How-To Guide
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How to Use the Business Process Library for SAP Test Data Migration Server

Release 4.0

Typographic Conventions

Type Style	Description
Example	Words or characters quoted from the screen. These include field names, screen titles, pushbuttons labels, menu names, menu paths, and menu options. Textual cross-references to other documents.
Example	Emphasized words or expressions.
`EXAMPLE`	Technical names of system objects. These include report names, program names, transaction codes, table names, and key concepts of a programming language when they are surrounded by body text, for example, SELECT and INCLUDE.
`Example`	Output on the screen. This includes file and directory names and their paths, messages, names of variables and parameters, source text, and names of installation, upgrade and database tools.
`Example`	Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.
`<Example>`	Variable user entry. Angle brackets indicate that you replace these words and characters with appropriate entries to make entries in the system.
`EXAMPLE`	Keys on the keyboard, for example, `F2` or `ENTER`.

Document History

Version	Date	Change
1.0	October 2011	First official release of the guide
1.1	July 2012	Minor updates to the BPL Modeler
1.2	March 2013	Maintenance of parameters possible at execution step (package) level Minor updates to the BPL Modeler and foreign key/link mapping function
1.3	August 2013	Assign a Logical System Name for the Receiver System under Making Technical Settings
1.4	February 2014	Verification of Client ID Match under Making Technical Settings
1.5	February 2015	Updates to parameters, activities, and tables.

Table of Contents

1   Business Scenario

You use TDMS Business Process Library (TDMS BPL) to select business objects and their specific data environment in the sender system and transfer them to a receiver system.

TDMS BPL provides a BPL object for each business process to select and transfer objects. The BPL object enables the transfer of data relevant to its corresponding business process.

> ⅰ Note
>
> Not all standard BPL objects are ready-to-use. We recommend verifying that the hierarchy of the BPL object you want to use contains the required tables. If all required tables are not present in the standard BPL object, create a custom BPL object with the required tables.

The BPL Object

The following elements are a part of the BPL object:

- **Root Table**: The starter table that specifies the reduction criteria for the BPL objects. Data selection for a BPL object starts with the root table.
- **Tables**: Database tables that are transferred as part of the selected BPL object.
- **Subobjects**: BPL objects included with another BPL object. A subobject can be transferred separately or included with a BPL object

TDMS BPL Phases and Activities

TDMS BPL provides migration solutions to transfer the data of BPL objects selected in the TDMS work center. The process tree for a BPL package consists of different phases and each phase includes several activities.

For more information about phases and activities, see the activity documentation in the BPL process tree.

The BPL Modeler

TDMS BPL includes the modeling tool BPL Modeler, which you can use to view, extend, and alter the data model of selected BPL objects based on your requirements.

Scrambling BPL Object Data

You can use the standard Scrambling workbench in SAP TDMS 4.0 to scramble the data of BPL objects using TDMS BPL.

2 Understanding the BPL Objects

With the standard delivery, SAP includes ready-to-use BPL objects. You can choose the suitable object based on your requirements.

If the standard, ready-to-use BPL objects partially suit your specific requirements, copy and extend the standard objects according to your needs.

If the standard, ready-to-use BPL objects do not match your requirements, or if there are no BPL objects for your business use, you may want to create completely new BPL objects.

2.1 Categories of BPL Objects Available with TDMS BPL

Master Data

The master data you want to select can belong to the following BPL objects:

BPL Object	Description
BC - Business Partner	General business partner master data, including addresses, bank details, and roles.
BC - Number Range Object	Central number range object for all SAP objects and processes.
BC - Material	Detailed information about materials that a company procures, manufactures, stores, and ships. Several applications use the data stored in the material master such as Warehouse Management (WM), Inventory Management (IM), Production Planning (PP), Quality Management (QM), and Shipping (SD-SHP).
BC - Vendor	The vendor's name and address, the currency used to order products from the vendor, terms of payment, and so on.
BC - Customer	Customer master data object including general data, company code data and sales area data.
BC - G/L Account A	G/L account master data for Chart of Accounts.
BC - G/L Account B	G/L account master data for company codes.
BC - Asset (FI-AA)	Asset master data containing information about fixed assets.
BC - Functional Location	Information about the place where a maintenance task needs to be performed.
BC - Equipment	Equipment data. An equipment is a physical object that must be maintained independently.

BPL Object	Description
	It can be installed in a technical system or be part of a technical system
BC - Internal Order	Internal order data used to monitor the costs of short-term jobs or the costs and revenues of a specific service, or for ongoing cost control
BC - Profit Center	Profit center data. A profit center is a company unit or division that performs a specific business function
BC - Project (PS)	Project management data with work breakdown structures (WBS)
BC - Cost Center	Organizational unit information within a controlling area that represents a clearly delimited location where costs occur.
BC - Purchasing Info Record	Information about a specific material and a vendor supplying the material.
BC - Work Center	Work center data. Work centers are central work environments that provide access to role-specific functions
BC - Material BOM	Information about all materials required in a process together with the quantities required
BC - Article (Retail)	Article master data that contains information about all the articles that a company procures, produces, stores, or sells.
BC - Contact Person	Data about the contact persons for the customer master.
Activity Master	Activity master data.
Asset Master	Asset master records.
Documents	Document information records.
Document Links	Information about document-object links.
Classification	Classification and characteristic data
Project	Project definition and related WBS data
Cost Center	Cost center master data.
Cost Element - A Segment	Cost element data for the Chart of Accounts.
Cost Element - B Segment	Cost element data for the controlling area.
Customer Master Contact Person	Data about the customer master contact person.
Customer Master	Customer master data
Equipment	Equipment master data and related data such as serial numbers
FI-FM - Commitment Items Sum level	FIFM: Commitment summarization item and texts.
Functional	Functional location and related data such as status information.

BPL Object	Description
Location	
Functional Reference Location	Reference functional location and related data such as status information.
G/L Account A-Segment	G/L account master data for the Chart of Accounts.
G/L Account B-Segment	G/L account master data for company codes.
Material BOM	Data relevant to the materials linked to the bill of material (BOM).
Material Master	Material master data.
PO Info record	Purchasing information records.
PM Object Location	Data relevant to the PM object location and account assignments.
Line Hierarchy	Line hierarchy data.
Supply Area	Data relevant to a supply area and texts.
Work Center	Work center data and related data such as cost center data.
Profit Center	Master data for profit centers.
CIM Production Resource Tool	Production resource data or tool master data.
Vendor Master	Vendor master data and related data such as bank details and partner functions.
New General Ledger[1]	Transfers data belonging to the new general ledger.

Legend

[1] Available with SAP TDMS 4.0 Support Package 1.

Transaction Data

This category contains the BPL objects where transaction data is transferred.

The transaction data you want to select can belong to the following BPL objects:

BPL Object	Description
BC - Accounting Document	FI document data including G/L account data.
BC - Purchase Requisition	Purchase requisition data related to material, vendors, customers, and info records.
BC - Purchase Order	Purchase order data related to materials, vendors, customers, info records, and conditions.
BC - Sales Order	Transactional data of SD sales order and related master data such as materials,

BPL Object	Description
	customers and vendors.
BC - Material Document	Material document data and relevant data such as materials, customers, vendors, and FI/CO.
BC - CO Document	CO document data and related data such as cost elements, FI documents, and materials.
BC - Sales Invoice	Sales and distribution data for invoices and related data such as conditions, vendors, customers, and materials.
BC - Incoming Invoice	Logistic invoice and related data such as cost centers, profit centers, accounts, conditions, vendors, and materials.
BC - Quality Notification	Data for quality notifications and related master data such as materials, equipment and vendors.
BC - Maintenance Order	Order master data related to relevant master data such as assets, materials, profit centers, and cost centers.
BC - Delivery	Data for SD deliveries and relevant master data such as conditions, materials, customers, and vendors.
BC - Physical Inventory Document	Physical inventory documents and related material master data.
BC - Allocation Table (Retail)	Allocations table documents and relevant master data such as classifications, materials, customers, and vendors.
BC - FI-CA Document	Open item accounting documents related to business partner and contract accounts.
Allocation table retail	Data related to allocation table documents and worklists.
CO-Document	CO object documents, including line items.
FI Documents	Accounting document data
Incoming Invoice	Information about invoice receipt documents.
Internal Order	Internal order data.
Delivery	SD delivery document data.
Material Document	Material document data.
Material Ledger Document	Data pertaining to material ledger documents.
Inventory documents	Data pertaining to physical inventory documents.
Network	Data pertaining to internal orders (network).
Internal Orders (PM)	Data pertaining to PM internal orders.
Capacity	Data pertaining to capacity data and unit of measure.
Production order	Production order data.
Purchase order	Purchasing document data.

BPL Object	Description
Purchase Requisition	Purchase Requisition data and account assignments.
Sales Invoice	Data pertaining to SD billing documents.
Sales Order	Data pertaining to SD sales documents.
Material Ledger History[1]	History data related to the material ledger.

Legend

[1] Available with SAP TDMS 4.0 Support Package 1.

Processes

This category contains the BPL objects where business process-related data is transferred.

The process data you want to select can belong to the following BPL objects:

BPL Object	Description
Premise	Information about premises.
BC - Process: Purchase Order	Transactional data for purchase orders and linked objects such as deliveries, sales orders, and material documents.
BC - Process: Sales Order	Transactional data for sales orders and related objects such as deliveries, material documents, and purchase orders.
BC - Process: Insurance Object (FS-CD)	Insurance master data and relevant business partners and contract accounts.
BC - Process: Contract (FS-CD)	Contract account data and related insurance data.
BC - Process: Loans Contract	Data regarding SAP loan contracts related to FI documents and business partners.
BC - Process: Asset (CFM)	Asset master data for securities and linked business partners
BC - Process: Bank Account (BCA)	Current account master data related to business partners, bank master, and cost centers.
BC - Process: Contract (IS-U)	ISU contract data and relevant objects such as installation, premise, customer master, and profit centers.
BC - Process: Installation (IS-U)	ISU installation data and relevant objects such as business partners, premise, equipment, and functional locations.
BC-Process: Delivery	Transactional data for SD deliveries and all relevant master data such as conditions, materials, customers, and vendors.
BC-Process: Purchase Requisition	Transactional data for purchase requisition linked to material, vendors, customers, and info records.
BC-Process: Sales Invoice	Transactional data for sales invoices and all related objects such as customer, vendors, materials, and conditions.

