

# Project Provisioning, Permissions and Environment Promotions

Reference:

## Dataset Provisioning

The Electronic Batch project uses the Data Ocean Domains of **Industrial, HR, Structure, & Procurement**

In each domain environment, the dataset **DS\_prj\_data\_sad\_ebatch** must be created.

This can be done with the following SQL statement

```
CREATE SCHEMA IF NOT EXISTS DS_prj_data_sad_ebatch OPTIONS (location="EU")
```

On the Ebatch Projects (prj-data-sad-ebatch-(prod/ppd/test/dev)) the following datasets need to be created: **STG, ODS, ODS\_DataOcean, DataOcean, DM**

```
SELECT 1 from region-eu.INFORMATION_SCHEMA.TABLES GROUP BY 1;
```

```
CREATE SCHEMA IF NOT EXISTS DM OPTIONS (location="EU");
```

```
CREATE SCHEMA IF NOT EXISTS STG OPTIONS (location="EU");
```

```
CREATE SCHEMA IF NOT EXISTS ODS OPTIONS (location="EU");
```

```
CREATE SCHEMA IF NOT EXISTS ODS_DataOcean OPTIONS (location="EU");
```

```
CREATE SCHEMA IF NOT EXISTS DataOcean OPTIONS (location="EU");
```

## Dataset Access Management Permissions

All actions concerning permissions and dataset authorization are manual actions that only need to be performed one time.

The dataset **DM** on the Ebatch project must be added as an authorized view to the dataset **STG, ODS, ODS\_DataOcean, & DataOcean**

These datasets must be shared with the webapp service account [sa-bqsync@prj-ebatch-{env}.iam.gserviceaccount.com](mailto:sa-bqsync@prj-ebatch-{env}.iam.gserviceaccount.com) with the permission **BigQuery Data Viewer**.

On the project level, the same service account [sa-bqsync@prj-ebatch-{env}.iam.gserviceaccount.com](mailto:sa-bqsync@prj-ebatch-{env}.iam.gserviceaccount.com) must have **BigQuery Job User** permission.

On the **Industrial and HR** domains, this dataset: **DS\_prj\_data\_sad\_ebatch** must be added as an authorized dataset on the datasets **ODS & STG**.

On the **Procurement and Structure** domains, this dataset must be added as an authorized dataset on the dataset **DM**.

Additionally, on the **Industrial and HR** domains, the dataset **DS\_prj\_data\_sad\_ebatch** must add the dataset **ODS\_DataOcean** on ebatch project as an authorized dataset.

On

Pay special note that the environments (prod/ppd/test/dev) match between the domains and ebatch project.

EbatchWep App Service account  
 sa-bqsync@prj-ebatch-(env).iam.gserviceaccount.com  
 Permissions BigQuery DataViewer & BigQuery Job User



# Environment Promotion

## Domains

When promoting changing between environments, the most simple procedure is to take the DDL statements from the lower level environment, and create new DDL statements for the higher level environment

To do this, use the example query to generate DDL statements from the **DEV** environment for **TEST** environment for the domains.

If moving from **TEST** to **PPD**, simply modify the items in bold.

Running this query will produce the necessary queries to run on each project to update the views.

WITH

view\_ddl AS (

SELECT

table\_catalog,

ddl

FROM

`prj-data-dm-industrial-**dev**.DS\_prj\_data\_sad\_ebatch.INFORMATION\_SCHEMA.TABLES`

WHERE

table\_type = 'VIEW'

UNION ALL

SELECT

table\_catalog,

ddl

FROM

`prj-data-dm-hr-**dev**.DS\_prj\_data\_sad\_ebatch.INFORMATION\_SCHEMA.TABLES`

WHERE

```

table_type = 'VIEW'
UNION ALL
SELECT
table_catalog,
ddl
FROM
`prj-data-dm-structure-dev.DS_prj_data_sad_ebatch.INFORMATION_SCHEMA.TABLES`
WHERE
table_type = 'VIEW'
UNION ALL
SELECT
table_catalog,
ddl
FROM
`prj-data-dm-procurement-dev.DS_prj_data_sad_ebatch.INFORMATION_SCHEMA.TABLES`
WHERE
table_type = 'VIEW' )
SELECT
table_catalog AS project_id,
STRING_AGG( CONCAT( "CREATE OR REPLACE VIEW `", REPLACE( REGEXP_EXTRACT(ddl, r"([\^]+)"), "dev", "test" ), "`", SUBSTR(ddl, INSTR(ddl, "`", INSTR(ddl, "`" ) + 1) + 1) ), '\n\n' ) AS modified_ddl
FROM
view_ddl
GROUP BY
project_id;

```

## Ebatch Product

The same process can be applied to the Ebatch project by running this query.

This example generates the DDL statements from **DEV** for **TEST**

Think to update the environments listed in **Bold** if changing between other environments.

```

WITH view_ddl AS (
SELECT
table_name,
ddl
FROM
`prj-data-sad-ebatch-dev.DataOcean.INFORMATION_SCHEMA.TABLES`
WHERE
table_type = 'VIEW'

```

```
)  
SELECT  
STRING_AGG(  
  CONCAT(  
    "CREATE OR REPLACE VIEW `",  
    REPLACE(  
      REGEXP_EXTRACT(ddl, r'^([^\s]+)'),  
      "-dev",  
      "-test"  
    ),  
    "`",  
    SUBSTR(  
      REPLACE(  
        SUBSTR(ddl, INSTR(ddl, "`", INSTR(ddl, "`") + 1) + 1),  
        "-dev",  
        "-test"  
      ),  
      1  
    )  
  ),  
  '\n\n'  
) AS modified_ddl  
FROM  
view_ddl;
```