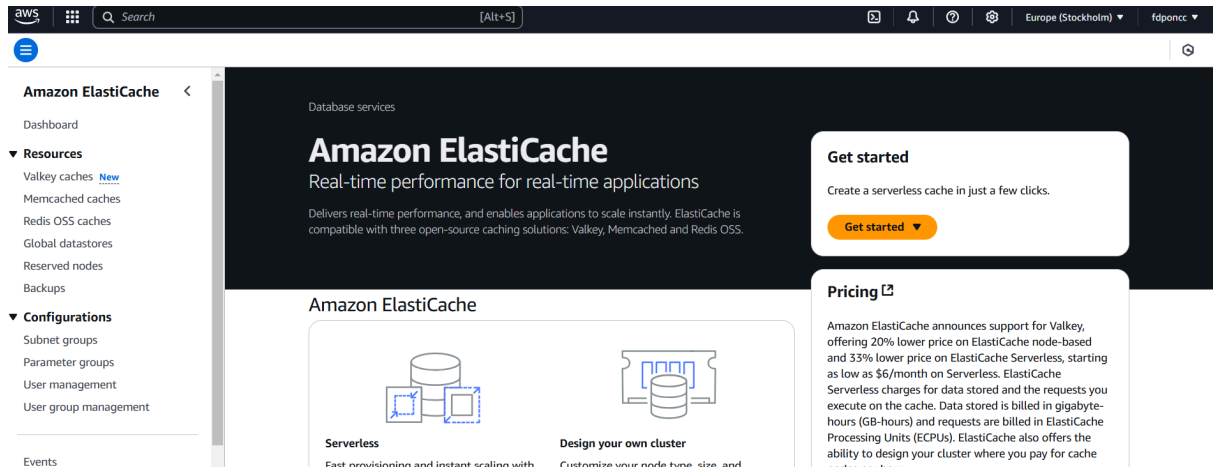
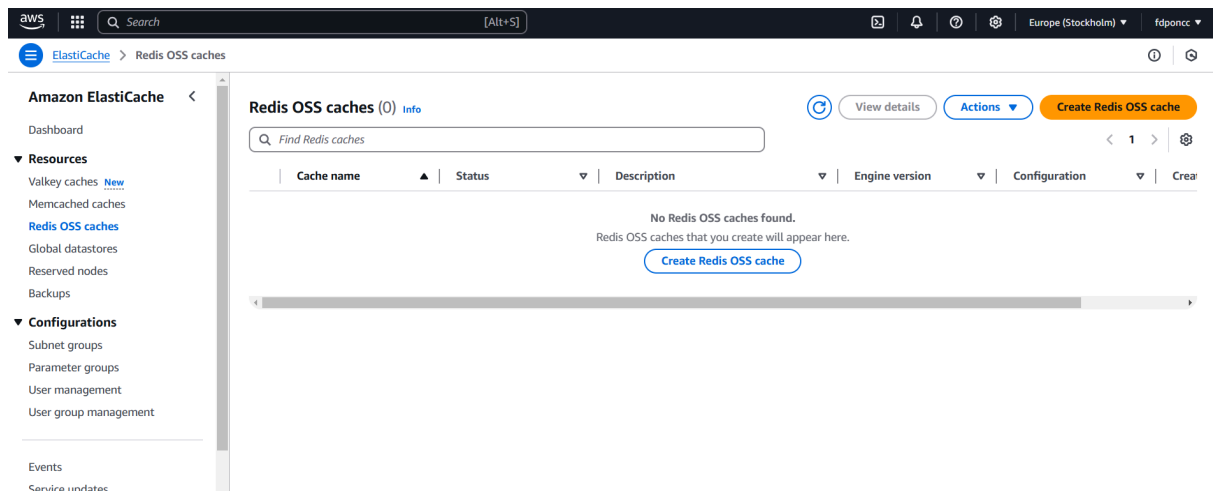


P7: ELASTIC CACHE WITH AWS



ON LEFT SIDE RESOURCES - ☐ REDIS OSS CACHE--☐



CONTINUE TO REDDIS OSS

Configuration [Info](#)

Choose one of the following options to create a Redis cache.

Deployment option

☐ Serverless - *new*

Use to quickly create a cache that automatically scales to meet application traffic demands, with no servers to manage.

☒ Design your own cache

Use to create a cache by selecting node type, size, and count.

Creation method

☐ Easy create

Use recommended best practice configurations. You can also modify options after you create the cluster.

☒ Cluster cache

Set all of the configuration options for your new cluster.

☐ Restore from backup

Use an existing backup or .rdb file to restore a cluster.

Cluster mode


Scale your cluster dynamically with no downtime.

