



Provedor de Internet e Serviços - (41) 3673-5879

Balance PCC para 3 links adsl com modem em bridge (2 links de 8mb, 1 link de 2mb).

Seu servidor deverá estar com a versão 3.24 ou superior do Mikrotik RouterOS e no mínimo 4 (quatro) placas de rede.

A versão usada no exemplo abaixo foi a v4.5.

Primeiro de tudo vamos dar nome as interfaces:

ether1 = saida (Interface onde os link`s vão sair já balanceados).

ether2 = wlan1 (Interface onde sera ligado o link1 de 8mb)

ether3 = wlan2 (Interface onde sera ligado o link2 de 8mb)

ether4 = wlan3 (Interface onde sera ligado o link3 de 2mb)

Eu usei os seguintes IP`s:

Interface saida = 172.16.0.1/24

Interface wlan1 = 10.1.1.2/24 (IP no modem = 10.1.1.1)

Interface wlan2 = 10.2.2.2/24 (IP no modem = 10.2.2.1)

Interface wlan3 = 10.3.3.2/24 (IP no modem = 10.3.3.1)

Obs.: Não é necessário definir os IP`s agora, pois o “script” irá definir no momento em que ele for “rodado”. Caso você for usar outros IP`s, os mesmos devem ser mudados no “script”.

“Script”

Primeira Parte (Define IP`s para as interfaces):

/ip address

```
add address=172.16.0.1/24 broadcast=172.16.0.255 comment="" disabled=no \
interface=saida network=172.16.0.0
```

```
add address=10.1.1.2/24 broadcast=10.1.1.255 comment="" disabled=no \
interface=wlan1 network=10.1.1.0
```

```
add address=10.2.2.2/24 broadcast=10.2.2.255 comment="" disabled=no \
interface=wlan2 network=10.2.2.0
```

```
add address=10.3.3.2/24 broadcast=10.3.3.255 comment="" disabled=no \
interface=wlan3 network=10.3.3.0
```

Obs.: O que esta destacado deverá ser mudado, caso os IP`s que serão usados forem diferentes dos que eu usei. Caso você tenha definido os IP`s para as interfaces “manualmente” pelo WinBOX “pule” essa parte e vá diretamente para a Segunda Parte.

Confirme pelo WinBox em IP => Address se tudo foi setado corretamente.

Segunda Parte (Define servidores DNS):

```
/ip dns
set allow-remote-requests=yes cache-max-ttl=1w cache-size=10240KiB \
max-udp-packet-size=512 primary-dns=8.8.8.8 secondary-dns=\
8.8.4.4
```

Obs.: Mude os DNS em destaque conforme os DNS da sua preferência.

Terceira Parte (Criar os pppoe clientes para “disca” para os modem`s):

```
/interface pppoe-client
add ac-name="" add-default-route=no allow=pap,chap,mschap1,mschap2 comment=\
"==== Disca Link01 =====" dial-on-demand=no disabled=no interface=wlan1 \
max-mru=1480 max-mtu=1480 mrru=disabled name=pppoe-wlan1 password=xxxx \
profile=default service-name="" use-peer-dns=no user=\
usuario@provedor.com.br
```

```
add ac-name="" add-default-route=no allow=pap,chap,mschap1,mschap2 comment=\
"==== Disca Link02 =====" dial-on-demand=no disabled=no interface=wlan2 \
max-mru=1480 max-mtu=1480 mrru=disabled name=pppoe-wlan2 password=xxxx \
profile=default service-name="" use-peer-dns=no user=\
usuario@provedor.com.br
```

```
add ac-name="" add-default-route=no allow=pap,chap,mschap1,mschap2 comment=\
"==== Disca Link03 =====" dial-on-demand=no disabled=no interface=wlan3 \
max-mru=1480 max-mtu=1480 mrru=disabled name=pppoe-wlan3 password=xxxx \
profile=default service-name="" use-peer-dns=no user=\
usuario@provedor.com.br
```

Obs.: Mude xxxx para sua senha de autenticação junto ao seu provedor de acesso e usuario@provedor.com.br para seu login de autenticação junto ao seu provedor de acesso.

