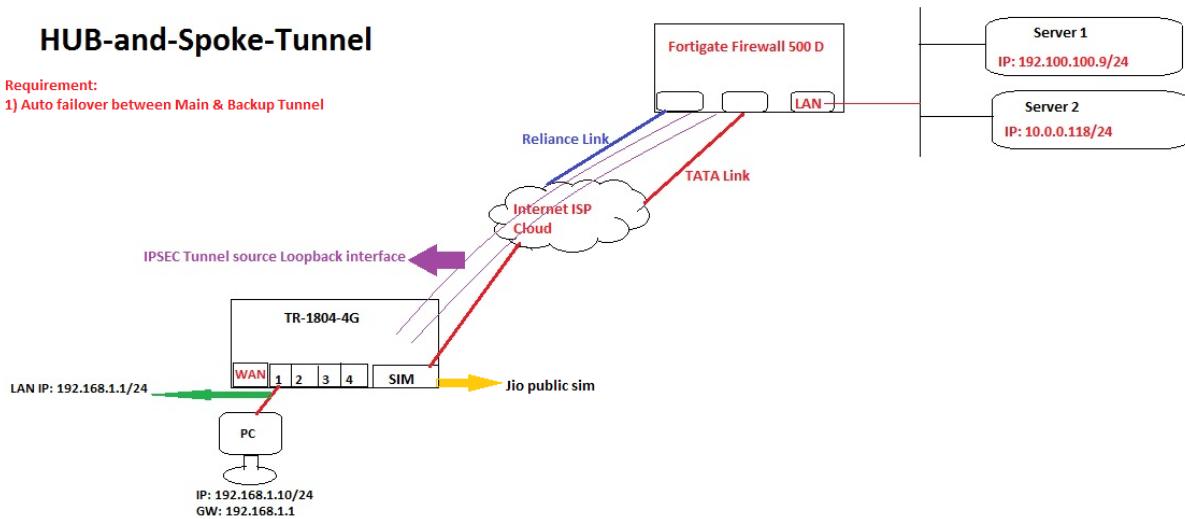


Topology

HUB-and-Spoke-Tunnel

Requirement:
1) Auto failover between Main & Backup Tunnel



Cell Status

TR-1804-4G Wireless Cellular Router/Modem

Status

System	
Hostname	TR-1815-LTE
SN	860400153A000545
Firmware Version	3.2.173
Kernel Version	3.18.29
Local Time	Mon Jul 30 13:55:17 2018
Uptime	0h 10m 29s
Load Average	1.73, 1.97, 1.23
Port Status	LAN1 LAN2 LAN3 LAN4 WAN

Mobile 1

Cellular Status	Up
IP Address	10.90.86.72/255.255.255.255

Navigation

- Status
- Overview
- Network
- Firewall
- Routes
- System Log
- Kernel Log
- Reboot Log
- Realtime Graphs
- VPN
- System
- Services
- Network
- Logout

AUTO REFRESH ON

Cellular Status	Up
IP Address	10.90.86.72/255.255.255.255
DNS 1	49.45.0.1
DNS 2	
Cell Modem	SLM730_SLM750 (05C6_F601)
IMEI/ESN	868621029221243
SIM Status	SIM Ready
Strength	25 / 31, dBm : -63
Selected Network	4G (LTE) only
Registered Network	Registered on Home network: "JIO 4G", 7,
Sub Network Type	TDD LTE
Location Area Code	16
Cell ID	16F118
Band	40,38800
ICCID	89918740400031581709
RSRP	-96 dBm
RSRQ	-12 dB
SINR	9.0 dB
MSISDN/IMSI	/405874003635168

NAT Enable

Status	Operation mode configuration	
System	You may configure the operation mode suitable for your environment.	
Services		
Network		
Operation Mode	<p>Operation mode <input checked="" type="radio"/> Bridge mode All ethernet and wireless interfaces are bridged into a single bridge interface.</p> <p><input checked="" type="radio"/> Gateway mode The first ethernet port is treated as WAN port. The other ethernet ports and the wireless interface are bridged together and are treated as LAN ports.</p> <p><input type="radio"/> AP client mode The wireless ap client interface is treated as WAN port</p>	
Mobile		
LAN		
Wired WAN	<p>Wired-WAN port role <input checked="" type="radio"/> Wired-WAN port acts as WAN <input type="radio"/> Wired-WAN port acts as LAN</p>	
WAN IPv6		
Interfaces		
Wi-Fi		
Firewall		
Switch	<p>NAT enable <input checked="" type="checkbox"/></p> <p style="text-align: right;">Save & Apply Save Reset</p>	

Cell Configuration

General Operator Selection Data Limitation

Mobile Configuration

SIM 1

Enable

Mobile connection: pppd mode

PIN code:

Dialing number: *99#

APN: jionet

Authentication method: None

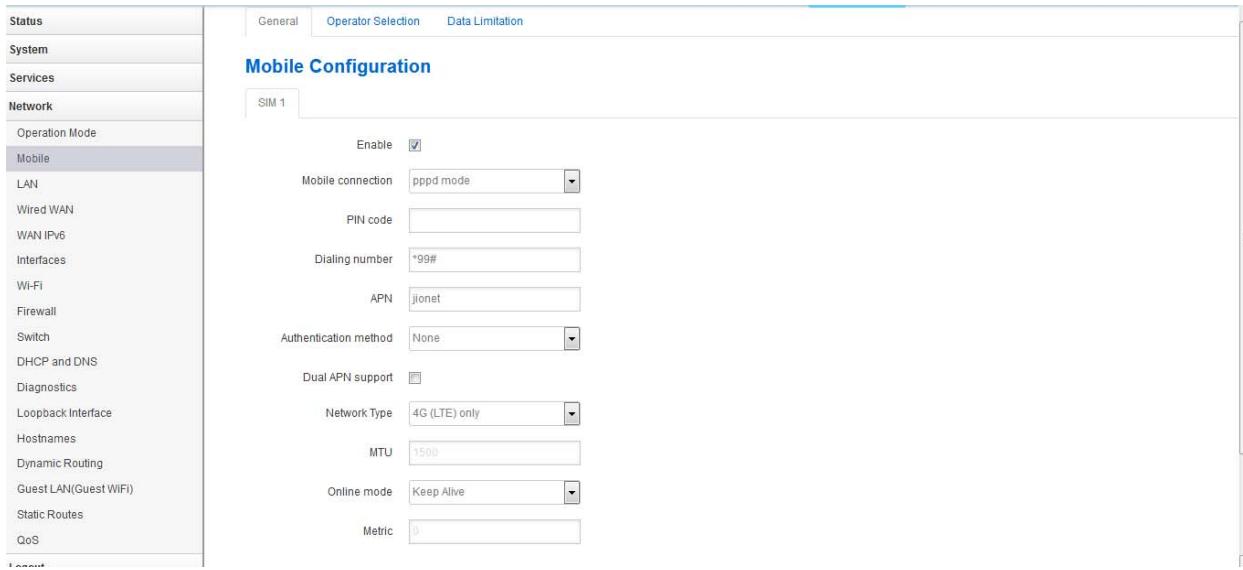
Dual APN support:

Network Type: 4G (LTE) only

MTU: 1500

Online mode: Keep Alive

Metric: 0



LAN Configuration

Techroutes NETWORK

TR-1804-4G Wireless Cellular Router/Modem

UNSAVED CHANGES: 2 AUTO REFRESH ON

Interfaces - LAN

This page you can configure the network interfaces. You can bridge several interfaces by ticking the "bridge interfaces" field and enter the names of several network interfaces separated by spaces. You can also use VLAN notation INTERFACE.VLANNR (e.g. eth0.1).