BPL Object	Description
Contract Account	Contract account data.
ISU Installation	Installation data and billing information.
ISU Insurance	Insurance data (FS-CD).
Loans Contract	Loan data.
BC - Process: Production Order[1]	Master data for production orders and linked transactional data such as sales orders and material documents.
BC - Process: Business Partner (IS-U)[1]	Business partner master data related to contracts.

Legend

[1] Available with SAP TDMS 4.0 Support Package 1.

Common Subobjects:

You can select any of the following common subobjects:
- Address Data
- Bank Master
- Change Documents
- Conditions
- Standard Texts
- Status Information

Custom Objects

This category contains the BPL objects that you create or copy. No objects are part of this category in the standard delivery from SAP.

2.2   Objects Included in a BPL Object

Root Table

Root table is the starter table that is used to specify the reduction criteria for the BPL object. The data selection for a BPL object scenario starts with the root table.

It is mandatory to assign at least one table as the root table in a BPL object.

You have to specify the values of these root tables in the TDMS work center, in the form of parameters. TDMS BPL then uses these values as filter criteria for data selection.+

+

i Note

The header table is indicated as the root table for BPL objects delivered by SAP. You can copy the BPL object and modify the root table.

Header Table

Every BPL object has a header table that is the main table of the BPL object. Other tables of the BPL object have a parent-child relationship with this table.

Tables

Tables are the database tables that are transferred as part of the selected BPL object.

Tables are mapped to another table using foreign key relationships within a BPL object.

Subobjects

Subobjects are the BPL objects that are included within another BPL object.

A subobject can be transferred separately, and can be included within a BPL object. A BPL object that is a part of another BPL object is treated as a subobject.

Subobjects are mapped to another BPL object or subobject using a link relationship within a BPL object scenario.

It's important to transfer the data of related subobjects in a BPL object to maintain data consistency in the receiver system.

2.3   BPL Modeler

The BPL Modeler is a modeling tool to model the BPL objects. You can view existing BPL objects, copy a BPL object and create a new BPL object using the BPL modeler.

For more information about the BPL modeler, see section 4.1.

2.4   BPL Process Tree

The process tree for a BPL migration package consists of various activities organized in different phases. The activities are responsible for executing the process tree to transfer data of the selected BPL object.

For more information about the BPL process tree, see section 4.3.

3 Prerequisites

- You have installed TDMS 4.0 on your control/central, sender, and receiver systems with the latest support packages.
- You have created CPIC users for establishing RFC connections between the systems involved in the TDMS transfer.

4 Step-by-Step Procedure

You use TDMS Business Process Library (TDMS BPL) to transfer BPL objects, along with any additional data related to the BPL object, which is required to maintain data consistency in the receiver system. SAP TDMS also selects such additional data for transfer.

TDMS BPL provides ready-to-use content that contains information about the BPL object, related subobjects, tables, and table dependencies. Standard delivery includes ready-to-use content for predefined BPL objects.

The predefined BPL objects include master data (for example, customer or vendor), transaction data (for example, material document or purchase requisition), business processes (for example, production order, loans contract), common subobjects (for example, change documents, standard texts), and custom objects.

The ready-to-use content "Customer Objects" includes the BPL objects you copied or created. If the standard delivered BPL objects do not serve your purpose, you can create new BPL objects or enhance the standard BPL objects by copying them.

TDMS BPL transfers only the tables involved in the selected BPL object. Tables not part of selected BPL objects are not considered during data transfer.

TDMS BPL uses selective data deletion. The object-based data deletion needs to be based on the same object list as the data selection. Only the data selected for data transfer is deleted in the receiver system.

The standard scrambling workbench of TDMS 4.0 is used to scramble the data of BPL objects as well.

4.1 Working with the BPL Modeler

BPL Modeler is a modeling tool to model BPL objects. You can view the predefined BPL objects along with hierarchy of tables and subobjects, their dependent subobjects and underlying tables.

Further, you can extend and alter the data model of selected BPL objects based on your requirements.

However, you cannot alter and extend the standard data model. To extend or alter the data model, you need to copy the data model. You can also create a new BPL object of your own based on your requirements.

The modeler is integrated into TDMS through the work center. It's added as a portfolio item in the TDMS work center.

You can check the status of a BPL object in the Status field on the Overview screen.

The BPL Object Category field on the Overview screen lists the categories that the BPL object could belong to. TDMS BPL provides the following BPL object categories:

- Common Subobjects
- Master Data
- Transactional Data
- Processes
- Customer Data

For example, the BPL object BC-Process: Sales Order shown in the BPL modeler under the Processes category is the same as the one seen in the BPL Portfolio.

The functions available with the BPL modeler are described in the sections that follow.

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How to Use the Business Process Library for SAP Test Data Migration Server

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Step-by-Step Procedure

4.1.1   Assigning RFC Destination

Choose the *Assign RFC Destination* pushbutton to select the RFC destination for a BPL object.

This RFC destination helps to retrieve DDIC information (such as table and field details) for the tables contained in the BPL objects.

You need to specify the RFC destination of sender system that is used for data selection.

Situations Where You May Face Errors

The BPL Modeler shows an error message in the following cases:

*   If you select an RFC destination that is not working.
*   If you select the RFC destination of an SAP Solution Manager system that does not have the DDIC information.
*   If you select the RFC destination of an SAP ERP system that does not have the DMIS component installed.
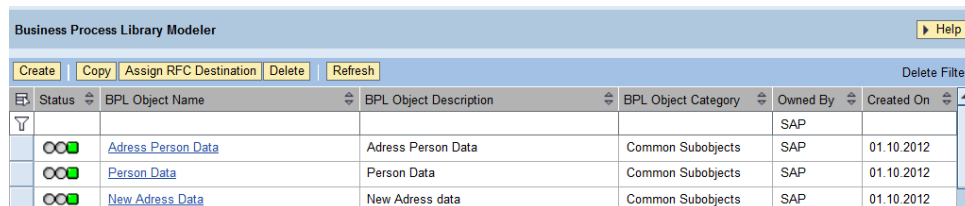
> i   Note
>
> If you cannot specify the RFC of the sender system in the BPL Modeler, you can instead:
>
> Specify the RFC destination of a copy of the sender system that has the DMIS component installed.
>
> Specify the RFC destination of any other system that has a DDIC structure similar to that in the sender system and that has the DMIS component installed.

The ready-to-use BPL objects provided by SAP contain NONE as the RFC destination. This destination points to the local system.

However, at the time of creating a project and package, you must specify the real sender system in the system landscape for data transfer to occur in the correct systems.

	Status	BPL Object Name	BPL Object Description	BPL Object Category	Owned By	Created On
					SAP	
	⚪⚪🟩	Adress Person Data	Adress Person Data	Common Subobjects	SAP	01.10.2012
	⚪⚪🟩	Person Data	Person Data	Common Subobjects	SAP	01.10.2012
	⚪⚪🟩	New Adress Data	New Adress data	Common Subobjects	SAP	01.10.2012

Figure 1: Assigning the RFC Destination

4.1.2   Viewing BPL Objects

Select a BPL object on the BPL modeler main screen and click the hyperlink to view the details, tables, subobjects, hierarchy, and relationships for this BPL object.

The maintenance screen for the BPL object appears. The maintenance screen shows all details of a BPL object.

Figure 2: Viewing a BPL Object

4.1.2.1　Viewing a List of Tables

Choose the *View All Tables* pushbutton to get the list of tables that are part of the BPL objects selected for data transfer. This is displayed as a dialog box.

You can view the names and description of the tables assigned to the selected BPL object in the dialog box.

You can export the list of tables to a spreadsheet file using the *Export* pushbutton.

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Figure 3: A List of Tables

4.1.2.2   List of Subobjects

Choose the View All Subobjects pushbutton to retrieve a list of subobjects that are a part of the BPL objects selected for data transfer. The list is displayed in a dialog box.

You can view the names and description of the subobjects assigned to the selected BPL object.

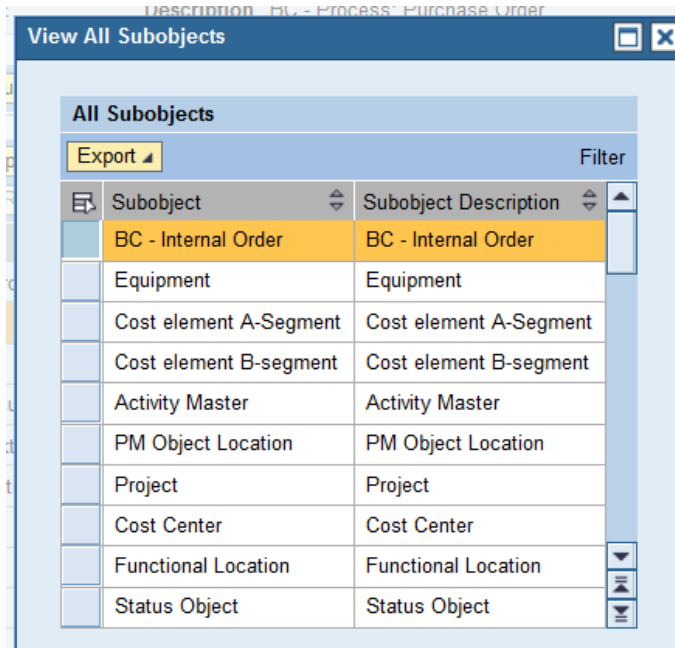You can export the list of subobjects to a spreadsheet file using the *Export* pushbutton.

How to Use the Business Process Library for SAP Test Data Migration Server   Error! Reference source not found.

Step-by-Step Procedure   © 2012 SAP AG. All rights reserved.   **17**

Figure 4: A List of Subobjects

4.1.2.3 Viewing Foreign Key/Link Relationships

Choose the *Map Foreign Key/Link* pushbutton to retrieve the details about foreign key or link mapping for tables or subobjects.

