AWS Certified Cloud Practitioner Training Bootcamp

Application Load Balancer Basics 101

AWS Elastic Load Balancing Overview

- With AWS Elastic Load Balancing, you can achieve fault tolerance for any application by ensuring scalability, performance and security

- Elastic Load Balancing automatically distributes incoming application traffic across multiple targets (i.e. EC2)

- AWS ELB supports three types of load balancers:
  - Network Load Balancers
  - Classic Load Balancers
  - Application Load Balancers

AWS ELBs Product Comparison

- AWS ELBs comparison: https://aws.amazon.com/elasticloadbalancing/features/

Feature	Application Load Balancer	Network Load Balancer	Classic Load Balancer
Protocols	HTTP, HTTPS	TCP, TLS	TCP, SSL/TLS, HTTP, HTTPS
Platforms	VPC	VPC	EC2-Classic, VPC
Health checks	✔	✔	✔
CloudWatch metrics	✔	✔	✔

AWS ALB Architecture Components

- The *Load Balancer* is the single point of contact for clients

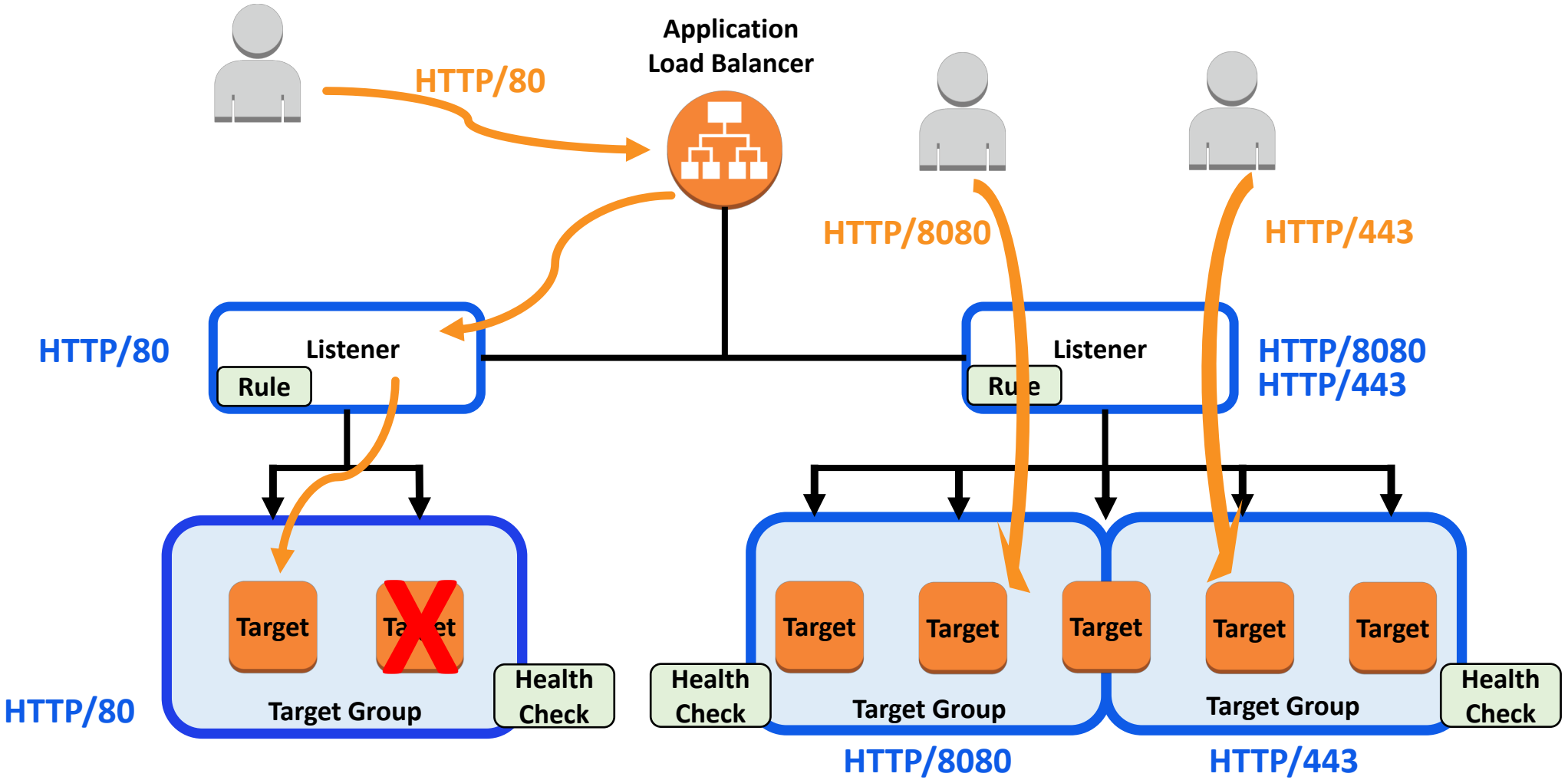
- The load balancer distributes incoming application traffic across multiple targets, such as EC2 instances, in multiple Availability Zones, which results in increased availability of your application

