Remplacer sa box Orange par un pfSense

Introduction

Ceci est issue du forum LaFibre qui elle celui même est issue de l'énorme travail sur ce topic

Internet

Il existe deux méthode d'attribution d'IP chez Orange :

- PPPOE : L'ancestrale méthode de chez Orange, ne supporte que l'IPv4 dynamique et est nativement compatible avec pfSense.
- DHCP : Méthode toute jeune, permet l'obtention de l'IPv6 mais non compatible nativement avec pfSense.

Bien évidement, on va utiliser la méthode du DHCP car l'IPv6 prime.

Étape 1

Il va falloir donc modifier le fichier suivant :

• dhcp6c

-> /usr/local/sbin/dhcp6c

Cette étape sera à répéter à chaque mise à jour.

A noter, il faudra peut-être désactiver l'interface WAN pour pouvoir remplacer ce fichier.

Pour les versions inférieur a la 2.4.4, il vous faut aussi remplacer le fichier suivant :

dhclient

-> /sbin/dhclient

Étape 2

Ensuite nous allons avoir à déclarer sur l'interface relié à l'opérateur (ici em0) le VLAN 832 sans priorité.

VLAN Configuration				
Parent	em0 (4e:cb:e4:b2:52:a7)	~		
Interface	Only VLAN capable interfaces will be shown.			
VLAN Tag	832			
	802.1Q VLAN tag (between 1 and 4094).			
VLAN Priority	0			
	802.1Q VLAN Priority (between 0 and 7).			
Description	VLAN internet			
	A group description may be entered here for administrative reference (not parsed).			

Puis de l'assigné sur l'interface WAN.

Étape 3

Il va falloir transformer son identifiant Orange en base32, pour cela il suffit de lancer le script suivant :

fti.sh

avec pour argument les 7 caractères de l'identifiant Orange (après le fti/).

Étape 4

Nous allons configurer les DHCP.

Pour cela, voici la configuration standard :

General Configuration	n							
Enable	☑ Enable interface							
Description	WAN Enter a description (name) for	r the interface here.						
IPv4 Configuration Type	DHCP		V					
IPv6 Configuration Type	DHCP6		[v]					
MAC Address	xxxxxxxxxx							
	This field can be used to mod Enter a MAC address in the fo	lify ("spoof") the MAC add	ress of this interface.					
MTU	Enter a MAC address in the ro	niowing format: xx:xx:xx:	x:xx:xx or leave blank					
	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 fiel	ld. then MSS clamping for	TCP connections to t	he value entere	d above minus 40 (TCP/II	P head	er size) will be i	in effect.
Speed and Duplex	Default (no preference, typic		~				, , , , , , , , , , , , , , , , , , , ,	
	Explicitly set speed and duple WARNING: MUST be set to au	x mode for this interface.		s the port this i	nterface connects to has	its sper	ed and duplex f	orced.
DHCP Client Configu	ration							
Options	☑ Advanced Configuration Use advanced DHCP configur	ration ontions		Configura	tion Override	,		
Hostname								
	The value in this field is sent a identification).	as the DHCP client identif	ier and hostname whe	n requesting a	DHCP lease. Some ISPs r	nay req	uire this (for cl	ient
Alias IPv4 address					1	32	~	
	The value in this field is used	as a fixed alias IPv4 addr	ess by the DHCP clien	t.				
Reject leases from	To have the DHCP client rejec					tries wi	th a comma). 1	This is usefu
Protocol timing	for rejecting leases from cable		ate IP addresses wher	they lose upst	ream sync.			
Protocol tilling	Timeout Retry	Select Reboot timeout	Backoff cutoff	Initial				
Presets	○ FreeBSD default	O Clear	OpfSense		Saved Cfg			
	The values in these fields are See here for more information	DHCP protocol timings u	sed when requesting a	a lease.				
Lease Requirements		'						
Send options	dhcp-class-identifier "sagem"					00:00:0	0:00:00:00	
	The values in this field are DH Value Substitutions: (interface Where C is U(pper) or L(ower)	e), {hostname}, {mac_add	r asciiCD), (mac addi	hexCD}				
	Some ISPs may require certai	in options be or not be se	nt.					
Request options	subnet-mask,broadcast-addr The values in this field are DH	ICP option 55 to be sent v	when requesting a DHO			iain-nar	me-servers	
Require options	Some ISPs may require certai	in options be or not be rec	quested.					
	The values in this field are DH	ICP options required by th	e client when request	ing a DHCP lea	se. [option [,]]			
Option modifiers	vlan-pcp 6 The values in this field are DH	ICP option modifiers appl	led to the obtained DF	ICP lease. [mod	lifier option declaration [,]]		
	modifiers: (default, supersede See here more information	e, prepend, append)						
DHCP6 Client Config								
Options	Advanced Configuration Use advanced DHCPv6 config	guration options.		Override the	tion Override configuration from this file	t.		
Use IPv4 connectivity as parent interface	Request a IPv6 prefix/info	rmation through the IPv4	connectivity link					
Request only an IPv6	Only request an IPv6 prefix	x, do not request an IPv6	address					
prefix DHCPv6 Prefix								
Delegation size	None 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 sent 	to the ISP on exit, some	ISPs then release the	allocated addre	ss or prefix. This option p	revents	that signal ev	er being
DHCP6 VLAN Priority	☐ Enable dhcp6c VLAN Prior Normally off unless specifical			Background	(BK, 0) p priority to set.			~
Advanced DHCP6 Cli		ny required by the lor.		0110000 002.1	p priority to our			
Information only	Exchange Information Only	у						
	Only exchange informational					74.00		
Send options	DHCP send options to be sent	t when requesting a DHCI	P lease. [option declar	ation [,]]	e.03.74:2e:73:01:00:74:01:	74.00.0	JI:00:03:2e	
	Value Substitutions: (interface Where C is U(pper) or L(ower) Some DHCP services may req	Case, and D is " :" Delim	iter (space, colon, hyp	hen, or period)	(omitted for none).			
Request Options								
	DHCP request options to be s Some DHCP services may req			II				
Scripts	Absolute path to a script invol		including when a repl	y message is r	eceived.			
Identity Assessed	[/[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	O Desfer later from all and			8				
statement Prefix Interface	Prefix Interface sla-id		~	sla-len				
	Select the interface on which	to apply the prefix delega						
Authentication statement	Authname	Protocol	Algorithm		RDM			
Keyinfo statement								
	Keyname			Realm				
	KeyID	Secret			Expire			
Reserved Networks	See here more information							
Block private networks								
and loopback addresses	Blocks traffic from IP address RFC 4193 (fc00::/7) as well as	ses that are reserved for p s loopback addresses (12	orivate networks per R 17/8). This option sho	FC 1918 (10/8, uld generally be	172.16/12, 192.168/16) a turned on, unless this ne	nd unic	que local addre nterface reside	sses per s in such a
Block bogon networks	private address space, too.							
Siock Sogui Helworks	Blocks traffic from reserved If routing table, and so should n				logons are prefixes that s	nould n	ever appear in	the Internet
	Note: The update frequency of	an be changed under Sys	tem > Advanced, Fire	wall & NAT sett	ngs.			

