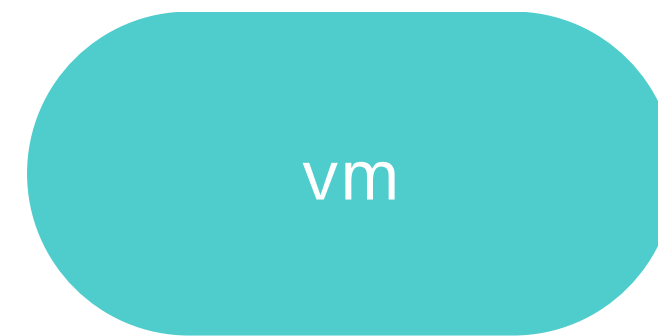




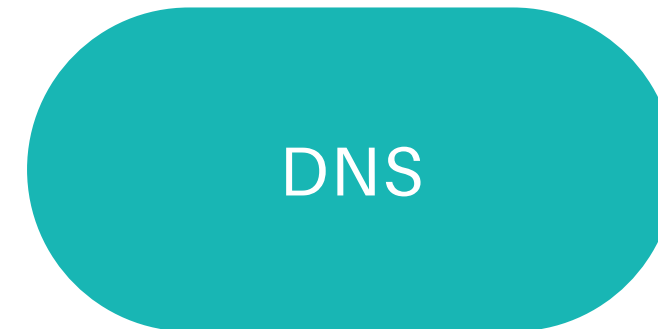
AWS

Auto Scaling

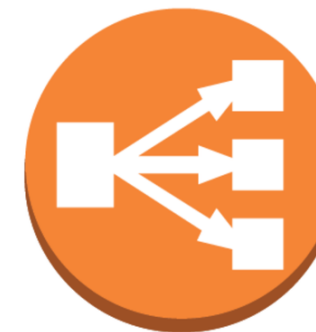
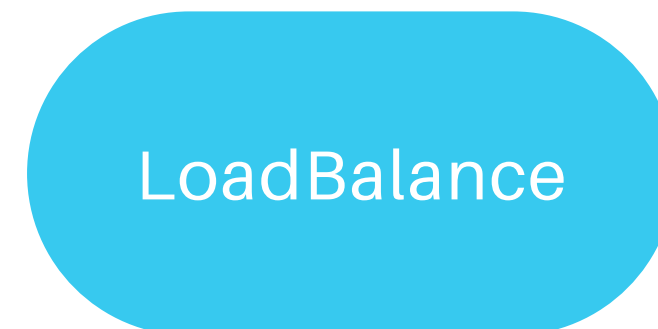
只是名字不同