Quarta Parte (Regras Gerais para que o Balance funcione corretamente):

```
/ip firewall nat
add action=masquerade chain=srcnat comment=\
"==== Masquerade Interfaces =====" disabled=no out-interface=pppoe-wlan1
add action=masquerade chain=srcnat comment="" disabled=no out-interface=\
pppoe-wlan2
add action=masquerade chain=srcnat comment="" disabled=no out-interface=\
pppoe-wlan3
```

```

/ip firewall mangle
add action=accept chain=prerouting comment="FORA DO LOADBALACED" disabled=no \
  dst-address-list=loopback in-interface=saida
add action=mark-connection chain=input comment=\
  "==== Make the packet leaves via same interface =====" disabled=no \
  in-interface=pppoe-wlan1 new-connection-mark=wlan1_conn passthrough=yes
add action=mark-routing chain=output comment="" connection-mark=wlan1_conn \
  disabled=no new-routing-mark=to_wlan1 passthrough=yes
add action=mark-connection chain=input comment="" disabled=no in-interface=\
  pppoe-wlan2 new-connection-mark=wlan2_conn passthrough=yes
add action=mark-routing chain=output comment="" connection-mark=wlan2_conn \
  disabled=no new-routing-mark=to_wlan2 passthrough=yes
add action=mark-connection chain=input comment="" disabled=no in-interface=\
  pppoe-wlan3 new-connection-mark=wlan3_conn passthrough=yes
add action=mark-routing chain=output comment="" connection-mark=wlan3_conn \
  disabled=no new-routing-mark=to_wlan3 passthrough=yes
add action=mark-connection chain=prerouting comment="==== Balance_PCC =====" \
  disabled=no dst-address-type=!local in-interface=saida \
  new-connection-mark=wlan1_conn passthrough=yes per-connection-classifier=\
  both-addresses-and-ports:9/0
add action=mark-connection chain=prerouting comment="" disabled=no \
  dst-address-type=!local in-interface=saida new-connection-mark=wlan1_conn \
  passthrough=yes per-connection-classifier=both-addresses-and-ports:9/1
add action=mark-connection chain=prerouting comment="" disabled=no \
  dst-address-type=!local in-interface=saida new-connection-mark=wlan1_conn \
  passthrough=yes per-connection-classifier=both-addresses-and-ports:9/2
add action=mark-connection chain=prerouting comment="" disabled=no \
  dst-address-type=!local in-interface=saida new-connection-mark=wlan1_conn \
  passthrough=yes per-connection-classifier=both-addresses-and-ports:9/3
add action=mark-connection chain=prerouting comment="" disabled=no \
  dst-address-type=!local in-interface=saida new-connection-mark=wlan2_conn \
  passthrough=yes per-connection-classifier=both-addresses-and-ports:9/4
add action=mark-connection chain=prerouting comment="" disabled=no \
  dst-address-type=!local in-interface=saida new-connection-mark=wlan2_conn \
  passthrough=yes per-connection-classifier=both-addresses-and-ports:9/5
add action=mark-connection chain=prerouting comment="" disabled=no \
  dst-address-type=!local in-interface=saida new-connection-mark=wlan2_conn \
  passthrough=yes per-connection-classifier=both-addresses-and-ports:9/6
add action=mark-connection chain=prerouting comment="" disabled=no \
  dst-address-type=!local in-interface=saida new-connection-mark=wlan2_conn \
  passthrough=yes per-connection-classifier=both-addresses-and-ports:9/7
add action=mark-connection chain=prerouting comment="" disabled=no \
  dst-address-type=!local in-interface=saida new-connection-mark=wlan3_conn \
  passthrough=yes per-connection-classifier=both-addresses-and-ports:9/8
add action=mark-routing chain=prerouting comment=\
  "==== Marking all the packets =====" connection-mark=wlan1_conn \
  disabled=no in-interface=saida new-routing-mark=to_wlan1 passthrough=yes
add action=mark-routing chain=prerouting comment="" connection-mark=\
  wlan2_conn disabled=no in-interface=saida new-routing-mark=to_wlan2 \
  passthrough=yes
add action=mark-routing chain=prerouting comment="" connection-mark=\

