

DBPLUS
better performance

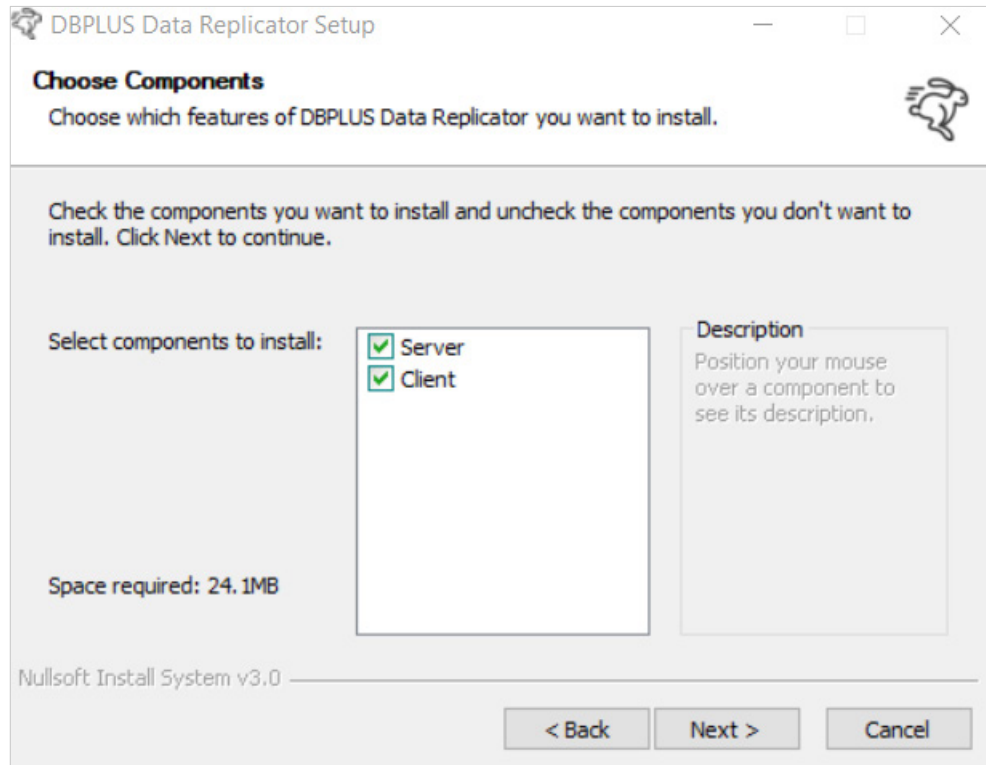
DBPLUS Data Replicator for Oracle

Installation

The installation program allows the user to install one or both components: server and client.

After selecting **Server** option Windows service will be installed and create and manage replication processes will be possible.

The **Client** provides a GUI interface that allows replication to be managed locally or remotely.



Starting the program

User can run the replication management program from the Windows menu:

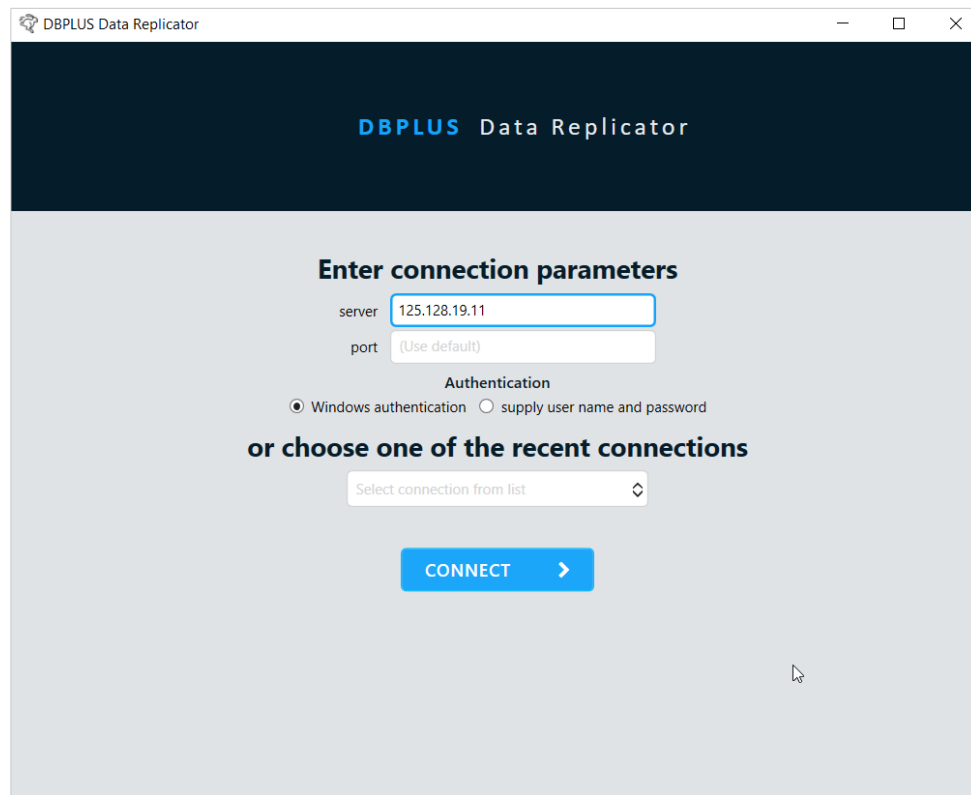
[DBPLUS](#) → [DBPLUS Data Replicator](#)

or using a shortcut on the desktop.

The port field should be left blank, unless settings have been changed before.

The Windows authentication can be used only if the computer we connect from is logged in to the domain.

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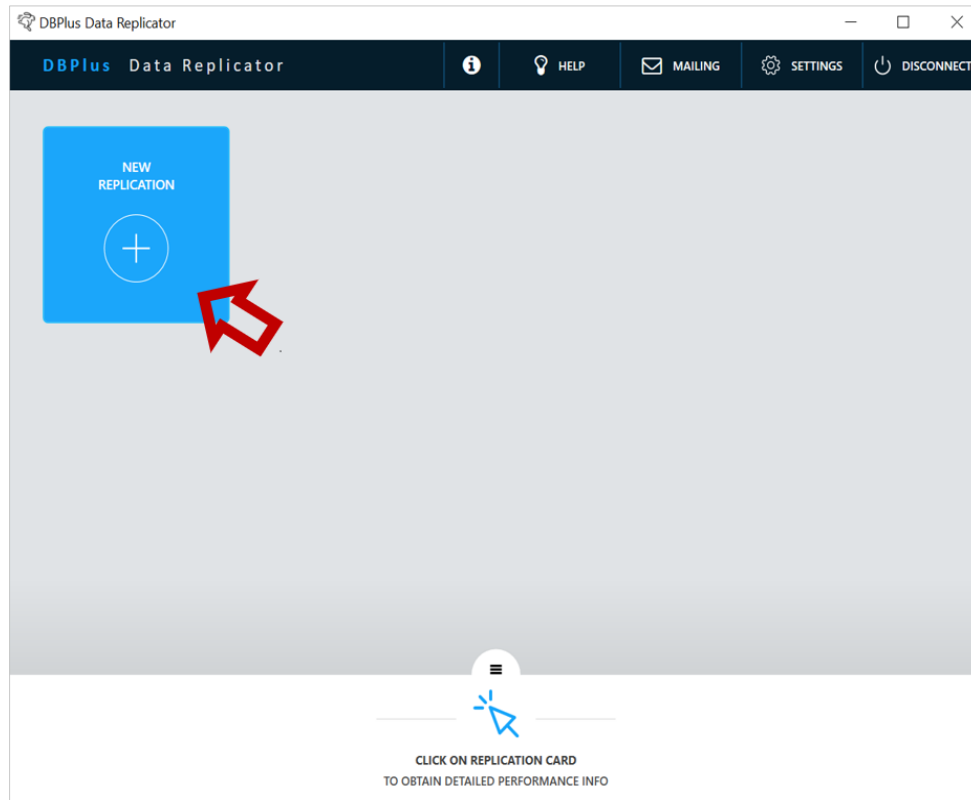


