



EDB Postgres Migration Portal

Version 3.0.1

1	Supported Platforms	3
2	Using Migration Portal	3
2.1	Overview of the Migration Portal Home Page	5
2.2	Overview of the Migration Portal Projects Page	7
2.3	Overview of the Migration Portal Wiki Page	9
3	Migrating a Database	10
3.1	Performing a Schema Extraction	11
3.2	Performing a Schema Assessment	16
3.3	Schema Migration	25
3.4	Data Migration	60
4	Advanced Data Migration	61

1 Supported Platforms

The Migration Portal supports assessment and migration from Oracle 11g and 12c to EDB Postgres Advanced Server 10, 11, 12, Or 13. Migration Portal is supported on the following browsers and operating systems:

Supported Browsers

For the best user experience, we recommend using the Google Chrome browser. Migration Portal is also supported on the following browsers:

Browser	Supported Version
Apple Safari on Macintosh OS	11 and above
Google Chrome	68 and above
Microsoft Edge	42 and above
Mozilla Firefox	60 and above

Supported Operating Systems

Operating Systems	Supported Version
Macintosh	OS X Sierra
Windows	10
Linux	CentOS 7

2 Using Migration Portal

Migration Portal allows you to easily migrate your database schema from Oracle to EDB Postgres Advanced Server. You can upload schemas for assessment and get immediate feedback and suggestions. The portal allows you to download assessed

DDLs for all objects and create your EDB Postgres database on-premises or in the cloud.



The assessment and migration process

!!! Note Migration Portal currently does not have team collaboration features. We recommend collaborative meetings, screen sharing, and using the downloadable assessment report to share results.

To access the Migration Portal:

1. Open a browser and navigate to <https://www.edbpostgres.com/>
2. On the EnterpriseDB home page, click **Products > Migration Portal**.



Accessing the Migration Portal

3. Click **Open Migration Portal**.
4. Log in using your credentials.

2.1 Overview of the Migration Portal Home Page

The Migration Portal home page provides quick access to migration tools.

The screenshot shows the EDB migration portal interface. On the left, a sidebar lists five projects: ProjectManagement, HumanResources, Finance, Marketing, and Administration, all last updated on 22 Sep 2020. The main area displays the 'ProjectManagement' project details. It includes an 'Overview' section with compatibility at 71%, actions like 'Migrate to...', 'Report', and 'Delete', and a 'Schemas' section showing HR (7 objects), HRM (13 objects), and schema_6595 (1 object) with their respective migration status (e.g., 100% successful). A 'Quick help' sidebar on the right provides links to various guides and an option to contact support for an offline assessment.

The Migration Portal home

The Migration Portal home page allows access to the following Migration Portal features:

1. Projects: The **Projects** panel displays a list of assessed projects.
2. Create project: Click **+ New** (the button located to the right of the **Projects** label) to create a new project.
3. Search Projects: Use the **Search** box to search for projects.
4. Overview: The **Overview** panel provides details about the selected project and displays the compatibility percentage after schema assessment.
5. Migrate: Use the **Migrate** button to either download an EDB Postgres Advanced Server compatible **.sql** file or to migrate a schema to an EDB Postgres Advanced Server on-premise or on cloud. For more information, see [Schema Migration](#).
6. Report: Use the **Report** button to view and download the schema assessment report.
7. Delete: Use the **Delete** button to delete a selected project.
8. Warning sign: A warning message is displayed if a project or a schema is less than

70% compatible or any DDL doesn't succeed after multiple attempts.

9. Upload DDL file: Use the **Upload new schema** button to upload a new or additional DDL file.
10. Schemas: The **Schemas** panel displays the assessment result from an uploaded DDL file.
11. Quick help: The **Quick help** panel contains all the help guides.
12. Portal Wiki: The **Portal Wiki** has links to product information and different help guides.

2.2 Overview of the Migration Portal Projects Page

The Migration Portal Projects page provides detailed information about your migration.



The screenshot shows the EDB migration portal's Projects page for the 'case_no_v2 / HR' project. The main interface includes a sidebar with 'COMMON FAILURES' and a search bar, a central dashboard with a summary bar chart, and a 'Quick help' sidebar on the right.

Summary Bar Chart:

Category	Total	Failed	Repaired	Passed	Status
Total	12	5	4	3	PASSED 58%

Object Details:

- HR Schema 8:** Includes sections for Sequences (100%), Types (100%), Tables (9 Failed, 2 Repaired, 1 Passed), Indexes (100%), Constraints (100%), Views (0%), and Materialized View (0%).
- Common Failures:** A list of 10 common failures, each with a link to a knowledge base article:
 - MERGE statement
 - Autonomous transaction
 - PIPELINED functions
 - MULTISET function
 - DEFAULT ON NULL keyword
 - UNIQUE keyword in SELECT statement
 - NVL function with different datatypes
 - LISTAGG function in SELECT statement
 - Global temporary table in Advanced Server does not match with Oracle global temporary table
 - An error occurs due to PARTITION and virtual column names in Advanced Server
 - An error occurs in virtual column in table
 - BITAND
 - External tables
 - SHARED DATABASE LINK
 - value "99999999999999999999999999999999" is out of range for type bigint
 - BYTE keyword

The Migration Portal Projects Page overview.

Use the following resources to gather information about your migration projects:

1. Compatible: The **Compatible** gauge displays the color on the basis of the compatibility percentage of the assessed schema.
2. Schema Count: Displays the number of schemas in a project.
3. Migrate to: Use the **Migrate to** to migrate the schema to an *EDB Postgres Advanced Server* on-premise or on cloud.
4. Search objects: Use the **Search** box to search for objects.
5. Filters: You can filter the system repaired and manual repaired objects from the left panel of the Projects page. In addition, you can select one or more filter combinations to refine the information.
6. Objects: Displays the objects for the selected schemas.
7. Common Failures: Displays the reason for the failed objects for the selected schemas.

The screenshot shows the EDB migration portal interface. At the top, there's a navigation bar with the logo, 'Projects', and 'Portal Wiki'. On the left, a sidebar has tabs for 'OBJECTS' (selected) and 'COMMON FAILURES'. Under 'OBJECTS', there's a card for 'case_no_v2' (68% compatible, 3 schemas) with a 'CSV' download button and a 'Search Errors' input field. Under 'COMMON FAILURES', there's a tree view with 'MIGRATIONTEST' expanded, showing 'HR' selected, and several error items under it. The main content area is titled 'HR Schema' and shows a table of common failures:

Count	Reason for failure	Occurrences
2	only superuser can change options of a file_fdw foreign table	Tables 2
1	column "empno" does not exist	Views 1
1	syntax error at or near "FROM"	Views 1
1	relation "hr.emp" does not exist	Materialized View 1

Common Failures tab

!!! Note You can download a **CSV** file for the common failures for the project.

8. Schema: The **Schema** panel displays the result of the assessment.
9. Tooltip: Hover over a result set to display a tooltip with the number of passed,

failed, and repaired objects.

10. Quick help: The **Quick help** panel displays links to Knowledge base articles and repair handler documentation.
11. Search: Use the **Search** box to search the **Knowledge base** entries or repair handler documentation for specific information.