Common Configuration

General Setup Advanced Settings Physical Settings Firewall Settings

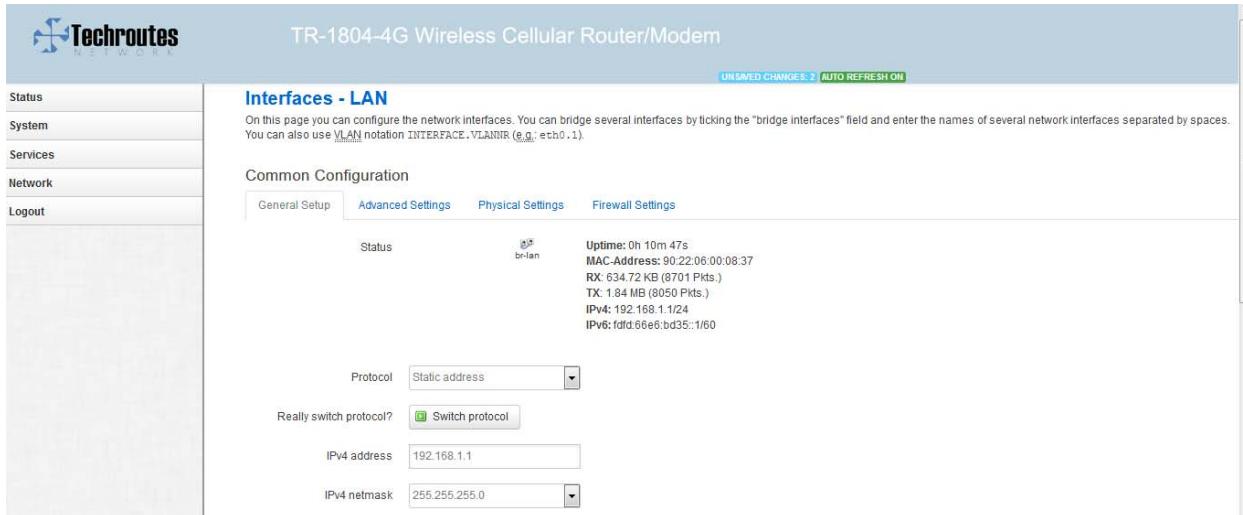
Status: br-lan Uptime: 0h 10m 47s
MAC-Address: 90:22:06:00:08:37
RX: 634.72 KB (8701 Pkts.)
TX: 1.84 MB (8050 Pkts.)
IPv4: 192.168.1.1/24
IPv6: ffd6:66e6:b035::1/60

Protocol: Static address

Really switch protocol? Switch protocol

IPv4 address: 192.168.1.1

IPv4 netmask: 255.255.255.0



Loopback Configuration

The screenshot shows the 'Loopback Interface Configuration' page. On the left, a sidebar menu includes 'Status', 'System', 'Services', 'Network' (selected), 'Operation Mode', 'Mobile', 'LAN', 'Wired WAN', 'WAN IPv6', 'Interfaces', 'Wi-Fi', 'Firewall', 'Switch', 'DHCP and DNS', 'Diagnostics', and 'Loopback Interface'. The main area has two input fields: 'IP address' (172.16.103.92) and 'Netmask' (255.255.255.255). Below the fields are three buttons: 'Save & Apply', 'Save', and 'Reset'.

IPSEC Main & Backup Configuration

The screenshot shows the 'IPsec Configuration' page. On the left, a sidebar menu includes 'Status', 'System', 'Services' (selected), 'ICMP Check', 'VRRP', 'Failover', 'DTU', 'SNMP', 'GPS', 'SMS', and 'VPN' (selected). The main area has tabs for 'IPSec' (selected), 'PPTP', 'L2TP', 'OpenVPN', and 'GRE Tunnel'. It lists two instances: 'Reliance_Link' (Enable: Yes, Exchange mode: IKEv1-Aggressive, Auth method: PSK Client, Operation level: Main) and 'TATA_Link' (Enable: Yes, Exchange mode: IKEv1-Main, Auth method: PSK Client, Operation level: backup (Reliance_Link)). Buttons for 'Edit' and 'Delete' are shown for each instance. A 'New instance name:' input field and an 'Add' button are at the bottom.

IPSEC Main Reliance Link Configuration

The screenshot shows the 'IPSec Instance: Reliance_Link' configuration page. On the left, a sidebar menu includes 'Status', 'System', 'Services', 'ICMP Check', 'VRRP', 'Failover', 'DTU', 'SNMP', 'GPS', 'SMS', 'VPN' (selected), 'DDNS', 'Connect Radio Module', 'NMS', 'Network', and 'Logout'. The main area shows configuration fields for the Reliance_Link instance: 'Enable' checked, 'Exchange mode' set to 'IKEv1-Aggressive', 'Operation Level' set to 'Main', 'Authentication method' set to 'PSK Client', 'Remote VPN endpoint' set to '115.254.59.45', 'Local endpoint' set to 'interface.loopback', 'Local IKE identifier' (empty), 'Remote IKE identifier' (empty), 'Preshared Keys' (empty), and 'Perfect Forward Secrecy' set to 'Enable'.