☒ Enabled

Cluster mode enables replication across multiple shards for enhanced scalability and availability.

☐ Disabled

The Redis OSS cluster will have a single shard (node group) with one primary node and up to 5 read replica.

i Enabling cluster mode supports partitioning your data across up to 500 node groups and improves performance of Redis OSS clusters. Some commands are unavailable in this mode. [Learn more](#) 

Cluster info

Use the following options to configure the cluster.

Name

MYREDDIS26

The name can have up to 40 characters, and must not contain spaces.

Description - optional

Description

Location

Choose whether to host the cluster in the AWS Cloud or on premises.

Location

☒ AWS Cloud

Use the AWS Cloud for your ElastiCache instances.

☐ On premises

Create your ElastiCache instances on an Outpost (through AWS Outposts). You need to create a subnet ID on an Outpost first.

Multi-AZ

☐ Enable

Multi-AZ provides enhanced high availability through automatic failover to a read replica, cross AZs, in case of a primary node failover.

Auto-failover

#####DON'T ENABLE MULTI A-Z

SELECT ENGINE VERSION (7.0) , PORT NUM (6379), **NODE TYPE (t3 micro), SHARDS 2**

Cluster settings

Use the following options to configure the cluster.

Engine version

Version compatibility of the engine that will run on your nodes.

7.0

Port

The port number that nodes accept connections on.

6379

Parameter groups

Parameter groups control the runtime properties of your nodes and clusters.

default.redis7.cluster.on



Node type

The type of node to be deployed and its associated memory size.

cache.t3.micro

0.5 GiB memory Up to 5 Gigabit network performance

Number of shards

Enter the number of shards in this cluster, from 1 to 500.

2

Replicas per shard

Enter the number of replicas for each shard, from 0 to 5.

1

Connectivity

Choose the IP version(s) this cluster will support. Then select an existing subnet group or create a new one.

Network type

Choose between IPv4, dual stack and IPv6

IPv4

Your resources will communicate only over the IPv4 protocol.

Subnet groups

☐ Choose existing subnet group

☒ Create a new subnet group

Name

MYREDDIS26-SUBNET

The name can have up to 255 characters, and must not contain spaces.

Description - optional

Description

Subnet groups

Choose existing subnet group

Create a new subnet group

Name

MYREDDIS2G-SUBNET

The name can have up to 255 characters, and must not contain spaces.

Description - optional

Description

VPC ID

The identifier for the VPC environment where your cluster is to run.

vpc-0dc4bbdbcb80c11cb

Create VPC

For Multi-AZ high availability mode, choose IDs for at least two subnets from two Availability Zones in the table below.

Selected subnets (2)

Manage

Availability Zone	Subnet ID	Subnet name	CIDR block (IPv4)
eu-north-1a	subnet-01b1ab8953d783de1	-	172.31.16.0/20
eu-north-1b	subnet-0fdf29b510af5dba3	-	172.31.32.0/20

GIVE REDDIS SUBNET NAME AND MANAGE THE RESOURCE

Name

REDDIS2G-SUBNET

The name can have up to 255 characters, and must not contain spaces.

Description - optional

Description

VPC ID

The identifier for the VPC environment where your cluster is to run.

vpc-0dc4bbdbcb80c11cb

Create VPC

Selected subnets (2)

Manage

Availability Zone	Subnet ID	Subnet name	CIDR block (IPv4)
eu-north-1a	subnet-01b1ab8953d783de1	-	172.31.16.0/20
eu-north-1b	subnet-0fdf29b510af5dba3	-	172.31.32.0/20

Tags for subnet group

Manage subnets

Add or remove subnets from the table below.

Subnets (1/3)

Find subnets

< 1 >

Availability Zone	Subnet ID	Subnet name	CIDR block (IPv4)
<input checked="" type="checkbox"/> eu-north-1a	subnet-01b1ab8953d783de1	-	172.31.16.0/20
<input type="checkbox"/> eu-north-1b	subnet-0fdf29b510af5dba3	-	172.31.32.0/20
<input type="checkbox"/> eu-north-1c	subnet-0f92911b6a96d8908	-	172.31.0.0/20

Cancel

Choose

Availability Zone placements

Use the following fields to configure placements for Availability Zones.

Slots and keyspaces

Distribution of the 16,384 cluster keyspace slots across shards.

Equal distribution

Availability Zone placements

By locating nodes in different Availability Zones, you reduce the chance that a failure in one Availability Zone, such as a power outage, will cause your entire system to fail. Choose **Specify Availability Zones** if you want to specify Availability Zones for cluster nodes.

