



PANDUAN PENGECEKKAN SECURE CRT

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CARA PENGGUNAAN SSH SECURE CRT

- Apabila menggunakan LAN dan berada dikantor akses SSH bisa menggunakan alamat :

10.62.170.49 (Jkt Jatinegara)

10.11.15.186 (Jkt Karet)

Hosname : 10.11.15.186

Port : 22

Username : c4a-rully

Pass : telkom.indo.123

Atau

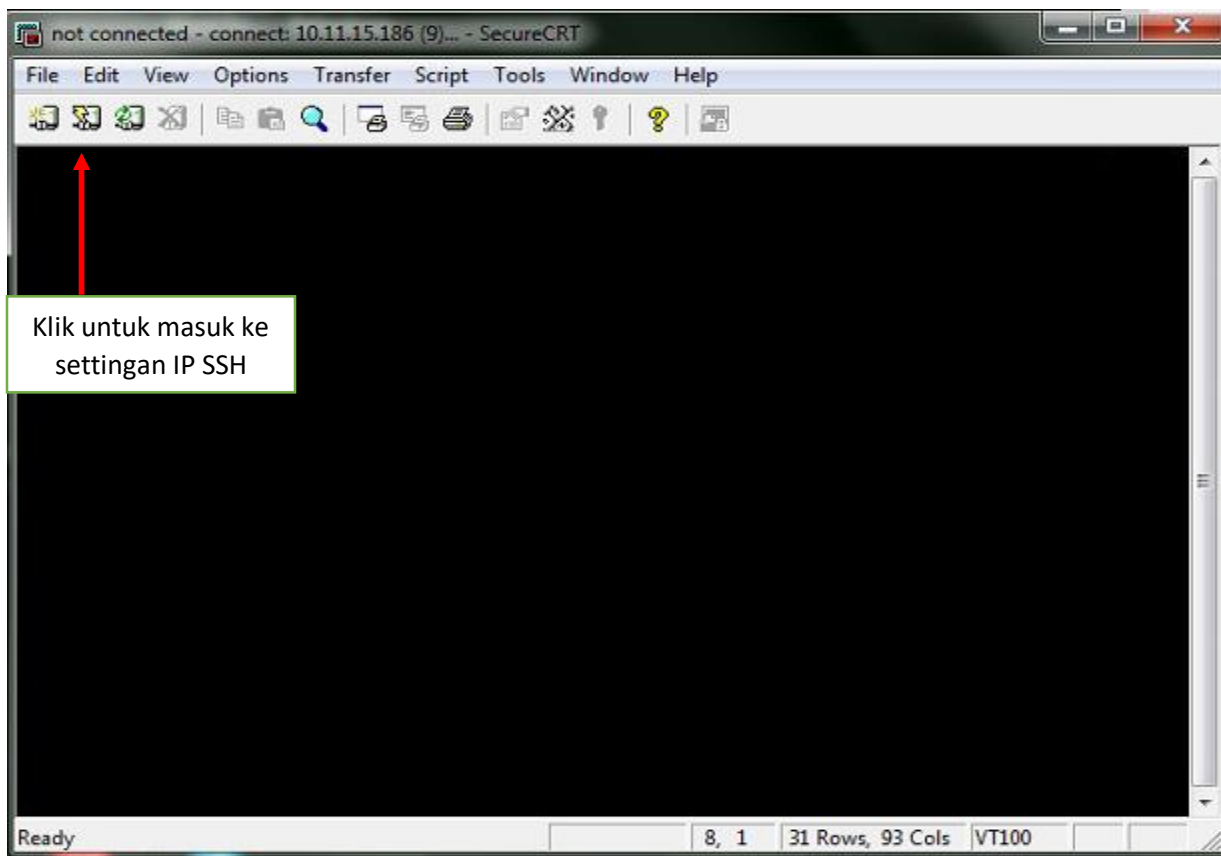
Hostname : 10.11.15.186

Port : 22

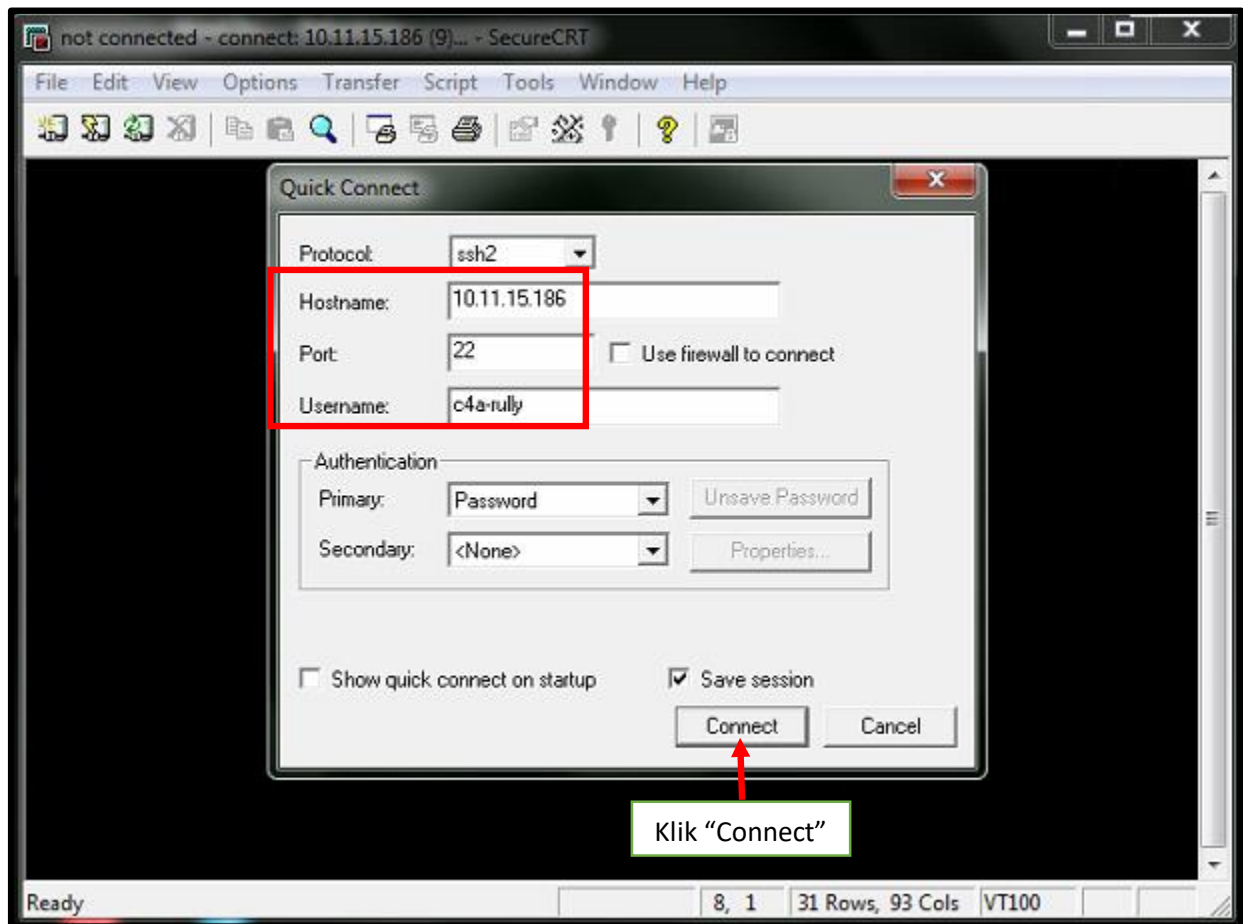
Username : c4a-hidayat

Pass : telkom.indo.123

Tahap 1 :



Tahap 2 :



Kemudian masukkan settingan IP untuk masuk ke SSH :

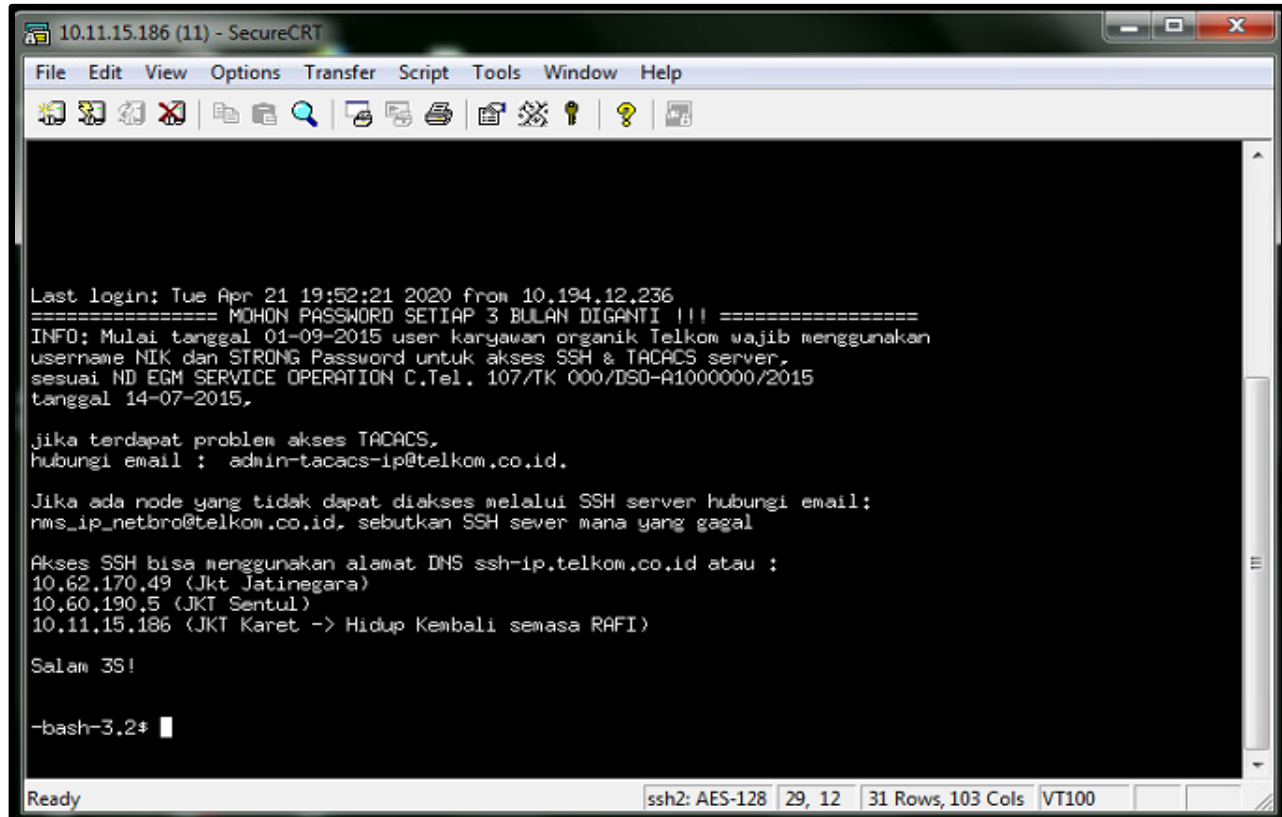
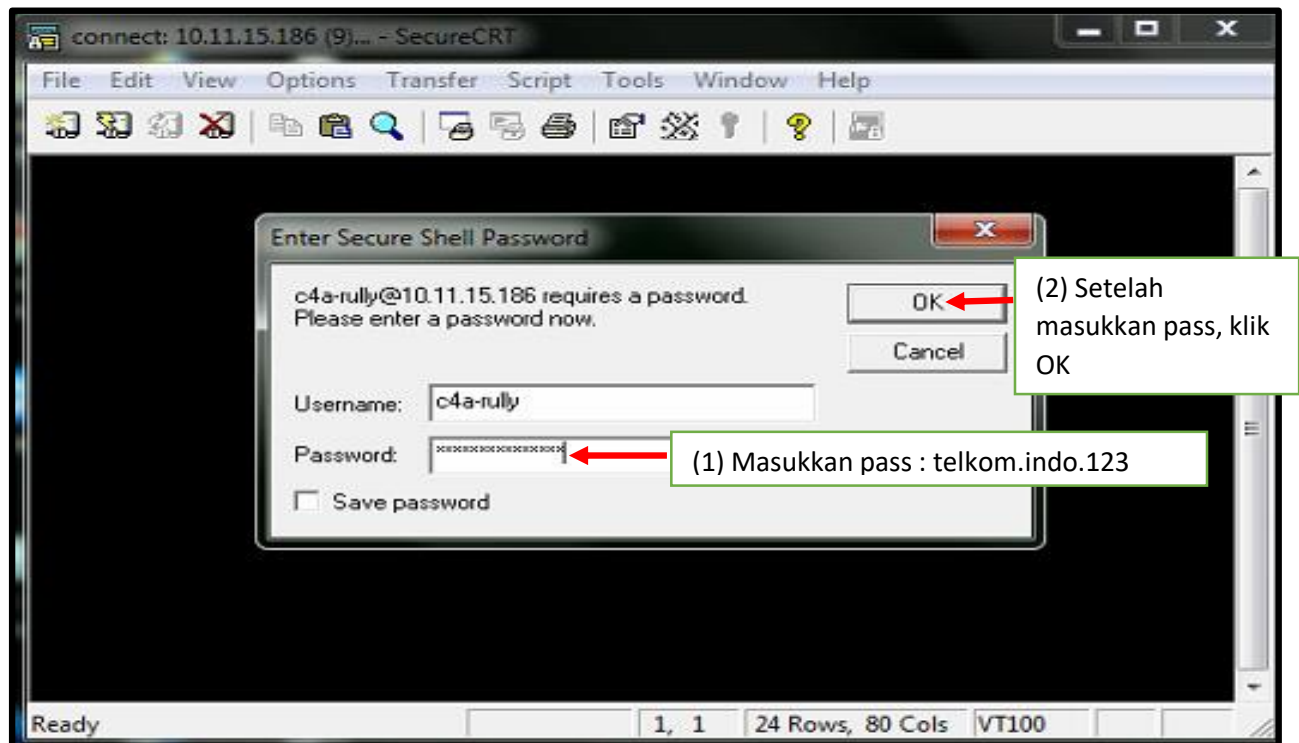
Hostname : 10.11.15.186