The screenshot shows the 'DBPLUS Data Replicator' application window. The title bar reads 'DBPLUS Data Replicator'. The main interface has a dark blue header with the 'DBPLUS Data Replicator' logo. Below the header, the text 'Enter connection parameters' is displayed. There are two input fields: 'server' with the value '125.128.19.11' and 'port' with the value '(Use default)'. Underneath these fields, the 'Authentication' section shows two radio buttons: 'Windows authentication' (selected) and 'supply user name and password'. Below this, the text 'or choose one of the recent connections' is shown, followed by a dropdown menu with the text 'Select connection from list'. At the bottom, there is a blue 'CONNECT' button with a right-pointing arrow.

New replication

After the first login, **NEW REPLICATION** button will be visible on the main screen.

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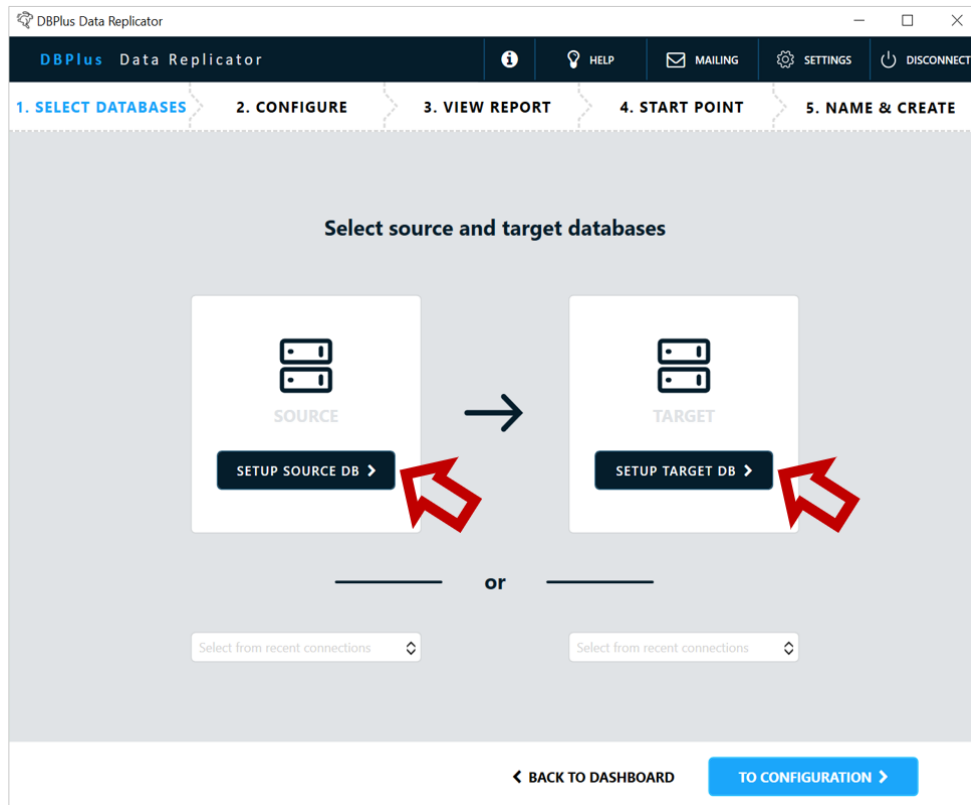


Select databases

At this stage, the connection to the source (SOURCE) and target (TARGET) database is configured.

To view and configure connection settings press [SETUP SOURCE DB](#) or [SETUP TARGET DB](#) button or use the previously entered settings by selecting them from the list below.

After selecting from the list, user can press [SETUP](#) SOURCE DB or [SETUP](#) TARGET DB button to verify or modify the settings.



Source DB configuration

In the **connection name** field, enter name for the connection.

Complete the remaining fields:

- **server** – IP or Host name
- **port** – port number
- **Service name** – Windows service name
- **container name** – db container name (optional)

Setup replication user manually

Enter the name and password of an existing user for replication.

To check your connection settings click **TEST CONNECTION** button.

The screenshot shows the 'Setup source database connection' window in the DBPLUS Data Replicator application. The window has a dark blue header with the title 'DBPLUS Data Replicator' and navigation links: 'i', 'HELP', 'MAILING', 'SETTINGS', and 'DISCONNECT'. Below the header is a progress bar with five steps: '1. SELECT DATABASES', '2. CONFIGURE', '3. VIEW REPORT', '4. START POINT', and '5. NAME & CREATE'. The current step is '2. CONFIGURE'. The main content area is titled 'Setup source database connection' and includes a checkbox 'save for later use' which is checked. There are two radio buttons for the database type: 'ORACLE' (selected) and 'MS SQL SERVER'. Under the 'ORACLE' section, there are two options for setting up the replication user: 'Setup replication user manually' (selected) and 'Let program create and configure the user for you'. The 'Setup replication user manually' option has a sub-section for 'replication user credentials' with fields for 'user name' (filled with 'user_rep') and 'password' (masked with dots). A 'SHOW SETUP SCRIPT' button is located below these fields. On the left side, there are several input fields: 'connection name' (filled with 'localhost_xe'), 'setup mode' (dropdown menu showing 'Basic'), 'server' (filled with 'localhost'), 'port' (filled with '1521'), 'service identifier type' (dropdown menu showing 'SID'), 'SID' (filled with 'xe'), and 'container name' (empty). At the bottom of the window, there is a 'TEST CONNECTION >' button and a 'SAVE >' button.

Source DB configuration

Let program create and configure the user for you

The user is automatically created and configured (if **create if not exists** checkbox is selected). For this purpose, it is necessary to enter the username and system administrator password.

The system administrator data are used only for the configuration process and are not saved anywhere.