<input type="checkbox"/> Perfect Forward Secrecy: Enable <input type="checkbox"/> DPD action: Clear <input type="checkbox"/> DPD delay: 30 seconds <input type="checkbox"/> DPD timeout: 60 seconds <input type="checkbox"/> NAT Traversal: Enable <input type="checkbox"/> Local LAN bypass <input type="checkbox"/> Local subnet: 192.168.1.0/24 <input type="checkbox"/> Remote subnet: 192.168.100.0/24 <input type="checkbox"/> 10.0.0.0/24 <input type="checkbox"/> Local source ip: <input type="checkbox"/> Remote source ip:

Phase 1 Proposal <input checked="" type="checkbox"/> Enable <input type="checkbox"/> Encryption algorithm: 3DES <input type="checkbox"/> Hash algorithm: HMAC_MD5 <input type="checkbox"/> DH group: MODP1024/2 <input type="checkbox"/> Life time: 28800 seconds Phase 2 Proposal <input checked="" type="checkbox"/> Enable <input type="checkbox"/> Encryption algorithm: 3DES <input type="checkbox"/> PFS group: MODP1024/2 <input type="checkbox"/> Authentication: HMAC_SHA1 <input type="checkbox"/> Life time: 3600 seconds

Techroutes TR-1804-4G Wireless Cellular Router/Modem

Status System Services ICMP Check VRRP Failover DTU SNMP GPS SMS VPN DDNS Connect Radio Module NMS Network Logout	<table border="0"> <tr> <td>IPSec</td> <td>PPTP</td> <td>L2TP</td> <td>OpenVPN</td> <td>GRE Tunnel</td> </tr> </table> <p>IPSec Instance: Reliance_Link <small>we can only enable IPSec ICMP check on Main tunnel, not on Backup tunnel</small></p> <p>Switch to basic configuration</p> <p>Enable ICMP check <input checked="" type="checkbox"/></p> <p>ICMP Check type: <input type="checkbox"/> Check remote VPN endpoint</p> <p>Main Remote endpoint IP address: 115.254.59.45</p> <p>switch from backup to Main instance if ping succeed <input checked="" type="checkbox"/></p> <p>Check interval: 10</p> <p>Check retries: 3</p> <p style="text-align: right; margin-top: 10px;"> <input type="button" value="Save & Apply"/> <input type="button" value="Save"/> <input type="button" value="Reset"/> </p>	IPSec	PPTP	L2TP	OpenVPN	GRE Tunnel
IPSec	PPTP	L2TP	OpenVPN	GRE Tunnel		

IPSEC Backup Tata Link Configuration

Techroute Networks

TR-1804-4G Wireless Cellular Router/Modem

IPSec Instance: TATA_Link

Switch to advanced configuration »

Enable

Exchange mode: IKEv1-Main

Operation Level: Backup

Backup for instance: Reliance_Link

Authentication method: PSK Client

Remote VPN endpoint: 14.141.165.149

Local endpoint: Interface:loopback

Local IKE identifier:

Remote IKE identifier:

Preshared Keys: 

Perfect Forward Secrecy: Enable

Perfect Forward Secrecy: Enable

DPD action: Clear

DPD delay: 30 seconds

DPD timeout: 60 seconds

NAT Traversal: Enable

Local LAN bypass:

Local subnet: 192.168.1.0/24 

Remote subnet: 192.100.100.0/24  10.0.0.0/24 

Local source ip:

Remote source ip:

Phase 1 Proposal

Enable

Encryption algorithm: AES 128

Hash algorithm: HMAC_MD5

DH group: MODP1024/2

Life time: 86400 seconds

Phase 2 Proposal

Enable

Encryption algorithm: AES 128

PFS group: MODP1024/2

Authentication: HMAC_SHA1

Life time: 43201 seconds

Buttons: Save & Apply, Save, Reset

TR-1804-4G Wireless Cellular Router/Modem

IPSec Instance: TATA_Link

we can only enable IPSec ICMP check on Main tunnel, not on Backup tunnel

[Switch to basic configuration](#)

Enable ICMP check

ICMP Check type: Check remote VPN endpoint

Main Remote endpoint IP address: 115.254.59.45

switch from backup to Main instance if ping succeed

Check interval: 10

Check retries: 3

Buttons: Save & Apply, Save, Reset

Main tunnel up (Reliance link) IPSEC Status

Status IPSec IPSec Log OpenVPN PPTP tunnel L2TP tunnel

IPSec Status

```

Status of IKE charon daemon (weakSwan 5.3.3, Linux 3.18.29, mips):
uptime: 64 seconds, since Jul 30 13:58:22 2018
malloc: szbk 122880, mmap 0, used 108624, free 14256
worker threads: 11 of 15 idle, 5/0/0 working, job queue: 0/0/0, scheduled: 6
loaded plugins: charon random nonce aes des sha1 sha2 md5 pem pkcs1 gmp x509 revocation hmac stroke kernel-netlink socket-default updown xauth-generic
Listening IP addresses:
 192.168.1.1
  fdd666:bd35:1
  10.90.86.72
Connections:
Reliance_Link_0: %any..._115.254.59.45 IKEv1 Aggressive, ddpsdelay=30s
Reliance_Link_0: local: [10.90.86.72] uses pre-shared key authentication
Reliance_Link_0: remote: [115.254.59.45] uses pre-shared key authentication
Reliance_Link_1: child: 172.16.103.92/32 === 192.100.100.0/24 TUNNEL, dpdaction=clear
Reliance_Link_1: _0: %any..._115.254.59.45 IKEv1 Aggressive, ddpsdelay=30s
Reliance_Link_1: local: [10.90.86.72] uses pre-shared key authentication
Reliance_Link_1: remote: [115.254.59.45] uses pre-shared key authentication
Reliance_Link_1: child: 172.16.103.92/32 === 10.0.0.0/24 TUNNEL, dpdaction=clear
Security Associations (1 up, 0 connecting):
Reliance_Link_1[2]: ESTABLISHED 63 seconds ago; 10.90.86.72[10.90.86.72]..._115.254.59.45[115.254.59.45]
Reliance_Link_1[2]: IKEv1 SPIs: 541c8e90dd0750a..._a02db0dc8e99989a..._r pre-shared key reauthentication in 7 hours
Reliance_Link_1[2]: IKE proposal: 3DES_CBC HMAC MD5_96IPRF_HMAC_MD5MODP_1024
Reliance_Link_1[1]: INSTALLED, TUNNEL, (reqd 1, ESP in UDP SPIs: cccb94f..._c857da5..._o
Reliance_Link_1[1]: 3DES_CBC HMAC SHA1_96, 6960 bytes_o (116 pkts, 1s ago), 3480 bytes_o (58 pkts, 1s ago), rekeying in 45 minutes
Reliance_Link_1[1]: 172.16.103.92/32 === 192.100.100.0/24
Reliance_Link_1[2]: INSTALLED, TUNNEL, (reqd 2, ESP in UDP SPIs: c6dca084..._c857da52..._o
Reliance_Link_1[2]: 3DES_CBC HMAC SHA1_96, 18959 bytes_o (164 pkts, 1s ago), 63270 bytes_o (249 pkts, 1s ago), rekeying in 41 minutes
Reliance_Link_1[2]: 172.16.103.92/32 === 10.0.0.0/24

