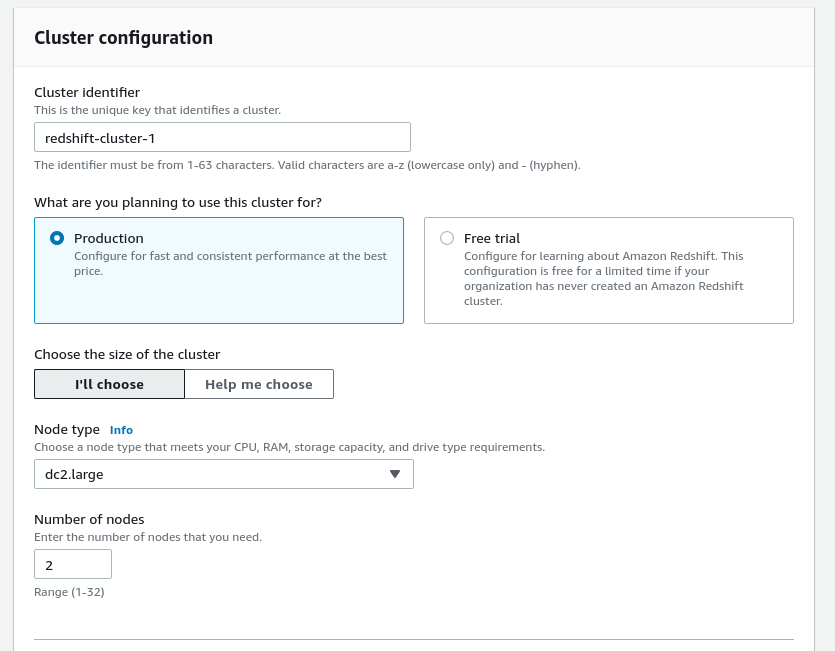
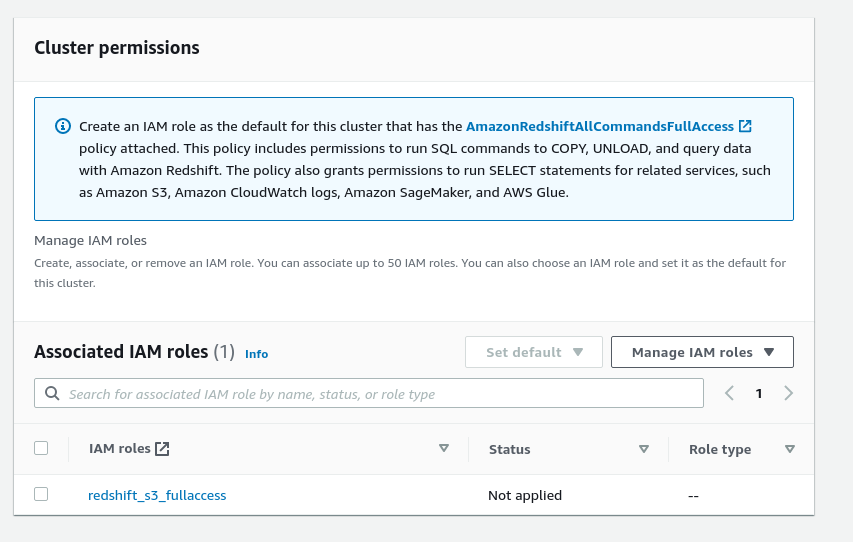
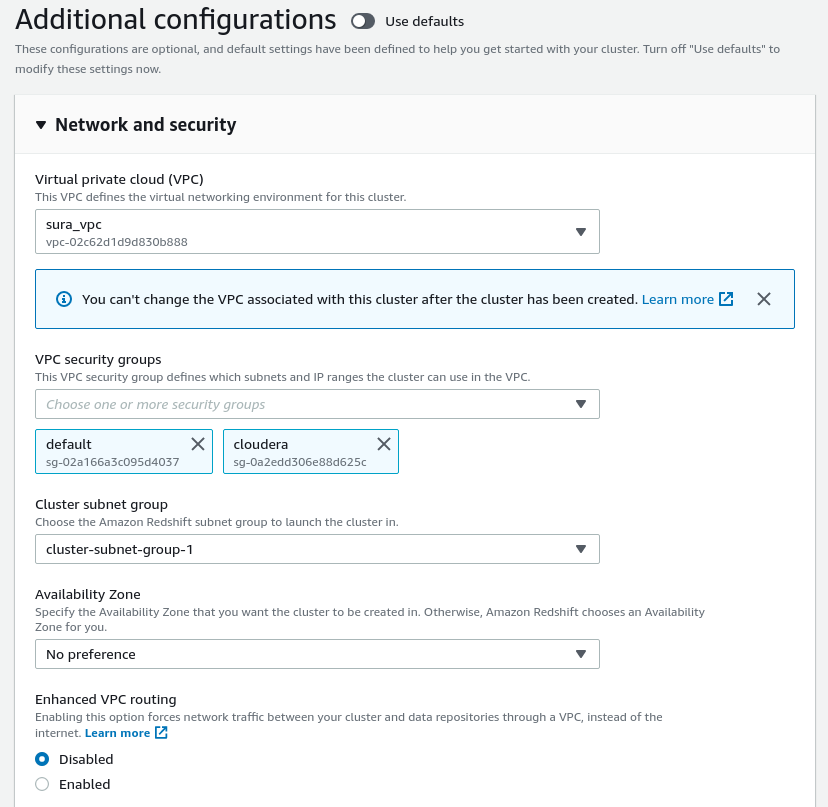
