IES ZAIDÍN-VERGELES

ESQUEMA DE CONFIGURACIÓN DE RED DEPARTAMENTO DE INFORMATICA







CABLEADO DEL SWITCH



CHANNEL BOUNDING / LINK AGGREGATION / LACP (802.3ad)

 Configuración en el router Mikrotik CCR1016 enlazándolo con el Switch, protocolo LACP



CHANNEL BOUNDING / LINK AGGREGATION / LACP (802.3ad)

Configuración en el switch DLINK DGS-1210
 enlace LACP con el router

D-Link	STREET, STREET,							-	mar		2	
Building Networks for People									COLUMN STREET	Ģ	admin - 1	92,168,100,1
🂾 Save 🖌 🌋 Tools 🗸 🛉	📴 Wizard 🔄 Help	🔹 🍁 Surveillan	ce Mode								2	Logout
DGS-1210-48	Port Trunking	g								0	Safe	guard
VLAN VLAN Jumbo Frame Port Mirroring	Link Aggregation	Enabled	O Disabled								A	pply
Loopback Detection MAC Address Table Spanning Tree	Link Aggregation	n Settings	LACP V								A	pply
Port Trunking	Port 01	02 03 04 05	00 U/ U0 U9	10 11 12	13 14	15 16	17 18	19 20		23	24 25	26
Multicast SNTP International State							00					
E GL3 Functions E GoS	Trunking list	orts in static group and 8	ports in LACP group.		_		_					
E Security E AAA R AAA	Group 01	Type LACP	Ports 49 ,50 ,51 ,52	-	-	-	-		-		Delete	
E SNMP		Annex		_	_	_	_	_	_			

CABLEADO DE VLANS EN EL SWITCH



VID	VLAN Name	Untagged	Tagged
1	default	01	26-28 ,34 ,39-46 ,48-52
5	proxmox	23-25	28 ,49-52
11	profes	29-33	26-28 ,34 ,39-46 ,48-52
12	depar	02-22	49-52
107	aula107	47	49-52
108	aula108		41 ,49-52
110	aula110		26 ,49-52
112	aula112		40 ,49-52
206	aula206		34 ,49-52
207	aula207		42 ,49-52
208	aula208		43 ,49-52
209	aula209		44 ,49-52
210	aula210		45 ,49-52
211	aula211		46 ,49-52
212	aula212		48-52
214	aula214		39 ,49-52

CABLEADO DE VLANS EN EL SWITCH

/ID Settings 😑 Safeguard																											
VID	5																										
VLAN Name	pr	oxmox																Back	c		Арр	ly					
Port	Select All	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Untagged	All	0	0	0	0	0	0	\bigcirc	0	0	0	0	0	0	0	0	0	\bigcirc	0	\bigcirc	0	0	0	0	0	\bigcirc	0
Tagged	All	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Not Member	All	0	0	0	0	0	\bigcirc	0	0	\bigcirc	0	0	\bigcirc	\bigcirc	\bigcirc	0	\bigcirc	0	0	0	\bigcirc	0	0	\bigcirc	\bigcirc	\bigcirc	0
Port	Select All	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
Untagged	All	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tagged	All	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Not Member	All	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

802.10	802.1Q VLAN PVID Settings 😑 Safeguard													
Port	01	02	03	04	05	06	07	08	09	10	11	12	13	
PVID		12	12	12	12	12	12	12	12	12	12	12	12	
Port	14	15	16	17	18	19	20	21	22	23	24	25	26	
PVID	12	12	12	12	12	12	12	12	12	5	5	5	1	
Port	27	28	29	30	31	32	33	34	35	36	37	38	39	
PVID	1	1	11	11	11	11	11	1	1	1	1	1	1	
Port	40	41	42	43	44	45	46	47	48	49	50	51	52	
PVID	1	1	1	1	1	1	1	107	1	1	1	1	1	
													Apply	

CONFIGURACIÓN WAN



informatica.ieszaidinvergeles.org xxxxxxxxx.ieszaidinvergeles.es

IP Pública 80.28.211.131

IPs Internas 192.168.1.254 192.168.2.254 192.168.1XX.254 192.168.2XX.254

Puerto 1 - WAN PPPoE client – VLAN ID 6

INTERFACES DEL ROUTER MIKROTIK

DETALLE

/interface ethernet

- set [find default-name=ether1] name=ether1-wan rx-flow-control=on \ tx-flow-control=on
- set [find default-name=ether2] name=ether2-direccion rx-flow-control=on \ tx-flow-control=on
- set [find default-name=ether3] name=ether3 rx-flow-control=on \ tx-flow-control=on
- set [find default-name=ether4] name=ether4 rx-flow-control=on \ tx-flow-control=on
- set [find default-name=ether5] name=ether5 rx-flow-control=on \ tx-flow-control=on
- set [find default-name=ether6] name=ether6 rx-flow-control=on \ tx-flow-control=on
- set [find default-name=ether7] name=ether7 rx-flow-control=on \ tx-flow-control=on
- set [find default-name=ether8] name=ether8 rx-flow-control=on \ tx-flow-control=on
- set [find default-name=ether9] name=ether9-bond-switch52 rx-flow-control=on \ tx-flow-control=on
- set [find default-name=ether10] name=ether10-bond-switch52 rx-flow-control=\ on tx-flow-control=on
- set [find default-name=ether11] name=ether11-bond-switch52 rx-flow-control=\ on tx-flow-control=on
- set [find default-name=ether12] name=ether12-bond-switch52 rx-flow-control=\ on tx-flow-control=on

Interface <vlanon< th=""><th>T></th><th></th><th></th><th></th></vlanon<>	T>			
General Status	Traffic			ОК
Name: 🔽	lanONT			Cancel
Type: V	/LAN			Apply
MTU: 1	500			Disable
L2 MTU: 1	576			Comment
MAC Address: E	E4:8D:8C:10:	A2:F8		Сору
ARP: e	nabled		₹	Remove
VLAN ID: 6	;			Torch
Interface: e	ther1-wan		₹	Torch
	Use Servic	e Tag		
apablad		a incina	alava	
enableu		lanning	slave	