The screenshot shows the EDB migration portal interface. At the top, there's a navigation bar with 'Projects' and 'Portal Wiki'. On the left, a sidebar titled 'COMMON FAILURES' lists various database objects like 'schema_1900', 'HR', 'Sequences', 'Types', 'Tables', and 'Indexes'. Under 'Indexes', 'DEPT_LOCATION_IX' is selected. The main workspace shows a comparison between 'Source' and 'Target' database structures. The 'Source' section contains the SQL command 'CREATE INDEX HR.DEPARTMENTS ON DEPT_LOCATION_ID'. The 'Target' section contains the SQL command 'CREATE INDEX DEPT_LOCATION_ID ON HR.DEPARTMENTS (LOCATION_ID)'. At the bottom of the workspace, there are tabs for 'OUTPUT' (which shows 'Success') and 'REPAIRED'. On the right side of the screen, there's a 'Quick help' panel with a search bar containing 'Merg' and a 'Knowledge base' dropdown. A message 'MERGE statement' is also visible in the 'Quick help' panel.

Searching the Knowledge Base entry

2.3 Overview of the Migration Portal Wiki Page

The Portal Wiki page provides quick access to information:

- What's New information
- Quick Start guide
- Migrating Schema
- Migrating Data

- DDL Extractor guide
- Knowledge Base
- Repair handlers
- Migration Portal User's Guide
- FAQs

The screenshot shows the EDB migration portal Wiki page. At the top, there are navigation links for 'Projects' and 'Portal Wiki'. On the right, there is a user profile for 'Nancy Drew'. The left sidebar has a 'Portal Wiki' section with a 'What's new' tab selected, showing links to 'Quick Start guide', 'Migrating Schema', 'Migrating Data', 'DDL Extractor guide', 'Knowledge Base', 'Repair Handler', 'Migration Portal guide', and 'FAQ'. The main content area features a 'What's New' section with a heading 'Version 3.0.1 (08-Jan-2021)' and a list of UI Enhancements. Below it is a section for 'Version 3.0.0 (09-Dec-2020)', which includes a note about migration support for Oracle version 13 and a list of 'Added New Cloud Platforms'. To the right, there is a 'Jump to version' sidebar listing all versions from 3.0.1 down to Beta 3, along with their release dates.

Jump to version

- Version 3.0.1 (08-Jan-2021)
- Version 3.0.0 (09-Dec-2020)
- Version 2.10.0 (16-Sep-2020)
- Version 2.9.0 (19-Aug-2020)
- Version 2.8.0 (11-Jun-2020)
- Version 2.7.0 (14-May-2020)
- Version 2.6.0 (19-March-2020)
- Version 2.5.0 (06-February-2020)
- Version 2.4.1 (28-January-2020)
- Version 2.4.0 (11-December-2019)
- Version 2.3.0 (03-October-2019)
- Version 2.2.0 (04-September-2019)
- Version 2.1.0 (16-July-2019)
- Version 2.0.0 (21-May-2019)
- Version 1.1.1 (16-April-2019)
- Version 1.1.0 (28-March-2019)
- Version 1.0.0 (19-February-2019)
- Beta 5 (07-Jan-2019)
- Beta 4 (11-Dec-2018)
- Beta 3 (11-Oct-2018)

The Migration Portal Wiki page

3 Migrating a Database

To migrate a database, you must complete the following steps:

1. Perform a [Schema Extraction](#).
2. Perform a [Schema Assessment](#).
3. Perform a [Schema Migration](#).
4. Perform a [Data Migration](#).

The following sections provide detailed information about each step in the migration process.

3.1 Performing a Schema Extraction

Prerequisites

Before extracting a schema, you must download the latest EDB DDL Extractor script from the Migration Portal [Projects](#) page or from the link provided in the DDL Extractor guide in the Portal Wiki. The script can be run in SQL Developer or SQL*Plus. It uses Oracle's `DBMS_METADATA` built-in package to extract DDLs for different objects under schemas (specified while running the script). The EDB DDL extractor creates the DDL file that will be uploaded to the portal and analyzed for EDB Postgres compatibility.

Note

You must have CONNECT and SELECT_CATALOG_ROLE roles and CREATE TABLE privilege.

For SQL*Plus

1. Connect to SQL*Plus and run the command:

`SQL>@edb_ddl_extractor.sql`

2. Provide the schema name and the path or directory in which the extractor will store the extracted DDL. When extracting multiple schemas, use a comma (',') as a delimiter.

Note

If you want to extract all the user schemas from the current database, do not mention any schema names while extracting. However, it is recommended to mention the schema names that you would like to extract.

3. If you want to extract dependent objects from other schemas, enter `yes` or `no`.

For example, on Linux:

Enter a comma separated list of schemas to be extracted
(Default all schemas): HR, SCOTT, FINANCE

Location for output file (Default current location) :
/home/oracle/extracted_ddls/

WARNING:

Given schema(s) list may contain objects which are dependent on objects from other schema(s), not mentioned in the list. Assessment may fail for such objects. It is suggested to extract all dependent objects together.

Extract dependent object from other schemas?(yes/no)
(Default no / Ignored for all schemas option): yes

On Windows:

Enter comma separated list of schemas to be extracted
(Default all schemas): HR, SCOTT, FINANCE

Location for output file (Default current location) :
c:\Users\Example\Desktop\

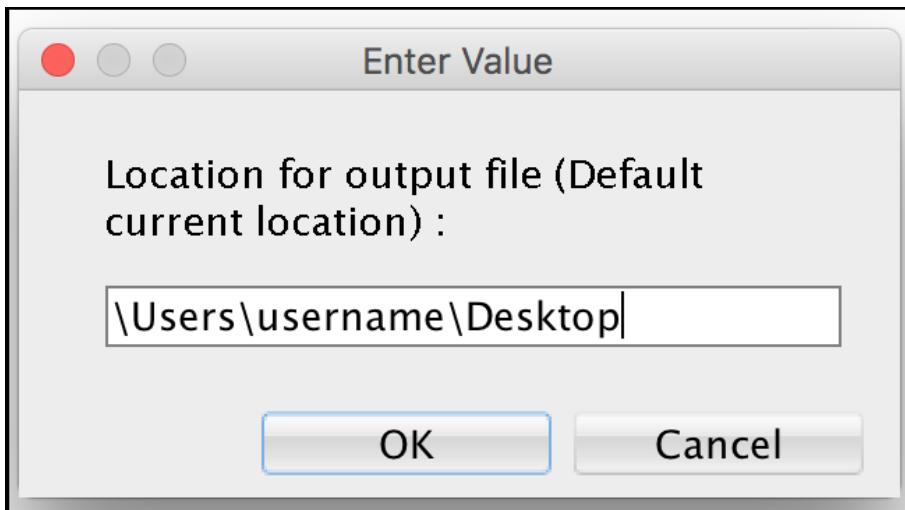
WARNING:

Given schema(s) list may contain objects which are dependent on objects from other schema(s), not mentioned in the list. Assessment may fail for such objects. It is suggested to extract all dependent objects together.

