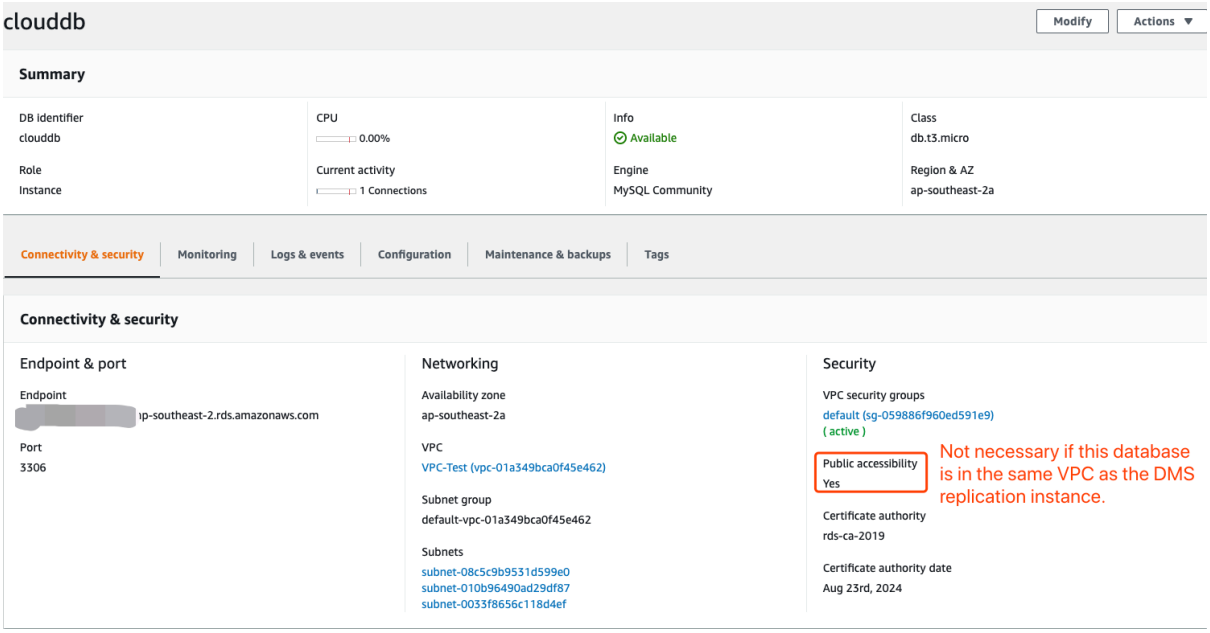
Database Migration Using DMS

Step 1: Create Target Database

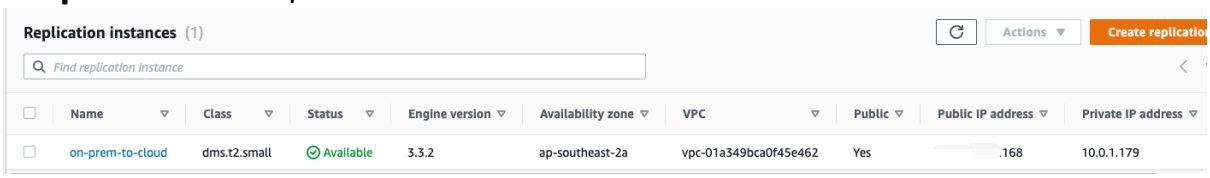
Here, we created a database in Amazon RDS with identifier **clouddb**

This database will to be in the same VPC as the DMS replication instance we create in following steps.

Notice: in the security group inbound rule, we need to allow the DMS replication instance to access port 3306 for MySQL database connection.

