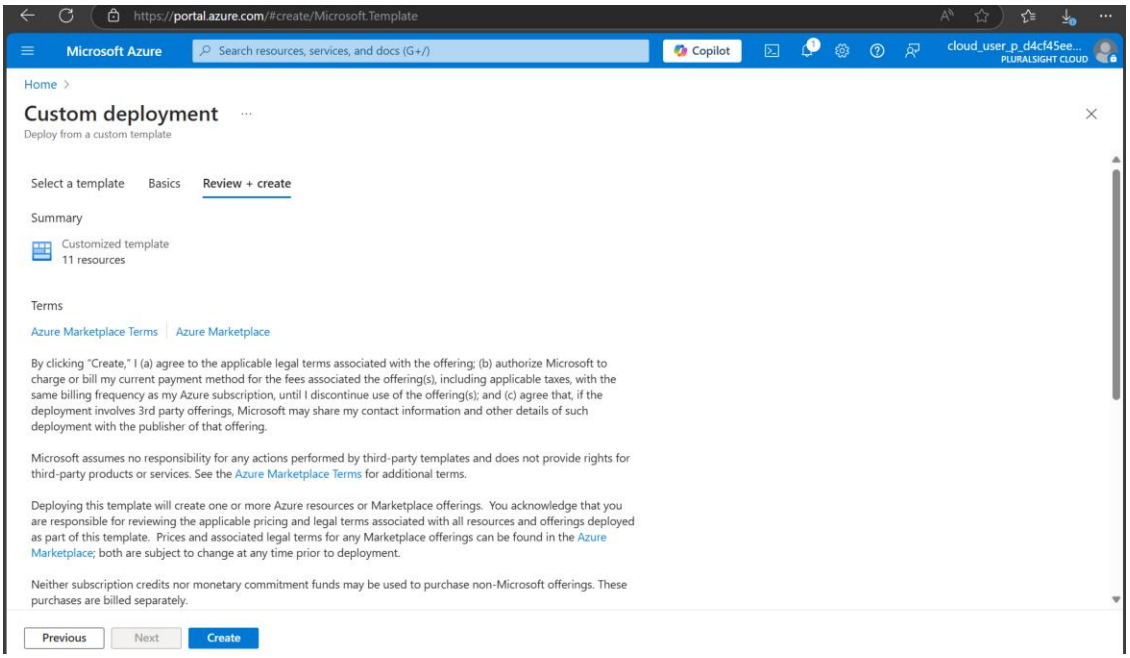
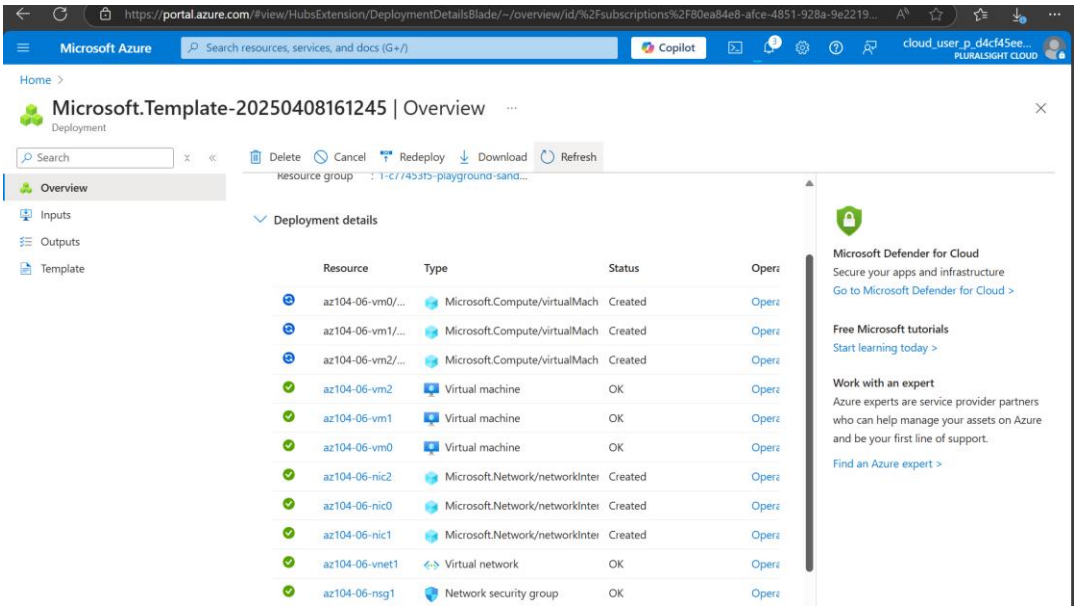
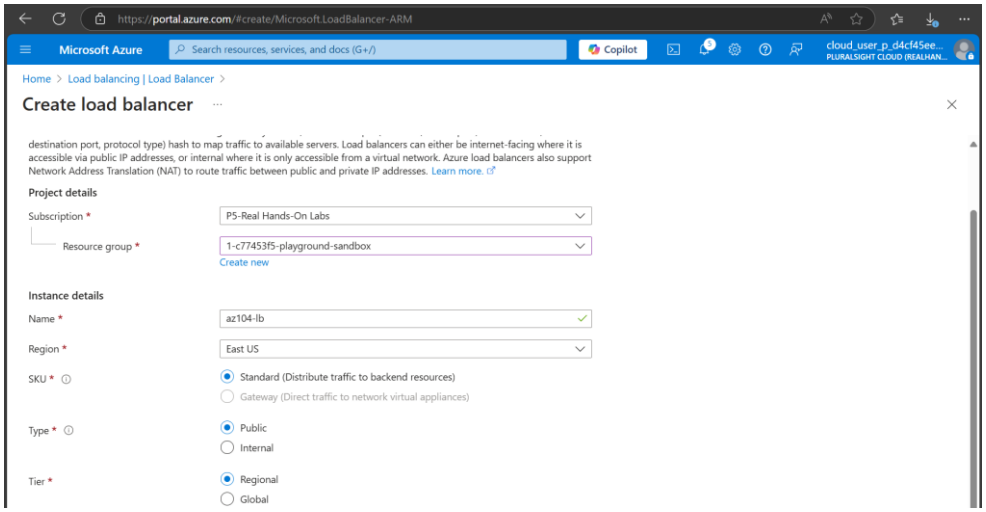
Lab 06 - Implement Network Traffic Management