```

C:\Windows\system32\cmd.exe - ping 192.100.100.9 -t

```

Reply from 192.100.100.9: bytes=32 time=97ms TTL=60
Reply from 192.100.100.9: bytes=32 time=51ms TTL=60
Reply from 192.100.100.9: bytes=32 time=53ms TTL=60
Reply from 192.100.100.9: bytes=32 time=50ms TTL=60
Reply from 192.100.100.9: bytes=32 time=62ms TTL=60
Reply from 192.100.100.9: bytes=32 time=71ms TTL=60
Reply from 192.100.100.9: bytes=32 time=27ms TTL=60
Reply from 192.100.100.9: bytes=32 time=89ms TTL=60
Reply from 192.100.100.9: bytes=32 time=49ms TTL=60
Reply from 192.100.100.9: bytes=32 time=70ms TTL=60
Reply from 192.100.100.9: bytes=32 time=73ms TTL=60
Reply from 192.100.100.9: bytes=32 time=102ms TTL=60
Reply from 192.100.100.9: bytes=32 time=46ms TTL=60
Reply from 192.100.100.9: bytes=32 time=86ms TTL=60
Reply from 192.100.100.9: bytes=32 time=75ms TTL=60
Reply from 192.100.100.9: bytes=32 time=48ms TTL=60
Reply from 192.100.100.9: bytes=32 time=47ms TTL=60
Reply from 192.100.100.9: bytes=32 time=57ms TTL=60
Reply from 192.100.100.9: bytes=32 time=59ms TTL=60
Reply from 192.100.100.9: bytes=32 time=37ms TTL=60
Reply from 192.100.100.9: bytes=32 time=40ms TTL=60
Reply from 192.100.100.9: bytes=32 time=95ms TTL=60
Reply from 192.100.100.9: bytes=32 time=54ms TTL=60

```

C:\Windows\system32\cmd.exe - ping 10.0.0.118 -t

```

Reply from 192.100.100.9: bytes=32 time=78ms TTL=60
Reply from 192.100.100.9: bytes=32 time=64ms TTL=60
Reply from 192.100.100.9: bytes=32 time=41ms TTL=60
Reply from 192.100.100.9: bytes=32 time=97ms TTL=60
Reply from 192.100.100.9: bytes=32 time=51ms TTL=60
Reply from 192.100.100.9: bytes=32 time=39ms TTL=60
Reply from 192.100.100.9: bytes=32 time=47ms TTL=60
Reply from 192.100.100.9: bytes=32 time=47ms TTL=60
Reply from 192.100.100.9: bytes=32 time=87ms TTL=60
Reply from 192.100.100.9: bytes=32 time=84ms TTL=60
Reply from 192.100.100.9: bytes=32 time=56ms TTL=60
Reply from 192.100.100.9: bytes=32 time=48ms TTL=60
Reply from 192.100.100.9: bytes=32 time=47ms TTL=60
Reply from 192.100.100.9: bytes=32 time=47ms TTL=60
Reply from 192.100.100.9: bytes=32 time=55ms TTL=60
Reply from 192.100.100.9: bytes=32 time=53ms TTL=60
Reply from 192.100.100.9: bytes=32 time=97ms TTL=60
Reply from 192.100.100.9: bytes=32 time=48ms TTL=60
Reply from 192.100.100.9: bytes=32 time=62ms TTL=60
Reply from 192.100.100.9: bytes=32 time=47ms TTL=60
Reply from 192.100.100.9: bytes=32 time=47ms TTL=60
Reply from 192.100.100.9: bytes=32 time=81ms TTL=60
Reply from 192.100.100.9: bytes=32 time=95ms TTL=60
Reply from 192.100.100.9: bytes=32 time=47ms TTL=60
Reply from 192.100.100.9: bytes=32 time=44ms TTL=60

```

Status

- Overview
- Network
- Firewall
- Routes
- System Log
- Kernel Log
- Reboot Log
- Realtime Graphs
- VPN**
- System
- Services
- Network
- Logout

IPSec Status

```

Status of IKE charon daemon (weakSwan 5.3.3, Linux 3.18.29, mips):
uptime: 108 seconds, since Jul 30 13:58:22 2018
malloc: sbrk@22880, mmap 0, used 108624, free 14256
worker threads: 11 of 16 idle, 5/0/0/0 working, job queue: 0/0/0/0, scheduled: 6
loaded plugins: charon random nonce aes des sha1 sha2 md5 pem pkcs1 gmp x509 revocation hmac stroke kernel-netlink socket-default updown xauth-generic
Listening IP addresses:
192.168.1.1
fdff666:b35:1
10.90.86.72
Connections:
Reliance_Link_0: %any_115.254.59.45 IKEv1 Aggressive, dpddelay=30s
Reliance_Link_0: local [10.90.86.72] uses pre-shared key authentication
Reliance_Link_0: remote [115.254.59.45] uses pre-shared key authentication
Reliance_Link_0: child: 172.16.103.92/32 === 192.100.100.0/24 TUNNEL, dpfaction=clear
Reliance_Link_1: %any_115.254.59.45 IKEv1 Aggressive, dpddelay=30s
Reliance_Link_1: local [10.90.86.72] uses pre-shared key authentication
Reliance_Link_1: remote [115.254.59.45] uses pre-shared key authentication
Reliance_Link_1: child: 172.16.103.92/32 === 10.0.0.0/24 TUNNEL, dpfaction=clear
Security Associations (1 up, 0 connecting):
Reliance_Link_1[2]: ESTABLISHED 107 seconds ago, 10.90.86.72[10.90.86.72]..115.254.59.45[115.254.59.45]
Reliance_Link_1[2]: IKEv1 SPIs: 541c8e9dd0750a_j_a02dbdce89969a_r pre-shared key reauthentication in 7 hours
Reliance_Link_1[2]: IKE proposal: 3DES_CBC/IMAC_MD5_96/PRF_HMAC_MD5/MODP_1024
Reliance_Link_1[1]: INSTALLED, TUNNEL, reqid 1, ESP in UDP SPIs: cdcbb94f_l_c857da51_o
Reliance_Link_1[1]: 3DES_CBC/HMAC_SHA1_96, 1178 bytes_i (196 pkts, 1s ago), 5940 bytes_o (99 pkts, 1s ago), rekeying in 44 minutes
Reliance_Link_1[1]: 172.16.103.92/32 === 192.100.100.0/24
Reliance_Link_1[2]: INSTALLED, TUNNEL, reqid 2, ESP in UDP SPIs: c6dca084_l_c857da52_o
Reliance_Link_1[2]: 3DES_CBC/HMAC_SHA1_96, 35533 bytes_i (298 pkts, 1s ago), 114621 bytes_o (451 pkts, 1s ago), rekeying in 40 minutes
Reliance_Link_1[2]: 172.16.103.92/32 === 10.0.0.0/24

```

Main tunnel down (Reliance link) then automatically Backup tunnel up (Tata link)

C:\Windows\system32\cmd.exe - ping 192.168.100.9 -t

```

Reply from 192.168.100.9: bytes=32 time=63ms TTL=60
Reply from 192.168.100.9: bytes=32 time=54ms TTL=60
Reply from 192.168.100.9: bytes=32 time=46ms TTL=60
Reply from 192.168.100.9: bytes=32 time=54ms TTL=60
Request timed out.
Request timed out.
Request timed out.
Request timed out.

