

# Design and Implement an Azure Load Balancer

---



**Tim Warner**

Principal Author Evangelist, Pluralsight

@TechTrainerTim TechTrainerTim.com



# Overview



## **Planning for Azure Load Balancer**

- Feature selection
- Deployment

## **Configuring Azure Load Balancer**

- Implement inbound and outbound traffic rules



# Planning for Azure Load Balancer

---



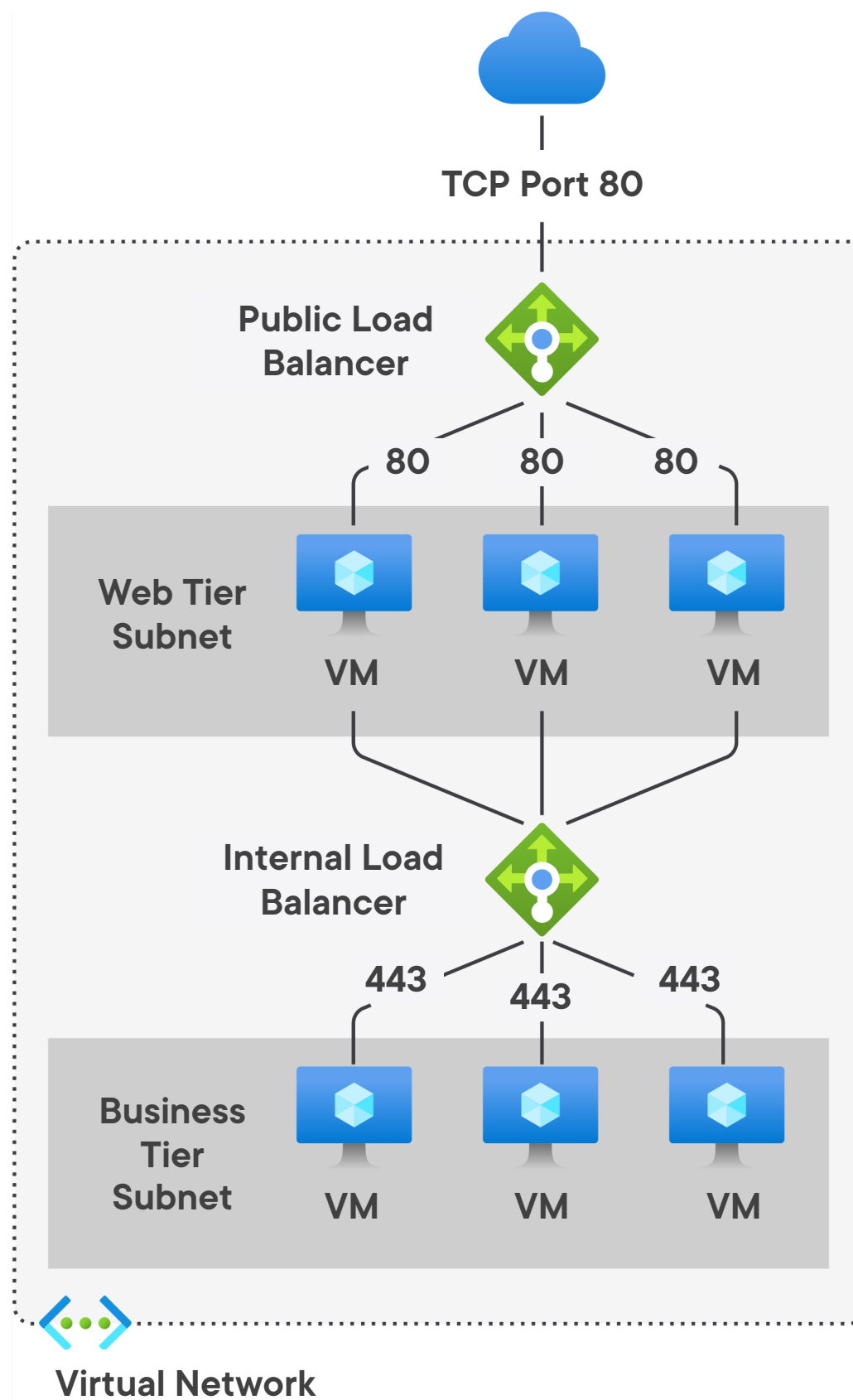
# Azure Load Balancer Basics

**Distributing incoming network traffic across a group of identically configured resources or servers**

**OSI Layer 4 general-purpose load balancer**

**LB decisions are made per flow:**

1. Source IP address
2. Source port number
3. Destination IP address
4. Destination port number
5. Protocol



# Azure Load Balancer SKUs

## Basic

Up to 300 instances in a single availability set or scale set

No availability zones

No diagnostics

Open by default

## Standard

Up to 1000 instances (any VM or scale set in a VNet)