EC2



ROUTE 53



ELB

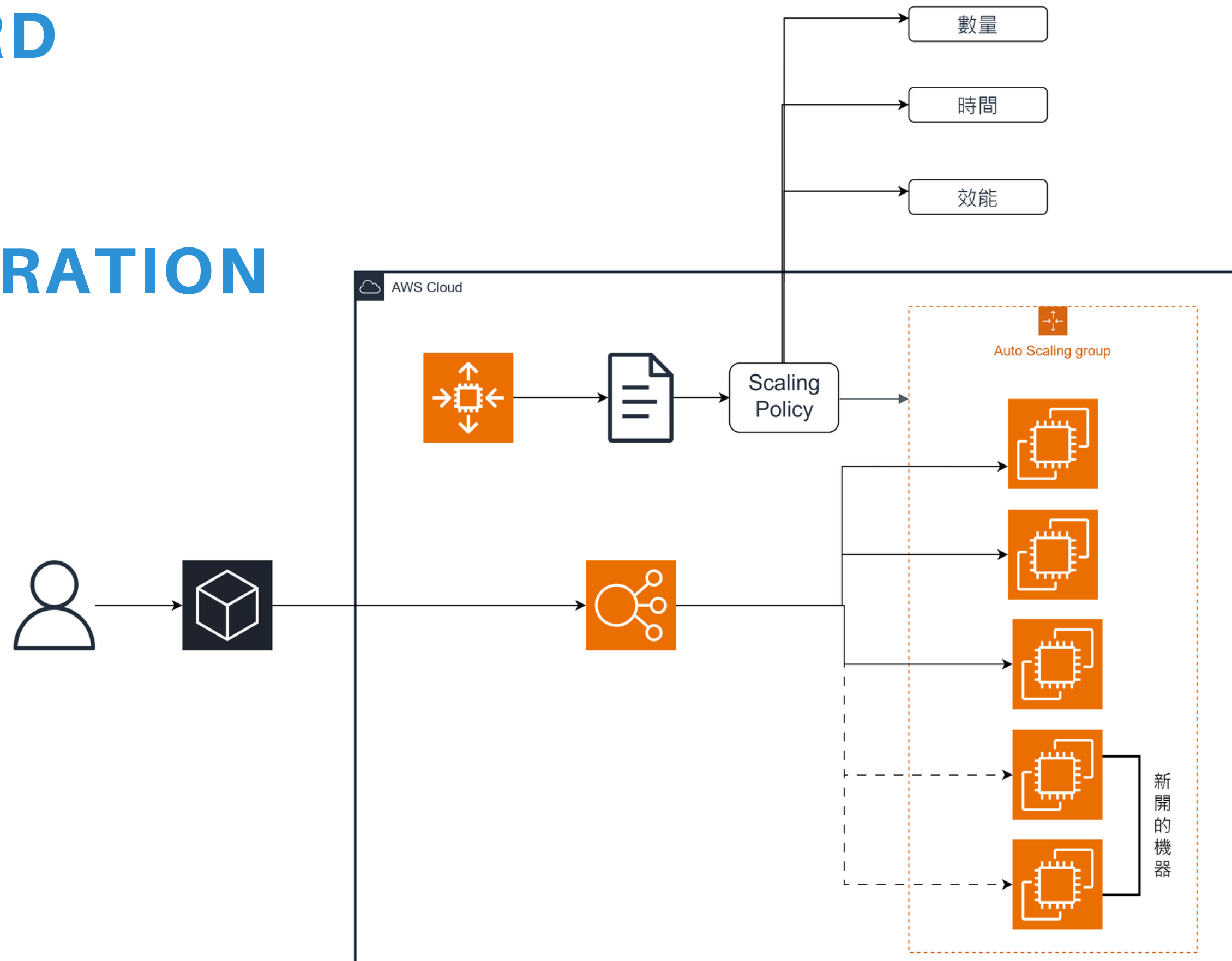


RDS

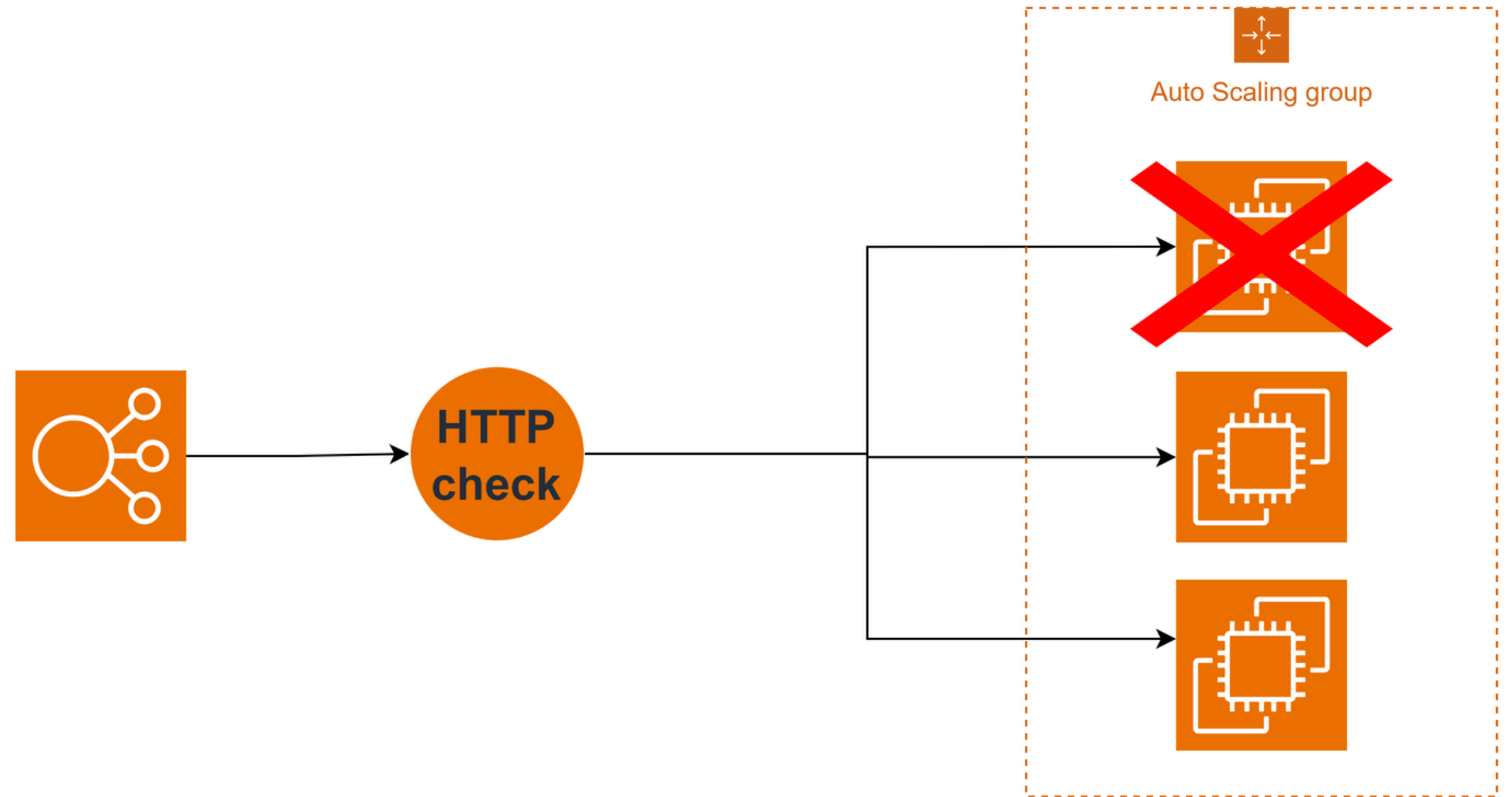


DynamoDB

STANDARD AUTO SCALING CONFIGURATION



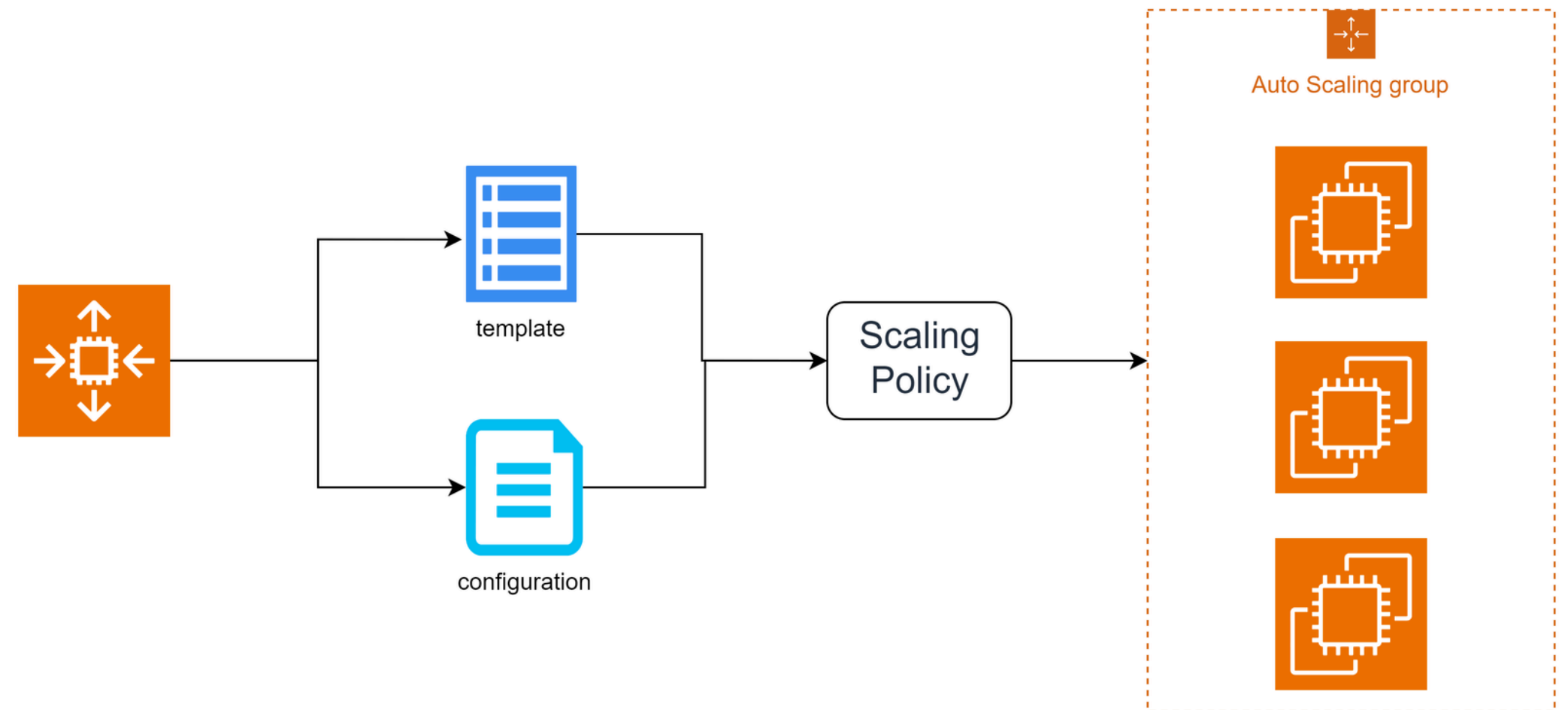
HEALTH CHECK



	ELB	Auto Scaling
operation mode	periodically sends pings, attempts connections, or sends requests to test the EC2 instances and determines if an instance is unhealthy.	The default health checks for an Auto Scaling group are EC2 health checks only. If an instance fails these health checks, it is marked unhealthy and is terminated while Amazon EC2 Auto Scaling launches a new replacement instance.
Status	inService / OutOfService	healthy / unhealthy

If you configure the Auto Scaling group to use Elastic Load Balancing health checks, it considers the instance unhealthy if it fails either the EC2 health checks or the Elastic Load Balancing health checks, the Auto Scaling group replaces the instance.

