

Multi-WAN w/ auto notification for WAN's status updates

PH18-MUM

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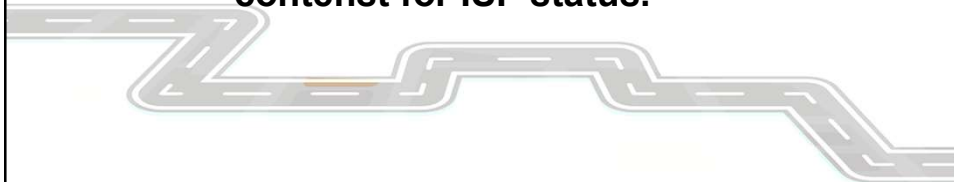
MTCTCE- 1504TCE023

MTCINE - 1504INE021

MTCUME-1511UME014

What do we have for today?

- **Basic MultiWAN using ECMP.**
- **Force destination address to route out of a specific ISP.**
- **Ensure dst.address will go out of specific route.**
- **Setup routers email settings.**
- **Setup Trigger and email contentst for ISP status.**



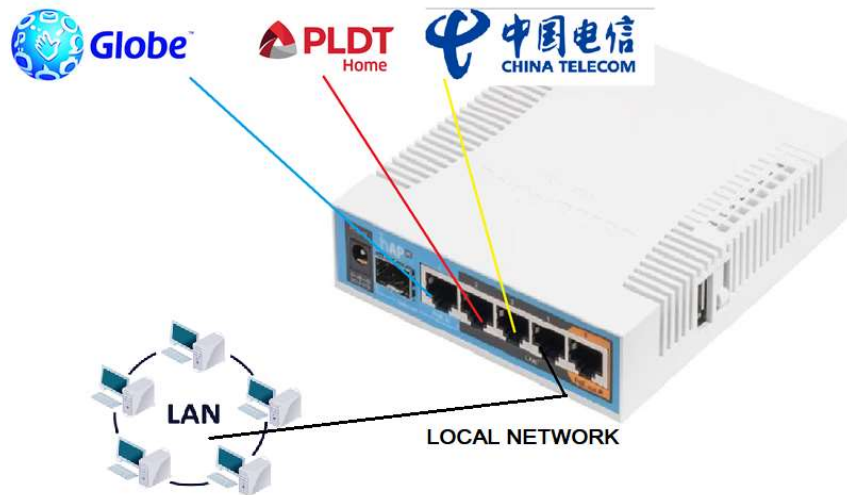


Multi-WAN Setup


**Multi-WAN is a practical setup to maximize multiple ISP's
And be able to avoid downtime if you have alternate ISP.**


➤ **We will use Tripple WAN for better sample**


Tripple WAN Source



IP configurations for simulation

- ISP1: 192.168.50.0/24
GW: 192.168.50.1 

- ISP2: 192.168.60.0/24
GW: 192.168.60.1 

- ISP3: 192.168.70.0/24
GW: 192.168.70.1 

- Local Network: 192.168.10.0/24
GW: 192.168.10.1

Tripple WAN setup

1. IP>Addresses
2. IP>DNS
3. Firewall>NAT>masquerade
4. Firewall>Mangle
5. IP>Routes
6. Local DHCP

Tripple WAN

IP>Addresses

Address List		
Address	Network	Interface
::: LOCAL Network		
192.168.10.254/24	192.168.10.0	ether4
192.168.50.254/24	192.168.50.0	ether1-WAN1
192.168.60.254/24	192.168.60.0	ether2-WAN2
192.168.70.254/24	192.168.70.0	ether3-WAN3

IP>DNS

DNS Settings	
Servers:	208.78.222.222
	208.67.220.220

Tripple WAN

Firewall>NAT>masquerade

Firewall						
Filter Rules		NAT	Mangle	Service Ports	Connections	Address
#	Action	Chain				Out. Interface
0	masquerade	srcnat				ether1-WAN1
1	masquerade	srcnat				ether2-WAN2
2	masquerade	srcnat				ether3-WAN3

Firewall>Mangle

Firewall							
Filter Rules		NAT	Mangle	Service Ports	Connections	Address Lists	Layer7 Protocols
#	Action	Chain	In. Interface	(Connection Mark	New Connection Mark	New Routing Mark	
::: Tripple WAN CONFIG							
	mark connection	input	ether1-WAN1		wan1_conn		
	mark connection	input	ether2-WAN2		wan2_conn		
	mark connection	input	ether3-WAN3		wan3_conn		
	mark routing	output		wan1_conn		to_wan1	
	mark routing	output		wan3_conn		to_wan3	
	mark routing	output		wan2_conn		to_wan2	

