

Services

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Amazon OpenSearch Service > Domains > Create domain

Create domain

Info

Name

Domain name

public-nonpriv-rafael

The name must start with a lowercase letter and must be between 3 and 28 characters. Valid characters are a-z (lowercase only), 0-9, and - (hyphen).

Domain creation method

Easy create

Quickly create an OpenSearch domain. You can change some configuration options after the domain is created.

Standard create

Create an OpenSearch domain with your preferred configuration. You can choose all configuration options, including availability zone(s), instances and storages, and security configurations.

Templates

Templates specify common settings for your use case. After creating the domain, you can change these settings at any time.

Production

Use for production workloads for high-availability and performance. Defaults follow the recommended best practices.

Dev/test

Use for development or testing Amazon OpenSearch Service

Deployment option(s)

Select a deployment option that corresponds to the availability goals for your application. [Learn more](#)

Domain with standby

Nodes in one of the Availability Zone (AZ) are reserved as standby. Automatic failover to standby. Provides 99.99% availability and consistent performance. (Recommended)

Domain without standby

Nodes are distributed across Availability Zone(s). Availability depends on the number of AZs and copies of data.

Availability Zone(s)

2-AZ

Engine options

Version

2.13 (latest)

Certain features require specific OpenSearch/Elasticsearch versions. We recommend choosing the latest version. [Learn more](#)

Include older versions

Summary

Engine version

OpenSearch 2.13 (latest)

Availability Zone(s)

2-AZ without standby

Dedicated master node

m6g.large.search 3 master nodes

Network

Public access IPv4

Encryption

HTTPS for all traffic to the domain

Node-to-node encryption

Enable encryption of data at rest

Cancel

CloudShell

Feedback

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Privacy

Terms

Cookie preferences

https://us-west-1.console.aws.amazon.com/aos/home?region=us-west-1#opensearch/domains/create-domain

1/6



Data nodes

Select an instance family and type that corresponds to the compute, memory, and storage needs of your application. Consider the size of your indexes, number of shards and replicas, type of queries, and volume of requests. [Learn more](#)

Instance family - *new* [Info](#)

Choose an instance family to filter instance types.

Memory optimized

Instance type

r6g.large.search

r6g.large.search instance type needs EBS storage.

☐ Include previous generation instance types

Number of nodes

For two Availability Zones, you must choose instances in multiples of two.

2

The number must be between 1 and 80.

Storage type

Choose a storage type for your data nodes.

EBS

EBS volume type

EBS volumes enable you to independently scale the storage resources of your domain from its compute resources. EBS volumes are most useful for domains with very large data sets, but without the need for large compute resources.

General Purpose (SSD) - gp3

☐ Include previous generation EBS volume types

EBS storage size per node

100

EBS storage size per node in GiB. Minimum 10 GiB and maximum 2048 GiB.

Data nodes*

	Nodes	Total storage (GB)
AZ	1	100
AZ	1	100
Total	2	200

[*] Indicative representation of node distribution across AZ(s). Service recommends equal number of nodes in each of the AZ

▼ Advanced volume type options (IOPs and throughput configurations)

Total IOPs per node [Info](#)

3000

IOPs



The total IOPS to volume size ratio should not exceed 500:1.

3000

16000 IOPs

Total throughput (MiB/s) per node [Info](#)

125

MiB/s



The total throughput to IOPS ratio should not exceed 1:4.

125

593 MiB/s

Warm and cold data storage

Enable UltraWarm to store even more data on Amazon OpenSearch Service. You can economically retain large amounts of data while keeping the same interactive analysis experience. [Learn more](#)

Enable cold storage to further reduce storage costs for data you rarely access. To view data in cold storage, you must first move it to warm storage. [Learn more](#)



You must enable UltraWarm to use cold storage.



Dedicated master nodes

Dedicated master nodes improve the stability of your domain. For production domains, three is recommended. [Learn more](#)

☒ Enable dedicated master nodes

Instance type

m6g.large.search

☐ Include previous generation instance types

Number of master nodes

3

	Nodes
AZ	2
AZ	1
Total	3

Indicative representation of node distribution across AZ(s).

Snapshot configuration

Amazon OpenSearch Service takes an automated snapshot of your cluster. [Learn more](#)

Frequency

Hourly

Elasticsearch version 5.3 and above have hourly snapshots only.