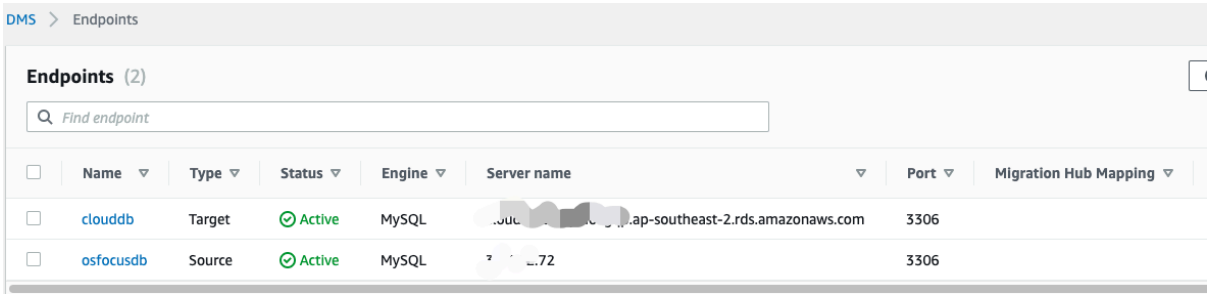


Step 2: Create a replication instance



We put it in the same VPC as clouddb created in Step 1.

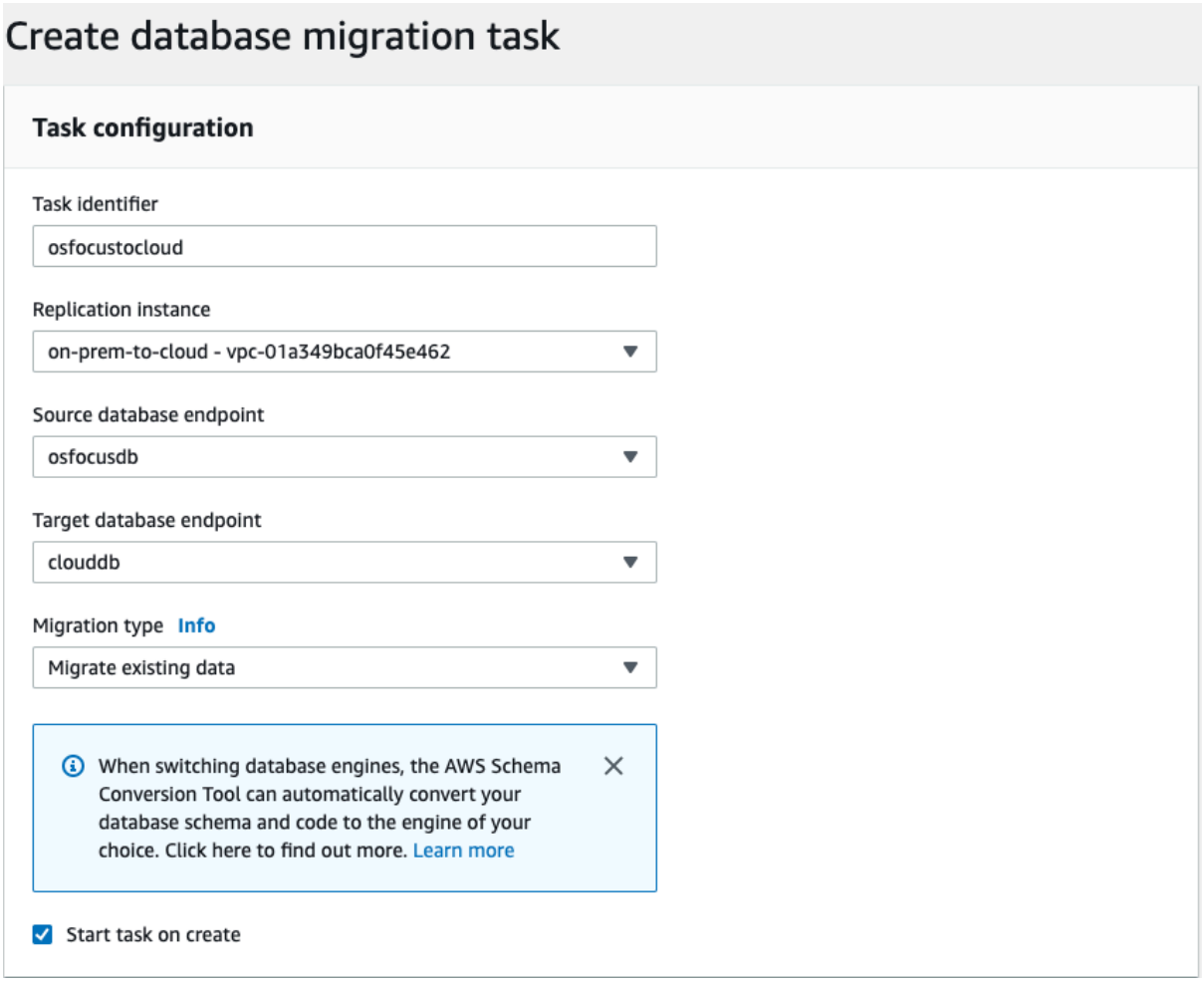
Step 3: Create source and target end points in AWS DMS



