

Contents

- 1 Debugging PPPoE Problems
 - ◆ 1.1 Cabling
 - ◆ 1.2 Enable Diagnostic Output
 - ◆ 1.3 Uplink

Debugging PPPoE Problems

PPPoE is used mainly for handling connections via Digital Subscriber Lines (DSL). Remember: The WRT54G / WRT54GS doesn't have an integrated DSL modem, so you need an external one.

Cabling

After connecting the WRT54G(S) router to the DSL modem on the port labeled *Internet* make sure that the *Internet* LED at the front panel is lit. If not, check cabling.

Reboot your DSL modem after you connected the router to it.

Enable Diagnostic Output

To debug problems regarding PPPoE you have to login to the router to get access to a console for entering commands.

Use *telnet* or *ssh* to login to the router. Then enable *syslog* on the shell prompt:

```
syslogd -O $(tty)
```

This will print

```
Jan  1 00:00:35  syslog.info syslogd started: Now DD-WRT VeryBusyBox v1.01 (2006.02.22-10:40 000
```

or something to this effect. From now on you'll see all syslog output on the login window.

Uplink

To check the DSL connection we use the command line version of rp-pppoe that comes with DD-WRT.

Important: Enable the DSL connection in your WRT54G's setup otherwise the network interfaces are not set up properly for this test.

Kill all running PPPoE clients

Debugging_PPPOE_Problems

```
kill $(ps | grep pppoe)
```

Now try to get the name of your DSL peer:

```
pppoe -I vlan1 -D$(tty) -A
|           |           |
|           |           | -- Find Access Concentrator
|           |           | ----- Output Debug Messages
|           |           | ----- Set Network Interface
```

This should print some network packets and the name of your DSL *access concentrator*.

If this works out, try to initiate the discovery procedure:

```
pppoe -I vlan1 -D$(tty) -d
```

Apart from a bunch of network packets representing the dialogue between the WRT54G and the peer, the last line should display a session number and the hardware address of your peer (separated by colons).

If your uplink does not work properly or your DSL modem does not work correctly, these commands may *fail* with one of the following messages:

- Timeout waiting for PADO packets.
- Timeout waiting for PADS packets.

In this case, ... more help to come ... have to sort out first!

There is a German page where you can find more information: <http://www.adsl4linux.de/howtos/>