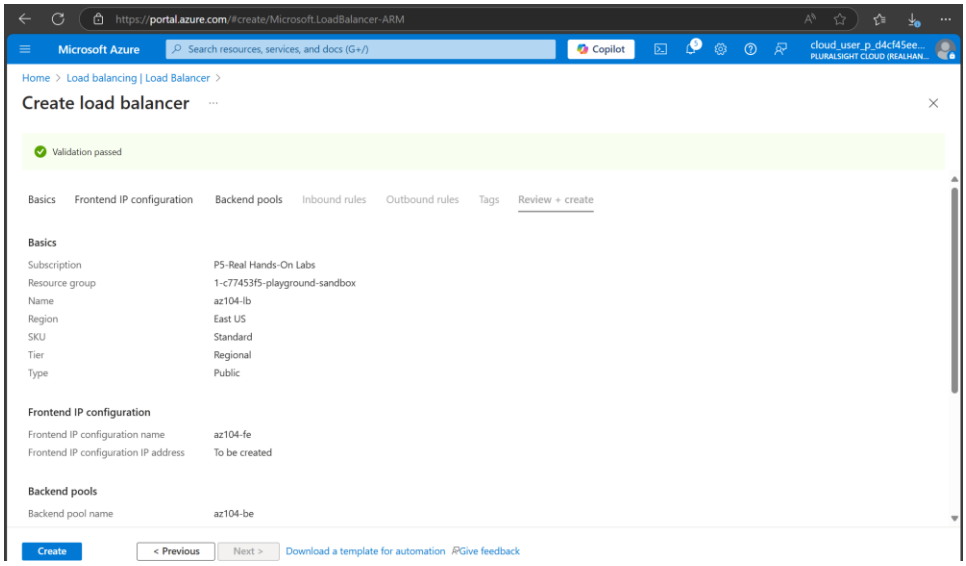
Task 1: Use a template to provision an infrastructure.