Port : 22

Username : c4a-rully

Setelah settingan selesai, klik “Connect”

Tahap 3 :



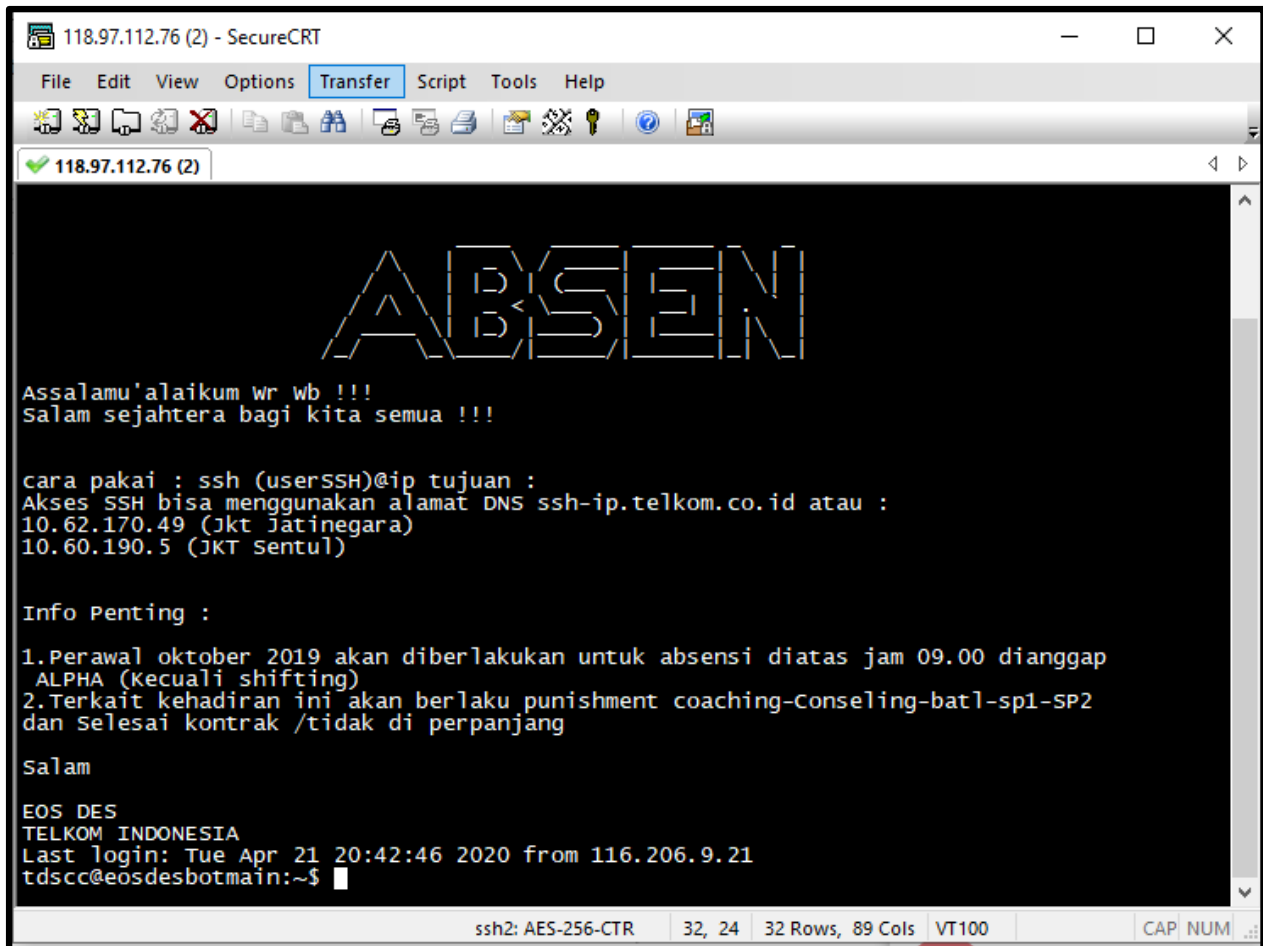
- Apabila berada diluar kantor dan mengaksesnya menggunakan wifi, settingannya sama seperti Tahap 1 dan Tahap 2 namun untuk penginputannya sebagai berikut :

Hostname : 118.97.112.76

Username : tdscc

Port : 10022

Pass : t3lk0m135



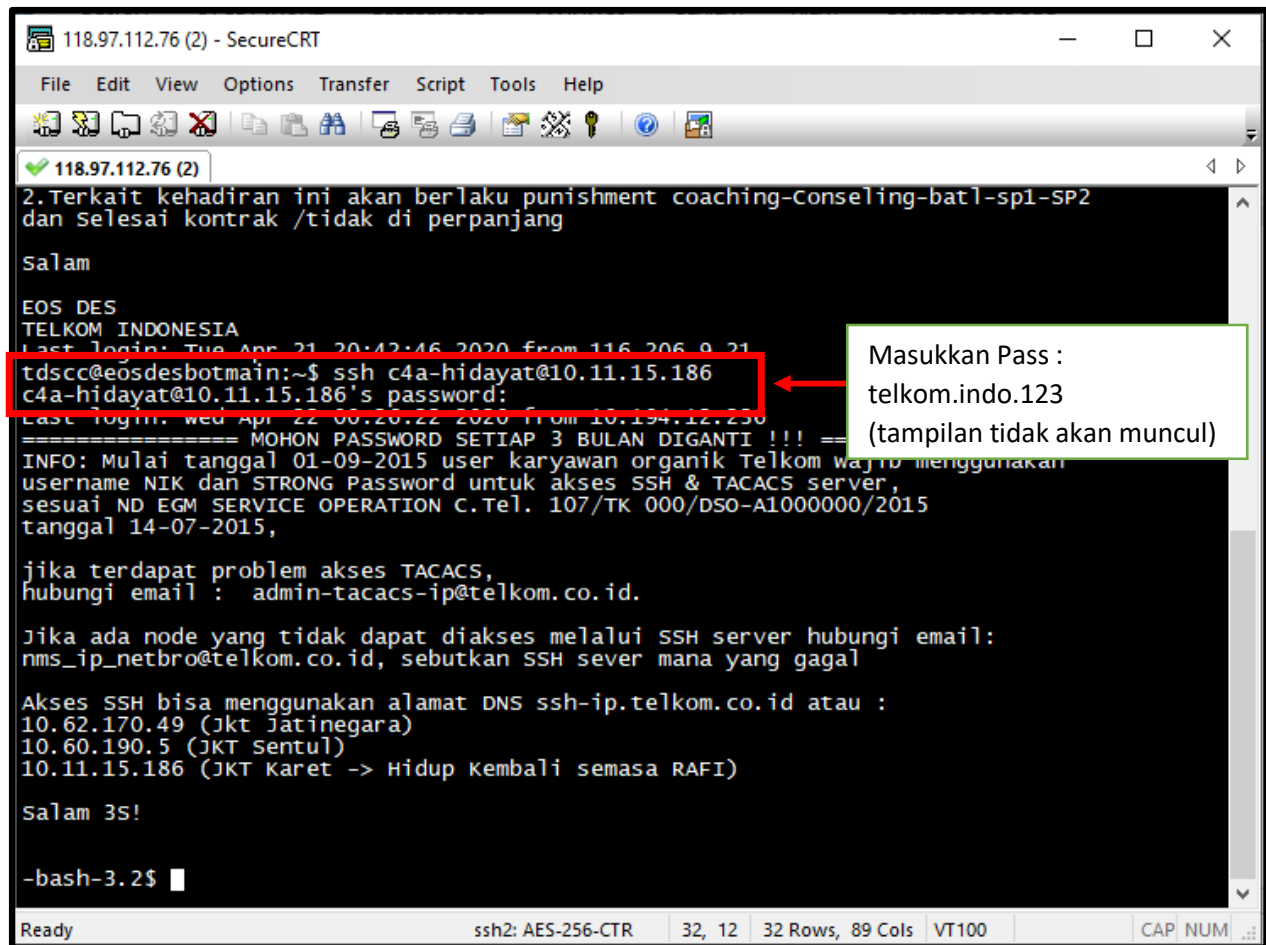
```
118.97.112.76 (2) - SecureCRT
File Edit View Options Transfer Script Tools Help
118.97.112.76 (2)
ABSEN
Assalamu'alaikum wr wb !!!
Salam sejahtera bagi kita semua !!!

cara pakai : ssh (userSSH)@ip tujuan :
Akses SSH bisa menggunakan alamat DNS ssh-ip.telkom.co.id atau :
10.62.170.49 (Jkt Jatinegara)
10.60.190.5 (JKT Sentul)

Info Penting :
1.Perawal oktober 2019 akan diberlakukan untuk absensi diatas jam 09.00 dianggap ALPHA (Kecuali shifting)
2.Terkait kehadiran ini akan berlaku punishment coaching-Conseling-bat1-sp1-SP2 dan Selesai kontrak /tidak di perpanjang

Salam

EOS DES
TELKOM INDONESIA
Last login: Tue Apr 21 20:42:46 2020 from 116.206.9.21
tdscc@eosdesbotmain:~$
```

