



Implementasi Dynamic DNS untuk Akses MikroTik RouterOS

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About Me

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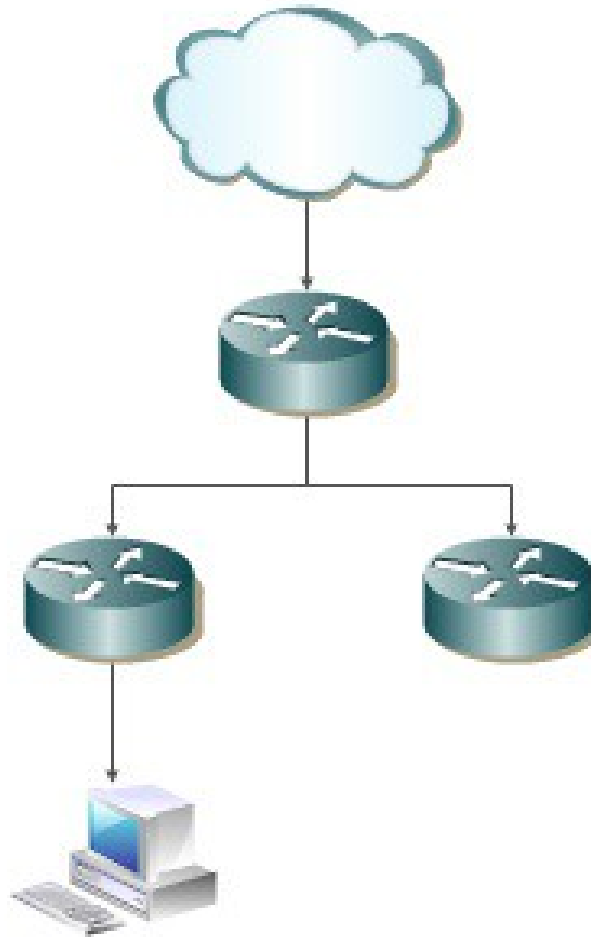
PT. Spectrum Indowibawa

- Reseller Wireless & Router Equipment
- Headquarter Surabaya
- MikroTik
 - Konsultan
 - Certified Training Partner
 - Network System Integrator
 - www.spectrumindo.com
 - www.trainingmikrotik.co.id
 - Regular and Bootcamp Training