Interfa	terface List										
Inter	face Ethemet EoIP Tunnel IP T	unnel GRE Tunnel VLA	VRRP	Bonding LTE							
<u> </u>							Find	٦			
.		_		_	-		7 110	4			
	EoIP Tunnel	I ∕ Type	L2 MTU	Tx	Rx	Tx Packet (p/s) 🗸	Rx Packet (p/s)	1			
	IP Tunnel	PPTP Server Binding	1570	0 bps	1920 bps	0	6 4				
		Bridge	15/6	0 bps	0 bps	0	0				
	GRE Tunnel	Ethemet	1580	13.6 Mbps	4.0 Mbps	1 435	1 363				
	VLAN	VLAN	15/6	13.6 Mbps	4.0 Mbps	1 439	1361				
	1000	Ethemet	1580	8/2 bps	8/2 bps	1					
	VRKP	Etnemet	1580	Ubps	U Dps	0	0				
	Bonding	Etnemet	1580	2.5 KDps	992 bps	2	2				
	Deidee	Etnemet	1580	1824 bps	U Dps	3	0				
	Bridge	VLAN	15/6	0 bps	0 bps	0	0				
	Mesh	VLAN	15/6	1/28 bps	0 bps	3	0				
	VDLC	VLAN	15/6	0 bps	0 bps	0	0				
	VPLS	Ethemet	1580	1113./kbps	107.6 kbps	118	122				
	Traffic Eng Interface	VLAN	15/6	1108.2 kbps	103.6 kbps	115	122				
	DDD Server	VLAN	15/6	1/28 bps	0 bps	3	0				
	PPP Server	VLAN	15/6	0 bps	0 bps	0	0				
	PPP Client	Ethemet	1580	6.3 kbps	34./kbps	4	20				
	DDTD Server Pinding	VLAN	1576	4.4 kbps	34.1 kbps	1	20				
	PPTP Server binding	VLAN	1576	1728 bps	0 bps	3	0				
	PPTP Client	VLAN	1576	0 bps	0 bps	0	0				
	SSTD Server Pinding	Ethemet	1580	39.8 kbps	26.0 kbps	28	27				
	SSTP Server binding	VLAN	1576	37.2 kbps	25.1 kbps	25	27				
	SSTP Client	VLAN	1576	1728 bps	0 bps	3	0				
	LOTD Server Rinding	VLAN	1576	0 bps	0 bps	0	0				
	L2TF Server binding	Ethemet	1580	2.7 kbps	0 bps	5	0				
	L2TP Client	VLAN	1576	0 bps	0 bps	0	0				
	OVPN Server Binding	VLAN	1576	2.1 kbps	0 bps	4	0				
	overver binding	VLAN	1576	424 bps	0 bps	1	0				
	OVPN Client	Ethemet	1580	3.0 kbps	1400 bps	4	2				
	PPPoF Server Binding	VLAN	1576	1240 bps	1336 bps	1	2				
-	The better binding	VLAN	1576	1728 bps	0 bps	3	0				
	PPPoE Client	VLAN	1576	0 bps	0 bps	0	0				
	VirtualAP	Ethernet	1580	7.4 kbps	4.6 kbps	6	7				
		VLAN	1576	4.6 kbps	4.4 kbps	1	7				
	WDS	VLAN	1576	2.1 kbps	0 bps	4	0				
	Nstreme Dual	VLAN	1576	424 bps	0 bps	1	0				
		Ethemet	1580	2.8 Mbps	13.4 Mbps	1 215	1 290				
	Interfaces	VLAN	1576	2.8 Mbps	13.4 Mbps	1 211	1 292 🔹	F			
41 ite	ms (1 selected)										

Interface <pppoe-movista< th=""><th>Þ</th><th></th><th></th><th></th></pppoe-movista<>	Þ			
General Dial Out Sta	tus Traffic			ОК
Service:			-	Cancel
AC Name:			•	Apply
User:	adslppp@telefonica	netpa		Disable
Password:		<- adslppp	•	Comment
Profile:	default		₹	Сору
Keepalive Timeout:	60		•	Remove
	Dial On Demand			Torch
	Use Peer DNS			PPPoE Scan
Default Route Distance:	Add Default Rou	te		
- Allow				
✓ pap	✓ cha	ар		
 mschap1 	🗹 ms	chap2		
enabled	Inning	slave	Status: c	connected

DETALLE DE CONFIGURACIÓN PPPOE CON MOVISTAR

/interface vlan add interface=ether1-wan l2mtu=1576 name=vlanONT vlan-id=6

/interface pppoe-client

add add-default-route=yes disabled=no interface=vlanONT name=pppoe-movistar \ password=adslppp use-peer-dns=yes user=adslppp@telefonicanetpa



2	Más visitados	۲	Comenzar a usar Firefox
---	---------------	---	-------------------------

TP-LINK°										
User Name: admin Password: ••••••••••••••••••••••••••••••••••••										
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• Ejemplo de configuración del Aula XXX

Puertos	VLAN ID	Nombre VLAN	Dirección IP
1	11	vlanAlumnosXXX	192.168.1.X
2-23	XXX	vlanAlumnosXXX	192.168.XXX.YYY
24	10 11 XXX	AdminSwitch vlanAlumnosXXX vlanAlumnosXXX	192.168.10.1 (admin) 192.168.1.X 192.168.XXX.YYY

VLAN Config																
VLAN Cre	ate															
VLAN	ID:			(2-4094)									Create		
Name				(16 charac	ters maxin	num)						_			
VLAN Tab	VLAN Table															
VLAN ID										Se	lect					
Select	VLAN ID	Nai	me		Unt	agged Po	rts			Tagg	jed Ports		0	Operation		
V	1	Default	t VLAN			1-23					24			Delete		
	11	profes	sores			1					24			Delete		
	208	alumn	os208			2-23					24			Delete		
VLAN Mer	nbership													-		
	VLANI	D			1			VL	AN Name			Default	VLAN			
Port	1	2	3	4	5	6	7	8	9	10	11	12	13	14		
Untagged	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲		
Tagged	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
NotMembe			0	<u> </u>	0	<u> </u>	<u> </u>	0	<u> </u>	0	0	<u> </u>	0	0		
PVID	11 👻	208 👻	208 👻	208 👻	208 👻	208 👻	208 👻	208 👻	208 👻	208 👻	208 👻	208 👻	208 👻	208 👻		
LAG																
Port	15	16	17	18	19	20	21	22	23	24						
Untagged	۲	۲	۲	۲	۲	۲	۲	۲	۲	0						
Tagged	0	0	0	0	0	0	0	0	0	۲						
NotMembe								0								
PVID	208 👻	208 👻	208 🗸	208 🗸	208 🗸	208 🗸	208 🗸	208 👻	208 👻	1 💌						
LAG																

VL	AN Conf	ig				
	Select	VLAN ID	Name	Untagged Ports	Tagged Ports	Operation
		1	Default VLAN	1-24		Delete
		11	profesores	1	24	Delete
		208	alumnos208	2-23	24	Delete

	VLAN Memi	bership													
		VLAN ID			11				VLAN Name				profesores		
	Port	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Untagged	۲	0	0	0	0	0	0	0	0	0	0	0	0	0
	Tagged	0	0	0	0	0	0	0	0	0	0	0	0	0	0
N	lotMember	0	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲
	PVID	11 🔻	208 🔻	208 🔻	208 🔻	208 🔻	208 🔻	208 🔻	208 🔻	208 🔻	208 🔻	208 🔻	208 🔻	208 🔻	208 🔻
	LAG														
	Port	15	16	17	18	19	20	21	22	23	24				
	Untagged	0	0	0	0	0	0	0	0	0	0				
	Tagged	0	0	0	0	0	0	0	0	0	۲				
Ν	lotMember	۲	۲	۲	۲	۲	۲	۲	۲	۲	0				
	PVID	208 🔻	208 🔻	208 🔻	208 🔻	208 🔻	208 🔻	208 🔻	208 🔻	208 🔻	1 🔻				
	LAG														

