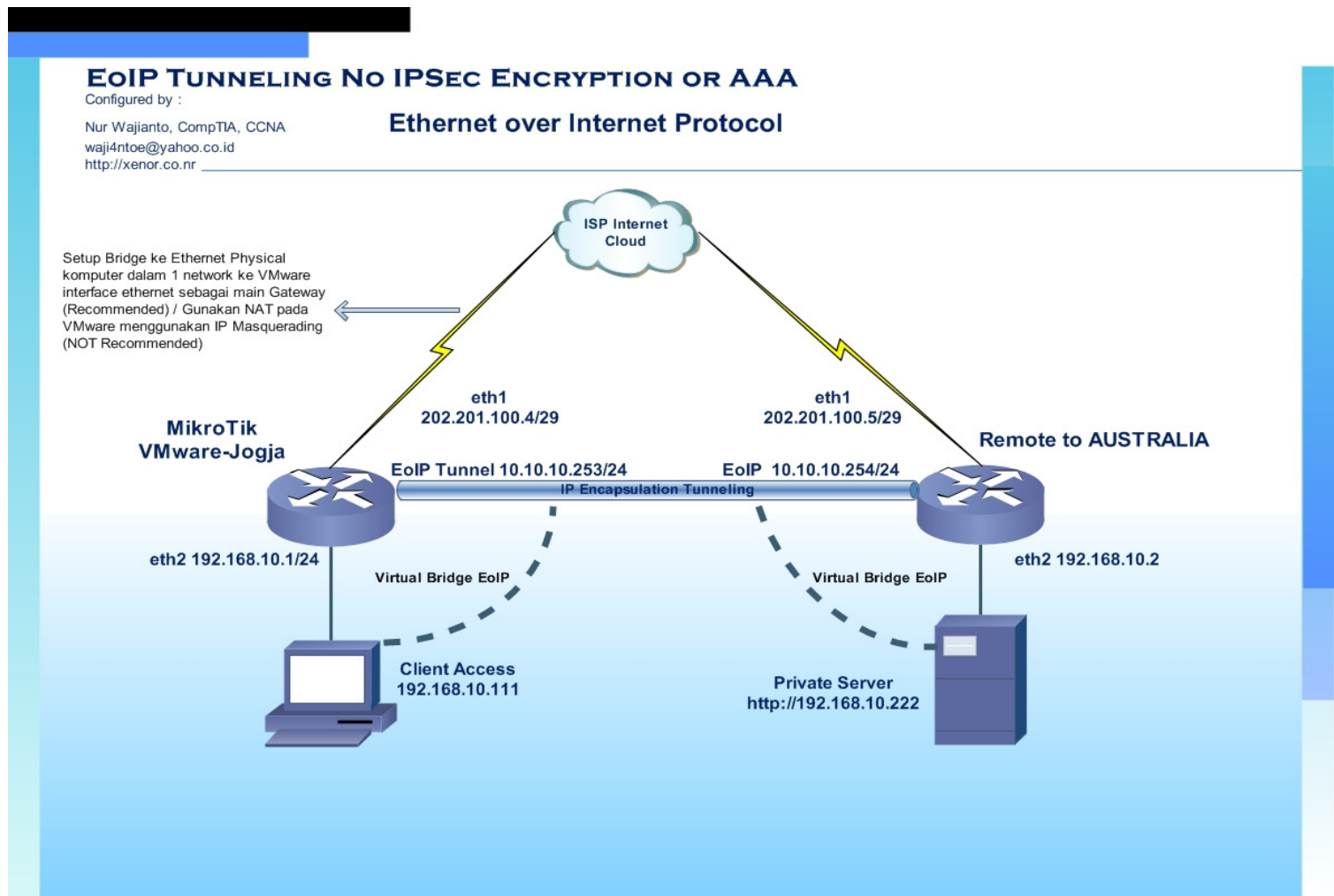


EoIP (Ethernet over Internet Protocol) di VMware

Kali ini gue mau bahas tentang EoIP and sebelum bicara panjang lebar apa itu EoIP kita harus ngerti yang namanya VPN (Virtual Private Network) wajib xixixix -_^, VPN adalah sebuah jaringan private yang menggunakan infrastruktur (lease) jaringan public seperti internet untuk saling bertukar informasi secara aman (secure) seolah2 terhubung langsung dalam satu private network, sehingga informasi penting seperti data, email, server dapat diakses oleh user dengan aman. EoIP adalah bagian dari sebuah IPTunneling protocol atau IP Encapsulation RFC 2003 dimana sebuah paket IP dibungkus dengan paket IP yang lain. IPv4 dapat membentuk IPTunneling 65535. EoIP adalah MikroTik Proprietary (kepemilikan) artinya protocol hanya support pada lingkungan OS MikroTik. EoIP dapat melakukan bridging dengan interface EoIP yang lain, jadi dengan kata lain fungsi utama EoIP adalah dapat melakukan bridge network remote. Jika diperlukan keamanan yg tinggi EoIP dapat dijalankan pada interface tunnel yg terenkripsi PPTP or PPOE. OK disini gue akan simulasikan EoIP menggunakan 2 MikroTik VMware.



