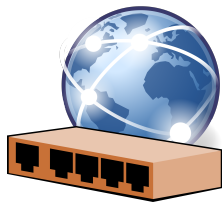


pfSense\_ISP  
(Virtual Internet)

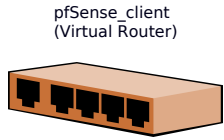
WAN 10.0.2.15  
WAN fd51:ca30:907e::1

LAN1 192.168.241.1  
LAN1 fd51:be27::1

LAN2 192.168.242.1  
LAN2 fd51:be28::1



WAN1  
WAN2



LAN1  
LAN2



Interfaces

WAN	1000baseT <full-duplex>	10.0.2.15 fd51:ca30:907e::1
LAN	1000baseT <full-duplex>	192.168.241.1 fd51:be27::1
LAN2	1000baseT <full-duplex>	192.168.242.1 fd51:be28::1

General Configuration

Enable

☒ Enable interface

Description

LAN

Enter a description (name) for the interface here.

IPv4 Configuration Type

Static IPv4

IPv6 Configuration Type

Static IPv6

Static assignments, simulated intranet.

Static IPv6 Configuration

IPv6 address

fd51:be27::1

/ 32

IPv6 Upstream gateway

None

+ Add a new gateway

LAN should have a /32 subnet.

If this interface is an Internet connection, select an existing Gateway from the list or add a new one using the 'Add' button.  
On local LANs the upstream gateway should be "none".

DHCPv6 Options

DHCPv6 Server

☒ Enable DHCPv6 server on interface LAN

Subnet

fd51:be27::

Subnet Mask

32 bits

Available Range

fd51:be27:: to fd51:be27:ffff:ffff:ffff:ffff:ffff:ffff

Range

fd51:be27::1000

fd51:be27::2000

Prefix Delegation Range

Prefix Delegation Size

48

A Prefix range can be defined here for DHCP Prefix Delegation. This allows for assigning networks to subrouters. The start and end of the range must end on boundaries of the prefix delegation size.

DNS Servers

DNS 1

DNS 2

DNS 3

DNS 4

Leave blank to use the system default DNS servers, this interface's IP if DNS forwarder is enabled, or the servers configured on the "General" page.

Domain name

The default is to use the domain name of this system as the default domain name provided by DHCP. An alternate domain name may be specified here.

Domain search list

The DHCP server can optionally provide a domain search list. Use the semicolon character as separator.

Default lease time

Lease time in seconds. Used for clients that do not ask for a specific expiration time.  
The default is 7200 seconds.

Max lease time

Maximum lease time for clients that ask for a specific expiration time.  
The default is 86400 seconds.

Time Format Change

☐ Change DHCPv6 display lease time from UTC to local time

By default DHCPv6 leases are displayed in UTC time. By checking this box DHCPv6 lease time will be displayed in local time and set to time zone selected. This will be used for all DHCPv6 interfaces lease time.

Issues /48 prefixes?

Status / DHCPv6 Leases

Leases									
IPV6 address	IAID	DUID	MAC address	Hostname	Start	End	Online	Lease Type	Actions
fd51:be27::2000	0	00:01:00:01:11fd1:ee08:00:27:141d14	08:00:27:73:ee5f (Oracle VirtualBox virtual NIC)		2017/01/05 17:48:02	2017/01/05 19:48:02	online	active	
Delegated Prefixes									
IPv6 Prefix	IAID	DUID	Start	End	State				

No prefixes delegated.

Once again,  
no prefixes delegated,  
no usable IPv6  
connectivity to  
upstream

Leases									
IPV6 address	IAID	DUID	MAC address	Hostname	Start	End	Online	Lease Type	Acti
fd3a:cea5:5feb::2000	1702127664	00:01:00:01:1fffec81:08:00:27:66:a2:4b			2017/01/04 17:52:30	2017/01/04 19:52:30	offline	active	
fd3a:cea5:5feb::161f	661037643	00:01:00:01:1fffecb0:08:00:27:66:a2:4b			2017/01/04 17:35:08	2017/01/04 19:35:08	offline	active	
Delegated Prefixes									
IPv6 Prefix	IAID	DUID	Start	End	State				

Interfaces

WAN	1000baseT <full-duplex>	192.168.241.12 fd51:be27::2000
LAN	1000baseT <full-duplex>	192.168.1.1

General Configuration

Enable

☒ Enable interface

Description

WAN

Enter a description (name) for the interface here.

IPv4 Configuration Type

DHCP

IPv6 Configuration Type

DHCP6

Console actually shows WAN IP as fd51:be27::2000/128

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

Should grab a /48 prefix?

General Configuration

Enable

☒ Enable interface

Description

LAN

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IPv4 Configuration Type

Static IPv4

IPv6 Configuration Type

Track Interface

Track IPv6 Interface

IPv6 Interface

WAN

Selects the dynamic IPv6 WAN interface to track for configuration.

IPv6 Prefix ID

0

(hexadecimal from 0 to ffff) The value in this field is the (Delegated) IPv6 prefix ID.

Should use a /48 prefix  
for the LAN?

DHCPv6 Options

DHCPv6 Server

☒ Enable DHCPv6 server on interface LAN

Subnet

Prefix Delegation

Subnet Mask

64 bits

Available Range

:: to ::ffff:ffff:ffff:ffff

Prefix Delegation subnet will be appended to the beginning of the defined range

Range

:::1000

:::2000

Prefix Delegation Range

Prefix Delegation Size

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