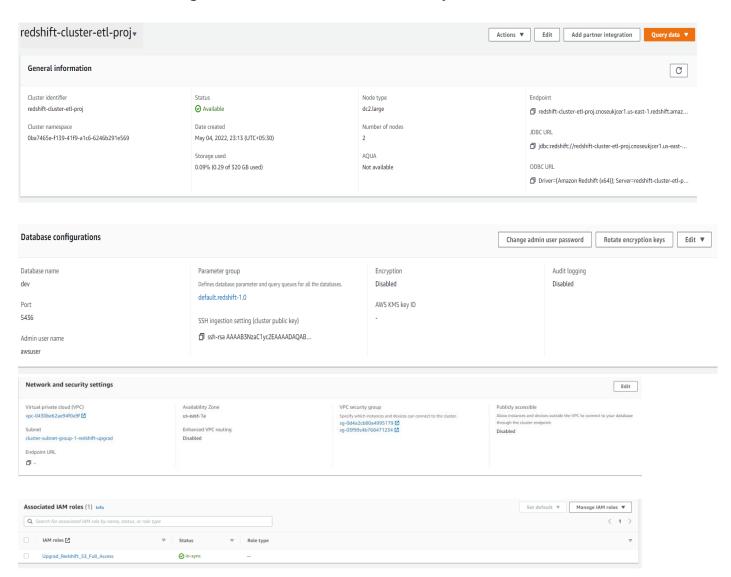




Creation of a Redshift Cluster

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 foreign keys:

create schema etl_project;





create table etl_project.location_dim(
location_id integer not null distkey sortkey,
location varchar(30),
streetname varchar(30),
street_number integer,
zipcode integer,
lat decimal(10,3),
lon decimal(10,3));

create table etl_project.atm_dim(
atm_id integer not null distkey sortkey,
atm_number integer,
atm_manufacturer varchar(30),
atm_location_id integer,
street_number integer);

create table etl_project.date_dim(
date_id date not null distkey sortkey,
full_date_time timestamp,
year integer,
month varchar(20),
day integer,
hour integer,
weekday varchar(20));

create table etl_project.card_type_dim(card_type_id integer not null distkey sortkey, card_type varchar(30));

-- TRANSCATION TABLE:





create table etl_project.atm_trans_fact(trans_id bigint not null distkey sortkey, atm_id integer, weather_loc_id integer, date_id date, card_type_id integer, atm_status varchar(20), currency varchar(10), service varchar(20), message_code varchar(255), message_text varchar(255), rain_3h decimal(10,3), clouds_all integer, weather_id integer, weather_main varchar(50), weather_description varchar(255), transaction_amount integer);

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

copy etl_project.location_dim from 's3://etl-proj/location-dimension/location_dim.csv/' iam_role 'arn:aws:iam::521912254229:role/Upgrad_Redshift_S3_Full_Access' delimiter ',' region 'us-east-1' IGNOREHEADER 1;

copy etl_project.atm_dim from 's3://etl-proj/location-dimension/atm_dim.csv/' iam_role 'arn:aws:iam::521912254229:role/Upgrad_Redshift_S3_Full_Access' delimiter ',' region 'us-east-1' IGNOREHEADER 1;

copy etl_project.date_dim from 's3://etl-proj/date-dimension/date_dim.csv/' iam_role 'arn:aws:iam::521912254229:role/Upgrad_Redshift_S3_Full_Access'





delimiter ',' region 'us-east-1' IGNOREHEADER 1;

copy etl_project.card_type_dim from 's3://etl-proj/card-type-dimension/card_type_dim.csv/' iam_role 'arn:aws:iam::521912254229:role/Upgrad_Redshift_S3_Full_Access' delimiter ',' region 'us-east-1' IGNOREHEADER 1;

copy etl_project.atm_trans_fact from 's3://etl-proj/transaction-fact/atm_trans_fact.csv/' iam_role 'arn:aws:iam::521912254229:role/Upgrad_Redshift_S3_Full_Access' delimiter ',' region 'us-east-1' IGNOREHEADER 1;