



Special procedure for BW copy (Scenario B3 of note 886102)

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Applicable Releases:
SAP Business Information Warehouse 2.x, 3.x, 7.x

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1 Preconditions

1.1 Disclaimer

The following is a special simplified procedure for the system copy scenario B3 of note 886102: Copy a single BW system of the group; the source system is not copied. You want to refresh an existing non-productive BW system by copying the source-system-independent objects from the productive BW system [PRD to NPS, refresh].

It can only be applied under the conditions described below, which must be carefully checked. For this reason, this procedure is only published for use by experienced consultants. **If the conditions are not met, this procedure must not be applied**, if not severe problems with the usage of the source system dependent BW objects shall occur in the copied system. Instead, follow the procedure B3 as described in note 886102 itself. SAP rejects any reliability for problems, which occur if the below procedure is followed even though the conditions are not met.

1.2 Check

In the following, the original BW system of the copy is assumed to be the productive BW system (PRD), named BWPRD500, the system to be replaced by the copy is the quality BW system (NPS), named BWQAS300.

Compare the field TSPREFIX in table RSBASIDOC of NPS and PRD. Any equivalent SAP or ERP source system (including the BW itself) must have the same TSPREFIX in both NPS and PRD. Two source systems A of PRD and B of NPS are equivalent, if the source system dependent objects, which are assigned to source system A, shall be assigned to source system B in course of the copy. An "SAP-source system" is a system with SRCTYPE = 'M', 'D' or '3'.

1.3 Example

NPS:

RLOGSYS	SLOGSYS	TSPREFI X	SRCTYPE
BWQAS300	R3QCLNT800	NA	3
BWQAS300	R3QCLNT600	NB	3
BWQAS300	R3QCLNT500	NC	3
BWQAS300	BWQAS300	MA	M
BWQAS300	PC_FI LE	OA	F

PRD:

RLOGSYS	SLOGSYS	TSPREFI X	SRCTYPE
BWPRD500	R3PCLNT800	NA	3
BWPRD500	R3PCLNT600	NC	3
BWPRD500	R3PCLNT500	NB	3
BWPRD500	BWPRD500	MA	M
BWPRD500	PC_FI LE	OB	F

Comparison:

SRCTYPE	SLOGSYS(NPS)	SLOGSYS(PRD)	TSPREFI X(NPS)	TSPREFI X(PRD)	resul t
3	R3QCLNT800	R3PCLNT800	NA	NA	Ok
3	R3QCLNT600	R3PCLNT600	NB	NC	mi smatch
3	R3QCLNT500	R3PCLNT500	NC	NB	mi smatch
M	BWQAS300	BWPRD500	MA	MA	Ok
F	PC_FI LE	PC_FI LE	OA	OB	i rrel evant

Because of the mismatch of TSPREFIX of source systems R3QCLNT600 / R3PCLNT600 and R3QCLNT500 / R3PCLNT500, the below procedure could not be applied in this example. Instead, the procedure described in note 886102 must be followed.

If the clients 600 and 500 would not exist in this example, the below procedure could be followed. The PC_FILE is not a SAP source system (SRCTYPE <> 'M', 'D' or '3'), thus the mismatch is irrelevant for this check.

2 Procedure

Perform necessary generic post-system copy activities, i.e. DB SID rename, TMS configuration (SE06, STMS).

Please refer to existing SAP technical documentation for more information. Some important resources are listed in the appendix.