```

C:\Windows\system32\cmd.exe - ping 10.0.0.118 -t

```

Reply from 192.168.100.9: bytes=32 time=45ms TTL=60
Reply from 192.168.100.9: bytes=32 time=57ms TTL=60
Reply from 192.168.100.9: bytes=32 time=57ms TTL=60
Reply from 192.168.100.9: bytes=32 time=57ms TTL=60
Reply from 192.168.100.9: bytes=32 time=48ms TTL=60
Reply from 192.168.100.9: bytes=32 time=36ms TTL=60
Reply from 192.168.100.9: bytes=32 time=56ms TTL=60
Reply from 192.168.100.9: bytes=32 time=56ms TTL=60
Reply from 192.168.100.9: bytes=32 time=49ms TTL=60
Request timed out.

```



```

c:\Windows\system32\cmd.exe - ping 192.100.100.9
Reply From 192.100.100.9: bytes=32 time=84ms TTL=60
Reply From 192.100.100.9: bytes=32 time=36ms TTL=60
Reply From 192.100.100.9: bytes=32 time=40ms TTL=60
Reply From 192.100.100.9: bytes=32 time=67ms TTL=60
Reply From 192.100.100.9: bytes=32 time=40ms TTL=60
Reply From 192.100.100.9: bytes=32 time=93ms TTL=60
Reply From 192.100.100.9: bytes=32 time=93ms TTL=60
Reply From 192.100.100.9: bytes=32 time=36ms TTL=60
Reply From 192.100.100.9: bytes=32 time=36ms TTL=60
Reply From 192.100.100.9: bytes=32 time=62ms TTL=60
Reply From 192.100.100.9: bytes=32 time=93ms TTL=60
Reply From 192.100.100.9: bytes=32 time=36ms TTL=60
Reply From 192.100.100.9: bytes=32 time=49ms TTL=60
Reply From 192.100.100.9: bytes=32 time=41ms TTL=60
Reply From 192.100.100.9: bytes=32 time=80ms TTL=60
Reply From 192.100.100.9: bytes=32 time=62ms TTL=60
Reply From 192.100.100.9: bytes=32 time=49ms TTL=60
Reply From 192.100.100.9: bytes=32 time=76ms TTL=60
Reply From 192.100.100.9: bytes=32 time=75ms TTL=60
Reply From 192.100.100.9: bytes=32 time=38ms TTL=60
Reply From 192.100.100.9: bytes=32 time=36ms TTL=60
Reply From 192.100.100.9: bytes=32 time=72ms TTL=60
Reply From 192.100.100.9: bytes=32 time=37ms TTL=60
Reply From 192.100.100.9: bytes=32 time=46ms TTL=60

```



```

c:\Windows\system32\cmd.exe - ping 10.0.0.118 -t
Reply from 192.100.100.9: bytes=32 time=90ms TTL=60
Reply from 192.100.100.9: bytes=32 time=43ms TTL=60
Reply from 192.100.100.9: bytes=32 time=37ms TTL=60
Reply from 192.100.100.9: bytes=32 time=76ms TTL=60
Reply from 192.100.100.9: bytes=32 time=40ms TTL=60
Reply from 192.100.100.9: bytes=32 time=86ms TTL=60
Reply from 192.100.100.9: bytes=32 time=92ms TTL=60
Reply from 192.100.100.9: bytes=32 time=93ms TTL=60
Reply from 192.100.100.9: bytes=32 time=72ms TTL=60
Reply from 192.100.100.9: bytes=32 time=60ms TTL=60
Reply from 192.100.100.9: bytes=32 time=62ms TTL=60
Reply from 192.100.100.9: bytes=32 time=101ms TTL=60
Reply from 192.100.100.9: bytes=32 time=95ms TTL=60
Reply from 192.100.100.9: bytes=32 time=47ms TTL=60
Reply from 192.100.100.9: bytes=32 time=86ms TTL=60
Reply from 192.100.100.9: bytes=32 time=70ms TTL=60
Reply from 192.100.100.9: bytes=32 time=58ms TTL=60
Reply from 192.100.100.9: bytes=32 time=59ms TTL=60
Reply from 192.100.100.9: bytes=32 time=51ms TTL=60
Reply from 192.100.100.9: bytes=32 time=89ms TTL=60
Reply from 192.100.100.9: bytes=32 time=109ms TTL=60
Reply from 192.100.100.9: bytes=32 time=59ms TTL=60
Reply from 192.100.100.9: bytes=32 time=45ms TTL=60

```

Techroutes

TR-1804-4G Wireless Cellular Router/Modem

Status	IPSec	IPSec Log	OpenVPN	PPTP tunnel	L2TP tunnel
Overview					
Network					
Firewall					
Routes					
System Log					
Kernel Log					
Reboot Log					
Realtime Graphs					
VPN					
System					
Services					
Network					
Logout					