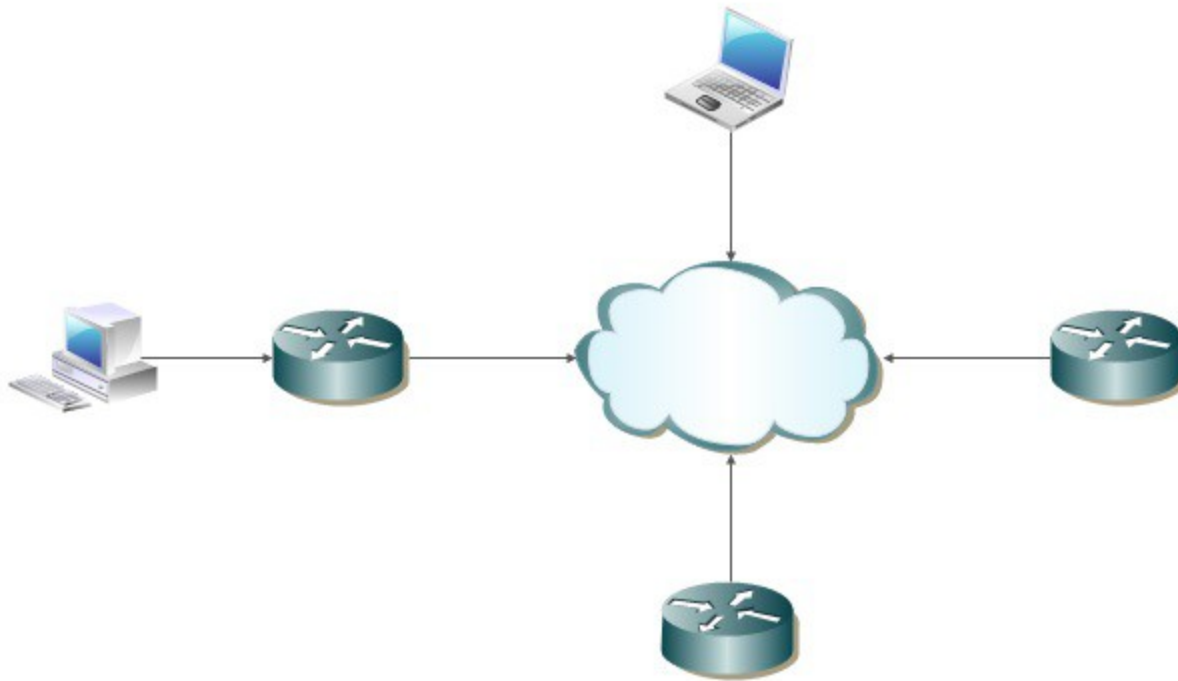
Akses Mikrotik

- SSH
- Telnet
- Winbox
- WWW
- Serial
- Keyboard dan monitor

Akses secara lokal



Akses melalui internet



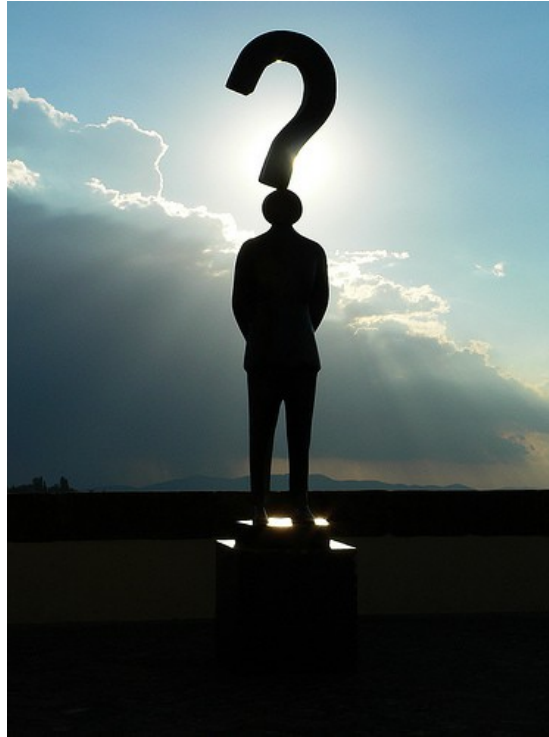
Akses melalui internet

- Akses menggunakan IP Public
- Bisa diakses dari mana saja dan kapan saja
- Akses menggunakan IP lokal dengan tunnel

Dynamic IP

- IP berubah-ubah sesuai yang diberikan oleh ISP
- Menjadi masalah karena IP yang hendak diakses tidak selalu sama

Dynamic IP?



Berapa IP saya?

Solusi

- Menggunakan Dynamic DNS
- Update IP menjadi sebuah DNS name
- Mengetahui IP public dari resolve DNS name
- Ex. service dynamic DNS dari `freedns.afraid.org`

Mendaftarkan domain

For Members:

- [[Main Menu](#)]
- [[Domains](#)]
- [[Subdomains](#)]
- [[Web Forward](#)]
- [[Dynamic DNS](#)]
- [[IPv6 Reverse](#)]
- [[Backup DNS](#)]
- [[Preferences](#)]
- [[Registry](#)]
- [[Logout](#)]

Add a new subdomain

Type: [explanation](#)

Subdomain:

Domain:

Destination:

TTL: seconds (optional)

Wildcard: ☐ Enabled for all subscribers ([more info](#))