Extract dependent object from other schemas?(yes/no)
(Default no / Ignored for all schemas option): yes

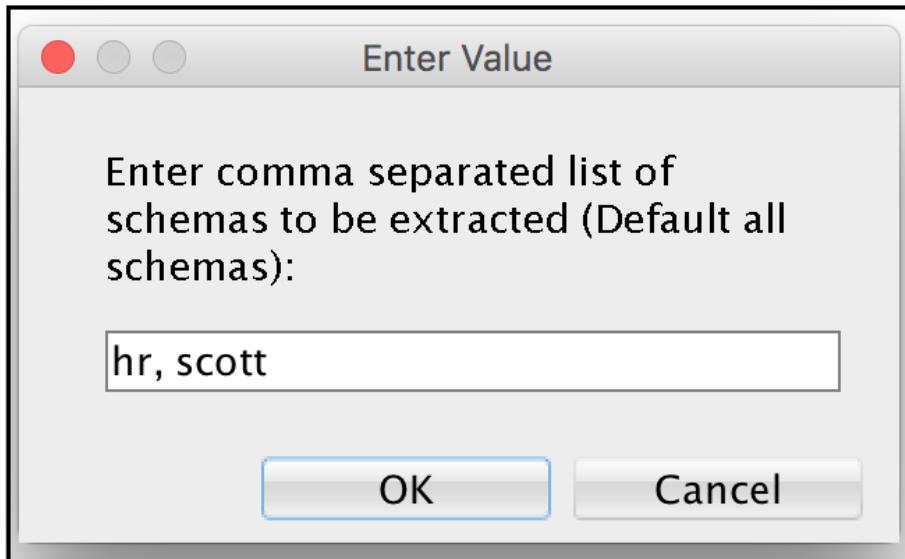
For SQL Developer

1. Connect to the SQL server and run the following command:



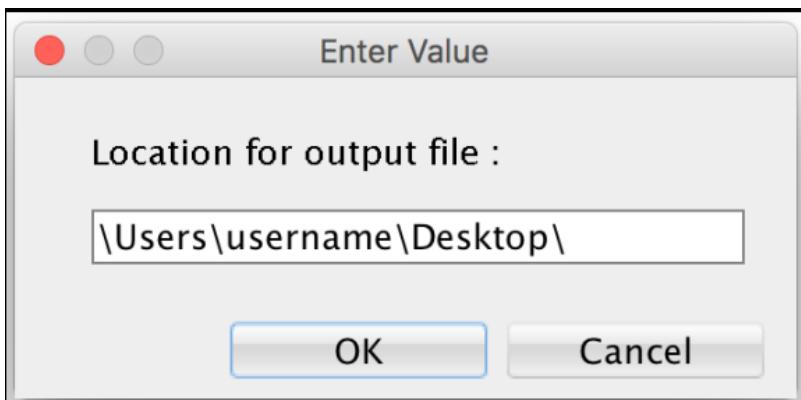
Enter the path for Linux or Windows

2. Enter a comma-separated list of schemas:



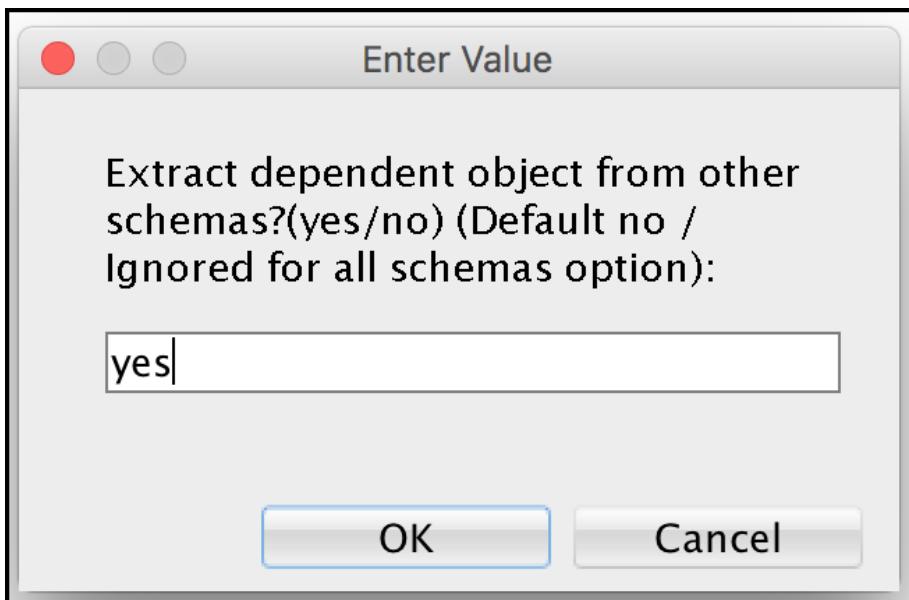
Provide a list of schemas

3. Enter the file path for the output file:



Specify the output file path

- Enter (yes/no) to extract dependant objects:



Extracting dependent objects

!!! Note You can also enter single schema name in both SQL*Plus and SQL Developer.

The script then iterates through the object types in the source database and once the task is completed, the .SQL output is stored at the entered location, i.e.,
c:\Users\Example\Desktop\.

Additional Notes

- The EDB DDL Extractor script does not extract objects that were restored using Flashback and still have names like BIN\$b54+4X1EYwPgUAB/AQBWwA==\\$0. If you want to extract these objects, you must change the name of the objects and re-run the extraction process.
- DDL Extractor extracts nologging tables as normal tables. Once these tables are migrated to EDB Postgres Advanced Server, WAL log files will be created.
- DDL Extractor creates Global Temporary tables to store the schema names and their dependency information. These tables are dropped at the end of successful extraction.
- DDL Extractor script does not extract schemas whose name starts with PG_ because PostgreSQL does not support it. If you want to extract these schemas, you must change name of schema before extraction.

Supported Object Types

The Migration Portal supports the migration of the following object types:

- Synonyms
- DB Links
- Types and Type Body
- Sequences
- Tables
- Constraints
- Indexes (Except LOB indexes and indexes on materialized views)
- Views
- Materialized Views
- Triggers
- Functions
- Procedures
- Packages

!!! Note COMMENTS on Columns, Tables, and Materialized Views are also supported.