```

```
wlan3_conn disabled=no in-interface=saida new-routing-mark=to_wlan3 \
passthrough=yes
```

```
/ip route
```

```
add check-gateway=ping comment="" disabled=no distance=1 dst-address=\
0.0.0.0/0 gateway=pppoe-wlan1 routing-mark=to_wlan1 scope=30 \
target-scope=10
add check-gateway=ping comment="" disabled=no distance=1 dst-address=\
0.0.0.0/0 gateway=pppoe-wlan1 scope=30 target-scope=10
add check-gateway=ping comment="" disabled=no distance=1 dst-address=\
0.0.0.0/0 gateway=pppoe-wlan2 routing-mark=to_wlan2 scope=30 \
target-scope=10
add check-gateway=ping comment="" disabled=no distance=2 dst-address=\
0.0.0.0/0 gateway=pppoe-wlan2 scope=30 target-scope=10
add check-gateway=ping comment="" disabled=no distance=1 dst-address=\
0.0.0.0/0 gateway=pppoe-wlan3 routing-mark=to_wlan3 scope=30 \
target-scope=10
add check-gateway=ping comment="" disabled=no distance=3 dst-address=\
0.0.0.0/0 gateway=pppoe-wlan3 scope=30 target-scope=10
```

Pronto, com isso seu Balance já deve estar funcionando.

Segue abaixo “script” sem as explicações (para copiar e colar no terminal):

```
/ip address
```

```
add address=172.16.0.1/24 broadcast=172.16.0.255 comment="" disabled=no \
interface=saida network=172.16.0.0
add address=10.1.1.2/24 broadcast=10.1.1.255 comment="" disabled=no \
interface=wlan1 network=10.1.1.0
add address=10.2.2.2/24 broadcast=10.2.2.255 comment="" disabled=no \
interface=wlan2 network=10.2.2.0
add address=10.3.3.2/24 broadcast=10.3.3.255 comment="" disabled=no \
interface=wlan3 network=10.3.3.0
```

```
/ip dns
```

```
set allow-remote-requests=yes cache-max-ttl=1w cache-size=10240KiB \
max-udp-packet-size=512 primary-dns=8.8.8.8 secondary-dns=\
8.8.4.4
```

```
/interface pppoe-client
```

```
add ac-name="" add-default-route=no allow=pap,chap,mschap1,mschap2 comment=\
"==== Disca Link01 =====" dial-on-demand=no disabled=no interface=wlan1 \
max-mru=1480 max-mtu=1480 mrru=disabled name=pppoe-wlan1 password=xxxx \
profile=default service-name="" use-peer-dns=no user=\
usuario@provedor.com.br
add ac-name="" add-default-route=no allow=pap,chap,mschap1,mschap2 comment=\
"==== Disca Link02 =====" dial-on-demand=no disabled=no interface=wlan2 \
max-mru=1480 max-mtu=1480 mrru=disabled name=pppoe-wlan2 password=xxxx \
profile=default service-name="" use-peer-dns=no user=\
usuario@provedor.com.br
add ac-name="" add-default-route=no allow=pap,chap,mschap1,mschap2 comment=\
"==== Disca Link03 =====" dial-on-demand=no disabled=no interface=wlan3 \
max-mru=1480 max-mtu=1480 mrru=disabled name=pppoe-wlan3 password=xxxx \
profile=default service-name="" use-peer-dns=no user=\
```

