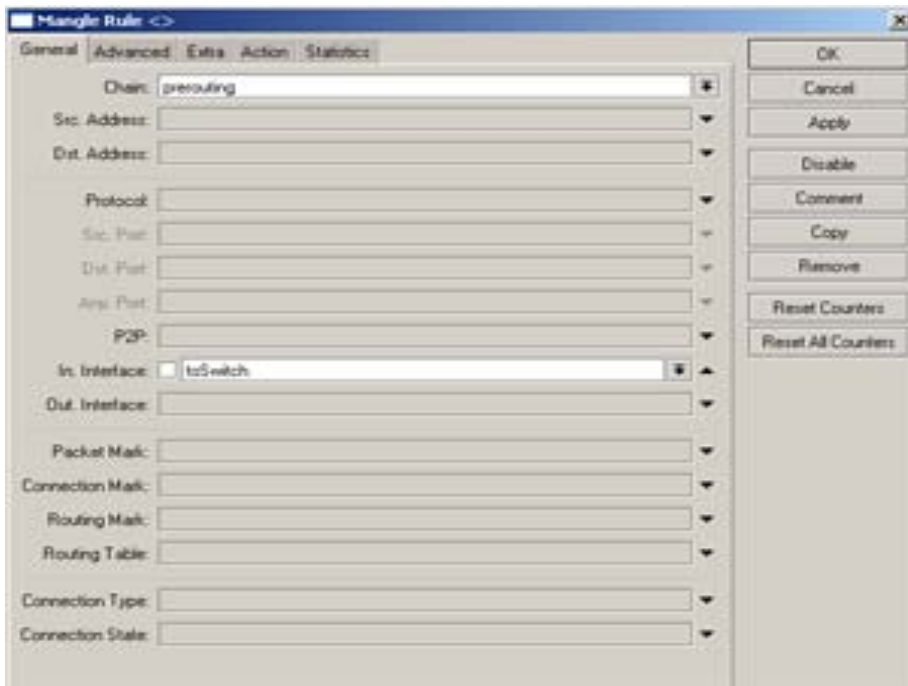


Memisahkan Bandwith local dan internasional dengan Mikrotik

Kita asumsikan untuk konfigurasi dasar mikrotik sudah dilakukan. Langkah selanjutnya adalah membuat mangle. Disini kita akan membuat 2 connection mark dan 2 packet mark (masing-masing untuk bandwith local dan internasional).

1. Untuk koneksi IIX

```
/ip firewall mangle add chain=prerouting interface="interface LAN" dst-address-list=nice  
action=mark-connection new-connection-mark=IIX
```



Mangle Rule

General Advanced Extra Action Statistics

Src. Address List: [ ]

Dst. Address List:  192.168.0.0/24

Layer7 Protocol: [ ]

Content: [ ]

Connection Bytes: [ ]

Connection Rate: [ ]

Per Connection Classifier: [ ]

Src. MAC Address: [ ]

Out. Bridge Port: [ ]

In. Bridge Port: [ ]

Ingress Priority: [ ]

DSCP (TOS): [ ]

TCP MSS: [ ]

Packet Size: [ ]

Random: [ ]

TCP Flags: [ ]

ICMP Options: [ ]

