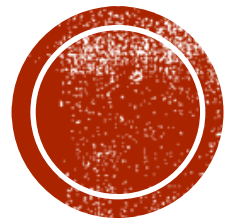


QUICK GUIDE

<https://tunnel.my.id>





PROSEDUR KEAMANAN

Apakah VPN ini aman?

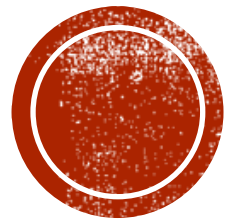
**NO
SYSTEM
IS SAFE**



TIPS MENGAMANKAN ROUTER

1. Pastikan selalu menggunakan router os versi terbaru.
2. Cek <https://mikrotik.com/download> untuk lihat versi terbaru
3. Buat user baru di System – User.
4. Gunakan user/pass yang rumit atau susah ditebak
5. Hapus user admin yang ada di System – User
6. Jika pernah memberi user/pass Winbox anda kepada orang lain segera ganti





MEMBUAT VPN REMOTE

DAFTAR AKUN VPN

Member Area – Menu VPN – Add VPN Account

Daftar Akun VPN

Add VPN Account

Lokasi Server* :

VPN Remote ID 4

×

▼

Username* :

kangarie

🔑

Password* :

kerenbanget

🔒

CNAME Domain :

Save

Save and go back to list

Cancel

Pilih “VPN REMOTE”
*Jgn pilih VPN Interkoneksi

Buat user/pass VPN
*Jangan sama dgn user/pass winbox

Klik ini utk menyimpan



HASIL VPN REMOTE

Tipe VPN : VPN Remote

Username : kangarie

Password : kerenbanget

Status : active

Last Login :

Last IP :

IP Netwatch : 192.168.195.1

Server : id4.tunnel.my.id

Port : 21 / 1000

Config : <http://id4.tunnel.my.id/id4-1000.conf>

IP VPN : 192.168.195.207

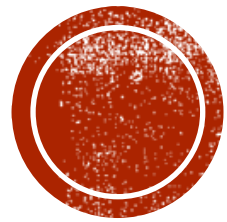
CNAME : kangarie.id4.tunnel.my.id

Port 22 : id4.tunnel.my.id:1207 <--> 192.168.195.207:22

Port 80 : id4.tunnel.my.id:1507 <--> 192.168.195.207:80

Port 8291 : id4.tunnel.my.id:1807 <--> 192.168.195.207:8291





MEMASANG VPN REMOTE

WAJIB PAKAI
WINBOX
di PC/Laptop



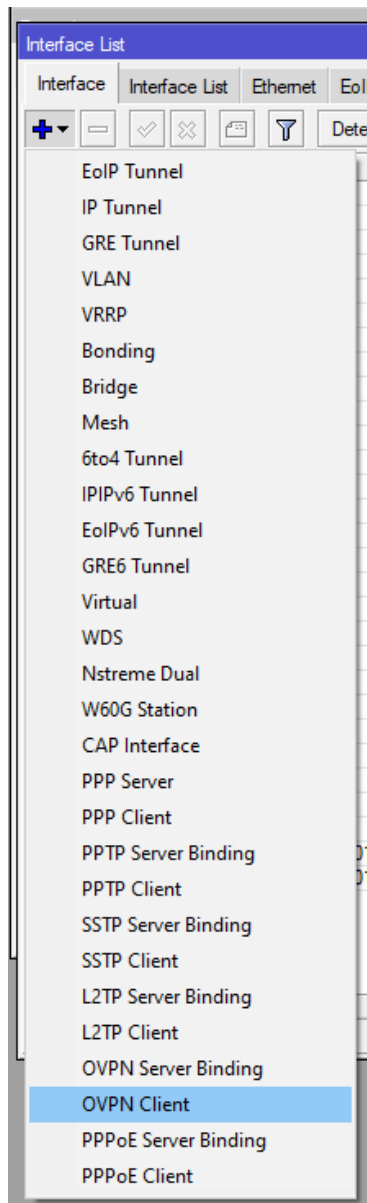
MEMBUAT OVPN-CLIENT
TIDAK BOLEH PAKAI

APLIKASI
MIKROTIK DI
ANDROID



ADD OVPN CLIENT

**STEP INI WAJIB
PAKAI WINBOX DI
PC/LAPTOP**



A screenshot of the WinBox 'New Interface' dialog box. The 'General' tab is selected. The 'Connect To' field is set to '0.0.0.0', 'Port' is '1194', and 'Mode' is 'ip'. The 'User' field is empty, 'Password' is empty, and 'Profile' is 'default'. The 'Certificate' is 'none', and the 'Verify Server Certificate' checkbox is unchecked. The 'Auth.' is 'sha1', 'Cipher' is 'blowfish 128', and 'Use Peer DNS' is 'yes'. The 'Add Default Route' checkbox is unchecked. The 'Status' field at the bottom shows 'enabled', 'running', and 'slave'. The 'OK', 'Cancel', 'Apply', 'Disable', 'Comment', 'Copy', 'Remove', and 'Torch' buttons are on the right.



