

Module-6: Database Services Assignment - 4

You have been asked to:

1. Create a Redshift Data Warehouse
 2. Using the Query editor
 - a. Load some data.
 - b. Query the data
-

warn Services Search N. Virginia VAIBHAV VERMA

Amazon Redshift

Analytics

Redshift serverless New

Provisioned clusters dashboard

▶ Clusters 

Query editor

Query editor v2 

Queries and loads

Datasources

▶ Configurations

Adviser

AWS Marketplace

Alarms

Events

What's new

Amazon Redshift

Accelerate your time to insights with fast, easy, and secure analytics at scale.

Amazon Redshift makes it easier for you to run and scale analytics without having to manage your data warehouse. Get insights by running real-time and predictive analytics on all of your data, across operational databases, data lake, data warehouse, and thousands of third-party datasets.

Get to powerful insights fast

The Amazon Redshift serverless experience makes it easy for customers to run and scale analytics without having to provision and manage their data warehouse. Simply load and query data.

Try Amazon Redshift Serverless 

How it works



Introduction to Data Warehousing on AWS with A... 

Provision and manage clusters

With a few clicks, you can create your first Amazon Redshift provisioned cluster in minutes.

Create cluster

Pricing and cost 

In my account

From other accounts

▼ Connect to Redshift clusters

Query data using Redshift query editor

Use the query editor v2 to run queries in your Redshift cluster.

[Query data](#)

Work with your client tools

You can connect to Amazon Redshift from your client tools, such as SQL clients, business intelligence (BI) tools, and extract, transform, load (ETL) tools, using JDBC or ODBC drivers.

Cluster

Cluster identifier

[Copy JDBC URL](#)[Copy ODBC URL](#)

Choose your JDBC or ODBC driver

Use JDBC or ODBC drivers to connect to Amazon Redshift from your client tools, such as SQL clients, BI tools, and ETL tools. We recommend using the new Amazon Redshift-specific drivers for better performance and scalability.

Driver

JDBC 4.2 without AWS SDK (.jar)

[Download driver](#)Clusters (0) [Info](#)[Filter clusters by property or value](#)

Query data ▾

Actions ▾

[Create cluster](#)

Cluster



Cluster namespace



Status



Storage capacity us... ▾



CPU utilization



Snapshots ▾

Notificati...

Tags ▾

No clusters

Create an Amazon Redshift cluster

[Create cluster](#)

Create cluster Info

Cluster configuration

Cluster identifier

This is the unique key that identifies a cluster.

Vaibhav-redshift-cluster-1

The identifier must be from 1-63 characters. Valid characters are a-z (lowercase only) and - (hyphen).

What are you planning to use this cluster for?

Production

Configure for fast and consistent performance at the best price.

Free trial

Configure for learning about Amazon Redshift. This configuration is free for a limited time if your organization has never created an Amazon Redshift cluster.

-  When the free trial ends, delete your cluster to avoid incurring charges at **on-demand rate**  for compute and storage. If you want to take a final snapshot of your cluster and store the snapshot on an S3, our on-demand rate applies.

Calculated configuration summary

dc2.large | 1 node

High performance with fixed local SSD storage

Compute

2 vCPU (gen 2) / node x 1 = 2 vCPU

Estimated on-demand compute price

Calculated configuration summary

dc2.large | 1 node

High performance with fixed local SSD storage

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Estimated on-demand compute price

\$2,190.00/year

\$0.25/node/hour

Estimated reserved (1 year)

\$1,407.00/year

\$0.075/node/hour

36% discount

Estimated reserved (3 year)

\$879.667/year

\$0.05/node/hour

60% discount

Storage capacity

160 GB x 1 nodes = 160 GB

Sample data [Info](#)

 Sample data is loaded with your Redshift cluster.

Ticket (28 MB)

Ticket is the sample data set that uses a sample database called TICKIT. Ticket contains individual sample data files: two fact tables and five dimensions.



Sample data Info

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Database configurations

Admin user name

Enter a login ID for the admin user of your DB instance.

awsuser

The name must be 1-128 alphanumeric characters, and it can't be a [reserved word](#).

Auto generate password

Amazon Redshift can generate a password for you, or you can specify your own password.

Admin user password

Show password

Must be 8-64 characters long. Must contain at least one uppercase letter, one lowercase letter and one number. Can be any printable ASCII character except "/", "", or "@".

Cancel

Create cluster



✓ Successfully created cluster [vaibhav-redshift-cluster-1](#)

To manage clusters or connect to the cluster, go to the [vaibhav-redshift-cluster-1](#) details page.

[View connection credentials](#)

✓ Successfully loaded sample data

To query the sample data, use the Redshift query editor v2.