IPSec Status

Status of IKE charon daemon (weakSwan 5.3.3, Linux 3.18.29, mips):
 uptime: 53 seconds; since Jul 30 14:03:11 2018
 malloc: sbrk 114688, mmap 0, used 106656, free 8032
 worker threads: 11 of 16 idle, 5/0/0 working, job queue: 0/0/0, scheduled: 4
 loaded plugins: charon random nonce aes des sha1 sha2 md5 pem pkcs1 gmp x509 revocation hmac stroke kernel-netlink socket-default updown xauth-generic
 Listening IP addresses:
 192.168.1.1
 fdf666:bd35::1
 10.90.86.72
 Connections:
 TATA_Link_ %any...14.141.165.149 IKEv1, dpddelay=30s
 TATA_Link_ local: [10.90.86.72] uses pre-shared key authentication
 TATA_Link_ remote: [14.141.165.149] uses pre-shared key authentication
 TATA_Link_ child: 172.16.103.92/32 === 192.100.100.0/24 TUNNEL, ddaction=clear
 TATA_Link_ child: 172.16.103.92/32 === 10.0.0.0/24 TUNNEL, ddaction=clear
 Security Associations (1 up, 0 connecting):
 TATA_Link[1]: ESTABLISHED 52 seconds ago 10.90.86.72[10.90.86.72]..14.141.165.149[14.141.165.149]
 TATA_Link[1] IKEv1 SPIs: 2fe7928a11c724fa_17e509faed3b5ec_r pre-shared key reauthentication in 23 hours
 TATA_Link[1] IKE proposal: AES_CBC_128 HMAC_MDS_96 PRF_HMAC_MDS MODP_1024
 TATA_Link[1]: INSTALLED, TUNNEL, reqid 1, ESP in UDP SPIs: c392098_j_c857dabf_o
 TATA_Link[1]: AES_CBC_128 HMAC SHA1_96, 5760 bytes_o (96 pkts, 18446744073709551615s ago), 2880 bytes_o (48 pkts, 18446744073709551615s ago), rekeying in 11 hours
 TATA_Link[1]: 172.16.103.92/32 === 192.100.100.0/24
 TATA_Link[1]: INSTALLED, TUNNEL, reqid 2, ESP in UDP SPIs: c206d3d5_j_c857dac0_o
 TATA_Link[1]: AES_CBC_128 HMAC SHA1_96, 2500 bytes_o (21 pkts, 35s ago), 10798 bytes_o (71 pkts, 1s ago), rekeying in 11 hours
 TATA_Link[1]: 172.16.103.92/32 === 10.0.0.0/24

Jul 30 14:03:11 [1@NET] <TATA_Link1> received source initiate _TATA_LINK1_I
Jul 30 14:03:11 [6@ENC] <TATA_Link1> received packet from 14.141.165.149[500] to 10.90.66.72[500] (148 bytes)
Jul 30 14:03:11 [6@ENC] <TATA_Link1> parsed ID_PROTO request 0 [SA VVV]
Jul 30 14:03:11 [6@KE] <TATA_Link1> received NAT-T (RFC 3947) vendor ID
Jul 30 14:03:11 [6@KE] <TATA_Link1> received DPD vendor ID
Jul 30 14:03:11 [6@ENC] <TATA_Link1> received unknown vendor ID: 82:99:03:17:57:a3:60:82:c6:a6:21 de 00:00:00:00
Jul 30 14:03:11 [6@ENC] <TATA_Link1> generating ID_PROTO request 0 [KE No NAT-D NAT-D]
Jul 30 14:03:11 [6@NET] <TATA_Link1> sending packet from 10.90.86.72[500] to 14.141.165.149[500] (236 bytes)
Jul 30 14:03:11 [3@NET] <TATA_Link1> received packet from 14.141.165.149[500] to 10.90.86.72[500] (220 bytes)
Jul 30 14:03:11 [3@ENC] <TATA_Link1> parsed ID_PROTO response 0 [KE No NAT-D NAT-D]
Jul 30 14:03:11 [3@KE] <TATA_Link1> local host is behind NAT, sending keep alive
Jul 30 14:03:11 [3@ENC] <TATA_Link1> generating ID_PROTO request 0 [ID HASH N(INITIAL_CONTACT)]
Jul 30 14:03:11 [3@NET] <TATA_Link1> sending packet from 10.90.86.72[4500] to 14.141.165.149[4500] (92 bytes)
Jul 30 14:03:12 [1@NET] <TATA_Link1> received packet from 14.141.165.149[4500] to 10.90.86.72[4500] (76 bytes)
Jul 30 14:03:12 [1@ENC] <TATA_Link1> parsed ID_PROTO response 0 [ID HASH]
Jul 30 14:03:12 [1@KE] <TATA_Link1> IKE_SA_TATA_Link1 established between 10.90.86.72[10.90.86.72]..14.141.165.149[14.141.165.149]
Jul 30 14:03:12 [1@KE] <TATA_Link1> scheduling reauthentication in 85788s
Jul 30 14:03:12 [1@NET] <TATA_Link1> maximum IKE_SA lifetime 86328s
Jul 30 14:03:12 [1@ENC] <TATA_Link1> generating QUICK_MODE request 3797477768 [HASH SA No KE ID ID]
Jul 30 14:03:12 [1@NET] <TATA_Link1> sending packet from 10.90.86.72[4500] to 14.141.165.149[4500] (316 bytes)
Jul 30 14:03:12 [1@NET] <TATA_Link1> received packet from 14.141.165.149[4500] to 10.90.86.72[4500] (300 bytes)
Jul 30 14:03:12 [1@ENC] <TATA_Link1> parsed QUICK_MODE response 3797477768 [HASH SA No KE ID ID]
Jul 30 14:03:12 [10@KNL] <TATA_Link1> policy already exists, try to update it
Jul 30 14:03:12 [10@KNL] <TATA_Link1> policy already exists, try to update it
Jul 30 14:03:12 [10@KNL] <TATA_Link1> policy already exists, try to update it
Jul 30 14:03:12 [10@KNL] <TATA_Link1> CHILDO_SA_TATA_Link1 established with SPIs c3392098_j c857dabf_o and TS 172.16.103.92/32 == 192.100.100.0/24
Jul 30 14:03:13 [10@ENC] <TATA_Link1> generating QUICK_MODE request 3797477768 [HASH]
Jul 30 14:03:13 [10@NET] <TATA_Link1> sending packet from 10.90.86.72[4500] to 14.141.165.149[4500] (60 bytes)
Jul 30 14:03:13 [10@ENC] <TATA_Link1> generating QUICK_MODE request 4275136958 [HASH SA No KE ID ID]
Jul 30 14:03:13 [10@NET] <TATA_Link1> sending packet from 10.90.86.72[4500] to 14.141.165.149[4500] (316 bytes)
Jul 30 14:03:13 [2@NET] <TATA_Link1> received packet from 14.141.165.149[4500] to 10.90.86.72[4500] (300 bytes)
Jul 30 14:03:13 [2@ENC] <TATA_Link1> parsed QUICK_MODE response 4275136958 [HASH SA No KE ID ID]
Jul 30 14:03:14 [2@KNL] <TATA_Link1> policy already exists, try to update it
Jul 30 14:03:14 [2@KNL] <TATA_Link1> policy already exists, try to update it
Jul 30 14:03:14 [2@KNL] <TATA_Link1> policy already exists, try to update it
Jul 30 14:03:14 [2@KNL] <TATA_Link1> updown: invalid argument
Jul 30 14:03:14 [2@CHD] <TATA_Link1> updown: invalid argument
Jul 30 14:03:14 [2@CHD] <TATA_Link1> updown: invalid argument
Jul 30 14:03:14 [2@NET] <TATA_Link1> generating QUICK_MODE request 4275136958 [HASH]
Jul 30 14:03:14 [2@NET] <TATA_Link1> sending packet from 10.90.86.72[4500] to 14.141.165.149[4500] (60 bytes)