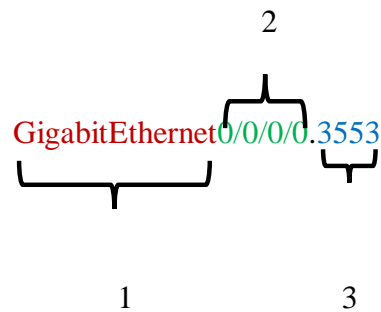


```
118.97.112.76 (2) - SecureCRT
File Edit View Options Transfer Script Tools Help
118.97.112.76 (2)
2.Terkait kehadiran ini akan berlaku punishment coaching-Conseling-batl-sp1-SP2
dan Selesai kontrak /tidak di perpanjang
Salam
EOS DES
TELKOM INDONESIA
Last login: Tue Apr 21 20:42:46 2020 from 116.206.9.21
tdsc@eosdesbotmain:~$ ssh c4a-hidayat@10.11.15.186
c4a-hidayat@10.11.15.186's password:
Last login: wed Apr 22 00:28:22 2020 from 10.194.12.230
===== MOHON PASSWORD SETIAP 3 BULAN DIGANTI !!! =====
INFO: Mulai tanggal 01-09-2015 user karyawan organik Telkom wajib menggunakan
username NIK dan STRONG Password untuk akses SSH & TACACS server,
sesuai ND EGM SERVICE OPERATION C.Tel. 107/TK 000/DSO-A1000000/2015
tanggal 14-07-2015,
jika terdapat problem akses TACACS,
hubungi email : admin-tacacs-ip@telkom.co.id.
jika ada node yang tidak dapat diakses melalui SSH server hubungi email:
nms_ip_netbro@telkom.co.id, sebutkan SSH sever mana yang gagal
Akses SSH bisa menggunakan alamat DNS ssh-ip.telkom.co.id atau :
10.62.170.49 (Jkt Jatinegara)
10.60.190.5 (JKT Sentul)
10.11.15.186 (JKT Karet -> Hidup Kembali semasa RAFI)
Salam 3S!
-bash-3.2$
```

Masukkan Pass :
telkom.indo.123
(tampilan tidak akan muncul)

Ready ssh2: AES-256-CTR 32, 12 32 Rows, 89 Cols VT100 CAP NUM

Struktur Interface :



Struktur interface terbagi jadi 3:

- Jenis interface
- Port interface
- Vlan

Command show interface digunakan untuk melihat detail konfigurasi yang ditanam pada interface tertentu ada beberapa informasi yang didapat seperti BW, description, status interface UP atau Down dengan command sebagai berikut :

:

VPN IP Berdasarkan SID

PE-D1-PBR-VPN

- ➔ PE Provider Edge (Router)
- ➔ D1 Regional
- ➔ PBR Pekanbaru (area site PE)
- ➔ VPN Jenis layanan

Mencari Interface Berdasarkan SID **PE VPN dan PE Non VPN**

Ex :

```
-bash-3.2$ telnet PE-D1-PBR-VPN
```

```
Trying 118.98.8.199...
```

```
Connected to pe-d1-pbr-vpn (118.98.8.199).
```

```
Escape character is '^]'.
```

```
username: des-eos-andhi
```

```
password:
```

Type: PE-VPN ROUTER

Site: Pekanbaru Centrum

Menunjukkan area site PE berada

Node: PE-D1-PBR-VPN

PE-D1-PBR-VPN#**show interface description | i 4702972-41975** (Masukkan SID nya)

Wed Apr 22 03:20:06.047 GMT

Gi0/0/0/0.811 up up VPNIP MUSIM MAS HANG TUAH PKB CID.1642811 SID

4702972-41975 (Pastikan status interfacenya Up)

Note :

Up Up → Status interface aktif

Down Down → Status interface tidak aktif, ada kemungkinan Suspend (Isolir), pindah PE, atau sudah cabut layanan

PE-D1-PBR-VPN#**show interface Gi0/0/0/0.811** (Berfungsi memunculkan deskripsi, IP dan bandwidth)

Wed Apr 22 03:21:43.640 GMT

GigabitEthernet0/0/0/0.811 is up, line protocol is up

Interface state transitions: 1

Hardware is VLAN sub-interface(s), address is 08ec.f575.f9c8

Description: VPNIP MUSIM MAS HANG TUAH PKB CID.1642811 SID 4702972-41975

Internet address is 172.17.246.9/30 ← IP Gateway (IP PE) / Untuk mengetahui

Berapa jumlah IP yang didapat

MTU 9216 bytes, BW 1024 Kbit (Max: 1000000 Kbit) ← Bandwidth

reliability 255/255, txload 0/255, rxload 0/255

Encapsulation 802.1Q Virtual LAN, VLAN Id 811, loopback no

Mencari VRF di PE VPN

PE-D1-PBR-VPN#**show ipv4 vrf all interface brief | i 0/0/0/0.811** ← Interface tanpa Gi

Thu Apr 23 12:56:34.426 GMT

GigabitEthernet0/0/0/0.811 172.17.246.9 Up Up Musim_Mas ← nama VRF

VRF (Virtual Routing Forwarding) berfungsi untuk mengelompokkan IP customer sehingga bila terdapat penggunaan IP yang sama antara customer satu dengan yang lain, IP tetap dapat digunakan dengan catatan penggunaan vrfnya berbeda.

Cek Trafik di PE Non VPN

PE-D7-TNT #**sh policy-map int GigabitEthernet0/2.3531 | i rate**

Service-policy input: rate_limit_8M ← BW yang dipasang

30 second offered rate 1000 bps, drop rate 0000 bps ← Pemakaian

Service-policy output: rate_limit_8M ← BW yang dipasang

30 second offered rate 2000 bps, drop rate 0000 bps ← Pemakaian

Trunking ke Metro Alcatel dari PE VPN dan PE Non VPN

Note : Yang menggunakan metro Alcatel yaitu Regional 1, 2, 3, dan 6

PE-D1-PBR-VPN#**show interface Gi0/0/0/0** ← Interface tanpa vlan

Thu Apr 23 13:31:50.405 GMT

GigabitEthernet0/0/0/0 is up, line protocol is up

Interface state transitions: 1

Hardware is GigabitEthernet, address is 08ec.f575.f9c8 (bia 08ec.f575.f9c8)

Description: TRUNK_PE-D1-PBR-VPN/Gi0/0/0/0_TO_ME3-D1-PBRC/6/1/6_No1_1G_
MAIN_AREA_RIDAR#1

PE-D1-PBR-VPN#**exit**

Connection closed by foreign host.

-bash-3.2\$ **telnet ME3-D1-PBRC**

Login: **des-eos-andhi**

Password:

METRO ALCATEL

P2P ← Epipe, type port Spok

P2MP ← VPLS, type port Mesh

A:ME3-D1-PBRC# **show service sap-using | match 6/1/6:811** ← 6/1/6 port metro yang didapat di PE, 811 vlan PE

6/1/6:811 201170811 1 none 1 none Up Up ← VCID

A:ME3-D1-PBRC# **show service id 201170811 base**

Service Basic Information

Service Id : 201170811 Vpn Id : 0
Service Type : Epipe ← Tipe koneksi P2P, untuk P2MP kodenya VPLS
Name : (Not Specified)
Description : VPNIP MUSIM MAS HANG TUAH PKB CID.1642811 SID 4702972-41975 (Pastikan deskripsinya sesuai dengan yang di PE)
Customer Id : 201170811 Creation Origin : manual
Last Status Change : 11/15/2019 00:01:46
Last Mgmt Change : 05/07/2019 01:11:29
Test Service : No
Admin State : Up Oper State : Up
MTU : 1514
Vc Switching : False
SAP Count : 1 SDP Bind Count : 1
Per Svc Hashing : Disabled
Vxlan Src Tep Ip : N/A
Force QTag Fwd : Disabled

Service Access & Destination Points

Identifier	Type	AdmMTU	OprMTU	Adm	Opr
sap:6/1/6:811	q-tag	9212	9212	Up	Up
sdp:222:201170811 S(172.30.1.222)	Spok	0	9190	Up	Up

Note :

Pastikan status SAP (Service Access Point) dan SDP (Service Destination Point) UP

Admin dan Operstate menunjukkan status link metro ada beberapa kondisi admin dan operstate yang biasa ditemui seperti :

* Admin UP Operstate Down pada sap status ini mengindikasikan terdapat gangguan di metro A.

* Admin UP Operstate Down pada sdp status ini mengindikasikan terdapat gangguan dari node metro lawan.

* Admin Down Operstate Down status ini mengindikasikan bahwa link tersebut sudah dimatikan atau sudah tidak dipakai bisa dikarenakan kontrak yang tidak diperpanjang atau Suspend (Isolir)

- Kemudian telnet ke metro lawan (IP SDP) untuk mengetahui perangkat lastmile customer

A:ME3-D1-PBRC# **telnet 172.30.1.222**

Trying 172.30.1.222 ...