Gambar Network Topology EoIP menggunakan MikroTik OS VMware

Buat PPTP tunnel antara kedua MikroTik, disini admin@remote-to-AUSTRALIA as PPTP Server

```
[admin@remote-to-AUSTRALIA] /interface pptp-server> /ppp secret add name=nadine service=pptp pass=cantik
local-add=10.10.10.254 remote-add=10.10.10.253
[admin@remote-to-AUSTRALIA] /interface pptp-server> add name=VMware-JOGJA user=nurwajianto
[admin@remote-to-AUSTRALIA] /interface pptp-server> server set enable=yes
[admin@remote-to-AUSTRALIA] /interface pptp-server> print

Flags: X - disabled, D - dynamic, R - running

#      NAME                USER           MTU           CLIENT-ADDRESS                UPTIME  ENCODING
0      VMware-JOGJA           nurwajianto
[admin@remote-to-AUSTRALIA] /interface pptp-server> ..
```

Tambahkan EoIP interface dikedua Mikrotik gunakan command berikut

```
[admin@remote-to-AUSTRALIA] /interface> eoip
[admin@remote-to-AUSTRALIA] /interface eoip> add name=EoIP-JOGJA tunnel-id=0 remote-addr=10.10.10.253
[admin@remote-to-AUSTRALIA] /interface eoip> enable eoip-remote
[admin@remote-to-AUSTRALIA] /interface eoip> print

Flags: X - disabled, R - running

0 R name="EoIP-JOGJA" mtu=1500 mac-address=FE:4E:FB:8B:C3:CF arp=enabled remote-address=10.10.10.253 tunnel-id=0
[admin@remote-to-AUSTRALIA] /interface eoip> ..
```

Aktifkan bridging antara EoIP dan Ethernet dikedua MikroTik gunakan command berikut

```
[admin@remote-to-AUSTRALIA] /interface> bridge
[admin@remote-to-AUSTRALIA] /interface bridge> add
[admin@remote-to-AUSTRALIA] /interface bridge> pr

Flags: X - disabled, R - running

0 R name="bridge1" mtu=1500 arp=enabled mac-address=00:00:00:00:00:00 protocol-mode=none priority=0x8000 auto-
mac=yes

admin-mac=00:00:00:00:00:00 max-message-age=20s forward-delay=15s transmit-hold-count=6 ageing-time=5m
[admin@remote-to-AUSTRALIA] /interface bridge> port add bridge=bridge1 interface=EoIP-JOGJA
[admin@remote-to-AUSTRALIA] /interface bridge> port add bridge=bridge1 interface=ether2
[admin@remote-to-AUSTRALIA] /interface bridge> port print

Flags: X - disabled, I - inactive, D - dynamic

#      INTERFACE                BRIDGE                PRIORITY  PATH-COST  HORIZON
0      EoIP-JOGJA                bridge1                128       10         none
1      ether2                    bridge1                128       10         none
[admin@remote-to-AUSTRALIA] /interface bridge>
```

```

[admin@nurwajianto-JOGJA] >
[admin@nurwajianto-JOGJA] > interface pptp-client
[admin@nurwajianto-JOGJA] /interface pptp-client> add name=pptp user=nurwajianto
connect-to=202.201.100.5 pass=cantik
[admin@nurwajianto-JOGJA] /interface pptp-client> enable pptp
[admin@nurwajianto-JOGJA] /interface pptp-client> print
Flags: X - disabled, R - running
0 name="pptp" max-mtu=1460 max-mru=1460 mrru=disabled
connect-to=202.201.100.5 user="nurwajianto" password="cantik"
profile=default-encryption add-default-route=no
allow=pap,chap,mschap1,mschap2
[admin@nurwajianto-JOGJA] /interface pptp-client> monitor pptp
status: "disconnected"

idle-time: 0s
mtu: 1460
mru: 1460

[admin@nurwajianto-JOGJA] /interface> eoip
[admin@nurwajianto-JOGJA] /interface eoip> add name=AUSTRALIA tunnel-id=0
remote-address: 10.10.10.254
[admin@nurwajianto-JOGJA] /interface eoip> print
Flags: X - disabled, R - running
0 R name="AUSTRALIA" mtu=1500 mac-address=FE:07:04:7E:DC:20 arp=enabled
remote-address=10.10.10.254 tunnel-id=0

[admin@nurwajianto-JOGJA] /interface> bridge
[admin@nurwajianto-JOGJA] /interface bridge> add
[admin@nurwajianto-JOGJA] /interface bridge> print
Flags: X - disabled, R - running
0 R name="bridge1" mtu=1500 arp=enabled mac-address=00:00:00:00:00:00
protocol-mode=none priority=0x8000 auto-mac=yes
admin-mac=00:00:00:00:00:00 max-message-age=20s forward-delay=15s
transmit-hold-count=6 ageing-time=5m
[admin@nurwajianto-JOGJA] /interface bridge> port add bridge=bridge1 interface=ether2
[admin@nurwajianto-JOGJA] /interface bridge> port add bridge=bridge1 interface=AUSTRALIA
[admin@nurwajianto-JOGJA] /interface bridge> port print
Flags: X - disabled, I - inactive, D - dynamic
# INTERFACE BRIDGE PRIORITY PATH-COST HORIZON
0 ether2 bridge1 128 10 none
1 AUSTRALIA bridge1 128 10 none
[admin@nurwajianto-JOGJA] /interface bridge>

```

Selamat mencoba ! ! ! ! !

If you've any question plz contact me at :

YM : waji4ntoe
E-mail : noorw@consultant.com
: waji4ntoe@yahoo.co.id
URL : http://www.xenor.co.nr

Referensi

<http://mikrotik.com>

<http://blog.internetnetworkexpert.com>

<http://gns3.net>

<http://i-networking.net>

Biography



Nur Wajianto, Pemegang sertifikasi dari Cisco sebagai Cisco Certified Network Associate (CCNA), Cisco IT Essential (CompTIA), berpengalaman dibidang IP Network, Routing, Switching and Network Security Tech. Research interest dibidang IPng (IP Next Generation). Currently project "Redial-In User Services (RADIUS) Server with IPv6" and "MPLSng (Multi Protocol Label Switching) IPv6 with OpenSource GNS3 (Graphical Network Simulator)".