VI	_AN Conf	ig				
	Select	VLAN ID	Name	Untagged Ports	Tagged Ports	Operation
		1	Default VLAN	1-24		Delete
		11	profesores	1	24	Delete
		208	alumnos208	2-23	24	Delete

VLAN Membership																
		VLAN ID	I		208				VLAN Name				alumnos208			
	Port	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	Untagged	0	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲	
	Tagged	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NotMember	۲	0	0	0	0	0	0	0	0	0	0	0	0	0	
	PVID	11 🔻	208 🔻	208 🔻	208 🔻	208 🔻	208 🔻	208 🔻	208 🔻	208 🔻	208 🔻	208 🔻	208 🔻	208 🔻	208 🔻	
	LAG															
	Port	15	16	17	18	19	20	21	22	23	24					
	Untagged	۲	۲	۲	۲	۲	۲	۲	۲	۲	0					
	Tagged	0	0	0	0	0	0	0	0	0	۲					
	NotMember	0	0	0	0	0	0	0	0	0	0					
	PVID	208 🔻	208 🔻	208 🔻	208 🔻	208 🔻	208 🔻	208 🔻	208 🔻	208 🔻	1 🔻					

CONFIGURACIÓN VLANS

💓 Quick Set	Interface Li	ist										
	Interface	Interface List	Ethernet	EoIP Tun	nel IP Tunnel	GRE Tu	innel V	'LAN	VRRP	Bonding	LTE	
Interfaces	+ -	🖌 🗶 🔁	7									
🔔 Wireless					-			•		LONTH		1
🐮 Bridge	Na	ame		Δ	Туре		MIU	Ac	tual MTU	L2 MTU	VLAN ID	Interface
t and	R 🙌	vlanAlumnado	107		VLAN		150	00	150	0 1576	5 107	bonding1-swit
E PPP	R 🙌	vlanAlumnado	108		VLAN		150	00	150	0 1576	5 108	bonding1-swit
📲 Mesh	R 🙌	vlanAlumnado	110		VLAN		150	00	150	0 1576	5 110	bonding1-swit
1855 ID N	R 🙌	vlanAlumnado	112		VLAN		150	00	150	0 1576	5 112	bonding1-swit
<u>∓ "</u>	R 🙌	vlanAlumnado	206		VLAN		150	00	150	0 1576	5 206	bonding1-swit
🕐 MPLS 🛛 🗅	R 🙌	vlanAlumnado	207		VLAN		150	00	150	0 1576	5 207	bonding1-swit
1 Routing 🛛 🔿	R 🙌	vlanAlumnado	208		VLAN		150	00	150	0 1576	5 208	bonding1-swit
1 Carlans N	R 🙌	vlanAlumnado	209		VLAN		150	00	150	0 1576	5 209	bonding1-swit
System	R 🙌	vlanAlumnado	210		VLAN		150	00	150	0 1576	5 210	bonding1-swit
🙅 Queues	R 🙌	vlanAlumnado	211		VLAN		150	00	150	0 1576	5 211	bonding1-swit
🖿 Files	R 🙌	vlanAlumnado	212		VLAN		150	00	150	0 1576	5 212	bonding1-swit
	R 🙌	vlanAlumnado	214		VLAN		150	00	150	0 1576	5 214	bonding1-swit
📄 Log	R 🙌	vlanDepartam	ento12		VLAN		150	00	150	0 1576	5 12	bonding1-swit
RADIUS	R 🙀	vlanONT			VLAN		150	00	150	0 1576	6 6	sfp1-wan
💥 Tools 🛛 📐	R 🙀	vlanProfes11			VLAN		150	00	150	0 1576	5 11	bonding1-swit
	R 🗰	vlanProxmox5			VLAN		150	00	150	0 1576	5 5	bonding1-swit
New Terminal	R 🙀	vlanSwitches			VLAN		150	00	150	0 1576	6 1	bonding1-swit

- Dot1X
- 💻 LCD
- 🦺 Partition
- Nake Supout.rif
- S New WinBox
- 🔣 Exit

CONFIGURACIÓN VLANS

S		admin@192	.168.1.25	4 (Router(OS)
Session Settings Dashboard					
Safe Mode Session:	192.168.1.254				
💓 💓 Quick Set 🛛 Interface Lis					
CAPsMAN Interface	Interface List Ethernet EoIP Tunnel IP Tunnel GRE Tu	nnel VLAN VRF	RP Bonding	LTE	
🛲 Interfaces					
🖵 Wireless					Inte
Bridge	rianAlumnado IU/>		1500 1	576 107	nne 7 bon
tage PPP General	Loop Protect Status Traffic	ОК	1500 1	576 108	B bon
C. Mesh N	ame: vlanAlumnado107	Cancel	1500 1	576 110) bon
ES IP			1500 1	576 112	2 bon
MPLS N	ype: VLAN	Apply	1500 1	5/6 206	bon bon
Routing N	/TU: 1500	Disable	1500 1	576 208	B bon
Actual N	ATU: 1500	Disable	1500 1	576 209) bon
System		Comment	1500 1	576 210) bon
P Queues L2 M	/TU: 1576	Copy	1500 1	576 211	bon
Files MAC Add	ress: 18:FD:74:E2:4B:33	Сору	1500 1	576 212	2 bon
🗒 Log		Remove	1500 1	576 214 576 12	bon P
ADIUS		Torch	1500 1	576 6	S sfp1
X Tools ARP Tim	eout 📃 🗸 🗸		1500 1	576 11	bon
New Terminal			1500 1	576 5	5 bon
VLA VLA	NID: 107		1500 1	576 1	bon
	iace: bonding1-switch52				
	Use Service Tag				
Partition					
Make Supout.rif					