Unsupported Object Types

- Editions
- Operators
- Schedulers
- LOB indexes and Indexes on Materialized Views
- XML Schemas
- Profiles
- Role and Object Grants
- Tablespaces
- Directories
- Users
- RLS Policy
- Queues

Oracle System Schemas

EDB DDL Extractor script will ignore the following system schemas while extracting from Oracle:

ANONYMOUS	APEX_PUBLIC_USER	APEX_030200
APEX_040000	APEX_040000	APPQOSSYS
AUDSYS	BI	CTXSYS
DMSYS	DBSNMP	DIP
DVF	DVSYS	EXFSYS
FLOWS_FILES	FLOWS_020100	GSMADMIN_INTERNAL
GSMCATUSER	GSMUSER	IX
LBACSYS	MDDATA	MDSYS
MGMT_VIEW	OE	OJVMSYS
OLAPSYS	ORDPLUGINS	ORDSYS
ORDDATA	OUTLN	ORACLE_OCM
OWBSYS	OWBYSS_AUDIT	PM
RMAN	SH	SI_INFORMTN_SCHEMA
SPATIAL_CSW_ADMIN_USR	SPATIAL_WFS_ADMIN_USR	SYS
SYSBACKUP	SYSDG	SYSKM
SYSTEM SYSMAN	TSMSYS WKPROXY	WKSYS
WK_TEST XS\$NULL	WMSYS	XDB

3.2 Performing a Schema Assessment

To assess an Oracle database schema for compatibility with EDB Postgres Advanced Server, you must:

1. Navigate to the [Migration Portal](#).
2. Enter your EDB credentials.

3. Click the **CREATE PROJECT** icon to create a new project.

New project



Project name

e.g. First project

Application interface

- JDBC
- ODBC
- .NET
- OCI
- ProC
- Other

Source DB

Oracle

Version

11g

Target DB

EDB Postgres Advanced Server

Version

13

DDL file [\(How to get a DDL file?\)](#)

No file chosen

Choose file

Add Index Prefix

Index objects will be prefixed with “idx” as unique names are required for tables and indexes.

Description(Optional)

Say something about the project...

200 characters left

Cancel

Create & assess

The Migration Portal New project dialog

4. On the **New project** dialog, enter the project name in the **Project name** field.
5. Specify project details:
 - Select the radio button next to the **Application interface**.
 - Select a **Source DB** and **Version** for the source.
 - Select the **Target DB** and **Version** for the target.
6. Click **Choose file** to upload the .SQL file generated by the latest EDB DDL Extractor for Oracle Database.

!!! Note - You should not modify the .SQL file. - Only the .SQL file generated by the latest EDB DDL Extractor can be uploaded.

For more information, refer to the [Schema Extraction](#) section.

7. Check the box next to **Add Index Prefix** to specify an index prefix (**idx**) when creating a project to ensure better assessment results, as EDB Postgres Advanced Server does not support the same name for tables and indexes.
8. Click **Create & assess** to create a new project and to assess the schemas.

The screenshot shows the EDB migration portal interface. On the left, there's a sidebar with a list of projects (297) and a search bar. The main area has tabs for 'Projects' and 'Portal Wiki'. The 'Projects' tab is active, showing an overview of the selected project 'case_no_v2'. The project status is 68% complete, with Oracle 11g as the source and EDB Postgres Advanced Server 10 as the target. The interface is ODBC. Below this, there's a 'Schemas' section with three categories: 'HR' (12 Objects), 'MIGRATIONTEST' (9 Objects), and 'schema_1900' (1 Objects). Each category has a progress bar indicating failed, repaired, and passed migrations. A 'Quick help' sidebar on the right provides links to Getting Started, Quick Start guide, Migration Portal guide, and EDB DDL Extractor.

The Schema analysis result

The analysis tool will review every construct and execute repair actions to improve compatibility with EDB Postgres Advanced Server, and flag any remaining errors that require manual intervention.

9. Verify the DDL objects (e.g., TABLES) that do not show a 100% success ratio.



Verifying the DDL objects

10. Click the objects that are not compatible with EDB Postgres Advanced Server and view the details. At the bottom of the middle panel, you can view repair action details.

Source

```

1 CREATE TABLE HR.DEPARTMENTS_EXT
2 (
3   DEPTNO VARCHAR2(4),
4   DNAME VARCHAR2(20),
5   LOCATION VARCHAR2(20)
6 )
7 ORGANIZATION EXTERNAL
  
```

Target

```

1 CREATE FOREIGN TABLE HR.DEPARTMENTS_EXT
2 (
3   DEPTNO VARCHAR2(4),
4   DNAME VARCHAR2(20),
5   LOCATION VARCHAR2(20)
6 )
7 server file_fdw_server
8 options (filename '/tmp/data.csv', format 'csv');
  
```

OUTPUT

Reassess

only superuser can change options of a file_fdw foreign table line 1, char 0

Quick help

- MERGE statement
- Autonomous transaction
- PIPELINED functions
- MULTISET function
- DEFAULT ON NULL keyword
- UNIQUE keyword in SELECT statement
- NVL function with different datatypes
- LISTAGG function in SELECT statement
- Global temporary table in Advanced Server does not match with Oracle global temporary table
- An error occurs due to PARTITION and virtual column names in Advanced Server
- An error occurs in virtual column in table
- BITAND
- External tables
- SHARED DATABASE LINK
- value "99999999999999999999999999999999" is out of range for type bigint
- BYTE keyword

Incompatible objects are identified

- Refer to the Knowledge Base information in the right panel to locate the possible workarounds for the objects that are not immediately compatible with EDB Postgres Advanced Server. You can also view the Knowledge Base information on the Portal Wiki page.

Category	Failed	Repaired	Passed	Total	Status
HR Schema	5	4	3	12	PASSED 58%
Sequences	1	2	1	4	100%
Types	2	2	0	4	100%
Tables	4	4	0	12	100%
Indexes	1	1	0	2	100%
Constraints	1	2	1	4	100%
Views	2	2	0	4	0%
Materialized View	1	1	0	2	0%

Quick help

- MERGE statement
- Autonomous transaction
- PIPELINED functions
- MULTISET function
- DEFAULT ON NULL keyword
- UNIQUE keyword in SELECT statement
- NVL function with different datatypes
- LISTAGG function in SELECT statement
- Global temporary table in Advanced Server does not match with Oracle global temporary table
- An error occurs due to PARTITION and virtual column names in Advanced Server
- An error occurs in virtual column in table
- BITAND
- External tables
- SHARED DATABASE LINK
- value "99999999999999999999999999999999" is out of range for type bigint
- BYTE keyword

Assessment result with errors

12. On the **Knowledge Base** tab, you can enter the error message for the incompatible objects with EDB Postgres Advanced Server and click **Search**.

The object detail panel displays the workaround or the resolution for the failed object. You can manually make the changes on the **Assessment** tab for that object, and click **Reassess**.

!!! Note If any failed object passes while reassessing, the dependent objects for that object are also reassessed.

Workaround or resolution for incompatible objects

Similarly, you can make all the incompatible objects compatible.

!!! Note If the information or workaround for incompatible objects is not available in the Knowledge Base, please contact the support team for assistance.

When you have finished working with the DDL, you can either download the modified EDB compatible DDL as a .sql file or migrate the schemas see, [Schema Migration](#).

Generating an Assessment Report

Migration Portal's report functionality provides a high-level assessment summary of the schemas assessed for your project. In addition, the report provides details about the failed objects and the cause of failure.

Report

Select schemas

All

schema_1900

HR

MIGRATIONTEST

 Generate

Select schemas for reports

To generate a report:

1. Click the **Report** button to access the schema selection dialog.
2. Select the schemas that you wish to include in the report.
3. Click **Generate** to generate the onscreen report.

[Generate PDF](#)

Schema Assessment Report

Project: case_no_v2 **Source database:** Oracle 11g **Target database:** EDB Postgres Advanced Server 10

Generated by: Migration Portal v2.9.0
14th September 2020, 2:56:49 pm

Summary

This report provides a high-level assessment summary for selected schemas you assessed under "case_no_v2" project. In addition, the report provides details of the failed objects and the cause of failure.