When this option is selected, the **SETUP REPLICATION USER** button will be available. Press the button will launch the function that creates the user (if necessary) and gives it the necessary permissions.

After finish, the **SAVE** button approves the changes.

The screenshot shows the 'Setup source database connection' window in the DBPLUS Data Replicator application. The window has a dark blue header with the title 'DBPLUS Data Replicator' and navigation links for '1. SELECT DATABASES', '2. CONFIGURE', '3. VIEW REPORT', '4. START POINT', and '5. NAME & CREATE'. The '2. CONFIGURE' step is active.

The main content area is titled 'Setup source database connection' and includes a checkbox for 'save for later use' which is checked. Below this, there are two radio buttons for 'ORACLE' (selected) and 'MS SQL SERVER'. The 'ORACLE' section contains several input fields: 'connection name' (SOURCE), 'setup mode' (Basic), 'server' (myserver), 'port' (1521), 'service identifier type' (Service name), 'service name' (SOURCE), and 'container name' (empty). To the right of these fields, there are two radio buttons for 'Setup replication user manually' and 'Let program create and configure the user for you' (selected). Below these, there are two sections for credentials: 'sys admin credentials (for setup purposes only)' with fields for 'user name' (SYS) and 'password' (masked), and 'replication user credentials' with a checked 'create if not exists' checkbox and fields for 'user name' (USER_REP) and 'password' (masked).

At the bottom of the window, there is a dark blue button labeled 'SETUP REPLICATION USER >' and a white button labeled 'SAVE >'.

Target DB configuration

In the **connection name** field, enter name for the connection.

Complete the remaining fields:

- **server** – IP or Host name
- **port** – port number
- **service name** – Windows service name
- **container name** – db container name (optional)

Enter the name and password of an existing user for replication.

To check your connection settings click **TEST CONNECTION** button.

Accept configuration by clicking **SAVE** button.

The screenshot shows the 'Setup target database connection' window in the DBPLUS Data Replicator application. The window has a dark blue header with the title 'DBPLUS Data Replicator' and navigation icons for 'DBPLUS', 'Data Replicator', 'HELP', 'MAILING', 'SETTINGS', and 'DISCONNECT'. Below the header is a progress bar with five steps: '1. SELECT DATABASES', '2. CONFIGURE', '3. VIEW REPORT', '4. START POINT', and '5. NAME & CREATE'. The '2. CONFIGURE' step is currently active.

The main content area is titled 'Setup target database connection' and includes a checkbox 'save for later use' which is checked. Below this, there are three radio buttons for database types: 'ORACLE' (selected), 'MS SQL SERVER', and 'POSTGRES'.

The configuration fields are organized into two columns. The left column contains: 'connection name' (text input with 'target_Oracle'), 'setup mode' (dropdown menu with 'Basic' selected), 'server' (text input with 'localhost'), 'port' (text input with '1521'), 'service identifier type' (dropdown menu with 'SID' selected), 'SID' (text input with 'PROD'), and 'container name' (text input). The right column contains 'replication user credentials' with 'user name' (text input with 'system') and 'password' (password input with masked characters).

At the bottom of the window, there are two buttons: 'TEST CONNECTION >' and '< CANCEL'. A blue 'SAVE >' button is located at the bottom right corner.

Configuration of the data Replicator

In this step it is possible to configure replication rules:

- Schemes and tables,
- What operations should be replicated,

And also object transformations:

- Renaming schemes,
- Renaming of tables.

The screenshot shows the 'DBPLUS Data Replicator' application window. The top navigation bar includes 'DBPLUS Data Replicator', an information icon, 'HELP', 'MAILING', 'SETTINGS', and 'DISCONNECT'. Below this is a progress bar with five steps: '1. SELECT DATABASES', '2. CONFIGURE' (active), '3. VIEW REPORT', '4. START POINT', and '5. NAME & CREATE'. The main section is titled 'Configure replication rules' and contains several interactive elements: a 'DB:' dropdown showing 'Source_PROD', two tabs 'CUSTOM REPLICATION' (selected) and 'EXACT REPLICATION', a text box explaining the difference between the two, two radio buttons for 'REPLICATE ALL SCHEMAS AND TABLES EXCEPT SELECTED' (selected) and 'REPLICATE ONLY SELECTED SCHEMAS AND TABLES', and two checkboxes for 'configure default schema advanced options' and 'configure default table advanced options'. Below these are two table-like structures for selecting schemas and tables, each with a '+' button. At the bottom, there is a 'SELECT TABLE, SCHEMA OR DATABASE TO VIEW ADVANCED OPTIONS' section with a magnifying glass icon, and two buttons: 'BACK TO DB SELECTION' and 'TO REPORT >'.

DBPLUS Data Replicator

DBPLUS Data Replicator

1. SELECT DATABASES 2. CONFIGURE 3. VIEW REPORT 4. START POINT 5. NAME & CREATE

Configure replication rules

DB: Source_PROD

CUSTOM REPLICATION EXACT REPLICATION

Choose **CUSTOM REPLICATION** if you want to pick schemas and tables to replicate with specific features turned on or off. Choose **EXACT REPLICATION** to obtain a *verbatim copy* of the source database.

REPLICATE ALL SCHEMAS AND TABLES EXCEPT SELECTED REPLICATE ONLY SELECTED SCHEMAS AND TABLES

☒ configure default schema advanced options ☒ configure default table advanced options

SCHEMA NAME

+

SCHEMA NAME TABLE NAME

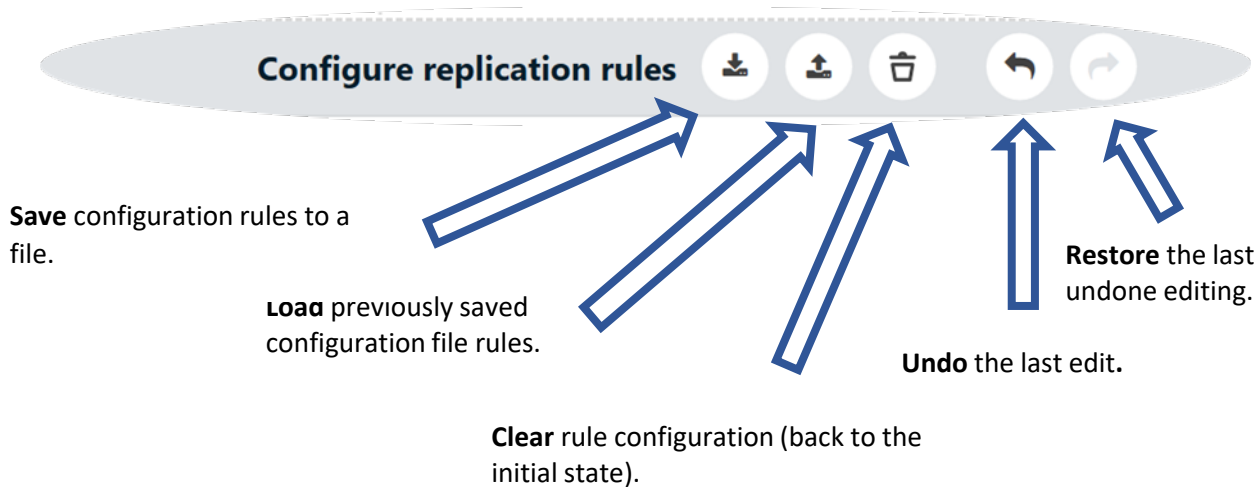
+

SELECT TABLE, SCHEMA OR DATABASE TO VIEW ADVANCED OPTIONS

BACK TO DB SELECTION TO REPORT >

Replication rules

Configuring replication rules provides toolbar **Configure replication rules**.