[Query data](#)

Amazon Redshift > Clusters

In my account

From other accounts

▼ Connect to Redshift clusters

Query data using Redshift query editor

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[Query data](#)

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Driver

JDBC 4.2 without AWS SDK (.jar)

[Download driver](#)

Clusters (1) [Info](#)

Filter results by selecting one or more filters



Query data

Actions

Create cluster

1



Cluster



Cluster namespace



Status



Storage capacity us...



CPU utilization



Snapshots



Notificati...



Tags

In my account | From other accounts

▼ Connect to Redshift clusters

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JDBC 4.2 without AWS SDK (.jar)

[Download driver](#)Clusters (1/1) [Info](#)[Filter clusters by property or value](#)

Query data ▾

Actions ▾

Create cluster

< 1 >

 Cluster

Cluster namespace ▾

Status ▾

Storage capacity us... ▾

CPU utilization ▾

Snapshots ▾

Notifica

 vaibhav-redshift-cluster-1
 dc2.large | 1 node | 160 GB

713217f3-e805-4418-...

Available

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Amazon Redshift X

Amazon Redshift query editor v2 is now available
Query editor v2 provides new features such as multistatement query execution, query parameterization, query versioning, visualizations, and query sharing. [Learn more](#)

Go to query editor v2

Redshift serverless New

Provisioned clusters dashboard

Clusters

Query editor Query editor v2

Queries and loads

Datashares

Configurations

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AWS Marketplace

Alarms

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What's new

Amazon Redshift > Clusters > vaibhav-redshift-cluster-1

vaibhav-redshift-cluster-1

Actions Edit Add partner integration Query data

General information

Cluster identifier	Status	Node type	Endpoint
vaibhav-redshift-cluster-1	Available	dc2.large	vaibhav-redshift-cluster-1.cvc4gn82mnyh.us...
Cluster namespace	Date created	Number of nodes	JDBC URL
713217f3-e805-4418-a840-735c87375d4f	October 14, 2022, 12:34 (UTC+05:30)	1	jdbc:redshift://vaibhav-redshift-cluster-1.cvc...
	Storage used		ODBC URL
	-		Driver={Amazon Redshift (x64)}; Server=vaib...

Cluster performance Query monitoring Schedules Maintenance Properties

► Recommendations (0)
To improve performance and decrease operating costs, the Amazon Redshift Advisor provides recommendations.

► Alarms (0)
CloudWatch alarms are triggered when a metric threshold is met.

► Events (1)
Amazon Redshift tracks events that occur on your cluster.

<https://us-east-1.console.aws.amazon.com/sqlworkbench/home?region=us-east-1#/client/>

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https://us



Services



Amazon Redshift



Redshift serverless [New](#)

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What's new

Redshift query editor v2

Untitled 1

1 select * from category;

 Limit 100 Explain Isolated session valbhav-redshift-clust...

Database

 valbhav-redshift-cluster-1

Queries

Notebooks

(Preview)

Charts

History

dev

public

Tables

category

date

event

listing

sales

users

venue

Views

Result 1 (11)

Chart

Functions

Stored procedu...

sample_data_dev

catid	catgroup	catname	catdesc
2	Sports	NHL	National Hockey League
4	Sports	NBA	National Basketball Assoc...
5	Sports	MLS	Major League Soccer
7	Shows	Plays	All non-musical theatre
9	Concerts	Pop	All rock and pop music co...
10	Concerts	Jazz	All jazz singers and bands
1	Sports	MLB	Major League Baseball
3	Sports	NFL	National Football League
6	Shows	Musicals	Musical theatre
8	Shows	Opera	All opera and light opera
11	Concerts	Classical	All symphony, concerto, a...

Elapsed time: 255 ms Total rows: 11

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Untitled 1

Run Explain Isolated session vaibhav-redshift-clust... dev

```
1 select * from sales where pricepaid > 500;
2
```

Result 1 (100)

userid	eventid	dateid	qtsold	pricepaid	commission	saletime
15	7003	1827	2	708	106.2	2008-01-01 02:30:52
64	6870	1827	2	4192	628.8	2008-01-01 12:59:34
312	6641	1828	2	810	121.5	2008-01-02 09:31:15
47	6884	1828	4	8672	1300.8	2008-01-02 03:20:32
378	6157	1829	3	603	90.45	2008-01-03 01:18:41
12	5309	1829	2	750	112.5	2008-01-03 11:44:23
08	7424	1829	2	692	103.8	2008-01-03 12:10:58
426	3494	1829	4	1640	246	2008-01-03 01:38:23
726	801	1829	4	1616	242.4	2008-01-03 03:01:05
060	1470	1829	2	628	94.2	2008-01-03 05:45:11
251	66	1829	4	1056	157.6	2008-01-03 05:45:27

Elapsed time: 151 ms Total rows: 100

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