HOSTNAME : ME2-D1-PBRC - ARNET RIDAR - PEKANBARU CENTRUM 02

INST. DATE: OCT 20, 2010

PIC 1 : Yudi Kurniawan/850035

PHONE : 0811-761-485

PIC 2 : Binsar Manalu/860020

PHONE : 0812-7580-0331

Login: **des-eos-andhi**

Password:

B:ME2-D1-PBRC# **show service id 201170811 base** ← **Ulang kembali syntax yang di metro pertama**

Service Basic Information

```

=====
Service Id       : 201170811      Vpn Id       : 0
Service Type    : Epipe
Name            : (Not Specified)
Description     : VPNIP MUSIM MAS HANG TUAH PKB CID.1642811 SID 4702972-41975
Customer Id     : 201170811      Creation Origin : manual
Last Status Change : 05/07/2019 01:16:27
Last Mgmt Change  : 12/14/2018 20:16:37
Admin State     : Up             Oper State    : Up
MTU             : 1514
Vc Switching    : False
SAP Count       : 1             SDP Bind Count : 1
Per Svc Hashing  : Disabled
Force QTag Fwd   : Disabled
=====

```

Service Access & Destination Points

Identifier	Type	AdmMTU	OprMTU	Adm	Opr
sap:lag-8:811	q-tag	9212	9212	Up	Up
sdp:232:201170811 S(172.30.1.232)	Spok	0	9190	Up	Up

B:ME2-D1-PBRC# **show lag 8 detail**

=====

LAG Details

=====

Description : AKSES_ME2-D1-PBRC/LAG-8_TO_GPON07-D1-PBB-2_(172.26.192.142)

Note :

Jika SAP nya berupa port, ex : 3/5/6:811

Syntaxnya sebagai berikut :

B:ME2-D1-PBRC# **show port 3/5/6**

=====

LAG Details

=====

Description : AKSES_ME2-D1-PBRC/LAG-8_TO_GPON07-D1-PBB-2_(172.26.192.142)

Berdasarkan dari hasil trunking diatas dapat disimpulkan topologi yang di gunakan Customer Musim Mas sebagai berikut :

PE-D1-PBR-VPN → ME3-D1-PBRC → ME2-D1-PBRC → GPON07-D1-PBB-2

Cek BW Pada Layanan Metro

A:ME-D1-ULKA# show service sap-using | match 1921302773

lag-8:2773 1921302773 12001 none 12001 none Up Up

Note :

Melihat 2 digit kode di awal :

11 >> Kbps

12 >> Mbps

13 >> Gbps

Trunking ke Metro Huawei

Note : Yang menggunakan metro Huawei yaitu Regional 4, 5, dan 7

PE-D4-GBL-VPN#**show interface Gi0/0/0/0**

Thu Apr 23 21:53:31.919 GMT

interface GigabitEthernet0/0/0/0

description TRUNK_PE-D4-GBL-VPN_GI0/0/0/0_TO_ME-D4-GBL_GI12/0/13_FOR_SERVICE

PE-D4-GBL-VPN#**exit**

Connection closed by foreign host.

-bash-3.2\$ **ssh des-eos-andhi@ME-D4-GBL**

The authenticity of host 'me-d4-gbl (172.31.63.1)' can't be established.

RSA key fingerprint is 76:59:2f:a2:52:66:1c:a9:8e:5e:53:7c:bc:0f:8a:ee.

Are you sure you want to continue connecting (yes/no)? **yes**

Warning: Permanently added 'me-d4-gbl,172.31.63.1' (RSA) to the list of known hosts.

NODE NAME : ME-D4-GBL (TIER-2)

TYPE : CX600-X16

LOCATION : STO GOMBEL

WITEL : SEMARANG

STATUS : RUNNING

User Authentication

Password:

METRO HUAWEI P2P

P2P ← mpls l2vc

P2MP ← vsi

<ME-D4-GBL>**display interface Gi12/0/13.174** ← Untuk melihat status interfacenya Up / Down

GigabitEthernet12/0/13.174 current state : **UP**

Line protocol current state : **UP**

Link quality grade : GOOD

Description:GBL-PEGBL-BMK-BTN-UNDIP

Route Port,The Maximum Transmit Unit is 1986

Internet protocol processing : disabled

Encapsulation dot1q Virtual LAN, Current used VID is 174

L2VPN connection of the main PW is up

L2VPN connection of the second PW is down

Current system time: 2020-04-23 22:16:00+07:00

<ME-D4-GBL>**display current-configuration interface Gi12/0/13.174**

#

interface GigabitEthernet12/0/13.174

vlan-type dot1q 174

description GBL-PEGBL-BMK-BTN-UNDIP

mtu 1986

mpls l2vc 172.31.63.5 411400174 ← Tipe koneksi P2P

trust upstream default

trust 8021p

qos-profile 128K inbound identifier none

qos-profile 128K outbound identifier none

statistic enable

#

return

<ME-D4-GBL>**display mpls l2vc 411400174**

Total LDP VC : 1 1 up 0 down

*client interface : GigabitEthernet12/0/13.174 is up
Administrator PW : no
session state : up
AC status : up
VC state : up
Label state : 0
Token state : 0
VC ID : 411400174 ← VCID
VC type : VLAN
destination : 172.31.63.5 ← IP Metro lawan
local VC label : 72739 remote VC label : 38512
control word : disable
remote control word : disable
forwarding entry : exist
local group ID : 0
remote group ID : 0
local AC OAM State : up
local PSN OAM State : up
local forwarding state : forwarding
local status code : 0x0
remote AC OAM state : up
remote PSN OAM state : up
remote forwarding state : forwarding
remote status code : 0x0

<ME-D4-GBL>**quit**

Info: The max number of VTY users is 20, and the number

of current VTY users on line is 0.Connection to ME-D4-GBL closed.

-bash-3.2\$ **ssh des-eos-andhi@172.31.63.5** ← IP Metro lawan

The authenticity of host '172.31.63.5 (172.31.63.5)' can't be established.

RSA key fingerprint is 37:d8:6c:85:3f:48:4e:78:18:16:d6:e5:35:99:90:de.

Are you sure you want to continue connecting (yes/no)? **yes**

Warning: Permanently added '172.31.63.5' (RSA) to the list of known hosts.

NODE NAME : ME-D4-MPH (TIER-2)
TYPE : CX600-X8
LOCATION : STO MAJAPAHIT
WITEL : SEMARANG
STATUS : RUNNING

User Authentication

Password:

<ME-D4-MPH> **display mpls l2vc 411400174** ← **Ulang kembali syntax yang di metro pertama**

Total LDP VC : 1 1 up 0 down

*client interface : **GigabitEthernet3/0/2.174** is up ← **Interface ke lastmile**

Administrator PW : no

session state : up

AC status : up

VC state : up

Label state : 0

Token state : 0

VC ID : 411400174

VC type : VLAN

destination : 172.31.63.1

local VC label : 38512 remote VC label : 72739

control word : disable

remote control word : disable

forwarding entry : exist

local group ID : 0

remote group ID : 0

local AC OAM State : up

local PSN OAM State : up

local forwarding state : forwarding

local status code : 0x0

remote AC OAM state : up

remote PSN OAM state : up
remote forwarding state : forwarding
remote status code : 0x0
ignore standby state : no
BFD for PW : unavailable
VCCV State : up
manual fault : not set
active state : active

<ME-D4-MPH>**display current-configuration interface GigabitEthernet3/0/2** ← Interface tanpa
vlan

#

interface GigabitEthernet3/0/2

description "AKSES_ME-D4-MPH/Gi3/0/2_TO_GPON04-D4-MPH_2(172.27.29.6)"

undo shutdown

undo dcn

#

Return

=====

METRO HUAWEI P2MP

=====

PE-D7-AB1-VPN#**sh int GigabitEthernet0/0/1/0**

Fri Apr 24 02:03:33.311 GMT

GigabitEthernet0/0/1/0 is up, line protocol is up

Interface state transitions: 1

Hardware is GigabitEthernet, address is a80c.0d4e.d5b0 (bia a80c.0d4e.d5b0)

Description: TRUNK_PE-D7-AB1-VPN_Gi0/0/1/0_To_ME2-D7-AMB_Gi3/1/11

_No1_1G_RESERVED_FOR_MIGRATION

Internet address is Unknown

MTU 1514 bytes, BW 1000000 Kbit (Max: 1000000 Kbit)

reliability 255/255, txload 19/255, rxload 18/255

Encapsulation ARPA,

PE-D7-AB1-VPN#**exit**

Connection closed by foreign host.

```
-bash-3.2$ ssh des-eos-andhi@ME2-D7-AMB
```

The authenticity of host 'me2-d7-amb (172.31.242.194)' can't be established.

RSA key fingerprint is 92:c8:f5:c0:70:83:dd:6f:93:19:28:0d:f5:b0:e8:f0.

Are you sure you want to continue connecting (yes/no)? **yes**

Warning: Permanently added 'me2-d7-amb,172.31.242.194' (RSA) to the list of known hosts.

seUser Authentication

Enter password:

```
<ME2-D7-AMB> display current-configuration interface Gi3/1/11.2071
```

```
#
```

```
interface GigabitEthernet3/1/11.2071
```

```
  vlan-type dot1q 2071
```

```
  mtu 1986
```

```
  description VPNIP BANK MEGA JL. KAPITAN ULUPAHA CID 76332071 SID 4700397-25801
```

```
  statistic enable
```

```
  trust upstream default
```

```
  l2 binding vsi Bank_Mega_1419_2071 ← VSI untuk tipe koneksi P2MP
```

```
  trust 8021p
```

```
#
```

Return

```
<ME2-D7-AMB> display vsi name Bank_Mega_1419_2071 verbose
```

```
***VSI Name                : Bank_Mega_1419_2071
```

```
  Work Mode                  : normal
```

```
  Administrator VSI         : no
```

```
  Isolate Spoken             : disable
```

```
  VSI Index                  : 1262
```

```
  PW Signaling               : ldp
```

```
  Member Discovery Style     : static
```

```
  Bridge-domain Mode        : disable
```

```
  PW MAC Learn Style        : unqualify
```

```
  Encapsulation Type        : vlan
```

```
  MTU                        : 1986
```

```
  Diffserv Mode              : uniform
```

```
  Service Class              : --
```

```
  Color                      : --
```

DomainId	:	255	
Domain Name	:		
Ignore AcState	:	disable	
P2P VSI	:	disable	
Multicast Fast Switch	:	disable	
Create Time	:	282 days, 9 hours, 52 minutes, 46 seconds	
VSI State	:	up	
Resource Status	:	--	
VSI ID	:	1968852071	← VCID
*Peer Router ID	:	172.31.242.192	← IP Metro lawan
Negotiation-vc-id	:	1968852071	
Encapsulation Type	:	vlan	
primary or secondary	:	primary	
ignore-standby-state	:	no	
VC Label	:	58184	
Peer Type	:	dynamic	
Session	:	up	
Tunnel ID	:	0x0000000001004c6771	
Broadcast Tunnel ID	:	--	
Broad BackupTunnel ID	:	--	
CKey	:	1902	
NKey	:	16777696	
Stp Enable	:	0	
PwIndex	:	1902	
Control Word	:	disable	
BFD for PW	:	unavailable	
Interface Name	:	GigabitEthernet3/1/11.2071	
State	:	up	
Ac Block State	:	unblocked	
Access Port	:	false	
Last Up Time	:	2019/09/06 02:38:00	
Total Up Time	:	282 days, 2 hours, 49 minutes, 51 seconds	

<ME2-D7-AMB>**quit**

Info: The max number of VTY users is 15, and the number of current VTY users on line is 0. Connection to ME2-D7-AMB closed.

-bash-3.2\$ **ssh des-eos-andhi@172.31.242.192**

The authenticity of host '172.31.242.192 (172.31.242.192)' can't be established.

RSA key fingerprint is cb:0b:6c:bf:98:56:4f:83:c6:73:a6:73:97:28:61:53.

Are you sure you want to continue connecting (yes/no)? **yes**

Warning: Permanently added '172.31.242.192' (RSA) to the list of known hosts.

User Authentication

Password:

Info: The max number of VTY users is 20, and the number of current VTY users on line is 1.

The current login time is 2020-04-24 02:08:28+09:00.