The following types of mappings are available:

- **Foreign Key**: Represents the details of the parent-child relationship of tables within a BPL object / subobject.
- **Link**: Represents the details of relationship of subobjects to the main BPL object/another subobject in a BPL object. Subobjects are linked to the main BPL objects via some table(s).

When you choose the Map Foreign Key/Link pushbutton, you see the following details of the foreign key/link mapping in the dialog box:

Field	Description
Child Table/Subobject	The name of the selected table/ header table of the selected subobject in the relationship.
Parent Table/Subobject	The name of the source table/header table of the source subobject in the relationship.
Child field	The field of the selected table/subobject.

Field	Description
Parent field	The fields of the source table or subobject.
Child Expression/Parent Expression	Represents logical expression.
	Could be a literal expression or combination of fields forming a logical expression.
	If there is no direct link between the parent and child tables or if there is a need to create a logical mapping, this field is populated.
Condition	The relationship between the parent field and the child field. Possible options: EQ.
	The Condition field is disabled by default. When a new row is inserted, this field is populated.

Here is an example of the foreign key/link mapping.
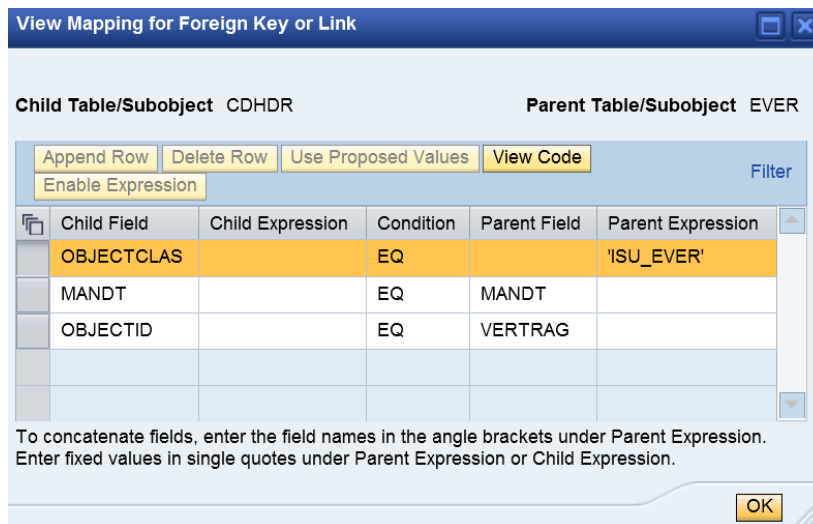
Figure 5: The Foreign Key/Link Relationships

4.1.2.3.1   Viewing the Sample Code

Choose the *View Code* pushbutton in the dialog box to see a sample code that is generated based on the displayed foreign key/link relationship.

A screenshot of the *View SQL Source Code* screen:-

```
View SQL Source Code                          □ ✕

SQL Source Code for Foreign Key Relationships

Select * from CDHDR
 where
 OBJECTCLAS ='ISU_EVER' AND
 MANDT =EVER-MANDT AND
 OBJECTID =EVER-VERTRAG.


                                         OK
```

Figure 6: A Sample Code

ℹ Note

This is not the actual code but a sample code to give you an idea of how the relationship is established. This code is not executed in isolation and is executed in conjunction with other relationships existing in a BPL object.

4.1.2.4   Viewing the Reduction Criteria

TDMS BPL uses reduction criteria to select the data for a BPL object.

Select a root table in the maintenance screen of a BPL object. You can view the field information of the selected table in the lower half of the screen. You can also view the text description and the key field information.

- **For the standard delivered BPL objects**: Single or multiple fields are set as active using the Active checkbox. TDMS BPL uses the active fields as reduction criteria for the selected BPL object.
- **For the selected fields of root tables**: Specify the values for the parameters in the TDMS work center. TDMS BPL uses the values to select data.

ℹ Note

Reduction criteria are only available for root tables.

Figure 7: A List of Reduction Criteria

4.1.2.5   Expanding by One level

Choose the *Expand by one Level* pushbutton to expand all the nodes one level down in the BPL Object hierarchy. In the initial view of the BPL Object Hierarchy, you can view information relevant to the first level in the hierarchy. If you want to see information relevant to the next level, you can:

- Select the individual node and manually open the node OR
- Choose the Expand by One Level pushbutton

4.1.3   Copying BPL Objects

If the existing BPL objects do not serve your requirements, you can copy a BPL object using the BPL modeler and make modifications according to your needs.

Click on a BPL object on the overview screen of the BPL modeler and choose the Copy pushbutton to copy the BPL object. Specify a unique name for each of the copied BPL objects.

i Note

You can give a continuous name (without any spaces) such as COPYBUSINESSPARTER or you can use the underscore (_) special character in the unique name such as COPY_BUSINESS_PARNTER. No other special characters are allowed.

You can change the copied BPL object using the modification options as described in section 4.1.4.
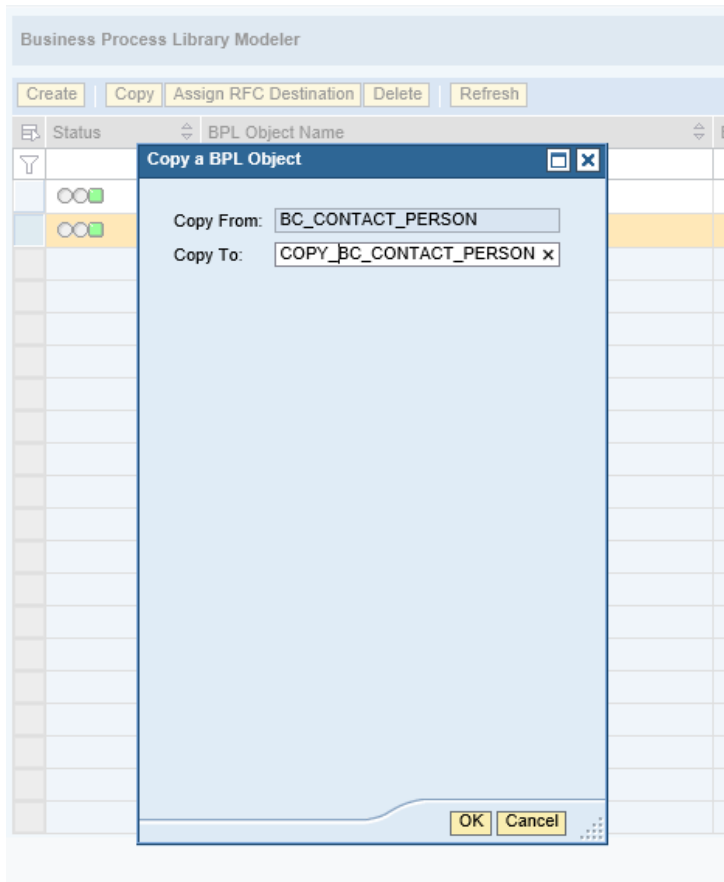

Figure 8: Copying BPL Objects

4.1.4 Modifying BPL Objects

You modify only the newly created or copied BPL objects to suit your requirements.

The options to modify a BPL object are described in this section.

Choose the *Edit* pushbutton at the top left of the maintenance screen to switch on the edit mode to modify the BPL objects.

> ℹ **Note**
>
> You cannot modify the standard BPL objects delivered by SAP. You can only edit the customer objects that you have created or copied.

4.1.4.1 Adding Tables

Choose the *Include Objects* pushbutton to add a new table to the BPL object. Choose the first radio button to add a table to the selected BPL object.

Enter the desired table name in the input field and choose *OK*.

You may want to choose this option if you have some custom developments in your systems and you want to include related tables for transfer using TDMS BPL.

If you enter a table that does not exist in the sender system, an error message appears in BPL modeler.

You can check the status of a BPL object by choosing the *Check Status* pushbutton.

> ℹ **Note**
>
> You can only add tables to the main BPL object. You cannot add tables to subobjects. You cannot make changes to the structure of subobjects in a BPL object.
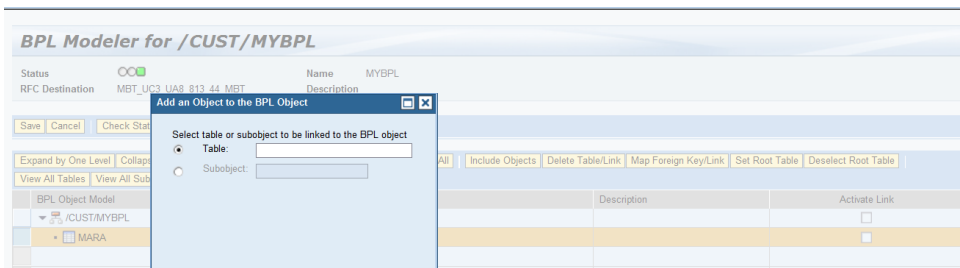

Figure 9: Adding Tables

4.1.4.2 Adding Subobjects

Choose the *Include Objects* pushbutton to add a new subobject to the BPL object. Choose the second radio button to select the desired subobject from the input help to add to the selected BPL object.

