Network

iWay

Recently we where connected by swl to the fiber network and I switched from upc, finally getting rid of the enforced router, finally the aera of synchonous connectivity started.

SG300-10

The setup is refreshingly simple, I added an SFP modul (FLEXOPTIX S.B1312.10.XDL) to the Cisco SG300-10 switch I used before, that was all. With my new provider iWay it was not even necessary to configure a specific VLAN.

On there website they say you need a `Simplex TX 1310nm/RX 1490nm BiBi SFP` Module.

The SFP module is connected to port 9 on the switch, port 10 goes to my OPNsense router. Ports 9 and 10 are on the same VLAN, just via access ports to separate the traffic.

Port VLAN Membership Table

Filter: *Interface Type* equals to Port Go

	Interface	Mode	Administrative VLANs	Operational VLANs	LAG
○	GE1	Access	55UP	55UP	
○	GE2	Access	55UP	55UP	
○	GE3	Access	55UP	55UP	
○	GE4	Trunk	1T, 40T, 50T, 51UP, 55T, 60T, 110T, 120T, 130T, 1000T...	1T, 40T, 50T, 51UP, 55T, 60T, 110T, 120T, 130T, 1000T...	
○	GE5	Access	55UP	55UP	
○	GE6	Access	55UP	55UP	
○	GE7	Access	55UP	55UP	
○	GE8	Trunk	1T, 40T, 50T, 51UP, 55T, 60T, 110T, 120T, 130T, 1000T...	1T, 40T, 50T, 51UP, 55T, 60T, 110T, 120T, 130T, 1000T...	
○	GE9	Access	180UP	180UP	

Port 8 gets internet from the router and distributes it to port 4, my office switch.

OPNsense WAN

This is the WAN configuration I use WAN

t-online

This is about connecting the Draytec Vigor 165 as simple Modem to a VDSL2 t-online connection in Germany

t-online

setup

I am using the following hardware for this setup

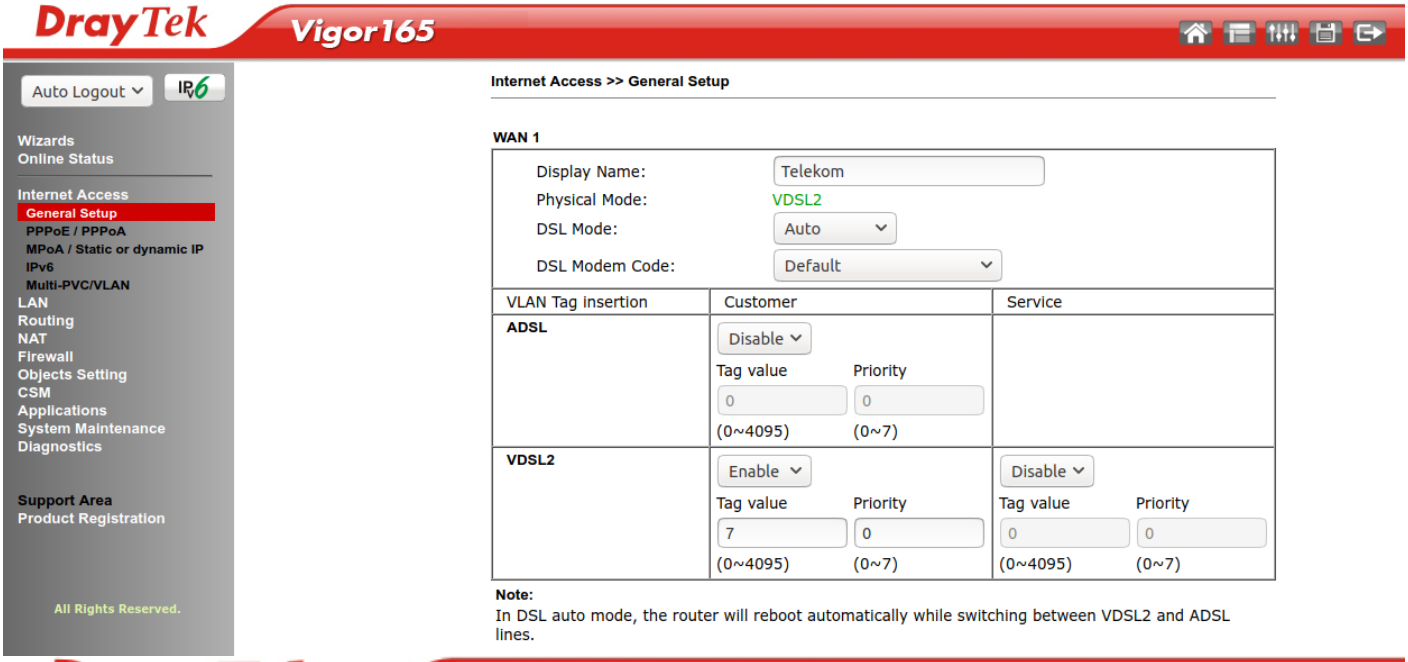
- 1 DrayTek Vigor 165 as VDSL2 Modem (250/40 Connection)
- 1 apu3c4 (black) as OPNsense router (VLAN WIFI LAN)
- 1 apu3c4 (red) as docker host (LAN) with a 1TB SATA SSD inside
- 1 Cisco SG 200-8