AUTO SCALING CONFIGURATION

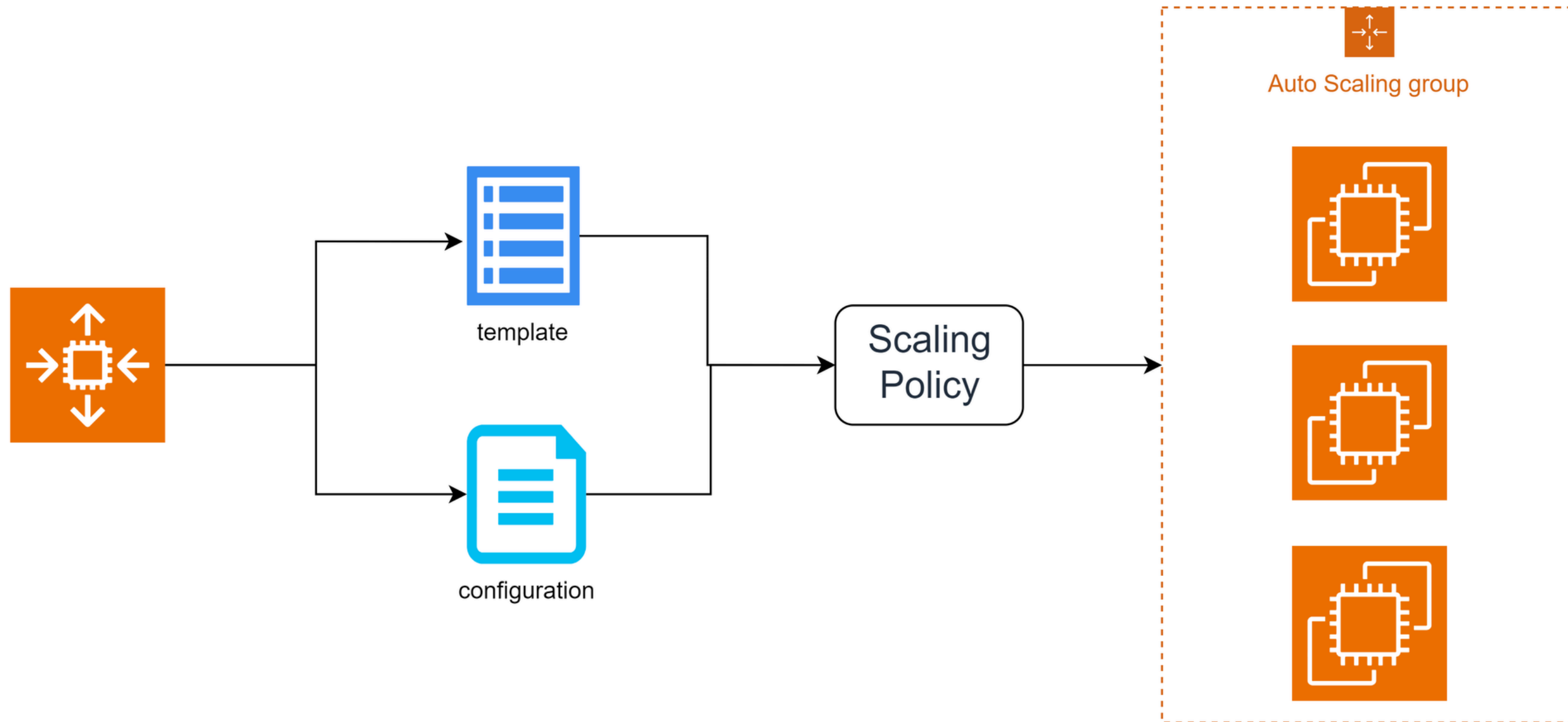


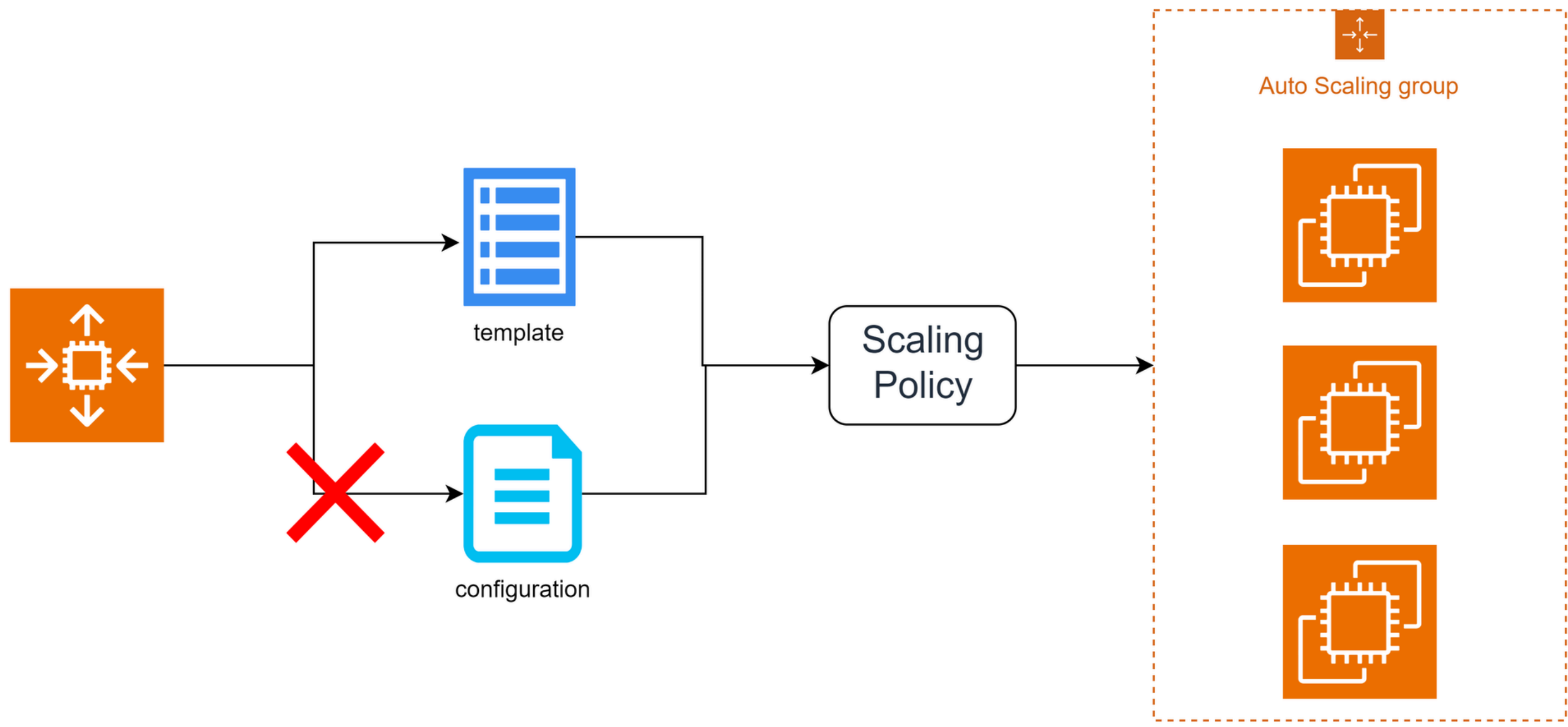
Launch Template

要開甚麼規格的機器？

Scaling Policy

甚麼時候要開/關機器？





Scaling Policy

固定數量機器



ex.維持3台機器維持運作

時間排程



ex.下午5:00開一台機器
ex.早上7:00關一台機器

效能指標



Simple Scaling

Step Scaling

Target Tracking
Scaling

效能指標

Simple Scaling

A simple scaling policy must also wait for an in-progress scaling activity or health check replacement to complete and a cooldown period to end before it responds to additional alarms.



Step Scaling

- Scale out by 10 instances if the alarm metric reaches 60 percent
- Scale out by 30 instances if the alarm metric reaches 75 percent
- Scale out by 40 instances if the alarm metric reaches 85 percent

搭配cloudwatch
監控流量、觸發並
發送通知

Target Tracking Scaling

Application Auto Scaling will scale out (increase capacity) when CPU exceeds 50 percent to handle increased load. It will scale in (decrease capacity) when CPU drops below 50 percent to optimize costs during periods of low utilization.


附錄一

AWS Auto Scaling Launch Template vs Launch Configuration

Launch Template		Launch Configuration
Versioning	Supports Versioning	Immutable - Cannot be modified once created.
Dedicated Hosts Support	Yes	No
Override Instance Types	Yes - Instance types specified in launch template can be overridden	No
Multiple Instance Types & Purchase Options	Yes - supports Mix of On-demand & Spot instances.	No
Features Parity	Yes	No - AWS has stopped adding new features to Launch Configuration
Combining CPU architectures Support	Yes - Combining CPU architectures such as Intel, AMD, and ARM	No
Automate Deployment using Instance Refresh	Yes	No
AWS Recommended	Yes	No

THANK YOU!

ELB

 CLB	NLB	ALB