MIGRATION PORTAL

FREQUENTLY ASKED QUESTIONS

1. I have assessed my schema with 100% success. What can I do next?

Once you have assessed all your schemas with 100% success, you can either export the Advanced Server compatible DDLs in a .sql file and use any of client application such as pgAdmin, ToadEdge, or PSQL client to create the schema in target EPAS server or you can directly migrate your schema to a Cloud Database Service (CDS) Cluster. For more information about Cloud Database Service, see EDB Postgres CDS documentation.

You can also move data from Oracle to Postgres using EDB Migration Toolkit. For more information, see EDB Migration Toolkit.

DEPLOYMENT EXAMPLE
Following is the example to use EDB-PSQL to deploy exported DDLs for schema HR:
edb=# \i <path_to_file>/ProjHR_hr.sql

DATA MIGRATION EXAMPLES IN ONLINE MODE
Following are the examples of data migration in online mode:

JDBC COPY API
/runMTK.sh –sourcedbtype oracle –targetdbtype enterprisedb –targetSchema HR –dataOnly –truncLoad HR

-copyViaDBLinkOra module
The dblink_ora module provides Advanced Server-to-Oracle connectivity at the SQL level. A dblink_ora is bundled and installed as a part of the Advanced Server database installation. The dblink_ora utilizes the COPY API method to transfer data between databases. This method is considerably faster than the JDBC COPY method.
./runMTK.sh –sourcedbtype oracle –targetdbtype enterprisedb –targetSchema
HR –copyViaDBLinkOra –dataOnly –truncLoad HR

SQL INSERT statements
SQL INSERT statements for each row in the table
./runMTK.sh –sourcedbtype oracle –targetdbtype enterprisedb –dataOnly –truncLoad –safeMode HR

DATA MIGRATION EXAMPLES IN OFFLINE MODE
Following are the examples of data migration in offline mode:

.cpy (copy) files
To generate the .cpy (copy) files, run the following command:
./runMTK.sh –sourcedbtype oracle –targetdbtype enterprisedb –targetSchema HR – dataOnly –offlineMigration /data_folder/hr_schema/ HR
Note: Only one file per table is generated.

Inserts as SQL Statements
To generate Inserts as SQL Statements, run the following command:
./runMTK.sh –sourcedbtype oracle –targetdbtype enterprisedb –targetSchema HR –dataOnly –safeMode –offlineMigration /data_folder/hr_schema/ HR
Note: Only one file per table is generated.

-singleDataFile keyword
To generate a single file that contains the data from all tables, run the following command:
./runMTK.sh –sourcedbtype oracle –targetdbtype enterprisedb – targetSchema HR –dataOnly –safeMode –singleDataFile –offlineMigration /data_folder/hr_schema/ HR

EDB POSTGRES

INSERTING DATA IN TABLES IN EDB POSTGRES

COPY COMMAND

The following example deploys exported DDLs for schema HR using EDB-PSQL.

edb=# COPY hr.locations FROM '/data_folder/hr_schema/mtk_hr_locations_data.cpy';

SQL FILE

edb=# \i /data_folder/hr_schema/mtk_hr_locations_data.sql

ONLINE RESOURCES

- EDB Postgres CDS
- EDB Migration Toolkit

2. What can I do when some of my objects failed to transform during assessment?

The EDB Postgres Migration Portal uses Repair Handlers to transform object DDLs to make them EDB Postgres compatible. In case, there are some failed objects, one needs to check the error in the Output window and refer KB or online documentation to resolve the error. One can post a query on the postgresrocks.com forum as well and someone from EDB will respond with possible solutions. In case of errors, you can check the error details in the Assessment output, and based on the error type, you can take one of the following options:

- Apply the fix and run the assessment.
- Refer to the Knowledge Base table on the Migration Portal, to resolve the errors.
- Refer to the Knowledge Base table on the Migration Portal, to resolve the errors.
- In case you do not find a solution in the Knowledge Base and the online documentation, you can post your query on the PostgresRocks.com forum, and the EDB team member will respond with a possible solution.

In the following example, the DDL uses Oracle's BITAND function. However, EDB Postgres does not support the BITAND function.

To remove the incompatibilities complete the following steps:

1. Create a project in EDB Postgres Migration Portal, and upload the extracted script from Oracle, and click Create & Assess.

2. After completion of the assessment, if there are any object failures, check the error details.

3. Oracle supports the BITAND function; however, Advanced Server does not support it. You can enter the BITAND keyword in the Knowledge Base section and look for the workaround for the BITAND function, which suggests using the & operator instead of BITAND function.

3. Does EDB Postgres Migration Portal connect to Oracle via Application Interface?

No. EDB Postgres Migration Portal does not connect to the Source database. Migration Portal requires the script generated by Extractor Utility, edb_ddl_extractor.sql. The utility uses Oracle's dbms_metadata package to extract definitions of different object types from database. The extracted files must be uploaded to EDB Postgres Migration Portal. For more information see, Quick Start Guide.

Note: We recommend to execute edb_ddl_extractor in Oracle SQL*PLUS.

4. Can I run an Oracle-extracted file directly in EDB Postgres?

No, the script file extracted from Oracle contains syntax, which is not compatible with EDB Postgres. The Migration Portal transforms the extracted objects to make them compatible with EDB Postgres.

The following samples display how Migration Portal automatically applies repair handlers to make objects compatible with EDB Postgres:

Table as extracted from Oracle

1: Migration Portal applied two repair handlers ERH 2005 (Using Index Enable) and ERH 2009 (Enable) for making the object compatible with EDB Postgres.