Avec dans le Send Options IPv4:

dans le **Request Options** IPv4:

subnet-mask, broadcast-address, dhcp-lease-time, dhcp-renewal-time, dhcp-rebinding-time, domain-search, routers, domain-name-servers, rfc3118-auth

et dans le Send Options IPv6 :

A noter que le

Vous devriez recevoir une IPv4 et un /56 IPv6.

Étape 5

Il faudra ajouter la route suivante pour pouvoir profiter de l'IPv6 :

Edit Gateway	
Disabled	☐ Disable this gateway
	Set this option to disable this gateway without removing it from the list.
Interface	WAN
	Choose which interface this gateway applies to.
A11 5 1	
Address Family	IPv6 Choose the Internet Protocol this gateway uses.
	Choose the Internet Protocol this gateway uses.
Name	WAN_V6
	Gateway name
Gateway	fe80::ba0:bab%em0.832
	Gateway IP address
Default Gateway	☑ This will select the above gateway as the default gateway.
Gateway Monitoring	☐ Disable Gateway Monitoring
	This will consider this gateway as always being up.
Gateway Action	☐ Disable Gateway Monitoring Action
Caterraly Action	No action will be taken on gateway events. The gateway is always considered up.
Monitor IP	Established the address have been as the state of the first transfer of the problem of the lead to be according to the state of the sta
	Enter an alternative address here to be used to monitor the link. This is used for the quality RRD graphs as well as the load balancer entries. Use this if the gateway does not respond to ICMP echo requests (pings).
Force state	☐ Mark Gateway as Down
Torce state	This will force this gateway to be considered down.
Description	
	A description may be entered here for reference (not parsed).
	☼ Display Advanced

A noter qu'il faudra changer le nom de l'interface par la votre.

Étape 6

Vous pouvez désormais mettre des IPv6 fixe a vos adresses LAN de votre pfSense et activer le Router Advertisement.

Vous avez la complète liberté sur vos préfixes.

Télévision



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