usuario@provedor.com.br

```
/ip firewall nat
add action=masquerade chain=srcnat comment=\
"===== Masquerade Interfaces =====" disabled=no out-interface=pppoe-wlan1
add action=masquerade chain=srcnat comment="" disabled=no out-interface=\
pppoe-wlan2
add action=masquerade chain=srcnat comment="" disabled=no out-interface=\
pppoe-wlan3
/ip firewall mangle
add action=accept chain=prerouting comment="FORA DO LOADBALACED" disabled=no \
dst-address-list=loopback in-interface=saida
add action=mark-connection chain=input comment=\
"===== Make the packet leaves via same interface =====" disabled=no \
in-interface=pppoe-wlan1 new-connection-mark=wlan1_conn passthrough=yes
add action=mark-routing chain=output comment="" connection-mark=wlan1_conn \
disabled=no new-routing-mark=to_wlan1 passthrough=yes
add action=mark-connection chain=input comment="" disabled=no in-interface=\
pppoe-wlan2 new-connection-mark=wlan2_conn passthrough=yes
add action=mark-routing chain=output comment="" connection-mark=wlan2_conn \
disabled=no new-routing-mark=to_wlan2 passthrough=yes
add action=mark-connection chain=input comment="" disabled=no in-interface=\
pppoe-wlan3 new-connection-mark=wlan3_conn passthrough=yes
add action=mark-routing chain=output comment="" connection-mark=wlan3_conn \
disabled=no new-routing-mark=to_wlan3 passthrough=yes
add action=mark-connection chain=prerouting comment="===== Balance_PCC =====" \
disabled=no dst-address-type=!local in-interface=saida \
new-connection-mark=wlan1_conn passthrough=yes per-connection-classifier=\
both-addresses-and-ports:9/0
add action=mark-connection chain=prerouting comment="" disabled=no \
dst-address-type=!local in-interface=saida new-connection-mark=wlan1_conn \
passthrough=yes per-connection-classifier=both-addresses-and-ports:9/1
add action=mark-connection chain=prerouting comment="" disabled=no \
dst-address-type=!local in-interface=saida new-connection-mark=wlan1_conn \
passthrough=yes per-connection-classifier=both-addresses-and-ports:9/2
add action=mark-connection chain=prerouting comment="" disabled=no \
dst-address-type=!local in-interface=saida new-connection-mark=wlan1_conn \
passthrough=yes per-connection-classifier=both-addresses-and-ports:9/3
add action=mark-connection chain=prerouting comment="" disabled=no \
dst-address-type=!local in-interface=saida new-connection-mark=wlan2_conn \
passthrough=yes per-connection-classifier=both-addresses-and-ports:9/4
add action=mark-connection chain=prerouting comment="" disabled=no \
dst-address-type=!local in-interface=saida new-connection-mark=wlan2_conn \
passthrough=yes per-connection-classifier=both-addresses-and-ports:9/5
add action=mark-connection chain=prerouting comment="" disabled=no \
dst-address-type=!local in-interface=saida new-connection-mark=wlan2_conn \
passthrough=yes per-connection-classifier=both-addresses-and-ports:9/6
add action=mark-connection chain=prerouting comment="" disabled=no \
dst-address-type=!local in-interface=saida new-connection-mark=wlan2_conn \
passthrough=yes per-connection-classifier=both-addresses-and-ports:9/7
add action=mark-connection chain=prerouting comment="" disabled=no \
dst-address-type=!local in-interface=saida new-connection-mark=wlan3_conn \
passthrough=yes per-connection-classifier=both-addresses-and-ports:9/8
```

```

add action=mark-routing chain=prerouting comment=\
"===== Marking all the packets =====" connection-mark=wlan1_conn \
disabled=no in-interface=saida new-routing-mark=to_wlan1 passthrough=yes
add action=mark-routing chain=prerouting comment="" connection-mark=\
wlan2_conn disabled=no in-interface=saida new-routing-mark=to_wlan2 \
passthrough=yes
add action=mark-routing chain=prerouting comment="" connection-mark=\
wlan3_conn disabled=no in-interface=saida new-routing-mark=to_wlan3 \
passthrough=yes
/ip route
add check-gateway=ping comment="" disabled=no distance=1 dst-address=\
0.0.0.0/0 gateway=pppoe-wlan1 routing-mark=to_wlan1 scope=30 \
target-scope=10
add check-gateway=ping comment="" disabled=no distance=1 dst-address=\
0.0.0.0/0 gateway=pppoe-wlan1 scope=30 target-scope=10
add check-gateway=ping comment="" disabled=no distance=1 dst-address=\
0.0.0.0/0 gateway=pppoe-wlan2 routing-mark=to_wlan2 scope=30 \
target-scope=10
add check-gateway=ping comment="" disabled=no distance=2 dst-address=\
0.0.0.0/0 gateway=pppoe-wlan2 scope=30 target-scope=10
add check-gateway=ping comment="" disabled=no distance=1 dst-address=\
0.0.0.0/0 gateway=pppoe-wlan3 routing-mark=to_wlan3 scope=30 \
target-scope=10
add check-gateway=ping comment="" disabled=no distance=3 dst-address=\
0.0.0.0/0 gateway=pppoe-wlan3 scope=30 target-scope=10

