Transfer of GL Master from Source SAP System to a Target SAP System through IDOCS



Applies to:

SAP ECC 6.0. For more information, visit the Enterprise Resource Planning homepage.

Summary

SAP offers a wide range of applications designed to transfer business objects from one system to another which cannot be captured in the transport request functionality.

This article provides an exhaustive approach to show the usage of the standard SAP transaction **'BD18'** (Send G/L Accounts) for transferring G/L master records from a Source Client to a Target Client through IDOCS.

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Introduction

The implementation of SAP software, such as SAP R/3 is almost always a massive operation that brings a lot of changes in the organization. The resulting changes that the implementation of SAP generates are intended to reach high level goals, such as improved communication and increased return on information.

From a Finance prespective, a complete new organization structure is created keeping in mind the business processes that are followed in the organization. This involves the creation of various SAP Business Objects like-Company Codes, Chart of Accounts, General Ledger (G/L) Accounts, Profit Centers, Cost Centers etc.

From a deployment and testing purpose, a majority of these SAP objects get captured in SAP transport request functionality and can be transported from a Development Client to a Testing Client\Production Client. However, there are certain business objects like the G/L accounts which do not get captured in transport request and has to be created in each client.

General Ledger Accounts-Overview

The general ledger is the core element of a company's business and financial endeavors. A general ledger summarizes all of a company's financial transactions including sales and income, asset management, retained earnings, inventory supplies and expenditures, payroll, including taxes and benefits and vendor expenses. The general ledger is where posting to the accounts occurs.

A general ledger basically holds four types of accounts:

- Assets
- Liabilities
- Income
- Expenses

The balance sheet and the income statement are both derived from the general ledger. In SAP, for each G/L account, the **'Chart of Accounts'** contains the account number, account name, and the information that controls how an account functions and how a GL account is created in a company code.

General Ledger Accounts in SAP

The transaction code for creating a General Ledger account in SAP is 'FS00'.

In a SAP implementation, there can be scores of G/L accounts which needs to be created in SAP from the existing legacy system. Moreover, if there is multiple company codes involved, then a particular G/L account has to be created for each of the company code for posting to occur.

The most common approach followed for the creation of G/L Accounts in SAP is through the use of a data migration tool, 'LSMW' (Legacy System Migration Workbench), wherein based on the recording of the transaction 'FS00' for a single record, a file containing the full list of G/L accounts along with the relevant fields is uploaded into SAP system, which in turn reads the file and creates the G/L accounts in the system. The above process is followed as well for the creation of G/L accounts in Testing Client as well as during the Deployment to the Production Client. However, there are risks associated with this process like the file containing the list of G/L accounts may get corrupted and the system is unable to read the file.

A more sophisticated and clean approach would be to use the '**IDOCS**' functionality to transfer the G/L accounts from one system to another. The major advantage of following this process is that it reduces the uncertainty around the creation of G/L accounts in SAP to a great extent. Once the connection is set up between two systems, the transferring can be done as much number of times.

This article provides a step by step overview to show the usage of SAP transaction code, "**BD18**', for transferring the G/L accounts master from a Source SAP system to a Target SAP system through '**IDOCS**' functionality.

Send G/L Accounts-BD18

SAP transaction '**BD18**' is used for the transmission of master data for the specified general ledger accounts in the form of IDOCs '**GLMAST**' or '**GLCORE**' from a source SAP System to a given receiver SAP system, provided a RFC connection is set up within the two systems along with same basic configuration. The general ledger accounts are selected and transferred to the corresponding transmission functional module.

Navigation path

	SAP Menu \rightarrow Logistics \rightarrow Logistics Execution \rightarrow Transportation
SAP Easy Access Path	→ External Planning System →ALE Monitoring→Go to →Master Data Distribution →Accounting →G/L Account →Send

Send G/L accounts		
Chart of accounts Company code Account No.		to to to to to to to to to to
Logical message Receiving logical system		
Parallel processing Server group G/L accounts per process	20	

SAP Standard report 'RBDSEGLM' is triggerred, when transaction Code 'BD18' is executed.

Tables & Function modules used

	SKA1	G/L Account Master (Chart of Accounts)
	SKB1	G/L Account Master (Company Code)
	TBDME	ALE supplement data for EDI message type
lables	TBDLS	Logical system
	T001	Company Codes
	EDMSG	Logical message types

	CHECK_REDUCED_MESSAGE_TYPE
	OWN_LOGICAL_SYSTEM_GET
	ALE_MODEL_DETERMINE_IF_TO_SEND
Function Modules	SPBT_INITIALIZE
	MASTERIDOC_CREATE_REQ_GLCORE
	MASTERIDOC_CREATE_REQ_GLMAST

Advantages of BD18 over LSMW

- (a) Time Efficient
- (b) No Flat file to be uploaded in SAP system
- (c) Once the connection is set up, the G/L accounts can be transferred to the receiver SAP system as much number of times as desired.