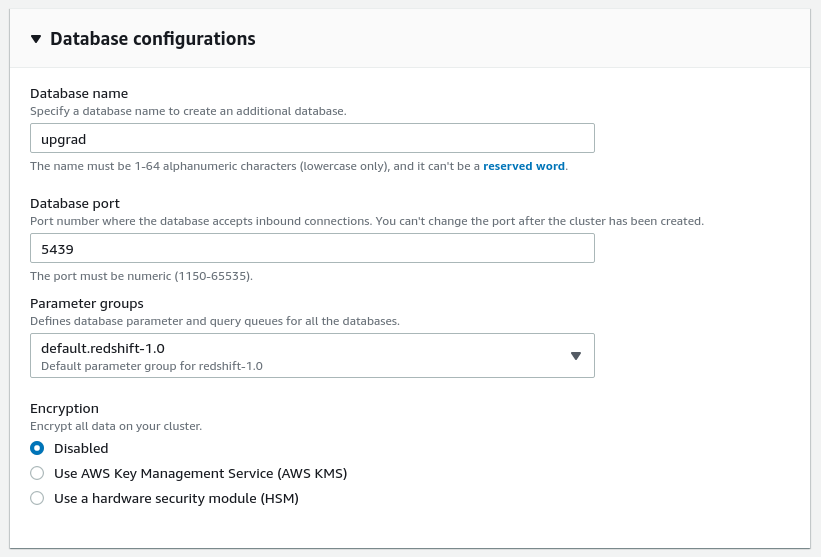
**Creation of Redshift cluster**