INPUT VPN ACCOUNT

Tipe VPN : VPN Remote

Username : kangarie
Password : kerenbanget
Status : active
Last Login :
Last IP :
IP Netwatch : 192.168.195.1

Server : id4.tunnel.my.id
Port : 21 / 1000
Config : http://id4.tunnel.my.id/id4-1000.conf
IP VPN : 192.168.195.207
CNAME : kangarie.id4.tunnel.my.id
Port 22 : id4.tunnel.my.id:1207 <--> 192.168.195.207:22
Port 80 : id4.tunnel.my.id:1507 <--> 192.168.195.207:80
Port 8291 : id4.tunnel.my.id:1807 <--> 192.168.195.207:8291

Mode : ethernet

Interface <ovpn-out2>

General Dial Out Status Traffic

Connect To: id4.tunnel.my.id

Port: 1000

Mode: ethernet

User: kangarie

Password: *****

Profile: default

Certificate: none

☐ Verify Server Certificate

Auth: sha1

Cipher: blowfish 128

Use Peer DNS: yes

☐ Add Default Route

OK Cancel Apply Disable Comment Copy Remove Torch

enabled running slave Status: connected

Auth: sha1

Chiper: blowfish128

Wajib connected

**STEP INI WAJIB
PAKAI WINBOX DI
PC/LAPTOP**



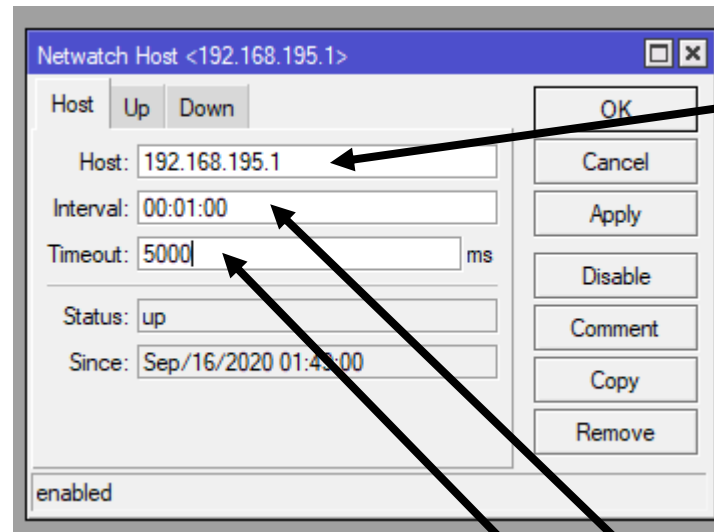
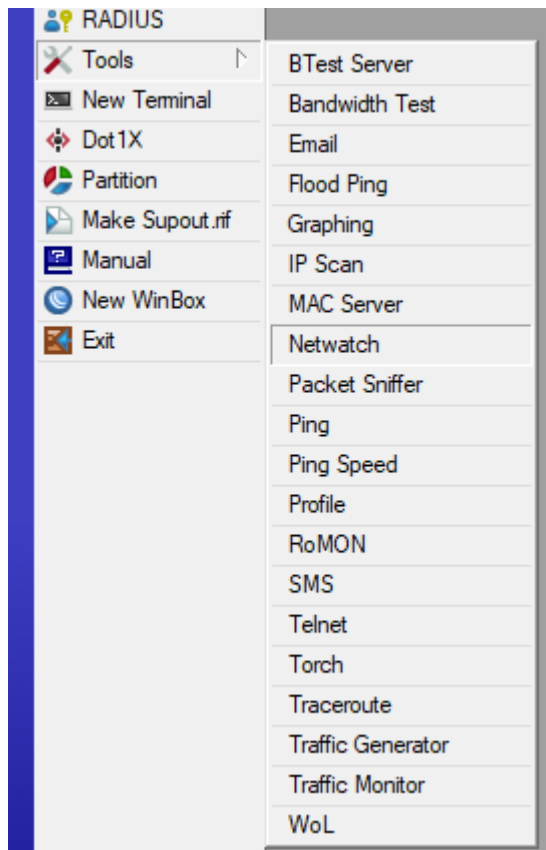
**MEMBUAT OVPN-CLIENT
TIDAK BOLEH PAKAI**

