Backup Operators Guests Network Configuration Operators Remote Desktop Users Replicator Users HelpServicesGroup TelnetClients New Refre	Description Administrators have complete and unrestricted a Backup Operators can override security restrictic Guests have the same access as members of the Members in this group can have some administra Power Users possess most administrative power: Members in this group are granted the right to lo Supports file replication in a domain Users are prevented from making accidental or in Group for the Help and Support Center
Creates a new local group.		nge Icons 🕨 🔰

New Group		<b>?</b> ×	🛛	- · · ·
Group name: Te	InetClients			- And
Description:	Select Users			? 🗙
Members:	Select this object type: Users or Built-in security principals			Dbject Types
	Erom this location: XP-SP2 Enter the object names to select ( <u>examples</u> [tim2	<u>s</u> ):		Locations
Add	Advanced		ОК	Cancel
	Create Clo	se		

e. Akses telnet menggunakan telnet client pada Windows-client (akses telnet client melalui command prompt menggunakan perintah "**telnet hostname/ip**")

C:\WINDOWS\system32\cmd.exe	- 🗆 🗙
C:// telnet 192.168.1.1	<b>^</b>

🔤 Telnet 192.168.1.1	- 🗆 🗙
Welcome to Microsoft Telnet Client	
Escape Character is 'CTRL+]'	
You are about to send your password information to a remote computer in Int zone. This might not be safe. Do you want to send anyway(y/n): y	ernet
	-

Telnet 192.168.1.1	- 🗆 ×
Telnet server could not log you in using NTLM authentication. Your password may have expired. Login using username and password	
Welcome to Microsoft Telnet Service	
login: tim password:	
Telnet 192.168.1.1	- 🗆 X
*	<b>_</b>

Tetilet 172.100.1.1	
*=====================================	<b>^</b>
C:\Documents and Settings\tim>ipconfig	
Windows IP Configuration	
Ethernet adapter Local Area Connection:	
Connection-specific DNS Suffix . : IP Address : 192.168.1.1 Subnet Mask : 255.255.255.0 Default Gateway :	
C:\Documents and Settings\tim>	<b>-</b>
	• //

f. Akses menggunakan telnet client pada Linux-client mengunakan perintah "telnet hostname/ip"



- 3. Melakukan konfigurasi RDC pada Windows (serta melakukan remote access berbasis GUI dengan RDC menggunakan Windows)
  - a. Berikut topologi yang akan dibuat



b. Tambahkan user baru untuk dimasukkan ke dalam group "Remote Desktop Users"

🗏 Computer Management 📃 🗖 🔀				
📕 File Action View Window He	elp		<u>_8×</u>	
⇔ → 🖻 🖪 🖻 😫 🗷				
📕 Computer Management (Local)	Name	Full Name	Description	
System Tools  System Tools  Shared Folders  Shared Folders  Shared Solders  Shared Solders  Shared Solders  Shared Groups  Sh	Guest Guest HelpAssistant SUPPORT_38 Lim	Remote Desktop Help Assi CN=Microsoft Corporation	Built-in account for administering th Built-in account for guest access to Account for Providing Remote Assi: This is a vendor's account for the H	
Device Manager		New User		
Removable Storage     Disk Defragmenter	-	Refresh Export List		
Disk Management Services and Applications		View 🕨		
		Arrange Icons 🔸 Line up Icons		
		Help		
< X	<			
Creates a new Local User account.				

New User		?×
User name:	tim2	
Full name:		
Description:		
Password:	•••••	
Confirm password:	•••••	
User must cha User cannot cl Password neve Account is disa	nge password at next logon hange password er expires abled	
	Create	ose

🔜 Computer Management	Remote Desktop Users Properties
E File Action View Window Help	General
← → E M × 🖀 🕃 M	Remote Desktop Users
Computer Indiagement (Cotal)     Name     Descript     Name     Descript     Administrators     Administ	ator:
Shared Folders      Guests      Guest	pera Description: bers in this group are granted the right to logon remotely ave t
Users Wetwork Configuration Members	in the Members:
Groups     Groups	in th
Storage Storage Storage Storage	a pret
Select Users	? 🗙
Select this object type:	
Users or Built-in security principals	bes
From this location:	
Enter the object names to select (examples):	Add Remove
	mes OK Cancel Apply
Advanced OK Can	

