HORIZONTAL COMPARISON OF LOAD BALANCING, AUTO-SCALING & SERVERLESS COMPUTING

AWS VS MICROSOFT AZURE VS GOOGLE CLOUD PLATFORM

amazon
web

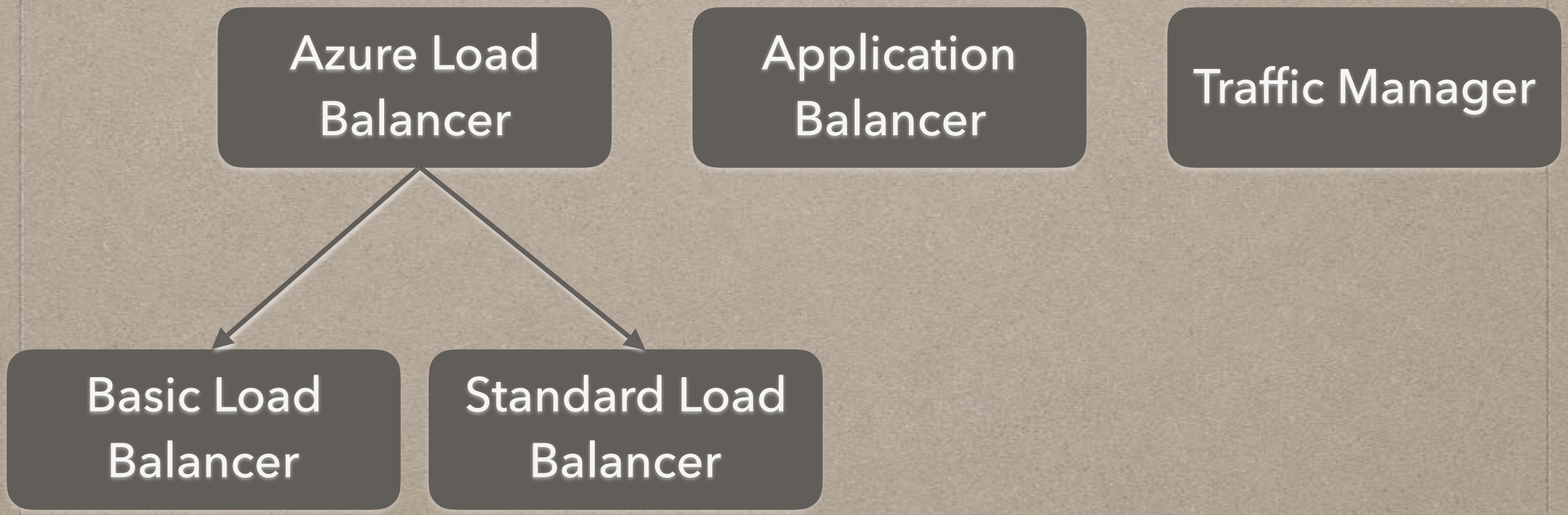
Microsoft Azure

LOAD BALANCER TYPES

- Azure Load Balancer
  - Works at the transport layer (Layer 4 in OSI), providing network-level distribution of traffic across instances of an application running in the same Azure data center (using TCP & UDP)
- Application Gateway
  - Works at the application layer (Layer 7 in OSI), acting as a reverse-proxy service, terminating the client connection and forwarding requests to back-end endpoints.
- Traffic Manager
  - Works at the DNS lever, using DNS responses to direct end-user traffic to globally distributed endpoints, clients then connect to those endpoints directly.