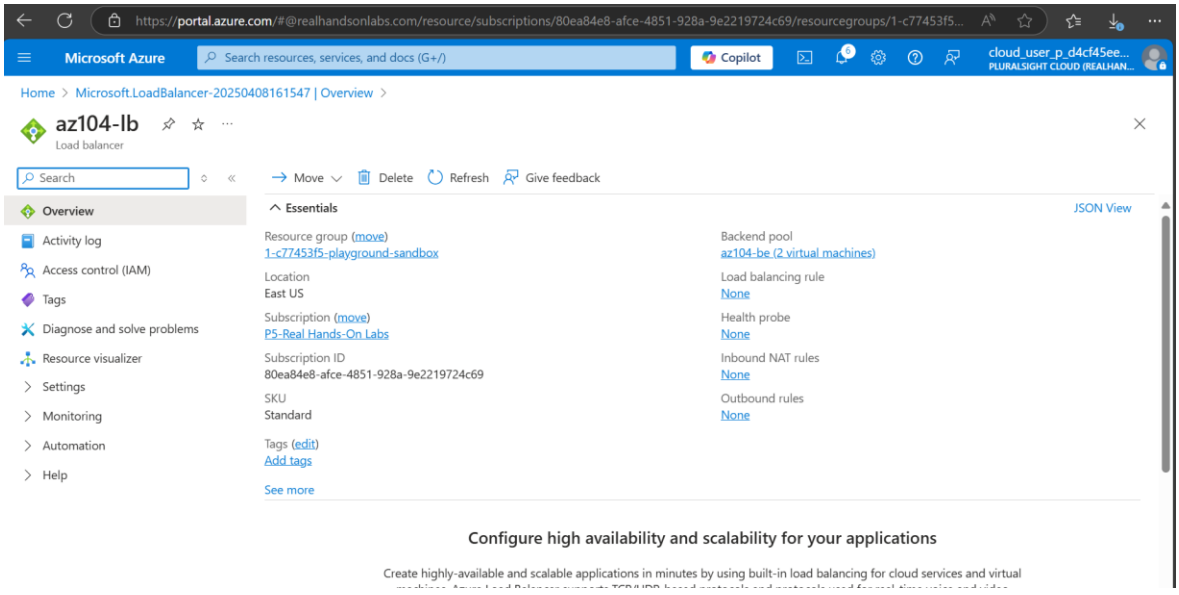


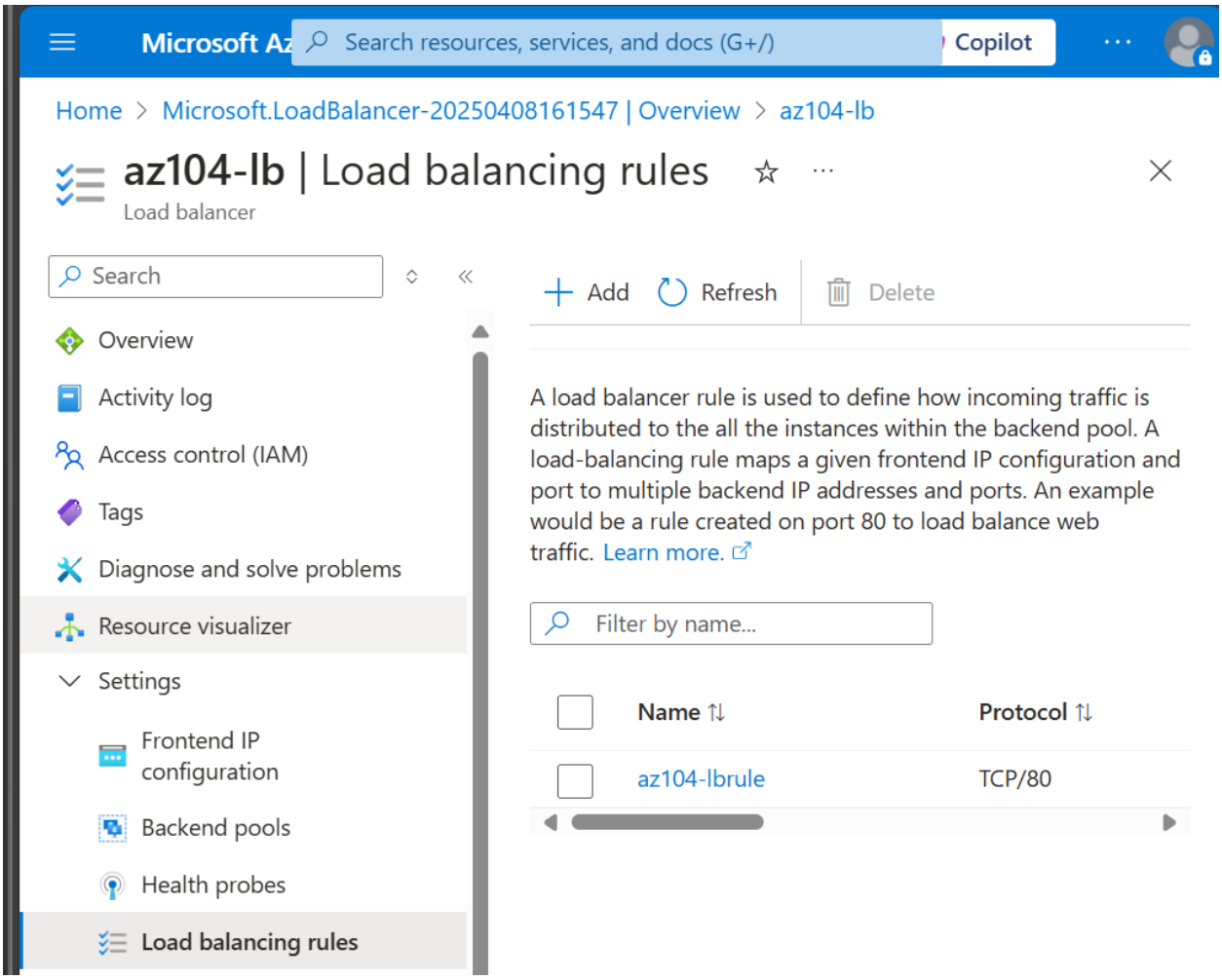


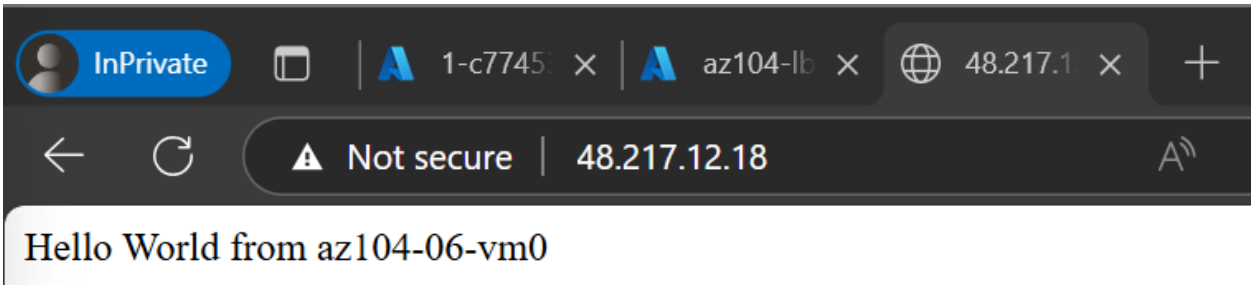
Task 2: Configure an Azure Load Balancer.


https://portal.azure.com/#create/Microsoft.LoadBalancer-ARM
Microsoft Azure
Search resources, services, and docs (G+/)
Copilot
cloud_user_p_d4cf45ee...
PLURALSIGHT CLOUD (REALHAN...
Home > Load balancing | Load Balancer >
Create load balancer
destination port, protocol type) hash to map traffic to available servers. Load balancers can either be internet-facing where it is accessible via public IP addresses, or internal where it is only accessible from a virtual network. Azure load balancers also support Network Address Translation (NAT) to route traffic between public and private IP addresses. Learn more.
Project details
Subscription *
P5-Real Hands-On Labs
Resource group *
1-c77453f5-playground-sandbox
Create new
Instance details
Name *
az104-lb
Region *
East US
SKU *
Standard (Distribute traffic to backend resources)
Gateway (Direct traffic to network virtual appliances)
Type *
Public
Internal
Tier *
Regional
Global