Replication mode

Two replication modes to choose from:

- **EXACT REPLICATION**
- **CUSTOM REPLICATION**

The screenshot shows the 'DBPLUS Data Replicator' application window. The top navigation bar includes 'DBPLUS Data Replicator', an information icon, and buttons for 'HELP', 'MAILING', 'SETTINGS', and 'DISCONNECT'. Below this is a progress bar with five steps: '1. SELECT DATABASES', '2. CONFIGURE' (highlighted), '3. VIEW REPORT', '4. START POINT', and '5. NAME & CREATE'. The main section is titled 'Configure replication rules' and contains several controls:

- A 'DB:' label with a database icon and the text 'Source_PROD'.
- Two buttons: 'CUSTOM REPLICATION' (highlighted in yellow and pointed to by a red arrow) and 'EXACT REPLICATION'.
- A text box explaining the modes: 'Choose **CUSTOM REPLICATION** if you want to pick schemas and tables to replicate with specific features turned on or off. Choose **EXACT REPLICATION** to obtain a *verbatim copy* of the source database.'
- Two radio buttons: 'REPLICATE ALL SCHEMAS AND TABLES EXCEPT SELECTED' (selected) and 'REPLICATE ONLY SELECTED SCHEMAS AND TABLES'.
- Two checkboxes: 'configure default schema advanced options' and 'configure default table advanced options', both of which are checked.
- Below these controls are two tables for selecting schemas and tables, each with a blue '+' button to add entries.

SCHEMA NAME

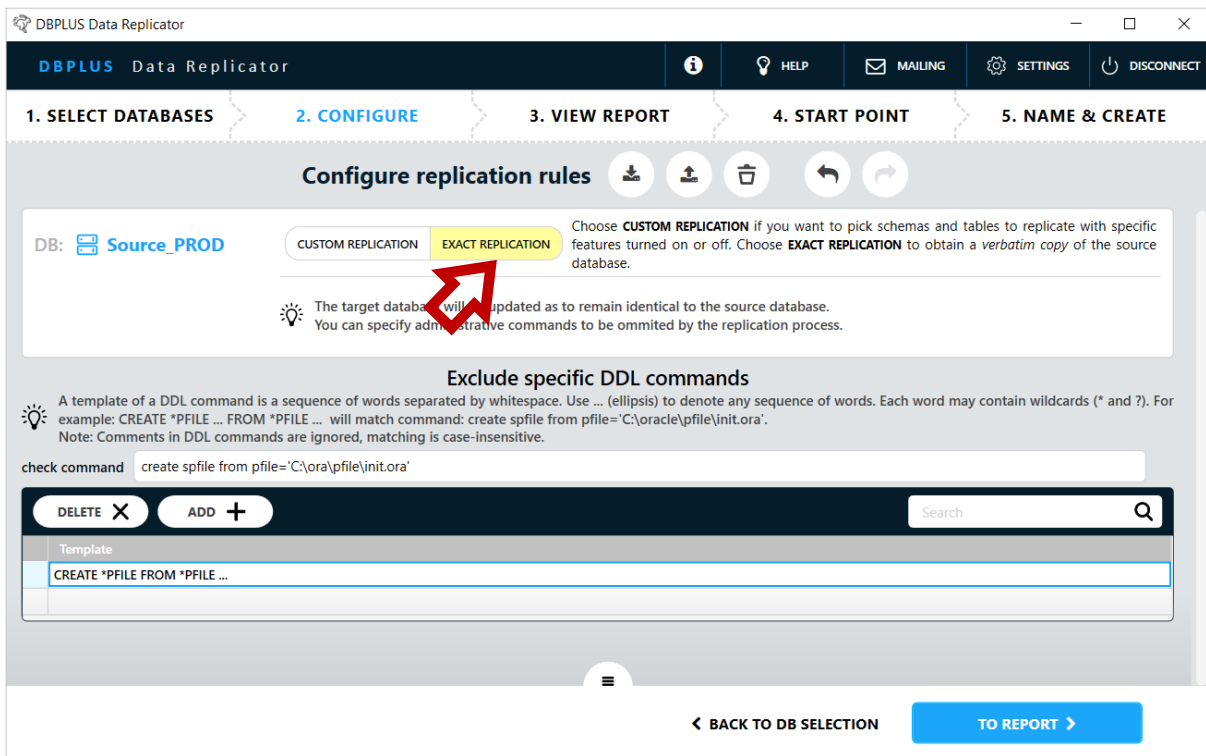
SCHEMA NAME	TABLE NAME

Exact Replication

Replication of **the entire database**. If this option is chosen, there is no need to perform any additional configuration.

The *exact* mode is available only for replication between Oracle databases.

In the **Exclude specific DDL commands** section, you can define DDL commands that will not be replicated. This is useful to exclude administrative commands from replication whose operation depends on the system environment.



The screenshot shows the 'DBPLUS Data Replicator' application window. The top navigation bar includes 'DBPLUS Data Replicator', an information icon, 'HELP', 'MAILING', 'SETTINGS', and 'DISCONNECT'. Below this is a progress bar with five steps: '1. SELECT DATABASES', '2. CONFIGURE', '3. VIEW REPORT', '4. START POINT', and '5. NAME & CREATE'. The '2. CONFIGURE' step is active, showing the 'Configure replication rules' section. In this section, the 'EXACT REPLICATION' option is selected and highlighted in yellow, with a red arrow pointing to it. The 'CUSTOM REPLICATION' option is also visible. Below the options, a note states: 'The target database will be updated as to remain identical to the source database. You can specify administrative commands to be omitted by the replication process.' The 'Exclude specific DDL commands' section is also visible, with a template of a DDL command: 'CREATE *PFILE FROM *PFILE ...'. At the bottom, there are buttons for 'BACK TO DB SELECTION' and 'TO REPORT >'.

DBPLUS Data Replicator

DBPLUS Data Replicator

1. SELECT DATABASES 2. CONFIGURE 3. VIEW REPORT 4. START POINT 5. NAME & CREATE

Configure replication rules

DB: Source_PROD

CUSTOM REPLICATION EXACT REPLICATION

Choose CUSTOM REPLICATION if you want to pick schemas and tables to replicate with specific features turned on or off. Choose EXACT REPLICATION to obtain a *verbatim copy* of the source database.