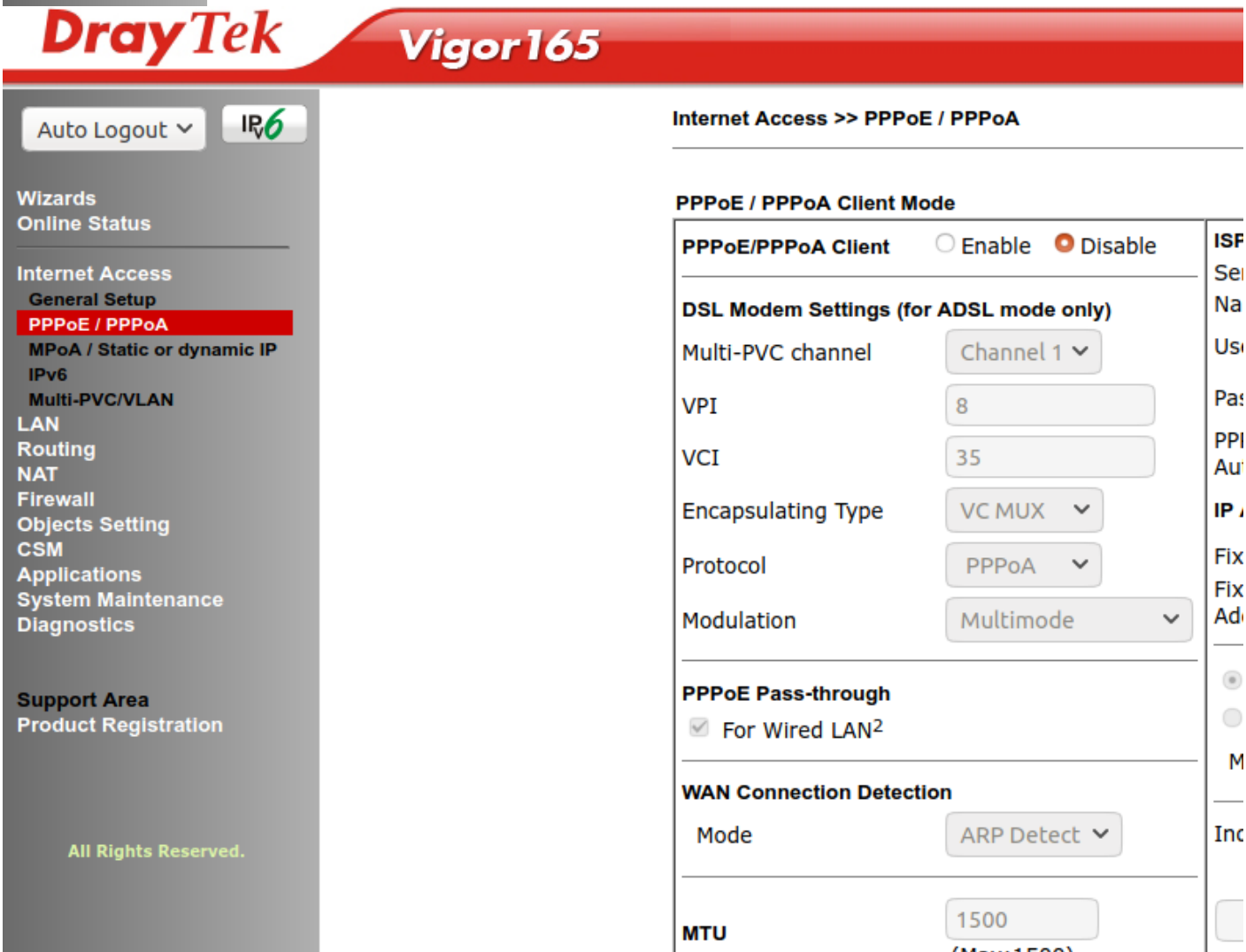
t-online

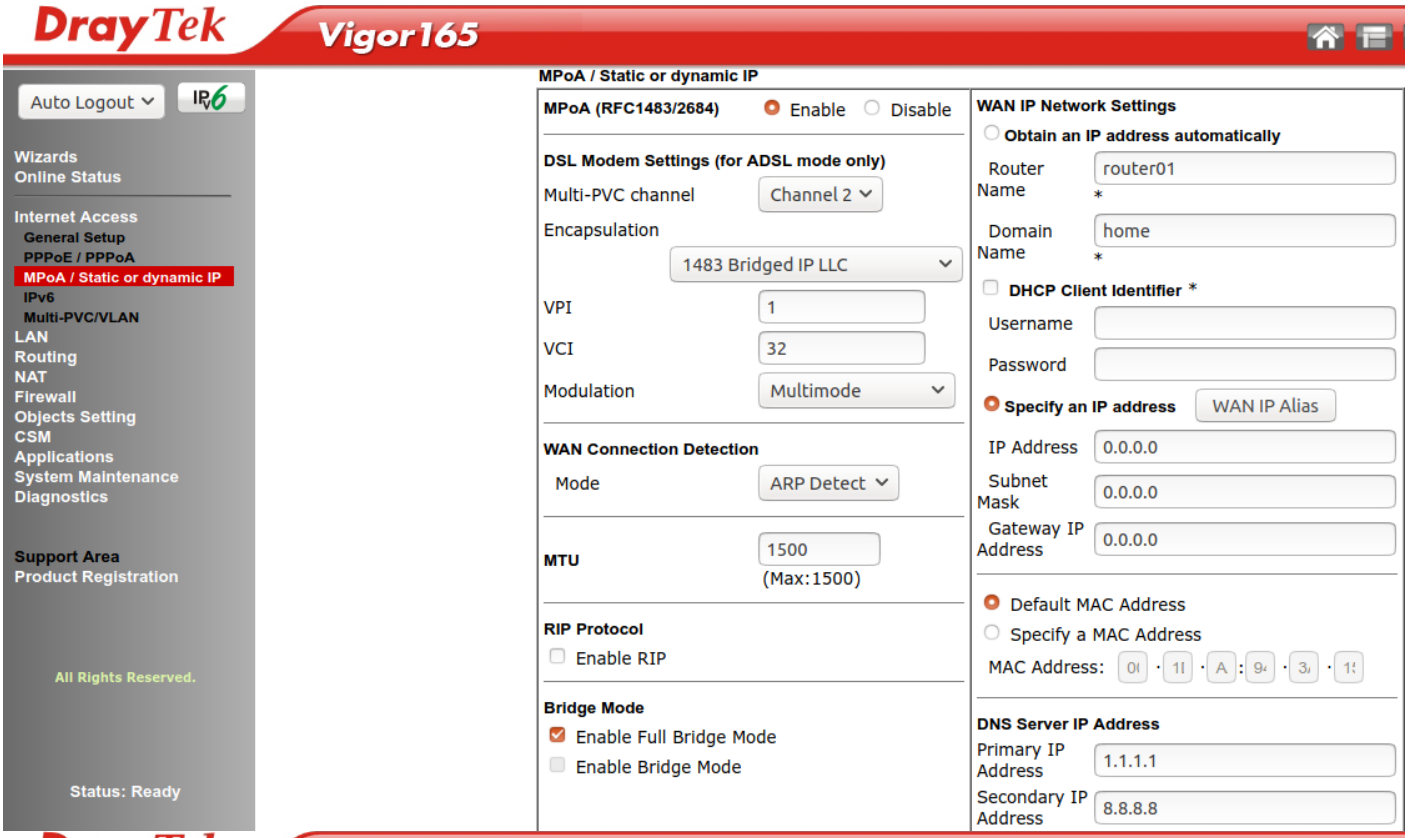
DrayTec Vigor 165