**APLIKASI
MIKROTIK DI
ANDROID**



NETWATCH

**STEP INI WAJIB
PAKAI WINBOX DI
PC/LAPTOP**



IP NETWATCH VPN REMOTE

192.168.195.1

NETWATCH WAJIB ADA
NETWATCH WAJIB PAKAI IP INI

Interval 1 menit

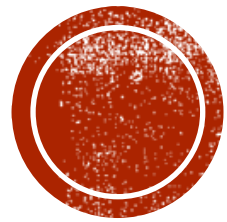
Timeout 5000ms



IP NETWATCH VPN REMOTE

192.168.195.1





REMOTE DENGAN WINBOX

AKSES WINBOX

id4.tunnel.my.id:1807

```
Tipe VPN : VPN Remote

Username : kangarie
Password : kerenbanget
Status : active
Last Login :
Last IP :
IP Netwatch : 192.168.195.1

Server : id4.tunnel.my.id
Port : 21 / 1000
Config : http://id4.tunnel.my.id/id4-1000.conf
IP VPN : 192.168.195.207
CNAME : kangarie.id4.tunnel.my.id
Port 22 : id4.tunnel.my.id:1207 <--> 192.168.195.207:22
Port 80 : id4.tunnel.my.id:1507 <--> 192.168.195.207:80
Port 8291 : id4.tunnel.my.id:1807 <--> 192.168.195.207:8291
```

WinBox (64bit) v3.27 (Addresses)

File Tools

Connect To: id4.tunnel.my.id:1807 ☒ Keep Password

Login: **USER/PASS WINBOX** Open In New Window

Password:

Add/Set Connect To RoMON Connect

Managed Neighbors

Find all

Address	User
---------	------



AKSES VIA MIKROTIK ANDROID/IOS

id4.tunnel.my.id:1807

```
Tipe VPN : VPN Remote

Username : kangarie
Password : kerenbanget
Status : active
Last Login :
Last IP :
IP Netwatch : 192.168.195.1

Server : id4.tunnel.my.id
Port : 21 / 1000
Config : http://id4.tunnel.my.id/id4-1000.conf
IP VPN : 192.168.195.207
CNAME : kangarie.id4.tunnel.my.id
Port 22 : id4.tunnel.my.id:1207 <--> 192.168.195.207:22
Port 80 : id4.tunnel.my.id:1507 <--> 192.168.195.207:80
Port 8291 : id4.tunnel.my.id:1807 <--> 192.168.195.207:8291
```