CONFIGURACIÓN VLANS

PUERTO	DESCRIPCION	RED	DIRECCIÓN	INTERFACE
1	WAN – Salida a Internet	80.58.67.86	80.28.211.131	pppoe-movistar
2	Red del Departamento	192.168.2.0/24	192.168.2.254	vlanDepertamento12
3	Red TIC - Andared	192.168.0.0/22	192.168.3.51	ether3-andared
bonding 9,10,11,12	Red de Profesores – Equipos Aulas	192.168.1.0/24	192.168.1.254	vlanAlumnos11
bonding		192.168.107.0/24	192.168.107.X	vlanAlumnos107
9,10,11,12	Aula 107	192.168.1.0/24	192.168.1.X	vlanAlumnos107
		192.168.0.0/24	192.168.0.107	vlanSwitches
bonding		192.168.108.0/24	192.168.108.X	vlanAlumnos108
9,10,11,12	Aula 108	192.168.1.0/24	192.168.1.X	vlanAlumnos11
		192.168.0.0/24	192.168.0.108	vlanSwitches
bonding		192.168.110.0/24	192.168.110.X	vlanAlumnos108
9,10,11,12	Aula 110	192.168.1.0/24	192.168.1.X	vlanAlumnos11
		192.168.0.0/24	192.168.0.110	vlanSwitches
bonding		192.168.206.0/24	192.168.206.X	vlanAlumnos206
9,10,11,12	Aula 206	192.168.1.0/24	192.168.1.X	vlanAlumnos11
		192.168.0.0/24	192.168.0.108	vlanSwitches
bonding		192.168.207.0/24	192.168.207.X	vlanAlumnos207
9,10,11,12	Aula 207	192.168.1.0/24	192.168.1.X	vlanAlumnos11
		192.168.0.0/24	192.168.0.207	vlanSwitches

CONFIGURACIÓN VLANS

PUERTO	DESCRIPCION	RED	DIRECCIÓN	INTERFACE
h a saite a		192.168.208.0/24	192.168.208.X	vlanAlumnos208
9,10,11,12	Aula 208	192.168.1.0/24	192.168.1.X	vlanAlumnos11
		192.168.0.0/24	192.168.0.208	vlanSwitches
h a saita a		192.168.209.0/24	192.168.209.X	vlanAlumnos209
9,10,11,12	Aula 209	192.168.1.0/24	192.168.1.X	vlanAlumnos11
		192.168.0.0/24	192.168.0.209	vlanSwitches
la e a alta a		192.168.210.0/24	192.168.210.X	vlanAlumnos210
9,10,11,12	Aula 210	192.168.1.0/24	192.168.1.X	vlanAlumnos11
		192.168.0.0/24	192.168.0.210	vlanSwitches
honding	Aula 211	192.168.211.0/24	192.168.211.X	vlanAlumnos211
9,10,11,12		192.168.1.0/24	192.168.1.X	vlanAlumnos11
		192.168.0.0/24	192.168.0.211	vlanSwitches
bonding		192.168.212.0/24	192.168.212.X	vlanAlumnos212
9,10,11,12	Aula 212	192.168.1.0/24	192.168.1.X	vlanAlumnos11
		192.168.0.0/24	192.168.0.212	vlanSwitches
bonding		192.168.214.0/24	192.168.214.X	vlanAlumnos214
9,10,11,12	Aula 214	192.168.1.0/24	192.168.1.X	vlanAlumnos11
		192.168.0.0/24	192.168.0.212	vlanSwitches

CONFIGURACIÓN VLANS

DETALLE DE CONFIGURACIÓN

/interface vlan

add interface=bonding1-switch52 l2mtu=1576 name=vlanAlumnos107 vlan-id=107 add interface=bonding1-switch52 l2mtu=1576 name=vlanAlumnos108 vlan-id=108 add interface=bonding1-switch52 l2mtu=1576 name=vlanAlumnos206 vlan-id=206 add interface=bonding1-switch52 l2mtu=1576 name=vlanAlumnos207 vlan-id=207 add interface=bonding1-switch52 l2mtu=1576 name=vlanAlumnos208 vlan-id=208 add interface=bonding1-switch52 l2mtu=1576 name=vlanAlumnos209 vlan-id=209 add interface=bonding1-switch52 l2mtu=1576 name=vlanAlumnos209 vlan-id=209 add interface=bonding1-switch52 l2mtu=1576 name=vlanAlumnos210 vlan-id=210 add interface=bonding1-switch52 l2mtu=1576 name=vlanAlumnos211 vlan-id=211 add interface=bonding1-switch52 l2mtu=1576 name=vlanAlumnos211 vlan-id=211 add interface=bonding1-switch52 l2mtu=1576 name=vlanAlumnos212 vlan-id=214 add interface=bonding1-switch52 l2mtu=1576 name=vlanAlumnos212 vlan-id=214

add interface=bonding1-switch52 name=vlanDepartamento12 vlan-id=12 add interface=bonding1-switch52 name=vlanProfes11 vlan-id=11 add interface=bonding1-switch52 name=vlanProxmox5 vlan-id=5 add interface=bonding1-switch52 name=vlanSwitches vlan-id=1

CONFIGURACIÓN DHCP

RED	DESCRIPCION	RANGO IPS	GATEWAY	INTERFACE
192.168.1.0/24	Red de Profesores	192.168.1.2-99	192.168.1.254	vlanProfes
192.168.2.0/24	Red del Departamento	192.168.2.2-199	192.168.2.254	vlanDepar
192.168.100.0/24	Red Equipo Directivo	192.168.100.2-199	192.168.100.254	ether2
192.168.107.0/24	Aula 107	192.168.107.2-199	192.168.107.254	vlanAlumnos107
192.168.108.0/24	Aula 108	192.168.108.2-199	192.168.108.254	vlanAlumnos108
192.168.110.0/24	Aula 110	192.168.110.2-199	192.168.110.254	vlanAlumnos110
192.168.206.0/24	Aula 206	192.168.206.2-199	192.168.206.254	vlanAlumnos206
192.168.207.0/24	Aula 207	192.168.207.2-199	192.168.207.254	vlanAlumnos207
192.168.208.0/24	Aula 208	192.168.208.2-199	192.168.208.254	vlanAlumnos208
192.168.209.0/24	Aula 209	192.168.209.2-199	192.168.209.254	vlanAlumnos209
192.168.210.0/24	Aula 210	192.168.210.2-199	192.168.210.254	vlanAlumnos210
192.168.211.0/24	Aula 211	192.168.211.2-199	192.168.211.254	vlanAlumnos211
192.168.212.0/24	Aula 212	192.168.212.2-199	192.168.212.254	vlanAlumnos212
192.168.214.0/24	Aula 214	192.168.214.2-199	192.168.214.254	vlanAlumnos214

Otros Parámetros	Valor
DNS	192.168.5.2 (Adguard Docker)
	80.58.61.250 (Telefónica)
	80.58.61.254 (Telefónica)
Domain	18700098.18.andared.ced.junta-andalucia.es