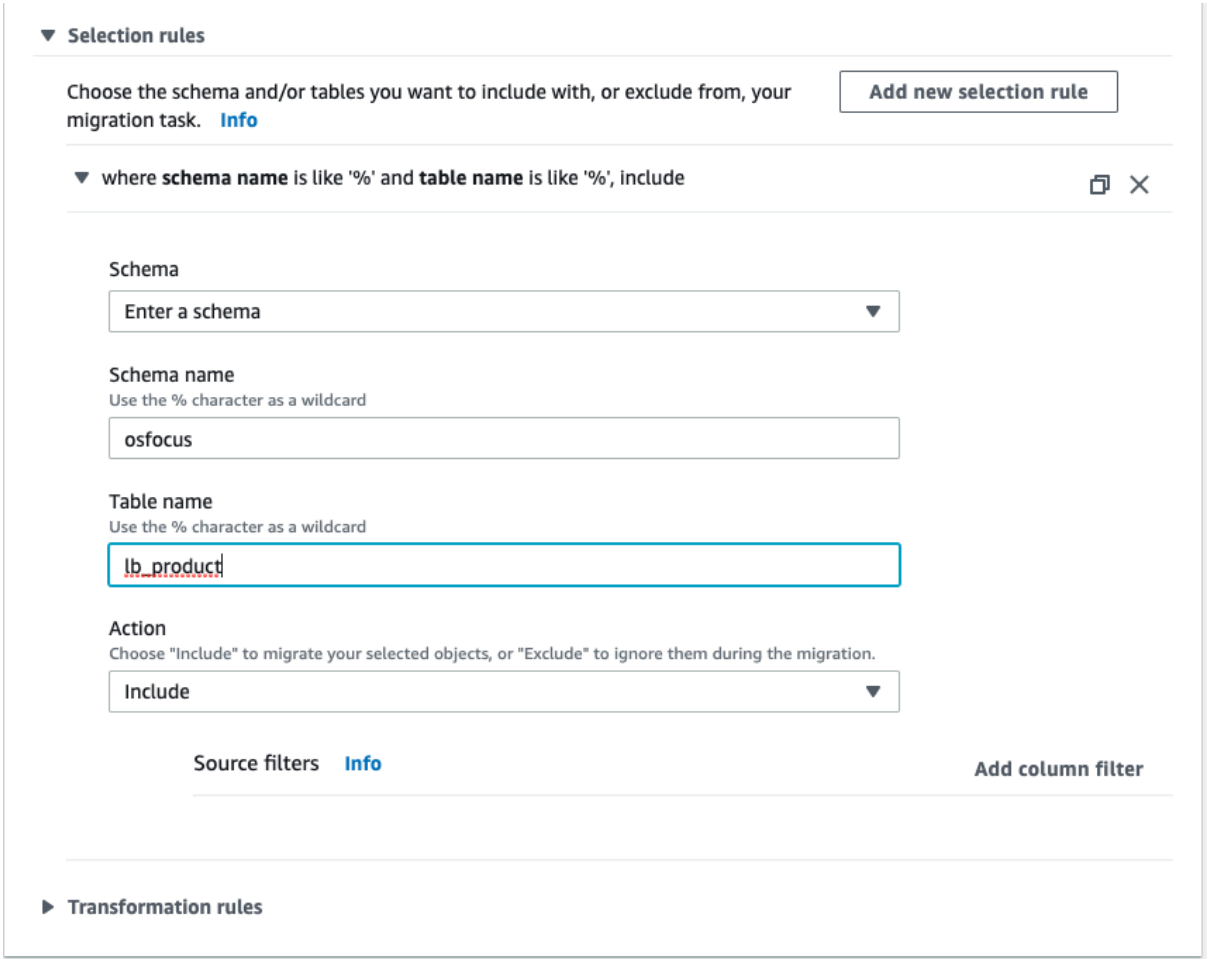
We need to make sure these two end points are accessible.

We can run tests during creation process to validate its accessibility.