You can only add the available subobjects (standard delivery as well as created or copied by you) to a BPL object.

i Note

You can only add subobjects to the main BPL object. You cannot add subobjects within subobjects. Changes in the structure of subobjects within a BPL object is not allowed.
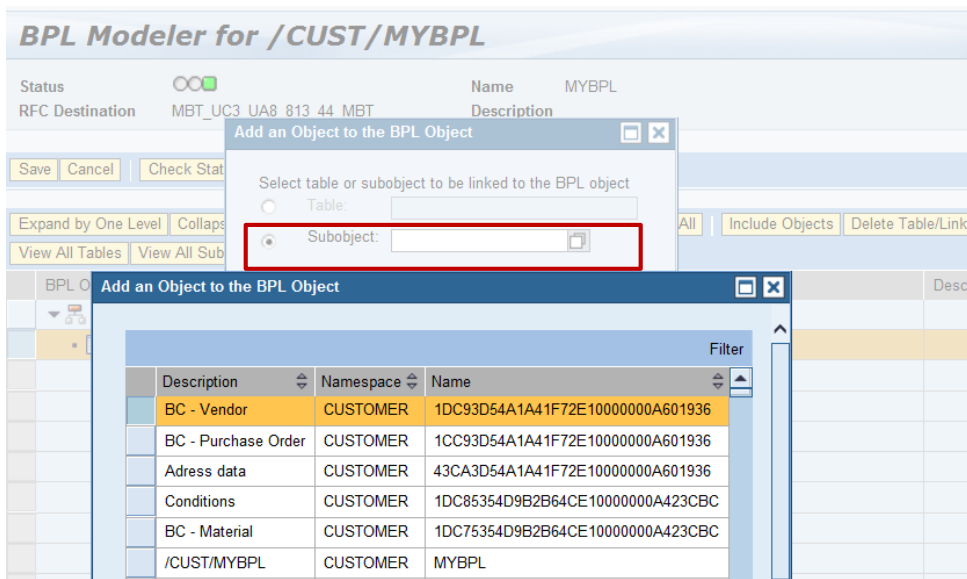

Figure 10: Adding Subobjects

4.1.4.3 Setting Tables as Root Tables

TDMS BPL slices data for a BPL object based on root tables.

i Note

All the key fields in a root table are automatically set to Active.

Choose the *Set Root Table* pushbutton to set the selected table as the root table.

Specifying reduction criteria is possible only for root tables, so you need to set a table as the root table if you want to specify reduction criteria for that table.

i Note

Each predefined BPL object has at least one root table.

TDBMS BPL slices data for a BPL object based on root tables.

Maintaining at least one root table is mandatory for newly-created BPL objects.

4.1.4.4 Deselecting Tables as Root Tables

Choose the *Deselect Root Table* pushbutton to deselect the selected table as root table.

If you do not want a root table to be used as reduction criteria, you can set that table as a non-root table using this option.
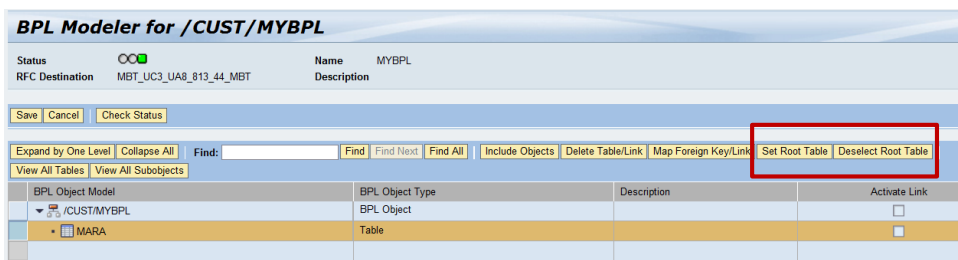

Figure 11: Selecting/Deselecting Tables as Root Tables

4.1.4.5 Deleting Tables

Choose the *Delete Table/Link* pushbutton to delete a table from a BPL object. This is required if you do not want some tables to be transferred in a selected BPL object or if you have incorrectly added a table.

ℹ **Note**

> You cannot delete a header table or a root table which is also a header table.

Each BPL object contains a header table, which is the main table and parent table for other tables in the BPL object. In the standard delivered shipment, the first table is usually the header table for each BPL object.
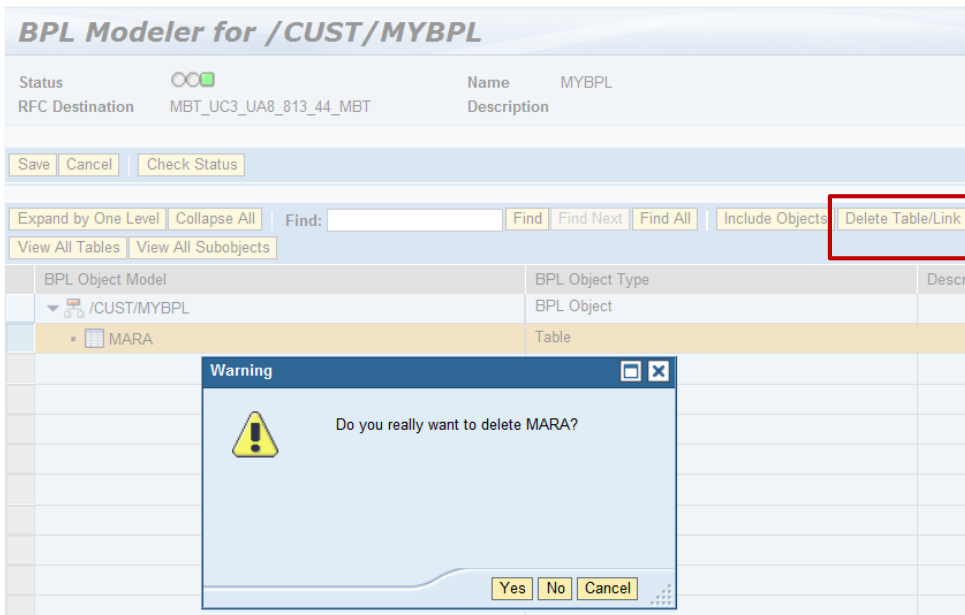
Figure 12: Table Deletion

4.1.4.6 Activating the Link to Subobjects

Select the *Activate Link* checkbox on the maintenance screen to activate the link between the subobject and the main BPL object. TDMS BPL does not include the subobjects corresponding to the deactivated link in the data selection and data transfer of a BPL object.

You may want to deactivate links to subobjects if you do not want the tables of a subobject to be transferred with the selected BPL object.

Some links are marked as deactivated by default in the standard shipment. If required, you can activate these links to transfer the underlying tables. Deselect the checkbox in the *Activate Link* column to remove the subobjects from data transfer. You can deselect the checkbox only for custom BPL objects created by you.

i **Note**

You can deactivate the subjects but not the main BPL object. The Activate Link pushbutton is disabled for the main BPL object.
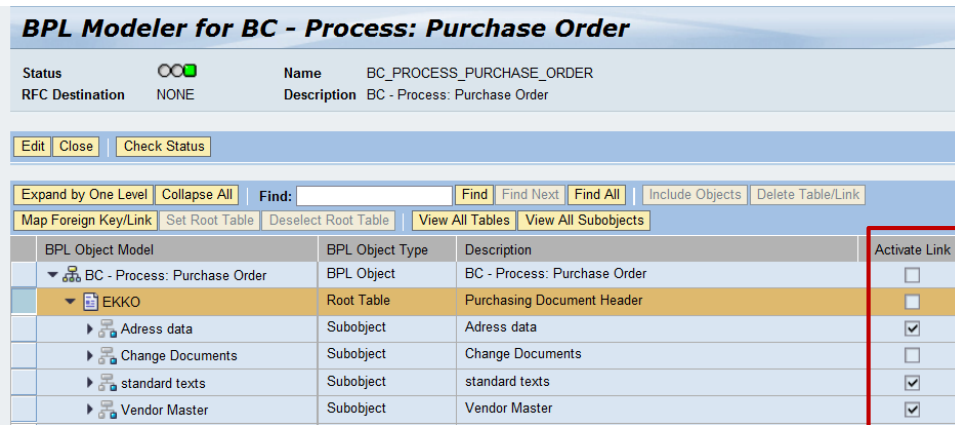
Figure 13: Activating Subobjects

4.1.4.7   Creating Foreign Key Relationships

Choose the *Map Foreign Key/Link* pushbutton to create the foreign key/link relationship for the newly added tables and subobjects.

- The BPL modeler shows the existing foreign key/ link relationship of the child table/subobject with the parent table/subobject, if any exists. Otherwise, you can maintain the relationships on your own.
- If you enter a wrong table or maintain an incorrect foreign key link, you can still use the BPL modeler. However, a warning message appears.

You can check the status of a BPL object by choosing the *Check Status* **pushbutton. Tables**

For tables, you can maintain foreign key relationship of the child table with the parent table.

Subobject

For subobjects, you can maintain the link of the sub-object with the main BPL object/ other subobjects.

You have the following options while maintaining foreign key/link mapping:

4.1.4.7.1   Use Proposed Values

Choose the *Use Proposed Values* pushbutton in the following contexts:

- If no foreign key/link mapping exists for the selected tables or subobjects
- If the existing foreign key/link mapping does not suit your purpose

The BPL modeler matches the parent and child tables based on the dictionary information and proposes possible mappings.

Choose *OK* to choose the proposed mapping or choose *Cancel* to discard the proposed mapping.

4.1.4.7.2 Delete Row

Choose the *Delete Row* pushbutton to delete the mapping displayed in the BPL modeler.
You can delete the mapping that is created by default or proposed by the BPL modeler.
You can select the row that is not needed and then choose this pushbutton.

4.1.4.7.3 Append Row

Choose the *Append Row* pushbutton to maintain the foreign key/link mapping based on your requirements.

This pushbutton inserts a new row in the table with the value **EQ** in the *Condition* column. You can maintain a foreign key/link mapping for the new entry. This may be required if you have deleted the mapping using the *Delete Row* pushbutton or if no suitable mapping exists for the selected tables/subobjects and you want to maintain a new foreign key/link mapping.
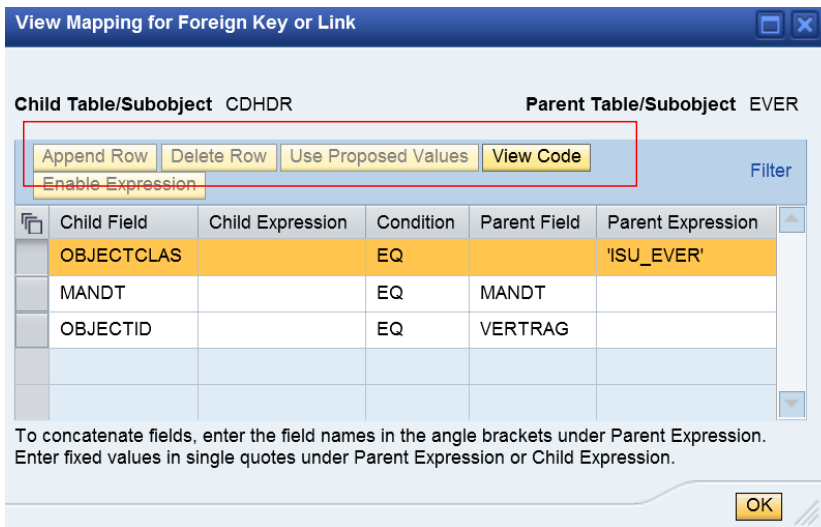

Figure 14: Mappings for Foreign Keys or Links

4.1.4.7.4 Enable Expression

The fields *Child Expression* and *Parent Expression* are disabled by default, even in the EDIT mode.