Again Main tunnel up (Reliance link) automatically Backup tunnel down (Tata link)

```
C:\Windows\system32\cmd.exe - ping 192.168.100.9 -t

Reply from 192.168.100.9: bytes=32 time=49ms TTL=60
Reply from 192.168.100.9: bytes=32 time=48ms TTL=60
Reply from 192.168.100.9: bytes=32 time=69ms TTL=60
Reply from 192.168.100.9: bytes=32 time=51ms TTL=60
Reply from 192.168.100.9: bytes=32 time=64ms TTL=60
Reply from 192.168.100.9: bytes=32 time=46ms TTL=60
Reply from 192.168.100.9: bytes=32 time=47ms TTL=60
Reply from 192.168.100.9: bytes=32 time=47ms TTL=60
Reply from 192.168.100.9: bytes=32 time=48ms TTL=60
Reply from 192.168.100.9: bytes=32 time=46ms TTL=60
Reply from 192.168.100.9: bytes=32 time=48ms TTL=60
Request timed out.
Reply from 192.168.100.9: bytes=32 time=74ms TTL=252
Reply from 192.168.100.9: bytes=32 time=66ms TTL=252
Reply from 192.168.100.9: bytes=32 time=40ms TTL=252
Reply from 192.168.100.9: bytes=32 time=89ms TTL=252
Reply from 192.168.100.9: bytes=32 time=78ms TTL=252
Reply from 192.168.100.9: bytes=32 time=60ms TTL=60
Reply from 192.168.100.9: bytes=32 time=75ms TTL=60
Reply from 192.168.100.9: bytes=32 time=48ms TTL=60
```

```
on C:\Windows\system32\cmd.exe - ping 10.0.0.118 -t  
Reply from 192.168.100.9: bytes=32 time=29ms TTL=60  
Reply from 192.168.100.9: bytes=32 time=59ms TTL=60  
Reply from 192.168.100.9: bytes=32 time=43ms TTL=60  
Reply from 192.168.100.9: bytes=32 time=86ms TTL=60  
Reply from 192.168.100.9: bytes=32 time=65ms TTL=60  
Reply from 192.168.100.9: bytes=32 time=40ms TTL=60  
Reply from 192.168.100.9: bytes=32 time=40ms TTL=60  
Reply from 192.168.100.9: bytes=32 time=52ms TTL=60  
Reply from 192.168.100.9: bytes=32 time=60ms TTL=60  
Reply from 192.168.100.9: bytes=32 time=73ms TTL=60  
Reply from 192.168.100.9: bytes=32 time=82ms TTL=60  
Reply from 192.168.100.9: bytes=32 time=84ms TTL=60  
Request timed out.  
Reply from 192.168.100.9: bytes=32 time=86ms TTL=60  
Reply from 192.168.100.9: bytes=32 time=89ms TTL=60  
Reply from 192.168.100.9: bytes=32 time=85ms TTL=60  
Reply from 192.168.100.9: bytes=32 time=74ms TTL=60
```