Specify Availability Zones

< 1 >

Shards	Slots/keyspaces	Primary	Replica 1
Shard 1	Equal distribution	eu-north-1a	eu-north-1b
Shard 2	Equal distribution	eu-north-1a	eu-north-1b

Cancel

Next

NEXT

Advanced settings [info](#)

Security

Use the following section to configure network security and data security for your cluster.

Encryption at rest

☒ Enable

Enables encryption of data stored on disk.

Encryption key

The master key that will be used to protect the key used to encrypt data at rest.

☒ Default key

An AWS owned key will be used for encryption.

☐ Customer managed CMK

Select a customer managed key.

Encryption in transit [info](#)

☒ Enable

Enables encryption of data that moves between the service and client.

Transit encryption mode

Required

[i](#) In **Required** mode, the cluster will support only encrypted TLS connections. Transit encryption mode can be modified after the cluster has been created. [Learn more](#)

Select AUTH DEFAULT ACCESS

Access control

Provides the ability to configure authenticating and authorizing access.

AUTH default user access

AUTH token

The AUTH token used for the cluster.

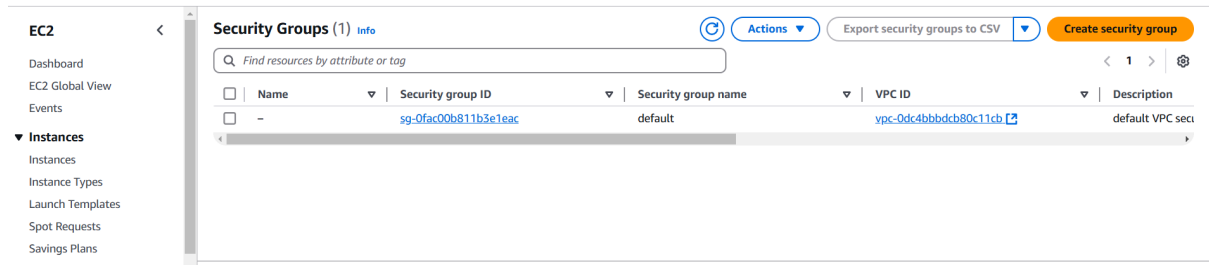
AUTHtoken123456789

☒ Show token

At least 16 characters and a maximum of 128 characters, which can be any printable ASCII character except for ' ' (blank space), '"' (quotation mark), '/' , and '@'.

AUTHtoken123456789

STEP2: GO TO EC2 IN NEW TAB AND CREATE A SECURITY GROUP



[EC2](#) > [Security Groups](#) > Create security group

Create security group [info](#)

A security group acts as a virtual firewall for your instance to control inbound and outbound traffic. To create a new security group, complete the fields below.

Basic details

Security group name [info](#)

Name cannot be edited after creation.

Description [info](#)

VPC [info](#)

INBOUND RULES □ ADD RULE □ CUSTOM TCP □ PORT NUM □ 6379 (AS OUR ELASTIC STACK RUNNING OVER THERE) - □ SOURCE (ANYWHERE IPV4)

Inbound rules [info](#)

Type [info](#)

Protocol [info](#)

Port range [info](#)

Source [info](#)

Description - optional [info](#)

Custom TCP ▼

TCP

6379

Anyw... ▼

Delete

Add rule

CREATE SECURITY GROUP

Inbound rules

Type

Protocol

Port range

Source

Description - optional

Custom TCP

TCP

6379

Anywhere...

0.0.0.0/0

Delete

Add rule

Outbound rules

Type

Protocol

Port range

Destination

Description - optional

All traffic

All

All

Custom

0.0.0.0/0

Delete

Add rule

Tags - optional

A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.

No tags associated with the resource.

Add new tag

You can add up to 50 more tags

Cancel

Create security group

Security group (sg-08b8fd734ba812a46 | REDDISSEC26) was created successfully

Details

sg-08b8fd734ba812a46 - REDDISSEC26

Actions

Details

Security group name

sg-08b8fd734ba812a46

Security group ID

sg-08b8fd734ba812a46

Description

REDISSEC26

VPC ID

vpc-0dc4bbbdc80c11cb

Owner

699475937818

Inbound rules count

1 Permission entry

Outbound rules count

1 Permission entry

Inbound rules

Outbound rules

Sharing - new

VPC associations - new

Tags

Inbound rules (1)

Manage tags

Edit inbound rules

Search

Name

Security group rule ID

IP version

Type

Protocol

Port range

Source

Description

-

sg-05bc2e2303a61e4a0

IPv4

Custom TCP

TCP

6379

0.0.0.0/0

-

----- STEP3: COMEBACK TO ELASTIC CACHE AND SELECT THE SECURITY GROUP----

Selected security groups (0)

Manage

A security group acts like a firewall that controls network access to your clusters.