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Choose the *Enable Expression* pushbutton to enable these fields and enter the expression or fixed values.

The use of non-transparent fields as expression is shown in the following examples:

- Concatenation is indicated by use of angle brackets.
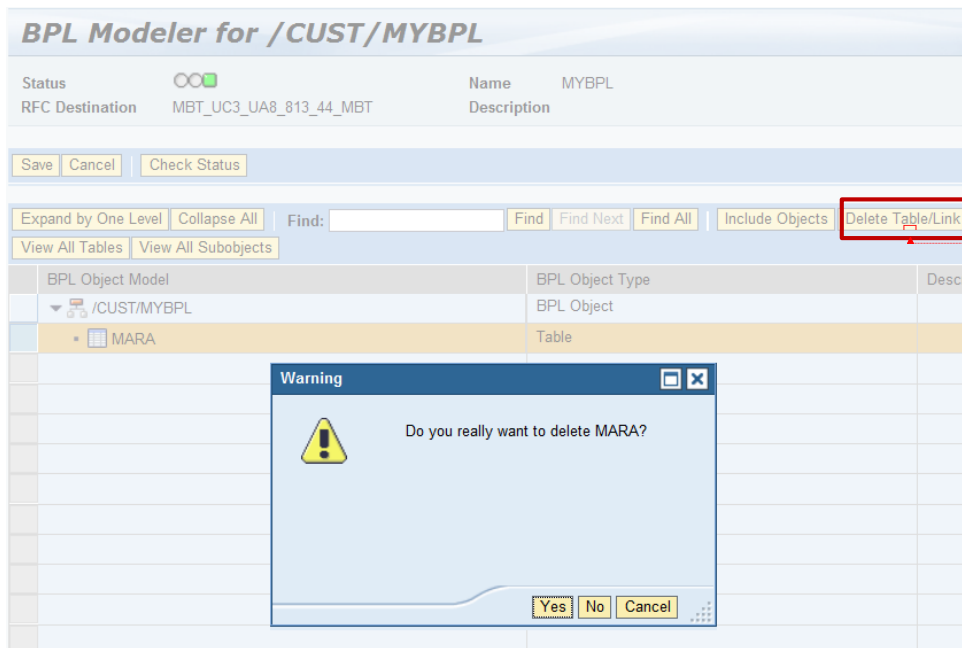
  Example

  AWKEY = <BELNR><GJAHR>

- Fixed value is indicated by the use of single quotes.

  Example

  AWTYP = 'PMRP'.

4.1.4.8   Deleting Link

Choose the *Delete Table/Link* pushbutton to delete a subobject link from a BPL object. This is required if you do not want tables related to certain subobjects links to be transferred in a selected BPL object or if you have incorrectly added a subobject.

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Figure 15: Deleting Links

4.1.4.9   Checking the Status of a BPL Object

Choose the *Check Status* pushbutton to check the consistency of a BPL object.

TDMS BPL checks if a wrong table/link is added in a BPL object or if the table exists in the sender system of TDMS. After carrying out the check, TDMS BPL displays suitable messages.

While displaying errors, TDMS BPL shows a scroll bar if the number of errors is significant.

TDMS BPL carries out additional technical checks on the foreign key mapping and data dictionary and displays suitable messages. Based on the message, carry out the necessary corrections in the BPL object.

When all the checks are successful, the status of the BPL object turns green.

If a table in a BPL object belongs to a higher EHP of SAP ERP and does not exist in your sender system, a warning message is displayed. You can still go ahead and use such BPL objects.

i Note

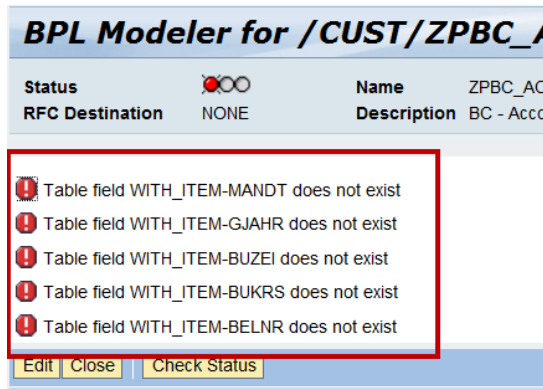You can only add consistent BPL objects to a project template.

Figure 16: Checking the status of a BPL object

4.1.5   Creating BPL Objects

Using the BPL modeler, create a BPL object if the existing objects do not meet your requirements.

i Note

If you create a new BPL object, maintaining a root table is mandatory.

Choose the *Create* pushbutton on the *Overview* screen of the BPL modeler to create a new BPL object. Specify a unique name for the new BPL object along with some description and the RFC destination.

Specify the **RFC destination of the sender system** that is used for data selection.

If you cannot specify the RFC of the sender system in the BPL Modeler, you can instead:

  o Specify the RFC destination of a copy of the sender system that has the DMIS component installed.
  o Specify the RFC destination of any other system that has a DDIC structure similar to that in the sender system and that has the DMIS component installed.
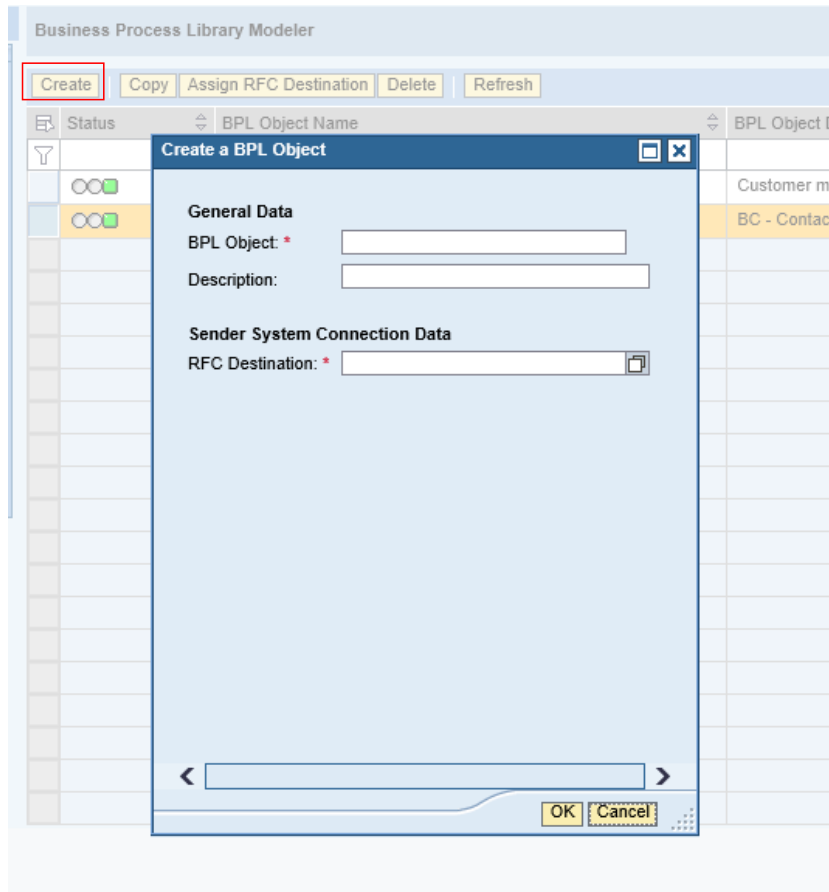

Figure 17: Creating a BPL Object

ⁱ **Note**

You can give a continuous name (without any spaces) such as COPYBUSINESSPARTER or you can use the underscore (_) special character in the unique name such as COPY_BUSINESS_PARTER. No other special characters are allowed.

4.1.5.1 Adding Tables

You add tables to a newly created BPL object as described in section 4.1.4.1.

4.1.5.2 Adding Subobjects

You add a subobject to a newly created BPL object as described in section 4.1.4.2.

4.1.5.3 Deleting Tables/Subobjects Link

You delete tables and subobjects from a newly created BPL object as described in section 4.1.4.5 and section 4.1.4.8

4.1.5.4 Setting Tables as Root Tables

You set a table as root table in a newly created BPL object as described in section 4.1.4.3.

4.1.5.5 Deselecting Tables as Root Tables

You deselect a table as a root table in a newly created BPL object as described in section 4.1.4.4.

4.1.5.6 Activating Links to Subobjects

You activate/deactivate a subobject in a newly created BPL object as described in section 4.1.4.6.

4.1.5.7 Creating Foreign Key Relationships

You maintain foreign key/link mapping for table/subobjects in a newly created BPL object as described in section 4.1.4.7.

4.1.6   Deleting BPL Objects

Using the BPL modeler, you delete a BPL object, in case any BPL object is created or copied wrongly or does not serve your requirements.

Choose the *Delete* pushbutton on the *Overview* screen of the BPL modeler to delete a BPL object.