Custom endpoint

Each Amazon OpenSearch Service domain has an auto-generated endpoint, but you can also add a custom endpoint using AWS Certificate Manager (ACM). [Learn more](#)

☐ Enable custom endpoint



Custom Endpoint cannot be enabled

You do not have access to AWS Certificate Manager with ListCertificate permissions. Contact your system administrator for access.

Network

VPC access uses private IP addresses, which provides an inherent layer of security. If you select public access, secure your domain with an access policy that only allows specific users or IP addresses to access the domain.

Network

☐ VPC access - *recommended*

☒ Public access

IP address type - *new* [Info](#)

Select the type of IP address that your subnets use.

☐ Dual-stack mode - *recommended*
Your resources can communicate over IPv4, IPv6, or both.

☒ IPv4 only
Your resources can communicate over IPv4 only.

Once the domain is created, you will be provided with a domain endpoint to only communicate over IPv4.



Master user

- Master username

root-rafael

Master usernames must be between 1 and 64 characters.

Master password

.....

Master password must be at least 8 characters long and contain at least one uppercase letter, one lowercase letter, one number, and one special character.

Confirm master password

.....

SAML authentication lets you use your existing identity provider for single sign-on for OpenSearch Dashboards/Kibana. [Learn more](#)

☐ Enable SAML authentication

JSON Web Token (JWT) auth lets you use your existing identity provider for single sign-on for OpenSearch. [Learn more](#)

☐ Enable JWT authentication and authorization

Enable to use Amazon Cognito authentication for OpenSearch Dashboards/Kibana. Amazon Cognito supports a variety of identity providers for username-password authentication. [Learn more](#)

☐ Enable Amazon Cognito authentication

Access policies control whether a request is accepted or rejected when it reaches the Amazon OpenSearch Service domain. If you specify an account, user, or role in this policy, you must sign your requests. [Learn more](#)

Domain access policy

- ☐ Only use fine-grained access control
Allow open access to the domain.
- ☐ Do not set domain level access policy
All requests to the domain will be denied.
- ☒ Configure domain level access policy

Visual editor

JSON

Import policy

more

Type	Principal	Action
Source IP addr...	129.8.0.0/16	Allow
Delete		

Add new element

You can add 9 more elements.

Encryption

You enabled fine-grained access control, which requires HTTPS, node-to-node encryption, and encryption at rest to be enabled.

Encryption

☒ Require HTTPS for all traffic to the domain

When enabled, your domain only accepts requests over HTTPS.

☒ Node-to-node encryption

This setting provides an additional layer of security. Each Amazon OpenSearch domain operates within a secure, dedicated VPC. Node-to-node encryption enables TLS encryption for all communications within that VPC. After you enable node-to-node encryption, you can't disable it. This setting requires Elasticsearch version 6.7 and above.

☒ Enable encryption of data at rest

Encryption at rest secures the indexes and automated snapshots associated with the domain. After you enable encryption of data at rest, you can't disable it. This setting requires Elasticsearch version 6.7 and above

Choose an AWS KMS key

This key will be used to encrypt and decrypt your resources. [Learn more](#)

☒ Use AWS owned key

A key that AWS owns and manages for you.

☐ Choose a different AWS KMS key (advanced)

Choose a key you have permission to use, or create a new one.

Off-peak window

Info

Off-peak window is a 10-hour time block that you can use to schedule service software updates and auto-tune optimizations. While these updates are designed to be non-disruptive, the service uses the off-peak window to deploy updates at a comparatively lower traffic time, whenever possible. Please note that updates to the domain such as node replacements, or changes that need to be deployed to the domain immediately do not use the off-peak window.

Start time (UTC)

00:00

End time (UTC)

10:00

Auto-Tune

Auto-Tune analyzes cluster performance over time and suggests optimizations based on your workload. You can choose to deploy these changes or rollback to the default OpenSearch settings at any time. [Learn more](#)

Auto-Tune

☐ Turn off

No automated changes to your cluster, Amazon OpenSearch Service will still send notifications on how to optimize cluster performance.

☒ Turn on

Automatically makes node-level changes that require no downtime, such as tuning queues and cache sizes.



Auto-Tune optimizations that require a blue/green deployment will be scheduled during off-peak hours.

[Learn more](#)

Automatic software update

☐ Enable automatic software update

Tags - optional

You can add tags to describe your domain. A tag consists of a case-sensitive key-value pair. For example, you can define a tag with a key-value pair of Environment Name-Development. [Learn More](#)

Add new tag

You can add 50 more tags.

► **Advanced cluster settings** - *optional*