CONFIGURACIÓN POOLS IP

🔏 Quick Set	Bridge									
🚊 CAPsMAN	Bridge Ports Filters	NAT Hosts								
🛲 Interfaces	+ - / ×	T								
🤶 Wireless	Interface /	Bridge	Priority (h	Path Cost	Horizon	Role	Root Pat			
📲 Bridge	1-tether4-profes	redProfes	80	10		designated port				
	1⊐tvlanProfes108	redProfes	80	10		designated port				
	t⊐tvlanProfes206	redProfes	80	10		designated port				
°t\$ Mesh	121vlanPmfes207	redProfes	80	10		designated port				
≊5 IP ►	ARP	dProfes	08	10		designated port				
D MPLS	Accounting	dProfes	80	10		designated port				
	Addresses	dProfes	80	10		designated port				
🚜 Routing 🛛 🗅	Claud	dProfes	80	10		designated port				
🌐 System 🗈	Cioud			40						
🙊 Queues	DHCP Client	Im IP Pool								
📄 Files	DHCP Relay	dm	Addresses							
E Log	DHCP Server	_ <u>in</u> 🕂 🖃 🛽	7						Fit	nd
🧟 Radius	DNS	dm Name				∠ Ad	dresses		Next Pool	_
Tools	Firewall	fm Pool-IP-De	par			192	2.168.2.2-192.16	8.2.199	none	
New Terminal	Hotspot	+ Pool-VPN-	rores-Aulas red			19/	2.168.1.10-192.1	168.2.230	none	
	IPsec	⊕pool-IPs-A	umnos-108			192	2.168.108.2-192.	168.108.199	none	
	Neighbors	中pool-IPs-A	umnos-206			192	2.168.206.2-192.	168.206.199	none	
🍤 Partition	Dealtra	Pool-IPs-A	umnos-207			19/	2.168.207.2-192.	168.207.199	none	
💄 Make Supout.rif	Facking	- pool-IPs-A	umnos-208 umnos-209			19/	2.100.200.2-192.	168 209 199	none	
Manual	Pool	⊕pool-IPs-A	umnos-210			192	2.168.210.2-192	168.210.199	none	
Eva	Routes	+ pool-IPs-A	umnos-211			192	2.168.211.2-192	168.211.199	none	
	SMB	☆pool-IPs-A	umnos-212			192	2.168.212.2-192.	168.212.199	none	
<	SNMP									
ß	Services									
	Settings									
	Socks	11 items								
5	TETP	1								

CONFIGURACIÓN POOLS IP

DETALLE DE CONFIGURACIÓN

/ip pool

add name=Pool-IP-Depar ranges=192.168.2.2-192.168.2.199 add name=Pool-IPs-Profes-Aulas ranges=192.168.1.10-192.168.1.99 add name=pool-IPs-Alumnos-108 ranges=192.168.108.2-192.168.108.199 add name=pool-IPs-Alumnos-206 ranges=192.168.206.2-192.168.206.199 add name=pool-IPs-Alumnos-209 ranges=192.168.209.2-192.168.209.199 add name=pool-IPs-Alumnos-210 ranges=192.168.210.2-192.168.210.199 add name=pool-IPs-Alumnos-211 ranges=192.168.211.2-192.168.211.199 add name=pool-IPs-Alumnos-212 ranges=192.168.212.2-192.168.212.199 add name=pool-IPs-Alumnos-207 ranges=192.168.207.2-192.168.207.199

CONFIGURACIÓN SERVICIO DHCP

🔏 Quick Set								
🔔 CAPsMAN								
🛲 Interfaces		DUCR Server						
📜 Wireless		DHCP Server			_			
😹 Bridge		DHCP Networks	Leases Options Op	tion Sets A	erts			
PPP		+ - 🖉 💥	DHCP Conf	ig DHCP	Setup		Fi	ind
°T [®] Mesh		Name	∧ Interface	Relay	Lease Time	Address Pool	Add AR	-
	ARP	108-dhcp	vlanAlumnos108		06:00:00	pool-IPs-Alumnos-108	no	
₩ IP	Accounting	206-dhcp	vlanAlumnos206		06:00:00	pool-IPs-Alumnos-206	no	
🧷 MPLS 🛛 🗅	Accounting	207-dhcp	vlanAlumnos207		06:00:00	pool-IPs-Alumnos-207	no	
🜌 Routing 🗈	Addresses	208-dhcp	vlanAlumnos208		06:00:00	pool-IPs-Alumnos-208	no	
Svetem	Cloud	209-dncp 210-dhcp	vlanAlumnos209		06:00:00	pool-IPs-Alumnos-209 pool-IPs-Alumnos-210	no	
- System	DHCP Client	211-dhcp	vlanAlumnos211		06:00:00	pool-IPs-Alumnos-211	no	
Sueues	DUCD Dalass	212-dhcp	vlanAlumnos212		06:00:00	pool-IPs-Alumnos-212	no	
📄 Files	рнор кејау	depar-dhcp	ether2-depar		06:00:00	Pool-IP-Depar	no	
E Log	DHCP Server	profes-dhcp	redProfes		06:00:00	Pool-IPs-Profes-Aulas	no	
A Radius	DNS							
X Tools	Firewall							
New Terminal	Hotspot							
	IPsec							
Partition	Neighbors	10 items						
Make Supout if	Packing							
Manual	Pool							
	Routes							

CONFIGURACIÓN SERVICIO DHCP

DETALLE DE CONFIGURACIÓN

/ip dhcp-server add address-pool=Pool-IP-Depar disabled=no interface=ether2-depar lease-time=\ 6h name=depar-dhcp add address-pool=Pool-IPs-Profes-Aulas disabled=no interface=redProfes \ lease-time=6h name=profes-dhcp add address-pool=pool-IPs-Alumnos-108 disabled=no interface=vlanAlumnos108 \ lease-time=6h name=108-dhcp add address-pool=pool-IPs-Alumnos-209 disabled=no interface=vlanAlumnos209 \ lease-time=6h name=209-dhcp add address-pool=pool-IPs-Alumnos-210 disabled=no interface=vlanAlumnos210 \ lease-time=6h name=210-dhcp add address-pool=pool-IPs-Alumnos-211 disabled=no interface=vlanAlumnos211 \ lease-time=6h name=211-dhcp add address-pool=pool-IPs-Alumnos-212 disabled=no interface=vlanAlumnos212 \ lease-time=6h name=212-dhcp add address-pool=pool-IPs-Alumnos-206 disabled=no interface=vlanAlumnos206 \ lease-time=6h name=206-dhcp add address-pool=pool-IPs-Alumnos-207 disabled=no interface=vlanAlumnos207 \ lease-time=6h name=207-dhcp add address-pool=pool-IPs-Alumnos-208 disabled=no interface=vlanAlumnos208 \ lease-time=6h name=208-dhcp