Tripple WAN

IP>Routes

Route List							
Routes		Next hops	Rules	VRF			
AS	Dst. Address	Gateway	Distance	Scope	Target Scope	Routing Mark	
AS	0.0.0.0/0	192.168.50.1 reachable ether1-WAN1	1	30		10 to_wan1	
AS	0.0.0.0/0	192.168.60.1 reachable ether2-WAN2	1	30		10 to_wan2	
AS	0.0.0.0/0	192.168.70.1 reachable ether3-WAN3	1	30		10 to_wan3	
::: Multi-WAN							
AS	0.0.0.0/0	192.168.70.1 reachable ether3-WAN3, 1...	1	30		10	

Route <0.0.0.0/0>

General Attributes

Dst. Address: 0.0.0.0/0

Gateway: 192.168.70.1 reachable ether3-WAN3

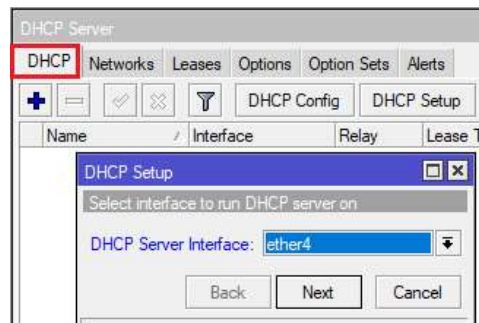
192.168.60.1 reachable ether2-WAN2

192.168.50.1 reachable ether1-WAN1

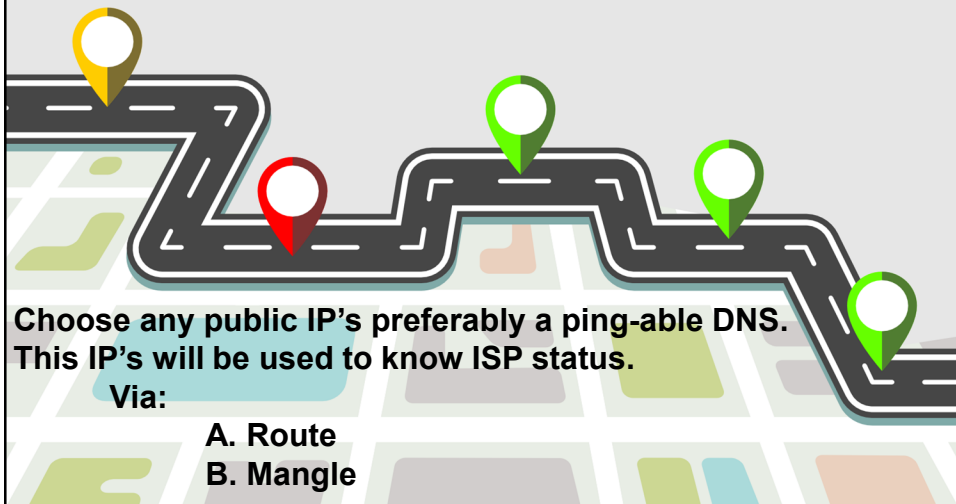
Check Gateway: []

Tripple WAN

Local DHCP



Force a dst.address to route out of a specific ISP.



Choose any public IP's preferably a ping-able DNS.
This IP's will be used to know ISP status.

Via:

- A. Route
- B. Mangle

Choose IP's

Choose 3 ping-able IP that we will be used for monitoring later-on.