```

Ex.: Balance PCC para 3 links adsl de mesmo tamanho com modem em bridge.

Obs.: Os nome das interfaces e IP`s usados no exemplo abaixo são os mesmo que foram usados no exemplo anterior (continua valendo as explicações do primeiro exemplo).

```

/ip address
add address=172.16.0.1/24 broadcast=172.16.0.255 comment="" disabled=no \
interface=saida network=172.16.0.0
add address=10.1.1.2/24 broadcast=10.1.1.255 comment="" disabled=no \
interface=wlan1 network=10.1.1.0
add address=10.2.2.2/24 broadcast=10.2.2.255 comment="" disabled=no \
interface=wlan2 network=10.2.2.0
add address=10.3.3.2/24 broadcast=10.3.3.255 comment="" disabled=no \
interface=wlan3 network=10.3.3.0
/ip dns
set allow-remote-requests=yes cache-max-ttl=1w cache-size=10240KiB \
max-udp-packet-size=512 primary-dns=8.8.8.8 secondary-dns=\
8.8.4.4
/interface pppoe-client
add ac-name="" add-default-route=no allow=pap,chap,mschap1,mschap2 comment=\
"===== Disca Link01 =====" dial-on-demand=no disabled=no interface=wlan1 \
max-mru=1480 max-mtu=1480 mrru=disabled name=pppoe-wlan1 password=xxxx \
profile=default service-name="" use-peer-dns=no user=\
usuario@provedor.com.br
add ac-name="" add-default-route=no allow=pap,chap,mschap1,mschap2 comment=\
"===== Disca Link02 =====" dial-on-demand=no disabled=no interface=wlan2 \

```

```

max-mru=1480 max-mtu=1480 mrru=disabled name=pppoe-wlan2 password=xxxx \
profile=default service-name="" use-peer-dns=no user=\
usuario@provedor.com.br
add ac-name="" add-default-route=no allow=pap,chap,mschap1,mschap2 comment=\
"==== Disca Link03 =====" dial-on-demand=no disabled=no interface=wlan3 \
max-mru=1480 max-mtu=1480 mrru=disabled name=pppoe-wlan3 password=xxxx \
profile=default service-name="" use-peer-dns=no user=\
usuario@provedor.com.br
/ip firewall nat
add action=masquerade chain=srcnat comment=\
"==== Masquerade Interfaces =====" disabled=no out-interface=pppoe-wlan1
add action=masquerade chain=srcnat comment="" disabled=no out-interface=\
pppoe-wlan2
add action=masquerade chain=srcnat comment="" disabled=no out-interface=\
pppoe-wlan3
/ip firewall mangle
add action=accept chain=prerouting comment="FORA DO LOADBALANCED" disabled=no \
dst-address-list=loopback in-interface=saida
add action=mark-connection chain=input comment=\
"==== Make the packet leaves via same interface =====" disabled=no \
in-interface=pppoe-wlan1 new-connection-mark=wlan1_conn passthrough=yes
add action=mark-routing chain=output comment="" connection-mark=wlan1_conn \
disabled=no new-routing-mark=to_wlan1 passthrough=yes
add action=mark-connection chain=input comment="" disabled=no in-interface=\
pppoe-wlan2 new-connection-mark=wlan2_conn passthrough=yes
add action=mark-routing chain=output comment="" connection-mark=wlan2_conn \
disabled=no new-routing-mark=to_wlan2 passthrough=yes
add action=mark-connection chain=input comment="" disabled=no in-interface=\
pppoe-wlan3 new-connection-mark=wlan3_conn passthrough=yes
add action=mark-routing chain=output comment="" connection-mark=wlan3_conn \
disabled=no new-routing-mark=to_wlan3 passthrough=yes
add action=mark-connection chain=prerouting comment="==== Balance_PCC =====" \
disabled=no dst-address-type=!local in-interface=saida \
new-connection-mark=wlan1_conn passthrough=yes per-connection-classifier=\
both-addresses-and-ports:3/0
add action=mark-connection chain=prerouting comment="" disabled=no \
dst-address-type=!local in-interface=saida new-connection-mark=wlan2_conn \
passthrough=yes per-connection-classifier=both-addresses-and-ports:3/1
add action=mark-connection chain=prerouting comment="" disabled=no \
dst-address-type=!local in-interface=saida new-connection-mark=wlan3_conn \
passthrough=yes per-connection-classifier=both-addresses-and-ports:3/2
add action=mark-routing chain=prerouting comment=\
"==== Marking all the packets =====" connection-mark=wlan1_conn \
disabled=no in-interface=saida new-routing-mark=to_wlan1 passthrough=yes
add action=mark-routing chain=prerouting comment="" connection-mark=\
wlan2_conn disabled=no in-interface=saida new-routing-mark=to_wlan2 \
passthrough=yes
add action=mark-routing chain=prerouting comment="" connection-mark=\
wlan3_conn disabled=no in-interface=saida new-routing-mark=to_wlan3 \
passthrough=yes
/ip route
add check-gateway=ping comment="" disabled=no distance=1 dst-address=\