c. Aktifkan RDC dan tambahkan user yang ada dalam group **Remote Desktop Users** 

				Remote Desktop Users
stem Proper	ties		? 🗙	The users listed below can connect to this computer, and any members of the Administrators group can connect even if they are not listed.
General	Computer Name	Hardware	Advanced	£ tim2
System Res Select t location Remote Assist Allow Rem <u>What is Re</u>	he ways that this compute tance tote Assistance invitations emote Assistance?	er can be used from	another	tim already has access.
Remote Deski	top s to connect remotely to t uter name:	his computer	vdvanced	To create new user accounts or add users to other groups, go to Control Panel and open <u>User Accounts</u> .  OK Cancel  Select Users ?
<u>What is R</u> i	emote Desktop?	Select Rem	ote Users	Select this object type: Users Object Types
For users to have a pass	connect remotely to this a word.	computer, the user	account must	From this location: XP-SP2
Windows Fir connections	r <u>ewall</u> will be configured to ⊧ to this computer.	o allow Remote De:	ktop	Enter the object names to select ( <u>examples</u> ): tim Check Names
		Cance	Apply	
				Advanced OK Cancel

d. Akses RDC lewat windows-client (Remote Desktop Connection bisa diakses dari **Start – All Programs – Accessories – Communications – Remote Desktop Connection**)

🔁 Remote	Desktop Co	nnection			
<b>S</b>	Remo Con	te Des necti	ktop <b>on</b>		
Computer:	192.168.1.	1  .t	Close	Help	Options >>
Remote	Desktop Co Remo Con	nnection te Des necti	sktop <b>on</b>		
General [ Logon set	Display Local ttings Enter the nai Computer:	Resources me of the re 192.168.	Programs mote comput	Experienc er.	e Advanced
	Username: You will be a	(none) sked for cre	dentials whe	n you conn	ect.
Connectio	on settings Save the cui saved conne Save	rrent connec ection.	ction settings Save As	to an RDP	file or open a Open
	Connec	x C	ancel	Help	Options <<

Remote Desktop Connection	? 🗙
Enter your credentials for 192.168 be used when you connect to the r	1.1. These credentials will emote computer.
User name: 🕵 tim2	<b>~</b>
Password:	
Remembe	r my password
	OK Cancel

- 4. Melakukan konfigurasi VNC pada Windows dan Linux (serta melakukan remote access berbasis GUI dengan VNC menggunakan Windows)
  - a. Berikut topologi yang akan dibuat



 Aktifkan VNC Server pada Ubuntu (Remote Desktop Preferences dapat diakses dari System – Preferences – Remote Desktop )

<b></b>	Remote Desktop Preferences	×
General	Advanced	
Sharing	g	
	🗹 Allow other users to <u>v</u> iew your desktop	
	☑ <u>A</u> llow other users to control your desktop	
	Users can view your desktop using this command:	
	vinagre ubuntu:0	
Securit	xy When a user tries to view or control your desktop: □ A <u>s</u> k you for confirmation	
	☑ <u>R</u> equire the user to enter this password:	
	<u>P</u> assword: ●●●●●●	]
el el	p Clos	e

c. Aktifkan VNC Server pada Windows



🔂 Setup - VNC	
License Agreement Please read the following important information before continuing.	VC
Please read the following License Agreement. You must accept the terms of this agreement before continuing with the installation.	
GNU GENERAL PUBLIC LICENSE Version 2, June 1991	
Copyright (C) 1989, 1991 Free Software Foundation, Inc. 59 Temple Place - Suite 330, Boston, MA 02111-1307, USA Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.	
Preamble	
The licenses for most software are designed to take away your	~
<ul> <li>I accept the agreement</li> <li>I do not accept the agreement</li> </ul>	
< <u>B</u> ack <u>N</u> ext>	Cancel

1🕏 Setup - VNC
Select Destination Location Where should VNC be installed?
Setup will install VNC into the following folder.
To continue, click Next. If you would like to select a different folder, click Browse.
C:\Program Files\RealVNC\VNC4 Browse
At least 0.7 MB of free disk space is required.
< Back Next > Cancel

🔂 Setup - VNC	
Select Components Which components should be installed?	<b>V</b> C
Select the components you want to install; clear the components you do install. Click Next when you are ready to continue.	o not want to
Full installation	✓
VNC Server	638 KB
VNC Viewer	266 KB
Current selection requires at least 1.6 MB of disk space.	
<u>B</u> ackNext⇒	Cancel

🕏 Setup - VNC 📃 🗖 🔀	
Select Start Menu Folder Where should Setup place the program's shortcuts?	Ī
Setup will create the program's shortcuts in the following Start Menu folder.	
To continue, click Next. If you would like to select a different folder, click Browse.	
RealVNC Browse	
Death search a Chaid Manu Gilder	
Don't create a Start Menu rolder	
<u> </u>	