1 Schemas	12 Total objects	5 Passed	2 Repaired	5 Failed	58% Compatibility
HR	12 objects	 ● 5 failed ● 2 repaired ● 5 passed			
HR Object type		12 Total	5 Passed	2 Repaired	5 Failed
Constraints		1	1	0	0
Indexes		1	1	0	0
Materialized View		1	0	0	1
Sequences		1	0	1	0
Tables		4	1	1	2
Types		2	2	0	0
Views		2	0	0	2

Failed Objects

Schema	Total	Failed
HR	12	5

Common Failures

The Schema Assessment Report

You can optionally select **Generate PDF** to save the report in **.pdf** format. You can also view the count of distinct repair handlers applied to the DDLs under the selected schemas.

14/09/2020

EDB Assessment Report-case_no_v2



Project:
case_no_v2

Source database:
Oracle 11g

Target database:
EDB Postgres Advanced Server 10

Generated by:

Migration Portal v2.9.0
14th September 2020, 2:51:34 pm

Description:

Summary

This report provides a high-level assessment summary for selected schemas you assessed under "case_no_v2" project. In addition, the report provides details of the failed objects and the cause of failure.

1	12	5	2	5	58%
Schemas	Total objects	Passed	Repaired	Failed	Compatibility



Object type	12	5	2	5
	Total	Passed	Repaired	Failed
Constraints	1	1	0	0
Indexes	1	1	0	0
Materialized View	1	0	0	1
Sequences	1	0	1	0
Tables	4	1	1	2
Types	2	2	0	0
Views	2	0	0	2

The saved pdf report

3.3 Schema Migration

After resolving errors in your schemas, you can use the schemas with a client application such as pgAdmin, ToadEdge, or the PSQL client, or migrate the schema to an EDB Postgres Advanced Server.

Note

For more information about using Toad Edge with EDB Postgres Advanced Server, see [Toad Edge for Postgres](#).

You can choose one of the following options for migrating schemas; migrate to an:

- Existing on-premises EDB Postgres Advanced Server
- New on-premises EDB Postgres Advanced Server
- EDB Postgres Advanced Server on Cloud



Schema migration home page

Migrating to an Existing On-Premises EDB Postgres Advanced Server Host

You can migrate schemas to an existing on-premises EDB Postgres Advanced Server on Windows or Linux platforms.

Migrating Schemas on Windows

1. Select the **Existing on-premises EDB Postgres Advanced Server** option:

Migrate schemas to

?



Existing on-premises EDB Postgres Advanced Server

Choose this option to migrate your schemas to an existing on-premises EDB Postgres Advanced Server.



New on-premises EDB Postgres Advanced Server Installation

Choose this option to install a new EDB Postgres Advanced Server and migrate your schemas.



EDB Postgres Advanced Server on Cloud

Choose this option to migrate your schemas on EDB Postgres Advanced Server on Cloud.

Cancel **→ Next**

Existing on-premises EDB Postgres Advanced Server home page

2. Select one or more schemas to migrate to EDB Postgres Advanced Server:

Migrate schemas to existing on-premises EDB Postgres Advanced Server

1 Select Schemas — 2 Download Schema — 3 Import — 4 Finish

⚠ This project has migration challenges. Contact us for help.

Contact Us X

Project Name case_no_v2	Interface ODBC	Source DB Oracle 11g	Target DB EDB Postgres Advanced Server 10	Compatibility 68% ⚠
----------------------------	-------------------	-------------------------	--	--

Select one or more schemas

All

schema_1900

HR

MIGRATIONTEST

[Cancel](#) [← Previous](#) [→ Next](#)

Selecting schemas for migration

Note

If your schemas are not 100% compatible, a banner will be displayed as shown; complete the `Contact Us` form for any assistance required.

Contact Us

Your message...

Required project details will be sent along with your message.

By submitting this form, I agree to EDB's [Terms & Conditions](#) and [Privacy Policy](#).

Send

*The Contact Us form***3. Download the assessed schemas:**

Migrate schemas to existing on-premises EDB Postgres Advanced Server

1 Select Schemas 2 Download Schema 3 Import 4 Finish

⚠ This project has migration challenges. Contact us for help.

Contact Us X

Project Name case_no_v2	Interface ODBC	Source DB Oracle 11g	Target DB EDB Postgres Advanced Server 10	Compatibility 68% ⚠
----------------------------	-------------------	-------------------------	--	--

Download the assessed schemas

Download SQL file

Note: Ensure the version number for the EDB Postgres Advanced Server database that you are migrating is 10 (your assessed version).

Cancel ← Previous Next →

Download the assessed schemas

4. Click on **Windows**:

Migrate schemas to existing on-premises EDB Postgres Advanced Server

?

Select Schemas ✓ Download Schema ✓ Import 3 Finish 4

⚠ This project has migration challenges. Contact us for help.

Contact Us X

Project Name case_no_v2	Interface ODBC	Source DB Oracle 11g	Target DB EDB Postgres Advanced Server 10	Compatibility 68% ⚠
----------------------------	-------------------	-------------------------	--	--

Import the selected schemas

Run the following command:

[Windows](#) [Linux](#)

On CLI

```
edb=# \i c:\users\...\<project_name>.sql
```

On cmd/shell

```
edb-psql -f <project_name>.sql
```

[Cancel](#) [← Previous](#) [Next →](#)

Selecting Windows operating system

5. To import the schemas, run the following command:

- On CLI

```
\i c:\users\...\<project_name>.sql
```

- On cmd/shell

```
edb-psql -f <project_name>.sql
```

Note

You can also use `pgAdmin` instead.

The converted schemas are migrated to the target server.

Migrate schemas to existing on-premises EDB Postgres Advanced Server

Project Name: case_no_v2 Interface: ODBC Source DB: Oracle 11g Target DB: EDB Postgres Advanced Server 10 Compatibility: 68% ⚠

Migration Successful

✓ You can view your converted schemas on the target server.
If you cannot see your schemas on the target server or need help to migrate the schemas, contact us.

[✉ Contact us](#)

Cancel ← Previous ✓ Done

A successful migration

Migrating Schemas on Linux

To migrate schemas to an existing on-premises EDB Postgres Advanced Server on Linux, complete the following steps:

1. Click the **Existing on-premises EDB Postgres Advanced Server** option:

Migrate schemas to

?



Existing on-premises EDB Postgres Advanced Server

Choose this option to migrate your schemas to an existing on-premises EDB Postgres Advanced Server.



New on-premises EDB Postgres Advanced Server Installation

Choose this option to install a new EDB Postgres Advanced Server and migrate your schemas.



EDB Postgres Advanced Server on Cloud

Choose this option to migrate your schemas on EDB Postgres Advanced Server on Cloud.

[Cancel](#) [→ Next](#)

Existing on-Premises EDB Postgres Advanced Server home page

2. Select one or more schemas to migrate to EDB Postgres Advanced Server:

Migrate schemas to existing on-premises EDB Postgres Advanced Server

1 Select Schemas — 2 Download Schema — 3 Import — 4 Finish

⚠️ This project has migration challenges. Contact us for help.