```

```

0.0.0.0/0 gateway=pppoe-wlan1 routing-mark=to_wlan1 scope=30 \
target-scope=10
add check-gateway=ping comment="" disabled=no distance=1 dst-address=\
0.0.0.0/0 gateway=pppoe-wlan1 scope=30 target-scope=10
add check-gateway=ping comment="" disabled=no distance=1 dst-address=\
0.0.0.0/0 gateway=pppoe-wlan2 routing-mark=to_wlan2 scope=30 \
target-scope=10
add check-gateway=ping comment="" disabled=no distance=2 dst-address=\
0.0.0.0/0 gateway=pppoe-wlan2 scope=30 target-scope=10
add check-gateway=ping comment="" disabled=no distance=1 dst-address=\
0.0.0.0/0 gateway=pppoe-wlan3 routing-mark=to_wlan3 scope=30 \
target-scope=10
add check-gateway=ping comment="" disabled=no distance=3 dst-address=\
0.0.0.0/0 gateway=pppoe-wlan3 scope=30 target-scope=10

```

Ex.: Balance PCC para 2 links adsl de mesmo tamanho com modem em bridge.

Obs.: Os nome das interfaces e IP`s usados no exemplo abaixo são os mesmo que foram usados no exemplo anterior (continua valendo as explicações do primeiro exemplo).

```

/ip address
add address=172.16.0.1/24 broadcast=172.16.0.255 comment="" disabled=no \
interface=saida network=172.16.0.0
add address=10.1.1.2/24 broadcast=10.1.1.255 comment="" disabled=no \
interface=wlan1 network=10.1.1.0
add address=10.2.2.2/24 broadcast=10.2.2.255 comment="" disabled=no \
interface=wlan2 network=10.2.2.0
/ip dns
set allow-remote-requests=yes cache-max-ttl=1w cache-size=10240KiB \
max-udp-packet-size=512 primary-dns=8.8.8.8 secondary-dns=\
8.8.4.4
/interface pppoe-client
add ac-name="" add-default-route=no allow=pap,chap,mschap1,mschap2 comment=\
"==== Disca Link01 =====" dial-on-demand=no disabled=no interface=wlan1 \
max-mru=1480 max-mtu=1480 mrru=disabled name=pppoe-wlan1 password=xxxx \
profile=default service-name="" use-peer-dns=no user=\
usuario@provedor.com.br
add ac-name="" add-default-route=no allow=pap,chap,mschap1,mschap2 comment=\
"==== Disca Link02 =====" dial-on-demand=no disabled=no interface=wlan2 \
max-mru=1480 max-mtu=1480 mrru=disabled name=pppoe-wlan2 password=xxxx \
profile=default service-name="" use-peer-dns=no user=\
usuario@provedor.com.br
/ip firewall nat
add action=masquerade chain=srcnat comment=\
"==== Masquerade Interfaces =====" disabled=no out-interface=pppoe-wlan1
add action=masquerade chain=srcnat comment="" disabled=no out-interface=\
pppoe-wlan2
/ip firewall mangle
add action=accept chain=prerouting comment="FORA DO LOADBALACED" disabled=no \
dst-address-list=loopback in-interface=saida
add action=mark-connection chain=input comment=\
"==== Make the packet leaves via same interface =====" disabled=no \