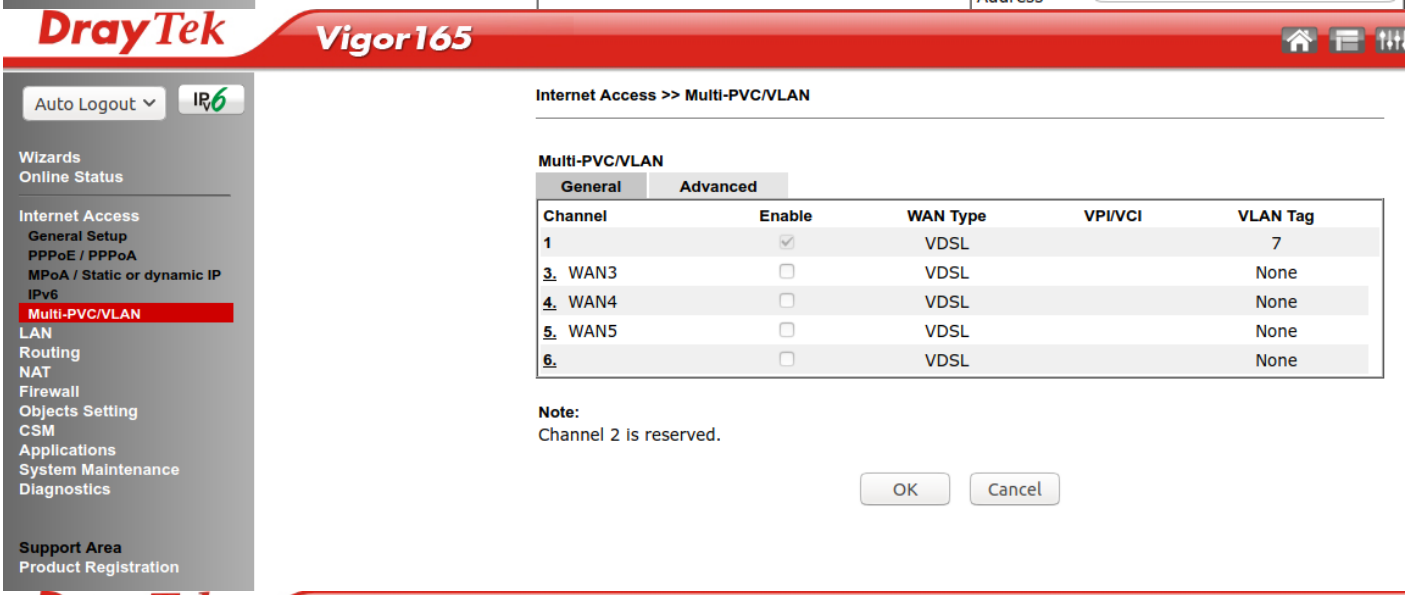
I did configure the DrayTec Vigor 165 as a Modem with t-online.