49.151.178.157 for
ISP1 Monitor

124.106.88.146 for
ISP2 Monitor

121.96.219.176 for
ISP3 Monitor

```

Select Command Prompt - ping 121.96.219.176 -t
Reply from 121.96.219.176: bytes=32 time=90ms TTL=52
Reply from 121.96.219.176: bytes=32 time=54ms TTL=52
Reply from 121.96.219.176: bytes=32 time=54ms TTL=52
Reply from 121.96.219.176: bytes=32 time=57ms TTL=52
Reply from 121.96.219.176: bytes=32 time=49ms TTL=52
Reply from 121.96.219.176: bytes=32 time=45ms TTL=52
Reply from 121.96.219.176: bytes=32 time=45ms TTL=52
Reply from 121.96.219.176: bytes=32 time=45ms TTL=52
Reply from 121.96.219.176: bytes=32 time=70ms TTL=52
Reply from 121.96.219.176: bytes=32 time=52ms TTL=52

Command Prompt - ping 124.106.88.146 -t
Reply from 124.106.88.146: bytes=32 time=75ms TTL=46
Reply from 124.106.88.146: bytes=32 time=76ms TTL=46
Reply from 124.106.88.146: bytes=32 time=114ms TTL=46
Reply from 124.106.88.146: bytes=32 time=75ms TTL=46
Reply from 124.106.88.146: bytes=32 time=73ms TTL=46
Reply from 124.106.88.146: bytes=32 time=97ms TTL=46
Reply from 124.106.88.146: bytes=32 time=95ms TTL=46
Reply from 124.106.88.146: bytes=32 time=76ms TTL=46

Command Prompt - ping 49.151.178.157 -t
Reply from 49.151.178.157: bytes=32 time=41ms TTL=48
Reply from 49.151.178.157: bytes=32 time=41ms TTL=48
Reply from 49.151.178.157: bytes=32 time=44ms TTL=48
Reply from 49.151.178.157: bytes=32 time=41ms TTL=48
Reply from 49.151.178.157: bytes=32 time=41ms TTL=48
Reply from 49.151.178.157: bytes=32 time=85ms TTL=48
Reply from 49.151.178.157: bytes=32 time=40ms TTL=48
Reply from 49.151.178.157: bytes=32 time=40ms TTL=48
Reply from 49.151.178.157: bytes=32 time=40ms TTL=48

```

A. Force dst. to Route to a specific ISP via Route

IP> Routes:

- when dst. is **49.151.178.157** gateway is **ISP1's GW**
- when dst. is **124.106.88.146** gateway is **ISP2's GW**
- when dst. is **121.96.219.176** gateway is **ISP3's GW**

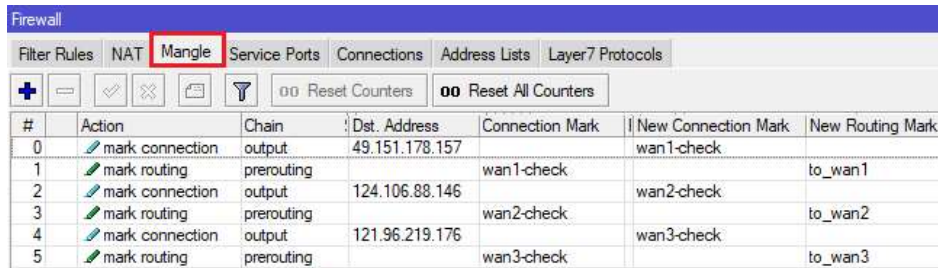
Route List							
Routes							
	Dst. Address	Gateway	Distance	Scope	Target Scope	Pc	
AS	124.106.88.146	192.168.60.1 reachable ether2-WAN2	1	10	10		
AS	121.96.219.176	192.168.70.1 reachable ether3-WAN3	1	10	10		
AS	49.151.178.157	192.168.50.1 reachable ether1-WAN1	1	10	10		

B. Force dst. to Route to a specific ISP via Mangle

Chain: Output dst.add: **49.151.178.157** new connection mark: **wan1-check**
Chain: Prerouting connection mark: **wan1-check** new-routing-mark: **to_wan1**

Chain: Output dst.add: **124.106.88.146** new connection mark: **wan2-check**
Chain: Prerouting connection mark: **wan2-check** new-routing-mark: **to_wan2**

Chain: Output dst.add: **121.96.219.176** new connection mark: **wan3-check**
Chain: Prerouting connection mark: **wan3-check** new-routing-mark: **to_wan3**



The screenshot shows the Mikrotik WinBox Firewall configuration interface, specifically the Mangle tab. The table below represents the data shown in the interface:

#	Action	Chain	Dst. Address	Connection Mark	New Connection Mark	New Routing Mark
0	mark connection	output	49.151.178.157		wan1-check	
1	mark routing	prerouting		wan1-check		to_wan1
2	mark connection	output	124.106.88.146		wan2-check	
3	mark routing	prerouting		wan2-check		to_wan2
4	mark connection	output	121.96.219.176		wan3-check	
5	mark routing	prerouting		wan3-check		to_wan3

The Problem

Despite having Route and Mangles that will force packets to go out of a certain ISP.