The target database will be updated as to remain identical to the source database. You can specify administrative commands to be omitted by the replication process.

Exclude specific DDL commands

A template of a DDL command is a sequence of words separated by whitespace. Use ... (ellipsis) to denote any sequence of words. Each word may contain wildcards (*) and (?). For example: CREATE *PFILE ... FROM *PFILE ... will match command: create spfile from pfile='C:\oracle\pfile\init.ora'. Note: Comments in DDL commands are ignored, matching is case-insensitive.

check command create spfile from pfile='C:\ora\pfile\init.ora'

DELETE X ADD +

Search

Template

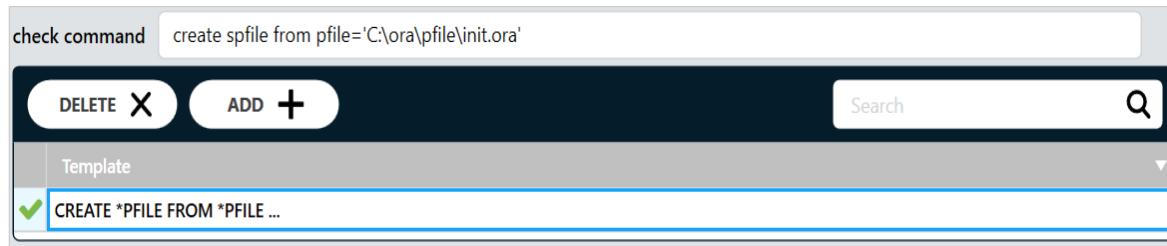
CREATE *PFILE FROM *PFILE ...

BACK TO DB SELECTION TO REPORT >

Exact replication - rules

Rules define templates DDL commands:

- Command words with template words are subject to comparison, spaces are used to separate words, the number and type of white markings does not matter.
- Character size does not matter.
- Comments analyzed in the DDL command are skipped.
- Within a single word, you can use special symbols * and ? (any string and any character).
- The special word ... (three dots) means any string (also empty) in the DDL command being analyzed.



Custom Replication

Replication of selected operations for selected schemas and tables.

In this mode it is possible to replicate:

- data
- data structures: tables and views definitions with columns, indexes
- code: packages, procedures and functions

There are three levels of configuration:

- **Database level** (global).
- **Schema level** (for particular schemes).
- **Tables level** (for particular tables).

The screenshot shows the 'DBPLUS Data Replicator' application window. The top navigation bar includes 'DBPLUS Data Replicator', 'HELP', 'MAILING', 'SETTINGS', and 'DISCONNECT'. The main navigation tabs are '1. SELECT DATABASES', '2. CONFIGURE', '3. VIEW REPORT', '4. START POINT', and '5. NAME & CREATE'. The '2. CONFIGURE' tab is active, showing the 'Configure replication rules' section. This section includes a 'DB:' dropdown set to 'Source_PROD', two tabs 'CUSTOM REPLICATION' (selected) and 'EXACT REPLICATION', and a text box with instructions. Below the tabs are two radio buttons: 'REPLICATE ALL SCHEMAS AND TABLES EXCEPT SELECTED' and 'REPLICATE ONLY SELECTED SCHEMAS AND TABLES' (selected). A red arrow points to the 'REPLICATE ONLY SELECTED SCHEMAS AND TABLES' option. Below the configuration section are two tables for selecting schemas and tables, each with a '+' button. The bottom section has a sidebar with 'ADVANCED FILTERING' (selected), 'TABLESPACE MAPPING', and 'RENAME COLUMNS'. The main area shows a 'DATABASE' dropdown set to 'user'. At the bottom, there are buttons for '< BACK TO DB SELECTION' and 'TO REPORT >'.

Custom – database level

From database level choose one of the options:

- **REPLICATE ALL SCHEMAS AND TABLE EXCEPT SELECTED** means that all schemas and tables are replicated, unless they are disabled by the settings at the lower configuration levels. Selecting this option forces the default schema and table filter advanced settings.
- **REPLICATE ONLY SELECTED SCHEMAS AND TABLES** means that only schemas and tables selected at the lower configuration levels are replicated. Entering the default advanced filter settings is optional.

DBPLUS Data Replicator

DBPLUS Data Replicator

1. SELECT DATABASES 2. CONFIGURE 3. VIEW REPORT 4. START POINT 5. NAME & CREATE

Configure replication rules

DB: Source_PROD

CUSTOM REPLICATION EXACT REPLICATION

Choose **CUSTOM REPLICATION** if you want to pick schemas and tables to replicate with specific features turned on or off. Choose **EXACT REPLICATION** to obtain a *verbatim copy* of the source database.

REPLICATE ALL SCHEMAS AND TABLES EXCEPT SELECTED REPLICATE ONLY SELECTED SCHEMAS AND TABLES

☐ configure default **schema** advanced options ☐ configure default **table** advanced options

SCHEMA NAME

+

SCHEMA NAME TABLE NAME

+

ADVANCED FILTERING

TABLESPACE MAPPING

RENAME COLUMNS

DATABASE

user

< BACK TO DB SELECTION TO REPORT >

Custom – schema level

Settings at the schema level enable to:

- **Add** schema to replicate if you use **REPLICATE ONLY SELECTED SCHEMAS AND TABLES** option from database level,
- **Exclude** schema if you use the **REPLICATE ALL SCHEMAS AND TABLES EXCEPT SELECTED** option at the database level,
- Change the **settings** for selected schema.

The screenshot shows the DBPLUS Data Replicator interface. At the top, there's a navigation bar with tabs: 1. SELECT DATABASES, 2. CONFIGURE (active), 3. VIEW REPORT, 4. START POINT, and 5. NAME & CREATE. Below the navigation bar, there's a section titled "Configure replication rules". It includes a dropdown for "DB:" set to "Source_PROD", and two tabs: "CUSTOM REPLICATION" (selected) and "EXACT REPLICATION". Under "CUSTOM REPLICATION", there are two options: "REPLICATE ALL SCHEMAS AND TABLES EXCEPT SELECTED" and "REPLICATE ONLY SELECTED SCHEMAS AND TABLES" (selected). Below these are checkboxes for "configure default schema advanced options" and "configure default table advanced options".

The main configuration area is divided into two sections. The top section is for "SCHEMA NAME" and lists two schemas: "FLOWS_FILES" and "HR". Each schema has a "REPLICATE ALL TABLES" button, a "REPLICATE SELECTED TABLES" button, and checkboxes for "configure this schema advanced options" and "configure default table advanced options". A red arrow points to the "HR" schema row. The bottom section is for "TABLE NAME" and lists two tables under the "HR" schema: "COUNTRIES" and "DEPARTMENTS". Each table has a "configure this table advanced options" checkbox and a list of target table names: "HR.COUNTRIES" and "HR.ALT_COUNTRIES" for "COUNTRIES", and "HR.DEPARTMENTS" and "HR.DATA" for "DEPARTMENTS".

