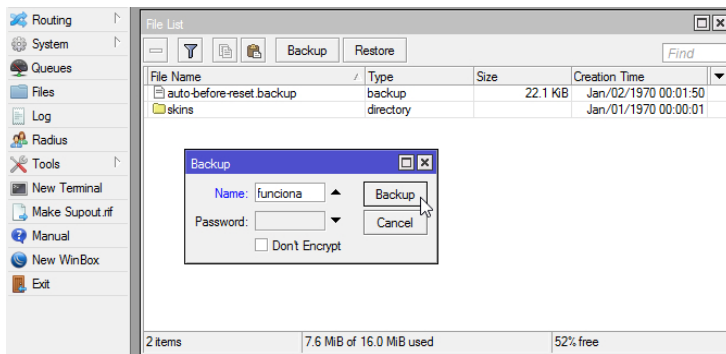


Balanceo de Carga usando Router Home Station

Aprovechando que Movistar con "Imagenio", trabaja con dos VLAN una para Imagenio con la IP 10.x.x.x y la otra para Internet con la IP 192.168.x.x. La idea es configurar Mikrotik para usar **Balanceo de Carga**.

Lo primero es realizar una **copia de seguridad** de la configuración del Mikrotik para ello vamos a:

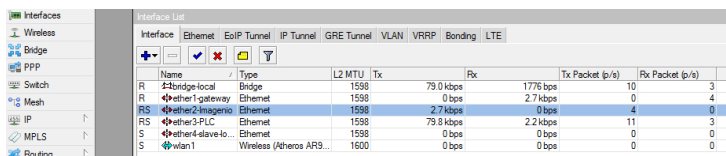
Files --> Backup



Recordar! Renombrar las interfaces y realizar comentarios si es necesario para un mejor resultado!

Para realizar el balanceo de carga, usaremos la boca 1 para "Gateway" (192.168.x.x), la boca 2 la llamaremos Imagenio (10.138.x.x), la boca 3 para el Switch o en mi caso un PLC (192.168.0.x)

En "**Interfaces**" veremos las bocas y podremos cambiar los nombres.

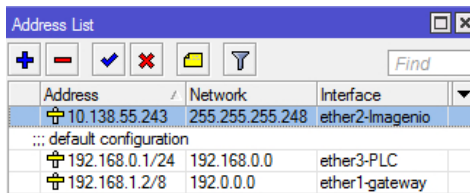


The screenshot shows the 'Interfaces List' window in Mikrotik WinBox. It displays a table of network interfaces with columns for Name, Type, L2 MTU, Tx, Rx, Tx Packet (p/s), and Rx Packet (p/s). The interface 'ether2-Imagenio' is highlighted in blue.

Name	Type	L2 MTU	Tx	Rx	Tx Packet (p/s)	Rx Packet (p/s)
bridge-local	Bridge	1538	79.0 kbps	1776 bps	10	3
ether1-gateway	Ethernet	1538	0 bps	2.7 kbps	0	4
ether2-Imagenio	Ethernet	1538	2.7 kbps	0 bps	4	0
ether3-PLC	Ethernet	1538	79.8 kbps	2.2 kbps	11	3
ether4-slave-to...	Ethernet	1538	0 bps	0 bps	0	0
wlan1	Wireless (Atheros AR9...	1600	0 bps	0 bps	0	0

Para asignarles las IP correspondientes utilizaremos:

IP --> Addresses



The screenshot shows the 'Address List' window in Mikrotik WinBox. It displays a table of IP addresses with columns for Address, Network, and Interface. The address 10.138.55.243 is assigned to the interface 'ether2-Imagenio'.