Routes will be disabled whenever gateway is unreachable.
Giving chance for the router to ping a monitoring IP thru other ISP/Gateway

This will give false report in our monitoring.
As we want to make them triggers

Scenario 1

Route List							
Routes	Nexthops	Rules	VRF				
Det. Address	Gateway	Check Gat...	Distance	Scope	Target Scope	Routing M	
DAC ▶ 192.168.70.0/24	ether3-WAN3 reachable		0	10	10		
DAC ▶ 192.168.60.0/24	ether2-WAN2 reachable		0	10	10		
DC ▶ 192.168.50.0/24	ether1-WAN1 unreachable		255	10	10		
DAC ▶ 192.168.10.0/24	ether4 reachable		0	10	10		
::: ISP2_monitor							
AS ▶ 124.106.88.146	192.168.60.1 reachable ether2-WAN2		1	10	10		
::: ISP3_monitor							
AS ▶ 121.96.219.176	192.168.70.1 reachable ether3-WAN3		1	10	10		
::: ISP1_monitor							
S ▶ 49.151.178.157	192.168.50.1 unreachable		1	10	10		
S ▶ 0.0.0.0/0	192.168.50.1 unreachable		1	30	10 to_wan1		
AS ▶ 0.0.0.0/0	192.168.60.1 reachable ether2-WAN2		1	30	10 to_wan2		
AS ▶ 0.0.0.0/0	192.168.70.1 reachable ether3-WAN3		1	30	10 to_wan3		
::: Multi-WAN							
AS ▶ 0.0.0.0/0	192.168.70.1 reachable ether3-WAN3, 192.168.60...		1	30	10		

49.151.178.157 is still ping-able despite ISP1 being disconnected

Forced Route Disabled

Route for mangle disabled

Terminal			
16	49.151.178.157	56	47 43ms
17	49.151.178.157	56	47 40ms
18	49.151.178.157	56	47 39ms
19	49.151.178.157	56	47 39ms

Scenario 2

Route List							
Routes	Nexthops	Rules	VRF				
Det. Address	Gateway	Check Gat...	Distance	Scope	Target Scope	Routing Mark	
DAC ▶ 192.168.70.0/24	ether3-WAN3 reachable		0	10	10		
DC ▶ 192.168.60.0/24	ether2-WAN2 unreachable		255	10	10		
DAC ▶ 192.168.50.0/24	ether1-WAN1 reachable		0	10	10		
DAC ▶ 192.168.10.0/24	ether4 reachable		0	10	10		
::: ISP2_monitor							
S ▶ 124.106.88.146	192.168.60.1 unreachable		1	10	10		
::: ISP3_monitor							
AS ▶ 121.96.219.176	192.168.70.1 reachable ether3-WAN3		1	10	10		
::: ISP1_monitor							
AS ▶ 49.151.178.157	192.168.50.1 reachable ether1-WAN1		1	10	10		
AS ▶ 0.0.0.0/0	192.168.50.1 reachable ether1-WAN1		1	30	10 to_wan1		
S ▶ 0.0.0.0/0	192.168.60.1 unreachable		1	30	10 to_wan2		
AS ▶ 0.0.0.0/0	192.168.70.1 reachable ether3-WAN3		1	30	10 to_wan3		
::: Multi-WAN							
AS ▶ 0.0.0.0/0	192.168.70.1 reachable ether3-WAN3, 192.168.60...		1	30	10		

124.106.88.146 is still ping-able despite ISP2 being disconnected

Forced Route Disabled

Route for mangle disabled

Terminal				
[admin@Multi-WAN auto change Gateway] > ping 124.106.88.146				
SEQ	HOST	SIZE	TTL	TIME STATUS
0	124.106.88.146	56	45	443ms
1	124.106.88.146	56	45	373ms
2	124.106.88.146	56	45	408ms
3	124.106.88.146	56	45	458ms
4	124.106.88.146	56	45	485ms