Availability zones

Azure Monitor integration

Closed to inbound flows by default



# Azure Load Balancer Tiers



## Regional

Load balances between containers, VMs, or clusters within a region/VNet

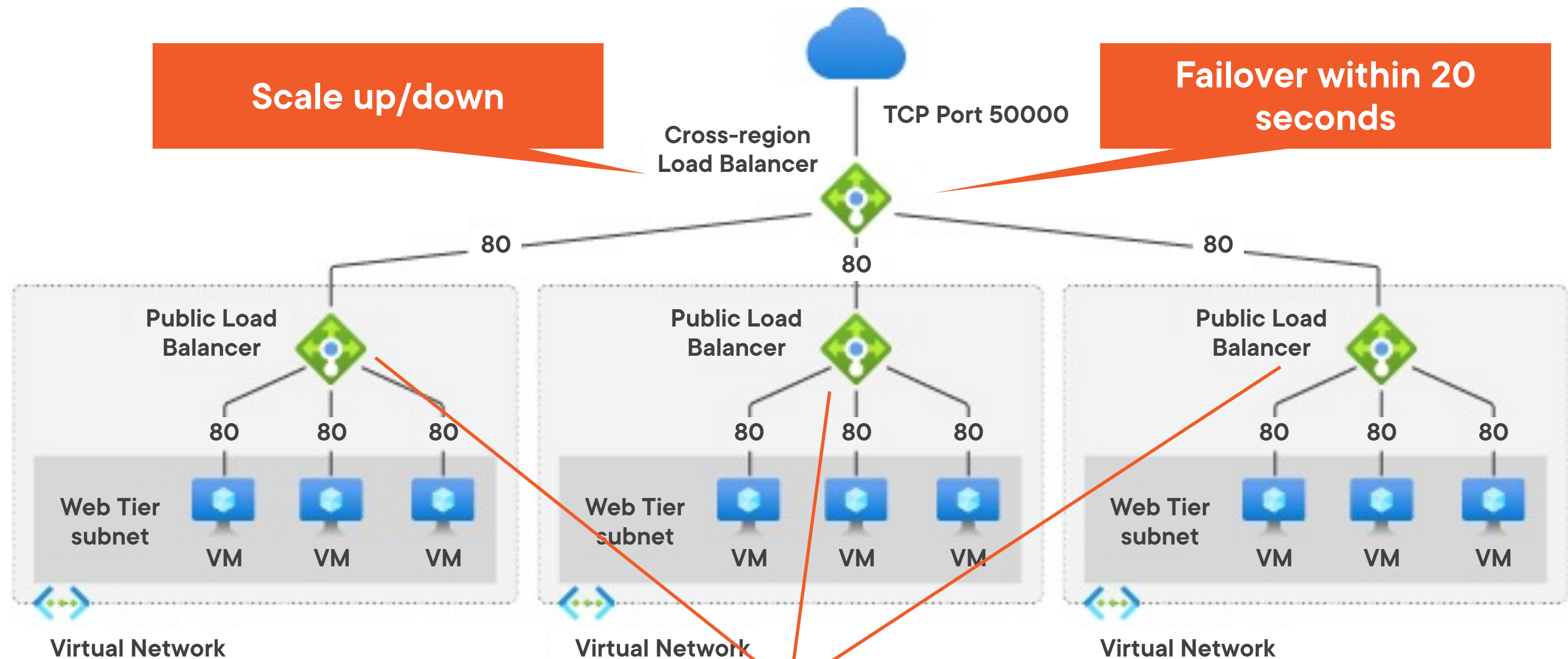


## Global

Load balances load balancers between regions

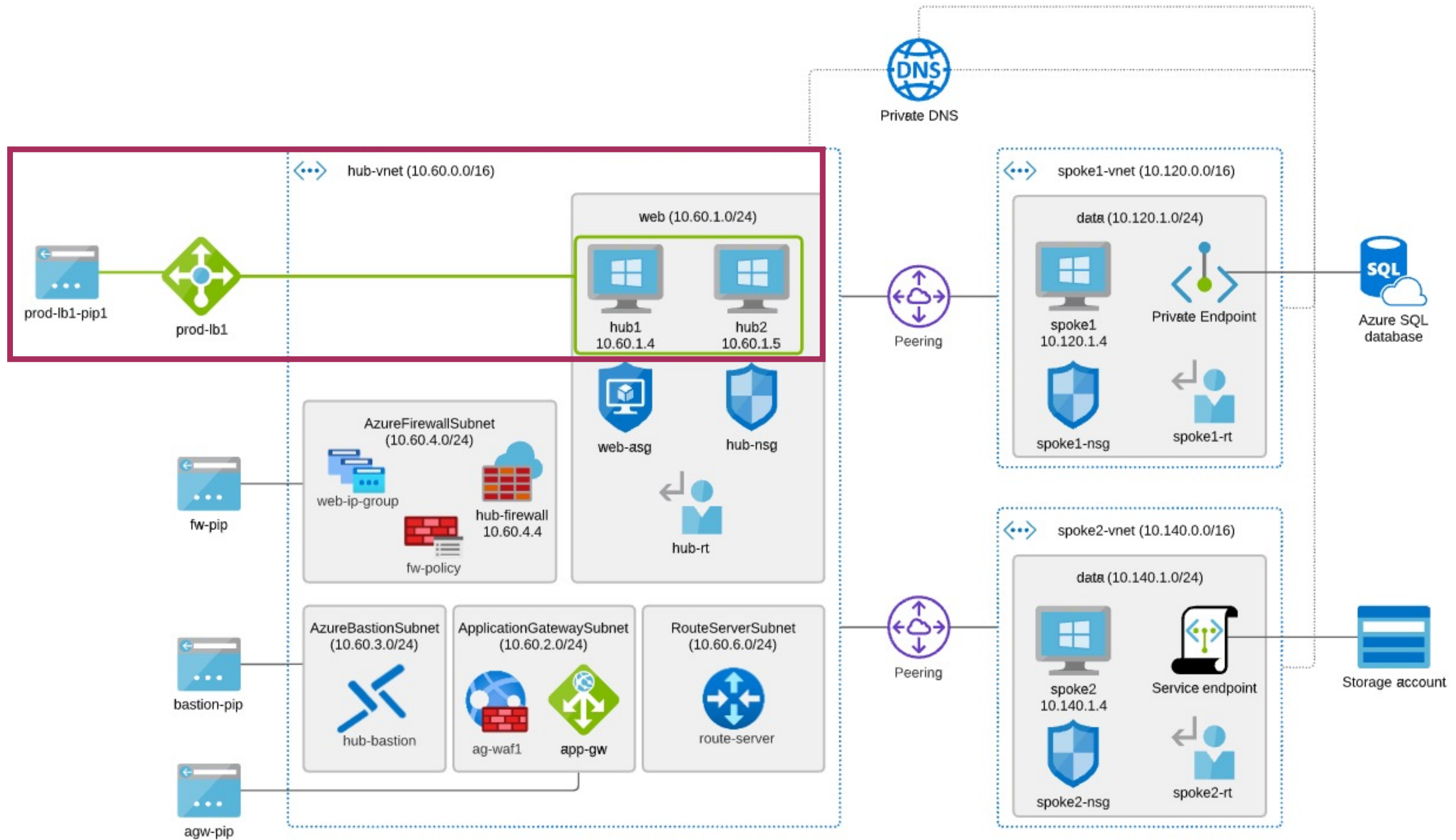


# Azure Global (Cross-Region) Load Balancer