Address	Network	Interface
10.138.55.243	255.255.255.248	ether2-Imagenio
... default configuration		
192.168.0.1/24	192.168.0.0	ether3-PLC
192.168.1.2/8	192.0.0.0	ether1-gateway

Debemos configurar el "**Mangle**" (marcado de paquetes según el puerto de destino) en el "**Firewall**", para ello utilizaremos "**New Terminal**" copiaremos y pegaremos las siguientes líneas:

/ip address

```
add address=192.168.0.1/24 network=192.168.0.0 broadcast=192.168.0.255 interface=ether3-PLC
add address=192.168.1.2/24 network=192.168.0.0 broadcast=192.168.0.255 interface=ether2-Gateway
add address=10.138.55.243/8 network=10.138.0.0 broadcast=10.138.0.255 interface=ether1-Imagenio

/ ip firewall mangle
add chain=prerouting src-address-list=ether1-Gateway in-interface=ether3-PLC action=mark-connection
new-connection-mark=ether1-Gateway passthrough=yes

add chain=prerouting src-address-list=ether1-Gateway in-interface=ether3-PLC action=mark-routing
new-routing-mark=ether1-Gateway passthrough=no

add chain=prerouting src-address-list=ether2-Imagenio in-interface=ether3-PLC action=mark-connection
new-connection-mark=ether2-Imagenio passthrough=yes

add chain=prerouting src-address-list=ether2-Imagenio in-interface=ether3-PLC action=mark-routing
new-routing-mark=ether2-Imagenio passthrough=no

add chain=prerouting in-interface=ether3-PLC connection-state=new nth=2,1
action=mark-connection new-connection-mark=ether1-Gateway passthrough=yes

add chain=prerouting in-interface=ether3-PLC action=add-src-to-address-list
address-list=ether1-Gateway address-list-timeout=1d connection-mark=ether1-Gateway passthrough=yes

add chain=prerouting in-interface=ether3-PLC connection-mark=ether1-Gateway action=mark-routing
new-routing-mark=ether1-Gateway passthrough=no

add chain=prerouting in-interface=ether3-PLC connection-state=new nth=2,2
action=mark-connection new-connection-mark=ether2-Imagenio passthrough=yes

add chain=prerouting in-interface=ether3-PLC action=add-src-to-address-list
address-list=ether2-Imagenio address-list-timeout=1d connection-mark=ether2-Imagenio passthrough=yes

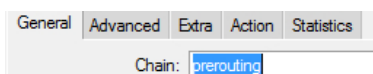
add chain=prerouting in-interface=ether3-PLC connection-mark=ether2-Imagenio action=mark-routing
new-routing-mark=ether2-Imagenio passthrough=no

/ ip firewall nat
add chain=srcnat out-interface=ether1-Gateway action=masquerade
add chain=srcnat out-interface=ether2-Imagenio action=masquerade

/ ip route
add dst-address=0.0.0.0/0 gateway=10.138.55.241 scope=255 target-scope=10 routing-mark=ether2-Imagenio
add dst-address=0.0.0.0/0 gateway=192.168.1.1 scope=255 target-scope=10 routing-mark=ether1-Gateway
add dst-address=0.0.0.0/0 gateway=192.168.1.1 scope=255 target-scope=10
```

En forma gráfica sería:

```
add chain=prerouting
```



The image shows a screenshot of the Mikrotik WinBox configuration interface. At the top, there are five tabs: 'General', 'Advanced', 'Extra', 'Action', and 'Statistics'. The 'General' tab is selected. Below the tabs, there is a label 'Chain:' followed by a text input field containing the value 'prerouting'.

connection-mark=ether1-Gateway (cambiamos odd por ether1-Gateway)

General	Advanced	Extra	Action	Statistics
Src. Address List: <input type="checkbox"/> odd				

In. Interface: <input type="checkbox"/> ether3-PLC
--

action=mark-routing=ether1-Gateway (cambiamos odd por ether1-Gateway)

Advanced	Extra	Action	Statistics
Action: mark routing			

new-connection-mark=ether1-Gateway (cambiamos odd por ether1-Gateway)

New Connection Mark: odd
<input checked="" type="checkbox"/> Passthrough

nth=2,2

Nth
Every: <input type="checkbox"/> 2
Packet: 1

Fuente:

[http://wiki.mikrotik.com/wiki/Balanceo de carga mejorado atrav% C3%A9z de multiples gateway \(wan\)](http://wiki.mikrotik.com/wiki/Balanceo_de_carga_mejorado_atrav%C3%A9_de_m%C3%BAltiples_gateway_(wan))

<http://www.ryohnosuke.com/>