> **i Note**
>
> You can only delete the BPL objects created in your system. You cannot delete BPL objects that are delivered by SAP.
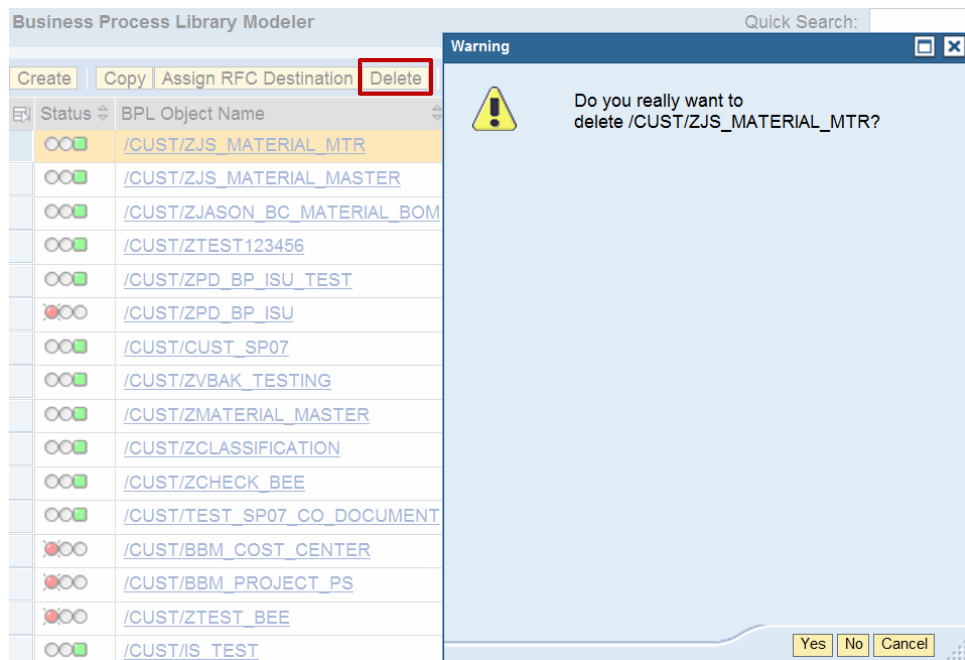

Figure 18: Deleting a BPL Object

4.1.7   Updating the Status of a BPL Object

Using the BPL modeler, you can update the statuses of BPL objects.

- Choose the *Refresh* pushbutton on the *Overview* screen of the BPL modeler to refresh the status of the BPL objects.
- You can view the status of a BPL object in the *Status* field. If an issue exists with the BPL object, the status is shown as red or yellow. If there are no issues, the status is shown as green.

- If the status of a BPL object is red, you can open the BPL object and choose the *Check Status* pushbutton to view the details of the error.

Figure 18: Updating the status of BPL Objects

4.2 Creating Project Template, Project and Parameters for TDMS BPL

4.2.1 Creating Project Templates

Create the project template for your BPL object using the TDMS work center.

For more information, see the Help Portal at Help.sap.com and *choose SAP Application Lifecycle Management -> SAP TDMS 4.0 -> Project Templates*.

ℹ️ Note

Please ensure that you only add consistent BPL objects to a project template.

To confirm that the BPL objects you added to the project template are consistent, choose the *Check Status* pushbutton in the project template.

⚠️ Caution

If you do not carry out the consistency check, you might face errors during the execution of the migration package that you created using this project template.

If you use the RFC destination of an SAP Solution Manager system, the project template shows an error status. To correct this, assign a valid RFC destination to the BPL object in the BPL Modeler.

4.2.2　Creating Projects

Create the project for your BPL object using the TDMS work center.

You can create a project using any of the following options:

Using the Project Template Link

1. Choose the Project Template link in the TDMS work center.
2. Select the desired project template and choose the Create Project pushbutton at the top of the screen.

   SAP TDMS displays a guided activity to create the project and automatically selects the specified project template for this project.

Using the Project link

1. Create a new project using the New pushbutton from the Project link in the TDMS work center.

   SAP TDMS displays a guided activity to create the project.
2. Select the desired project template for this project from the list of available project templates using the input help.
3. You can view the BPL object selected as the solution in the project template.

4.2.3　Assigning Parameters

Specify the data selection criteria for BPL objects using parameters in the TDMS work center.

You can specify the parameter values at the project level or the package level.

Enter the landscape details when specifying a parameter. You can validate the values you enter to reduce data in the sender system using the *Check* pushbutton.

For more information about migration parameters, see the Help Portal at http://help.sap.com/saptdm40. Choose *Application Help-> EN -> Migration Parameters*.

> i Note
>
> **For TDMS BPL, you can only enter parameter values at the package (execution step) level.**

> ➡ Recommendation
>
> We recommend that you retain the parameter setting at the package level even for your custom objects to enable the use of the parameters at the package level.

4.2.3.1.1　Maintaining Parameters at Execution Step (Package) Level

Only maintain the parameter values at the package level for TDMS BPL projects.

Any value you specify at this level overrides the value you set at the project level.

To maintain the parameters at the package level, proceed as follows:

1. Click your project and switch to Edit mode.
2. In the Edit mode, go to the parameters column and click on *EDIT* In the dialog box that opens, select the interface TDMS BPL INTERFACE and click *Edit Values*.
3. Select the parameter TDMS BPL Parameter. The system populates the right side of the screen with the fields *Table Name*, *Field Name*, *Low Value* and *High Value*.
4. TDMS BPL automatically populates the fields *Table Name* and *Field Name*.
5. Enter the values to be transferred in the fields *Low Value* and *High Value*.
6. To transfer single values, only enter values in the field *Low Value*.
7. To transfer a range of values, enter values in the fields *Low Value* and *High Value*.
8. Keep the number of records to be transferred to a minimum, as TDMS BPL appends the test system with additional data after the TDMS ERP data transfer is carried out.
9. If you want to transfer multiple records, enter the range of values rather than individual values.
10. Choose the *Check* pushbutton to validate the values entered in parameters. This validation should take place in the sender system, as the Data dictionary information is available in the sender system. TDMS BPL takes the sender system RFC details from the landscape assigned to the project.

   i Note

   o If the number of entered values is very large, the SELECT query fails in some databases.
   o You can currently enter individual values or a range of values for data selection while assigning values for the parameters.
   o Avoid using wild card characters for the reduction criteria, since wild card characters are currently not available with TDMS BPL data selection.

4.2.3.1.2   Using the Download-and Upload Feature

1. Choose your project and switch to the Edit mode.
2. In the Edit mode, go to the parameters column and click *Edit.*
3. In the dialog box that opens, select the interface TDMS BPL INTERFACE.
4. Choose the *Export* pushbutton to download the template spreadsheet (ODS format) for this parameter from the work center,
5. You can open the file or save the file to a folder in your local system.
6. In the spreadsheet, you see two worksheets Info and 00001.

   Choose Worksheet 00001. You see the name of the BPL parameter *TDMS BPL Parameter* and the following fields for this parameter:

   Solution_GUID

   Table Name

   Field Name

   Low Value

   High Value

7. The values of fields *Solution Guid*, *Table Name* and *Field Name* are automatically populated in the first row. Enter the desired values for the *Low Value* and *High Value* columns.

8. Using the Copy and Paste feature of spreadsheet, make as many entries as desired (single values) and save the worksheet.

9. Choose the *Import* pushbutton to upload the updated spreadsheet (ODS format) for this parameter. Select the file name and path for the updated file from the dialog box.

10. After the upload is complete, you can view the values you entered in the *Parameter Data* section~~the variant screen~~. TDMS BPL uses these values for data selection.

i Note

o You cannot use any spreadsheet with values to upload to the ~~variants~~parameters. You need to first download the ODS file from the work center to access the desired template. You can upload the same file with your updated values.

o Any values that you entered manually on the *Parameters* screen are overwritten by the values updated in the spreadsheet.
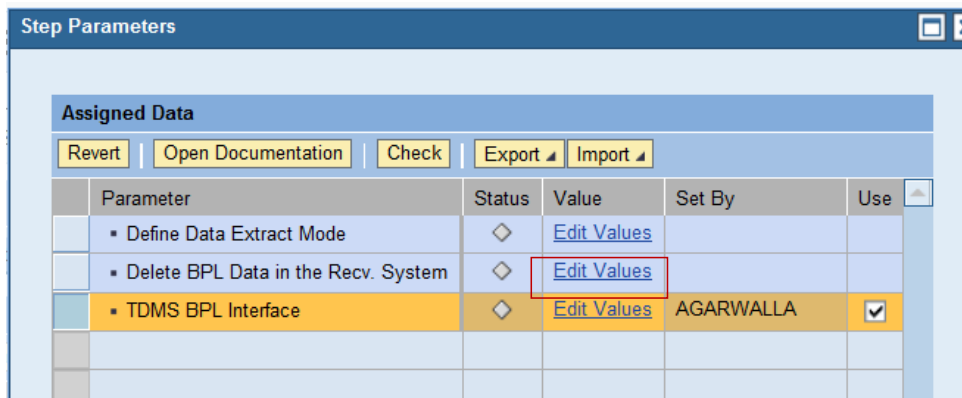
Step Parameters

Assigned Data

| Revert | Open Documentation | Check | Export ⏷ | Import ⏷ |

	Parameter	Status	Value	Set By	Use
	▪ Define Data Extract Mode	◇	Edit Values		
	▪ Delete BPL Data in the Recv. System	◇	Edit Values		
	▪ TDMS BPL Interface	◇	Edit Values	AGARWALLA	☑

Figure 19: File Download and Upload functionality for parameters
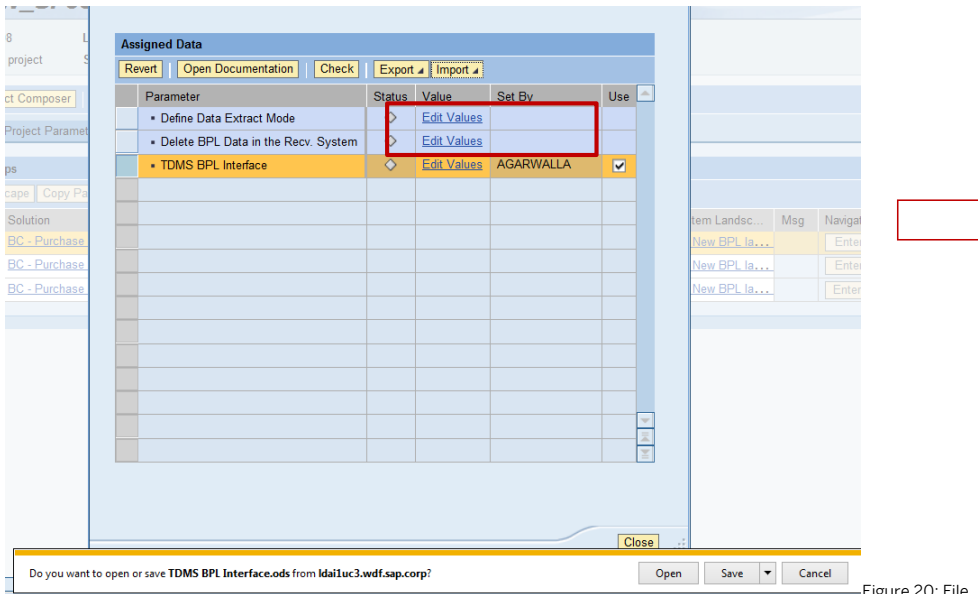
Figure 20: File Export option