```



```

in-interface=pppoe-wlan1 new-connection-mark=wlan1_conn passthrough=yes
add action=mark-routing chain=output comment="" connection-mark=wlan1_conn \
  disabled=no new-routing-mark=to_wlan1 passthrough=yes
add action=mark-connection chain=input comment="" disabled=no in-interface=\
  pppoe-wlan2 new-connection-mark=wlan2_conn passthrough=yes
add action=mark-routing chain=output comment="" connection-mark=wlan2_conn \
  disabled=no new-routing-mark=to_wlan2 passthrough=yes
add action=mark-connection chain=prerouting comment="==== Balance_PCC =====" \
  disabled=no dst-address-type=!local in-interface=saida \
  new-connection-mark=wlan1_conn passthrough=yes per-connection-classifier=\
  both-addresses-and-ports:2/0
add action=mark-connection chain=prerouting comment="" disabled=no \
  dst-address-type=!local in-interface=saida new-connection-mark=wlan2_conn \
  passthrough=yes per-connection-classifier=both-addresses-and-ports:2/1
add action=mark-routing chain=prerouting comment=\
  "==== Marking all the packets =====" connection-mark=wlan1_conn \
  disabled=no in-interface=saida new-routing-mark=to_wlan1 passthrough=yes
add action=mark-routing chain=prerouting comment="" connection-mark=\
  wlan2_conn disabled=no in-interface=saida new-routing-mark=to_wlan2 \
  passthrough=yes
/ip route
add check-gateway=ping comment="" disabled=no distance=1 dst-address=\
  0.0.0.0/0 gateway=pppoe-wlan1 routing-mark=to_wlan1 scope=30 \
  target-scope=10
add check-gateway=ping comment="" disabled=no distance=1 dst-address=\
  0.0.0.0/0 gateway=pppoe-wlan1 scope=30 target-scope=10
add check-gateway=ping comment="" disabled=no distance=1 dst-address=\
  0.0.0.0/0 gateway=pppoe-wlan2 routing-mark=to_wlan2 scope=30 \
  target-scope=10
add check-gateway=ping comment="" disabled=no distance=2 dst-address=\
  0.0.0.0/0 gateway=pppoe-wlan2 scope=30 target-scope=10

```

Dicas, sugestões e melhorias são bem vindas.

Veja também:

Tutorial Servidor Mikrotik Básico que esta disponível em:

[http://www.microcenterweb.com.br/mikrotik/MicrocenterWEB%20-%20\(41\)%203673-5879%20-%20Mikrotik%20Servidor%20Basico.pdf](http://www.microcenterweb.com.br/mikrotik/MicrocenterWEB%20-%20(41)%203673-5879%20-%20Mikrotik%20Servidor%20Basico.pdf)

Tutorial Mikrotik + Debian + Squid + ThunderCache 3 = “SuperCache” que esta disponível em:

[http://www.microcenterweb.com.br/mikrotik/MicrocenterWEB%20-%20\(41\)%203673-5879%20-%20Mikrotik+Debian+Squid+ThunderCache3=SuperCache.pdf](http://www.microcenterweb.com.br/mikrotik/MicrocenterWEB%20-%20(41)%203673-5879%20-%20Mikrotik+Debian+Squid+ThunderCache3=SuperCache.pdf)

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www.microcenterweb.com.br/mikrotik