CONFIGURACIÓN REDES DHCP

DHCP Server			DHCP Network <19	×□	
DHCP Networks Lea	ses Options Option	on Sets Alerts	Address:	192.168.108.0/24	ОК
+ 7			Gateway:	192.168.108.254 🖨	Cancel
Address A	Gateway	DNS Servers	Netmask:	24	Apply
192.168.1.0/24	192.168.1.254	192.168.1.254, 8			
192.168.2.0/24	192.168.2.254	192.168.2.254, 8	DNS Servers:	192.168.108.254	Comment
192.168.3.0/24	192.168.0.1	192.168.1.254, 8		80 58 61 254	
192.168.108.0/24	192.168.108.254	192.168.108.254		00.00.01.204	Сору
192.168.206.0/24	192.168.206.254	192.168.206.254	Domain:	18700098.18.anda 🔺	
192.168.207.0/24	192.168.207.254	192.168.207.254			Remove
192.168.208.0/24	192.168.208.254	192.168.208.254	WINS Servers:	↓	
192.168.209.0/24	192.168.209.254	192.168.209.254	NTDO		
192.168.210.0/24	192.168.210.254	192.168.210.254	NTP Servers:	— —	
192.168.211.0/24	192.168.211.254	192.168.211.254	CAPS Managem		
192.168.212.0/24	192.168.212.254	192.168.212.254	CAPS Managers.	▼	
			Next Server:	192.168.1.100	
			Boot File Name:	pxelinux.0	
			DHCP Options:	\$	
11 items (1 selected)			DHCP Option Set:	 ~	
(1 selected)					

CONFIGURACIÓN REDES DHCP

DETALLE DE CONFIGURACIÓN

/ip dhcp-server network

add address=192.168.1.0/24 boot-file-name=pxelinux.0 dns-server=\ 192.168.1.254,80.58.61.254,8.8.8 domain=\ ieszaidinvergeles.org gateway=192.168.1.254 netmask=\ 24 next-server=192.168.1.100 add address=192.168.2.0/24 boot-file-name=pxelinux.0 dns-server=\ 192.168.2.254,80.58.61.254 domain=\ ieszaidinvergeles.org gateway=192.168.2.254 netmask=\ 24 next-server=192.168.1.100 add address=192.168.3.0/24 boot-file-name=pxelinux.0 dns-server=\ 192.168.1.254,80.58.61.254 domain=\ ieszaidinvergeles.org gateway=192.168.0.1 netmask=22 \ next-server=192,168,1,100 add address=192.168.108.0/24 boot-file-name=pxelinux.0 dns-server=\ 192.168.108.254,80.58.61.254 domain=\ ieszaidinvergeles.org gateway=192.168.108.254 \ netmask=24 next-server=192,168,1,100 add address=192.168.206.0/24 boot-file-name=pxelinux.0 dns-server=\ 192.168.206.254,80.58.61.254 domain=\ ieszaidinvergeles.org gateway=192.168.206.254 \ netmask=24 next-server=192.168.1.100

CONFIGURACIÓN REDES DHCP

DETALLE DE CONFIGURACIÓN

/ip dhcp-server network

add address=192.168.207.0/24 boot-file-name=pxelinux.0 dns-server=\ 192.168.207.254,80.58.61.250 domain=\ ieszaidinvergeles.org gateway=192.168.207.254 \ netmask=24 next-server=192.168.1.100 add address=192.168.208.0/24 boot-file-name=pxelinux.0 dns-server=\ 192.168.208.254,80.58.61.254 domain=\ ieszaidinvergeles.org gateway=192.168.208.254 \ netmask=24 next-server=192,168,1,100 add address=192.168.209.0/24 boot-file-name=pxelinux.0 dns-server=\ 192.168.209.254,80.58.61.254 domain=\ ieszaidinvergeles.org gateway=192.168.209.254 \ netmask=24 next-server=192,168,1,100 add address=192.168.210.0/24 boot-file-name=pxelinux.0 dns-server=\ 192.168.210.254,80.58.61.254 domain=\ ieszaidinvergeles.org gateway=192.168.210.254 \ netmask=24 next-server=192.168.1.100 add address=192.168.211.0/24 boot-file-name=pxelinux.0 dns-server=\ 192.168.211.254,80.58.61.254 domain=\ ieszaidinvergeles.org gateway=192.168.211.254 \ netmask=24 next-server=192,168,1,100 add address=192.168.212.0/24 boot-file-name=pxelinux.0 dns-server=\ 192.168.212.254,80.58.61.254 domain=\ ieszaidinvergeles.org gateway=192.168.212.254 \ netmask=24 next-server=192.168.1.100

CONFIGURACIÓN DNS-CACHE

🗯 Quick Set						
CAPsMAN						
Interfaces						
🤶 Wireless			DNS Settings			
Standard Bridge			DNS Settings			
🚅 PPP			Servers:	192.168.1.254	_ \$	OK
°t\$ Mesh		1		80.58.61.250	\$	Cancel
≊55 IP ►	ARP			80.58.61.254	\$	Apply
🧷 MPLS 🛛 🗅	Accounting			8.8.8.8	•	
🔀 Routing 🛛 🗅	Addresses			0 0 4 4		Static
💮 System 🗅	Cloud			0.0.4.4		Cache
Queues	DHCP Client		Dynamic Servers:	80.58.61.250		
Files	DHCP Relay			80.58.61.254		
E Log	DHCP Server			Allow Remote Requests		
A Radius	DNS		Max UDP Packet Size:	4096		
X Tools	Firewall			1000		
New Terminal	Hotspot		Query Server Timeout:	1.000	s	
	IPsec		Query Total Timeout:	5.000	s	
Partition	Neighbors				_	
Make Supout rif	Packing		Cache Size:	16382	КiВ	
Manual Manual	Pool		Cache Max TTL:	7d 00:00:00		
Fxit	Routes		Cache Used:	2152		
	SMB					
<	SNMP					
8	Services					
	Settings					
	Socks					

CONFIGURACIÓN DNS-CACHE

DETALLE DE CONFIGURACIÓN

/ip dns

set allow-remote-requests=yes cache-size=16382KiB query-server-timeout=1s \ query-total-timeout=5s servers=\ 192.168.1.254,80.58.61.250,80.58.61.254,8.8.8.8.8.8.4.4

/ip dns static

add address=192.168.1.100 name="informatica.ieszaidinvergeles.org.18700098.18.\ andared.ced.junta-andalucia.es" add address=192.168.1.100 name=\ diskstation.18700098.18.andared.ced.junta-andalucia.es add address=192.168.0.2 name=c0.18700098.18.andared.ced.junta-andalucia.es add address=192.168.1.1 name=\

webserver.18700098.18.andared.ced.junta-andalucia.es

/ip firewall nat

add action=redirect chain=dstnat comment="Redirigir a DNS Cache" dst-port=53 protocol=\ udp to-ports=53

