GRE tunnel on MikroTik router

Note: In this setup, the MikroTik router sits behind your primary router.
GRE (protocol 47) must be allowed on the main router to ensure the tunnel can be established correctly.

IP addresses provided by Luxxy.cloud (example values):

Luxxy GRE server: 5.231.32.3
Luxxy local GRE server address: 100.65.0.1
Your local address: 100.65.0.2
Your public IPs: 5.231.32.101, 5.231.32.102, 5.231.32.103, 5.231.32.104
Note: These are example IP addresses. You will receive the correct IP addresses from Luxxy.cloud.

Local IP address of your MikroTik router (WAN interface): 192.168.1.201
Note: Your MikroTik WAN IP may be different.

1. Rename interfaces

```
/interface ethernet
set [find default-name=ether2] disable-running-check=no name=LAN
set [find default-name=ether1] disable-running-check=no name=WAN
```

2. Create GRE interface

```
/interface gre
add local-address=192.168.1.201 mtu=1476 name=GRE-luxxy remote-address=5.231.32.3
```

3. Add IP addresses

```
/ip address
add address=100.65.0.2/30 interface=GRE-luxxy network=100.65.0.0
add address=5.231.32.101 interface=LAN network=5.231.32.101
```

**Public IP 5.231.32.101 is your “main address” in the allocated range.
Remaining 5.231.32.102–104 will be assigned by DHCP to the servers.**

These rules apply only to the public IP — the rest of the router remains accessible normally.

4. Create a separate routing table

```
/routing table
add disabled=no fib name=luxxy
```

5. Routing: GRE as the default path for public IPs

```
/ip route
add disabled=no distance=1 dst-address=0.0.0.0/0 gateway=100.65.0.1 \
    routing-table=luxxy scope=30 suppress-hw-offload=no target-scope=10

add disabled=no dst-address=5.231.32.102/32 gateway=LAN routing-table=main
add disabled=no dst-address=5.231.32.103/32 gateway=LAN routing-table=main
add disabled=no dst-address=5.231.32.104/32 gateway=LAN routing-table=main
```

Servers on your LAN receiving public IPs will be ARP-visible on the LAN, therefore gateway=LAN is correct.

6. Routing rules — send traffic from public IPs via GRE

```
/routing rule
add action=lookup disabled=no src-address=5.231.32.102/32 table=luxxy
add action=lookup disabled=no src-address=5.231.32.103/32 table=luxxy
add action=lookup disabled=no src-address=5.231.32.104/32 table=luxxy
```

This ensures that servers with public IPs route their outbound traffic through the tunnel.

7. Firewall (access to the public IP)

```
/ip firewall filter
add action=accept chain=input dst-address=5.231.32.101 protocol=icmp
add action=drop chain=input dst-address=5.231.32.101
```

8. DHCP pool for public IPs

```
/ip pool
add name=POOL-luxxy ranges=5.231.32.102,5.231.32.103,5.231.32.104
```

9. Enable DHCP server

```
/ip dhcp-server
add address-pool=POOL-luxxy interface=LAN lease-time=2d name=DHCP-luxxy
```

10. DHCP network parameters

```
/ip dhcp-server network
add address=5.231.32.0/24 dns-server=1.1.1.1,8.8.8.8 gateway=5.231.32.101 netmask=24
```

? Done!

Your public IPs should now route through the GRE tunnel.

Revision #22
Created 1 December 2025 12:56:21 by oSAlj
Updated 11 December 2025 22:53:49 by oSAlj