Figure 21: File Import option

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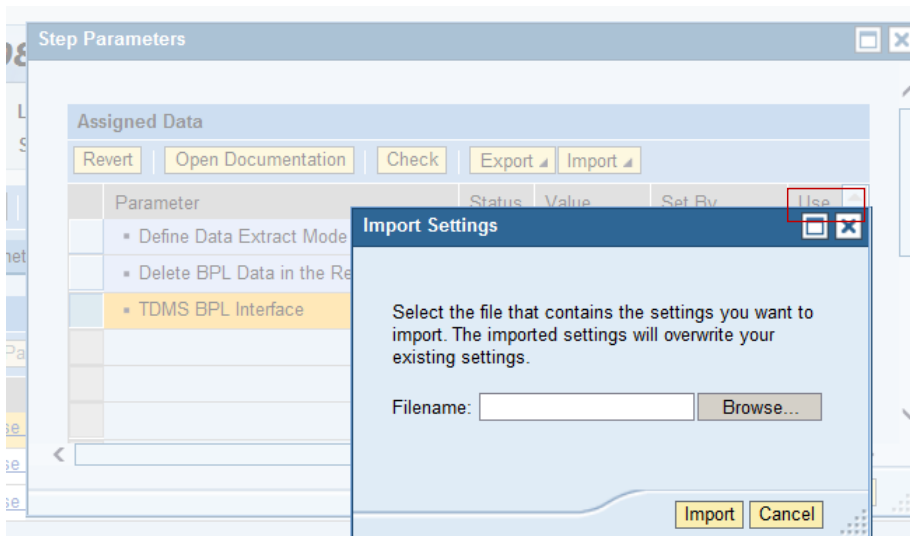
4.2.3.2   Parameter Delete BPL Data in Recv. System

You can use this parameter to choose the data deletion behavior at the execution plan level. Selecting or deselecting the checkbox impacts the data deletion and data transfer behavior as described below.

Option 1: BLANK

Write Behavior for Data Transfer: MODIFY

If you do not select the Delete BPL Data in the Recv. System checkbox, SAP TDMS does not delete the BPL data in the receiver system. The data deletion related activities become optional and during data transfer, SAP TDMS overwrites the existing data with the data transferred from the sender system.

> ⓘ Note
>
> Option 1 is the default behavior. If you do not want to delete the data, choose Option 1.

Option 2: X

Write Behavior for Data Transfer: INSERT

If you select the Delete BPL Data in the Recv. System checkbox, SAP TDMS deletes the BPL data in the receiver system. During data transfer, SAP TDMS transfers the BPL data selected in the sender system to the receiver system.

4.3   Working with the BPL Process Tree

The process tree for a BPL migration package consists of different phases.

Each phase includes several activities. For more information about each activity, see the activity documentation assigned to each activity in the process tree.

> ⓘ Note
>
> This document provides additional information for some of the TDMS BPL-specific activities. Other activities are common to TDMS classic and TDMS scrambling.

4.3.1   Making Technical Settings

This phase consists of activities necessary to make basic technical settings for the selection and transfer of BPL objects.

The activities relevant for TDMS BPL are described below.

Size Analysis for Client-Specific Tables (Optional)

> This optional activity analyzes the size of all client-specific tables that SAP TDMS selects for transfer in the sender system of the type TRANS, POOL, and CLUSTER.SAP TDMS stores the results in a transparent table in the control system.
>
> The activity View Related Tables displays the results of the size analysis.

View Related Tables (Optional)

In this optional activity, you can view a comprehensive list of tables related to the BPL object selected for data transfer. If you execute the activity Size Analysis for Client-Specific Tables, you can also view the size and other relevant details for the tables.

You can also view any additional data related to the BPL object and its subobjects, which is required to maintain data consistency in the receiver system. SAP TDMS selects the additional data for transfer.

Verification of Client ID Match

This activity compares the sender client ID and the receiver client ID. In the case of a match, the activity closes without performing any further actions.

In the case of a mismatch, the activity adds the following activities to the migration process tree:

o   Prepare Fields for Client Conversion

o   Generate Conversion Rules for Client Conversion

The activities listed above ensure client conversion during the *Data Transfer* phase by carrying out the following actions:

o   Conversion of the client ID in the client ID field in client-specific tables to the client ID of the receiver system

o   Conversion of the client ID value in a different field to the receiver system client value

Get Logical System Name from the sender System

In this activity, you can assign a logical system name for the receiver system in the same row as the logical system name in the sender system. The new logical system name specified here is replicated in the receiver system at the time of data transfer.

You can use the search help, which lists all the available logical system names in the receiver system.

4.3.2   Configuring and Selecting Data

This phase consists of activities necessary for the settings related to migration objects used in data transfer. Activities related to selection filters, to the selection of migration parameters, and to the confirmation of migration definition are also a part of this phase.

The activities specific to TDMS BPL are described below. The remaining activities are common to the other migration solutions provided by SAP TDMS.

Preparation of Migration Settings

This is a mass starter activity that starts a sequence of the following activities:

Identification of Nested BPL Subobjects

This is a background activity that automatically identifies the application tables related to each nested level of the BPL subobjects and sets the table names for transfer.

Using this activity, you can transfer the data of the subobjects below the second level in the BPL Object hierarchy.

Validation of Business Process Content

This is a background activity, which validates the technical correctness of the BPL object selected for data transfer.

The activity performs the following validations:

o   Verifies that the BPL object data is mapped correctly to the data repository of Landscape Transformation.

o   Verifies that the foreign key and links are mapped correctly between tables and subobjects.

o   Verifies that all table and field names are correctly assigned.

o   Carries out other miscellaneous technical checks.

Creation of Migration Objects

This activity automatically creates migration objects for each table belonging to the BPL object you selected. TDMS BPL creates one flat migration object for each of the tables belonging to the selected BPL object and its subobjects.

In common with the other migration solutions of SAP TDMS, the mass starter also executes the following activities:

Validation of SAP Application Tables

Generation of Migration Subproject

Exec. of Consistency Checks for Transfer-Rel. Customizing

Definition of Mass Transfer ID for Participating Tables

Preparation of Migration Objects for Data Transfer

Execution of Database Analysis

Generation of Run-Time Objects for Data Transfer

Specify Migration Parameters for Data Selection (Optional)

In this activity, you can specify migration parameters to transfer a set of data based on your business requirements.

This activity is used to execute the same migration package again to transfer a new set of data.

If you have executed a TDMS BPL package to transfer a set of data for selected BPL object and you want to transfer a new set of data for the same BPL object using same migration package, execute this activity.

Prerequisites

You have already maintained the parameter values at the executed step level.

Activities

When you execute this activity, you see the parameter values that you entered at the execution step level. You can change the parameter values, which are then used for data pre-selection and data selection.

.

TDMS BPL automatically creates migration parameters for each active field of the root tables of selected BPL object. In the TDMS work center, you specify values of each of these fields which are used in the data pre-selection and data selection. In migration parameter, you can specify a single value or range of values using the fields *Low Value* and *High Value* for a migration parameter.

This activity is displayed as a dialog.

Execution of Filter Criteria Settings

This is a mass starter activity that starts a sequence of the following activities:

- **Plan Creation for the Setting of Filter Criteria**
- **Setting of Filter Criteria for Data Selection**
- **Setting of Filter Criteria for Data Deletion**

Each activity in the list above runs in the background and is described in detail in this section.

Plan Creation for the Setting of Filter Criteria

This is a background activity that automatically creates a plan to set the filter criteria for data selection.

This activity carries out the following major actions:

- Verifies the tables participating in the selection
- Creates a plan to set the filter criteria for the participating tables while taking into account any predecessor and successor relationships
- Updates the control tables relevant to the filter criteria

Setting of Filter Criteria for Data Selection

This is a background activity that is responsible for pre-selection of data and does the following:

- Takes the table's relationship, and link of the subobjects within the selected BPL object into account.
- Schedules multiple jobs to process the selection of key information based on the predecessor-successor relationship.
- Updates the pre-selection cluster with the key information for each of the tables involved in this BPL object. The table key information is stored in the initial cluster.

As a prerequisite for this activity, carry out the following activities:

- You have set at least one field as active in the reduction criteria for the starter table(s) in the BPL modeler for the BPL object you want to transfer.
- You have entered valued for parameters in the work center for the selected starter table. You have specified the values to be used as reduction criteria.

Setting of Filter Criteria for Data Deletion

This is a background activity that automatically selects table key information of tables in the BPL object you selected. The table key information is stored in the initial cluster of the receiver system.

The cluster information is required for the execution of data deletion in the receiver system.

Define Scrambling Rules

In this activity, you can perform data scrambling to secure your sensitive data according to the scrambling rules you create. You can execute this activity and define some scrambling rules to scramble your sensitive data.

For more information about this activity and the scrambling rules, see the How-To Guide for scrambling on SAP Service Marketplace at http://service.sap.com/instguides.

> i Note
>
> You can only define the scrambling rules for one execution of a migration package. You cannot specify new rules if you want scrambling to be applied for another execution of a TDMS BPL migration package with a new set of data.

