* **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 fiture:**

[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 conection)

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 pcket 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 mokrotik 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 /