> HRM > Tables > CUSTOMERS

Source

```
1  CREATE TABLE "HRM"."CUSTOMERS"
2    (    "ID" NUMBER(3,0) NOT NULL ENABLE,
3     "NAME" VARCHAR2(30) NOT NULL ENABLE,
4     "AGE" NUMBER NOT NULL ENABLE,
5     "ADDRESS" VARCHAR2(20) NOT NULL ENABLE,
6     "SALARY" CHAR(2) NOT NULL ENABLE,
7      PRIMARY KEY ("ID")
8   USING INDEX  ENABLE
9     ) ;
```

Target

```
1  CREATE TABLE HRM.CUSTOMERS
2    (    ID NUMBER(3,0) NOT NULL ,
3     "name" VARCHAR2(30) NOT NULL ,
4     AGE NUMBER NOT NULL ,
5     ADDRESS VARCHAR2(20) NOT NULL ,
6     SALARY CHAR(2) NOT NULL ,
7      PRIMARY KEY (ID) )  ;
```

⟳ Reassess

Output   Repaired

```
Migration Portal applied following repair actions
  └ ◎ ERH-2005 deleted [USING INDEX <CREATE INDEX CLAUSE> ENABLE]
  └ ◎ ERH-2009 deleted [ENABLE]

  -- TABLE CUSTOMERS is compatible with EDB Postgres Advanced Server
```

5. Can I transform Oracle schema for PostgreSQL using EDB Postgres Migration Portal to deploy on the PostgreSQL server?

No, you can assess your source schema only against EDB Postgres. The downloaded script can only be deployed on the respective EDB Postgres version.

6. Which EDB Postgres versions are supported?

Migration Portal supports EDB Postgres 10 onwards as of now. And as and when a newer version of EDB Postgres is available, its support will be added to Migration Portal.

EDB POSTGRES

7. Unable to find the option to migrate from SQL Server on the EDB Postgres Migration Portal.

Migration from SQL Server and other legacy databases will be supported in future versions. The current version allows only migration from Oracle. In case you want to migrate right now, you may use EDB Migration Toolkit, which allows migration from Oracle, SQL Server, Sybase, MySQL, and PostgreSQL.

8. Can I use edb_ddl_extractor.sql to extract from databases other than Oracle e.g. SQL Server or Sybase?

No, edb_ddl_extractor can only be used to extract Oracle schema. In the future, we will provide extractors for other databases as well, and the updated DDL Extractor can be downloaded from the "Getting Started" menu.

9. Can I see or identify the objects repaired or edited by me?

No, edb_ddl_extractor can only be used to extract Oracle schema. In the future, we will provide extractors for other databases as well, and the updated DDL Extractor can be downloaded from the "Getting Started" menu.

10. Can I generate a report for the assessed schema?

Yes, once you assess the schema, click Report. You can either generate the report for all schemas or select the required schemas. You can also view the count of distinct repair handlers applied to the DDLs under the selected schemas.
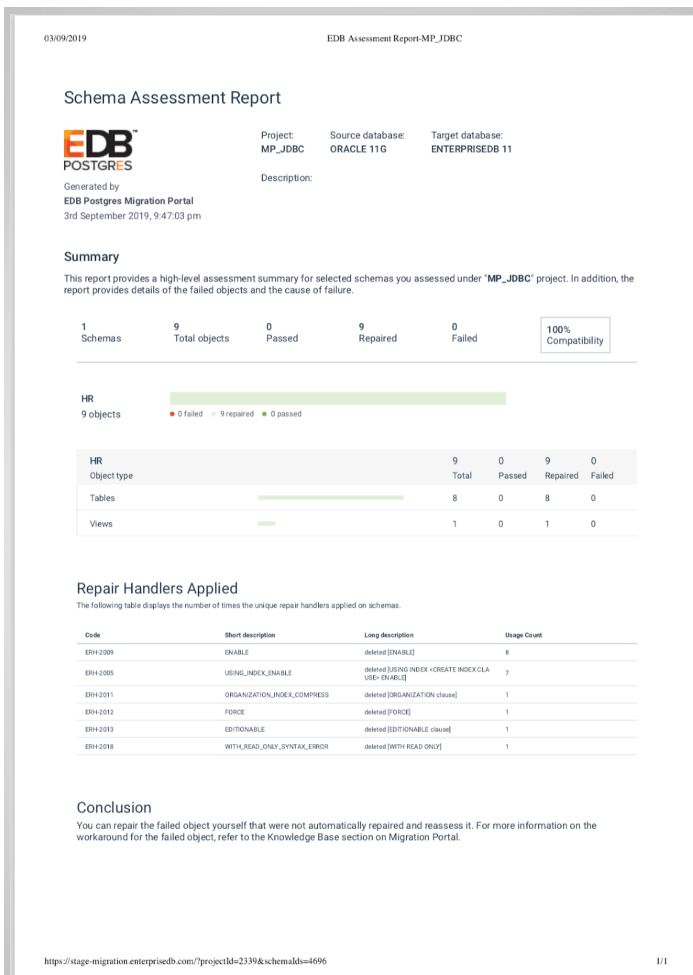
11. Can I deploy the assessed schema to any cloud service?

Yes, you can export the assessed schema and deploy directly on EDB Cloud Database Service's cluster or you can also download the EDB Postgres compatible schema and deploy on EDB Postgres on any cloud service provider.