CONFIGURACIÓN DEL FIREWALL



CONFIGURACIÓN DEL FIREWALL REGLAS FILTER

🄏 Quick Set	Queue List	Firewall									
CAPsMAN	Simple Queues Interfac	Filter Rul	es NAT	Mangle	Service Ports	Connections	Address Lists	Layer7 Protocols	3		
Interfaces	+- ~ ×	+ -	v 3	• 🗖	T 00 Rese	t Counters	00 Reset All C	Counters			
Wireless	# Name	#	Action	Chain	Src. Address	Dst Address	Protocol	Src. Port	Dst Port	In Interface	C
🐮 Bridge		::: Cort	ar puertos	del router	desde el Exterior	200.71001000	11000001	010.1101	Dot. For	In Incondoo	
	-	0	× reject	input			6 (tcp)		1-1023,8	pppoe-movistar	
E LLL	-	::: TCF	flags and	Port 0 atta	acks						
°° Mesh		1	💢 drop	forward			6 (tcp)				
255 IP	ARP	2	🗙 drop	forward			6 (tcp)				
		3	× drop	forward			17 (udp)	0			
WIPLS P	Accounting	4	× drop	forward			17 (udp)		0		
🔀 Routing 🛛 🗅	Addresses	::: Perr	nitir destin	o red I IC		102 100 0					
💮 System 🗈	Cloud	D C Perr	v acc nitir acces	rorward o al Servid	lor Web	192.168.0					
Queues	DHCP Client	6	Vacc	forward	192.168.0	192.168.1.1					
Eilee	DUCD Delev	::Perr	nitir conex	ion NAS							
	DHCP Relay	/	Vacc	torward	192.168.0	192.168.1					
Eog	DHCP Server	::: Per	nitir conex		100 100 0	100 100 1					
🧟 Radius	DNS	Ö Dom	V acc	rorward	192.168.2	192.168.1	•				
Ve Taala N	D	q	acc.	forward	192 168 2	192 168 0					
× TOOIS	Firewall	··· Aislz	r Red De	nartamento	132.100.2	132.100.0	•				
🔚 New Terminal	Hotspot	10		forward	192.168.1	192.168.2					
E LCD	IPsec.	::: Aisla	r Redes A	Aulas Alum	nos / Abrir y cerra	r el cortafuego)S				
		11	🗙 drop	forward	192.168.10	192.168.0					
Partition	Neighbors	12	🗙 drop	forward	192.168.20	192.168.0					
💄 Make Supout.rif	Packing	13	💢 drop	forward	192.168.20	192.168.0					
Manual	Pool	14	💢 drop	forward	192.168.20	192.168.0					
	1001	15	🗙 drop	forward	192.168.20	192.168.0					
🛃 Exit	Routes	16	× drop	forward	192.168.21	192.168.0					
	SMB	17	× drop	forward	192.168.21	192.168.0					
		18	💢 drop	forward	192.168.21	192.168.0					

CONFIGURACIÓN DEL FIREWALL REGLAS FILTER

DETALLE DE CONFIGURACIÓN

/ip firewall filter

add action=reject chain=input comment="Cortar puertos Exterior" dst-port=1-1023,8291 \ in-interface=pppoe-movistar protocol=tcp reject-with=icmp-port-unreachable add action=drop chain=forward comment="TCP flags and Port 0 attacks" \ protocol=tcp tcp-flags=fin,!ack add action=drop chain=forward protocol=tcp tcp-flags=fin,urg add action=drop chain=forward protocol=udp src-port=0 add action=drop chain=forward dst-port=0 protocol=udp add chain=forward comment="Permitir destino redTIC" dst-address=\ 192.168.0.0/24 add chain=forward comment="Permitir acceso al Servidor Web" dst-address=\ 192.168.1.1 src-address=192.168.0.0/16 add chain=forward comment="Permitir conexion NAS" dst-address=192.168.1.100 \ src-address=192.168.0.0/16 add chain=forward comment="Permitir conexion ITX" dst-address=192.168.1.200 \ src-address=192,168,2,0/24 add chain=forward comment="Permitir conexion desde Departamento a TODOS" \ dst-address=192.168.0.0/16 src-address=192.168.2.0/24 add action=drop chain=forward comment="Aislar Red Departamento" \ connection-state=new dst-address=192.168.2.0/24 src-address=\ 192.168.1.0/24 src-address-list=!192.168.1.100 add action=drop chain=forward comment="Aislar Redes Aulas Alumnos" \ connection-state=new dst-address=192.168.0.0/16 src-address=192.168.108.0/24

CONFIGURACIÓN DEL FIREWALL REGLAS FILTER

DETALLE DE CONFIGURACIÓN

/ip firewall **filter**

- add action=drop chain=forward connection-state=new dst-address=192.168.0.0/16 \ src-address=192.168.206.0/24
- add action=drop chain=forward connection-state=new dst-address=192.168.0.0/16 \ src-address=192.168.207.0/24
- add action=drop chain=forward connection-state=new dst-address=192.168.0.0/16 \ src-address=192.168.208.0/24
- add action=drop chain=forward connection-state=new dst-address=192.168.0.0/16 \ src-address=192.168.209.0/24
- add action=drop chain=forward connection-state=new dst-address=192.168.0.0/16 \ src-address=192.168.210.0/24
- add action=drop chain=forward connection-state=new dst-address=192.168.0.0/16 \ src-address=192.168.211.0/24
- add action=drop chain=forward connection-state=new dst-address=192.168.0.0/16 \ src-address=192.168.212.0/24
- add action=drop chain=forward comment=108 src-address=192.168.108.0/24 add action=drop chain=forward comment=206 src-address=192.168.206.0/24 add action=drop chain=forward comment=207 src-address=192.168.207.0/24 add action=drop chain=forward comment=208 disabled=yes src-address=\

192.168.208.0/24

add action=drop chain=forward comment=209 src-address=192.168.209.0/24 add action=drop chain=forward comment=210 disabled=yes src-address=192.168.210.0/24 add action=drop chain=forward comment=211 disabled=yes src-address=192.168.211.0/24 add action=drop chain=forward comment=212 src-address=192.168.212.0/24

CONFIGURACIÓN DEL FIREWALL REGLAS NAT

Exit

Routes

🔏 Quick Set	Queue List	Firewall
🔔 CAPsMAN	Simple Queues Interfac	AC Filter Rules NAT Mangle Service Ports Connections Address Lists Layer7 Protocols
🛲 Interfaces	+ - 🖉 💥 1	🕂 🛨 🖌 🗶 🗂 🧊 00 Reset Counters 00 Reset All Counters
🧘 Wireless	# Name	# Action Chain Src. Address Dst. Address Proto Src. Port Dst. Port In. Inter Out. Interface
📲 Bridge		;;; Masquerade WAN
💼 PPP		0 ≓ll masquerade srcnat pppoe-movist
		;;; Masquerade ANDARED
ଁ lõ Mesh		1 ≠II masquerade srcnat ether3-andare
255 IP 🗅 🗅	ARP	;;; Masquerade FIREWALL
20 MPLS N	Anner	Z Filmasquerade srcnat 192.168.1.200 redProfes
	Accounting	Redirection al servicior VPIN
🌌 Routing 🛛 🗅	Addresses	S */ Ustriat Ustriat 00.20.211.131 0 (tcp) 1723
💮 System 🛛 🗅	Cloud	4 ≓l masquerade srcnat 192 168 1 1 redProfes
	DUCD Class	::: Masguerade NAS
- QUEUES	DHCP Client	5 ≓∥ masquerade srcnat 192.168.1.100 redProfes
📄 Files	DHCP Relay	6 +∦*dst-nat dstnat 80.28.211.131 6 (tcp) 5000
🗏 Log	DHCP Server	7 +∦*dst-nat dstnat 80.28.211.131 6 (tcp) 5001
		::: DNS Cache
Mr. Radius	DNS	8 ≓ll redirect dstnat 17 (u 53
🗙 Tools 🛛 🗅	Firewall	
🔚 New Terminal	Hotspot	
	in the second se	
	IPsec	
🥭 Partition	Neighbors	
💄 Make Supout.rif	Packing	
😧 Manual	Pool	