Microsoft Azure

LOAD BALANCERS



Microsoft Azure

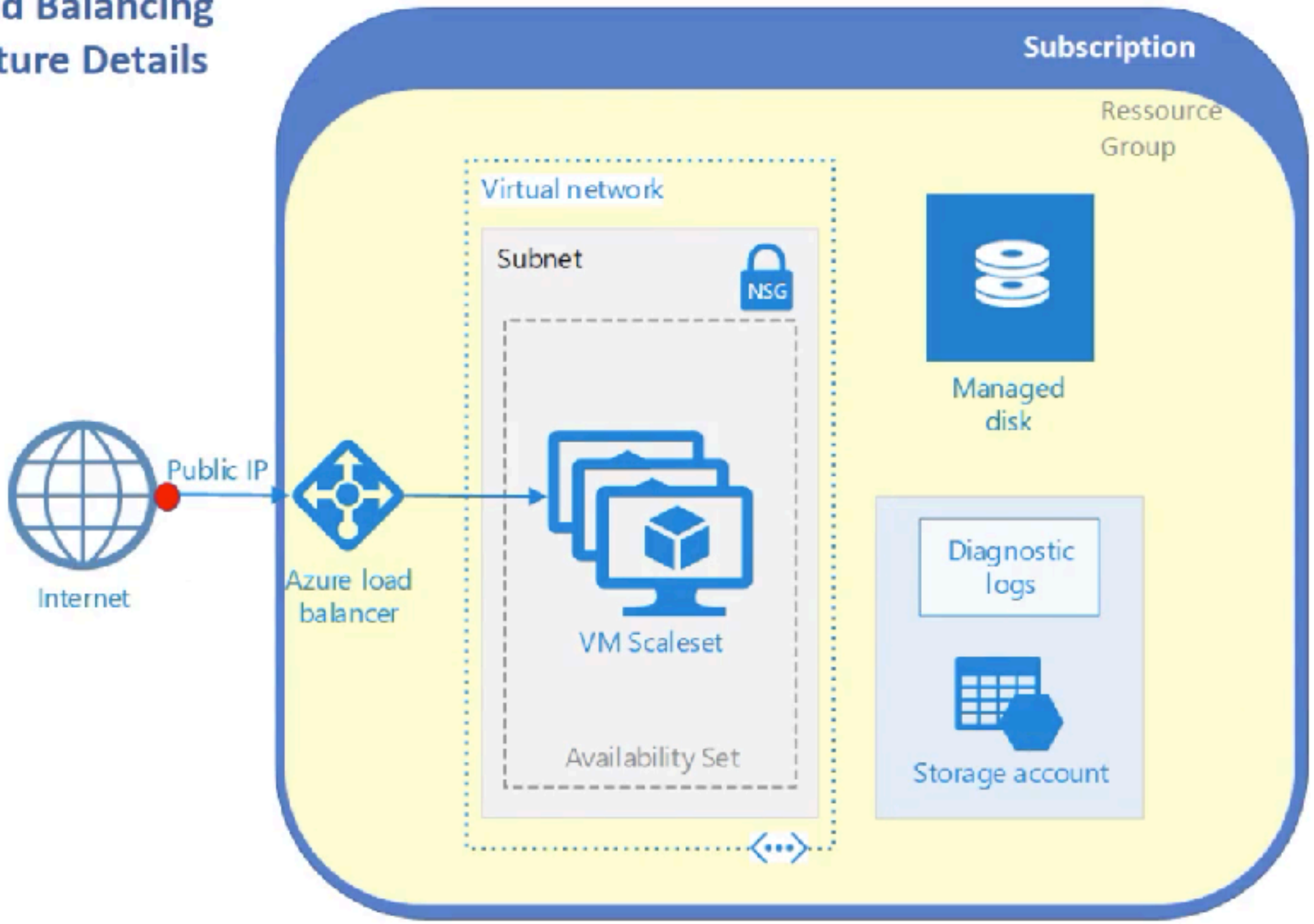
LOAD BALANCERS

Features	Basic Load Balancer	Standard Load Balancer
Internet-facing load balancing	✓	✓ + backend pool size 1000 instances + standalone VM without availability set + new diagnostic insights
Service monitoring (probes)	• Guest Agent Probe • HTTP custom Probe • TCP custom Probe	• Guest Agent Probe • HTTP custom Probe • TCP custom Probe
Distribution mode	• Hash-based distribution • Source IP affinity mode	✓ • Hash-based distribution • Source IP affinity mode
Internal load balancing	✓	✓ + HA high availability ports, reliability
Forward external traffic to VM	✓	✓ + new diagnostic insights
Zone redundancy (availability)	✗	✓ + cross-zone load balancing
NSG required for all VMs	✗	✓ + load balancer standard SKUs or Public IP Standard SKUs.
Outband traffic NAT	✓	+ new SNAT model for greater resiliency
Automatic reconfiguration	✓	✓

Microsoft Azure

LOAD BALANCERS

Internet-Facing Load Balancing Reference Architecture Details



Google Cloud Platform