

Screenshots

```
PS D:\cd13926-Building-Generative-AI-Applications-with-Amazon-Bedrock-and-Python-project-solution\stack1> terraform apply
module.vpc.aws_nat_gateway.this[0]: Still creating... [00m40s elapsed]
module.vpc.aws_nat_gateway.this[0]: Still creating... [00m50s elapsed]
module.vpc.aws_nat_gateway.this[0]: Still creating... [01m00s elapsed]
module.vpc.aws_nat_gateway.this[0]: Still creating... [01m10s elapsed]
module.vpc.aws_nat_gateway.this[0]: Still creating... [01m20s elapsed]
module.vpc.aws_nat_gateway.this[0]: Still creating... [01m30s elapsed]
module.vpc.aws_nat_gateway.this[0]: Still creating... [01m40s elapsed]
module.vpc.aws_nat_gateway.this[0]: Still creating... [01m50s elapsed]
module.vpc.aws_nat_gateway.this[0]: Creation complete after 1m58s [id=nat-05de7da47953ac4c7]
module.vpc.aws_route.private_nat_gateway[0]: Creating...
module.vpc.aws_route.private_nat_gateway[0]: Creation complete after 1s [id=r-rtb-02deefde911a6cbf21080289494]

Warning: Deprecated attribute
  on terraform/modules/vpc/vpc-flow-logs.tf line 28, in locals:
  28:     "arn:${data.aws_partition.current[0].partition}:logs:${data.aws_region.current[0].name}:${data.aws_caller_identity.current[0].account_id}:log-group:${log_group.name}:"**

The attribute "name" is deprecated. Refer to the provider documentation for details.

Apply complete! Resources: 5 added, 0 changed, 0 destroyed.

Outputs:
aurora_arn = "arn:aws:rds:us-west-2:317395562947:cluster:my-aurora-serverless"
aurora_endpoint = "my-aurora-serverless.cluster-ccvfkywfy409.us-west-2.rds.amazonaws.com"
Apply complete! Resources: 5 added, 0 changed, 0 destroyed.

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aurora_arn = "arn:aws:rds:us-west-2:317395562947:cluster:my-aurora-serverless"
aurora_endpoint = "my-aurora-serverless.cluster-ccvfkywfy409.us-west-2.rds.amazonaws.com"
db_endpoint = "my-aurora-serverless.cluster-ccvfkywfy409.us-west-2.rds.amazonaws.com"
db_reader_endpoint = "my-aurora-serverless.cluster-ro-ccvfkywfy409.us-west-2.rds.amazonaws.com"
private_subnet_ids = [
  "subnet-021d15427fd06d925",
  "subnet-0b31aeb930010759e",
  "subnet-034a189a048b5f11c",
]
public_subnet_ids = [
  "subnet-0170f0f323de71a7a",
  "subnet-0d9ebd668a6e12689",
  "subnet-0fe0e5853575070d7",
]
rds_secret_arn = "arn:aws:secretsmanager:us-west-2:317395562947:secret:my-aurora-serverless-8FRnXY"
s3_bucket_name = "arn:aws:s3:::bedrock-kb-317395562947"
vpc_id = "vpc-0fe4c4279bf7d496a"
PS D:\cd13926-Building-Generative-AI-Applications-with-Amazon-Bedrock-and-Python-project-solution\stack1>
```

```

module.aurora_serverless.aws_rds_cluster_instance.aurora_instance: Still creating... [02m20s elapsed]
module.aurora_serverless.aws_rds_cluster_instance.aurora_instance: Still creating... [02m30s elapsed]
module.aurora_serverless.aws_rds_cluster_instance.aurora_instance: Still creating... [02m40s elapsed]
module.aurora_serverless.aws_rds_cluster_instance.aurora_instance: Still creating... [02m50s elapsed]
module.aurora_serverless.aws_rds_cluster_instance.aurora_instance: Still creating... [03m00s elapsed]
module.aurora_serverless.aws_rds_cluster_instance.aurora_instance: Still creating... [03m10s elapsed]
module.aurora_serverless.aws_rds_cluster_instance.aurora_instance: Still creating... [03m20s elapsed]
module.aurora_serverless.aws_rds_cluster_instance.aurora_instance: Still creating... [03m30s elapsed]