Scenario 3

Route List

Routes	Nexthops	Rules	VRF
DC	▶ 192.168.70.0/24	ether3-WAN3 unreachable	
DAC	▶ 192.168.60.0/24	ether2-WAN2 reachable	
DAC	▶ 192.168.50.0/24	ether1-WAN1 reachable	
DAC	▶ 192.168.10.0/24	ether4 reachable	
...	ISP2_monitor		
AS	▶ 124.106.88.146	192.168.60.1 reachable ether2-WAN2	
...	ISP3_monitor		
S	▶ 121.96.219.176	192.168.70.1 unreachable	
...	ISP1_monitor		
AS	▶ 49.151.178.157	192.168.50.1 reachable ether1-WAN1	
AS	▶ 0.0.0.0/0	192.168.50.1 reachable ether1-WAN1	
AS	▶ 0.0.0.0/0	192.168.60.1 reachable ether2-WAN2	
S	▶ 0.0.0.0/0	192.168.70.1 unreachable	
...	Multi-WAN		
AS	▶ 0.0.0.0/0	192.168.70.1 unreachable, 192.168.60.1 reachable...	

```

Terminal
sent=934 received=881 packet-loss=5% min-rtt=71ms avg-rtt=167ms
echo: dhcp,critical,error dhcp-client on ether2-WAN2 lost IP address
[admin@Multi-WAN auto change Gateway] > ping 124.106.88.146
SEQ HOST                                SIZE TTL TIME  STATUS
0 124.106.88.146                        56  45 177ms
1 124.106.88.146                        56  45  72ms
2 124.106.88.146                        56  45 177ms
    
```

Forced Route Disabled

Route for mangle disabled

121.96.219.176 is still ping-able despite ISP2 being disconnected

Ensuring dst.address will go out of assigned specific route



The Solution

To avoid monitoring IP's being pinged thru other ISP's we will use Firewall Filter.

Chain: Output dst.add: 49.151.178.157 out.interface:Ether2_Wan2 action: drop
Chain: Output dst.add: 49.151.178.157 out.interface:Ether3_Wan3 action: drop

Chain: Output dst.add: 124.106.88.146 out.interface:Ether1_Wan1 action: drop
Chain: Output dst.add: 124.106.88.146 out.interface:Ether3_Wan3 action: drop

Chain: Output dst.add: 121.96.219.176 out.interface:Ether1_Wan1 action: drop
Chain: Output dst.add: 121.96.219.176 out.interface:Ether2_Wan2 action: drop

The Solution

Drops monitoring IP for ISP1 from going out of ISP2 & ISP3

Chain: Output dst.add: 49.151.178.157 out.interface:Ether2_Wan2 action: drop
Chain: Output dst.add: 49.151.178.157 out.interface:Ether3_Wan3 action: drop

#	Action	Chain	S Dst. Address	In. Inter...	Out. Interface
0	✘ drop	output	49.151.178.157		ether2-WAN2
1	✘ drop	output	49.151.178.157		ether3-WAN3
2	✘ drop	output	124.106.88.146		ether1-WAN1
3	✘ drop	output	124.106.88.146		ether3-WAN3
4	✘ drop	output	121.96.219.176		ether1-WAN1
5	✘ drop	output	121.96.219.176		ether2-WAN2

The Solution

Drops monitoring IP for ISP2 from going out of ISP1 & ISP3

Chain: Output dst.add: 124.106.88.146 out.interface:Ether1_Wan1 action: drop

Chain: Output dst.add: 124.106.88.146 out.interface:Ether3_Wan3 action: drop

#	Action	Chain	S Dst. Address	In. Inter...	Out. Interface
0	✗ drop	output	49.151.178.157		ether2-WAN2
1	✗ drop	output	49.151.178.157		ether3-WAN3
2	✗ drop	output	124.106.88.146		ether1-WAN1
3	✗ drop	output	124.106.88.146		ether3-WAN3
4	✗ drop	output	121.96.219.176		ether1-WAN1
5	✗ drop	output	121.96.219.176		ether2-WAN2

The Solution

Drops monitoring IP for ISP3 from going out of ISP1 & ISP2

Chain: Output dst.add: 121.96.219.176 out.interface:Ether1_Wan1 action: drop

Chain: Output dst.add: 121.96.219.176 out.interface:Ether2_Wan2 action: drop

#	Action	Chain	S Dst. Address	In. Inter...	Out. Interface
0	✗ drop	output	49.151.178.157		ether2-WAN2
1	✗ drop	output	49.151.178.157		ether3-WAN3
2	✗ drop	output	124.106.88.146		ether1-WAN1
3	✗ drop	output	124.106.88.146		ether3-WAN3
4	✗ drop	output	121.96.219.176		ether1-WAN1
5	✗ drop	output	121.96.219.176		ether2-WAN2

Results

Firewall Drops Traffic for **49.151.178.157** going out of ether2_WAN2 and ether3_WAN3.