🗟 Setup - VNC	
Select Additional Tasks Which additional tasks should be performed?	REAL VC
Select the additional tasks you would like Setup to perform click Next. Additional icons: Create a VNC Viewer <u>desktop iconi</u> Create a VNC Viewer <u>Q</u> uick Launch icon	ı while installing VNC, then
VNC Server configuration: Register and configure VNC Server for Service-Mode Start the VNC Server in Service-Mode	
< <u>B</u> ack	Next > Cancel

🕼 Setup - VNC	
Ready to Install Setup is now ready to begin installing VNC on your computer.	VC
Click Install to continue with the installation, or click Back if you want to review or change any settings.	
Destination location: C:\Program Files\RealVNC\VNC4	^
Setup type: Full installation	
Selected components: VNC Server VNC Viewer	
Start Menu folder: Real/NC	~
< <u>B</u> ack Install	Cancel

	VNC Server Properties (Service-Mode)	
🔂 Setup - 1	Sharing Desktop Capture Method Legacy	×
<b>Installing</b> Please	Authentication Connections Inputs	ה
	O No Authentication	-
Finishir	VNC Password Authentication     Configure	
	ONT Logon Authentication Configure	
	Encryption: Always Off Generate Keys	
	Prompt VNC Server Password	
	Onl: New Password:	
	Confirm Password:	
	OK Cancel	
	Cancel	1
	OK Cancel Apply	



🕼 Setup - VNC	
REAL	Completing the VNC Setup Wizard
	Setup has finished installing VNC on your computer. The application may be launched by selecting the installed icons.
	Click Finish to exit Setup.
	< <u>B</u> ack <u>Finish</u>

d. Akses melalui VNC Viewer pada windows-client (VNC Viewer dapat diakses dari **Start – All Programs – RealVNC – VNC Viewer 4 – Run VNC Viewer**)



V2 ubuntu	@ubuntu		
-🗳 Appl	cations Pla	aces System 🎯 🔄 🕢 🔹 🕎 🔤 🌞 🛒 🔒 에 Mon Mar 8, 4:34 Piswitc	h users or shut do
		ubuntu@ubuntu: ~	
	<u>File</u> <u>E</u> dit		
	ubuntu@ub eth0	<pre>untu:~\$ ifconfig Link encap:Ethernet HWaddr 08:00:27:7a:01:91 inet addr:192.168.1.1 Bcast:192.168.1.255 Mask:255.255.255.0 inet6 addr: fe80::a00:27ff:fe7a:191/64 Scope:Link UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1 RX packets:101126 errors:2 dropped:0 overruns:0 frame:0 TX packets:99870 errors:0 dropped:0 overruns:0 carrier:0 collisions:0 txqueuelen:1000 RX bytes:6877472 (6.8 MB) TX bytes:61309604 (61.3 MB) Interrupt:10 Base address:0xd020</pre>	
X	lo ubuntu@ub	Link encap:Local Loopback inet addr:127.0.0.1 Mask:255.0.0.0 inet6 addr: ::1/128 Scope:Host UP LOOPBACK RUNNING MTU:16436 Metric:1 RX packets:449 errors:0 dropped:0 overruns:0 frame:0 TX packets:449 errors:0 dropped:0 overruns:0 carrier:0 collisions:0 txqueuelen:0 RX bytes:34102 (34.1 KB) TX bytes:34102 (34.1 KB) untu:~\$	Н
4			
ostal)			U 1999

e. Akses melalui Remote Desktop Viewer pada Linux (Remote Desktop Viewer dapat diakses pada **Applications – Internet – Remote Desktop Viewer**)

	Remote Desktop Viewer	_ <b> </b>
<u>M</u> achine <u>V</u> iew <u>B</u> ookma	ırks <u>H</u> elp	
Connect Close	🗇 🐻 📑 ullscreen Take screenshot Send Ctrl-Alt-Del	
Bookmarks	Domoto Dockton Vitawar	
Hosts nearby		
i ubuntu's remote des	S Which machine do you want to connect to?	
	Host: 192.168.1.2	Eind
	Connection options	
	□ <u>S</u> caling	
	Conne Conne	ect
x		al.
	169 1 2:5000 - Romoto Dockton Viewor	
Machine View Bookma	irks Help	
	÷ 🖻 🗄	
Connect Close	-uliscreen Take screenshot Send Ctri-Alt-Dei	
Bookmarks		
a ubuntu's remote des	5	
	Remote Desktop Viewer	
	In order to connect on this machine is	
	password is required. Please supply it.	
	Host: 192.168.1.2:5900	
	Password:	
	<u>Remember this password</u>	

