KONFIGURASI VPN SERVER PADA CISCO PACKET TRACER

A. Pengertian

VPN adalah singkatan dari Virtual Private Network, yaitu jaringan pribadi
(bukan untuk akses umum) yang menggunakan medium nonpribadi (misalnya internet)
untuk menghubungkan antar remote-site secara aman.

Sebuah virtual private network (VPN) memperluas jaringan pribadi melalui jaringan publik, seperti Internet. Hal ini memungkinkan pengguna untuk mengirim dan menerima data melalui jaringan bersama atau publik seakan perangkat komputasi mereka langsung terhubung ke jaringan pribadi. Aplikasi yang berjalan melintasi VPN karena itu dapat mengambil manfaat dari fungsi, keamanan, dan pengelolaan jaringan pribadi.

B.Latar belakang

Merupakan bagaian kegiatan target untuk saya penuhi.

C. Tujuan

Berbagi cara kepada sobat semua bagaimana cara membuat VPN di Cisco packet tracker.

D.Alat dan bahan

- -1 Server
- -1 Router
- 1Router VPN Server
- -1 Swicth

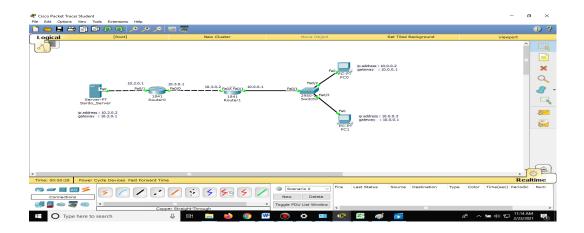
_

E.Waktu

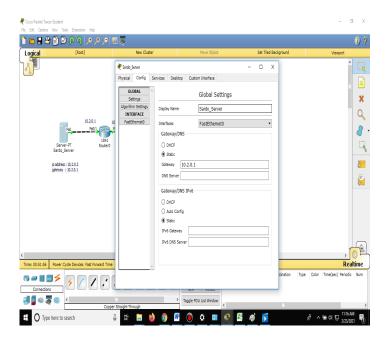
Saya membutuhkan waktu beberapa jam untuk membaca dan memahami kemudian mempraktekkannya.

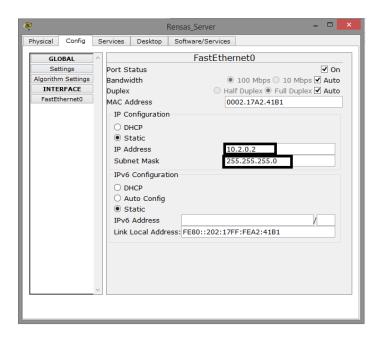
F.Pelaksanaan

1.Pertama silahkan anda bukak aplikasi cisco packet tracker nya , kemudian siapkan bahan-bahannya seperti gambar dibawah ini.

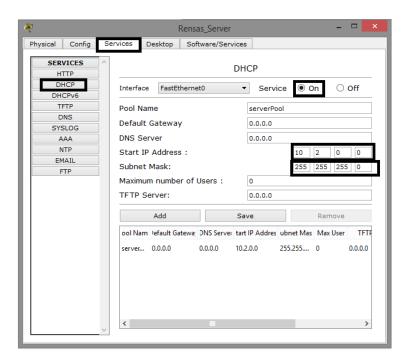


2.Kemudian lalukukan double clik pada server aaa untuk melakukan setting sesuai gambar berikut (setting gatewaynya).

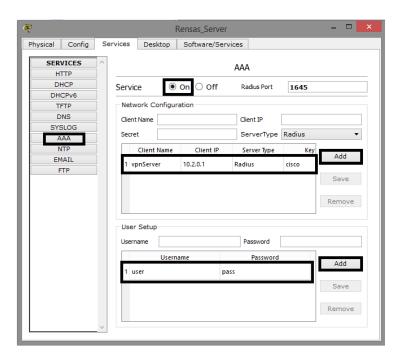




3.Lalu setting setting pada bagian DHCPnya ,seperti gambar dibawah ini.



4.Berikutnya setting pada bagian AAA isikan name ,secret serta client ip nya, seperti gambar dibawah ini.



6.Kemudian selanjutnya double clik pada bagian router(VPN server) untuk settingan berikutnya ,lalu pilih menu CLI dan isikan perintah-perintahnya sebagai berikut:

SETTING ROUTER

Untuk R1 VPN SERVER

Router>en

Router#conf t

Enter configuration commands, one per line. End with CNTL/Z.