Group ID

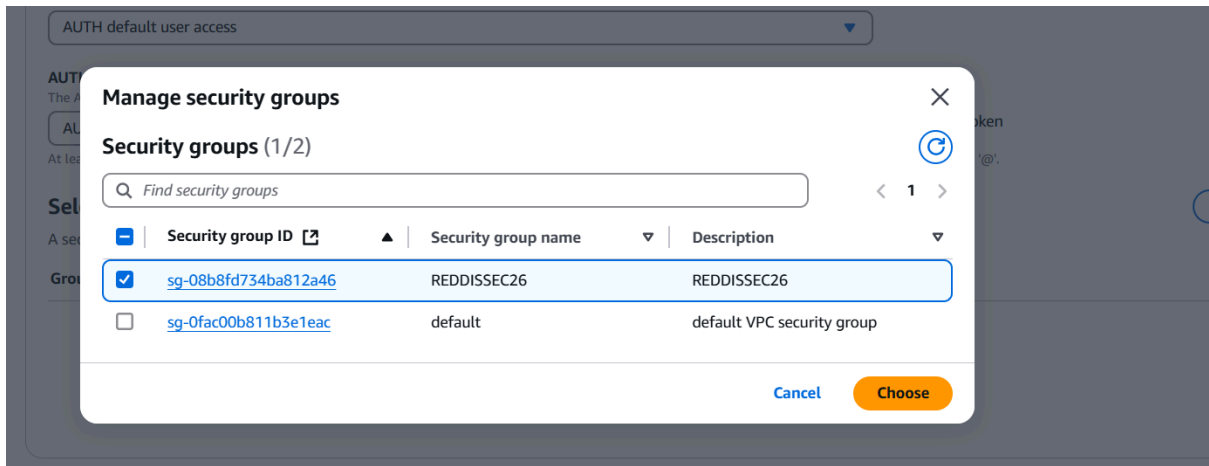
Name

No selected security groups

Add security groups by choosing the Manage button.

Manage

GO TO MANAGE AND REFRESH & SELECT THE SECURITY GROUP



Backup

You can use backups to restore a cluster or seed a new cluster. The backup consists of the cluster's metadata, along with all of the data in the cluster.

☐ **Enable automatic backups**

ElastiCache will automatically create a daily backup of a set of replicas.

Maintenance

Configure maintenance settings for the cluster.

Maintenance window

Specify the time range (UTC) for updates such as patching an operating system, updating drivers, and installing software or patches.

☒ **No preference**

☐ **Specify maintenance window**

Auto upgrade minor versions

☐ **Enable**

Automatically schedule cluster upgrade to the latest minor version, once it becomes available. Cluster upgrade will only be scheduled during the maintenance window.

Topic for Amazon SNS notification

Choose an SNS topic from the list, or enter the Amazon Resource Name (ARN) for an existing topic. If no topic is chosen, no notifications are sent.

Disable notifications

Logs

Specify whether to provide the Redis OSS slow logs or engine logs.

Slow logs

☒ Enable

Provide the slow log for queries that exceed a specified runtime.

Log format

Choose the format of the logs.

Text

Log destination type

Choose the destination of the logs.

CloudWatch Logs

Log destination

Select an existing log group or create a new one.

☐ Choose existing log group

☒ Create a new log group

Log group name

REDDIS26LOG

Engine logs

☐ Enable

Provide the engine log for queries that exceed a specified runtime.

Tags

You can use tags to search and filter your clusters, or track your AWS costs.

No tags associated with the cluster.

[Add new tag](#)

You can add 50 more tags.

[Cancel](#)

[Previous](#)

[Next](#)

NEXT

WITH DEFAULT SETTINGS IN NEXT PAGE CLICK ON CREATE

Logs

Specify whether to provide the Redis OSS slow logs or engine logs.

Slow logs
Enabled

Slow logs format
text

Slow log destination type
cloudwatch-logs

Slow log destination
[REDDIS26LOG](#)

Engine logs
Disabled

Tags

You can use tags to search and filter your clusters, or track your AWS costs.

Key

Value

No tags found.
Tags that you create will appear here.

Cancel

Previous

Create

ElastiCache > Redis OSS caches

The cluster was created successfully.

Redis OSS caches (1)

View details

Actions

Create Redis OSS cache

Find Redis caches

< 1 >

Cache name	Status	Description	Engine version	Configuration	Created date
myredis26	Creating	-	7.0.7	cache.t3.micro	February 5, 2025, 03:5...