I use the following settings






DrayTek
Vigor165
Auto Logout
IPv6
Wizards
Online Status
Internet Access
General Setup
PPPoE / PPPoA
MPoA / Static or dynamic IP
IPv6
Multi-PVC/VLAN
LAN
Routing
NAT
Firewall
Objects Setting
CSM
Applications
System Maintenance
Diagnostics
Support Area
Product Registration
All Rights Reserved.
Status: Ready
MPoA / Static or dynamic IP
MPoA (RFC1483/2684) Enable Disable
DSL Modem Settings (for ADSL mode only)
Multi-PVC channel Channel 2
Encapsulation
1483 Bridged IP LLC
VPI 1
VCI 32
Modulation Multimode
WAN Connection Detection
Mode ARP Detect
MTU 1500 (Max:1500)
RIP Protocol
Enable RIP
Bridge Mode
Enable Full Bridge Mode
Enable Bridge Mode
WAN IP Network Settings
Obtain an IP address automatically
Router Name router01 *
Domain Name home *
DHCP Client Identifier *
Username
Password
Specify an IP address
WAN IP Alias
IP Address 0.0.0.0
Subnet Mask 0.0.0.0
Gateway IP Address 0.0.0.0
Default MAC Address
Specify a MAC Address
MAC Address:
DNS Server IP Address
Primary IP Address 1.1.1.1
Secondary IP Address 8.8.8.8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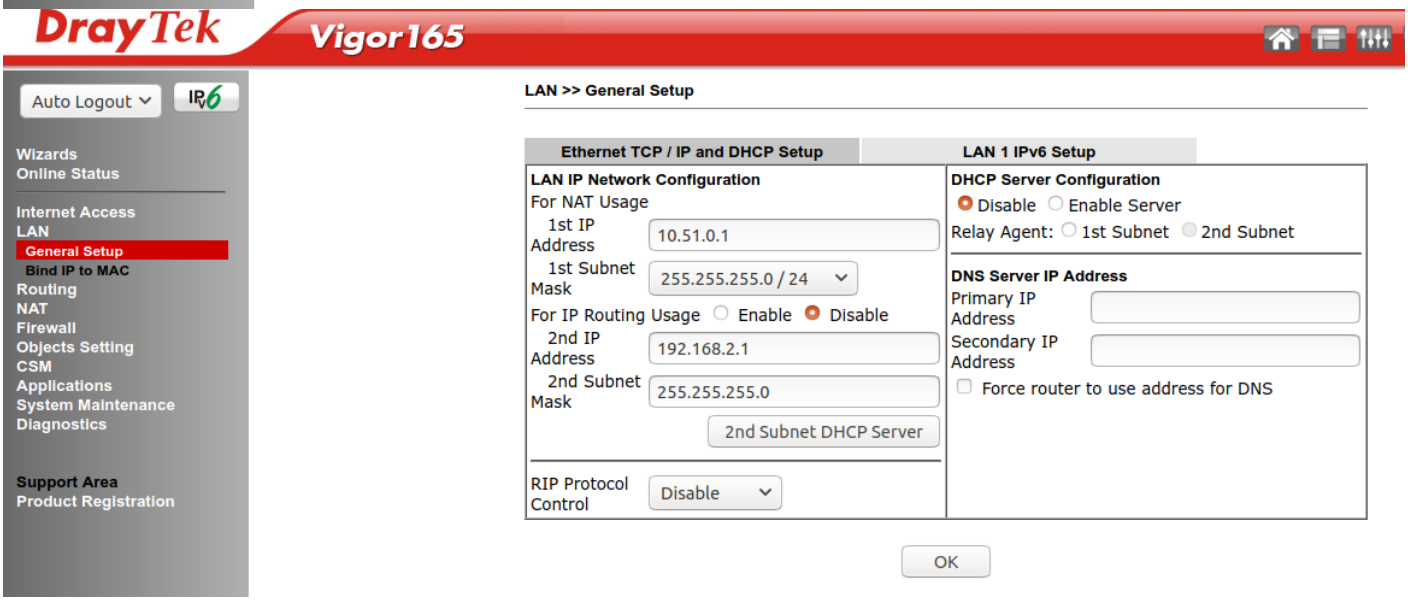
Objects Setting
CSM
Applications
System Maintenance
Diagnostics
Support Area
Product Registration
Internet Access >> Multi-PVC/VLAN
Multi-PVC/VLAN
General
Advanced
Channel Enable WAN Type VPI/VCI VLAN Tag
1 VDSL 7
3. WAN3 VDSL None
4. WAN4 VDSL None
5. WAN5 VDSL None
6. VDSL None
Note:
Channel 2 is reserved.
OK
Cancel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Diagnostics
Support Area
Product Registration
LAN >> General Setup
Ethernet TCP / IP and DHCP Setup
LAN 1 IPv6 Setup
LAN IP Network Configuration
For NAT Usage
1st IP Address 10.51.0.1
1st Subnet Mask 255.255.255.0 / 24
For IP Routing Usage Enable Disable