Info: First time access. Failed: 0

<ME-D7-AMB>**display vsi name Bank_Mega_1419_2071 verbose** ←

Diulang menggunakan

syntax di metro pertama

```
***VSI Name           : Bank_Mega_1419_2071
Administrator VSI      : no
Isolate Spoken         : disable
VSI Index              : 394
PW Signaling           : ldp
Member Discovery Style  : static
PW MAC Learn Style     : unqualify
Encapsulation Type     : vlan
MTU                    : 1986
Diffserv Mode          : uniform
Service Class          : --
Color                  : --
DomainId               : 255
Domain Name            :
Ignore AcState         : disable
P2P VSI                : disable
```


Multicast Fast Swith : disable
Create Time : 443 days, 9 hours, 29 minutes, 26 seconds
VSI State : up
Resource Status : Valid

VSI ID : 1968852071
*Peer Router ID : 172.31.242.194
primary or secondary : primary
ignore-standby-state : no
VC Label : 37024
Peer Type : dynamic
Session : up
Tunnel ID : 0x400092ce
Broadcast Tunnel ID : 0x400092ce
Broad BackupTunnel ID : 0x0
CKey : 2928
NKey : 2554
Stp Enable : 0
PwIndex : 0
Control Word : disable

Interface Name : **Eth-Trunk7.2071** ← **Interface baru mengarah ke lastmile**
State : up
Access Port : false
Last Up Time : 2019/09/17 00:10:33
Total Up Time : 443 days, 9 hours, 16 minutes, 16 seconds

****PW Information:**

*Peer Ip Address : 172.31.242.194
PW State : up
Local VC Label : 37024
Remote VC Label : 58184
Remote Control Word : disable

PW Type : label
 Tunnel ID : 0x400092ce
 Broadcast Tunnel ID : 0x400092ce
 Broad BackupTunnel ID : 0x0
 Ckey : 0xb70
 Nkey : 0x9fa
 Main PW Token : 0x400092ce
 Slave PW Token : 0x0
 Tnl Type : LSP
 OutInterface : Eth-Trunk15
 Backup OutInterface :
 Stp Enable : 0
 Mac Flapping : 0
 PW Last Up Time : 2019/09/06 02:38:00
 PW Total Up Time : 282 days, 2 hours, 46 minutes, 51 seconds

<ME-D7-AMB>**display current-configuration interface Eth-Trunk7** ← Interface tanpa vlan

#

interface Eth-Trunk7

description KSES_ME-D7-AMB_ETH-TRUNK7_TO_GPON03-D7-ABO-
3_xgei_1/10/1_2x10G_172.25.208.155

#

return

Cek BW Pada Layanan Metro

<ME-D4-GBL>**display current-configuration interface Gi12/0/13.174**

#

interface GigabitEthernet12/0/13.174

vlan-type dot1q 174

description GBL-PEGBL-BMK-BTN-UNDIP

mtu 1986

mpls l2vc 172.31.63.5 411400174

trust upstream default

trust 8021p

qos-profile 128K inbound identifier none ←

BW

qos-profile 128K outbound identifier none ←

BW

statistic enable

return

VPN IP Berdasarkan IP

#Berdasarkan IP Wan, dipastikan mengetahui juga nama perusahaannya, ex :

Nama Perusahaan : Ajiomoto

IP Wan : 10.254.14.97

Jika cust melaporkan berdasarkan IP, kita harus melakukan routing bisa dari PE sembarang yang nantinya akan diarahkan oleh IP nexthop masuk ke PE aslinya.

```
-bash-3.2$ telnet pe-d3-lbg-vpn
```

```
Trying 118.98.8.210...
```

```
Connected to pe-d3-lbg-vpn (118.98.8.210).
```

```
Escape character is '^]'.
```

```
username: des-eos-andhi
```

```
password:
```

```
      Type: PE-VPN ROUTER
```

```
      Site: Lembong
```

```
      Node: PE-D3-LBG-VPN
```

Last switch-over Sat Sep 22 03:56:24 2018: 1 year, 30 weeks, 5 days, 9 hours, 55 minutes ago

PE-D3-LBG-VPN#show interfaces description | i AJINOMOTO ← Menggunakan huruf besar

Fri Apr 24 13:52:03.557 GMT

```
Gi0/7/0/0.3210  admin-down admin-down 4700216-0029268982 VPNIP AJINOMOTO CALPIS  
BEVERAGE INDONESIA Jl Balandongan RT 001 RW 003 Kel Sudajaya Hilir,00,Kec Baros Kabupaten  
Sukabumi Jawa Barat  
Gi0/7/0/10.3221  admin-down admin-down 4700216-0027083797 VPNIP AJINOMOTO U/ TOYOTA  
PDC RANCAEKEK Jl Rancaekek Km 23,5,KM 23,5,Bandung Jawa Barat [DO 1-3268792127*]  
Gi0/7/0/17.3771  admin-down admin-down SID 4700216-0029673569 VPNIP AJINOMOTO CALPIS  
BEVERAGE INDONESIA Jl Let Jend H Mashudi Babakan Tengah Tasikmalaya
```

Ambil salah satu interface sembarang untuk mencari VRF nya (dipastikan nama perusahaannya sama dengan yang dicari)

PE-D3-LBG-VPN#**show ipv4 vrf all interface brief | i 0/7/0/0.3210**

Fri Apr 24 13:55:12.959 GMT

GigabitEthernet0/7/0/0.3210 10.254.14.57 Shutdown Down NTT_Indonesia ← VRF

PE-D3-LBG-VPN#**show ip route vrf NTT_Indonesia 10.254.14.97** ← masukan IP yang diinfokan customer

Fri Apr 24 13:56:17.338 GMT

Routing entry for 10.254.14.96/30

Known via "bgp 17974", distance 200, metric 0, type internal

Installed Mar 3 12:46:58.678 for 7w3d

Routing Descriptor Blocks

118.98.8.200, from 118.98.9.62 ← IP Netxhop untuk masuk ke PE tujuan (PE aslinya)

Nexthop in Vrf: "default", Table: "default", IPv4 Unicast, Table Id: 0xe0000000

Route metric is 0

No advertising protos.

Note :

silahkan di perhatikan dibagian **routing entry for** (jika ip yg muncul 10.0.0.0 & 0.0.0.0 jangan dilanjutkan)

RP/0/RSP0/CPU0:PE-D3-LBG-VPN#**telnet 118.98.8.200** ← telnet IP nexthop

Trying 118.98.8.200...

Connected to 118.98.8.200.

Escape sequence is '^q'.

This router is the property of PT.TELKOM INDONESIA.

All actions are monitored.

Unauthorized access is prohibited.

Violators will be prosecuted.

For operational problems contact:

PT.TELKOM Network Operations Centre

e-mail: fh-ipdn@telkom.co.id

phone : 0811-929343

username: **des-eos-andhi**

password:

Type: PE-VPN ROUTER

Site: Palembang Talangkelapa

Node: **PE-D1-TLK-VPN** ← **Masuk ke Pe Tujuan (Pe Asli)**

Last switch-over Thu Sep 20 02:56:33 2018: 1 year, 31 weeks, 11 hours, ago

RP/0/RSP0/CPU0:PE-D1-TLK-VPN#**show ip route vrf NTT_Indonesia 10.254.14.97** ← **Ulang**

kembali syntax yang dari PE sembarang

Fri Apr 24 13:56:58.450 GMT

Routing entry for 10.254.14.97/32

Known via "local", distance 0, metric 0 (connected)

Installed Dec 10 02:29:51.977 for 19w3d

Routing Descriptor Blocks

directly connected, via **GigabitEthernet0/7/0/12.3750** ← **Akan muncul interface yg kita cari dari hasil routing menggunakan IP yg diinfokan oleh customer**

Route metric is 0

No advertising protos.

RP/0/RSP0/CPU0:PE-D1-TLK-VPN#**show interface GigabitEthernet0/7/0/12.3750**

Fri Apr 24 13:58:11.043 GMT

GigabitEthernet0/7/0/12.3750 is up, line protocol is up

Interface state transitions: 7

Hardware is VLAN sub-interface(s), address is 8478.ac7f.ebec

Description: **4700216-0029323656 VPNIP AJINOMOTO CALPIS BEVERAGE INDONESIA Jl Sei Kerjan RT 06 RW 02 Kel Sei Kerjan Kec Bungo Dani, No 35, Kab Bungo Prop Jambi**

Internet address is **10.254.14.97/30** ← **Pastikan IP sesuai dengan yang dicari**

MTU 9216 bytes, BW 512 Kbit (Max: 1000000 Kbit)

reliability 253/255, txload 0/255, rxload 0/255

Encapsulation 802.1Q Virtual LAN, VLAN Id 3750, loopback not set

- Setelah itu lakukan pengecekan selanjutnya, cek ARP, Ping IP CE kemudian trunking ke metro sampai pengecekan lastmilanya (bisa dilihat dihalaman 9).

Cara Mengetahui Jenis Routing Yang Digunakan

PE-D7-JAP-VPN#**show ip route vrf PolRI | i 0/0/1/0.3245**

Fri Apr 24 23:09:36.462 GMT

S 10.14.126.0/24 [1/0] via 10.253.14.126, 42w2d, GigabitEthernet0/0/1/0.3245

C 10.253.14.124/30 is directly connected, 42w2d, GigabitEthernet0/0/1/0.3245

L 10.253.14.125/32 is directly connected, 42w2d, GigabitEthernet0/0/1/0.3245

Note :

S → Statik

O → Ospf (Dynamic)

B → Bgp (Dynamic)

ASTINET PE-INET

- Jika berdasarkan SID untuk syntaxnya sama seperti layanan VPN IP
- Pada dasarnya VRF untuk layanan Astinet tidak terlalu banyak seperti VPN hanya terdiri dari 4 vrf yaitu Astinet, Astinet-Conn, Astinet_Global (BB), Astinet_Domestik (BB),
Namun untuk routing menggunakan VRF utama yaitu Astinet dan Astinet-Conn.

#Jika berdasarkan IP, ex :

IP Publik : 36.67.25.185

Nama Perusahaan : Aneka Tambang

#Masuk ke PE sembarang

-bash-3.2\$ **telnet PE2-D2-CKA-INET**

Trying 118.98.9.21...

Connected to PE2-D2-CKA-INET (118.98.9.21).

Escape character is '^['.

For operational problems contact:

PT.TELKOM Network Operations Centre

e-mail: fh-ipdn@telkom.co.id

phone : 0811-929343

username: **des-eos-andhi**

password:

Type: PE-VPN ROUTER

Site: Cikupa

Node: PE2-D2-CKA-INET

RP/0/RSP1/CPU0:PE2-D2-CKA-INET#**show ip route vrf Astinet-Conn 36.67.25.185**

Sat Apr 25 15:49:59.783 GMT

Routing entry for 36.67.25.184/29

Known via "bgp 17974", distance 200, metric 0, type internal

Installed Apr 22 15:26:55.044 for 3d00h

Routing Descriptor Blocks

61.5.13.36, from 118.98.9.62

Nexthop in Vrf: "default", Table: "default", IPv4 Unicast, Table Id: 0xe0000000

Route metric is 0

No advertising protos.

RP/0/RSP1/CPU0:PE2-D2-CKA-INET#**telnet 61.5.13.36**

Trying 61.5.13.36...

Connected to 61.5.13.36.

