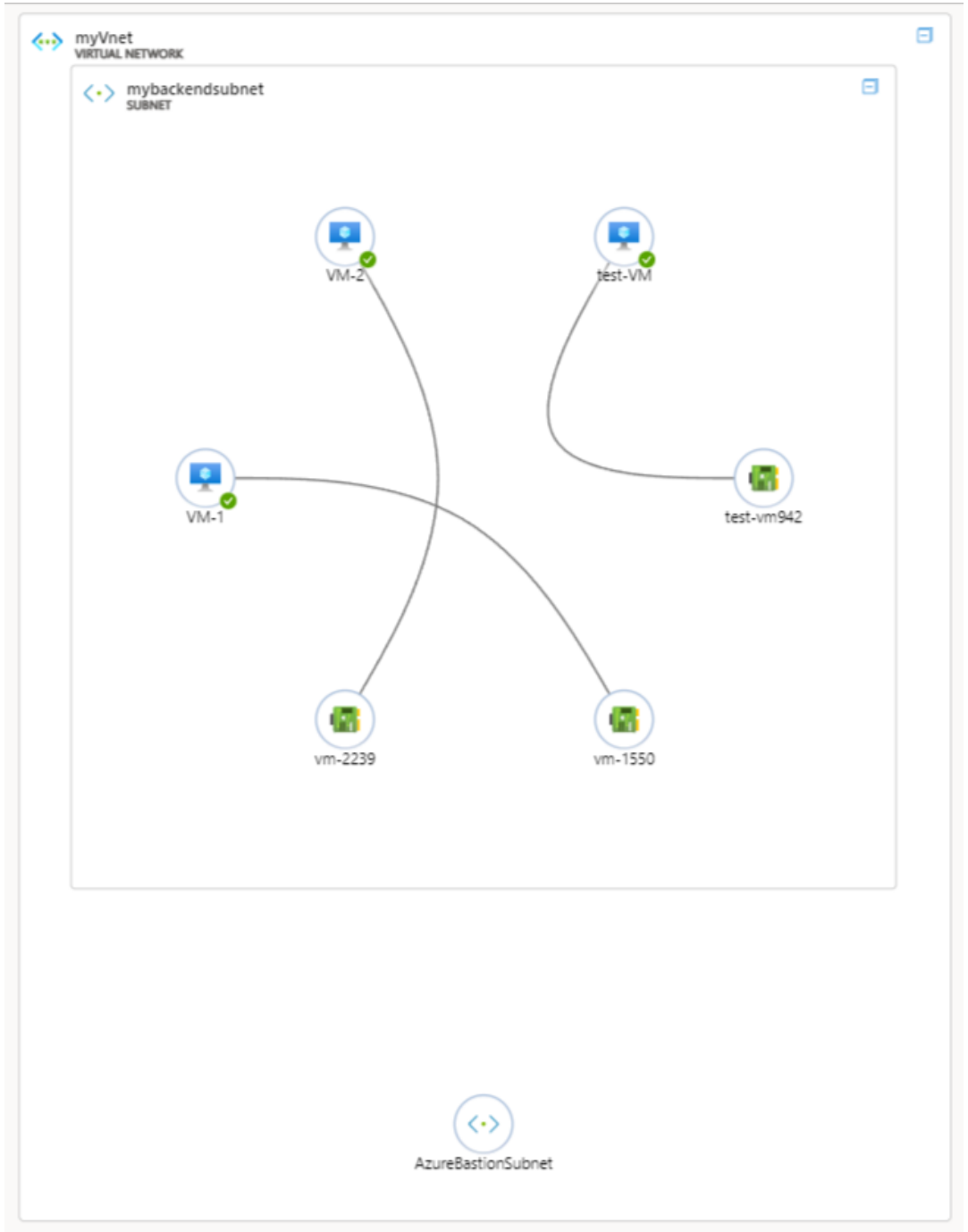