# Our Lab Topology





# Configuring Azure Load Balancer

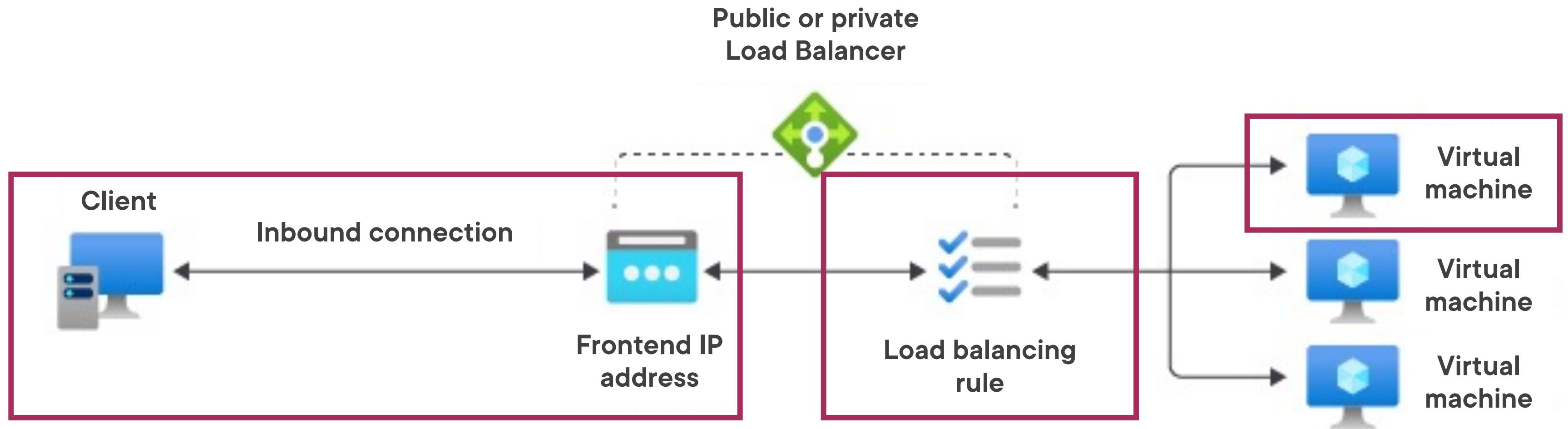
---



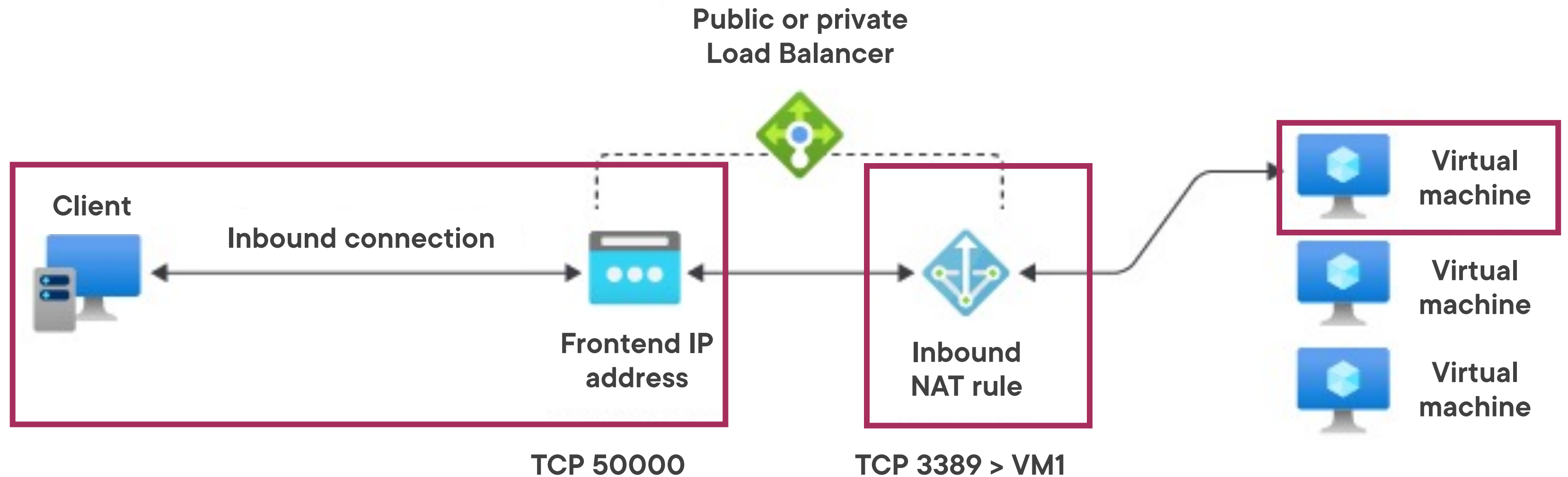
# Azure Load Balancer Configuration Process