module.aurora_serverless.aws_rds_cluster_instance.aurora_instance: Still creating... [03m40s elapsed]
module.aurora_serverless.aws_rds_cluster_instance.aurora_instance: Still creating... [03m50s elapsed]
module.aurora_serverless.aws_rds_cluster_instance.aurora_instance: Still creating... [04m00s elapsed]
module.aurora_serverless.aws_rds_cluster_instance.aurora_instance: Still creating... [04m10s elapsed]
module.aurora_serverless.aws_rds_cluster_instance.aurora_instance: Still creating... [04m20s elapsed]
module.aurora_serverless.aws_rds_cluster_instance.aurora_instance: Still creating... [04m30s elapsed]
module.aurora_serverless.aws_rds_cluster_instance.aurora_instance: Still creating... [04m40s elapsed]
module.aurora_serverless.aws_rds_cluster_instance.aurora_instance: Still creating... [04m50s elapsed]
module.aurora_serverless.aws_rds_cluster_instance.aurora_instance: Still creating... [05m00s elapsed]
module.aurora_serverless.aws_rds_cluster_instance.aurora_instance: Still creating... [05m10s elapsed]
module.aurora_serverless.aws_rds_cluster_instance.aurora_instance: Still creating... [05m20s elapsed]
module.aurora_serverless.aws_rds_cluster_instance.aurora_instance: Still creating... [05m30s elapsed]
module.aurora_serverless.aws_rds_cluster_instance.aurora_instance: Still creating... [05m40s elapsed]
module.aurora_serverless.aws_rds_cluster_instance.aurora_instance: Still creating... [05m50s elapsed]
module.aurora_serverless.aws_rds_cluster_instance.aurora_instance: Still creating... [06m00s elapsed]
module.aurora_serverless.aws_rds_cluster_instance.aurora_instance: Still creating... [06m10s elapsed]
module.aurora_serverless.aws_rds_cluster_instance.aurora_instance: Still creating... [06m20s elapsed]
module.aurora_serverless.aws_rds_cluster_instance.aurora_instance: Still creating... [06m30s elapsed]
module.aurora_serverless.aws_rds_cluster_instance.aurora_instance: Still creating... [06m40s elapsed]
module.aurora_serverless.aws_rds_cluster_instance.aurora_instance: Creation complete after 6m45s [id=tf-20250923031412477800000006]

Warning: Deprecated attribute
  on .terraform/modules/vpc/vpc-flow-logs.tf line 28, in locals:
  28:   "arn:${data.aws_partition.current[0].partition}:logs:${data.aws_region.current[0].name}:${data.aws_caller_identity.current[0].account_id}:log-group:${log_group.name}:"
The attribute "name" is deprecated. Refer to the provider documentation for details.

Apply complete! Resources: 35 added, 0 changed, 0 destroyed.

Outputs:
aurora_arn = "arn:aws:rds:us-west-2:317395562947:cluster:my-aurora-serverless"
aurora_endpoint = "my-aurora-serverless.cluster-ccvfkywfy409.us-west-2.rds.amazonaws.com"
db_endpoint = "my-aurora-serverless.cluster-ccvfkywfy409.us-west-2.rds.amazonaws.com"
db_reader_endpoint = "my-aurora-serverless.cluster-ro-ccvfkywfy409.us-west-2.rds.amazonaws.com"
private_subnet_ids = [
  "subnet-013747fd172afe6bd",
  "subnet-046e9392e8b96105b",
  "subnet-0af51d89238a4ed92",
]
public_subnet_ids = [
  "subnet-0ff41ec178a10b6f6",
  "subnet-09ea21a3e797153ab",
  "subnet-040d18c2edfa1a547",
]
rds_secret_arn = "arn:aws:secretsmanager:us-west-2:317395562947:secret:my-aurora-serverless-PPjPez"
s3_bucket_name = "arn:aws:s3:::bedrock-kb-317395562947"
vpc_id = "vpc-0118ce9818a2f29b6"
PS D:\cd13926-Building-Generative-AI-Applications-with-Amazon-Bedrock-and-Python-project-solution\stack1>

