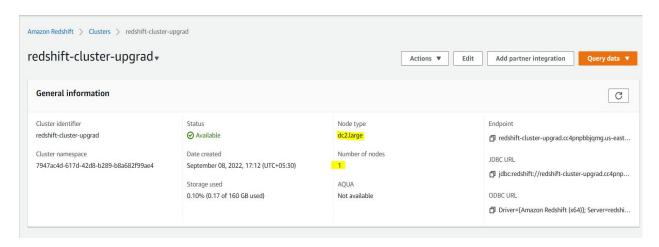




## Creation of a Redshift Cluster

## 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 TABLE IF NOT EXISTS public.dim atm
      atm number INTEGER NOT NULL
      ,atm manufacturer VARCHAR(255) NOT NULL
      ,location_id VARCHAR(255) NOT NULL
      ,PRIMARY KEY (atm_number)
)
CREATE TABLE IF NOT EXISTS public.dim card type
      card type VARCHAR(255) NOT NULL
      ,PRIMARY KEY (card_type)
)
CREATE TABLE IF NOT EXISTS public.dim date
      year INTEGER
      ,month VARCHAR(255)
      ,day INTEGER
      ,hour INTEGER
      ,weekday VARCHAR(255) NOT NULL
      ,date_id BIGINT NOT NULL
      ,PRIMARY KEY (date_id)
)
CREATE TABLE IF NOT EXISTS public.dim location
      location VARCHAR(255) NOT NULL
      ,lat INTEGER NOT NULL
      ,lon INTEGER NOT NULL
      ,streetname VARCHAR(255) NOT NULL
      street number INTEGER NOT NULL
      ,zipcode INTEGER NOT NULL
      ,PRIMARY KEY (location)
)
```





```
CREATE TABLE fact atm trans (
       year int,
       month varchar(255),
       day int,
       weekday varchar(255),
       hour int,
       atm status varchar(255),
       atm_number int,
       atm manufacturer varchar (255),
       location varchar(255),
       streetname varchar(255),
       street number int,
       zipcode int,
       lat int,
       lon int.
       currency varchar(255),
       card type varchar(255),
       transaction amount int,
       service varchar(255),
       message code varchar(255),
       message text varchar(255),
       weather lat float,
       weather_lon float,
       weather city id int,
       weather_city_name varchar(255),
       temp float,
       pressure int,
       humidity int,
       wind_speed int,
       wind deg int,
       rain_3h float,
       clouds all int,
       weather id int,
       weather main varchar(255),
       weather description varchar(255),
       id bigint NOT NULL PRIMARY KEY
);
```

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 fact\_atm\_trans from 's3://myfactanddimensiontables/fact\_table/part-00000-114b1950-24fb-4913-a261-382929abad53-c000.csv'





access\_key\_id 'AKIAVEEUOLOSHHEPNDUG' secret\_access\_key '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' delimiter '|' null as """ TIMEFORMAT 'auto';

copy dim\_date from 's3://myfactanddimensiontables/dim\_date/part-00000-f8de88cd-2b78-45c0-8205-5cbfb81e427c-c000.csv'

access key id 'AKIAVEEUOLOSHHEPNDUG' secret access key

'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' delimiter ',' TIMEFORMAT 'auto';

copy dim\_location from 's3://myfactanddimensiontables/dim\_location/part-00000-056c6f89-b82c-4a25-9d01-914579cb76c2-c000.csv'

access\_key\_id 'AKIAVEEUOLOSHHEPNDUG' secret\_access\_key

'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' delimiter ',' TIMEFORMAT 'auto';

copy dim\_atm from 's3://myfactanddimensiontables/dim\_atm/part-00000-dc455089-945f-46b9-9b72-e6a014286858-c000.csv'

access key id 'AKIAVEEUOLOSHHEPNDUG' secret access key

'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' delimiter ',' TIMEFORMAT 'auto';

copy dim\_card\_type from 's3://myfactanddimensiontables/dim\_card\_type/part-00000-bcd13f88-33b0-4067-bbca-e41060c7d912-c000.csv'

access key id 'AKIAVEEUOLOSHHEPNDUG' secret access key

'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' delimiter ',' TIMEFORMAT 'auto';