Escape sequence is

username: **des-eos-andhi**

password:

WARNING	: None
NODE NAME	: PE-D7-TNT-INET
TYPE	: Cisco 7206VXR
LOCATION	: Ternate
PIC	: Arnet Ternate

PE-D7-TNT-INET#**show ip route vrf Astinet-Conn 36.67.25.185**

Routing Table: Astinet-Conn

Routing entry for 36.67.25.185/32

Known via "connected", distance 0, metric 0 (connected)

Redistributing via bgp 17974

Routing Descriptor Blocks:

* directly connected, via **GigabitEthernet0/2.3531**

Route metric is 0, traffic share count is 1

PE-D7-TNT-INET#**show interface GigabitEthernet0/2.3531**

GigabitEthernet0/2.3531 is up, line protocol is up

Hardware is BCM1250 Internal MAC, address is 0012.7faf.191a (bia 0012.7faf.191a)

Description: SID 4700747-0029675799 ASTINET ANEKA TAMBANG Buli Maba Halmahera Maluku Utara [MO 1-3694353280]

Internet address is **36.67.25.185/29**

MTU 1632 bytes, **BW 8192 Kbit/sec**, DLY 10 usec,

reliability 255/255, txload 17/255, rxload 2/255

Encapsulation 802.1Q Virtual LAN, Vlan ID 3531.

ARP type: ARPA, ARP Timeout 04:00:00

Keepalive set (10 sec)

Last clearing of "show interface" counters never

PE-D7-TNT-INET#**sh arp vrf Astinet-Conn GigabitEthernet0/2.3531**

Protocol	Address	Age (min)	Hardware Addr	Type	Interface
Internet	36.67.25.185	-	0012.7faf.191a	ARPA	GigabitEthernet0/2.3531
Internet	36.67.25.187	1	b869.f4ad.ae51	ARPA	GigabitEthernet0/2.3531
Internet	36.67.25.186	0	Incomplete	ARPA	
Internet	36.67.25.188	0	Incomplete	ARPA	
Internet	36.67.25.189	0	Incomplete	ARPA	
Internet	36.67.25.190	0	Incomplete	ARPA	

PE-D7-TNT-INET#**ping vrf Astinet-Conn 36.67.25.187** ← Ping IP CE yang mac addressnya terdetek saja.

Type escape sequence to abort.

Sending 5, 100-byte ICMP Echos to 36.67.25.187, timeout is 2 seconds:

!!!!

Success rate is 100 percent (5/5), round-trip min/avg/max = 4/4/4 ms

PE-D7-TNT-INET#**ping vrf Astinet-Conn 36.67.25.187 r 500**

Type escape sequence to abort.

Sending 500, 100-byte ICMP Echos to 36.67.25.187, timeout is 2 seconds:

!!
!!
!!
!!
!!
!!
!!
!!
!!!!!!!!!!!!

Success rate is 100 percent (500/500), round-trip min/avg/max = 1/3/12 ms

PE-D7-TNT-INET#**ping vrf Astinet-Conn 36.67.25.187 r 500 si 1000**

Type escape sequence to abort.

Sending 500, 1000-byte ICMP Echos to 36.67.25.187, timeout is 2 seconds:

!!
!!
!!
!!
!!
!!
!!
!!!!!!!!!!!!

Success rate is 100 percent (500/500), round-trip min/avg/max = 1/3/8 ms

Cek Trafik DI PE

PE-D7-TNT-INET#**sh policy-map int GigabitEthernet0/2.3531 | i rate**

Service-policy input: rate_limit_8M ← BW yang dipasang
30 second offered rate 1000 bps, drop rate 0000 bps ← Pemakaian
Service-policy output: rate_limit_8M ← BW yang dipasang
30 second offered rate 2000 bps, drop rate 0000 bps ← Pemakaian

Trunking ke Metro

PE-D7-TNT-INET#**show interface GigabitEthernet0/2**

GigabitEthernet0/2 is up, line protocol is up

Hardware is BCM1250 Internal MAC, address is 0012.7faf.191a (bia 0012.7faf.191a)

Description: TRUNK_PE-D7-TNT-INET/Gi0/2_TO_ME-D7-TNT/Gi1/0/7_1G

MTU 1632 bytes, BW 1000000 Kbit/sec, DLY 10 usec,

reliability 255/255, txload 19/255, rxload 1/255

Encapsulation 802.1Q Virtual LAN, Vlan ID 1., loopback not set

Keepalive set (10 sec)

Full Duplex, 1000Mbps, link type is force-up, media type is LX

output flow-control is unsupported, input flow-control is XON

ARP type: ARPA, ARP Timeout 04:00:00

Last input 00:00:00, output 00:00:00, output hang never

Last clearing of "show interface" counters never

Input queue: 0/75/151695/25728 (size/max/drops/flushes); Total output drops: 386142528

Queueing strategy: fifo

Output queue: 0/40 (size/max)

- Setelah itu lakukan pengecekan selanjutnya, ssh des-eos-andhi@ME-D7-TNT, kemudian ikuti langkah di hal 15.

ASTINET PE-TRANSIT

#Berdasarkan SID

```
-bash-3.2$ ssh des-eos-andhi@PE3-D2-JT2-TRANSIT
```

The authenticity of host 'pe3-d2-jt2-transit (61.5.13.76)' can't be established.

RSA key fingerprint is 7e:c2:e7:ef:46:c2:51:79:5a:ad:4c:42:b3:a7:6f:43.

Are you sure you want to continue connecting (yes/no)? **yes**

Warning: Permanently added 'pe3-d2-jt2-transit,61.5.13.76' (RSA) to the list of known hosts.

```

NODE NAME      : PE3-D2-JT2-TRANSIT
TYPE           : NE9000
LOCATION        : STO JATINEGARA
STATUS         : NORMAL

```

User Authentication

Enter password:

<PE3-D2-JT2-TRANSIT>**display interface description | i 4700089-0031389092**

Info: It will take a long time if the content you search is too much or the string you input is too long, you can press CTRL_C to break.

PHY: Physical

*down: administratively down

^down: standby

(l): loopback

(s): spoofing

(E): E-Trunk down

(b): BFD down

(B): Bit-error-detection down

(e): ETHOAM down

(d): Dampening Suppressed

(p): port alarm down

(ld): loop-detect trigger down

Interface	PHY	Protocol Description
-----------	-----	----------------------

GE3/1/14.3710 up up 4700089-0031389092 MM_ASTINET LITE KIMIA FARMA Jln. Mangun Jaya, Kp.Rukem RPC 115 No. 94-95, Kab.Bekasi,-,Bekasi

<PE3-D2-JT2-TRANSIT> **display interface Gi3/1/14.3710** ← Interface GE diganti menjadi Gi

GigabitEthernet3/1/14.3710 current state : UP (ifindex: 13133)

Line protocol current state : UP

Last line protocol up time : 2019-10-18 11:54:16+07:00

Link quality grade : GOOD

Description: 4700089-0031389092 MM_ASTINET LITE KIMIA FARMA Jln. Mangun Jaya, Kp.Rukem
RPC 115 No. 94-95, Kab.Bekasi,-,Bekasi

Route Port, The Maximum Transmit Unit is 1500

Internet Address is 36.89.98.122/31

IP Sending Frames' Format is PKTFMT_ETHNT_2, Hardware address is 9c52-f8ec-0eda

Encapsulation dot1q Virtual LAN, The number of Vlan is 1, Vlan ID 3710

Current system time: 2020-04-25 19:27:53+07:00

<PE3-D2-JT2-TRANSIT> **display current-configuration int Gi3/1/14.3710** ← Untuk cek bandwidth

#

interface GigabitEthernet3/1/14.3710

vlan-type dot1q 3710

bandwidth 3

description 4700089-0031389092 MM_ASTINET LITE KIMIA FARMA Jln. Mangun Jaya, Kp.Rukem
RPC 115 No. 94-95, Kab.Bekasi,-,Bekasi

ip binding vpn-instance Astinet_Mix

ip address 36.89.98.122 255.255.255.254

statistic enable

arp-proxy enable

qos-profile 768K inbound identifier none

qos-profile 3M outbound identifier none

#

Return

<PE3-D2-JT2-TRANSIT> **display arp interface Gi3/1/14.3710**

ARP timeout:1200s

IP ADDRESS	MAC ADDRESS	EXPIRE(M)	TYPE	INTERFACE	VPN-INSTANCE
VLAN/CEVLAN PVC					

36.89.98.122	9c52-f8ec-0eda	I -		GE3/1/14.3710	Astinet_Mix
36.89.98.123	d818-d3a1-4800 9	D-3		GE3/1/14.3710	Astinet_Mix
3710/-					

Total:2 Dynamic:1 Static:0 Interface:1 Remote:0

Redirect:0

<PE3-D2-JT2-TRANSIT>ping -vpn Astinet_Mix 36.89.98.123 ← Ping biasa

PING 36.89.98.123: 56 data bytes, press CTRL_C to break

Reply from 36.89.98.123: bytes=56 Sequence=1 ttl=64 time=5 ms

Reply from 36.89.98.123: bytes=56 Sequence=2 ttl=64 time=2 ms

Reply from 36.89.98.123: bytes=56 Sequence=3 ttl=64 time=2 ms

Reply from 36.89.98.123: bytes=56 Sequence=4 ttl=64 time=2 ms

Reply from 36.89.98.123: bytes=56 Sequence=5 ttl=64 time=2 ms

--- 36.89.98.123 ping statistics ---

5 packet(s) transmitted

5 packet(s) received

0.00% packet loss

round-trip min/avg/max = 2/2/5 ms

<PE3-D2-JT2-TRANSIT>ping -c 10 -vpn Astinet_Mix 36.89.98.123 ← Ping dengan Count

PING 36.89.98.123: 56 data bytes, press CTRL_C to break

Reply from 36.89.98.123: bytes=56 Sequence=1 ttl=64 time=2 ms

Reply from 36.89.98.123: bytes=56 Sequence=2 ttl=64 time=4 ms

Reply from 36.89.98.123: bytes=56 Sequence=3 ttl=64 time=3 ms

Reply from 36.89.98.123: bytes=56 Sequence=4 ttl=64 time=3 ms

Reply from 36.89.98.123: bytes=56 Sequence=5 ttl=64 time=2 ms

Reply from 36.89.98.123: bytes=56 Sequence=6 ttl=64 time=2 ms

Reply from 36.89.98.123: bytes=56 Sequence=7 ttl=64 time=3 ms

Reply from 36.89.98.123: bytes=56 Sequence=8 ttl=64 time=2 ms

Reply from 36.89.98.123: bytes=56 Sequence=9 ttl=64 time=3 ms

Reply from 36.89.98.123: bytes=56 Sequence=10 ttl=64 time=3 ms

--- 36.89.98.123 ping statistics ---

10 packet(s) transmitted

10 packet(s) received

0.00% packet loss

round-trip min/avg/max = 2/2/4 ms

<PE3-D2-JT2-TRANSIT>**ping -c 10 -s 500 -vpn Astinet_Mix 36.89.98.123** ← **Ping dengan Count dan Size**

PING 36.89.98.123: 500 data bytes, press CTRL_C to break

Reply from 36.89.98.123: bytes=500 Sequence=1 ttl=64 time=4 ms

Reply from 36.89.98.123: bytes=500 Sequence=2 ttl=64 time=4 ms

Reply from 36.89.98.123: bytes=500 Sequence=3 ttl=64 time=3 ms

Reply from 36.89.98.123: bytes=500 Sequence=4 ttl=64 time=3 ms

Reply from 36.89.98.123: bytes=500 Sequence=5 ttl=64 time=3 ms

Reply from 36.89.98.123: bytes=500 Sequence=6 ttl=64 time=4 ms

Reply from 36.89.98.123: bytes=500 Sequence=7 ttl=64 time=3 ms

Reply from 36.89.98.123: bytes=500 Sequence=8 ttl=64 time=3 ms

Reply from 36.89.98.123: bytes=500 Sequence=9 ttl=64 time=4 ms

Reply from 36.89.98.123: bytes=500 Sequence=10 ttl=64 time=2 ms

--- 36.89.98.123 ping statistics ---

10 packet(s) transmitted

10 packet(s) received

0.00% packet loss

round-trip min/avg/max = 2/3/4 ms

<PE3-D2-JT2-TRANSIT>**display interface Gi3/1/14**

GigabitEthernet3/1/14 current state : UP (ifindex: 408)

Line protocol current state : DOWN

Link quality grade : GOOD

Description: TRUNK_PE3-D2-JT2-TRANSIT/GI3/1/14_TO_ME9-D2-JT/GI6/2/28_10G_ASTINET

Route Port, The Maximum Transmit Unit is 1500

Internet protocol processing : disabled

- Setelah itu lakukan pengecekan selanjutnya, trunking ke metro sampai pengecekan lastmilanya (bisa dilihat dihalaman 11).

