

# ALOHA LOAD BALANCER CONFIGURING AN IP ADDRESS

## "APPNOTE" #0001 — IP CONFIGURATION

*This application note is intended to help you configure an IP address or a route on one or more network interface(s) for the ALOHA Load Balancer solution.*

### CONSTRAINTS

Add a new IP listening address on the same Aloha physical interface. Requires a list of IP addresses which are available and useable on the network, and a detailed map of the routing rules applied on the network.

### OBJECTIVE

Add a private IP address and a route to the Aloha device, available to internal users. This enables load balancing on two Web sites located on different networks (this method may be used to change or delete an IP address or a route).

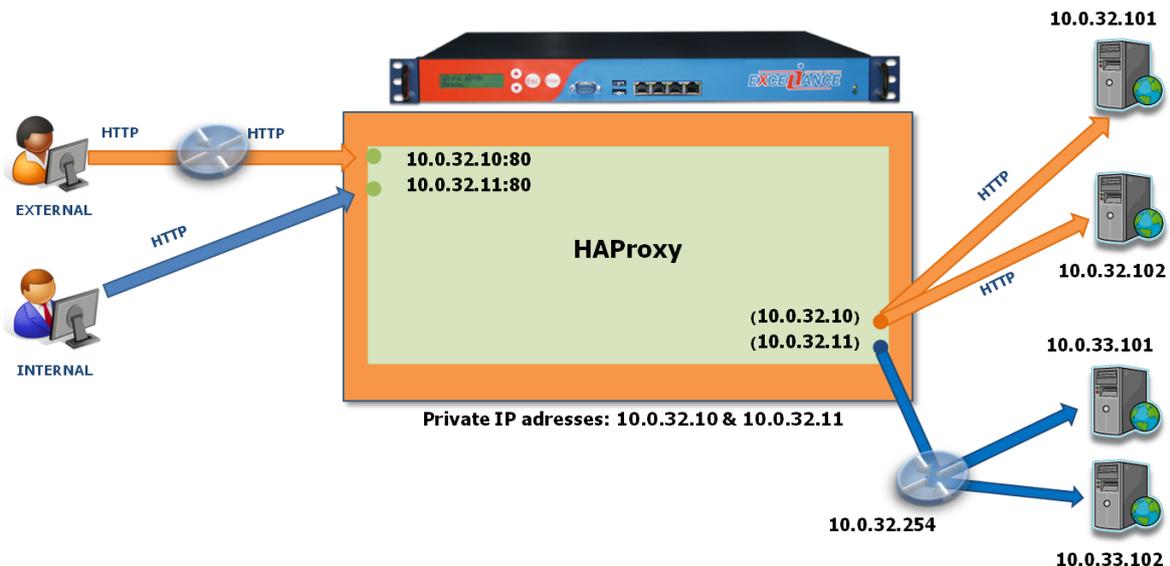
### COMPLEXITY



### VERSIONS CONCERNED

V 3.x and later

### TARGET NETWORK DIAGRAM



## EXTRACT OF THE NETWORK CONFIGURATION

### **Before modifications:**

```
service network eth0
##### Interface eth0, used as the admin port.
auto on
mtu 1500
ip address 10.0.32.10/24

service network eth1
##### Interface eth1: .
auto on
mtu 1500

service network eth2
##### Interface eth2: .
auto on
mtu 1500
```

### **After modifications:**

```
service network eth0
##### Interface eth0, used as the admin port.
auto on
mtu 1500
ip address 10.0.32.10/24
ip address 10.0.32.11/24
ip route 10.0.33.0/24 10.0.32.254

service network eth1
##### Interface eth1: .
auto on
mtu 1500

service network eth2
##### Interface eth2: .
auto on
mtu 1500
```

You can configure the network interface configuration directly from the Services tab by editing the network service.

In order to meet the objective, simply specify the new IP address and its subnet mask on the network interface in question.

Then you can enter as many IP addresses or routes as required.

To add a route, you must specify the following parameters:

**ip route "network/mask address" "gateway IP address"**

**Warning: there can only be one default route for the entire machine!**

## BASIC TROUBLESHOOTING

**Diagnostic Tools**

arp who-has (interface, source\*, destination) Retries: 5 Timeout: 5s  
\* Optional

Diagnostic Tool (eth0, , 10.0.32.11)

```
# /bin/arping -c 5 -I eth0 10.0.32.11
```

```
ARPING 10.0.32.11 from 10.0.32.10 eth0
Unicast reply from 10.0.32.11 [00:0D:C5:36:C6:72] 0.666ms
Unicast reply from 10.0.32.11 [00:0D:C5:36:C6:72] 0.618ms
Unicast reply from 10.0.32.11 [00:0D:C5:36:C6:72] 0.620ms
Unicast reply from 10.0.32.11 [00:0D:C5:36:C6:72] 0.636ms
Unicast reply from 10.0.32.11 [00:0D:C5:36:C6:72] 0.618ms
```

Should a problem arise, check whether the IP address you have just added to Aloha is used by any other device. To do this, you can use the built-in "arp who-has" tool available in the "DiagTools" tab; specify the name of the interface and the IP address to test. If a unicast message appears, then the IP address is already used.

**Diagnostic Tools**

ping (source\*, destination, ignored) Retries: 5 Timeout: 5s  
\* Optional

Diagnostic Tool ( , 10.0.32.11, )

```
# /bin/ping -n -c 5 10.0.33.101
```

```
PING 10.0.33.101 (10.0.33.101) 56(84) bytes of data.
64 bytes from 10.0.33.101: icmp_seq=1 ttl=64 time=0.051 ms
64 bytes from 10.0.33.101: icmp_seq=2 ttl=64 time=0.030 ms
64 bytes from 10.0.33.101: icmp_seq=3 ttl=64 time=0.024 ms
64 bytes from 10.0.33.101: icmp_seq=4 ttl=64 time=0.030 ms
64 bytes from 10.0.33.101: icmp_seq=5 ttl=64 time=0.036 ms

--- 10.0.33.101 ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4008ms
rtt min/avg/max/mdev = 0.024/0.034/0.051/0.009 ms
```

Now you must make sure the route is working correctly by checking the IP address of a machine on the remote network. To do this, you can use the built-in "ping" tool; specify the target IP address to test.

**Diagnostic Tools**

routes (ignored, ignored, ignored) Retries: 5 Timeout: 5s

\* Optional

Diagnostic Tool ( )

```
# /bin/netstat -nr
```

```
Kernel IP routing table
```

Destination	Gateway	Genmask	Flags	MSS	Window	irrtt	Iface
10.0.32.0	0.0.0.0	255.255.255.0	U	0	0	0	eth0
10.0.33.0	10.0.32.254	255.255.255.0	U	0	0	0	eth0

Finally, you can display all the known routes on your Aloha. To do this, you can use the built-in "route" tool; click on the "Run" button.