4:56 AM | 0.1KB/s

MikroTik v1.3.15

LOG IN SAVED DISCOVER

Address
id4.tunnel.my.id:1807

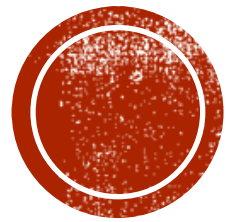
USER WINBOX

PASS WINBOX

☒ Keep password

SAVE CONNECT





REMOTE DENGAN WEBFIG

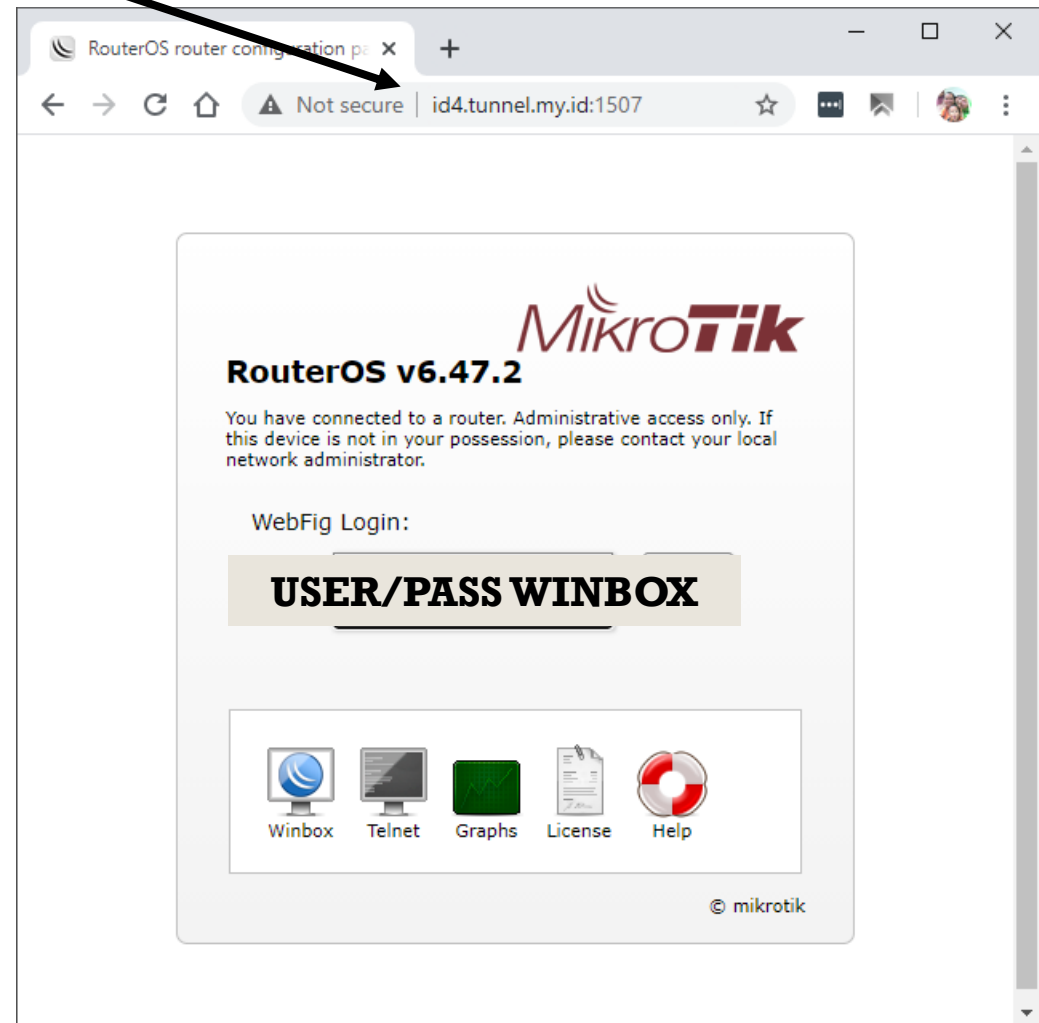
AKSES VIA WEBFIG

id4.tunnel.my.id:1507

```
Tipe VPN : VPN Remote

Username : kangarie
Password : kerenbanget
Status : active
Last Login :
Last IP :
IP Netwatch : 192.168.195.1

Server : id4.tunnel.my.id
Port : 21 / 1000
Config : http://id4.tunnel.my.id/id4-1000.conf
IP VPN : 192.168.195.207
CNAME : kangarie.id4.tunnel.my.id
Port 22 : id4.tunnel.my.id:2207 <--> 192.168.195.207:22
Port 80 : id4.tunnel.my.id:1507 <--> 192.168.195.207:80
Port 8291 : id4.tunnel.my.id:1807 <--> 192.168.195.207:8291
```