- The *Listener* checks for connection requests from clients, using the protocol/port configured and forwards requests to one or more target groups

AWS ALB Architecture Components

- You will define *Rules* for traffic forwarding, including *Target Groups*, condition and priority
- The *Target Group (TG)* routes requests to one or more registered targets, such as EC2 instances, using protocol/port number that you configured
- A *Target* can be registered with multiple target groups
- *Health checks* are run on all targets registered to a TG

AWS ALB Architecture Components



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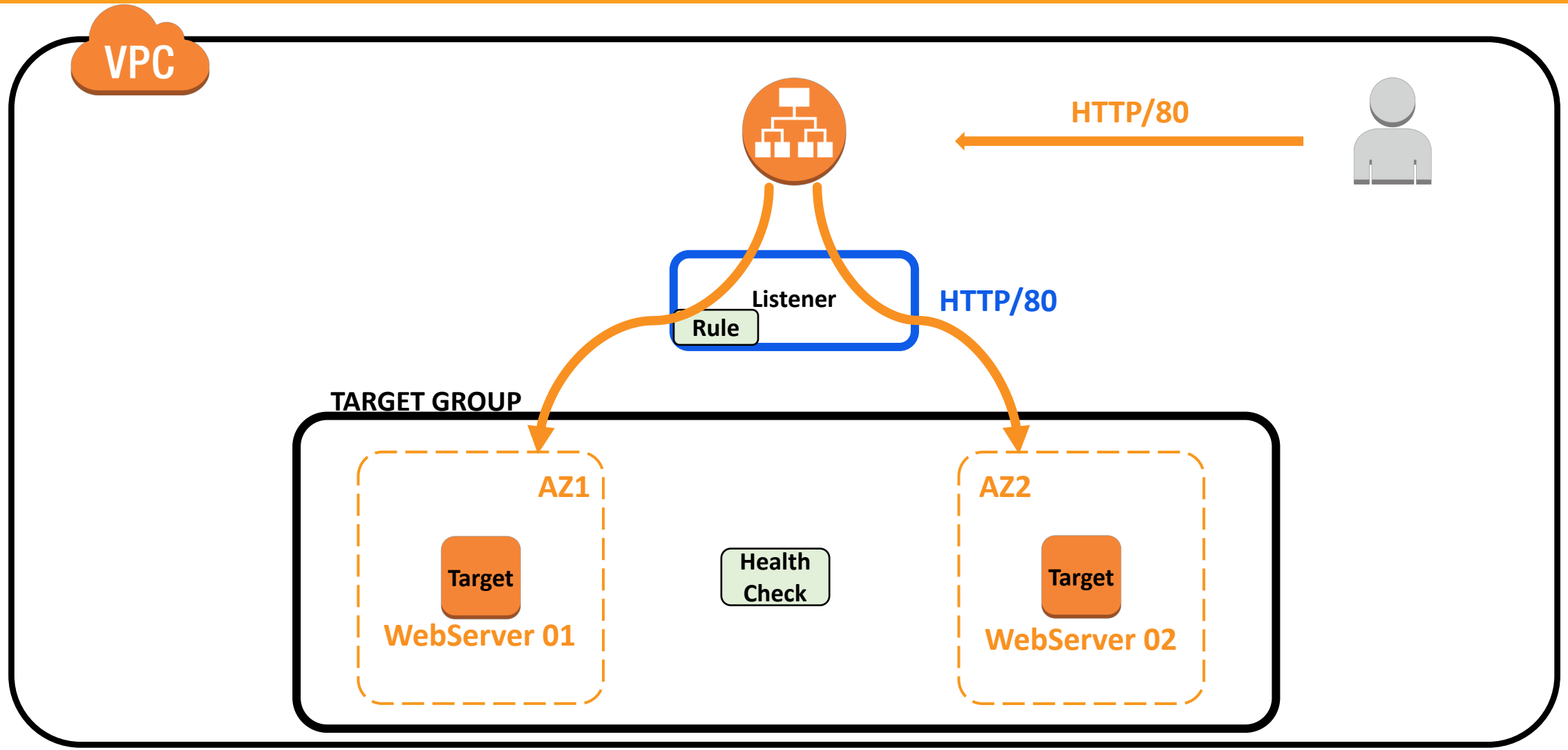

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Thank you