At the bottom, there's a section for "ADVANCED FILTERING" with three options: "A → B RENAME OBJECTS" (selected), "A → B RENAME COLUMNS", and "A → B RENAME COLUMNS". To the right, there's a "TARGET SCHEMA NAME" field set to "HR" and a "TARGET TABLE NAME" field set to "ALT_<NAME>". A legend explains the placeholders: "Use <NAME> as a placeholder for the original schema or table name. E. g. to insert prefix ALT_ before the names of all tables in a schema specify ALT_<NAME> as table name replacement on the schema level." At the bottom right, there are two buttons: "BACK TO DB SELECTION" and "TO REPORT".

Custom – schema level

On the left, enter the name of the schema:

- select one or more schemas from the list,
- enter the name of the schema (schema does not need to exist at the time of configuration),
- you can enter a **pattern** containing **special characters**.

After entering the schema name, select one of the options in the middle part of the screen:

- EXCLUDE
- CONFIGURE

(the selection of buttons depends on the option selected at the database level).

The schema name will appear in the list on the right.

DBPLUS Data Replicator

DBPLUS Data Replicator

HELP MAILING SETTINGS DISCONNECT

Add schemas to configuration

Enter schema name

☐ APEX_040200

☐ FIN

☐ FLOWS_FILES

☐ GSMADMIN_INTERNAL

☐ SALES

☐ TESTDATA

EXCLUDE >

CONFIGURE >

Add the following schemas

x FLOWS_FILES

x SALES

to the currently selected

< CANCEL CONFIRM >

Custom – schema level

Schema entries can belong to one of **three** types:



Add to replication

It is required to enter advanced filtering settings for the schema, unless they were entered at the database level. It is possible to enter configuration items for tables that belong to this schema.



Disable of replication

There are no further settings to enter.



Change setting




It is required to enter advanced filtering settings for the schema, unless they were entered at the database level. It is possible to enter configuration items for tables that belong to this scheme.



Custom – table level

For the "change settings" and „add to replication" items, choose one of the options:

REPLICATE ALL TABLES means that all tables belonging to a given schema will be replicated, unless they are indicated as **disabled** at the table configuration level. Selecting this option **forces** the default filter advanced settings for the table to be entered.

REPLICATE SELECTED TABLES means that only tables belonging to a given schema will be replicated, which will be indicated at the table configuration level. Entering the default advanced filter settings for tables is **optional**.

SCHEMA NAME	
 FLOWS_020100	<div><div>×</div><div>REPLICATE ALL TABLES</div><div>REPLICATE SELECTED TABLES</div><div><input type="checkbox"/> configure this schema advanced options <input type="checkbox"/> configure default table advanced options</div></div>
 FLOWS_FILES	<div><div>×</div><div>Schema FLOWS_FILES will be excluded from replication.</div></div>
 HR	<div><div>×</div><div>REPLICATE ALL TABLES</div><div>REPLICATE SELECTED TABLES</div><div><input checked="" type="checkbox"/> configure this schema advanced options <input checked="" type="checkbox"/> configure default table advanced options</div><div>HR.* ↓ HR.ALTT.*</div></div>
<div>+</div>	

SCHEMA NAME	
 FLOWS_020100	<div><div>×</div><div>REPLICATE ALL TABLES</div><div>REPLICATE SELECTED TABLES</div><div><input type="checkbox"/> configure this schema advanced options <input type="checkbox"/> configure default table advanced options</div></div>
 HR	<div><div>×</div><div>REPLICATE ALL TABLES</div><div>REPLICATE SELECTED TABLES</div><div><input checked="" type="checkbox"/> configure this schema advanced options <input checked="" type="checkbox"/> configure default table advanced options</div><div>HR.* ↓ HR.ALTT.*</div></div>
<div>+</div>	

Custom – table level

On the left side of page user have options to choose the tables from selected schema to included to configuration. User can use one of the following options:

- Select the table (**SELECT** tab)
- Import tables name (**IMPORT** tab)

The screenshot displays the 'DBPLUS Data Replicator' application window, specifically the '2. CONFIGURE' step. The interface includes a top navigation bar with icons for help, mailing, settings, and disconnect. Below this is a progress bar with five steps: 1. SELECT DATABASES, 2. CONFIGURE (active), 3. VIEW REPORT, 4. START POINT, and 5. NAME & CREATE. The main content area is titled 'Add tables to configuration' and features two tabs: 'SELECT' (active) and 'IMPORT'. Under the 'SELECT' tab, there is a 'Select schema' dropdown menu with 'HR' selected, and an 'Enter table name' text input field. Below these, a list of tables is shown with checkboxes: COUNTRIES, DEPARTMENTS, EMPLOYEES, JOBS, JOB_HISTORY, LOCATIONS, and REGIONS. To the right of the table list is a 'REPLICATE >' button. On the far right, a panel titled 'Add the following tables' shows a list of tables to be added: HRJOB_HISTORY and HRLOCATIONS. Below this, a section titled 'to the currently selected' shows a list of tables already selected: FLOWS_020100.WWV_FLOWS, FLOWS_020100.WWV_FLOW_CALS, HR.COUNTRIES, and HR.DEPARTMENTS. At the bottom of the window, there are 'CANCEL' and 'CONFIRM >' buttons.

Custom – table level

Settings at the table level enable to:

- **Add** a table to replicate using the **REPLICATE SELECTED TABLES** option at the schema level.
- **Exclude** tables from replication using the **REPLICATE ALL SCHEMAS AND TABLES EXCEPT SELECTED** option at the database level, or **REPLICATE ALL TABLES** at the schematic level.
- Change **settings** for selected tables.

SCHEMA NAME			
+ FLOWS_020100	×	REPLICATE ALL TABLES	REPLICATE SELECTED TABLES
		<input type="checkbox"/> configure this schema advanced options <input type="checkbox"/> configure default table advanced options	
+ HR	×	REPLICATE ALL TABLES	REPLICATE SELECTED TABLES
		<input checked="" type="checkbox"/> configure this schema advanced options <input checked="" type="checkbox"/> configure default table advanced options	
		HR.* ↓ HR. ALT.*	
		+	
SCHEMA NAME	TABLE NAME		
🔗 FLOWS_020100	WWV_FLOWS	×	<input type="checkbox"/> configure this table advanced options
		FLOWS_020100.WWV_FLOWS ↓ FLOWS_020100.ABC	
— FLOWS_020100	WWV_FLOW_CALS	×	Table WWV_FLOW_CALS in schema FLOWS_020100 will be excluded from replication.
+ HR	COUNTRIES	×	<input type="checkbox"/> configure this table advanced options
		HR.COUNTRIES ↓ HR. ALT_COUNTRIES	
+ HR	DEPARTMENTS	×	<input type="checkbox"/> configure this table advanced options
		HR.DEPARTMENTS ↓ HR.DATA	
		+	

Custom – Advanced filtering

This option allows you to specify which DDL operations will be replicated.