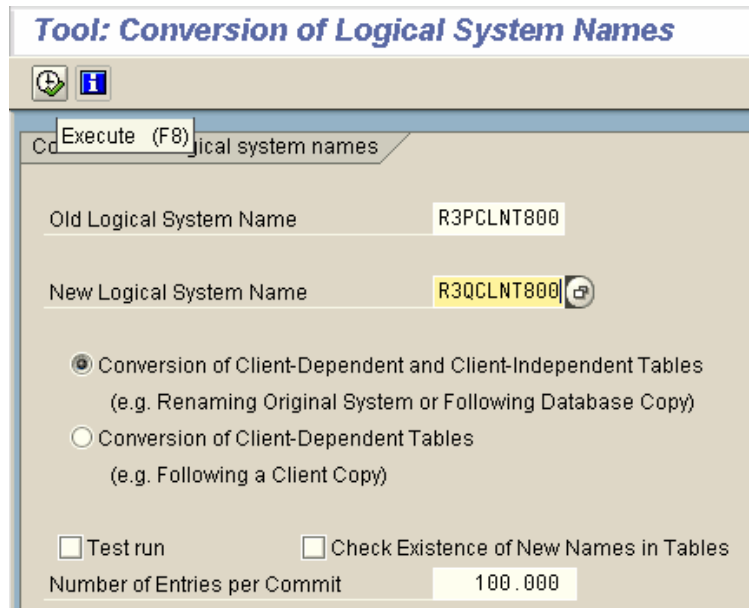
1. Log into the SAP BW client in the newly *refreshed* SAP BW system. Run transaction BDL5 first to convert the SAP BW myself logical system name. In our example, *BWPRD500* is the logical system name of the DB that was copied, and it is renamed to *BWQAS300* (example logical system names only). BDL5 converts occurrences of the value for logical system name in various tables. Accept the other default selections, except de-select “test run” and “check existence...” Please note that if you have equal logical names for PRD and NPS systems, do not perform this step or the others following. These procedures are only applicable for cases where the logical system naming convention includes unique names. Cf. note 184447.

Tool: Conversion of Logical System Names

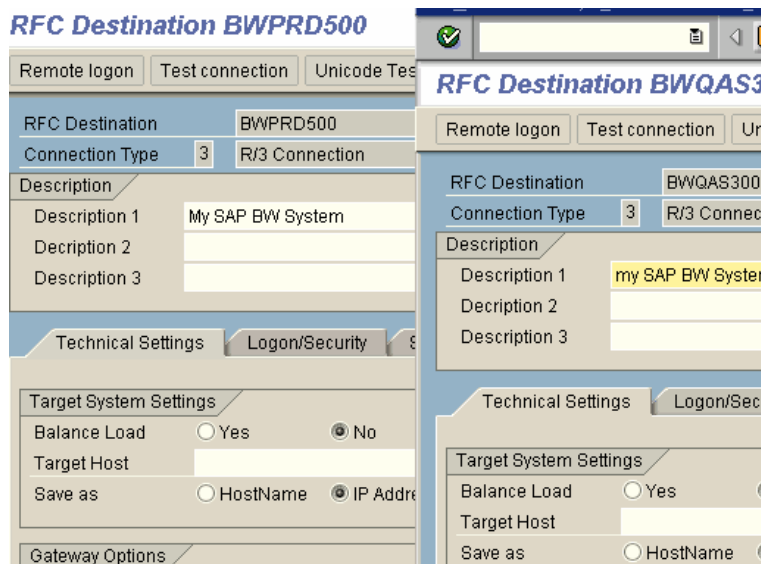
The screenshot shows the SAP tool interface for converting logical system names. The title bar reads "Tool: Conversion of Logical System Names". The main window has a title bar "Execute (F8) Logical system names". The interface includes the following elements:

- Old Logical System Name: BWPRD500
- New Logical System Name: BWQAS300
- Conversion options:
 - Conversion of Client-Dependent and Client-Independent Tables (e.g. Renaming Original System or Following Database Copy)
 - Conversion of Client-Dependent Tables (e.g. Following a Client Copy)
- Test run:
- Check Existence of New Names in Tables:
- Number of Entries per Commit: 100.000

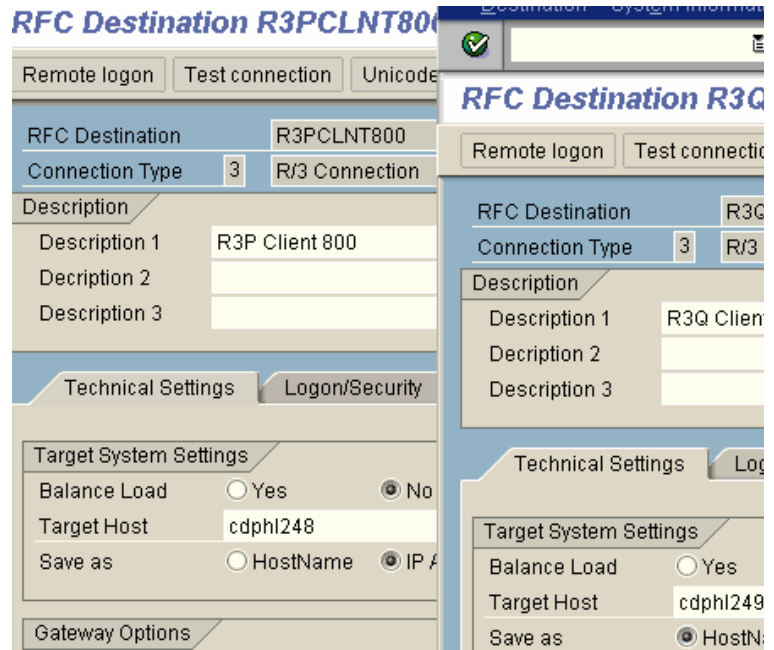
- Again in the SAP BW client of the newly refreshed SAP BW system, in transaction BLDS, convert the logical system name of the source system. In our example, we convert R3PCLNT800 to R3QCLNT800 (again, this is run in the SAP BW system, in the SAP BW client). Accept the other default selections, except de-select “test run” and “check existence...”