Overview

IPSec Status

```
Status of IKE charon daemon (weakSwan 5.3.3, Linux 3.18.29, mips):
uptime: 20 seconds, since Jul 30 14:10:17 2018
malloc: sbrk:122880, mmap 0, used 108792, free 14088
worker threads: 11 of 16 idle, 5/0/0/0 working, job queue: 0/0/0/0, scheduled: 7
loaded plugins: charon random nonce aes des sha1 sha2 md5 pem pkcs1 gmp x509 revocation hmac stroke kernel-netlink socket-default updown xauth-generic
Listening IP addresses:
192.168.1.1
fdid:666:b35:1
10.90.86.72
Connections:
Reliance_Link_<any>_115.254.59.45 IKEv1 Aggressive, dppdelay=30s
Reliance_Link_local:[10.90.86.72] uses pre-shared key authentication
Reliance_Link_remote:[115.254.59.45] uses pre-shared key authentication
Reliance_Link_child:172.16.103.92/32 === 192.100.100.0/24 TUNNEL, dpdaction=clear
Reliance_Link_1_<any>_115.254.59.45 IKEv1 Aggressive, dppdelay=30s
Reliance_Link_1_local:[10.90.86.72] uses pre-shared key authentication
Reliance_Link_1_remote:[115.254.59.45] uses pre-shared key authentication
Reliance_Link_1_child:172.16.103.92/32 === 10.0.0/24 TUNNEL, dpdaction=clear
Security Associations(1 up, 0 connecting):
Reliance_Link_1[2]: ESTABLISHED 11 seconds ago, 10.90.86.72[10.90.86.72]..115.254.59.45[115.254.59.45]
Reliance_Link_1[2]: IKEv1 SPIs: a3f6fabef0330e_1^6b286a73bed64ab1_ pre-shared key reauthentication in 7 hours
Reliance_Link_1[2]: IKE proposal: 3DES_CBC HMAC_MD5_96/PRF_HMAC_MD5/MODP_1024
Reliance_Link_1[1]: INSTALLED, TUNNEL, reqid 1, ESP in UDP SPIs: cd566bbc_1 c857db62_o
Reliance_Link_1[1]: 3DES_CBC HMAC_SHA1_96, 1680 bytes_J (28 pkts, 1s ago), 1020 bytes_o (17 pkts, 0s ago), rekeying in 44 minutes
Reliance_Link_1[1]: 172.16.103.92/32 === 192.100.100.0/24
Reliance_Link_1[2]: INSTALLED, TUNNEL, reqid 2, ESP in UDP SPIs: c48466bb_1 c857db63_o
Reliance_Link_1[2]: 3DES_CBC HMAC_SHA1_96, 360 bytes_J (6 pkts, 6s ago), 1140 bytes_o (19 pkts, 0s ago), rekeying in 42 minutes
Reliance_Link_1[2]: 172.16.103.92/32 === 10.0.0/24
```

```
Jul 30 14:10:18 0 [NET] <Reliance_Link_1> received packet from 115.254.59.45[500] to 10.90.86.72[500] (364 bytes)
Jul 30 14:10:18 0 [ENC] <Reliance_Link_1> parsed AGGRESSIVE response 0 [SA KE No ID HASH V NAT-D NAT-D VV]
Jul 30 14:10:18 0 [KE] <Reliance_Link_1> received NAT-T (RFC 3847) vendor ID
Jul 30 14:10:18 0 [KE] <Reliance_Link_1> received DPD vendor ID
Jul 30 14:10:18 0 [ENC] <Reliance_Link_1> received unknown vendor ID: 82:99:03:17:57:a3:60:82:c6:a6:21:de:00:00:00:00
Jul 30 14:10:18 0 [ENC] <Reliance_Link_1> generating QUICK_MODE request 2000509438 [HASH SA No KE ID ID]
Jul 30 14:10:18 0 [NET] <Reliance_Link_1> sending packet from 10.90.86.72[4500] to 115.254.59.45[4500] (300 bytes)
Jul 30 14:10:18 0 [NET] <Reliance_Link_1> received packet from 115.254.59.45[4500] to 10.90.86.72[4500] (284 bytes)
Jul 30 14:10:18 0 [ENC] <Reliance_Link_1> parsed QUICK_MODE response 2000509438 [HASH SA No KE ID ID]
Jul 30 14:10:19 0 [KE] <Reliance_Link_1> local host is behind NAT, sending keep alives
Jul 30 14:10:19 0 [KE] <Reliance_Link_1> CHILD_SA Reliance_Link1 established with SPIs cd566bbc_1 c857db62_o and TS 172.16.103.92/32 === 192.100.100.0/24
Jul 30 14:10:20 0 [ENC] <Reliance_Link_1> generating QUICK_MODE request 2000509438 [HASH]
Jul 30 14:10:20 0 [NET] <Reliance_Link_1> sending packet from 10.90.86.72[4500] to 115.254.59.45[4500] (52 bytes)
Jul 30 14:10:20 0 [KE] <Reliance_Link_1> detected result of existing IKE_SA adopting 1 children and 0 virtual IPs
Jul 30 14:10:20 0 [KE] <Reliance_Link_1> maximum IKE_SA lifetime 28591s
Jul 30 14:10:20 0 [KE] <Reliance_Link_1> scheduling reauthentication in 28051s
Jul 30 14:10:20 0 [ENC] <Reliance_Link_1> generating AGGRESSIVE request 0 [HASH NAT-D NAT-D]
Jul 30 14:10:20 0 [NET] <Reliance_Link_1> sending packet from 10.90.86.72[4500] to 115.254.59.45[4500] (92 bytes)
Jul 30 14:10:20 0 [ENC] <Reliance_Link_1> generating QUICK_MODE request 2121225840 [HASH SA No KE ID ID]
Jul 30 14:10:20 0 [NET] <Reliance_Link_1> sending packet from 10.90.86.72[4500] to 115.254.59.45[4500] (300 bytes)
Jul 30 14:10:20 0 [NET] <Reliance_Link_1> received packet from 115.254.59.45[4500] to 10.90.86.72[4500] (284 bytes)
Jul 30 14:10:20 0 [ENC] <Reliance_Link_1> parsed QUICK_MODE response 2121225840 [HASH SA No KE ID ID]
Jul 30 14:10:21 14[CHD] <Reliance_Link_1> up/down: up/up: uci: Invalid argument
Jul 30 14:10:21 14[CHD] <Reliance_Link_1> up/down: up/up: uci: Invalid argument
Jul 30 14:10:22 14[ENC] <Reliance_Link_1> generating QUICK_MODE request 2121225840 [HASH]
Jul 30 14:10:22 14[NET] <Reliance_Link_1> sending packet from 10.90.86.72[4500] to 115.254.59.45[4500] (52 bytes)
Jul 30 14:10:30 04[KE] <Reliance_Link_1> deleting IKE_SA Reliance_Link1 between 10.90.86.72[10.90.86.72]..115.254.59.45[115.254.59.45]
Jul 30 14:10:30 04[KE] <Reliance_Link_1> sending DELETE for IKE_SA Reliance_Link1
Jul 30 14:10:30 04[ENC] <Reliance_Link_1> generating INFORMATIONAL_V1 request 1470048019 [HASH D]
Jul 30 14:10:30 04[NET] <Reliance_Link_1> sending packet from 10.90.86.72[4500] to 115.254.59.45[4500] (84 bytes)
```

Overview

IPSec Status

```
Status of IKE charon daemon (weakSwan 5.3.3, Linux 3.18.29, mips):
uptime: 108 seconds, since Jul 30 14:10:17 2018
malloc: sbrk:122880, mmap 0, used 108840, free 14240
worker threads: 11 of 16 idle, 5/0/0/0 working, job queue: 0/0/0/0, scheduled: 6
loaded plugins: charon random nonce aes des sha1 sha2 md5 pem pkcs1 gmp x509 revocation hmac stroke kernel-netlink socket-default updown xauth-generic
Listening IP addresses:
192.168.1.1
fdid:666:b35:1
10.90.86.72
Connections:
Reliance_Link_<any>_115.254.59.45 IKEv1 Aggressive, dppdelay=30s
Reliance_Link_local:[10.90.86.72] uses pre-shared key authentication
Reliance_Link_remote:[115.254.59.45] uses pre-shared key authentication
Reliance_Link_child:172.16.103.92/32 === 192.100.100.0/24 TUNNEL, dpdaction=clear
Reliance_Link_1_<any>_115.254.59.45 IKEv1 Aggressive, dppdelay=30s
Reliance_Link_1_local:[10.90.86.72] uses pre-shared key authentication
Reliance_Link_1_remote:[115.254.59.45] uses pre-shared key authentication
Reliance_Link_1_child:172.16.103.92/32 === 10.0.0/24 TUNNEL, dpdaction=clear
Security Associations(1 up, 0 connecting):
Reliance_Link_1[2]: ESTABLISHED 105 seconds ago, 10.90.86.72[10.90.86.72]..115.254.59.45[115.254.59.45]
Reliance_Link_1[2]: IKEv1 SPIs: a3f6fabef0330e_1^6b286a73bed64ab1_ pre-shared key reauthentication in 7 hours
Reliance_Link_1[2]: IKE proposal: 3DES_CBC HMAC_MD5_96/PRF_HMAC_MD5/MODP_1024
Reliance_Link_1[1]: INSTALLED, TUNNEL, reqid 1, ESP in UDP SPIs: cd566bbc_1 c857db62_o
Reliance_Link_1[1]: 3DES_CBC HMAC_SHA1_96, 12240 bytes_J (204 pkts, 1s ago), 6240 bytes_o (104 pkts, 1s ago), rekeying in 43 minutes
Reliance_Link_1[1]: 172.16.103.92/32 === 192.100.100.0/24
Reliance_Link_1[2]: INSTALLED, TUNNEL, reqid 2, ESP in UDP SPIs: c48466bb_1 c857db63_o
Reliance_Link_1[2]: 3DES_CBC HMAC_SHA1_96, 17663 bytes_J (260 pkts, 1s ago), 34198 bytes_o (363 pkts, 1s ago), rekeying in 40 minutes
Reliance_Link_1[2]: 172.16.103.92/32 === 10.0.0/24
```