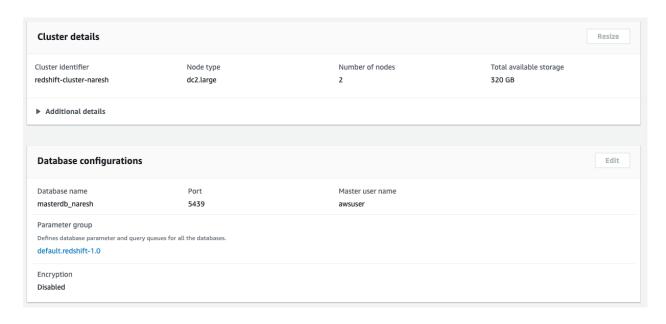




Creation of a RedShift Cluster

Screenshots of the configuration of the RedShift cluster that you have created:







Setting up a database in the RedShift cluster and running queries to create the dimension and fact tables

Queries to create the various dimension and fact tables with appropriate primary and foriegn keys:

```
create schema etl project;
create table etl project.DIM LOCATION(
location VARCHAR(255),
streetname VARCHAR(255),
street number INT,
zipcode INT,
lat DECIMAL(10,3),
lon DECIMAL(10,3),
location id VARCHAR (500),
primary key(location id)
);
create table etl project.dim Atm (
atm id INT,
atm number INT,
atm manufacturer VARCHAR(50),
atm location id VARCHAR (500),
PRIMARY KEY (atm id),
FOREIGN KEY (atm location id) REFERENCES
etl project.DIM LOCATION (location id));
create table etl project.dim date (
year INT,
month VARCHAR (20),
day INT,
hour INT,
weekday VARCHAR (20),
full date time TIMESTAMP,
date id VARCHAR (100),
PRIMARY KEY (date id) ) ;
create table etl project.DIM CARD TYPE (
card type VARCHAR(250),
card type id VARCHAR(250),
```





```
PRIMARY KEY (card type id) ) ;
create table etl project.fact Atm trans (
trans id VARCHAR(255),
atm id INT,
weather loc id VARCHAR (255),
date id VARCHAR (255),
card type id VARCHAR (255),
atm status VARCHAR(20),
currency VARCHAR (50),
service VARCHAR (50),
transaction amount INT,
message code VARCHAR (255),
message text VARCHAR(255),
rain 3h DECIMAL(10,3),
clouds all INT,
weather id INT,
weather main VARCHAR (50),
weather description VARCHAR (255),
PRIMARY KEY (trans id),
FOREIGN KEY (weather loc id) REFERENCES etl project.DIM_LOCATION
(location id),
FOREIGN KEY (atm id) REFERENCES etl project.DIM ATM (atm id),
FOREIGN KEY (date id) REFERENCES etl project.DIM DATE (date id),
FOREIGN KEY (card type id) REFERENCES etl project.DIM CARD TYPE
(card type id)
);
```

Loading data into a RedShift cluster from Amazon S3 bucket

Queries to copy the data from S3 buckets to the RedShift cluster in the appropriate tables

```
-- DIM LOCATION Loading copy etl_project.DIM_LOCATION from 's3://online-atm-trans-naresh/tables/DIM_LOCATION/part-00000-529e4274-5a0e-4f80-88ef-b59621ca8e62-c000.csv'iam_role 'arn:aws:iam::329627341842:role/redshift-s3-access-role-naresh'delimiter ',' region 'us-east-1'CSV IGNOREHEADER 1;
```





```
-- DIM Date Loading
copy etl project.DIM DATE
from 's3://online-atm-trans-naresh/tables/DIM DATE/part-00000-
0a3248a0-e39f-49ff-8918-10da5f53ef79-c000.csv'
iam role 'arn:aws:iam::329627341842:role/redshift-s3-access-
role-naresh'
delimiter ',' region 'us-east-1'
CSV IGNOREHEADER 1;
--DIM CARD TYPE Loading
copy etl project.DIM CARD TYPE
from 's3://online-atm-trans-naresh/tables/DIM CARD TYPE/part-
00000-c903c954-392a-4660-b9bd-3c44520d71f3-c000.csv'
iam role 'arn:aws:iam::329627341842:role/redshift-s3-access-
role-naresh'
delimiter ',' region 'us-east-1'
CSV IGNOREHEADER 1;
--DIM ATM Loading
copy etl project.DIM ATM
from 's3://online-atm-trans-naresh/tables/DIM ATM/part-00000-
6b338c0d-8505-44d4-862c-6592f6a1a3ab-c000.csv'
iam role 'arn:aws:iam::329627341842:role/redshift-s3-access-
role-naresh'
delimiter ',' region 'us-east-1'
CSV IGNOREHEADER 1;
--FACT ATM TRANS Loading
copy etl project.fact Atm trans
from 's3://online-atm-trans-naresh/tables/FACT ATM TRANS/part-
00000-3080fae6-0664-4aa8-8b20-137b997e1f9c-c000.csv'
iam role 'arn:aws:iam::329627341842:role/redshift-s3-access-
role-naresh'
delimiter ',' region 'us-east-1'
CSV IGNOREHEADER 1;
```