- In the SAP BW system (BW client), in transaction SM59 create a new interface destination for the *myself* source system. In our example, the SAP BW QA system's logical system name is BWQAS300, and therefore an interface destination *BWQAS300* is created, with the destination from the previous *myself* source system, *BWPRD500* as the template. The interface destination for *BWPRD500* is then deleted, in order to avoid confusion at some later point.



- In the SAP BW system (SAP BW client), in transaction SM59 create a new interface destination for the source system interface destination. In our example, the source system is an SAP R/3 QA system, and therefore an interface destination *R3QCLNT800* is created, with the destination from the previous source system *R3PCLNT800* as the template. The interface destination for *R3PCLNT800* is then deleted, in order to avoid confusion at some later point. Be sure to maintain the *logon/security* tab, and you need to know the extraction user and its password for the source system to which you are (re)connecting.



- If the source system is an SAP source system, there is an interface destination created during source system creation for the dialog connection. In our example, this destination is called *R3QCLNT800_DIALOG*. In the SAP BW system (SAP BW client), in transaction SM59 create a new interface destination for the source system dialog interface destination. In our example, the source system is a SAP R/3 QA system, and therefore an interface destination *R3QCLNT800_DIALOG* is created, with the destination from the previous source system *R3PCLNT800_DIALOG* as the template. The interface destination for *R3PCLNT800_DIALOG* is then deleted, in order to avoid confusion at some later point. Note the specific settings required in the logon/security tab (logon screen).



- In the SAP BW system (SAP BW client), transaction SE16, maintain table RSSYSLOGDEST. This table holds the relationship between source system logical system name and SM59 interface destination. In our example, *BWPRD500* is changed to *BWQAS300*, and *R3PCLNT800* is changed to *R3QCLNT800*.

Data Browser: Table RSLOGSYSDEST

LOGSYS	DESTINATION
BWQAS300	BWQAS300
R3QCLNT800	R3QCLNT800

- In the SAP BW system (SAP BW client), transaction WE20, activate the partner profiles for the logical systems for the SAP BW myself logical and the source system logical system. Highlight the logical system name, under partner type LS. Go to the *classification* tab, and change the “I” to an “A”, to activate the profile, as BDLs deactivated them. In our example, the partner profiles for logical systems *R3QCLNT800* and *BWQAS300* were activated.

Partner profiles

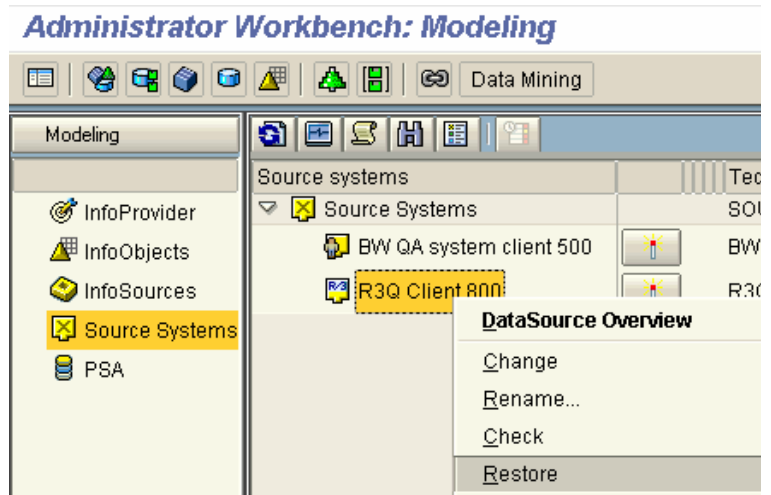
Partner	Description	Partner no.	Partn.Type	Partner class	Partn.status
Partner Type B	Bank	R3QCLNT800	LS	BIW	A
Partner Type GP	Business Partner				
Partner Type KU	Customer				
Partner Type LI	Vendor				
Partner Type LS	Logical system				
BWQAS300	BW PRD system c				
R3QCLNT800	R3P Client 800				
Partner Type US	User (first 10 char)				