ASTINET PE-TRANSIT

#Pengecekan berdasarkan IP Publik

Ex : 36.89.98.122

-bash-3.2\$ **telnet pe2-d2-cka-inet**

Trying 118.98.9.21...

Connected to pe2-d2-cka-inet (118.98.9.21).

Escape character is '^J'.

This router is the property of PT.TELKOM INDONESIA.

All actions are monitored.

Unauthorized access is prohibited.

Violators will be prosecuted.

For operational problems contact:

PT.TELKOM Network Operations Centre

e-mail: fh-ipdn@telkom.co.id

phone : 0811-929343

username: **des-eos-nesha**

password:

Type: PE-VPN ROUTER

Site: Cikupa

Node: PE2-D2-CKA-INET

RP/0/RSP1/CPU0:PE2-D2-CKA-INET#**show ip route vrf Astinet-Conn 36.89.98.122**

Sat Apr 25 20:10:15.590 GMT

Routing entry for 36.89.98.122/31

Known via "bgp 17974", distance 200, metric 0

Tag 7713, type internal

Installed Mar 12 01:01:37.847 for 6w2d

Routing Descriptor Blocks

61.5.13.76, from 118.98.9.62

NextHop in Vrf: "default", Table: "default", IPv4 Unicast, Table Id: 0xe0000000

Route metric is 0

No advertising protos.

RP/0/RSP1/CPU0:PE2-D2-CKA-INET#**telnet 61.5.13.76**

Trying 61.5.13.76...

telnet: Unable to connect to remote host: Connection timed out

RP/0/RSP1/CPU0:PE2-D2-CKA-INET#**exit**

Connection closed by foreign host.

-bash-3.2\$ **ssh des-eos-nesha@61.5.13.76**

The authenticity of host '61.5.13.76 (61.5.13.76)' can't be established.

RSA key fingerprint is 7e:c2:e7:ef:46:c2:51:79:5a:ad:4c:42:b3:a7:6f:43.

Are you sure you want to continue connecting (yes/no)? **yes**

Warning: Permanently added '61.5.13.76' (RSA) to the list of known hosts.

NODE NAME : PE3-D2-JT2-TRANSIT
TYPE : NE9000
LOCATION : STO JATINEGARA
STATUS : NORMAL

User Authentication

Enter password:

<PE3-D2-JT2-TRANSIT>**display ip routing-table vpn Astinet_Mix 36.89.98.122**

Route Flags: R - relay, D - download to fib, T - to vpn-instance, B - black hole route

Routing Table : Astinet_Mix

Summary Count : 1

Destination/Mask	Proto	Pre	Cost	Flags	NextHop	Interface
------------------	-------	-----	------	-------	---------	-----------

```
36.89.98.122/32 Direct 0 0 D 127.0.0.1 GigabitEthernet3/1/14.3710
<PE3-D2-JT2-TRANSIT>display interface GigabitEthernet3/1/14.3710
GigabitEthernet3/1/14.3710 current state : UP (ifindex: 13133)
Line protocol current state : UP
Last line protocol up time : 2019-10-18 11:54:16+07:00
Link quality grade : GOOD
Description: 4700089-0031389092 MM_ASTINET LITE KIMIA FARMA Jln. Mangun Jaya, Kp.Rukem
RPC 115 No. 94-95, Kab.Bekasi,-,Bekasi
Route Port,The Maximum Transmit Unit is 1500
Internet Address is 36.89.98.122/31
IP Sending Frames' Format is PKTFMT_ETHNT_2, Hardware address is 9c52-f8ec-0eda
```

```
<PE3-D2-JT2-TRANSIT>display current-configuration interface GigabitEthernet3/1/14.3710
```

```
#
```

```
interface GigabitEthernet3/1/14.3710
```

```
 vlan-type dot1q 3710
```

```
 bandwidth 3
```

```
description 4700089-0031389092 MM_ASTINET LITE KIMIA FARMA Jln. Mangun Jaya, Kp.Rukem
RPC 115 No. 94-95, Kab.Bekasi,-,Bekasi
```

```
ip binding vpn-instance Astinet_Mix
```

```
ip address 36.89.98.122 255.255.255.254
```

```
 statistic enable
```

```
 arp-proxy enable
```

```
 qos-profile 768K inbound identifier none
```

```
 qos-profile 3M outbound identifier none
```

```
#
```

```
Return
```

ASTINET PE-SPEEDY

#Berdasarkan SID

Ex : SID 4700709-0030797202

```
-bash-3.2$ ssh des-eos-nesha@pe-d3-cbn-speedy
```

The authenticity of host 'pe-d3-cbn-speedy (118.98.8.182)' can't be established.

RSA key fingerprint is ff:c1:c6:1c:ef:59:0e:57:e1:35:ac:94:d2:49:a9:5c.

Are you sure you want to continue connecting (yes/no)? **yes**

Warning: Permanently added 'pe-d3-cbn-speedy,118.98.8.182' (RSA) to the list of known hosts.

```
_____|
|                                     |
|          !!! W A R N I N G !!!          |
|  This Node is the property of PT.TELKOM INDONESIA.  |
|          All actions are monitored.          |
|          Unauthorized access is prohibited.          |
|          Violators will be prosecuted.          |
|_____|\\n
```

Password:

--- JUNOS 16.1R4-S1.3 Kernel 64-bit JNPR-10.3-20170209.344539_build

No alarms currently active

{master}

des-eos-nesha@PE-D3-CBN-SPEEDY> **show interfaces descriptions | match 4700709-0030797202**

xe-3/0/1.3653 up up 4700709-0030797202 MM_ASTINET LITE INDOMARCO

PRISMATAMAindomarco JL.SILIWANGI, CIAWI GEBANG,03/03,KABUPATEN KUNINGAN

{master}

des-eos-nesha@PE-D3-CBN-SPEEDY> **show interfaces xe-3/0/1.3653**

Logical interface xe-3/0/1.3653 (Index 1022) (SNMP ifIndex 1317)

Description: 4700709-0030797202 MM_ASTINET LITE INDOMARCO PRISMATAMA indomarco
JL.SILIWANGI, CIAWI GEBANG,03/03,KABUPATEN KUNINGAN

Flags: Up SNMP-Traps 0x4000 VLAN-Tag [0x8100.3653] Encapsulation: ENET2

Input packets : 2253434553

Output packets: 2965821690

Protocol inet, MTU: 1500

Max nh cache: 75000, New hold nh limit: 75000, Curr nh cnt: 1, Curr new hold cnt: 0, NH drop cnt: 0

Flags: Sendbcast-pkt-to-re

Addresses, Flags: Is-Preferred Is-Primary

Destination: 36.66.146.58/31, Local: 36.66.146.58

Protocol multiservice, MTU: Unlimited

{ master }

des-eos-nesha@PE-D3-CBN-SPEEDY> **show configuration interfaces xe-3/0/1.3653** ← Untuk cek
bandwidth

description "4700709-0030797202 MM_ASTINET LITE INDOMARCO PRISMATAMAindomarco
JL.SILIWANGI, CIAWI GEBANG,03/03,KABUPATEN KUNINGAN";

vlan-id 3653;

family inet {

 policer {

 input 768k;

 output 3M;

 }

 address 36.66.146.58/31;

}

{ master }

des-eos-nesha@PE-D3-CBN-SPEEDY> **show arp interface xe-3/0/1.3653**

MAC Address	Address	Name	Interface	Flags
6c:3b:6b:87:c4:5e	36.66.146.59	36.66.146.59	xe-3/0/1.3653	none

{ master }

Note :

Untuk PE Speedy ketika cek ARP, apabila ada IP yang muncul yaitu IP CE, untuk IP PE tidak akan muncul.

```
des-eos-nesha@PE-D3-CBN-SPEEDY> ping 36.66.146.59 no-resolve interface xe-3/0/1.3653 rapid  
count 20
```

```
PING 36.66.146.59 (36.66.146.59): 56 data bytes
```

```
!!!!!!!!!!!!!!!!!!!!!!
```

```
--- 36.66.146.59 ping statistics ---
```

```
20 packets transmitted, 20 packets received, 0% packet loss
```

```
des-eos-nesha@PE-D3-CBN-SPEEDY> ping 36.66.146.59 no-resolve interface xe-3/0/1.3653 rapid  
count 20 size 500
```

```
PING 36.66.146.59 (36.66.146.59): 500 data bytes
```

```
!!!!!!!!!!!!!!!!!!!!!!
```

```
--- 36.66.146.59 ping statistics ---
```

```
20 packets transmitted, 20 packets received, 0% packet loss
```

```
round-trip min/avg/max/stddev = 9.704/10.050/11.511/0.373 ms
```

```
{ master }
```

ASTINET PE-SPEEDY

#Berdasarkan IP Publik

Ex : 36.66.146.58

-bash-3.2\$ **ssh des-eos-nesha@pe2-d1-pbr-transit**

The authenticity of host 'pe2-d1-pbr-transit (118.98.9.114)' can't be established.

RSA key fingerprint is 04:74:1b:cc:24:4f:ff:63:37:d1:6c:b8:99:21:36:9e.

Are you sure you want to continue connecting (yes/no)? **yes**

Warning: Permanently added 'pe2-d1-pbr-transit,118.98.9.114' (RSA) to the list of known hosts.

Error: Failed to obtain the banner file.

User Authentication

Enter password:

Info: The max number of VTY users is 15, the number of current VTY users online is 1, and total number of terminal users online is 1.

The current login time is 2020-04-25 23:40:35+07:00.

<PE2-D1-PBR-TRANSIT>**display ip routing-table vpn Astinet_Mix 36.66.146.58**

Route Flags: R - relay, D - download to fib, T - to vpn-instance, B - black hole route

Routing Table : Astinet_Mix

Summary Count : 1

Destination/Mask	Proto	Pre	Cost	Flags	NextHop	Interface
36.66.146.58/31	IBGP	255	0	RD	118.98.8.182	Eth-Trunk4

<PE2-D1-PBR-TRANSIT>**quit**

-bash-3.2\$ **ssh des-eos-nesha@118.98.8.182**

The authenticity of host '118.98.8.182 (118.98.8.182)' can't be established.