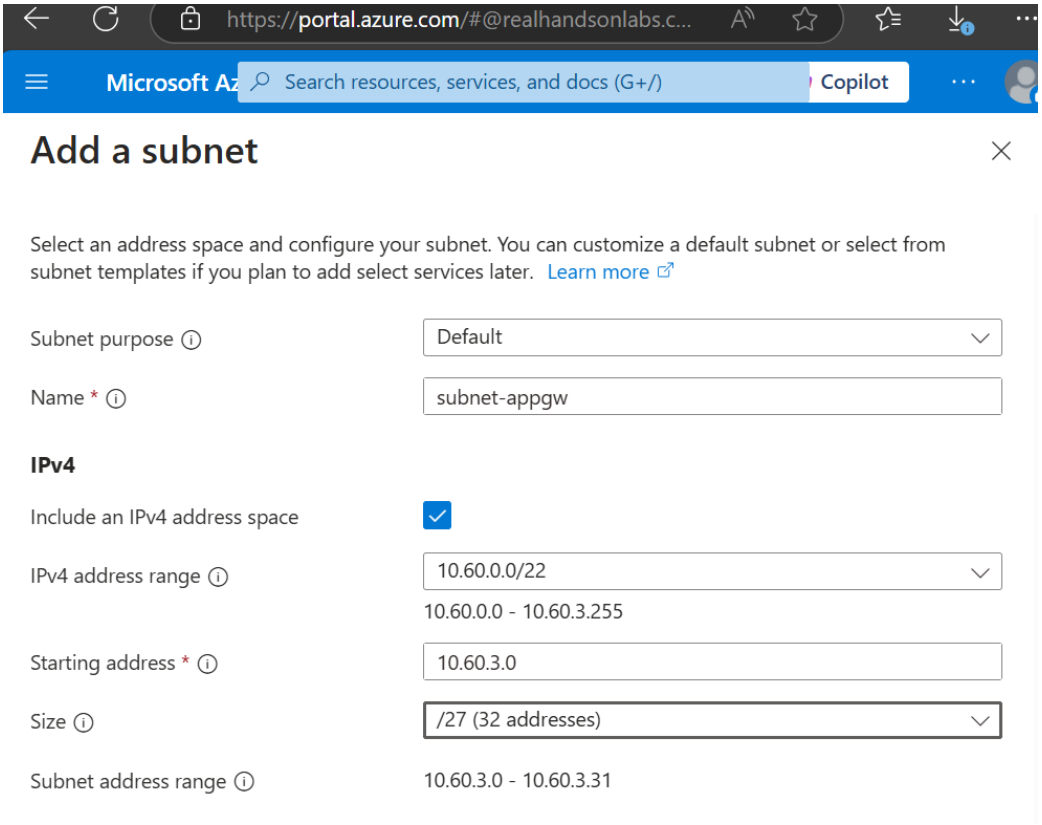

https://portal.azure.com/#create/Microsoft.LoadBalancer-ARM
Microsoft Azure
Search resources, services, and docs (G+/)
Copilot
cloud_user_p_d4cf45ee...
PLURALSIGHT CLOUD (REALHAN...
Home > Load balancing | Load Balancer >
Create load balancer
Validation passed
Basics
Frontend IP configuration
Backend pools
Inbound rules
Outbound rules
Tags
Review + create
Basics
Subscription P5-Real Hands-On Labs
Resource group 1-c77453f5-playground-sandbox
Name az104-lb
Region East US
SKU Standard
Tier Regional
Type Public
Frontend IP configuration
Frontend IP configuration name az104-fe
Frontend IP configuration IP address To be created
Backend pools
Backend pool name az104-be
Create
< Previous
Next >
Download a template for automation
Give feedback

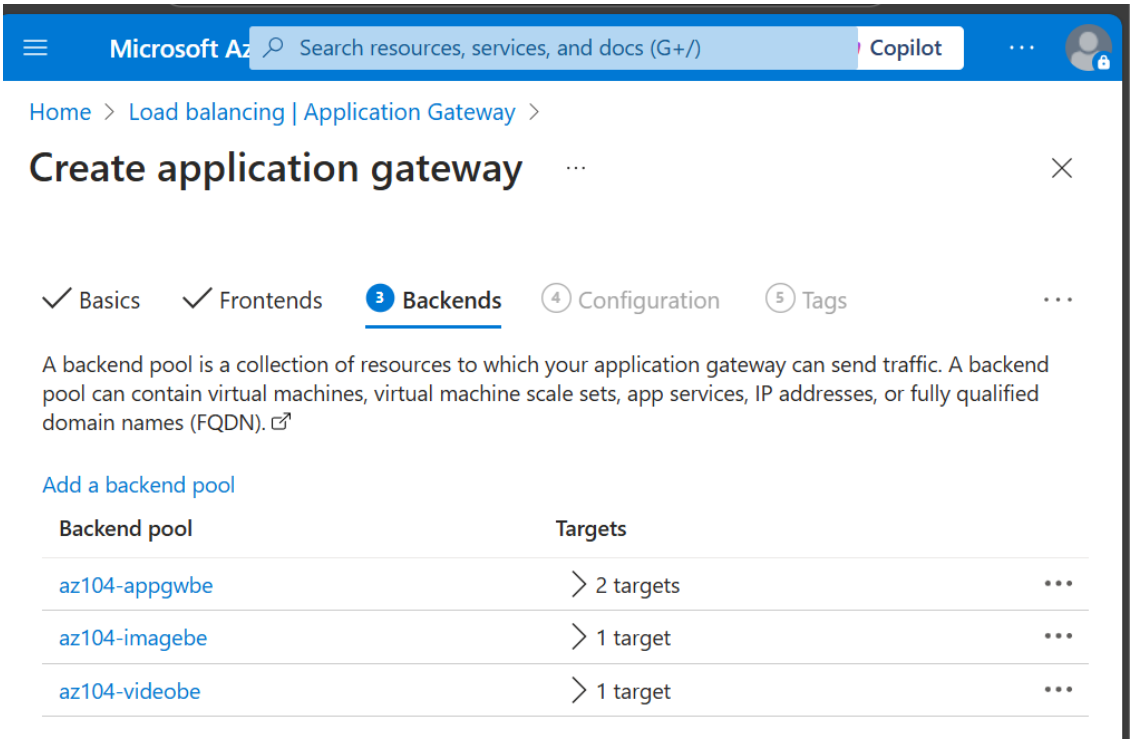

https://portal.azure.com/#@realhandsonlabs.com/resource/subscriptions/80ea84e8-afce-4851-928a-9e2219724c69/resourcegroups/1-c77453f5...
Microsoft Azure
Search resources, services, and docs (G+/)
Copilot
cloud_user_p_d4cf45ee...
PLURALSIGHT CLOUD (REALHAN...
Home > Microsoft.LoadBalancer-20250408161547 | Overview >
az104-lb
Load balancer
Search
Move
Delete
Refresh
Give feedback
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Resource visualizer
Settings
Monitoring
Automation
Help
Essentials
JSON View
Resource group (move)
1-c77453f5-playground-sandbox
Location
East US
Subscription (move)
P5-Real Hands-On Labs
Subscription ID
80ea84e8-afce-4851-928a-9e2219724c69
SKU
Standard
Tags (edit)
Add tags
See more
Backend pool
az104-be (2 virtual machines)
Load balancing rule
None
Health probe
None
Inbound NAT rules
None
Outbound rules
None
Configure high availability and scalability for your applications
Create highly-available and scalable applications in minutes by using built-in load balancing for cloud services and virtual