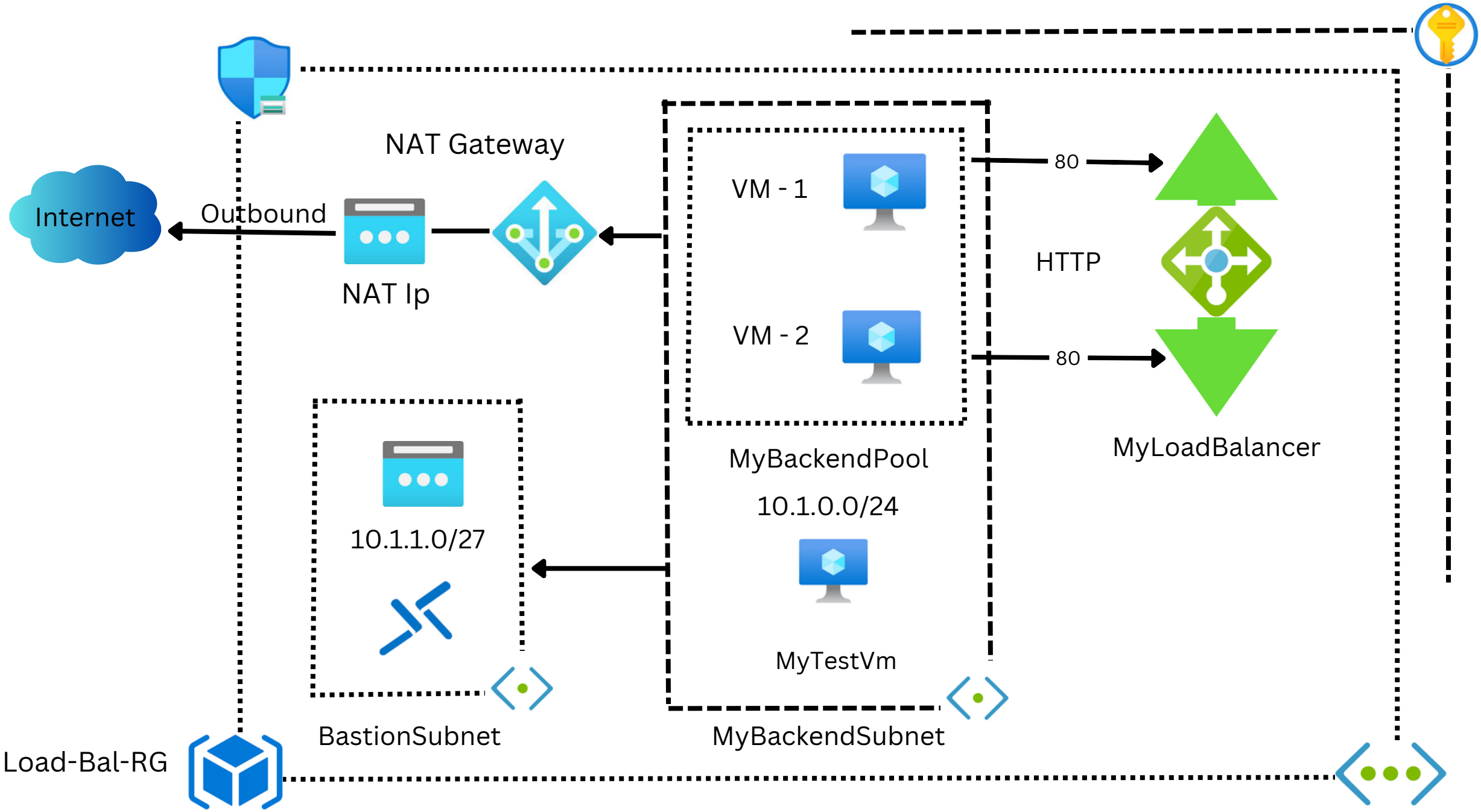