Database level definition:




- **User** – database user.

Schema level definition:

- **View** – view definition
- **Code*** - packages, procedures and functions

Table level definition:

- **Table** – table definitions
- **Index** – index definitions
- **Data** – data (records)

	ADVANCED FILTERING
A → B	RENAME OBJECTS
 → 	RENAME COLUMNS



	DATABASE	SCHEMA		TABLE		DATA
	user	view	code *	table	index	data
Create	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Alter	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Drop	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Insert						<input checked="" type="checkbox"/>
Update						<input checked="" type="checkbox"/>
Delete						<input checked="" type="checkbox"/>

* package, procedure and function

Custom – rename objects

This option allows you to change **objects name** at the schema and table level.

Rename objects allows to move data between schemas and tables whose names are different between the source and target database.

User can use **<NAME>** as placeholder for the original schema or table name. E.g. to insert prefix ALT_ before the names of all tables in a schema specify ALT_<NAME> as table name replacement on the schema level.

The screenshot shows the DBPLUS Data Replicator interface. At the top, a navigation bar includes options: ADVANCED FILTERING, RENAME OBJECTS (highlighted with a red arrow), and RENAME COLUMNS. Below this, the main window displays the 'Configure replication rules' section. A table lists source schemas and tables, with the 'DEPARTMENTS' table from the 'HR' schema being mapped to 'TEST.DATA_DEPARTMENTS' in the target. A red arrow points to this mapping. Below the table, the 'TARGET TABLE NAME' field is set to 'DATA_<NAME>', with a red arrow pointing to it. A red arrow also points to the 'TO REPORT' button at the bottom right. A red arrow points to the 'RENAME OBJECTS' option in the top navigation bar.

DBPLUS Data Replicator

1. SELECT DATABASES 2. CONFIGURE 3. VIEW REPORT 4. START POINT 5. NAME & CREATE

Configure replication rules

SCHEMA NAME	TABLE NAME		
+ HR	COUNTRIES	×	<input checked="" type="checkbox"/> configure this table advanced options
+ HR	DEPARTMENTS	×	<input checked="" type="checkbox"/> configure this table advanced options
+ HR	EMPLOYEES	×	<input checked="" type="checkbox"/> configure this table advanced options

HR.DEPARTMENTS
↓
TEST.DATA_DEPARTMENTS

TARGET SCHEMA NAME
CHANGE ☒ TEST

TARGET TABLE NAME
CHANGE ☒ DATA_<NAME>

Use <NAME> as a placeholder for the original schema or table name. E.g. to insert prefix ALT_ before the names of all tables in a schema specify ALT_<NAME> as table name replacement on the schema level.

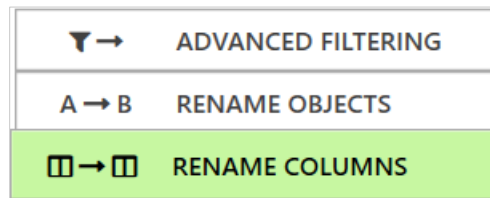
< BACK TO DB SELECTION TO REPORT >

Custom – rename columns

Changing column names allows you to transfer data between columns whose names are different between the source and target databases.

Mapping options:

- Automatic
- Manual



AUTO COLUMN MAPPING

CHANGE ☐ Limit column names' length Inherited from [database](#) level.

maximum length

Column names will be replaced by shortened names whenever their length exceeds the length specified above. If simply truncating a column name would lead to a duplicate, digits will be appended at the end of the name to obtain a unique name.

CONVERT TO MANUAL

Source schema	Source table	Source column name	Target column name
SALES	CUSTOMERS	IS_ELIGIBLE_FOR_SPECIAL_DISCOUNT	IS_ELIGIBLE_FOR_SPECIAL_DISCOU

MANUAL COLUMN MAPPING

DELETE **ADD**

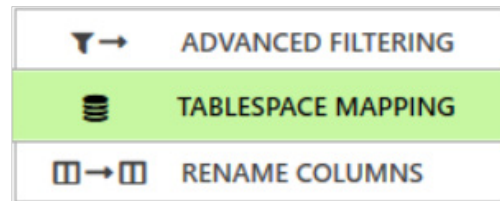
Source column name	Target column name
AMOUNT IN EUR	AMOUNT_IN_EUR
AMOUNT IN USD	AMOUNT_IN_USD

Custom – Tablespace mapping

In the **database** level, the **TABLESPACE MAPPING** tab is available.

This options allow you to map the **tablespace** between the source and target database.

In the **Source tablespace** column, enter the name of the table space in the source database (the name can contain special characters like * and ?). In the **Target tablespace** column enter the name of the corresponding table space in the target database. The result will be a replace of table space identifiers in DDL commands executed in the target database.



DELETE X ADD + Search Q		
	Source tablespace	Target tablespace
*	TS_1	USERS
*	RS_2	USERS
*	ABD	EMP

Generating report

After confirm the configuration system will generate a **report**.

The report contains information about number of tables, data and index volume. Information about detected potential problem is also reported.

The generated report also will be available for view later.

Go to the next step by pressing **TO START POINT** button.

DBPlus Data Replicator

DBPlus Data Replicator

1. SELECT DATABASES > 5. NAME & CREATE > **3. VIEW REPORT** > 4. START POINT > 5. NAME & RUN

SUMMARY

Number of tables	34
Data volume	1.03 GB
Index volume	27.2 MB

SYSTEM CHECK RESULTS

- Some of the tables selected for replication have no unique index. This may lead to runtime problems.
TESTDATA.INPUT_FILES
- Archive logs are available
Archive logs are available for period of 22 days.

◀ BACK TO CONFIGURATION **TO START POINT >**

Start point – current SCN

In this step, the starting replication point is set. The starting point is expressed as the value of the **SCN** number (System Change Number).

The replication process will transfer transactions committed after the start point. In other words, transactions will be transferred, where the SCN of the *commit* operation is **higher** than the SCN of the starting point.

Current SCN on replication start
when replication process will start the SCN number set automatically. This SCN becomes the SCN number of the starting point and does not change.

The screenshot shows the 'DBPLUS Data Replicator' application window. The top navigation bar includes 'DBPLUS Data Replicator', 'HELP', 'MAILING', 'SETTINGS', and 'DISCONNECT'. Below this is a progress bar with five steps: '1. SELECT DATABASES', '2. CONFIGURE', '3. VIEW REPORT', '4. START POINT' (which is highlighted), and '5. NAME & CREATE'. The main content area is titled 'Setup replication start point'. It contains a paragraph explaining that the replication process will transfer transactions committed after the start point and lists three methods to set the start point: 1. Let start point be determined at the moment replication starts as current database SCN, 2. Specify it manually, and 3. Let start point be determined by data imported to the target database. Below this, there are three radio buttons: 'Current SCN on replication start' (which is selected), 'Set manually', and 'Automatically set by import'. At the bottom of the main area, there is a checkbox labeled 'Activate data pump script creation tool after this wizard has been finished'. At the very bottom of the window, there are two buttons: 'BACK TO REPORT' and 'TO NAMING'.