```

Future AWS AI Engineermy-aurora-serverless | Secrets Manager

https://us-west-2.console.aws.amazon.com/secretsmanager/secret?name=my-aurora-serverless®ion=us-west-2

Account ID: 3173-9556-2947voclabs/user4416315-e583c447-ec3c-4f91-a78b-3...

United States (Oregon)

AWS Secrets ManagerSecretsmy-aurora-serverless

my-aurora-serverless

Secret details

Encryption keyaws/secretsmanager

Secret namemy-aurora-serverless

Secret ARNarn:aws:secretsmanager:us-west-2:317395562947:secret:my-aurora-serverless-PPjPez

Secret description-

Overview

Rotation

Versions

Replication

Tags

Secret value

Retrieve and view the secret value.

Key/value

Plaintext

Secret key	Secret value
db	myapp
dbClusterIdentifier	my-aurora-serverless
engine	aurora-postgresql
host	my-aurora-serverless.cluster-ccvfkywfy409.us-west-2.rds.amazonaws.com
password	RP8}F5d+kVENT=rh
port	5432
username	dbadmin

Close

Edit

Resource permissions - optional

Add or edit a resource policy to access secrets across AWS accounts.

Edit permissions

Sample code

Use these code samples to retrieve the secret in your application.

Java

JavaScript

C#

Python3

Ruby

Go

Rust

CloudShellFeedback

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```

PS D:\cd13926-Building-Generative-AI-Applications-with-Amazon-Bedrock-and-Python-project-solution\stack1> aws rds-data execute-statement --resource-arn "arn:aws:rds:us-west-2:317395562947:cluster-arn:aws:secretsmanager:us-west-2:317395562947:secret:my-aurora-serverless-8FRnXY" --database "myapp" --sql "SELECT * FROM pg_extension;"
{
  "records": [
    [
      {
        "stringValue": "14498"
      },
      {
        "stringValue": "plpgsql"
      },
      {
        "stringValue": "10"
      },
      {
        "stringValue": "11"
      },
      {
        "booleanValue": false
      },
      {
        "stringValue": "1.0"
      },
      {
        "isNull": true
      },
      {
        "isNull": true
      }
    ],
    [
      {
        "stringValue": "16445"
      },
      {
        "stringValue": "vector"
      },
      {
        "stringValue": "10"
      },
      {
        "stringValue": "2200"
      },
      {
        "booleanValue": true
      },
      {
        "stringValue": "0.5.0"
      },
      {
        "isNull": true
      }
    ]
  ],
  "numberOfRecordsUpdated": 0
}
-- More --

```

```

    {
      "stringValue": "16445"
    },
    {
      "stringValue": "vector"
    },
    {
      "stringValue": "10"
    },
    {
      "stringValue": "2200"
    },
    {
      "booleanValue": true
    },
    {
      "stringValue": "0.5.0"
    },
    {
      "isNull": true
    },
    {
      "isNull": true
    }
  ]
},
"numberOfRecordsUpdated": 0
}

PS D:\cd13926-Building-Generative-AI-Applications-with-Amazon-Bedrock-and-Python-project-solution\stack1> aws rds-data execute-statement --resource-arn "arn:aws:rds:us-west-2:317395562947:cluster-arn:aws:secretsmanager:us-west-2:317395562947:secret:my-aurora-serverless-8FRnXY" --database "myapp" --sql "SELECT table_schema || '.' || table_name as show_tables FROM information_schema.tables WHERE table_type = 'BASE TABLE' AND table_schema = 'bedrock_integration';"
{
  "records": [
    [
      {
        "stringValue": "bedrock_integration.bedrock_kb"
      }
    ]
  ],
  "numberOfRecordsUpdated": 0
}

PS D:\cd13926-Building-Generative-AI-Applications-with-Amazon-Bedrock-and-Python-project-solution\stack1>

```

Amazon Bedrock

Knowledge Bases

my-bedrock-kb

Discover

Test

Infer

Tune

Build

Assess

Configure and learn

Overview

Model catalog

API keys

Chat / Text playground

Image / Video playground

Watermark detection

Cross-region inference

Batch inference

Provisioned Throughput

Custom model on-demand

Agents

Flows

Knowledge Bases

Automated Reasoning

Guardrails

Prompt Management

Data Automation

Evaluations

Settings

Model access

User guide

Bedrock Service Terms

Introducing S3 Vectors as a vector store (currently in preview)

Create Knowledge Base

53 vector buckets are optimized for durable and cost-effective storage of large long-term data sets while maintaining subsecond query performance. This feature is currently in preview and we don't recommend using it for production workloads.

my-bedrock-kb

Test Knowledge Base

Delete

Knowledge Base overview

Knowledge Base name

my-bedrock-kb

Knowledge Base description

—

Service Role

my-bedrock-kb-role

Knowledge Base ID

V7Z0DAT3IE

Status

Available

Created date

September 22, 2025, 16:35 (UTC+07:00)

Log Deliveries

Configure log deliveries and event logs in the Edit page.

Retrieval-Augmented Generation (RAG) type

Vector store

Data source (1)

Sync

Stop sync

Add

Find data source

1

	Data sou...	Status	Data sour...	Account ID	Source Link	Last sync ti...	Last sync ...	Chunking s...	Parsing str...	Data dele...
	s3_bedroc...	Available	S3	317395562...	s3://bedro...	-	-	Default	Default	Delete

Tags

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.

Key

Value

No tags

Manage tags

Embeddings model

Model

Titan Embeddings G1 - Text v1.2

Embeddings type

Floa vector embeddings

Vector dimensions

1536

Knowledge Bases (1)

Edit

Delete

Test Knowledge Base

Evaluate

Create

Find Knowledge Base

1

	Name	Status	Type	Data sources	Description	Creation time	Last sync date	Last sync warni...
	my-bedrock-kb	Available	Vector store	-	-	September 22, 2...	-	-

Amazon Bedrock

Knowledge Bases

my-bedrock-kb

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Knowledge Bases

Introducing S3 Vectors as a vector store (currently in preview)

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53 vector buckets are optimized for durable and cost-effective storage of large long-term data sets while maintaining subsecond query performance. This feature is currently in preview and we don't recommend using it for production workloads.

Sync completed for data source - 's3_bedrock_bucket'

my-bedrock-kb

Test Knowledge Base

Delete

Knowledge Base overview

Knowledge Base name

my-bedrock-kb

Knowledge Base description

—

Service Role

my-bedrock-kb-role

Knowledge Base ID

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Sync

Stop sync

Add

Add documents from S3

Find data source

1

	Data sou...	Status	Data sour...	Account ID	Source Link	Last sync ti...	Last sync ...	Chunking s...	Parsing str...	Data dele...
	s3_bedroc...	Available	S3	317395562...	s3://bedro...	September ...	-	Default	Default	Delete