SIMPLE INTERNAL LOAD BALANCE NETWORK WITH AZURE BASTION


NAT Gateway
Internet
Outbound
NAT Ip
VM - 1
VM - 2
80
HTTP
80
MyLoadBalancer
MyBackendPool
10.1.0.0/24
MyTestVm
10.1.1.0/27
BastionSubnet
MyBackendSubnet
Load-Bal-RG

Instead of using remote desktop protocol in this project i am using bastion to connect to a private network. Both VM-1 and VM-2 are in a load balanced configuration .
all the machines in the backend pool can only be accessed by MyTestVm in the same subnet

whenever the servers are hit with a process the request is distributed among the pool using an internal load balancer using 5-tuple Hash algorithm .The servers dosen't have any public IP configured .hence, a NAT gateway is used to translate all the traffic from the private IP to a single outbound public IP

NOTE :

In Azure the VM will be able to connect to internet even without a public IP

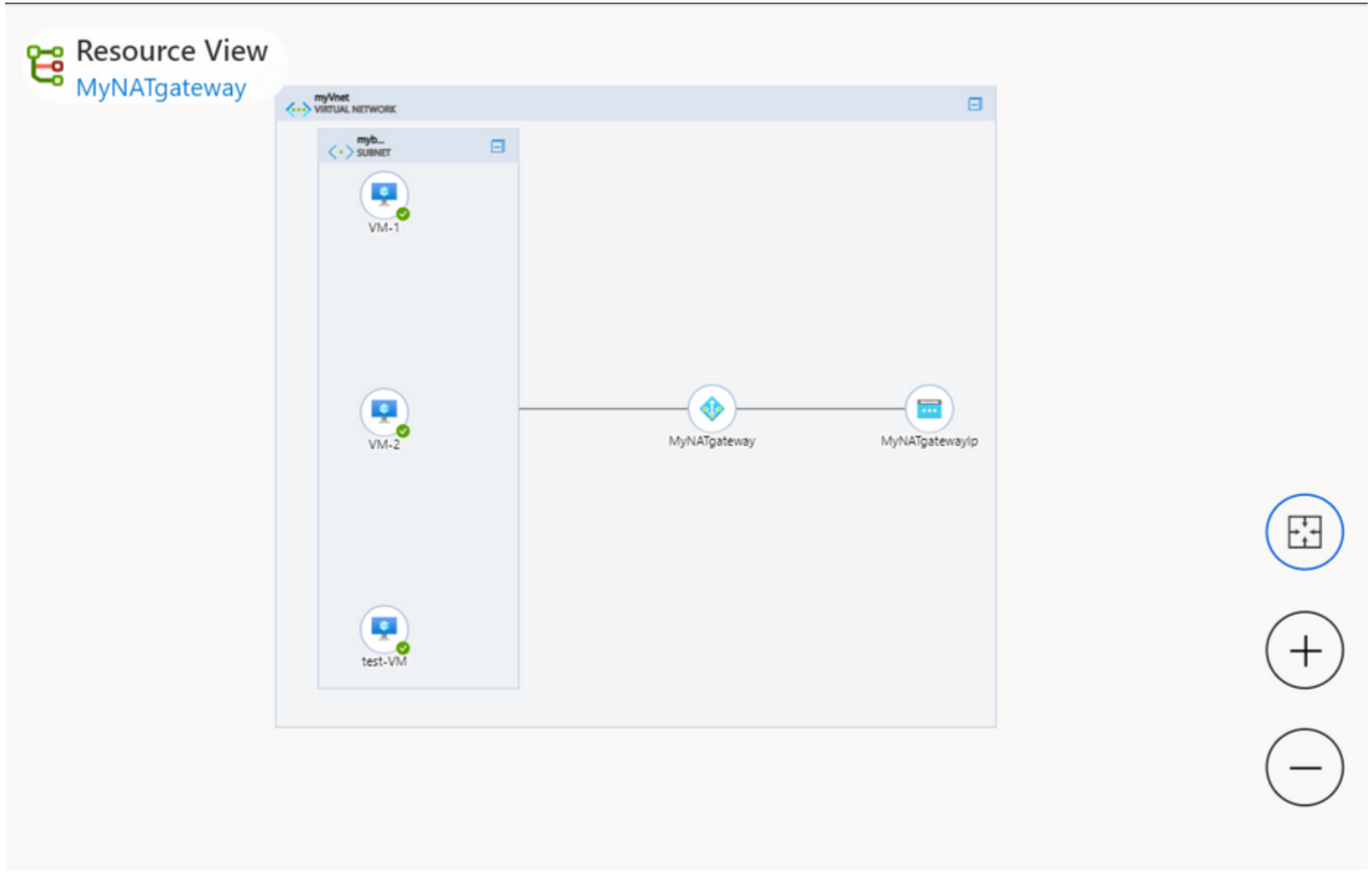
Internal load balancer :

an internal Application Load Balancer consists of: An internal IP address to which clients send traffic. Only clients that are located in the same region as the load balancer can access this IP address. Internal client requests stay internal to your network and region.