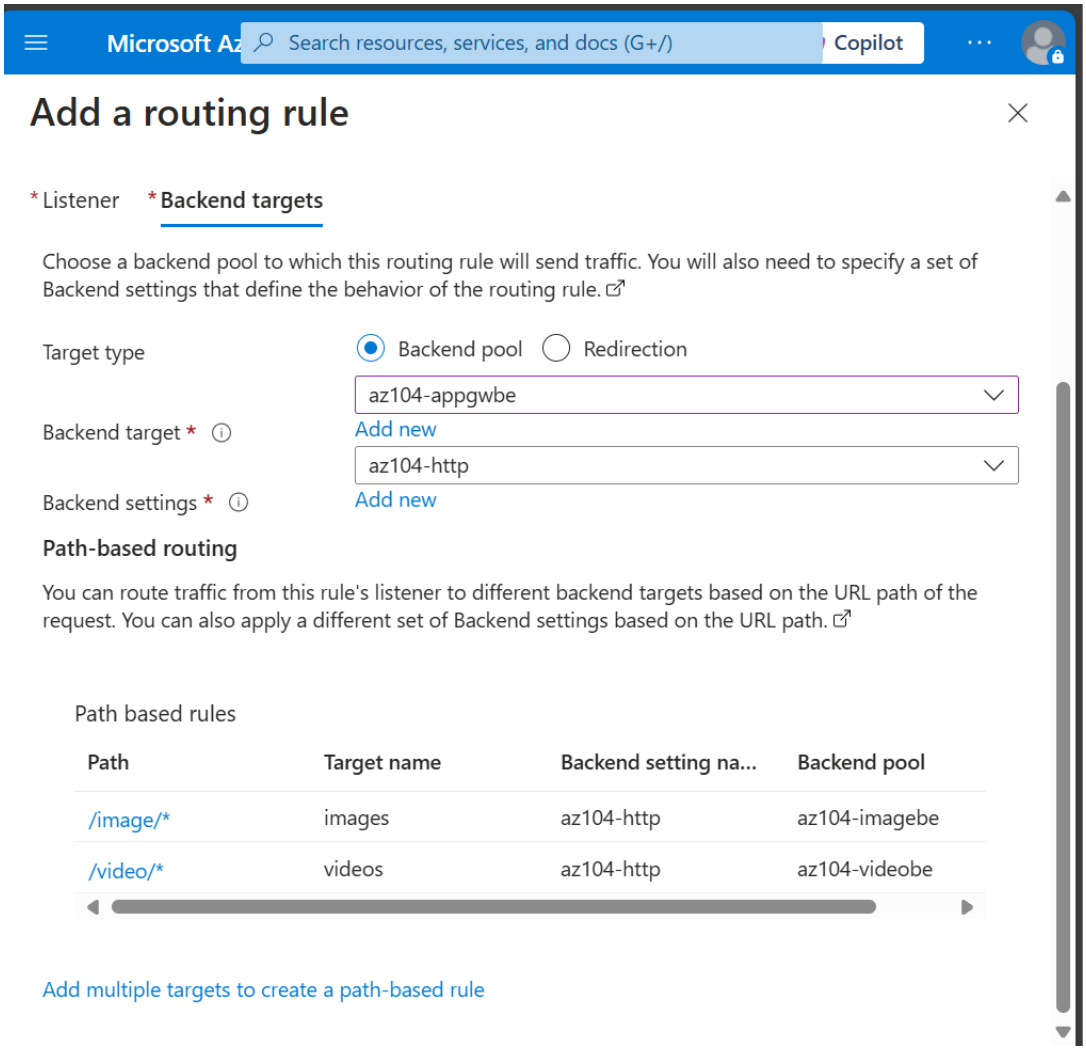


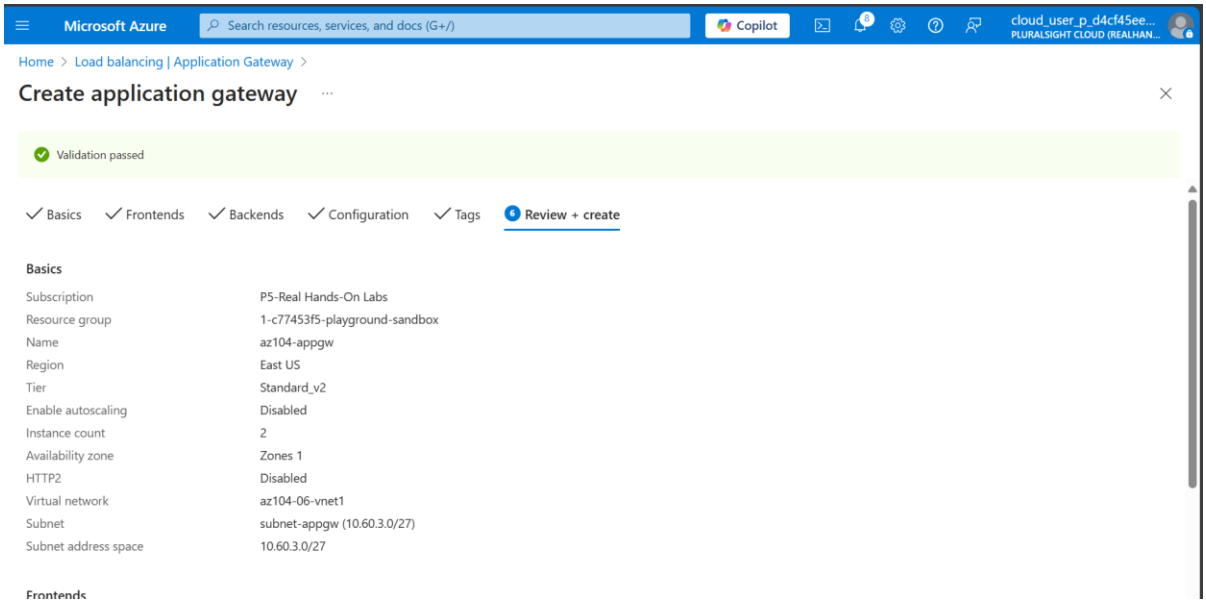