Mendapatkan url untuk update

- `http://freedns.afraid.org/dynamic/update.php?<key>`



The image shows a screenshot of the freedns.afraid.org website. On the left, under the heading "For Members:", there is a list of menu items: Main Menu, Domains, Subdomains, Web Forward, Dynamic DNS, IPv6 Reverse, Backup DNS, Preferences, Registry, and Logout. A red arrow points from the "Dynamic DNS" link to the right. On the right, a section titled "2 dynamic update candidates! (A record)" lists "chickenkiller.com". Below this, there is a redacted area, followed by a row showing a redacted subdomain, "k.chickenkiller....", and a "Direct URL" link. The "Direct URL" text is circled in green, and the word "example" is visible below it.

For Members:	
[	[Main Menu]
[	[Domains]
[	[Subdomains]
[	[Web Forward]
[	[Dynamic DNS]
[	[IPv6 Reverse]
[	[Backup DNS]
[	[Preferences]
[	[Registry]
[	[Logout]

2 dynamic update candidates! (A record)

chickenkiller.com

[Redacted]

[Redacted] k.chickenkiller.... [Direct URL](#) | example

/tool fetch

- Console tools pada RouterOS, copy file dari device network yang lain menuju ke router mikrotik via HTTP atau FTP
- **/tool fetch** hanya untuk mengeksekusi link update DNS

Update DNS

- `/tool fetch`
`url="http://freedns.afraid.org/dynamic/update.php?<key>" keep-result=no`
- Tambahkan `&address=<ip address>` untuk menentukan address

Script – 1

```
:local host "xxxxxxxxxx.chickenkiller.com"  
:local url  
    "http://freedns.afraid.org/dynamic/update.php?<key>&address="  
:global lastwanip;
```

Script – 2

```
##credit to webasdf
:if ([ :typeof $lastwanip ] = "nothing" )
  do={ :global lastwanip 0.0.0.0 };
:local wanip [:resolve $host];
:if ( $wanip != $lastwanip ) do={
  ##proses mengambil IP WAN ke dyndns.org
  /tool fetch mode=http
  address="checkip.dyndns.org" src-
  path="/" dst-
  path="/dyndns.checkip.html"
```


Script – 3

```
:local result [/file get
dyndns.checkip.html contents]
:local resultLen [:len $result]
:local startLoc [:find $result ": " -1]
:set startLoc ($startLoc + 2)
:local endLoc [:find $result "</body>" - 1]
:local currentIP [:pick $result
$startLoc $endLoc]
:set lastwanip $currentIP;
##proses mengambil IP WAN selesai
/tool fetch url="$url$currentIP" keep-
result=no
}
```

Script – 4

Source:

```
:local host "[REDACTED]k.chickenkiller.com"
:local url "http://freedns.afraid.org/dynamic/update.php?
[REDACTED]ODNUOjEwNjcxMjk3&address="

:global lastwanip;
if ([ typeof $lastwanip ] = "nothing" ) do={ :global lastwanip 0.0.0.0 };
:local wanip [:resolve $host];
if ( $wanip != $lastwanip ) do={
##proses mengambil IP WAN ke dyndns.org
    /tool fetch mode=http address="checkip.dyndns.org" src-path="/" dst-path="/dyndns.checkip.html"
    :local result [/file get dyndns.checkip.html contents]
    :local resultLen [:len $result]
    :local startLoc [find $result ":" -1]
    :set startLoc ($startLoc + 2)
    :local endLoc [find $result "</body>" -1]
    :local currentIP [:pick $result $startLoc $endLoc]
    :set lastwanip $currentIP;
##proses mengambil IP WAN selesai
    /tool fetch url="$url$currentIP" keep-result=no
}
```

Scheduler – 1

```
/system scheduler add \ name="UpdateDNS" \  
                        on-event="DynamicDNS" \  
start-time="00:00:00" \  
interval="00:10:00"
```