OK

Cancel

Apply

Disable

Comment

Copy

Remove

Reset Counters

Reset All Counters

Mangle Rule

General Advanced Extra Action Statistics

Action: mark\_connection

New Connection Mark: 100

Passthrough

OK

Cancel

Apply

Disable

Comment

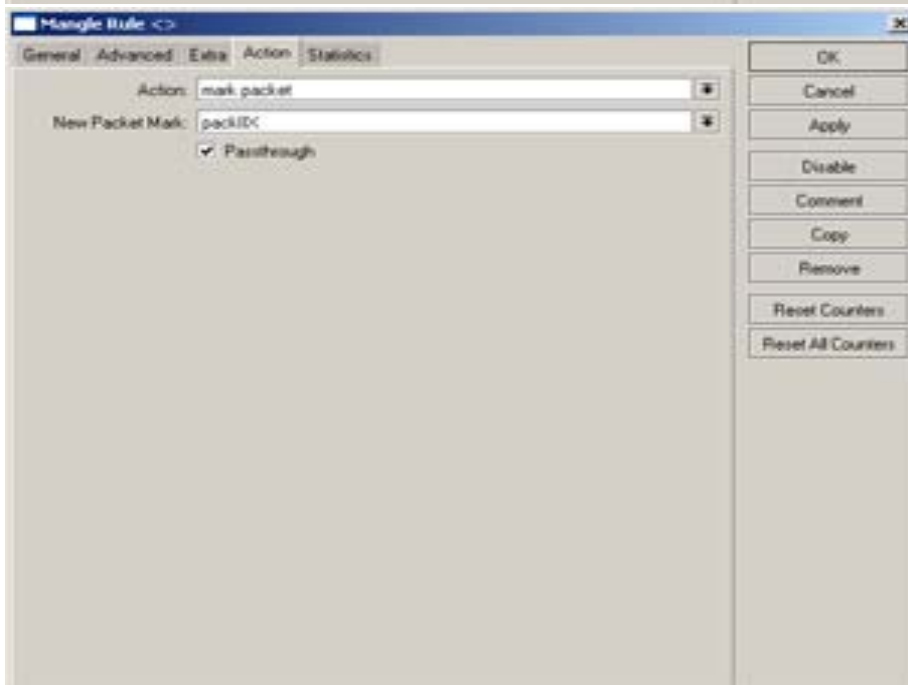
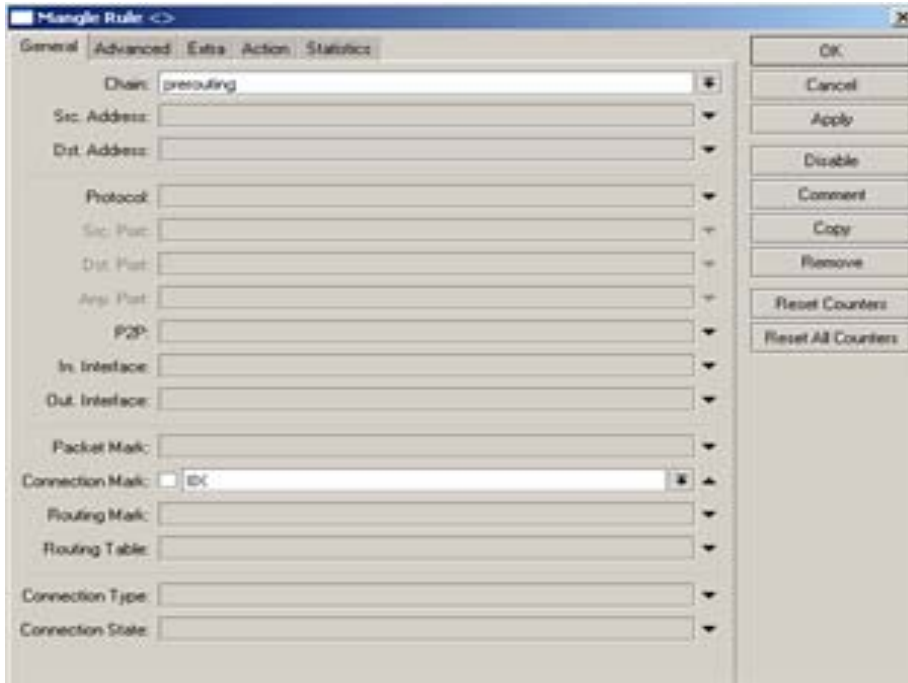
Copy

