

# 1 Solution analysis and fixes

## 1.1 The site cannot be accessed from external addresses

**Resolution:** Add everywhere access to load balancer ingress

**Detail:** Allow all addresses to access the load balancer on port 80 Allow all addresses to access the load balancer on port 80

## 1.2 Load balancer cannot route to subnet

**Resolution:** Add PublicSubnetA to load balancer

**Detail:** The ELB can only route to instances in PublicSubnetB. This change allows it to route to PublicSubnetA also, where the current instance is located. The ELB can only route to instances in PublicSubnetB. This change allows it to route to PublicSubnetA also, where the current instance is located.

## 1.3 Instances cannot be accessed from the load balancer

**Resolution:** Allow access to the instance from the ELB only

**Detail:** This change allows traffic from the ELB to the instances This change allows traffic from the ELB to the instances

## 1.4 ELB healthcheck on wrong instance port

**Resolution:** Change ELB port for healthcheck from 443 to 80

**Detail:** Httpd starts on-instance on port 80. The ELB correctly forwards ports from from 80 to instance port 80. However, the healthcheck looks to verify instance health on port 443 through a tcp connection. This change simply targets the healthcheck correctly at port 80 on the instance. Httpd starts on-instance on port 80. The ELB correctly forwards ports from from 80 to instance port 80. However, the healthcheck looks to verify instance health on port 443 through a tcp connection. This change simply targets the healthcheck correctly at port 80 on the instance.

# 2 Solution Enhancement

## 2.1 Operational

## 2.2 Security

- Instances in public subnet

## 2.3 Reliability

- Single instance with no auto-recovery

## 2.4 Performance

- Bursting t2.micro instances with CPU credit limits

## 2.5 Cost