Contact Us X

Project Name case_no_v2	Interface ODBC	Source DB Oracle 11g	Target DB EDB Postgres Advanced Server 10	Compatibility 68% ⚠️
----------------------------	-------------------	-------------------------	--	---

Select one or more schemas

All

schema_1900

HR

MIGRATIONTEST

[Cancel](#) [← Previous](#) [→ Next](#)

Selecting schemas for migration

3. Download the assessed schemas:

Migrate schemas to existing on-premises EDB Postgres Advanced Server

1 Select Schemas 2 Download Schema 3 Import 4 Finish

⚠ This project has migration challenges. Contact us for help.

Contact Us X

Project Name case_no_v2	Interface ODBC	Source DB Oracle 11g	Target DB EDB Postgres Advanced Server 10	Compatibility 68% ⚠
----------------------------	-------------------	-------------------------	--	--

Download the assessed schemas

Download SQL file

Note: Ensure the version number for the EDB Postgres Advanced Server database that you are migrating is 10 (your assessed version).

Cancel ← Previous Next →

Download the assessed schemas

4. Click on Linux:

Migrate schemas to existing on-premises EDB Postgres Advanced Server

Project Name: case_no_v2 | Interface: ODBC | Source DB: Oracle 11g | Target DB: EDB Postgres Advanced Server 10 | Compatibility: 68%

Import the selected schemas

Run the following command:

[Windows](#) [Linux](#)

Run the following command on Terminal

```
shell=$ sudo su - enterpriseedb
shell=$ edb-psql edb
edb=# create database <database_name>;
edb=# \connect <database_name>
database_name=# \i <project_name>.sql
```

[Cancel](#) [← Previous](#) [→ Next](#)

Selecting Linux operating system

5. To import the schemas, invoke the following `edb-psql` client commands:

```
sudo su - enterpriseedb
edb-psql edb
create database <database_name>;
\\connect <database_name>
\\i <project_name>.sql
```

Note

You can optionally use the `pgAdmin` client for the import.

The converted schemas are migrated to the target server.

The screenshot shows the 'Migrate schemas to existing on-premises EDB Postgres Advanced Server' page. At the top, a progress bar indicates 'Select Schemas' (green checkmark), 'Download Schema' (green checkmark), 'Import' (green checkmark), and 'Finish' (blue circle with '4'). Below the progress bar, project details are listed: Project Name 'case_no_v2', Interface 'ODBC', Source DB 'Oracle 11g', Target DB 'EDB Postgres Advanced Server 10', and Compatibility '68%' with a warning icon. A large green checkmark icon is followed by the text 'Migration Successful'. Below this, two informational messages are displayed: 'You can view your converted schemas on the target server.' and 'If you cannot see your schemas on the target server or need help to migrate the schemas, contact us.' A 'Contact us' button is shown. At the bottom, there are 'Cancel', '← Previous', and '✓ Done' buttons.

A successful schema migration

Migrating to a New On-Premises EDB Postgres Advanced Server Installation

You can install new EDB Postgres Advanced Server on-premises on Windows or Linux platforms and migrate the schemas.

Migrating Schemas on Windows

To migrate schemas to a new on-premises EDB Postgres Advanced Server on Windows, complete the following steps:

1. Click **New on-premises EDB Postgres Advanced Server** option.

Migrate schemas to

?



Existing on-premises EDB Postgres Advanced Server

Choose this option to migrate your schemas to an existing on-premises EDB Postgres Advanced Server.



New on-premises EDB Postgres Advanced Server Installation

Choose this option to install a new EDB Postgres Advanced Server and migrate your schemas.



EDB Postgres Advanced Server on Cloud

Choose this option to migrate your schemas on EDB Postgres Advanced Server on Cloud.

Cancel

→ Next

New on-premises EDB Postgres Advanced Server home page

2. Select one or more schemas to migrate on EDB Postgres Advanced Server.

Migrate schemas to new on-premises EDB Postgres Advanced Server Installation

1 Select Schemas — 2 Select Platform — 3 Get EDB Postgres Advanced Server — 4 Install EDB Postgres Advanced Server

⚠ This project has migration challenges. Contact us for help.

Contact Us X

Project Name	Interface	Source DB	Target DB	Compatibility
case_no_v2	ODBC	Oracle 11g	EDB Postgres Advanced Server 10	68% ⚠

Select one or more schemas

All
 schema_1900
 HR
 MIGRATIONTEST

Cancel ← Previous Next →

Selecting schemas for migration

3. Select the Windows operating system.

Migrate schemas to new on-premises EDB Postgres Advanced Server Installation

1 Select Schemas 2 Select Platform 3 Get EDB Postgres Advanced Server 4 Install EDB Postgres Advanced Server

⚠ This project has migration challenges. Contact us for help.

Project Name case_no_v2	Interface ODBC	Source DB Oracle 11g	Target DB EDB Postgres Advanced Server 10	Compatibility 68%
----------------------------	-------------------	-------------------------	--	----------------------

Select the Operating System/Platform

Windows 64-bit

Linux 64-bit

[Cancel](#) [← Previous](#) [→ Next](#)

Selecting Windows operating system

4. Download [Windows Installer](#).

Migrate schemas to new on-premises EDB Postgres Advanced Server Installation

?

1 Select Schemas 2 Select Platform 3 Get EDB Postgres Advanced Server 4 Install EDB Postgres Advanced Server >

⚠ This project has migration challenges. Contact us for help.

Contact Us X

Project Name case_no_v2	Interface ODBC	Source DB Oracle 11g	Target DB EDB Postgres Advanced Server 10	Compatibility 68% ⚠
----------------------------	-------------------	-------------------------	--	-------------------------------

Install EDB Postgres Advanced Server for Windows

 Download Windows installer 

Cancel  Previous  Next

Downloading Windows installer

- For installation steps, click **EDB Postgres Advanced Server Installation Guide for Windows**.

Migrate schemas to new on-premises EDB Postgres Advanced Server Installation

Get EDB Postgres Advanced Server 4. Install EDB Postgres Advanced Server 5. Download Schema 6. Import >

This project has migration challenges. Contact us for help.

Contact Us X

Project Name case_no_v2	Interface ODBC	Source DB Oracle 11g	Target DB EDB Postgres Advanced Server 10	Compatibility 68% ⚠
----------------------------	-------------------	-------------------------	--	--

Install EDB Postgres Advanced Server on Windows

EDB Postgres™ Advanced Server Installation Guide for Windows

Cancel ← Previous → Next

6. Download the assessed schemas.

Migrate schemas to new on-premises EDB Postgres Advanced Server Installation

Postgres Advanced Server — ✓ Install EDB Postgres Advanced Server — 5 Download Schema — 6 Import — 7 Finish

⚠ This project has migration challenges. Contact us for help.

Contact Us X

Project Name case_no_v2	Interface ODBC	Source DB Oracle 11g	Target DB EDB Postgres Advanced Server 10	Compatibility 68% ⚠
----------------------------	-------------------	-------------------------	--	--

Download the assessed schemas

Download SQL file

Note: Ensure the version number for the EDB Postgres Advanced Server database that you are migrating is 10 (your assessed version).