Remove

Reset Counters

Reset All Counters

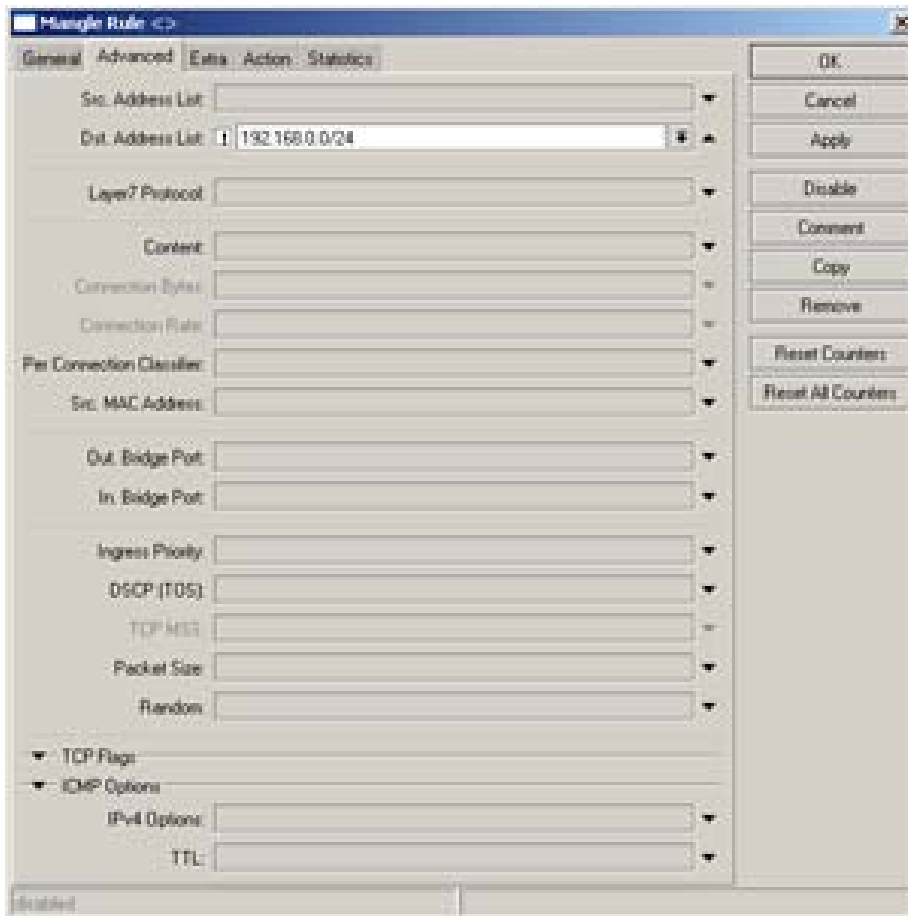
/ip firewall mangle add chain=prerouting connection-mark=IX action=mark-packet new-packet-mark=packIX



2. Untuk koneksi Internasional

```
/ip firewall mangle add chain=prerouting interface="interface LAN" dst-address-list=!nice  
action=mark-connection new-connection-mark=INT
```





Manage Rule <D>

General Advanced Extra Action Statistics

Src. Address List

Dst. Address List: 192.168.0.0/24

Layer 7 Protocol

Content

Connection Bytes

Connection Rate

Per Connection Classifier

Src. MAC Address

Out. Bridge Port

In. Bridge Port

Ingress Priority

DSCP (TOS)

