

- **Access MikroTik:**

1.via console

Mikrotik router board or PC can be accessed directly via the console / shell and remote access using putty (www.putty.nl)

2.via Winbox

Mikrotik can also be accessed / remotely using software tools Winbox

3.via web

Mikrotik can also be accessed via web / port 80 by using a browser

- **Changing the name of the interface:**

```
[ropix@IATG-SOLO] > /interface print
```

```
[ropix@IATG-SOLO] > /interface edit 0
```

```
value-name: Local
```

- **Naming MikroTik**

```
[ropix@IATG-SOLO] > system identity print
```

```
name: "Mikrotik"
```

```
[ropix@IATG-SOLO] > system identity edit
```

```
value-name: "mohsin-router"
```

C-c quit

C-o save & quit

C-u undo

C-k cut line

C-y paste

If using Winbox System->Identity

- **Changing the name of the interface:**

```
[ropix@IATG-SOLO] > /interface print
```

```
[ropix@IATG-SOLO] > /interface edit 0
```

```
value-name: Local
```

Via Winbox: Interface->

Setting IP Address:

```
[ropix@IATG-SOLO] > /ip address add
```

```
address: 192.168.1.1/24
```

```
interface: local
```

Via Winbox: IP-> address

- **Make MikroTik NAT**

```
[ropix@IATG-SOLO] > /ip firewall nat add chain=srcnat action=masquerade out-interface=public
```

Via Winbox: IP-> Firewall->NAT

- **Transparent web proxy mikrotik**

Enabling web proxy in mikrotik future:

```
[ropix@IATG-SOLO] > /ip proxy set enabled=yes
```

```
[ropix@IATG-SOLO] > /ip web-proxy set cache-administrator= ropix.fauzi@infoasia.net
```

```
[ropix@IATG-SOLO] > /ip web-proxy print
```

Make a rule for transparent proxy on the firewall NAT, precisely there masquerading under the rule for NAT:

```
[ropix@IATG-SOLO] > /ip firewall nat add chain=dstnat in-interface=local src-address=192.168.0.0/24 protocol=tcp  
dst-port=80 action=redirect to-ports=3128  
[ropix@IATG-SOLO] > /ip firewall nat print
```

In Winbox:

1. Enable web proxy on the menu IP> Proxy> Access> Settings (check box enabled)
2. Parameter settings on the IP menu> Web Proxy> Access Settings> General
3. Make a rule for transparent proxy on the menu IP> Firewall> NAT

- **Transparent proxy with proxy servers separate / independent**

Make a rule for transparent proxy on the menu IP> Firewall> NAT

In the above example 192.168.0.100 is the IP proxy server port 8080

- **Mikrotik as a bandwidth limiter**

Mikrotik can also be used for bandwidth limiter (queue). To control the data rate allocation mechanism.

Simple queue:

For example we will limit the bandwidth of the client with ip 192.168.0.3 that is for upstream and downstream 128kbps 64kbps

Settings on the menu Queues> Simple Queues

Queue tree

Click the ip> firewall> magle

Make a rule (click the + red) with the following parameters:

On the General tab:

Chain = forward,

Src.address = 192.168.0.3 (or ip who want the limit)

On the Action tab:

Action = mark-connection,

New connection-mark = client3 con (or the name of the mark we created a distinguished connection)

Click Apply and OK

Create another rule with the following parameters:

On the General tab: chain = forward,

Connection mark = client3-con (choose from dropdown menu)

On the Action tab:

Action = mark-packet,

New packet Mark = client3 (or the name of the packet we created a distinguished mark)

Click Apply and OK

Click the Queues> Queues Tree

Make a rule (click the + red) with the following parameters:

On the General tab:

Name = client3-in (eg),

Parent = public (which is the direction of outgoing interface),

Mark = client3 Package (choose from the dropdown, just that we make to magle)

Queue Type = default,

Priority = 8,

Max limit = 64k (for setting the bandwidth max download)

Click apply and Ok

Create another rule with the following parameters:

On the General tab:

Name = client3-up (eg),

Parent = local (as an interface into which direction),

Mark = client3 Package (choose from the dropdown, just that we make to magle)

Queue Type = default,

Priority = 8,

Max limit = 64k (for setting max upload bandwidth)

Click apply and Ok

- **Mikrotik as Bridging**

Bridge is a way to connect two separate network segments together in a protocol itself. you have a local network 192.168.0.0/24 gateway to an ADSL modem which also as a router with a local ip 192.168.0.254 and public ip 222.124.21.26.

Internet-----Moderm/router-----Mikrotik-----Switch/Hub-----Client

Setting bridging using Winbox

1. Add a bridge interface

Click the Interface menu and then click the + sign to add a red color interface, select the Bridge to name = bridge interface, eg, we named bridge1

2. adding ether interface on the local and public interface

Click the IP> Bridge> Ports, then click the + sign to add a new rule:

Set Interface Name And bridge Name

3. Giving IP address to bridge interface

Click the IP menu and then click the + sign to add an address to an interface IP, eg 192.168.0.100, select bridge1 interface (or the name of the bridge interface that we created earlier)

This means giving the IP address on bridge interface

- **Mikrotik as MRTG / Graphing**

Graphing is a tool in mikrotik enabled to monitor changes in the parameters at any time. Changes that change the form of graphs uptodate and can be accessed using a browser.

Activating the function grapping

Click the Tools menu> Graphing> Resource Rules

Is to enable graphing for Mikrotik resource usage. While allow address is anywhere IP that can access these charts, 0.0.0.0 / 0 for all ip address.

Click the Tools menu> Graphing> Interface Rules

Is to enable graphing for monitoring traffic passing through the interface, please select which interface you want monitored, or select "all" for all.

To access the graphics, type the URL with the format

http:// [Router_IP_address] / graphs /