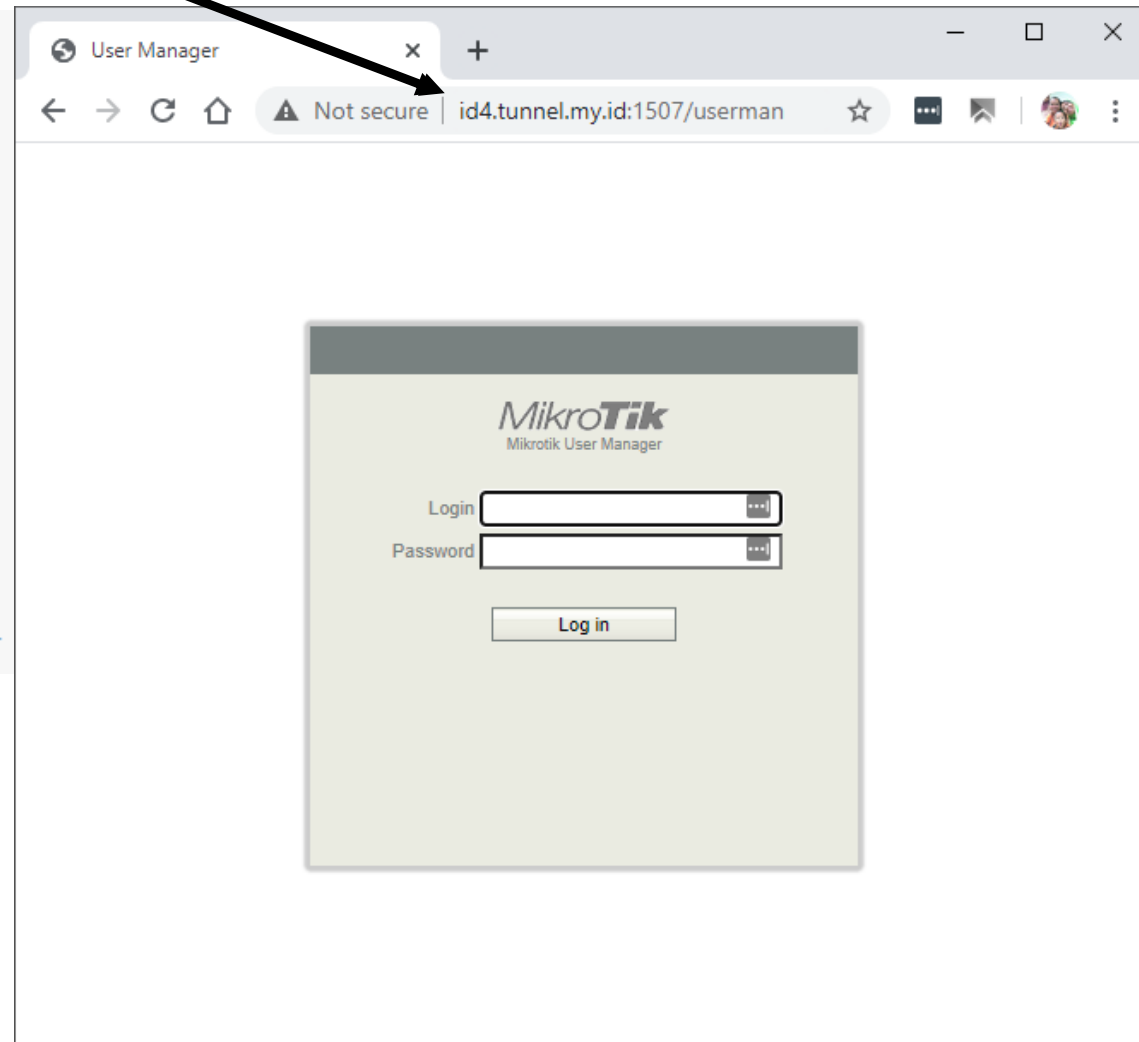
AKSES USERMAN

<http://id4.tunnel.my.id:1507/userman>

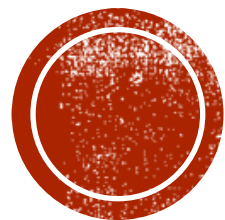
```
Tipe VPN : VPN Remote

Username : kangarie
Password : kerenbanget
Status : active
Last Login :
Last IP :
IP Netwatch : 192.168.195.1

Server : id4.tunnel.my.id
Port : 21 / 1000
Config : http://id4.tunnel.my.id/id4-1000.conf
IP VPN : 192.168.195.207
CNAME : kangarie.id4.tunnel.my.id
Port 22 : id4.tunnel.my.id:1207 <--> 192.168.195.207:22
Port 80 : id4.tunnel.my.id:1507 <--> 192.168.195.207:80
Port 8291 : id4.tunnel.my.id:1807 <--> 192.168.195.207:8291
```



The screenshot shows a web browser window with the title 'User Manager'. The address bar displays 'id4.tunnel.my.id:1507/userman' with a 'Not secure' warning. The main content area shows the Mikrotik User Manager login interface, which includes the Mikrotik logo, the text 'Mikrotik User Manager', and two input fields labeled 'Login' and 'Password'. Below these fields is a 'Log in' button.



MIKHMON ONLINE

SETTING PORT API

Pindah port ssh ke 212 dan disable
Pindah port api ke port 22

The screenshot shows the MikroTik WinBox interface. On the left is a sidebar menu with categories like Switch, Mesh, IP, IPv6, System, Queues, Files, Log, RADIUS, Tools, New Terminal, Dot1X, Partition, Make Supout.rif, Manual, New WinBox, and Exit. The main area displays the 'IP Service List' window. This window contains a table with columns: Name, Port, Available From, Certificate, and TLS Ver... The table lists 8 items: 'api' (port 22), 'api-ssl' (port 8729), 'ftp' (port 21), 'ssh' (port 212), 'telnet' (port 23), 'winbox' (port 8291), 'www' (port 80), and 'www-ssl' (port 443). Two black arrows point from the text above to the 'ssh' and 'api' rows in the table. The 'api' row has a green dot next to its name, while the others have a grey dot. The 'ssh' row has an 'X' in the first column, and the 'api' row has a green dot in the first column.

	Name	Port	Available From	Certificate	TLS Ver...
	api	22			
X	api-ssl	8729		none	any
X	ftp	21			
X	ssh	212			
X	telnet	23			
	winbox	8291			
	www	80			
X	www-ssl	443		none	any

**YANG MAU MIKHMOM / MIKRO WINBOX STEP WAJIB
JANGAN DI SKIP**



AKSES MIKHMON

id4.tunnel.my.id:1207

Type VPN : VPN Remote

Username : kangarie

Password : kerenbanget

Status : active

Last Login :

Last IP :

IP Netwatch : 192.168.195.1

Server : id4.tunnel.my.id

Port : 21 / 1000

Config : http://id4.tunnel.my.id/id4-1000.conf

IP VPN : 192.168.195.207

CNAME : kangarie.id4.tunnel.my.id

Port 22 : id4.tunnel.my.id:1207 <--> 192.168.195.207:22

Port 80 : id4.tunnel.my.id:1507 <--> 192.168.195.207:80

Port 8291 : id4.tunnel.my.id:1807 <--> 192.168.195.207:8291

MikroTik

IP MikroTik

id4.tunnel.my.id:1207

Username

USER WINBOX

Password

PASS WINBOX

Save

Connect

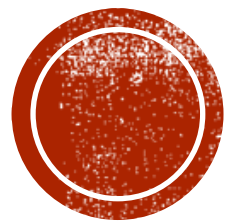
Ping

Ping Test [id4.tunnel.my.id:1207]

Host : id4.tunnel.my.id Port : 1207

Ping OK

Close



MIKRO WINBOX PRO

SETTING PORT API

Pindah port ssh ke 212 dan disable
Pindah port api ke port 22

The screenshot shows the MikroTik WinBox interface. On the left is a sidebar menu with categories like Switch, Mesh, IP, IPv6, System, Queues, Files, Log, RADIUS, Tools, New Terminal, Dot1X, Partition, Make Supout.rif, Manual, New WinBox, and Exit. The main area displays the 'IP Service List' window. This window contains a table with columns: Name, Port, Available From, Certificate, and TLS Ver... The table lists 8 items: 'api' (port 22), 'api-ssl' (port 8729), 'ftp' (port 21), 'ssh' (port 212), 'telnet' (port 23), 'winbox' (port 8291), 'www' (port 80), and 'www-ssl' (port 443). Two black arrows point from the text above to the 'ssh' and 'api' rows in the table. The 'api' row has a green dot next to its name, while the others have a grey dot. The 'ssh' row has an 'X' in the first column, indicating it is disabled.