TCP MSS

Packet Size

Random

TCP Flags

ICMP Options

IPv4 Options

TTL

Disabled

OK

Cancel

Apply

Disable

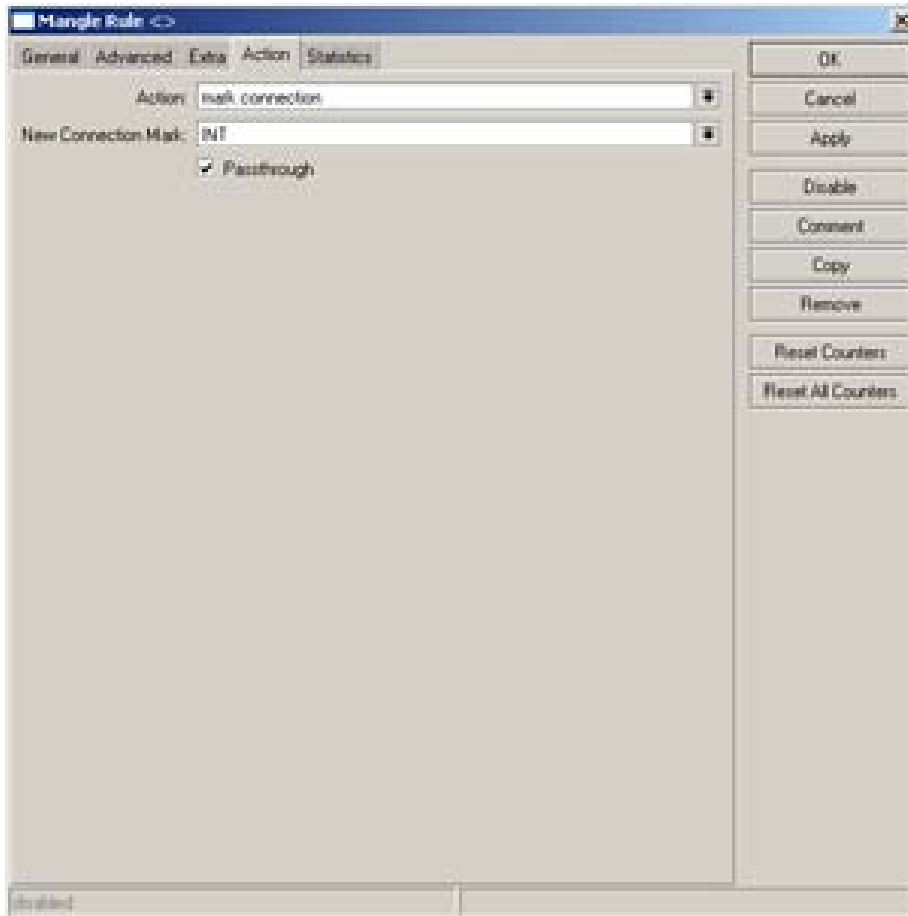
Comment

Copy

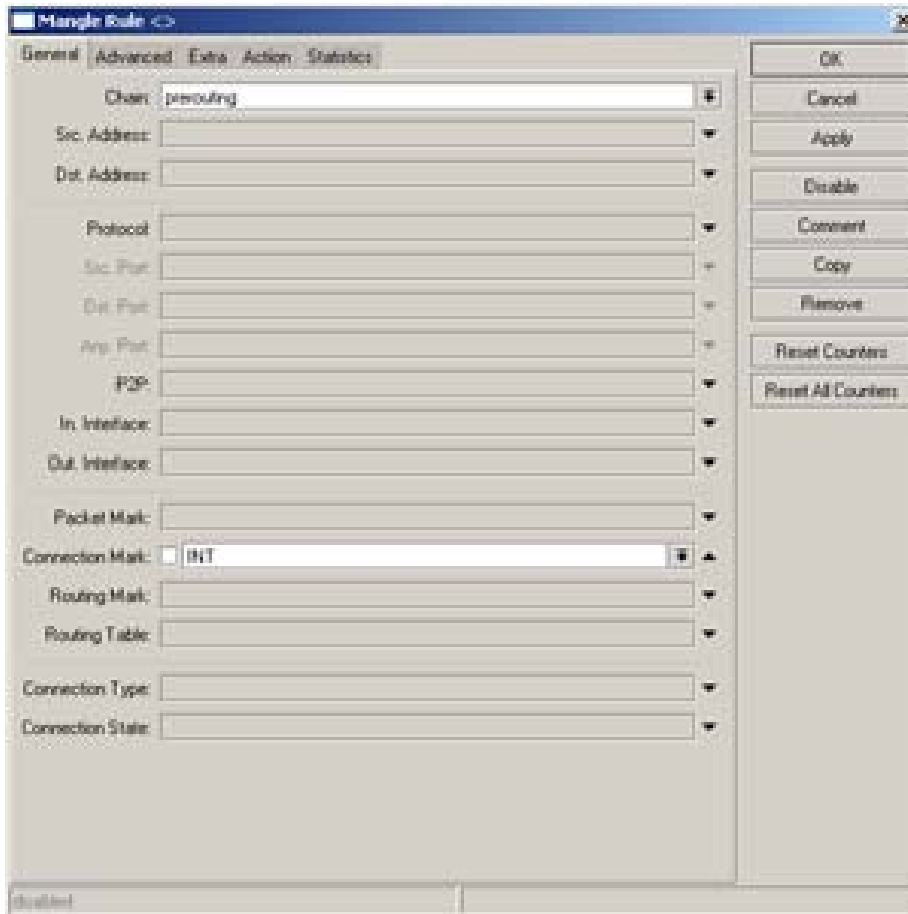
Remove

Reset Counters

Reset All Counters



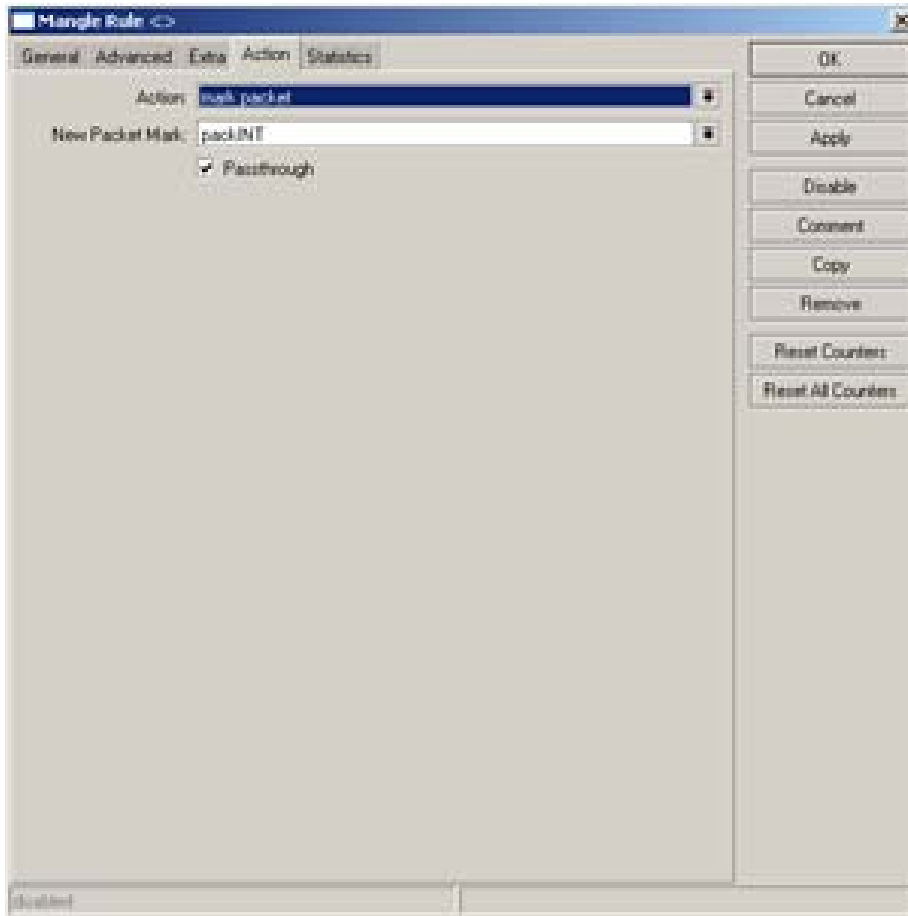
```
/ip firewall mangle add chain=prerouting connection-mark=INT action=mark-connection new-connection-mark=packINT
```



The image shows a screenshot of the Mikrotik WinBox Mangle Rule configuration window. The window title is "Mangle Rule" and it has a close button in the top right corner. The window is divided into several tabs: "General", "Advanced", "Extra", "Action", and "Statistics". The "General" tab is currently selected. The configuration fields are as follows:

- Chain: preouting
- Src. Address: (empty)
- Dst. Address: (empty)
- Protocol: (empty)
- Src. Port: (empty)
- Dst. Port: (empty)
- Src. Port: (empty)
- Port: (empty)
- In. Interface: (empty)
- Out. Interface: (empty)
- Packet Mark: (empty)
- Connection Mark:  INT
- Routing Mark: (empty)
- Routing Table: (empty)
- Connection Type: (empty)
- Connection State: (empty)