CONFIGURACIÓN DEL FIREWALL REGLAS NAT

DETALLE DE CONFIGURACIÓN

/ip firewall nat add action=masquerade chain=srcnat comment="Masquerade WAN" out-interface=\ pppoe-movistar add action=masquerade chain=srcnat comment="Masquerade ANDARED" \ out-interface=ether3-andared add action=masquerade chain=srcnat comment="Masquerade FIREWALL" dst-address=\ 192.168.1.200 out-interface=redProfes add action=dst-nat chain=dstnat comment="Redireccion al servidor VPN" \ dst-address=80.28.211.131 dst-port=1723 protocol=tcp to-addresses=\ 192,168,2,254 add action=masquerade chain=srcnat comment="Masquerade WebServer" \ dst-address=192.168.1.1 dst-address-list=192.168.1.1 out-interface=\ redProfes add action=masquerade chain=srcnat comment="Masquerade NAS" dst-address=\ 192.168.1.100 out-interface=redProfes add action=dst-nat chain=dstnat dst-address=80.28.211.131 dst-port=5000 \ protocol=tcp to-addresses=192.168.1.100 to-ports=5000 add action=dst-nat chain=dstnat dst-address=80.28.211.131 dst-port=5001 \ protocol=tcp to-addresses=192.168.1.100 to-ports=5001 add action=redirect chain=dstnat comment="DNS Cache" dst-port=53 protocol=\ udp to-ports=53

CONFIGURACIÓN DEL FIREWALL REGLAS MANGLE

🔏 Quick Set	Queue List	Firewall							
🔔 CAPsMAN	Simple Queues Interfac	Filter Rules NAT Mangle Service	ce Ports Connections Ad	dress Lists Layer7	Protocols				
Interfaces			00 Reset Counters 00	Reset All Counters					
Wireless	# Name 1		Chain	Can Address	Dat Date and	Car Dat	la latadaaa	Out Interferen	
Se Bridge		0 D Action	forward	Src. Address	Dst Protocol	SIC DSL.	. In. Interrace	out. Interrace	
		1 D V change MSS	forward		6 (tcp)		all oop	aii ppp	
E PPP		::: Conexion VPN pptp			5 ((SP)		PPP		
°t≵ Mesh		2 / mark connection	input		47 (gre)				
255 IP	400	3 🖌 mark packet	input						
	ARP	4 🖌 🖉 mark packet	output						
MPLS 🗅	Accounting	5 I mark connection	input		6 (tcp)	1723	}		
🔀 Routing 🛛 🗅	Addresses	6 s mark packet	input						
All Cuntom	0.1	7 / mark packet	output						
System 1	Cloud	::: P2P							
Sequences	DHCP Client	8 / mark connection	postrouting				anna ann ústar	pppoe-movistar	
Files	DHCP Relay	10 mark packet	prerouting				pppoe-movistar	pppoe-movietar	
	puep e	···· Trafico de ALILAS PROFES VI	DEPAR					pppoentovistal	
Log	DHCP Server	11 / mark connection	postrouting	192 168 1 0/24				pppoe-movistar	
🎊 Radius	DNS	12 / mark packet	prerouting				pppoe-movistar	pppee menee	
🖌 Tools 📃 🗅	Firewall	13 / mark packet	postrouting					pppoe-movistar	
	T II CWAII	14 A mark connection	postrouting	192.168.2.0/24				pppoe-movistar	
New Terminal	Hotspot	15 🖌 mark packet	prerouting				pppoe-movistar		
💻 LCD	IPsec	16 🖉 mark packet	postrouting					pppoe-movistar	
Partition	Neichham	17 A mark connection	postrouting	192.168.108.0/24				pppoe-movistar	
	Neighbors	18 🕒 mark packet	prerouting				pppoe-movistar		
Make Supout.rif	Packing	19 / mark packet	postrouting	100 100 000 0/04				pppoe-movistar	
😧 Manual	Pool	20 / mark connection	postrouting	192.168.206.0/24			and the second states	pppoe-movistar	
Ev#	Deutee	21 A mark packet	prerouting				pppoe-movistar	papao maviator	
	Routes	22 Prindik packet	postrouting	192 168 207 0/24				pppoe-movistar	
	SMB	24 / mark packet	prerouting	132.100.207.0/24			oppoe-movistar	pppoentovistal	
	SNMP	25 / mark packet	postrouting				pppoolinerical	pppoe-movistar	
	Candidan	26 / mark connection	postrouting	192.168.208.0/24				pppoe-movistar	
	Services	27 smark packet	prerouting				pppoe-movistar		
	Settings	28 🖌 mark packet	postrouting					pppoe-movistar	
	Socks	29 / mark connection	postrouting	192.168.209.0/24				pppoe-movistar	
	тсто	30 / mark packet	prerouting				pppoe-movistar		
	IFIP	31 / mark packet	postrouting	100 100 010 0 /04				pppoe-movistar	
	Traffic Flow	32 / mark connection	postrouting	192.168.210.0/24			annes merider	pppoe-movistar	
	UPnP	30 ar mark packet	prerouting				pppoe-movistar	pppoe-movieter	
	Web Deve	35 / mark connection	postrouting	192 168 211 0/24				pppoe-movistar	
	web Proxy	36 / mark packet	prerouting	102.100.211.0/24			pppoe-movistar	Pppool in o Hotor	
		37 smark packet	postrouting				PPP'ss	pppoe-movistar	
		38 / mark connection	postrouting	192.168.212.0/24				pppoe-movistar	
		39 🖌 mark packet	prerouting				pppoe-movistar		

CONFIGURACIÓN DEL FIREWALL REGLAS MANGLE

Ejemplo de Marcados de Conexiones y Paquetes de Entrada/Salida

/ip firewall mangle
add action=mark-connection chain=postrouting comment=\
 "Conexiones nuevas desde de la red de profes" connection-state=new \
 new-connection-mark=redprofes out-interface=pppoe-movistar src-address=\
 192.168.1.0/24
add action=mark-packet chain=prerouting connection-mark=redprofes \
 in-interface=pppoe-movistar new-packet-mark=profes_in passthrough=no
add action=mark-packet chain=postrouting connection-mark=redprofes \
 new-packet-mark=profes_out out-interface=pppoe-movistar passthrough=no