Cancel ← Previous Next →

Downloading the assessed file

7. You can import schemas by running the following command:

- On CLI

```
\i c:\users\...\<project_name>.sql
```

- On cmd/shell

```
edb-psql -f <project_name>.sql
```

Migrate schemas to new on-premises EDB Postgres Advanced Server Installation

Postgres Advanced Server ✓ Install EDB Postgres Advanced Server ✓ Download Schema 6 Import 7 Finish

⚠ This project has migration challenges. Contact us for help. [Contact Us](#) X

Project Name case_no_v2	Interface ODBC	Source DB Oracle 11g	Target DB EDB Postgres Advanced Server 10	Compatibility 68% ⚠
----------------------------	-------------------	-------------------------	--	--

Import schemas into EDB Postgres Advanced Server

On CLI

```
edb=# \i c:\users\...\<project_name>.sql
```

On cmd/shell

```
edb-psql -f <project_name>.sql
```

[PSQL Documentation](#) | [Advanced Server Documentation](#)

Use pgAdmin instead.

[Cancel](#) [← Previous](#) [→ Next](#)

Importing schemas into EDB Postgres Advanced Server

!!! Note You can also use pgAdmin instead.

The schemas are migrated to the target server.

Migrate schemas to new on-premises EDB Postgres Advanced Server Installation

Postgres Advanced Server ✓ Install EDB Postgres Advanced Server ✓ Download Schema ✓ Import 7 Finish

Project Name case_no_v2	Interface ODBC	Source DB Oracle 11g	Target DB EDB Postgres Advanced Server 10	Compatibility 68% ⚠
----------------------------	-------------------	-------------------------	--	--

Migration Successful

✓ You can view your converted schemas on the target server.

If you cannot see your schemas on the target server or need help to migrate the schemas, contact us.

✉ Contact us

Cancel ← Previous ✓ Done

Migrating Schemas on Linux

To migrate schemas to an on-premises EDB Postgres Advanced Server on Linux, complete the following steps:

1. Click **New On-premises EDB Postgres Advanced Server** option.



Migrate schemas to



Existing on-premises EDB Postgres Advanced Server

Choose this option to migrate your schemas to an existing on-premises EDB Postgres Advanced Server.



New on-premises EDB Postgres Advanced Server Installation

Choose this option to install a new EDB Postgres Advanced Server and migrate your schemas.



EDB Postgres Advanced Server on Cloud

Choose this option to migrate your schemas on EDB Postgres Advanced Server on Cloud.

[Cancel](#)[→ Next](#)

Migrating schemas home page

2. Select one or more schemas to migrate on EDB Postgres Advanced Server.

Migrate schemas to new on-premises EDB Postgres Advanced Server Installation

1 Select Schemas — 2 Select Platform — 3 Get EDB Postgres Advanced Server — 4 Install EDB Postgres Advanced Server

⚠ This project has migration challenges. Contact us for help.

Project Name	Interface	Source DB	Target DB	Compatibility
case_no_v2	ODBC	Oracle 11g	EDB Postgres Advanced Server 10	68%

Select one or more schemas

All
 schema_1900
 HR
 MIGRATIONTEST

[Cancel](#) [← Previous](#) [Next →](#)

Selecting schemas for migration

3. Select the **Linux** operating system.

Migrate schemas to new on-premises EDB Postgres Advanced Server Installation ?

1 Select Schemas 2 Select Platform 3 Get EDB Postgres Advanced Server 4 Install EDB Postgres Advanced Server >

This project has migration challenges. Contact us for help.

Contact Us X

Project Name case_no_v2	Interface ODBC	Source DB Oracle 11g	Target DB EDB Postgres Advanced Server 10	Compatibility 68%
----------------------------	-------------------	-------------------------	--	----------------------

Select the Operating System/Platform

Windows 64-bit

Linux 64-bit

[Cancel](#) [← Previous](#) [→ Next](#)

Selecting Linux operating system

4. You can select one of the following options to install the EDB Postgres Advanced Server:

- Repository
- More options

Migrate schemas to new on-premises EDB Postgres Advanced Server Installation ?

1 Select Schemas — 2 Select Platform — **3 Get EDB Postgres Advanced Server** — 4 Install EDB Postgres Advanced Server

⚠ This project has migration challenges. Contact us for help. Contact Us X

Project Name case_no_v2	Interface ODBC	Source DB Oracle 11g	Target DB EDB Postgres Advanced Server 10	Compatibility 68% ⚠
----------------------------	-------------------	-------------------------	--	-------------------------------------

Install EDB Postgres Advanced Server for Linux

Repository More options

Cancel ← Previous → Next

Selecting Linux repository

- For information on the installation procedure, click [EDB Postgres Advanced Server Installation Guide](#) for Linux:

Migrate schemas to new on-premises EDB Postgres Advanced Server Installation

Get EDB Postgres Advanced Server 4 Install EDB Postgres Advanced Server 5 Download Schema 6 Import

This project has migration challenges. Contact us for help.

Contact Us X

Project Name case_no_v2	Interface ODBC	Source DB Oracle 11g	Target DB EDB Postgres Advanced Server 10	Compatibility 68% ⚠
----------------------------	-------------------	-------------------------	--	--

Install EDB Postgres Advanced Server on Linux

 EDB Postgres™ Advanced Server Installation Guide for Linux 

Cancel ← Previous → Next

Selecting Linux installation guide

6. Download the assessed schemas:

Migrate schemas to new on-premises EDB Postgres Advanced Server Installation ?

Postgres Advanced Server — ✓ Install EDB Postgres Advanced Server — 5 Download Schema — 6 Import — 7 Finish

⚠ This project has migration challenges. Contact us for help. ✉️ Contact Us X

Project Name	Interface	Source DB	Target DB	Compatibility
case_no_v2	ODBC	Oracle 11g	EDB Postgres Advanced Server 10	68% ⚠

Download the assessed schemas

⬇️ Download SQL file

Note: Ensure the version number for the EDB Postgres Advanced Server database that you are migrating is 10 (your assessed version).

Cancel ← Previous → Next

Downloading the assessed schemas

7. To import the schemas, run the following command:

```
sudo su - enterprisedb
edb-psql edb
create database <database_name>;
\connect <database_name>
\i <project_name>.sql
```

Migrate schemas to new on-premises EDB Postgres Advanced Server Installation



[Postgres Advanced Server](#) [Install EDB Postgres Advanced Server](#) [Download Schema](#) **6 Import** **7 Finish**

This project has migration challenges. Contact us for help.

[Contact Us](#)



Project Name	Interface	Source DB	Target DB	Compatibility
case_no_v2	ODBC	Oracle 11g	EDB Postgres Advanced Server 10	68%

Import schemas into EDB Postgres Advanced Server

Run the following command on Terminal

```
shell=$ sudo su - enterpriseedb
shell=$ edb-psql edb
edb=# create database <database_name>;
edb=# \connect <database_name>
database_name=# \i <project_name>.sql
```



[PSQL Documentation](#) | [Advanced Server Documentation](#)

Use pgAdmin instead.