2nd IP Address 192.168.2.1
2nd Subnet Mask 255.255.255.0
2nd Subnet DHCP Server
RIP Protocol Control Disable
DHCP Server Configuration
Disable Enable Server
Relay Agent: 1st Subnet 2nd Subnet
DNS Server IP Address
Primary IP Address
Secondary IP Address
Force router to use address for DNS
OK

t-online

docker

To be able to reach the DrayTec Vigor 165 admin page from other vlans I added a route to traefik.

This is my `/etc/environment` file

```
PATH="/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games
"
PUID=1001
PGID=1001
TZ="Europe/Zurich"
DOMAINNAME="apu07.home"
DNS=10.51.0.254
```

This is my `docker-compose.yml` file

```
version: '3.7'

services:
  traefik:
    container_name: traefik
    domainname: ${DOMAINNAME}
    image: traefik
    restart: unless-stopped
    command:
      - --api.insecure=true
      - --providers.docker
      - --providers.docker.exposedbydefault=false
      - --entrypoints.web.address=:80
      - --providers.file.directory=/rules
      - --providers.file.watch=true
      #- --providers.docker.defaultRule="Host(`${DOMAINNAME}`)"
    ports:
      - "80:80"
      - "443:443"
      - "8080:8080"
    volumes:
```

```
      - /var/run/docker.sock:/var/run/docker.sock
      - ./traefik/rules:/rules
    networks:
      - default
      - discovery
    dns:
      - ${DNS}

networks:
  discovery:
```

And I have traefik rules in a `traefik/rules/vigor.toml` file for the DrayTec Vigor 165

```
[http.routers]
  [http.routers.vigor-rtr]
      entryPoints = ["web"]
      rule = "Host(`vigor.apu07.home`)"
      service = "vigor-svc"

[http.services]
  [http.services.vigor-svc]
    [http.services.vigor-svc.loadBalancer]
      passHostHeader = true
      [[http.services.vigor-svc.loadBalancer.servers]]
        url = "http://10.51.0.1:80"
```