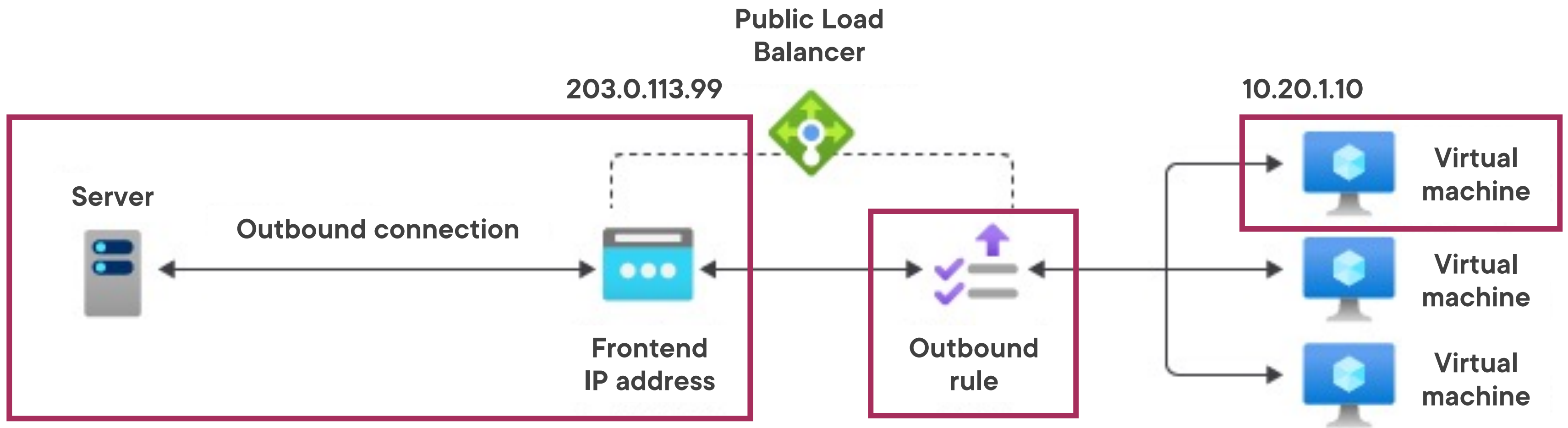
# Azure Load Balancer Load Balancing Rules



# Azure Load Balancer Inbound NAT Rules

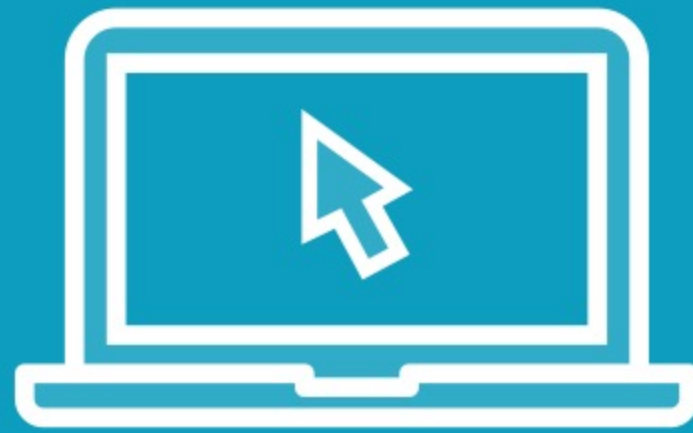


# Azure Load Balancer Outbound Rules



**Consider Azure NAT Gateway**

# Demo



# 1

## Deploy public load balancer

- Portal
- ARM template
- Bicep template

## Test:

- Connectivity
- Verify IP address
  - [ipaddress.com](https://www.ipaddress.com) test





## Summary



**Azure Load Balancer is flexible and cost-effective general purpose load balancing solution**

**What if you're load balancing HTTP(S) workloads? Do you need a third-party NVA?**



Up Next:  
Design and Implement Azure  
Application Gateway

---