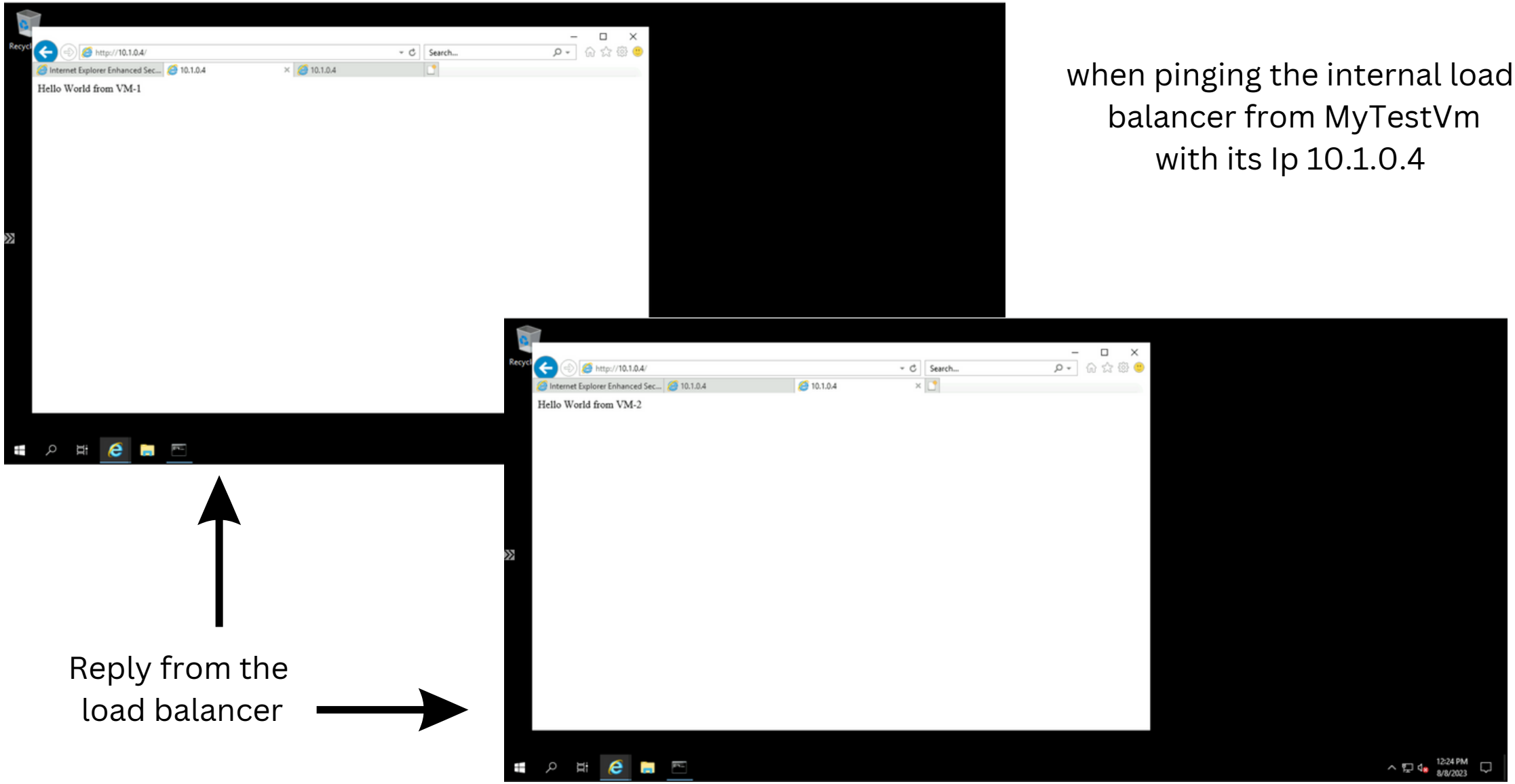
5 Tuple-Hash-ALgorithm :

Azure Load balancer is a layer 4 load balancer that distributes incoming traffic among healthy virtual machine instances . by default it uses 5-tuple hash (source Ip, destination Ip, source port, destination port, protocol type) to map traffic to available servers

we can also route traffic between private and public networks using NAT



NAT configuration



when pinging the internal load balancer from MyTestVm with its Ip 10.1.0.4

Reply from the load balancer