	Name	Port	Available From	Certificate	TLS Ver...
	api	22			
X	api-ssl	8729		none	any
X	ftp	21			
X	ssh	212			
X	telnet	23			
	winbox	8291			
	www	80			
X	www-ssl	443		none	any

**YANG MAU MIKHMOM / MIKRO WINBOX STEP WAJIB
JANGAN DI SKIP**



AKSES MIKRO WINBOX PRO

id4.tunnel.my.id 1207

```
Tipe VPN : VPN Remote
Username : kangarie
Password : kerenbanget
Status : active
Last Login :
Last IP :
IP Netwatch : 192.168.195.1

Server : id4.tunnel.my.id
Port : 21 / 1000
Config : http://id4.tunnel.my.id/id4-1000.conf
IP VPN : 192.168.195.207
CNAME : kangarie.id4.tunnel.my.id
Port 22 : id4.tunnel.my.id:1207 <--> 192.168.195.207:22
Port 80 : id4.tunnel.my.id:1207 <--> 192.168.195.207:80
Port 8291 : id4.tunnel.my.id:1807 <--> 192.168.195.207:8291
```

5:33 AM | 0.8KB/s

< Add Host

Connect To id4.tunnel.my.id Port 1207

USER WINBOX

Password **PASS WINBOX** ☒ Keep

Note

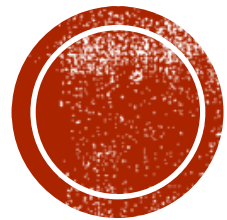
Group

☐ SSL

Port for Graphic module

CONNECT SAVE/CONNECT





PORT FORWARD

Note

1. Untuk remote webserver, akses point, dkk
2. Karena mengorbankan port 22, maka tutorial API sebelumnya tidak dapat digunakan

TARGET WEBSERVER

http://192.168.2.238/

TARGET
IP 192.168.2.238
PORT 80

PHP 7.3.14-1~deb10u1 - phpinfo

192.168.2.238

PHP Version 7.3.14-1~deb10u1

System	Linux orangezero 4.19.62-sunxi #5.92 SMP Wed Jul 31 22:07:23 CEST 2019 armv7l
Build Date	Feb 16 2020 15:07:23
Server API	Apache 2.0 Handler
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/etc/php/7.3/apache2
Loaded Configuration File	/etc/php/7.3/apache2/php.ini
Scan this dir for additional .ini files	/etc/php/7.3/apache2/conf.d
Additional .ini files parsed	/etc/php/7.3/apache2/conf.d/10-mysqlnd.ini, /etc/php/7.3/apache2/conf.d/10-opcache.ini, /etc/php/7.3/apache2/conf.d/10-pdo.ini, /etc/php/7.3/apache2/conf.d/20-calendar.ini, /etc/php/7.3/apache2/conf.d/20-ctype.ini, /etc/php/7.3/apache2/conf.d/20-curl.ini, /etc/php/7.3/apache2/conf.d/20-exif.ini, /etc/php/7.3/apache2/conf.d/20-fileinfo.ini, /etc/php/7.3/apache2/conf.d/20-ftp.ini, /etc/php/7.3/apache2/conf.d/20-gettext.ini, /etc/php/7.3/apache2/conf.d/20-iconv.ini, /etc/php/7.3/apache2/conf.d/20-json.ini, /etc/php/7.3/apache2/conf.d/20-mbstring.ini, /etc/php/7.3/apache2/conf.d/20-mysqli.ini, /etc/php/7.3/apache2/conf.d/20-pdo_mysql.ini, /etc/php/7.3/apache2/conf.d/20-phar.ini, /etc/php/7.3/apache2/conf.d/20-posix.ini, /etc/php/7.3/apache2/conf.d/20-readline.ini, /etc/php/7.3/apache2/conf.d/20-shmop.ini, /etc/php/7.3/apache2/conf.d/20-sockets.ini, /etc/php/7.3/apache2/conf.d/20-sysvmsg.ini, /etc/php/7.3/apache2/conf.d/20-sysvsem.ini, /etc/php/7.3/apache2/conf.d/20-sysvshm.ini, /etc/php/7.3/apache2/conf.d/20-tokenizer.ini

IP LOCAL VPN

Tipe VPN : VPN Remote

Username : kangarie

Password : kerenbanget

Status : active

Last Login :

Last IP :