[Cancel](#)

[← Previous](#)

[→ Next](#)

Importing schemas into EDB Postgres Advanced Server

!!! Note You can also use pgAdmin instead.

The converted schemas are migrated to the target server.

Migrate schemas to new on-premises EDB Postgres Advanced Server Installation ?

Postgres Advanced Server — ✓ Install EDB Postgres Advanced Server — ✓ Download Schema — ✓ Import — 7 Finish

Project Name case_no_v2	Interface ODBC	Source DB Oracle 11g	Target DB EDB Postgres Advanced Server 10	Compatibility 68% ⚠
----------------------------	-------------------	-------------------------	--	--

Migration Successful

✓ You can view your converted schemas on the target server.
 If you cannot see your schemas on the target server or need help to migrate the schemas, contact us.

[✉ Contact us](#)

[Cancel](#) [← Previous](#) ✓ Done

A successful schema migration

Migrating to the Cloud

To migrate schemas on EDB Postgres Advanced Server to Cloud, complete the following steps:

2. Click **EDB Postgres Advanced Server on Cloud** option:

Migrate your schemas to the cloud



Existing on-premises EDB Postgres Advanced Server

Choose this option to migrate your schemas to an existing on-premises EDB Postgres Advanced Server.



New on-premises EDB Postgres Advanced Server Installation

Choose this option to install a new EDB Postgres Advanced Server and migrate your schemas.



EDB Postgres Advanced Server on Cloud

Choose this option to migrate your schemas on EDB Postgres Advanced Server on Cloud.

[Cancel](#)

[→ Next](#)

EDB Postgres Advanced Server on Cloud

3. Select one or more schemas to migrate to EDB Postgres Advanced Server:

Migrate your schemas to the cloud

1 Select Schemas — 2 Select Platform — 3 Launch Cluster — 4 Connect — 5 Deploy — 6 Finish

⚠ This project has migration challenges. Contact us for help.

Contact Us X

Project Name case_no_v2	Interface ODBC	Source DB Oracle 11g	Target DB EDB Postgres Advanced Server 10	Compatibility 68% ⚠
----------------------------	-------------------	-------------------------	--	--

Select one or more schemas

All
 schema_1900
 HR
 MIGRATIONTEST

Cancel ← Previous → Next

Selecting schemas for migration

4. Select the cloud platform. For example, **IBM Cloud**:

Migrate your schemas to the cloud

Project Name: HumanResources Interface: JDBC Source DB: Oracle 11g Target DB: EDB Postgres Advanced Server 12 Compatibility: 100%

Select the Cloud Platform

IBM Cloud

AWS

Google Cloud

Microsoft Azure

[Cancel](#) [← Previous](#) [→ Next](#)

Selecting cloud option for migration

5. To launch a new cluster, click **Go to Cloud**:

Migrate schemas to EDB Postgres Advanced Server on Cloud

?

1 Select Schemas 2 Select Platform 3 Launch Cluster 4 Connect 5 Deploy 6 Finish

Project Name ID2019_1	Interface JDBC	Source DB Oracle 11g	Target DB EDB Postgres Advanced Server 12	Compatibility 100%
--------------------------	-------------------	-------------------------	--	-----------------------

Launch new IBM™ Cloud cluster

Navigate to IBM™ Cloud to launch a new cluster.

→ Go to IBM™ Cloud

Note: If you have an existing cluster running, click Next.

Cancel ← Previous → Next

Launching a cloud cluster

Or, if you have an existing cluster running, click **Next**.

6. Enter the required connection details on the **Connect** page:

Migrate schemas to EDB Postgres Advanced Server on Cloud

Project Name: ID2019_1 | Interface: JDBC | Source DB: Oracle 11g | Target DB: EDB Postgres Advanced Server 12 | Compatibility: 100%

Connect to IBM™ Cloud cluster

Target Database: ID2019_1

Host Name/Address: Host Name/Address | Port: 9999

Note: Ensure that your database server is accessible from Migration Portal.

Maintenance Database: edb

Username: enterprisedb

Password:

[Cancel](#) [← Previous](#) [→ Next](#)

Connecting to the cloud cluster

Note

You can click `Edit Connection` to make changes to the connection details and retest the connection details.

7. Click **Test Connection** to verify the connection details:

Migrate schemas to EDB Postgres Advanced Server on Cloud



✓ Select Schemas — ✓ Select Platform — ✓ Launch Cluster — 4 Connect — 5 Deploy — 6 Finish

Project Name ID2019_1	Interface JDBC	Source DB Oracle 11g	Target DB EDB Postgres Advanced Server 12	Compatibility 100%
--------------------------	-------------------	-------------------------	--	-----------------------

Target Database

ID2019_1

Host Name/Address Port

52.5.148.59 9999

Maintenance Database

dmp_exec

Note: Deployment will create a new database **ID2019_1** on target server, if the database does not exist.

Ensure that all schemas have a 100% success ratio before deployment.

Existing schemas with similar names will be dropped during deployment.

Edit Connection

[Cancel](#)

[← Previous](#)

[→ Next](#)

Verify the connection details

8. Once the connection is successful, click **Next**:

Migrate schemas to EDB Postgres Advanced Server on Cloud

Project Name: ID2019_1 | Interface: JDBC | Source DB: Oracle 11g | Target DB: EDB Postgres Advanced Server 12 | Compatibility: 100%

Migration Successful

You can view your converted schemas on the target server.

[Download Summary](#)

If you cannot see your schemas on the target server or need help to migrate the schemas, contact us.

[Contact us](#)

[Cancel](#) [Previous](#) [Done](#)

A successful migration

The converted schemas are migrated to the target server.

3.4 Data Migration

After performing the schema migration, complete the following steps to migrate data:

1. Use Migration Toolkit to migrate the data. For detailed information about using Migration Toolkit, see the [Migration Toolkit Guide](#).

- Configure the Migration Toolkit `toolkit.properties` file, ensuring that connection information for the source and target databases is available in the property file:

```

SRC_DB_URL = jdbc: oracle:thin:@localhost:1521:ORCL
SRC_DB_USER = user_name
SRC_DB_PASSWORD = password
TARGET_DB_URL= jdbc:edb://localhost:5444/migration
TARGET_DB_USER = enterprisedb
TARGET_DB-PASSWORD = password

```

For more information, see [Building the toolkit.properties File](#).

- Invoke Migration Toolkit in `-dataOnly` mode; include the `-truncLoad` keyword to resolve foreign key dependencies across tables.

For example, the following command migrates data to a schema named `hr`:

```
runMTK.sh -dataOnly -targetSchema hr -truncLoad HR
```

The command migrates the specified `source_schema` to the `target_schema`. The data is loaded into the locally installed EDB Postgres instance with a database superuser named `enterprisedb` and the password of `password`.

!!! Note The tables are truncated before attempting the data load.

4 Advanced Data Migration

For larger databases that require a parallel data load, you can use one of the following methods:

- Use the EDB Postgres Advanced Server database link feature (for compatibility with Oracle databases).

Or

- Use a Dblink or a database link style migration (if your data contains **CLOB** data).

For more information, see the [Migration Toolkit Guide](#).