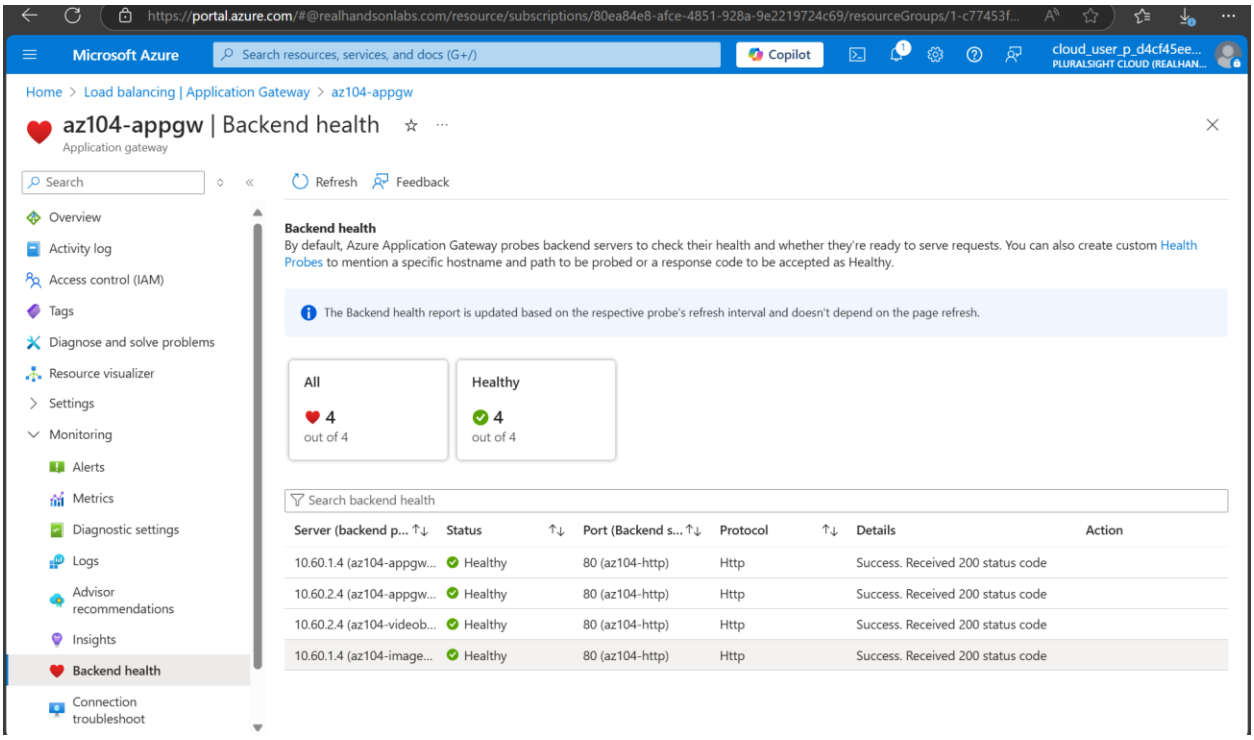
Task 3: Configure an Azure Application Gateway.

