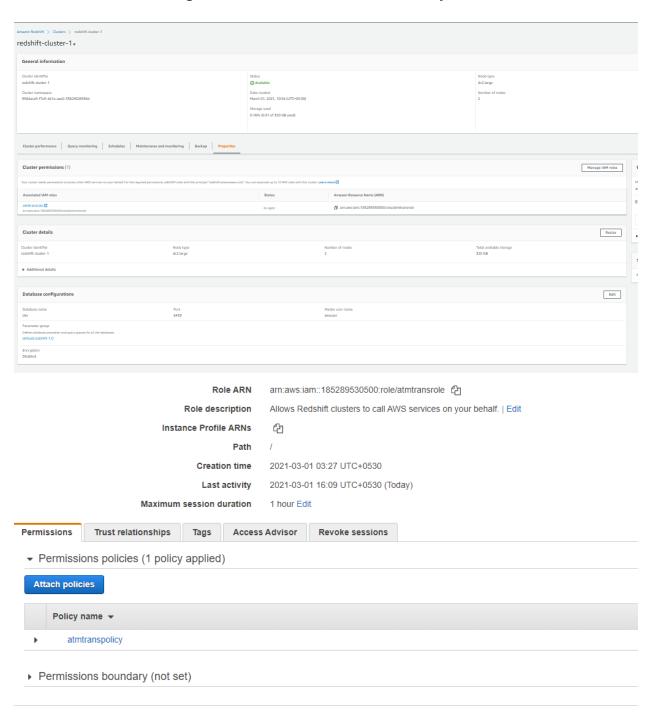# Creation of a RedShift Cluster

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 atm_trans;

```
create table atm_trans.card_type(
        cardtype_text varchar(30),
        cardtype_id integer not null distkey);

create table atm_trans.location(
        loc_id integer not null distkey,
        location_text varchar(50),
        street_name varchar(255),
        street_number integer,
        zipcode integer,
        latitude decimal(10,3),
        longitude decimal(10,3));

create table atm_trans.atm(
        atm_number varchar(20),
        atm_manufacturer varchar(50),
        atm_location_id integer,
        atm_id integer not null distkey);

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

create table atm_trans.fact(
        trans_id bigint not null distkey,
        atm_id integer,
        weather_loc_id integer,
        date_id integer,
        card_type_id integer,
        atm_status varchar(20),
```

```
        currency varchar(10),
        service varchar(20),
        transaction_amount integer,
        msg_code varchar(255),
        msg_text varchar(255),
        rain_3h decimal(10,3),
        clouds_all decimal(10,3),
        weather_id integer,
        weather_main varchar(50),
        weather_description varchar(255));
```

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 atm_trans.fact from
'**s3://atmtransbucket/fact_text/part-00160-4537dfe4-3a2e-425e-a4cb-8334a4073301-c000.csv'**
iam_role 'arn:aws:iam::185289530500:role/atmtransrole'
delimiter '|' region 'us-east-1';
similarly 13 other fact .csv files were loaded.

copy atm_trans.date from
'**s3://atmtransbucket/time/part-00000-5bfac5d1-6322-4676-be9d-b7463f3b31be-c000.csv'**
iam_role 'arn:aws:iam::185289530500:role/atmtransrole'
delimiter ',' region 'us-east-1' timeformat 'YYYY-MM-DD HH:MI:SS';

copy atm_trans.atm from
'**s3://atmtransbucket/atm/part-00000-217091df-516c-4eb8-ab46-9a9c0e60a4f4-c000.csv'**
iam_role 'arn:aws:iam::185289530500:role/atmtransrole'
delimiter ',' region 'us-east-1';

copy atm_trans.location from
'**s3://atmtransbucket/loc/part-00000-f76d78e5-af0a-4bcf-a427-4ec84c8efe44-c000.csv'**
iam_role 'arn:aws:iam::185289530500:role/atmtransrole'
delimiter ',' region 'us-east-1';

copy atm_trans.card_type from
'**s3://atmtransbucket/cardtype/part-00000-d358f45a-94a6-49e1-bb70-5db05b2ef106-c000.csv'**
iam_role 'arn:aws:iam::185289530500:role/atmtransrole'
delimiter ',' region 'us-east-1';