Firewall

#	Action	Chain	Src. Address	Dst. Address	Src. Port	Out. Interface	Bytes	Packets
0	drop	output	49.151.178.157			ether2-WAN2	896 B	16
1	drop	output	49.151.178.157			ether3-WAN3	56 B	1

Cannot Ping 49.151.178.157 when ISP1 is down.

```

Terminal
max-rtt=354ms
[admin@Multi-WAN auto change Gateway] > ping 49.151.178.157
PING: 49.151.178.157: 56 bytes from 49.151.178.157: icmp: packet rejected
PING: 49.151.178.157: 56 bytes from 49.151.178.157: icmp: packet rejected
PING: 49.151.178.157: 56 bytes from 49.151.178.157: icmp: packet rejected
PING: 49.151.178.157: 56 bytes from 49.151.178.157: icmp: packet rejected
PING: 49.151.178.157: 56 bytes from 49.151.178.157: icmp: packet rejected

```

Route List

Dest. Address	Gateway	Check Gat...	Distance	Scope	Target Scope	Routing Mark
192.168.70.0/24	ether3-WAN3 reachable		0	10	10	
192.168.60.0/24	ether2-WAN2 reachable		0	10	10	
192.168.50.0/24	ether1-WAN1 unreachable		255	10	10	
192.168.10.0/24	ether4 reachable		0	10	10	
124.106.88.146	192.168.60.1 reachable ether2-WAN2		1	10	10	
121.96.219.176	192.168.70.1 reachable ether3-WAN3		1	10	10	
49.151.178.157	192.168.50.1 unreachable		1	10	10	
0.0.0.0	192.168.50.1 unreachable		1	30	10 to_wan1	
0.0.0.0	192.168.60.1 reachable ether2-WAN2		1	30	10 to_wan2	
0.0.0.0	192.168.70.1 reachable ether3-WAN3		1	30	10 to_wan3	

Results

Firewall Drops Traffic for **124.106.88.146** going out of ether1_WAN1 and ether3_WAN3.

Firewall

#	Action	Chain	Dst. Address	Out. Interface	Bytes	Packets
	drop	output	124.106.88.146	ether1-WAN1	0 B	0
	drop	output	124.106.88.146	ether3-WAN3	280 B	5

Cannot Ping 124.106.88.146 when ISP2 is down.

```

Terminal
/
..
/command
Use command at the base level
[admin@Multi-WAN auto change Gateway] > ping 124.106.88.146
PING: 124.106.88.146: 56 bytes from 124.106.88.146: icmp: packet rejected
PING: 124.106.88.146: 56 bytes from 124.106.88.146: icmp: packet rejected
PING: 124.106.88.146: 56 bytes from 124.106.88.146: icmp: packet rejected

```

Route List

Dest. Address	Gateway	Check Gat...	Distance	Scope	Target Scope	Routing Mark
192.168.70.0/24	ether3-WAN3 reachable		0	10	10	
192.168.60.0/24	ether2-WAN2 unreachable		255	10	10	
192.168.50.0/24	ether1-WAN1 reachable		0	10	10	
192.168.10.0/24	ether4 reachable		0	10	10	
124.106.88.146	192.168.60.1 unreachable		1	10	10	
121.96.219.176	192.168.70.1 reachable ether3-WAN3		1	10	10	
49.151.178.157	192.168.50.1 reachable ether1-WAN1		1	10	10	
0.0.0.0	192.168.50.1 reachable ether1-WAN1		1	30	10 to_wan1	
0.0.0.0	192.168.60.1 unreachable		1	30	10 to_wan2	
0.0.0.0	192.168.70.1 reachable ether3-WAN3		1	30	10 to_wan3	

Results

Firewall Drops Traffic for **121.96.219.176** going out of ether1_WAN1 and ether2_WAN2.

#	Action	Chain	Out. Interface	Bytes	Packets
	drop	output	ether1-WAN1	504 B	9
	drop	output	ether2-WAN2	0 B	0

Cannot Ping **121.96.219.176** when ISP3 is down.