On the right side of the window, there is a vertical column of buttons: OK, Cancel, Apply, Disable, Comment, Copy, Remove, Reset Counters, and Reset All Counters.



## Pengaturan Queue

Untuk setiap klien, di sini kita harus membuat 2 settingan simple queue, satu untuk bandwidth lokal dan satunya lagi untuk bandwidth international. Contoh berikut ini, PC monitoring akan dialokasikan bandwidth lokal (up/down) 64 kbps/256 kbps dan untuk international (up/down) 32 kbps/128 kbps

```
/queue tree add name="monitoring-iix" target-address=192.168.0.4 dst-address=0.0.0.0/0  
interface=all parent=none packet-mark=packIX direction=both priority=8 queue=default-  
small/default-smalllimit-at=0/0 max-limit=64000/256000 total-queue=default-small
```



**Simple Queue <Monitoring-IIX>**

General | Advanced | Statistics | Traffic | Total | Total Statistics

Name: Monitoring-IIX

Target Address: 192.168.0.4

Target Upload       Target Download

Max Limit: 64k      256k      bits/s

Burst

Burst Limit: unlimited      unlimited      bits/s

Burst Threshold: unlimited      unlimited      bits/s

Burst Time: 0      0      s

Time

disabled

Buttons: OK, Cancel, Apply, Disable, Comment, Copy, Remove, Reset Counters, Reset All Counters, Torch