IP Netwatch : 192.168.195.1

Server : id4.tunnel.my.id

Port : 21 / 1000

Config : <http://id4.tunnel.my.id/id4-1000.conf>

IP VPN : 192.168.195.207

CNAME : kangarie.id4.tunnel.my.id

Port 22 : id4.tunnel.my.id:1207 <--> 192.168.195.207:22

Port 80 : id4.tunnel.my.id:1507 <--> 192.168.195.207:80

Port 8291 : id4.tunnel.my.id:1807 <--> 192.168.195.207:8291

IP LOCAL VPN 192.168.195.207



PRASARAT

- Bisa diping dan difetch dari mikrotik

```
[kangarie@KangArie-hAPac^2] > ping 192.168.2.238
SEQ HOST                                SIZE TTL TIME  STATUS
 0 192.168.2.238                        56  64 0ms
 1 192.168.2.238                        56  64 0ms
 2 192.168.2.238                        56  64 0ms
 3 192.168.2.238                        56  64 0ms
 4 192.168.2.238                        56  64 0ms
 5 192.168.2.238                        56  64 0ms
sent=6 received=6 packet-loss=0% min-rtt=0ms avg-rtt=0ms max-rtt=0ms

[kangarie@KangArie-hAPac^2] > /tool fetch url=http://192.168.2.238 output=none
status: finished
downloaded: 7KiB[-z pause]
total: 7KiB
duration: 1s

[kangarie@KangArie-hAPac^2] > █
```



DST NAT

IP LOCAL 192.168.195.207

Port 22 yg dijadikan akses
Kalau sdh dipakai API, pakai yg port 80

TARGET WEBSERVER
IP 192.168.2.238 | PORT 80

The screenshot shows the 'NAT Rule <192.168.195.207:22>' configuration window in Mikrotik WinBox. The 'General' tab is active. The 'Chain' is set to 'dstnat'. The 'Dst. Address' is '192.168.195.207'. The 'Protocol' is '6 (tcp)'. The 'Dst. Port' is '22'. The 'In. Interface' and 'Out. Interface' are empty. The 'In. Interface List' and 'Out. Interface List' are empty. The 'Packet Mark', 'Connection Mark', 'Routing Mark', and 'Routing Table' are empty. The 'Connection Type' is empty. The 'enabled' checkbox is checked. Arrows point from the text 'IP LOCAL 192.168.195.207' to the 'Dst. Address' field and from 'Port 22 yg dijadikan akses' to the 'Dst. Port' field.

Field	Value
Chain	dstnat
Src. Address	
Dst. Address	192.168.195.207
Protocol	6 (tcp)
Src. Port	
Dst. Port	22
Any. Port	
In. Interface	
Out. Interface	
In. Interface List	
Out. Interface List	
Packet Mark	
Connection Mark	
Routing Mark	
Routing Table	
Connection Type	

enabled

The screenshot shows the 'NAT Rule <192.168.195.207:22>' configuration window in Mikrotik WinBox. The 'General' tab is active. The 'Action' is set to 'dst-nat'. The 'Log' checkbox is unchecked. The 'Log Prefix' is empty. The 'To Addresses' is '192.168.2.238'. The 'To Ports' is '80'. The 'enabled' checkbox is checked. Arrows point from the text 'TARGET WEBSERVER IP 192.168.2.238 | PORT 80' to the 'To Addresses' and 'To Ports' fields.

Field	Value
Action	dst-nat
Log	<input type="checkbox"/>
Log Prefix	
To Addresses	192.168.2.238
To Ports	80

enabled

NAT GLOBAL

NAT Rule <>

General Advanced Extra Action Statistics

Chain: srcnat

Src. Address:

Dst. Address:

Protocol:

Src. Port:

Dst. Port:

Any. Port:

In. Interface:

Out. Interface:

In. Interface List:

Out. Interface List:

Packet Mark:

Connection Mark:

Routing Mark:

Routing Table:

Connection Type:

enabled

OK

Cancel

Apply

Disable

Comment

Copy

Remove

Reset Counters

Reset All Counters

NAT Rule <>

General Advanced Extra Action Statistics

Action: masquerade

☐ Log

Log Prefix:

To Ports:

enabled

OK

Cancel

Apply

Disable

Comment

Copy

Remove

Reset Counters

Reset All Counters



CARA AKSES WEBSERVER

The screenshot shows a web browser window with the address bar displaying `id4.tunnel.my.id:1207`. The page content shows the PHP version `7.3.14-1~deb10u1` and a table of system information. A green arrow points from the URL in the address bar to the `id4.tunnel.my.id:1207` entry in the VPN log.