Router(config) #hostname Router

Router(config) #aaa new-model

Router(config) #aaa authentication login VPNAUTH group radius local

Router(config) #aaa authorization network VPNAUTH local

Router(config) #crypto isakmp policy 10

Router(config-isakmp) #encr aes 256

Router(config-isakmp) #authentication pre-share

Router(config-isakmp) #group 2

Router(config-isakmp) #crypto isakmp client configuration group ciscogroup

Router(config-isakmp-group)#key ciscogroup

Router(config-isakmp-group) #pool VPNCLIENTS

Router(config-isakmp-group) #netmask 255.255.255.0

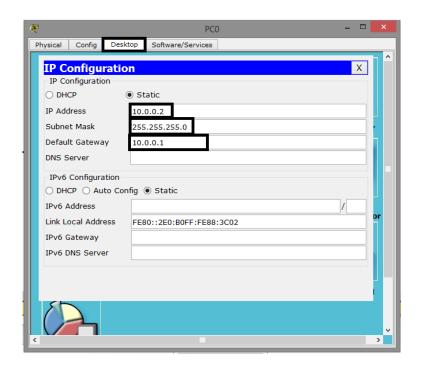
```
Router(config-isakmp-group) #crypto ipsec transform-set mytrans esp-3des esp-sha-hmac
Router(config) #crypto dynamic-map myamap 10
Router(config-crypto-map)#set transform-set mytrans
Router(config-crypto-map) #reverse-route
Router(config-crypto-map) #crypto map mymap client authentication list VPNAUTH
Router(config) #crypto map mymap isakmp authorization list VPNAUTH
Router(config) #crypto map mymap client configuration address respond
Router(config) #crypto map mymap 10 ipsec-isakmp dynamic mymap
Router(config-crypto-map) #set transform-set mytrans
Router(config-crypto-map) #reverse-route
Router(config) #ip ssh version 1
Please create RSA keys (of at least 768 bits size) to enable SSH v2.
Router(config) #spanning-tree mode pvst
Router(config) #int fa0/0
Router(config-if) #ip add 10.3.0.1 255.255.255.0
Router(config-if) #duplex auto
Router(config-if) #speed auto
Router(config-if) #crypto map mymap
*Jan 3 07:16:26.785: %CRYPTO-6-ISAKMP ON OFF: ISAKMP is ON
Router(config-if) #no sh
Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
Router(config-if) #int fa0/1
Router(config-if) #ip add 10.2.0.1 255.255.255.0
Router(config-if) #duplex auto
Router(config-if) #speed auto
Router(config-if) #no sh
Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
Router(config-if) #int vlan1
Router(config-if) #no ip add
Router(config-if) #sh
Router(config-if) #ip local pool VPNCLIENTS 10.1.1.100 10.1.1.200
Router(config) #ip route 10.0.0.0 255.255.255.0 10.3.0.2
Router(config) #radius-server host 10.2.0.2 auth-port 1645 key cisco
Router(config) #ex
Router#
%SYS-5-CONFIG I: Configured from console by console
Router#
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to
Router#ping 10.2.0.2
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 10.2.0.2, timeout is 2 seconds:
. 1111
Success rate is 80 percent (4/5), round-trip min/avg/max = 0/0/0 ms
Router#wr
Building configuration...
[OK]
Router#
```

```
Untuk R2
Router>en
Router#conf t
Enter configuration commands, one per line. End with {\tt CNTL/Z}.
Router(config) #hostname Router
Router(config) #ip ssh version 1
Please create RSA keys (of at least 768 bits size) to enable SSH v2.
Router(config)#spanning-tree mode pvst
Router(config) #int fa0/0
Router(config-if) #ip add 10.3.0.2 255.255.255.0
Router(config-if) #duplex auto
Router(config-if) #speed auto
Router(config-if) #no sh
Router(config-if)#
LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
Router(config-if)#int fa0/1
Router(config-if) #ip add 10.0.0.1 255.255.255.0
Router(config-if) #duplex auto
Router(config-if)#
Router(config-if) #speed auto
Router(config-if) #no sh
```

```
Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
Router(config-if) #int vlan1
Router(config-if) #no ip add
Router(config-if)#class less
Router(config-cmap) #ip route 10.2.0.0 255.255.255.0 10.3.0.1
Router(config) #ip route 10.1.0.0 255.255.255.0 10.3.0.1
Router(config) #ip route 10.1.1.0 255.255.255.0 10.3.0.1
Router(config) #ex
Router#
SYS-5-CONFIG_I\colon Configured from console by console
Router#
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to
up
Router#ping 10.3.0.1
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 10.3.0.1, timeout is 2 seconds:
.!!!!
Success rate is 80 percent (4/5), round-trip min/avg/max = 0/0/3 ms
```

SETTING PC

1. PC 0.

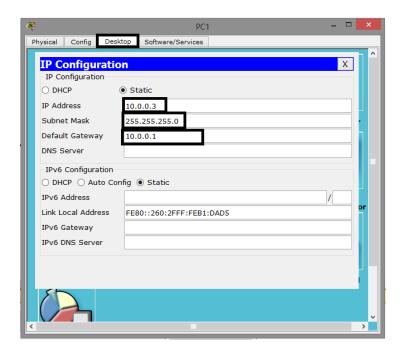


```
Physical Config Desktop Software/Services

Command Prompt

Packet Tracer PC Command Line 1.0
PC>ping 10.2.0.2 with 32 bytes of data:
Reply from 10.2.0.2: bytes=32 time=1ms TTL=126
Reply from 10.2.0.2: bytes=32 time=1ms TTL=126
Reply from 10.2.0.2: bytes=32 time=0ms TTL=126
Reply from 10.2.0.2: bytes=32 time=0ms TTL=126
Ping statistics for 10.2.0.2:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 10ms, Average = 3ms
PC>
```

2. PC 1.



```
Physical Config Desktop Software/Services

Command Prompt

Packet Tracer PC Command Line 1.0
PC-ping 10.2.0.2 with 32 bytes of data:

Reply from 10.2.0.2: bytes=32 time=2ms TTL=126
Reply from 10.2.0.2: bytes=32 time=10ms TTL=126
Reply from 10.2.0.2: bytes=32 time=0ms TTL=126
Reply from 10.2.0.2: bytes=32 t
```