Scheduler – 2

Schedule <Update DNS>

Name: Update DNS

Start Date: Nov/01/2013

Start Time: 00:00:00

Interval: 00:10:00

On Event:

DynamicDNS

Owner: t0n6

Policy

<input checked="" type="checkbox"/> reboot	<input checked="" type="checkbox"/> read
<input checked="" type="checkbox"/> write	<input checked="" type="checkbox"/> policy
<input checked="" type="checkbox"/> test	<input checked="" type="checkbox"/> password
<input checked="" type="checkbox"/> sniff	<input checked="" type="checkbox"/> sensitive

Run Count: 0

Next Run: Nov/30/2013 05:40:00

enabled

OK

Cancel

Apply

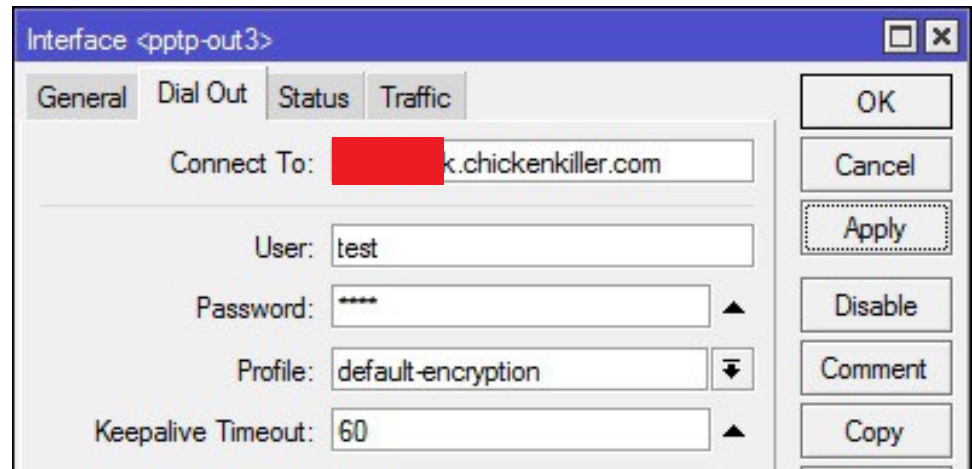
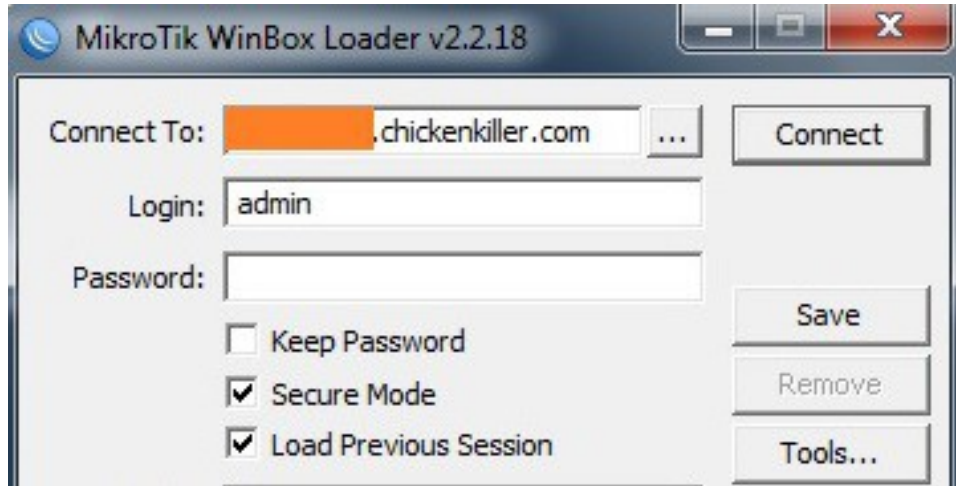
Disable

Comment

Copy

Remove

Akses MikroTik



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