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

create schema atm\_new\_trans;

drop table if exists atm\_new\_trans.dim\_date;

create table atm\_new\_trans.dim\_date

(

date\_id integer not null,

year integer,

month varchar(20),

day integer,

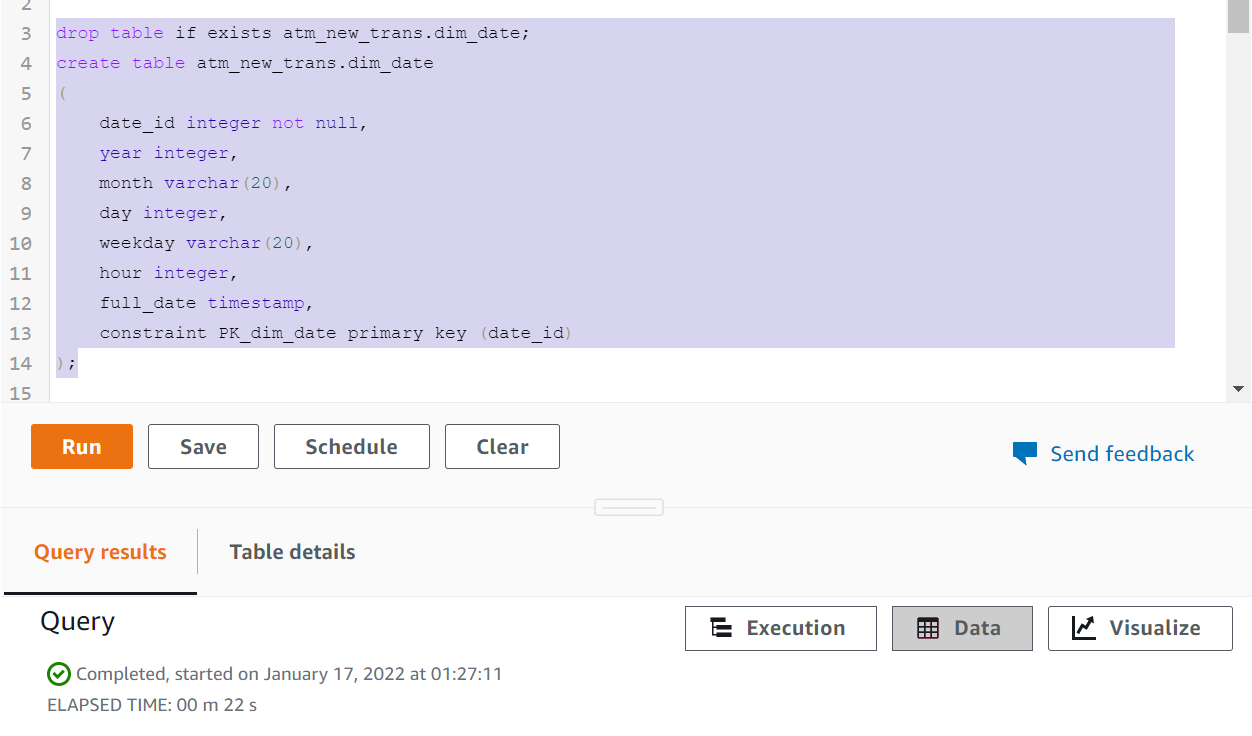
weekday varchar(20),

hour integer,

full\_date timestamp,

constraint PK\_dim\_date primary key (date\_id)

);



drop table if exists atm\_new\_trans.dim\_location;

create table atm\_new\_trans.dim\_location

(

location\_id integer not null,

location varchar(50),

streetname varchar(255),

street\_number integer,

zipcode integer,

lat decimal(10, 3),

lon decimal(10, 3),

constraint PK\_dim\_location primary key (location\_id)

);

Graphical user interface, text, application, email

Description automatically generated

drop table if exists atm\_new\_trans.dim\_atm;

create table atm\_new\_trans.dim\_atm

(

atm\_id integer not null,

atm\_number varchar(20),

atm\_manufacturer varchar(255),

location\_id integer,

constraint PK\_dim\_atm primary key (atm\_id),

constraint FK\_dim\_atm foreign key (location\_id) references atm\_new\_trans.dim\_location(location\_id)

);

Graphical user interface, text, application, email

Description automatically generated

drop table if exists atm\_new\_trans.dim\_card\_type;