DBPLUS Data Replicator

DBPLUS Data Replicator

1. SELECT DATABASES 2. CONFIGURE 3. VIEW REPORT 4. START POINT 5. NAME & CREATE

Setup replication start point

Replication process will transfer transactions committed after the start point. You can use one of the following methods to set up the start point: 1. Let start point be determined at the moment replication starts as current database SCN. 2. Specify it manually. 3. Let start point be determined by data imported to the target database. The third method will only work when scripts generated by the DBPLUS Data Replicator tools are used for data import.

☒ Current SCN on replication start ☐ Set manually ☐ Automatically set by import

Data pump script

☐ Activate data pump script creation tool after this wizard has been finished

← BACK TO REPORT TO NAMING →

Start point – set manually

Set manually - allows you to enter the SCN value of the starting point.

Calculate automatically – Replicator will automatically calculate the point from which to start reading transaction log to accommodate the start point as specified above. The value is determined based on the value of the **UNDO_RETENTION** parameter.

Set manually – the ability to manually enter the value of the **SCN**, which will start reading transaction log.

The screenshot shows the 'DBPLUS Data Replicator' application window. The top navigation bar includes 'DBPLUS Data Replicator', 'HELP', 'MAILING', 'SETTINGS', and 'DISCONNECT'. The main content area is titled 'Setup replication start point' and is part of a 5-step wizard (1. SELECT DATABASES, 2. CONFIGURE, 3. VIEW REPORT, 4. START POINT, 5. NAME & CREATE). The wizard explains that the replication process will transfer transactions committed after the start point and offers three methods to set it: 1. Let start point be determined at the moment replication starts as current database SCN, 2. Specify it manually, and 3. Let start point be determined by data imported to the target database. The 'Set manually' option is selected, and a text input field contains the value '21318645646865'. Below this, the 'Transaction log reading start position' section explains that the replicator will automatically calculate the point but allows manual override. The 'Calculate automatically' option is selected. At the bottom, there is a checkbox for 'Activate data pump script creation tool after this wizard has been finished' which is currently unchecked. Navigation buttons at the bottom right are '< BACK TO REPORT' and 'TO NAMING >'. A mouse cursor is pointing at the 'TO NAMING >' button.

DBPLUS Data Replicator

DBPLUS Data Replicator

1. SELECT DATABASES 2. CONFIGURE 3. VIEW REPORT 4. START POINT 5. NAME & CREATE

Setup replication start point

Replication process will transfer transactions committed after the start point. You can use one of the following methods to set up the start point: 1. Let start point be determined at the moment replication starts as current database SCN. 2. Specify it manually. 3. Let start point be determined by data imported to the target database. The third method will only work when scripts generated by the DBPLUS Data Replicator tools are used for data import.

☐ Current SCN on replication start ☒ Set manually ☐ Automatically set by import

21318645646865

Transaction log reading start position

Replicator will automatically calculate the point from which to start reading transaction log to accommodate the start point as specified above. In rare cases you might want to manually override its choice.

☒ Calculate automatically ☐ Set manually

Data pump script

☐ Activate data pump script creation tool after this wizard has been finished

< BACK TO REPORT TO NAMING >

Start point – set by import

Automatically set by import - starting point determined based on the last data import made using the **data pump** generation tool provided by the replicator.

During the script execution which imports data in the target database, information about the **SCN** number for which the data was exported is saved (data pump *flashpoint* parameter).

If the *automatically set by import* option is selected, the information will be read during the replication start and the SCN for which the data was exported will automatically become the starting point.

The screenshot shows the 'DBPLUS Data Replicator' application window. The title bar reads 'DBPLUS Data Replicator'. The interface has a dark blue header with the 'DBPLUS Data Replicator' logo and several utility icons: an information icon, a lightbulb icon labeled 'HELP', an envelope icon labeled 'MAILING', a gear icon labeled 'SETTINGS', and a power icon labeled 'DISCONNECT'. Below the header is a progress bar with five steps: '1. SELECT DATABASES', '2. CONFIGURE', '3. VIEW REPORT', '4. START POINT' (which is highlighted in blue), and '5. NAME & CREATE'. The main content area is titled 'Setup replication start point'. It contains a paragraph explaining that the replication process will transfer transactions committed after the start point and lists three methods to set it up. A lightbulb icon is next to the first method. The methods are: 1. Let start point be determined at the moment replication starts as current database SCN. 2. Specify it manually. 3. Let start point be determined by data imported to the target database. Below this, there are three radio buttons: 'Current SCN on replication start', 'Set manually', and 'Automatically set by import' (which is selected). At the bottom of the main area, there is a section titled 'Data pump script' with a checked checkbox labeled 'Activate data pump script creation tool after this wizard has been finished'. At the very bottom of the window, there are two buttons: '< BACK TO REPORT' and 'TO NAMING >' (which is highlighted in blue).

DBPLUS Data Replicator

DBPLUS Data Replicator

1. SELECT DATABASES 2. CONFIGURE 3. VIEW REPORT 4. START POINT 5. NAME & CREATE

Setup replication start point

Replication process will transfer transactions committed after the start point. You can use one of the following methods to set up the start point: 1. Let start point be determined at the moment replication starts as current database SCN. 2. Specify it manually. 3. Let start point be determined by data imported to the target database. The third method will only work when scripts generated by the DBPLUS Data Replicator tools are used for data import.

☐ Current SCN on replication start ☐ Set manually ☒ Automatically set by import

Data pump script

☒ Activate data pump script creation tool after this wizard has been finished

< BACK TO REPORT TO NAMING >

Creating replication

Replication name - the name can only contain alphanumeric marks and an underscore (mark _).

Data folder location - by default, the data folder is created on the drive C: in the folder:

C:\ProgramData\DBPLUS\DataReplicator\
(replication name)\Data

If drive C: is not the right location, select **Specify alternative location** and enter the path to the data folder.

End point - this option allows you to specify the place where replication will finish.

The end point is, like the starting point, expressed as the value of the **SCN** number.

DBPLUS Data Replicator

DBPLUS Data Replicator

1. SELECT DATABASES 2. CONFIGURE 3. VIEW REPORT 4. START POINT 5. NAME & CREATE

You're about to run a new replication named:

NEW_PROD

Data folder location

This folder is used to temporarily store data processed by the replication engine. The amount of required space depends on database activity and may reach hundreds of GB.

☒ Use default location ☐ Specify alternative location

C:\ProgramData\DBPLUS\DataReplicator\NEW_PROD\Data

End point

Specify end point SCN if you want the replication to stop at some point. Replication process will transfer transactions committed at or before the end point.

☐ Run forever (no end point) ☒ Specify end point

32132465464456

some databases

< BACK TO START POINT LET'S CREATE IT >

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Thank you

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