Interfaces / WAN (pppoe0)

General Configuration

Enable
☑ Enable interface

Description
WAN
Enter a description (name) for the interface here.

IPv4 Configuration Type
PPPoE

IPv6 Configuration Type
DHCP6

MAC Address
xx:xx:xx:xx:xx:xx
This field can be used to modify ("spoof") the MAC address of this interface.
Enter a MAC address in the following format: xx:xx:xx:xx:xx:xx or leave blank.

MTU
If this field is blank, the adapter's default MTU will be used. This is typically 1500 bytes but can vary in some circumstances.

MSS
If a value is entered in this field, then MSS clamping for TCP connections to the value entered above minus 40 (TCP/IP header size) will be in effect.

DHCP6 Client Configuration

Options	☑ Advanced Configuration Use advanced DHCPv6 configuration options. ☐ Configuration Override Override the configuration from this file.
Use IPv4 connectivity as parent interface	☑ Request a IPv6 prefix/information through the IPv4 connectivity link
Request only an IPv6 prefix	☑ Only request an IPv6 prefix, do not request an IPv6 address
DHCPv6 Prefix Delegation size	48 The value in this field is the delegated prefix length provided by the DHCPv6 server. Normally specified by the ISP.
Send IPv6 prefix hint	☐ Send an IPv6 prefix hint to indicate the desired prefix size for delegation
Debug	☐ Start DHCP6 client in debug mode
Do not wait for a RA	☐ Required by some ISPs, especially those not using PPPoE
Do not allow PD/Address release	☐ dhcp6c will send a release to the ISP on exit, some ISPs then release the allocated address or prefix. This option prevents that signal ever being sent

Advanced DHCP6 Client Configuration

Information only

☐ Exchange Information Only

Only exchange informational configuration parameters with servers.

Send options

ia-pd 0

DHCP send options to be sent when requesting a DHCP lease. [option declaration [, ...]]
Value Substitutions: {interface}, {hostname}, {mac_addr_asciiCD}, {mac_addr_hexCD}
Where C is U(pper) or L(ower) Case, and D is " :-." Delimiter (space, colon, hyphen, or period) (omitted for none).
Some DHCP services may require certain options be or not be sent.

Request Options

domain-name-servers,domain-name

DHCP request options to be sent when requesting a DHCP lease. [option [, ...]]
Some DHCP services may require certain options be or not be requested.

Scripts

Absolute path to a script invoked on certain conditions including when a reply message is received.
[/[dirname/[.../]]filename[.ext]].

Identity Association Statement

☐ Non-Temporary Address Allocation

id-assoc na ID | IPv6 address | pltime | vltime

☑ Prefix Delegation

0 (id-assoc pd ID) | IPv6 prefix | pltime | vltime

Prefix interface statement

0 (Prefix Interface sla-id) | 16 (sla-len)

Prefix Interface

WAN

Select the interface on which to apply the prefix delegation.

Authentication statement

Authname | Protocol | Algorithm | RDM

Keyinfo statement

Keyname | Realm

KeyID | Secret | Expire

Username	XXXXX@dsl.mnet-online.de
Password	•••••••• •••••••• Confirm
Service name	This field can usually be left empty.
Host-Uniq	A unique host tag value for this PPPoE client. Leave blank unless a value is required by the service provider.
Dial on demand	☐ Enable Dial-On-Demand mode
Idle timeout	If no qualifying outgoing packets are transmitted for the specified number of seconds, the connection is brought down. An idle timeout of zero disables this feature.
Periodic reset	Disabled Select a reset timing type.
Advanced and MLPPP	Advanced and MLPPP Click for additional PPPoE configuration options. Save first if changes have been made.

Reserved Networks

Block private networks and loopback addresses	☑ Blocks traffic from IP addresses that are reserved for private networks per RFC 1918 (10/8, 172.16/12, 192.168/16) and unique local addresses per RFC 4193 (fc00::/7) as well as loopback addresses (127/8). This option should generally be turned on, unless this network interface resides in such a private address space, too.
Block bogon networks	☑ Blocks traffic from reserved IP addresses (but not RFC 1918) or not yet assigned by IANA. Bogons are prefixes that should never appear in the Internet routing table, and so should not appear as the source address in any packets received. This option should only be used on external interfaces (WANs), it is not necessary on local interfaces and it can potentially block required local traffic. Note: The update frequency can be changed under System > Advanced, Firewall & NAT settings.

```
[2.5.0-RELEASE][admin@pfSense.localdomain]/root: cat /var/etc/dhcp6c_wan.conf
interface pppoe0 {
        send ia-pd 0;
        request domain-name-servers;
        request domain-name;
        script "/var/etc/dhcp6c_wan_script.sh";
};
id-assoc pd 0 {
        prefix-interface pppoe0 {
                sla-id 0;
                sla-len 16;
        };
};
[2.5.0-RELEASE][admin@pfSense.localdomain]/root: grep dhcp6c /var/log/dhcpd.log | tail -n3
Mar  3 16:37:36 pfSense dhcp6c[53483]: link layer address is too short (pppoe0)
Mar  3 16:37:36 pfSense dhcp6c[53483]: failed to get default IF ID for pppoe0
Mar  3 16:37:36 pfSense dhcp6c[53483]: failed to parse configuration file
```