Initialization of Conversion/Scrambling Settings

In this activity, SAP TDMS initializes the scrambling settings that ensure that data is scrambled according to your specified settings.

For more information about this activity and the scrambling rules, see the How-To Guide for scrambling on SAP Service Marketplace at http://service.sap.com/instguides.

➡ Recommendation

We recommend that you use scrambling in TDMS BPL in those BPL objects where only predefined scrambling content is transferred.

We **do not** recommend that you use scrambling in BPL objects where pre-delivered scrambling content is shipped along with other data.

Otherwise, the receiver system becomes inconsistent, as only the data of tables as part of pre-delivered scrambling content is scrambled, whereas in other tables, the data is not scrambled.

For, example, scrambling in BPL must be used with Customer Master, Vendor Master, Address Master and Material master scenarios alone, but it should not be used for other scenarios where customer/vendor/address/material master data is transferred along with other data such as sales order, or purchase order.

For more details about each of these activities, refer to the How-to Carry Out Data Scrambling guide for SAP TDMS 4.0 on the SAP Service Marketplace at http://service.sap.com/tdms.

Preparation for Data Scrambling

This is a mass starter activity that starts a sequence of the following activities if you activate scrambling in a BPL package:

- Activation of Conversion/Scrambling Settings
- Copy of Scrambling Definitions
- Identification of Relevant Cluster Tables and Cluster Fields
- Creation of Relevant Programs to Read Cluster Tables
- Verification of Scrambling Settings for Cluster Tables
- Verification of Cluster Data
- Identification of Relevant Tables and Fields
- Verification of Customizing Settings
- Deactivation of Conversion/Scrambling Settings

For more information, see the how-to guide for data scrambling on SAP Service Marketplace at http://service.sap.com/tdms.

Confirmation of Migration Definitions

In this activity, you indicate that you have completed defining the selection parameters for your data transfer. This activity checks that none of the activities in current phase is running. If so, the activity is finished with error message. Otherwise, the activity is finished with success and the active phase is changed to the next phase – the Data Transfer phase.

4.3.3 Transferring Data

This phase consists of activities that are necessary for data transfer of selected BPL objects. Activities related to data selection, data deletion, troubleshooting and re-execution are also part of this phase.

The TDMS BPL- specific activities are described below. The remaining activities are common to the other migration solutions provided by SAP TDMS.

Maintain Table for Technical Control (Optional)

In this step, using the maintenance view, you can maintain the following technical control settings:

Setting	Description
CLUBY	Size of one cluster in bytes
COMBY	Commit size in bytes
TASKID_MAX	Number of parallel jobs for a table
PARCLU_MIN	Number of clusters from which parallel processing is used
CLUDEL	Delete the temporarily stored data in cluster CNVMBTCLU

Data Deletion Start in the Receiver System (Optional)

This is a mass starter activity that executes the activities related to deletion in sequence in background.

This activity executes the following activities:

- **Copy tables for processing to the receiver system**
- **Get result from the pre-selection**
- **Start data deletion in receiver system**

In TDMS BPL, data deletion is selective.

Only the data selected for data transfer is deleted in the receiver system. Deletion uses the results of initial data selection for deleting data in relevant tables. Only the relevant data of tables that are participating in data transfer of selected BPL object are deleted.

Data Selection Start for All Tables

This activity works in the same manner as the Data Selection process in the standard TDMS. The only difference is that this activity uses the result of the pre-selection activity to select the data.

Start Data Transfer

This activity works in the same manner as the Data Transfer process in the standard TDMS.

In the Start Data Transfer activity, you might face duplicate key errors for certain tables. This problem can occur if the receiver system is inconsistent. For example, data exists in the receiver system for a child table, but not for the parent table.

When TDMS BPL pre-selection identifies data in the receiver system, it first looks for data in the parent table. Only if data is present in the parent table, does it proceed to the child tables. If the parent table has no related records, TDMS BPL skips the child tables.

When data transfer starts, TDMS BPL copies data relevant to both the parent and child tables. Since the child table already contains some entries similar to the selection criteria, TDMS BPL throws a duplicate key error. You can fix the error by changing the transfer method to modify using the troubleshooter *Change Write Behaviour*.

.If a large amount of data is transferred using TDMS BPL and you are facing issues in data transfer performance, initiate the following troubleshooters:

- *Drop Indexes in the Receiver System*: Allows you to drop the non-unique secondary indexes in the receiver system for tables that are a part of the data transfer.
- *Recreate the Dropped Indexes in the Receiver System*: After data transfer is complete, recreates the dropped non-unique secondary indexes in the receiver system.

If a unique secondary index exists for a table included with your BPL in the receiver system and a few records in conflict with this unique secondary index are transferred from the sender system, the data transfer ends with the Duplicate Key error, This error cannot be resolved with the Write behavior MODIFY.

If you face the Duplicate Key error during data transfer due to a unique secondary index, initiate the following troubleshooter:

Duplicate Key Error Due to Unique Secondary Index: Displays the list of tables in error and a list of conflicting records. You can select each record and press the *Delete* pushbutton to delete the conflicting records from the receiver system.

You can delete the conflicting unique secondary index records in the receiver system. However, this action may seriously impact the data in the receiver system, so verify the table entries before deletion.

View Number Range Details

This information activity provides you with the details of the number range objects used by the BPL object in the current TDMS package.

TDMS BPL does not transfer or adjust any number range objects.

Using the details provided by this activity, you are required to manually adjust the number ranges objects in the TDMS receiver system.

Refresh of the Data Selection Cluster for the Current Transfer (Optional)

The data selection activity (Data Selection Start for All Tables) fills the TDMS cluster table `DMC_INDXCL` in the sender system.

Once the data transfer has been completed successfully, you can delete the data from this temporary data storage (cluster table) in the sender system.

➡ Recommendation

We recommend that you execute this optional activity after you validate the data transfer results in the receiver system.

Refresh of the Initial Data Cluster for the Current Transfer (Optional)

The activity Setting of Filter Criteria for Data Selection fills the following cluster tables in the sender system:

- `LTR_DELIM_RLT_K`
- `LTR_DELIM_RLT_H`
- `LTR_G_CLU`

After the data transfer is completed successfully, you can delete the data from this temporary data storage (Initial Data Cluster) in the sender and receiver systems.

➡ Recommendation

We recommend that you execute this optional activity after you validate the data transfer results in receiver system.

Return to the Configuration and Selection Phase (Optional)

This activity is used to execute the migration package again. If you want to transfer a new set of data for a BPL object but you want to use the same migration package, change the values in the •parameters and then execute the necessary activities again.

This activity checks that none of the activities in the current phase are running. If an activity is running, the activity is finished with an error message. Otherwise, the activity is completed successfully. The system then changes the active phase to the previous Configuration and Selection phase and resets the status of activities that have to be executed again.

This approach prepares the migration package for another execution.

If you activate scrambling in a BPL package, the following scrambling-related activities are added to the process tree:

- **Determine Objects to be Converted**
- **Preparation for Data Mapping**
- **Mapping of Data for Scrambling**
- **Convert Migration Objects**
- **Reset of Mapping Data**

4.4 Transferring a New Set of Data for a BPL Object Using the Same Migration Package

You want to transfer a new set of data for a BPL object using the same TDMS BPL migration package. For example, in the scenario *BC-Sales Order*, if you have transferred a set of sales orders (say 1-100) in a previous execution and if you want to transfer a new set of sales orders (say 101-200), this implies that you want to transfer a different set of data. You can use the same BPL package to transfer this data.

The reuse of a BPL package commences with the activity *Return to Configuration and Selection Phase* (optional) in the Data Transfer phase. This activity performs a few necessary technical checks, resets the status of some activities in the Configuration and Selection and Data Transfer phases, and changes the active phase to the Configuration and Selection phase.

After you execute the activity *Return to Configuration and Selection Phase* and the activity sets the active phase to Configuration and Selection, the package is available in the reuse status.

To transfer a new set of data when using the same BPL migration package, proceed as follows:

1. Maintain the parameters value at the execution step level in the TDMS work center.
2. In the process tree for TDMS BPL, execute the Return to Configuration and Selection Phase (Optional) activity. This activity checks whether parameter values exist for the selected project or package.
   - TDMS changes the active phase to Configuration and Selection.
   - TDMS resets the status of all the activities that need to be executed again in the current phase and in the Configuration and Selection phase.
3. Execute the following activities in the Configuration and Selection phase:

- o **Specify Migration Parameters for Data Selection (Optional)**

  Change the parameter values that you want to be used for selecting the data.
- o **Execution of Filter Criteria Settings (Mass starter activity)**
- o **Confirmation of Migration Definitions**
- o **Execute the following activities in the Data Transfer phase:**
- o **Execution of Final Checks Before Data Transfer**
- o **User Lock in the Receiver Client (Optional)**
- o **Data Deletion Start in the Receiver System**

  This is an optional activity that only deletes the data that has to be transferred to the receiver system.
- o **Data Selection Start for All Tables**
- o **Data Transfer Start**
- o **User Unlock in the Receiver Client (Optional)**

4. Check and verify the results in the receiver system.

> $\overset{\text{.}}{1}$ Note
>
> You can execute a TDMS BPL package again using RFC technology or a file extract export package, but not with a file extract import package.

4.5 Transferring Data Using File Extracts in TDMS Business Process Library

You can use the file extract method or the RFC method in TDMS BPL to transfer data to the receiver system.

Using the File Extract Method

TDMS BPL allows you to execute the data export package again to create multiple export files for transferring many different sets of data.

You can execute the import packages again to transfer the different sets of data using the extract files created when using the same BPL object.

Working with Client Conversion in the File Extract Method

SAP TDMS automatically identifies the sender client information and store it in TDMS control tables. This data is passed to the import package. When you execute the import package, SAP TDMS prompts you for the receiver client information. It uses the receiver client information and the sender client information (that it collected from the export package) to convert the values in the client fields (or in any other fields holding client information) from the sender system client to the receiver system client.

For more information about the file extract technology, see the How-To Guide for File Transfer on SAP Service Marketplace at http://service.sap.com/tdms.

www.sap.com/contactsap

Material Number