Dist. Address	Gateway	Check Gat...	Distance	Scope	Target Scope	Routing Mark
DC ▶ 192.168.70.0/24	ether3-WAN3 unreachable		255	10	10	
DAC ▶ 192.168.60.0/24	ether2-WAN2 reachable		0	10	10	
DAC ▶ 192.168.50.0/24	ether1-WAN1 reachable		0	10	10	
DAC ▶ 192.168.10.0/24	ether4 reachable		0	10	10	
...ISP2_monitor						
AS ▶ 124.106.88.146	192.168.60.1 reachable ether2-WAN2		1	10	10	
...ISP3_monitor						
S ▶ 121.96.219.176	192.168.70.1 unreachable		1	10	10	
...ISP1_monitor						
AS ▶ 49.151.178.157	192.168.50.1 reachable ether1-WAN1		1	10	10	
AS ▶ 0.0.0.0/0	192.168.50.1 reachable ether1-WAN1		1	30	10 to_wan1	
AS ▶ 0.0.0.0/0	192.168.60.1 reachable ether2-WAN2		1	30	10 to_wan2	
S ▶ 0.0.0.0/0	192.168.70.1 unreachable		1	30	10 to_wan3	
...Multi-WAN						
AS ▶ 0.0.0.0/0	192.168.70.1 unreachable, 192.168.50.1 reachable...		1	30	10	

```

Terminal
/ Move up to base level
.. Move up one level
/command Use command at the base level
[admin@Multi-WAN auto change Gateway] > ping 121.96.219.176
S BQ HOST SIZE TTL TIME STATUS
0 packet r...
1 packet r...
2 packet r...

```

Setup routers email settings.



Router's Email setup

Server: mikrotikphilippines.com
Port: 26
Start TLS: no

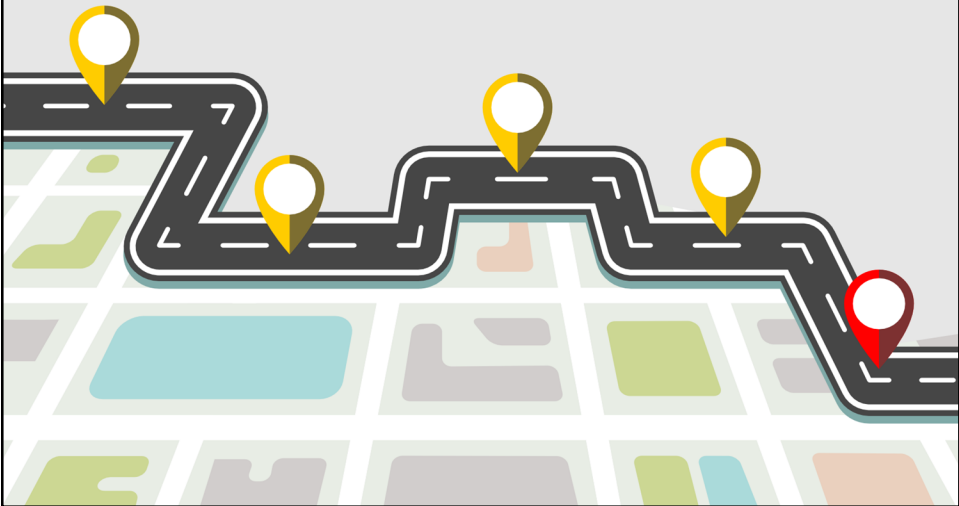
From: mar.flordeliza
User: mar.flordeliza@mikrotikphilippines.com
Password: *****

OK
Cancel
Apply
Send Email

mail server setting

account to be used by the router to send mails

Triggers for Email Router



Auto Email setup

Now that we are assured that when ISP1 is down you cannot ping **49.151.178.157**

Now that we are assured that when ISP2 is down you cannot ping **124.106.88.146**

Now that we are assured that when ISP3 is down you cannot ping **121.96.219.176**

We could now use them as triggers.

Host	Interval	Timeout (...)	Status	Since
... I1				
49.151.178.157	00:00:30	1000	up	Dec/13/2017 11:14:30
... I3				
121.96.219.176	00:00:30	1000	up	Dec/13/2017 11:27:21
... I2				
124.106.88.146	00:00:30	1000	up	Dec/13/2017 11:27:22

Auto Email setup

With the use of Netwatch monitoring **49.151.178.157** for ISP1

Netwatch Host <49.151.178.157>

Host: 49.151.178.157
Interval: 00:00:30
Timeout: 1000 ms
Status: up
Since: Dec/13/2017 11:14:30

Interval period could be shortened for a more accurate status check.

