

VPN debug cheat sheet

Misconfiguration troubles, start here

Phase 1/2 properties mismatch

VPN Communities -> Dbl click on the community -> Encryption, Hash, DH Group should MATCH those on VPN peer .
Be careful with IP addressing (no overlap) !
Encryption domain traffic IPs should be a reversed copy of each other between peers .

- Manage Network Objects -> Dbl click on the remote peer firewall -> Topology -> VPN Domain -> Manually defined ;
- Do the same but for the properties of the firewall you are logged in ;
- Security Rules - > Add new Rule (make sure nothing overlaps with rules before it) -> If you want VPN tunnel initiated from both sides - put remote and local networks in the same rule as both source and destination .

... Still on Security Rules

If it is the 1st VPN tunnel on the firewall make sure IPsec protocols are allowed from VPN peer: **ESP, IKE**
- Advisable to exclude IKE from encrypted services : VPN Communities -> Dbl click -> Advanced -> Excluded Services -> Add- > IKE

On Communities

Star - Satellite VPN peers can communicate with each other only via Center gateway, if it allows this
Meshed - VPN peers are equal and can communicate with each other directly

Preshared Key

Make sure it is the same on both peers. VPN communities -> Dbl click -> Advanced Settings -> Use Only Shared Secret ...

Disable NAT inside VPN tunnel

Community -> Advanced Settings -> Disable NAT inside VPN community
Don't forget - Policy install on every change

Cont: Configs are ok – enter the debug ...

SmartView Tracker - 1st aid, short stay. " No valid SA" just states the obvious - tunnel is down, but not why.

SSH into the module, don't waste your time with GUI

See statistics about existing tunnels

```
Phase 1 SAs that are up
#vpn tu
# 1
Phase 2 SAs that are up
#vpn tu
# 2
One SA in each direction !
```

Delete stale tunnels

```
#vpn shell
shell> delete IKE peer <IP address of
peer>
shell> delete IPSEC peer <IP address
of peer>
```

Is VPN daemon listening at all ?

```
#ps aux | grep vpnd | grep -v grep
Look for port 500
```

Are VPN initiation packets from the peer even reaching my firewall?

```
#fw monitor -e `accept host(<IP of VPN peer>)
and port(500) ;`
```

Let's get our hands dirty! Log the whole VPN establishment process.

```
#vpn debug trunc
#vpn debug debug on
#vpn debug ikeon
```

Now try initiate some interesting traffic. If one of the firewall interfaces is in the encryption domain , do the magic:

```
# ping <IP of remote net> -I <local interface IP
in encryption domain>
# vpn debug ikeoff
# vpn debug off
```

Download to your PC file **\$FWDIR/log/ike.elg**
Open it with **IKEVIEWER.EXE** which you download from Checkpoint.com .

Have fun looking at the mysteries of the VPN creation .