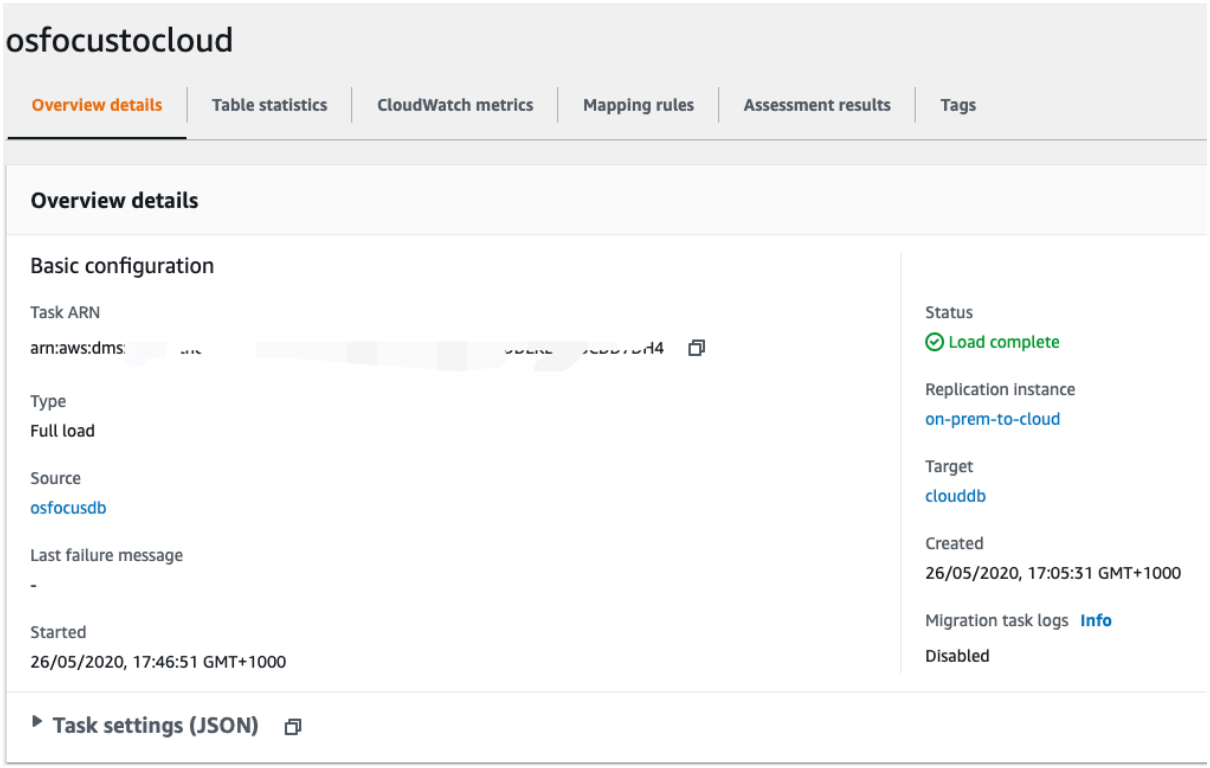
Step 4: Create a Database migration tasks



Besides filling with end points, we can specific which schema and table we want to migrate. For example:



Step 5: Start Migration



Before & After

```
mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| innodb             |
| mysql              |
| performance_schema |
| sys                |
+--------------------+
5 rows in set (0.01 sec)

mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| awsdms_control     |
| innodb             |
| mysql              |
| osfocus            |
| performance_schema |
| sys                |
+--------------------+
7 rows in set (0.00 sec)

mysql> use osfocus
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> show tables;
+------------------+
| Tables_in_osfocus |
+------------------+
| lb_product       |
+------------------+
1 row in set (0.01 sec)

mysql> select count(*) from lb_product
    -> ;
+----------+
| count(*) |
+----------+
|   255770 |
+----------+
1 row in set (0.10 sec)
```

Step 6: Full Migration

Change the table name to % in selection rules of migration task to have full migration.

Notice: we need to select Full LOB mode, and specific the related LOB chunk size(kb), otherwise there will be errors, such as migrating MEDIUMTEXT or LONGTEXT datatype.
More detail please refer to:
https://docs.aws.amazon.com/dms/latest/userguide/CHAP_Source.MySQL.html