- In the SAP BW system (SAP BW client), administrator workbench (RSA1) > *Modeling* > *Source Systems*, highlight, right mouse click (RMC), context menu – choose *rename*. Rename the text of the BW myself logical system and the source system logical system. This is purely a cosmetic change, but again may help to avoid confusion later. To be clear, this refers to the short text label attached to the technical name in the admin workbench view of the source systems.

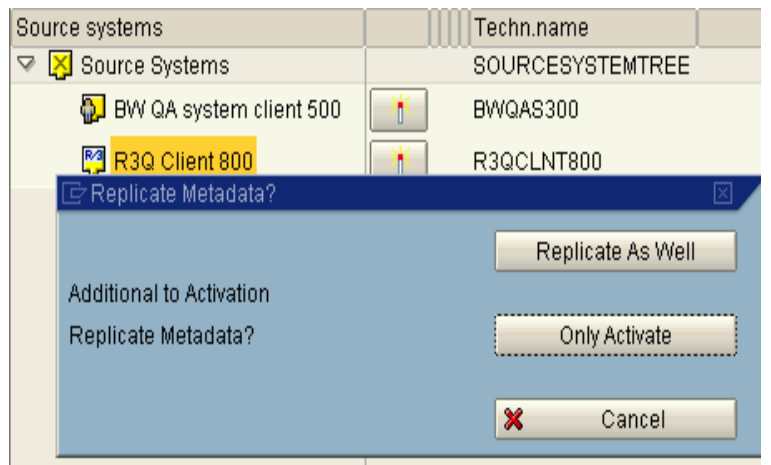
Source systems	Techn.name
Source Systems	SOURCESYSTEMT
BW PRD system client 300	BWQAS300
R3QCLNT800	R3P Client 800

Source system	STEXT
BWQAS300	BW QA system client 500

9. In the SAP BW system (SAP BW client), administrator workbench (RSA1) > *modeling* > *Source Systems*: Highlight the source system, and from the context menu, choose *restore*. In our example we will attempt to restore the connection to the SAP R/3 QA source system R3QCLNT800. In order to proceed, you must know the password for both the extraction user in the source system and also the equivalent user in the SAP BW system (system user, like “BWREMOTE” or something similar). Be ready to log onto the client for the source system connection. **IMPORTANT NOTE:** the dialog makes an RFC call into the source system, where you must log in with a user with admin privileges (basis administrator authorizations), but **note** the client “000” is the default! You must enter the specific client you are (re)connecting as the source system, overwrite the “000”s!



10. When you log on to the source system via RFC, there is a dialog that says “user already exists”, “continue”, choose “continue”. Next is the dialog for the RFC destination, choose “check”. Here, make any necessary change if there is any difference in the client number for the newly refreshed SAP BW system (than the previous SAP BW system to which this source system was connected). Test connection, save, green arrow back continues the RFC dialog. This takes you back to the SAP BW system. There is a dialog that says “Replicate Metadata?”, choose *only activate*. Please note in the next step, it is expected that this will result in a termination with an error.



11. The error that is to be expected, when making the first attempt at (re)connection of the source system. The reason for the failure is that the partner profiles do not have the correct partner profile receiver port definition. The initial attempt at (re)connect of the source system generates a new TRFC receiver port for the source system (in our example, R3QCLNT800), which we can use to fix the configuration of the partner profiles for the logical system.

Source System Check			
Type	Message Text	ID	No.
	Port description contains errors: Incorrect destination R3PCLNT800	RSAR	669

12. In the SAP BW system (SAP BW client), transaction WE20, again maintain the partner profiles for the logical systems, but this time, double-click on the Outbound Parameter "Message Type" RSRQST.