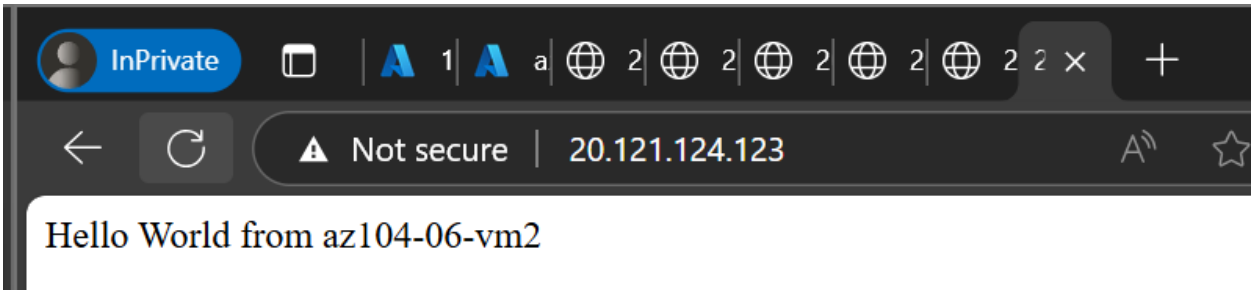

https://portal.azure.com/#@realhandsonlabs.c...
Microsoft Az
Search resources, services, and docs (G+/)
Copilot
Add a subnet
Select an address space and configure your subnet. You can customize a default subnet or select from subnet templates if you plan to add select services later. Learn more
Subnet purpose
Default
Name *
subnet-appgw
IPv4
Include an IPv4 address space
IPv4 address range
10.60.0.0/22
10.60.0.0 - 10.60.3.255
Starting address *
10.60.3.0
Size
/27 (32 addresses)
Subnet address range
10.60.3.0 - 10.60.3.31


Microsoft Az
Search resources, services, and docs (G+/)
Copilot
Home > Load balancing | Application Gateway >
Create application gateway
Basics
Frontends
3 Backends
4 Configuration
5 Tags
A backend pool is a collection of resources to which your application gateway can send traffic. A backend pool can contain virtual machines, virtual machine scale sets, app services, IP addresses, or fully qualified domain names (FQDN).
Add a backend pool
Backend pool
Targets
az104-appgwbe
2 targets
az104-imagebe
1 target
az104-videobe
1 target


Microsoft Az
Search resources, services, and docs (G+/)
Copilot
Add a routing rule
* Listener
* Backend targets
Choose a backend pool to which this routing rule will send traffic. You will also need to specify a set of Backend settings that define the behavior of the routing rule.
Target type
Backend pool
Redirection
az104-appgwbe
Backend target *
Add new
az104-http
Backend settings *
Add new
Path-based routing
You can route traffic from this rule's listener to different backend targets based on the URL path of the request. You can also apply a different set of Backend settings based on the URL path.
Path based rules
Path
Target name
Backend setting na...
Backend pool
/image/*
images
az104-http
az104-imagebe
/video/*
videos
az104-http
az104-videobe
Add multiple targets to create a path-based rule


Microsoft Azure
Search resources, services, and docs (G+/)
Copilot
cloud_user_p_d4cf45ee...
PLURALSIGHT CLOUD (REALHAN...
Home > Load balancing | Application Gateway >
Create application gateway
Validation passed
Basics
Frontends
Backends
Configuration
Tags
Review + create
Basics
Subscription P5-Real Hands-On Labs
Resource group 1-c77453f5-playground-sandbox
Name az104-appgw
Region East US
Tier Standard_v2
Enable autoscaling Disabled
Instance count 2
Availability zone Zones 1
HTTP2 Disabled
Virtual network az104-06-vnet1
Subnet subnet-appgw (10.60.3.0/27)
Subnet address space 10.60.3.0/27
Frontends


https://portal.azure.com/#@realhandsonlabs.com/resource/subscriptions/80ea84e8-afce-4851-928a-9e2219724c69/resourceGroups/1-c77453f...
Microsoft Azure
Search resources, services, and docs (G+/)
Copilot
cloud_user_p_d4cf45ee...
PLURALSIGHT CLOUD (REALHAN...
Home > Load balancing | Application Gateway > az104-appgw
az104-appgw | Backend health
Application gateway
Search
Refresh
Feedback
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Resource visualizer
Settings
Monitoring
Alerts
Metrics
Diagnostic settings
Logs
Advisor recommendations
Insights
Backend health
Connection troubleshoot
Backend health
By default, Azure Application Gateway probes backend servers to check their health and whether they're ready to serve requests. You can also create custom Health Probes to mention a specific hostname and path to be probed or a response code to be accepted as Healthy.
The Backend health report is updated based on the respective probe's refresh interval and doesn't depend on the page refresh.
All
4
out of 4
Healthy
4
out of 4
Search backend health
Server (backend p...
Status
Port (Backend s...
Protocol
Details
Action
10.60.1.4 (az104-appgw... Healthy 80 (az104-http) Http Success. Received 200 status code
10.60.2.4 (az104-appgw... Healthy 80 (az104-http) Http Success. Received 200 status code
10.60.2.4 (az104-videob... Healthy 80 (az104-http) Http Success. Received 200 status code
10.60.1.4 (az104-image... Healthy 80 (az104-http) Http Success. Received 200 status code


InPrivate
Not secure
20.121.124.123
Hello World from az104-06-vm2