System	Linux orangeipzero 4.19.62-sunxi #5.92 SMP Wed Jul 31 22:07:23 CEST 2019 armv7l
Build Date	Feb 16 2020 15:07:23
Server API	Apache 2.0 Handler
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/etc/php/7.3/apache2
Loaded Configuration File	/etc/php/7.3/apache2/php.ini
Scan this dir for additional .ini files	/etc/php/7.3/apache2/conf.d
Additional .ini files parsed	/etc/php/7.3/apache2/conf.d/10-mysql.ini, /etc/php/7.3/apache2/conf.d/10-pdo.ini, /etc/php/7.3/apache2/conf.d/20-ctype.ini, /etc/php/7.3/apache2/conf.d/20-exif.ini, /etc/php/7.3/apache2/conf.d/20-gettext.ini, /etc/php/7.3/apache2/conf.d/20-json.ini, /etc/php/7.3/apache2/conf.d/20-mysqli.ini, /etc/php/7.3/apache2/conf.d/20-phar.ini, /etc/php/7.3/apache2/conf.d/20-readline.ini, /etc/php/7.3/apache2/conf.d/20-sysvmsg.ini, /etc/php/7.3/apache2/conf.d/20-sysvshm.ini

VPN Log:

```
Type VPN : VPN Remote
Username : kangarie
Password : kerenbanget
Status : active
Last Login :
Last IP :
IP Netwatch : 192.168.195.1
Server : id4.tunnel.my.id
Port : 21 / 1000
Config : http://id4.tunnel.my.id/id4-1000.conf
IP VPN : 192.168.195.207
CNAME : kangarie-id4-tunnel.my.id
Port 22 : id4.tunnel.my.id:1207 <--> 192.168.195.207:22
Port 80 : id4.tunnel.my.id:1507 <--> 192.168.195.207:80
Port 8291 : id4.tunnel.my.id:1807 <--> 192.168.195.207:8291
```

JENIS TARGET YG BISA DI PORT FORWARD

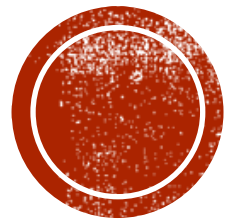
- Akses point
- Web server
- MySQL server
- SSH / SCP Server



JENIS TARGET YG TIDAK BISA DI PORT FORWARD

- FTP Server
- ZTE f609 yang aktif jadi modem





TIPS & TRIK

Additional tutorial

ROUTE LOADBALANCE

/ip route

add check-gateway=ping distance=1 dst-address=103.65.237.158/32
gateway=192.168.1.1

Sesuaikan IP berikut dengan IP Server dan IP Modem

- 103.65.237.158 (ini contoh IP server id11.tunnel.my.id)
- 192.168.1.1 (ini contoh IP default modem indihome)

IP SERVER ada di Member Area menu Beranda

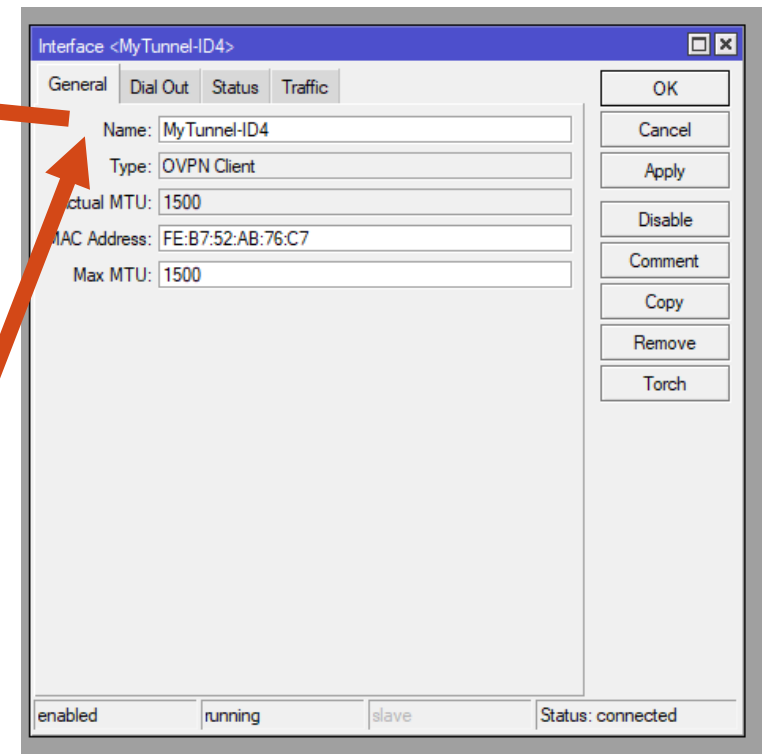
192.168.195.1 BUKAN IP SERVER



SCHEDULER DISABLE/ENABLE

<https://pastebin.com/D6qKmK2B>

```
:local ip "192.168.195.1"  
:local interface "MyTunnel-ID4"  
  
:if ([/ping $ip count=5] = 0) do {  
:log warning "Interface $interface is restarting"  
/interface disable $interface  
:delay 1  
/interface enable $interface  
}
```



- Sesuaikan nama interface dgn nama ovpn anda
- Agar tidak membebani router anda, set scheduler 10 menit sekali