Partner profiles

Partner	Description	Partner no.	Partn. Type
Partner Profiles		R3QCLNT800	LS
Partner Type B	Bank		
Partner Type GP	Business Partn		
Partner Type KU	Customer		
Partner Type LI	Vendor		
Partner Type LS	Logical system		
BWQAS300	BW QA system		
R3QCLNT800	R3Q Client 800		
Partner Type US	User (first 10 ch		

Post processing: permitted age	
Typ	US
Agent	SILBERSTEIN
Lang.	EN

Outbound parmts.	
Partner Role	Message type
	RSRQST

13. In the Outbound Parameters maintenance screen, under the tab *Outbound Parameters*, click the drop down icon to select the TRFC port of the source system to which you are (re)connecting. This action does not have to be performed for the partner profile for the SAP BW myself logical system, only for partner profiles of relevant source systems.

Partner profiles: Outbound parameters

Partner No. R3QCLNT800 R3Q Client 800
 Partn.Type LS Logical system
 Partner Role
 Message Type RSRQST BIW
 Message code
 Message function Test

Outbound Options Post Processing: Permitted Agent Teleph

Receiver port A000000038 Transactional RFC R3P
 Pack. Size 1
 Queue Processing
 Output Mode
 Transfer IDoc Immed.
 Collect IDocs
 IDoc Type
 Basic type RSREQUEST
 Extension

Port	Port description
A000000036	My SAP BW System
A000000038	R3P Client 800
A000000039	R3Q Client 800

14. Once again, in the SAP BW system (SAP BW client), administrator workbench (RSA1) > *modeling* > *Source Systems*: Highlight the source system, and from the context menu, choose *restore*. Attempt at (re)connection results in a dialog that says "Connection cannot be used." Choose *Delete*: The text in the dialog is the key "The connection is restored after it has been deleted successfully". After this, the same dialog for RFC logon to the source system client to which you are connecting must be repeated, with the same dialogs about the user existing and the same check of the RFC destination once again. This time, when prompted to Replicate Metadata, choose *Replicate As Well*. Please see the previous notes in step 9 about the default client in the RFC dialog in the source system; you must specify the exact client to which the connection should be established.

Connection Cannot be Used

The Connection PA is used in the R3QCLNT800 Source System as a Connection BWQAS300 to BW.

Do You Want to Delete this Connection in the Source System?
 The Connection is Restored After It Has Been Deleted Successfully.

Delete Do Not Delete

15. The connection process should end at “Analyze Application Log”. If you choose “continue”, the defaults will take you to the log for the activity. Success in (re)establishing the connection will result in green lights in the application log.

Display logs

Date/Time/User	Jumbe	External ID	Object
28.03.2005 01:48:29 SILBERSTE	3	LSYS_CHANGE_BWQAS3(Busine	
28.03.2005 01:48:29 SILBERSTE	3	BWQAS300	Busine
28.03.2005 01:48:39 SILBERSTE	3	LSYS_CHANGE_R3QCLN(Busine	
28.03.2005 01:48:39 SILBERSTE	3	R3QCLNT800	Busine

16. You are now able to perform InfoPackage data loads now for the source system, and the delta mechanisms should continue without interruption, no re-initializations required. Please note that data consistency is not maintained, however – the only way to ensure consistent data between source system and SAP BW InfoProviders is to delete data from the InfoProvider and re-initialize delta for the DataSource in question.



3 Appendix: Additional Resources

- <http://service.sap.com/BW> > Services & Implementation > Migration
 - On this page there is a link to the latest migration document, as well as a special Product Availability Matrix. You can link to a document such as, for example, “Heterogeneous and Homogenous System Copy for SAP Systems Based on SAP Web Application Server ABAP 6.40 SR1”.
- <http://service.sap.com/osdbmigration> (SAP migrations homepage)
- <http://service.sap.com/instguides> > Choose *SAP NetWeaver* > *Release 04* > *Installation*.
 - The example guide listed above is located here as well. Also see SAP Note 771209 “NW04: Homogeneous and Heterogeneous System Copy (supplementary SAP note)” for any supplements to the guide.
- **SAP Notes:**

Please refer to the note-list within note 886102.

www.sdn.sap.com/irj/sdn/howtoguides