create table atm\_new\_trans.dim\_card\_type

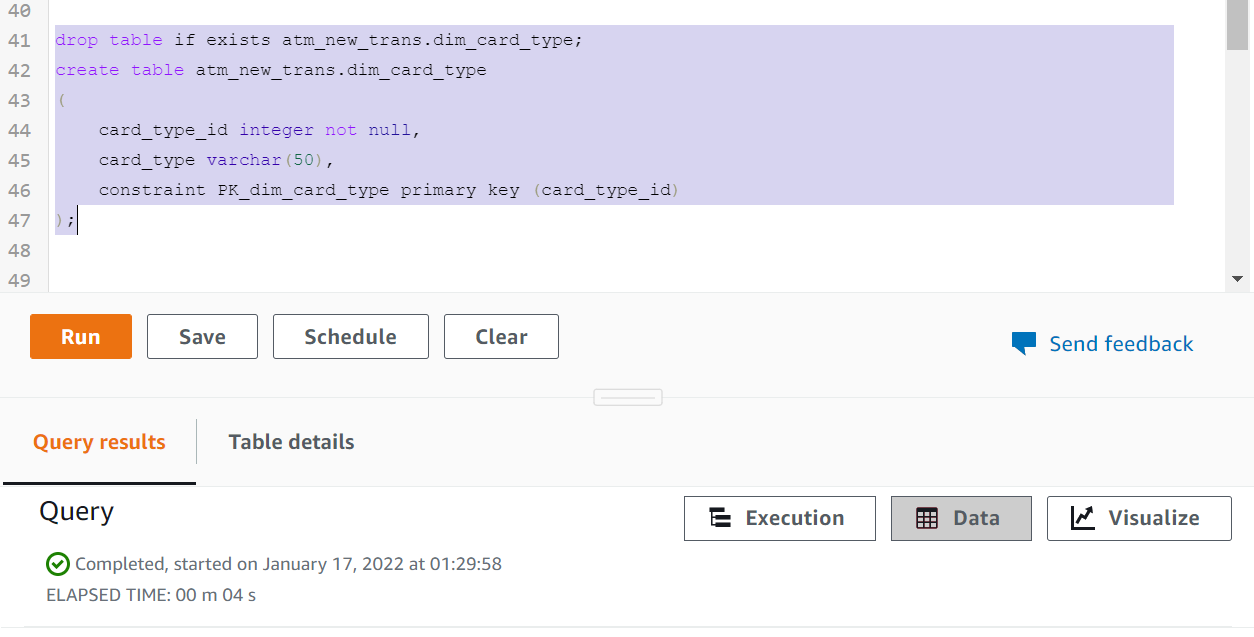
(

card\_type\_id integer not null,

card\_type varchar(50),

constraint PK\_dim\_card\_type primary key (card\_type\_id)

);



drop table if exists atm\_new\_trans.transaction\_fact cascade;

create table atm\_new\_trans.transaction\_fact

(

trans\_id bigint not null,

date\_id integer,

atm\_status varchar(20),

atm\_id integer,

currency varchar(10),

card\_type\_id integer,

transaction\_amount integer,

service varchar(50),

message\_code varchar(255),

message\_text varchar(255),

weather\_loc\_id integer,

rain\_3h decimal(10, 3),

clouds\_all integer,

weather\_id integer,

weather\_main varchar(255),

weather\_description varchar(255),

constraint PK\_transaction\_fact primary key (trans\_id),

constraint FK\_atm foreign key (atm\_id) references atm\_new\_trans.dim\_atm(atm\_id),

constraint FK\_card\_type foreign key (card\_type\_id) references atm\_new\_trans.dim\_card\_type(card\_type\_id),

constraint FK\_location foreign key (weather\_loc\_id) references atm\_new\_trans.dim\_location(location\_id),

constraint FK\_date foreign key (date\_id) references atm\_new\_trans.dim\_date(date\_id)

);

Graphical user interface, text, application, email

Description automatically generated

**Loading data into a RedShift cluster from Amazon S3 bucket**

copy atm\_new\_trans.dim\_atm

from 's3://atmtransdata/atmtrans\_v2/dim\_atm.csv'

iam\_role 'arn:aws:iam::823888918855:role/redshift\_s3\_fullaccess'

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

CSV;

Graphical user interface, text, application, email

Description automatically generated

copy atm\_new\_trans.dim\_location

from 's3://atmtransdata/atmtrans\_v2/dim\_location.csv'

iam\_role 'arn:aws:iam::823888918855:role/redshift\_s3\_fullaccess'

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

CSV;

Graphical user interface, text, application

Description automatically generated

copy atm\_new\_trans.dim\_card\_type

from 's3://atmtransdata/atmtrans\_v2/dim\_card\_type.csv'

iam\_role 'arn:aws:iam::823888918855:role/redshift\_s3\_fullaccess'

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

CSV;

Graphical user interface, text, application, email

Description automatically generated

copy atm\_new\_trans.dim\_date

from 's3://atmtransdata/atmtrans\_v2/dim\_date.csv'

iam\_role 'arn:aws:iam::823888918855:role/redshift\_s3\_fullaccess'

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

timeformat 'YYYY-MM-DDTHH:MI:SS'

CSV;

Graphical user interface, text, application, email

Description automatically generated

copy atm\_new\_trans.transaction\_fact

from 's3://atmtransdata/atmtrans\_v2/transaction\_fact.csv'

iam\_role 'arn:aws:iam::823888918855:role/redshift\_s3\_fullaccess'

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

CSV;

Graphical user interface, text, application

Description automatically generated