**Simple Queue <Monitoring-IIX>**

General | Advanced | Statistics | Traffic | Total | Total Statistics

P2P: [dropdown]

Packet Marks: packIIX

Dst. Address: [dropdown]

Interface: all

Target Upload      Target Download

Limit At: 0      0      bits/s

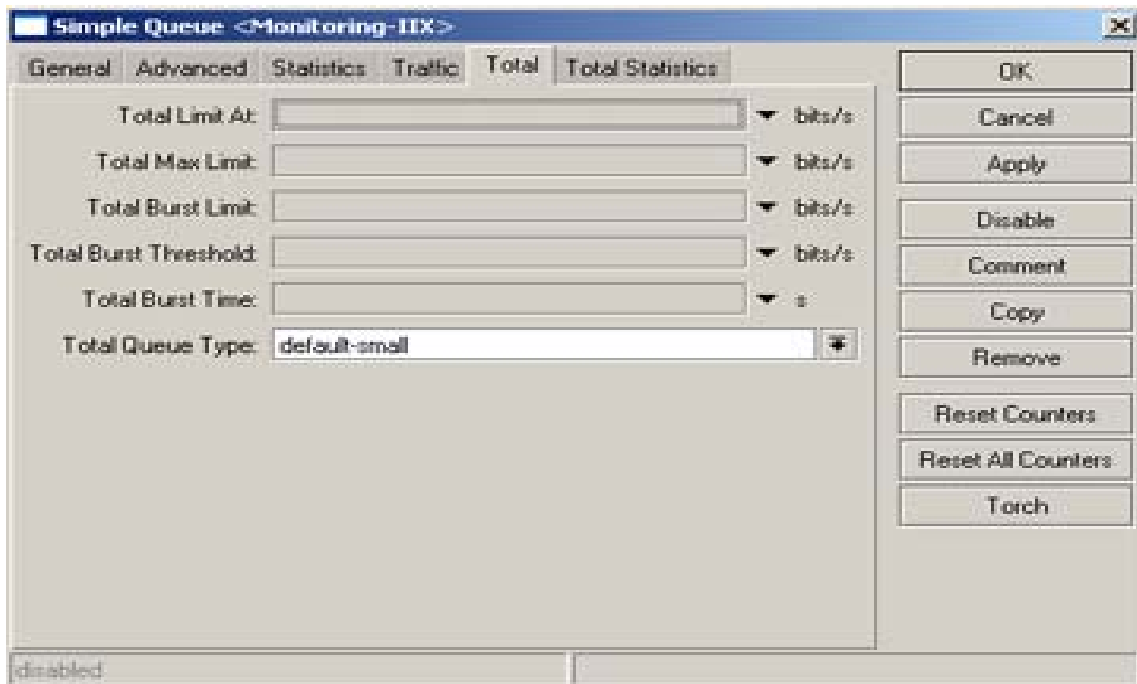
Queue Type: default-small      default-small

Parent: none

Priority: 8

disabled

Buttons: OK, Cancel, Apply, Disable, Comment, Copy, Remove, Reset Counters, Reset All Counters, Torch