Netwatch Host <49.151.178.157>

Host Up Down

On Up:

```
/tool e-mail send to=aesflordeliza@gmail.com  
subject="ISP1 is now up"  
body="ISP1 on Ether1 is now restored"  
from="mar.flordeliza@mikrotikphilippines.com"
```

Netwatch Host <49.151.178.157>

Host Up Down

On Down:

```
/tool e-mail send to=aesflordeliza@gmail.com  
subject="ISP1 is down"  
body="ISP1 on Ether1 is disconnected"  
from="mar.flordeliza@mikrotikphilippines.com"
```

Auto Email setup

With the use of Netwatch monitoring **124.106.88.146** for ISP2

Netwatch Host <124.106.88.146>

Host Up Down

Host: 124.106.88.146

Interval: 00:00:30

Timeout: 1000 ms

Status: up

Since: Dec/13/2017 11:27:22

Interval period could be shortened for a more accurate status check.

<p>Netwatch Host <124.106.88.146></p> <p>Host Up Down</p> <p>On Up:</p> <pre>/tool e-mail send to=aesflordeliza@gmail.com subject="ISP2 is now up" body="ISP2 on Ether2 is now restored" from="mar.flordeliza@mikrotikphilippines.com"</pre>	<p>Netwatch Host <124.106.88.146></p> <p>Host Up Down</p> <p>On Down:</p> <pre>/tool e-mail send to=aesflordeliza@gmail.com subject="ISP2 is down" body="ISP2 on Ether2 is Down" from="mar.flordeliza@mikrotikphilippines.com"</pre>
--	--

Auto Email setup

With the use of Netwatch monitoring **121.96.219.176** for ISP3

Netwatch Host <121.96.219.176>

Host Up Down

Host: 121.96.219.176

Interval: 00:00:30

Timeout: 1000 ms

Status: up

Since: Dec/13/2017 11:27:21

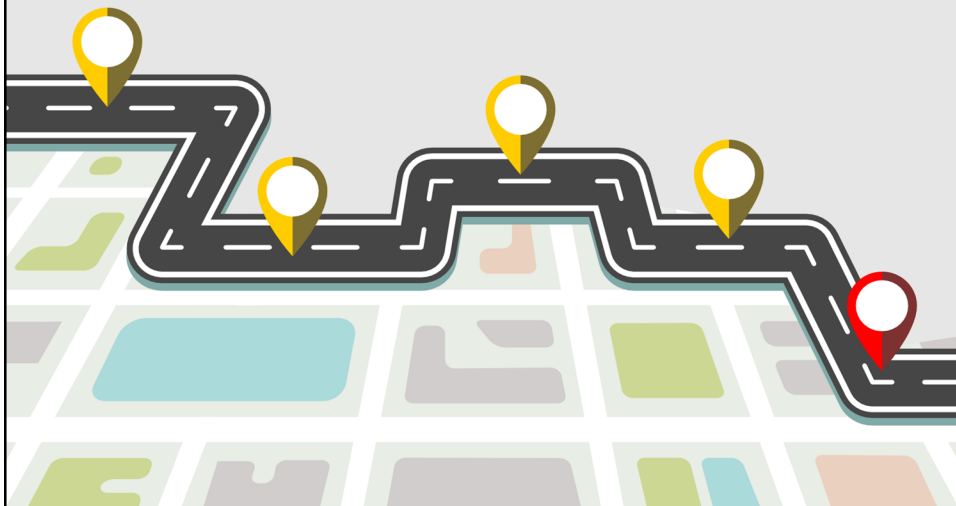
Interval period could be shortened for a more accurate status check.

<p>Netwatch Host <121.96.219.176></p> <p>Host Up Down</p> <p>On Up:</p> <pre>/tool e-mail send to=aesflordeliza@gmail.com subject="ISP3 is now up" body="ISP3 on Ether3 is now restored" from="mar.flordeliza@mikrotikphilippines.com"</pre>	<p>Netwatch Host <121.96.219.176></p> <p>Host Up Down</p> <p>On Down:</p> <pre>/tool e-mail send to=aesflordeliza@gmail.com subject="ISP3 is down" body="ISP3 on Ether3 is Down" from="mar.flordeliza@mikrotikphilippines.com"</pre>
--	--

Configuration benefits?

- Knows when your ISP goes down and the time it was restored.
- Router reports via email means you could also receive it while on vacation/away from work.
- Ease of mind that you don't need to manually check each ISP manually, specially for multiple ISP deployment.
- Ensuring configuration will work even on modem-router down time, ISP link disconnection or any other forms of internet source problem.

Thank You



The End

- Questions and Answers

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