RSA key fingerprint is ff:c1:c6:1c:ef:59:0e:57:e1:35:ac:94:d2:49:a9:5c.

Are you sure you want to continue connecting (yes/no)? **yes**

Warning: Permanently added '118.98.8.182' (RSA) to the list of known hosts.

```
|
|
|      !!! W A R N I N G !!!
|
|  This Node is the property of PT.TELKOM INDONESIA.
|
|      All actions are monitored.
|
|      Unauthorized access is prohibited.
|
|      Violators will be prosecuted.
|
|_____\\n
```

Password:

--- JUNOS 16.1R4-S1.3 Kernel 64-bit JNPR-10.3-20170209.344539_build

No alarms currently active

{master}

des-eos-nesha@PE-D3-CBN-SPEEDY> **show route 36.66.146.58 | match via**

```
> to 118.98.57.125 via ae10.0, Push 282560, Push 27489(top)
> to 118.98.57.125 via ae10.0, Push 282560, Push 27489(top)
> to 118.98.57.125 via ae10.0, Push 282588, Push 27489(top)
> to 118.98.57.125 via ae10.0, Push 282588, Push 27489(top)
> to 118.98.57.125 via ae10.0, Push 282097, Push 27489(top)
> to 118.98.57.125 via ae10.0, Push 282097, Push 27489(top)
> to 118.98.57.125 via ae10.0, Push 282096, Push 27489(top)
  Local via xe-3/0/1.3653
  Local via xe-3/0/1.3653
  Local via xe-3/0/1.3653
> to 118.98.57.125 via ae10.0, Push 36, Push 24076(top)
> to 118.98.57.125 via ae10.0, Push 36, Push 24076(top)
> to 118.98.57.125 via ae10.0, Push 26720, Push 24192(top)
> to 118.98.57.125 via ae10.0, Push 26720, Push 25248(top)
```

des-eos-nesha@PE-D3-CBN-SPEEDY> **show interfaces xe-3/0/1.3653**

Logical interface xe-3/0/1.3653 (Index 1022) (SNMP ifIndex 1317)

Description: 4700709-0030797202 MM_ASTINET LITE INDOMARCO PRISMATAMAindomarco
JL.SILIWANGI, CIAWI GEBANG,03/03,KABUPATEN KUNINGAN

Flags: Up SNMP-Traps 0x4000 VLAN-Tag [0x8100.3653] Encapsulation: ENET2

Input packets : 2253770979

Output packets: 2966304977

Protocol inet, MTU: 1500

Max nh cache: 75000, New hold nh limit: 75000, Curr nh cnt: 1, Curr new hold cnt: 0, NH drop cnt: 0

Flags: Sendbcst-pkt-to-re

Addresses, Flags: Is-Preferred Is-Primary

Destination: 36.66.146.58/31, Local: 36.66.146.58

Protocol multiservice, MTU: Unlimited

{ master }

des-eos-nesha@PE-D3-CBN-SPEEDY> **show configuration interfaces xe-3/0/1.3653**

description "4700709-0030797202 MM_ASTINET LITE INDOMARCO PRISMATAMAindomarco
JL.SILIWANGI, CIAWI GEBANG,03/03,KABUPATEN KUNINGAN";

vlan-id 3653;

family inet {

 policer {

 input 768k;

 output 3M;

 }

 address 36.66.146.58/31;

}

{ master }

IP TRANSIT

#Berdasarkan SID

- Pada dasarnya untuk layanan IP Transit syntaxnya sama dengan Astinet PE Transit (hal 34) Namun perbedaanya hanya di VRF nya saja, untuk layanan IP Transit menggunakan VRF Transit Mix.

```
-bash-3.2$ ssh des-eos-nesha@PE3-D2-CKA-TRANSIT
```

```
The authenticity of host 'pe3-d2-cka-transit (61.5.13.77)' can't be established.
```

```
RSA key fingerprint is 0b:71:9f:52:37:56:5d:a9:35:14:8c:7a:79:e1:54:1e.
```

```
Are you sure you want to continue connecting (yes/no)? yes
```

```
Warning: Permanently added 'pe3-d2-cka-transit,61.5.13.77' (RSA) to the list of known hosts.
```

```
*****
```

```
NODE NAME      : PE3-D2-CKA-TRANSIT
```

```
TYPE           : NE9000
```

```
LOCATION        : STO CIKUPA
```

```
STATUS         : NORMAL
```

```
*****
```

```
User Authentication
```

```
Enter password:
```

```
Info: The max number of VTY users is 15, the number of current VTY users online is 4, and total number of terminal users online is 4.
```

```
The current login time is 2020-04-27 14:45:08+07:00.
```

```
<PE3-D2-CKA-TRANSIT> display interface description | i 888202411063
```

```
Interface      PHY  Protocol Description
Eth-Trunk25.3527 up   up    888202411063 TRANSIT MIX PERTAMINA PT JL TB
```

```
Simatupang Gd Arcadia Jakarta Selatan Indonesia 12520 Arcadia Tower F
```

```
<PE3-D2-CKA-TRANSIT> disp int Eth-Trunk25.3527
```

```
Eth-Trunk25.3527 current state : UP (ifindex: 9607)
```

```
Line protocol current state : UP
```

```
Last line protocol up time : 2020-03-28 10:57:26+07:00
```

```
Link quality grade : GOOD
```

Description: 888202411063 TRANSIT MIX PERTAMINA PT JL TB Simatupang Gd Arcadia Jakarta Selatan Indonesia 12520 Arcadia Tower F

Route Port,Hash arithmetic : According to flow, Maximal BW: 40Gbps, Current BW: 40Gbps, The Maximum Transmit Unit is 1500

Internet Address is 36.92.252.81/30

IP Sending Frames' Format is PKTFMT_ETHNT_2, Hardware address is 4857-0297-b7bd

<PE3-D2-CKA-TRANSIT>display current-configuration interface Eth-Trunk25.3527

#

interface Eth-Trunk25.3527

vlan-type dot1q 3527

bandwidth 100

description 888202411063 TRANSIT MIX PERTAMINA PT JL TB Simatupang Gd Arcadia Jakarta Selatan Indonesia 12520 Arcadia Tower F

ip binding vpn-instance Transit_Mix

ip address 36.92.252.81 255.255.255.252

statistic enable

qos-profile 100M inbound identifier none

qos-profile 100M outbound identifier none

#

return

<PE3-D2-CKA-TRANSIT>display arp interface Eth-Trunk25.3527

ARP timeout:1200s

IP ADDRESS	MAC ADDRESS	EXPIRE(M)	TYPE	INTERFACE	VPN-INSTANCE
				VLAN/CEVLAN	PVC

36.92.252.81	4857-0297-b7bd	I -	Eth-Trunk25.3527	Transit_Mix
36.92.252.82	f0f7-55f4-9502 1	D-0	Eth-Trunk25.3527	Transit_Mix
		3527/-		

Total:2 Dynamic:1 Static:0 Interface:1 Remote:0

Redirect:0

<PE3-D2-CKA-TRANSIT>display arp interface Eth-Trunk25.3527

ARP timeout:1200s

IP ADDRESS	MAC ADDRESS	EXPIRE(M)	TYPE	INTERFACE	VPN-INSTANCE
VLAN/CEVLAN PVC					

36.92.252.81	4857-0297-b7bd	I -	Eth-Trunk25.3527	Transit_Mix	
36.92.252.82	f0f7-55f4-9502	12	D-0	Eth-Trunk25.3527	Transit_Mix
3527/-					

Total:2 Dynamic:1 Static:0 Interface:1 Remote:0

Redirect:0

<PE3-D2-CKA-TRANSIT>**ping -vpn Transit_Mix 36.92.252.82**

PING 36.92.252.82: 56 data bytes, press CTRL_C to break

Reply from 36.92.252.82: bytes=56 Sequence=1 ttl=255 time=2 ms

Reply from 36.92.252.82: bytes=56 Sequence=2 ttl=255 time=1 ms

Reply from 36.92.252.82: bytes=56 Sequence=3 ttl=255 time=1 ms

Reply from 36.92.252.82: bytes=56 Sequence=4 ttl=255 time=1 ms

Reply from 36.92.252.82: bytes=56 Sequence=5 ttl=255 time=1 ms

--- 36.92.252.82 ping statistics ---

5 packet(s) transmitted

5 packet(s) received

0.00% packet loss

round-trip min/avg/max = 1/1/2 ms

<PE3-D2-CKA-TRANSIT>**ping -c 10 -vpn Transit_Mix 36.92.252.82**

PING 36.92.252.82: 56 data bytes, press CTRL_C to break

Reply from 36.92.252.82: bytes=56 Sequence=1 ttl=255 time=2 ms

Reply from 36.92.252.82: bytes=56 Sequence=2 ttl=255 time=1 ms

Reply from 36.92.252.82: bytes=56 Sequence=3 ttl=255 time=2 ms

Reply from 36.92.252.82: bytes=56 Sequence=4 ttl=255 time=2 ms

Reply from 36.92.252.82: bytes=56 Sequence=5 ttl=255 time=2 ms

Reply from 36.92.252.82: bytes=56 Sequence=6 ttl=255 time=2 ms

Reply from 36.92.252.82: bytes=56 Sequence=7 ttl=255 time=1 ms

Reply from 36.92.252.82: bytes=56 Sequence=8 ttl=255 time=1 ms

Reply from 36.92.252.82: bytes=56 Sequence=9 ttl=255 time=1 ms
Reply from 36.92.252.82: bytes=56 Sequence=10 ttl=255 time=2 ms

--- 36.92.252.82 ping statistics ---
10 packet(s) transmitted
10 packet(s) received
0.00% packet loss
round-trip min/avg/max = 1/1/2 ms

<PE3-D2-CKA-TRANSIT>**ping -c 10 -s 500 -vpn Transit_Mix 36.92.252.82**

PING 36.92.252.82: 500 data bytes, press CTRL_C to break
Reply from 36.92.252.82: bytes=500 Sequence=1 ttl=255 time=2 ms
Reply from 36.92.252.82: bytes=500 Sequence=2 ttl=255 time=1 ms
Reply from 36.92.252.82: bytes=500 Sequence=3 ttl=255 time=1 ms
Reply from 36.92.252.82: bytes=500 Sequence=4 ttl=255 time=1 ms
Reply from 36.92.252.82: bytes=500 Sequence=5 ttl=255 time=1 ms
Reply from 36.92.252.82: bytes=500 Sequence=6 ttl=255 time=1 ms
Reply from 36.92.252.82: bytes=500 Sequence=7 ttl=255 time=1 ms
Reply from 36.92.252.82: bytes=500 Sequence=8 ttl=255 time=1 ms
Reply from 36.92.252.82: bytes=500 Sequence=9 ttl=255 time=1 ms
Reply from 36.92.252.82: bytes=500 Sequence=10 ttl=255 time=1 ms

--- 36.92.252.82 ping statistics ---
10 packet(s) transmitted
10 packet(s) received
0.00% packet loss
round-trip min/avg/max = 1/1/2 ms