**Simple Queue <Monitoring-INT>**

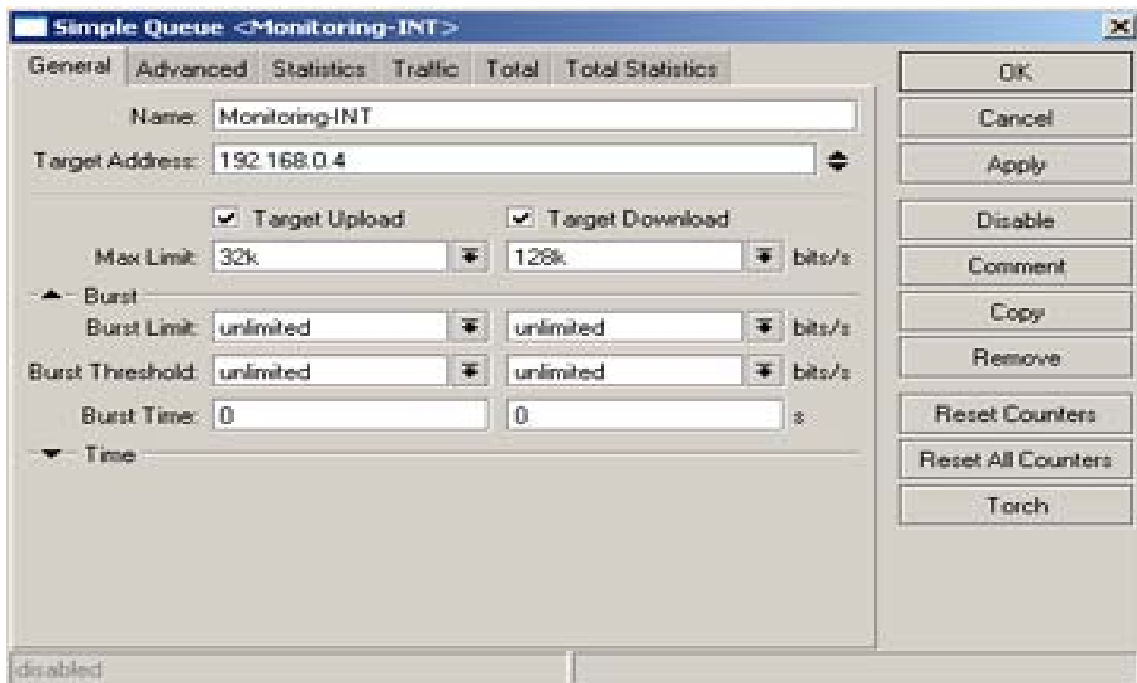
General | **Advanced** | Statistics | Traffic | Total | Total Statistics

Total Limit At: [ ] bits/s  
 Total Max Limit: [ ] bits/s  
 Total Burst Limit: [ ] bits/s  
 Total Burst Threshold: [ ] bits/s  
 Total Burst Time: [ ] s  
 Total Queue Type: default-small

Buttons: OK, Cancel, Apply, Disable, Comment, Copy, Remove, Reset Counters, Reset All Counters, Torch

disabled

```
/queue tree add name="monitoring-int" target-address=192.168.0.4 dst-address=0.0.0.0/0
interface=all parent=none packet-mark=packINT direction=both priority=8 queue=default-small/default-small limit-at=0/0 max-limit=32000/128000 total-queue=default-small
```



**Simple Queue <Monitoring-INT>**

General | **Advanced** | Statistics | Traffic | Total | Total Statistics

Name: Monitoring-INT  
 Target Address: 192.168.0.4

Target Upload     Target Download

Max Limit: 32k    128k bits/s

**Burst**

Burst Limit: unlimited    unlimited bits/s  
 Burst Threshold: unlimited    unlimited bits/s  
 Burst Time: 0    0 s

**Time**

Buttons: OK, Cancel, Apply, Disable, Comment, Copy, Remove, Reset Counters, Reset All Counters, Torch

disabled

**Simple Queue <Monitoring-INT>**

General | **Advanced** | Statistics | Traffic | Total | Total Statistics

P2P:

Packet Marks:

Dst. Address:

Interface:

Target Upload: Limit At:  bits/s

Target Download:  bits/s

Queue Type:

Parent:

Priority:

disabled

OK  
Cancel  
Apply  
Disable  
Comment  
Copy  
Remove  
Reset Counters  
Reset All Counters  
Torch

**Simple Queue <Monitoring-INT>**

General | Advanced | **Statistics** | Traffic | Total | Total Statistics

Total Limit At:  bits/s

Total Max Limit:  bits/s

Total Burst Limit:  bits/s

Total Burst Threshold:  bits/s

Total Burst Time:  s

Total Queue Type:

disabled

OK  
Cancel  
Apply  
Disable  
Comment  
Copy  
Remove  
Reset Counters  
Reset All Counters  
Torch

## Pengecekan Akhir

Untuk pengecekan akhir, browsinglah ke situs lokal dan international. Kemudian perhatikan traffic counter baik di mangle atau simple queue. Untuk lebih akurat, bisa dites lewat <http://speedtest.net>

Jika ada kendala dan memerlukan bantuan, hubungi kami.

Salam,  
Green Tech Community

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## Green Tech Community

**Representative**  
Tel: 021 - 9356 4494

**Service Support Center**  
Kota Serang Baru Blok D31/17  
Tel: 021 - 8995 6275

**Website, E-mail**  
[www.serba-murah.web.id](http://www.serba-murah.web.id)  
[marketing@serba-murah.web.id](mailto:marketing@serba-murah.web.id)