Step by Step Procedure for using BD18

There are certain pre-requisites which needs to be completed, before executing the transaction '**BD18**'. These pre-requisites are explained in detail as steps in the pages to follow.

Situation

Transferring G/L accounts from a Source SAP system to a Target SAP System.

Assumptions

- (a) The Source and Target SAP systems have already been created.
- (b) The G/L accounts in the Source SAP system have already been created.

In brief, the steps are as follows-

Step(s)	Description	SAP Transaction Code
1	Configuration and Checking of RFC Connections	SM59
2	Configuration of tRFC port	WE21
3	Configuration of Partner Profiles in Source System	BD54,WE20
4	Configuration of Distribution Model	BD64
5	Configuration of Partner Profiles in Target System	BD54,WE20
6	Transferring G/L Accounts	BD18
7	Status check of the IDOCs	BD87

Step-1: Configuration and Checking of RFC Connections

Source System-'ID2' Client 100

Target System-'IST' Client 100

Log in to the Source System (ID2) and go to Transaction Code 'SM59'

Configuration of RFC Connections

🕄 🛗 🗋 🥒 🞸 🛅

0

Select the "ABAP Connections" and click on Create Icon

The following values needs to be filled in-

Field	Value	Description
RFC Destination IST100		Target System
Description1	RFC Destination for IST 100	
Target Host AB14.abcloud14.int		Target System Server Details
System Number	14	Target System's Number

Note-The values used are specific to the Target System used in here. It will be different for different for different systems.

RFC Destination IST100

	Remote Logon Connection Test Unicode Test 🦻		
	RFC Destination IST100		
	Connection Type 3 ABAP Connection Description		
	Description /		
	Description 1 RFC Destination for IST 100		
	Description 2		
	Description 3		
	Administration / Technical Settings / Logon & Security / MDMP & Unicode / Special Optio	ns	
I			
	Target System Settings		
	Load Balancing Status		
	Load Balancing O Yes No		
	Target Host AB14.abcloud14.int System Number 14		
	Save to Database as		
	Save as O IP Address AB14.abcloud14.		

Once the values are filled in, click on the 'Logon &Security' tab to set up the 'User' and 'Password' for the same. The 'User' should be a 'Communication user' and should exists in the Target System as well.

RFC Destination IST100		
Remote Logon Connection Test Unicode Test 🎾		
RFC Destination [ST100 Connection Type 3 ABAP Connection Description		
Description		
Description 1 RFC Destination for IST 100		
Description 2		
Description 3		
Administration Technical Settings Logon & Security MDMP & Unicode Special Options		
Security Options		
Trusted System/Logon Screen Status		
Trusted System No Yes Logon Screen		
Ctatus of Cosura Protocol		
Status of Secure Protocol Image: Status of Secure Proto		
Authorization for Destination		
Logon		
Language EN		
Client 100		
User AB13 Current User		
PW Status changed		

Once the details are entered, press 📙 so that the RFC destination is saved.

Now ,click on the "Connection Test" button **Connection Test** to test the connection from ID2 to IST. For successful connection between the two systems, the following screen should appear.

RFC - Connection Test

Connection Test IST100 Connection Type SAP Connection		
Action	Result	
Logon	66 msec	
Transfer of 0 KB	18 msec	
Transfer of 10 KB	18 msec	
Transfer of 20 KB	19 msec	
Transfer of 30 KB	19 msec	

If the above screen is not coming, then some error has happened in the configuration and it is better to contact the SAP BASIS team for the rectification of the same.

Step-2: Configuration of tRFC port

In the Source System (**ID2**), Go to Transaction Code '**WE21'**. Select the '**Transactional RFC**' folder and Click on the Create Icon

Ports in IDoc processing

On clicking the create icon, a Pop-up comes asking for a Port name

Ports in IDoc processing			
Ports Du Ports Ports P C Transactional RFC P C File CPI-C ABAP-PI XML File XML HTTP	Descrip Create tRFC port Generate port name O own port name Name		
	✓ ×		

Select the 'Own Port Name' option and give name as 'IST100' and press enter.

Choose '**RFC destination**' as '**IST100**' from the drop down and '**Version**' as '**IDoc record Types SAP Release 4.x**'. Press \blacksquare to save the port details.

Creating a tRFC port

Ports Ports P Transactional F P File CPI-C ABAP-PI ABAP-PI XML File XML HTTP	Description	Port Description Version O IDoc rec.types S/ IDoc record types	IST100 IST Client 100 AP Release 3.0/3.1 s SAP Release 4.x	
		RFC destination	IST100	Ø

Step-3: Configuration of Partner Profiles in Source System

For configuring the Partner Profile in the Source System, the '**Target System**' has to be defined as a logical system. In the Source System (**ID2**), Go to Transaction Code '**BD54**' and click on New Entries New Entries. Maintain the Target System (**IST100**) and press to save the details.

New Entries: Overview of Added Entries

	Logical Syste	ms		
	Log.System	Name 📶		
Γ	IST100	Logical System for IST		
_				

After the above activitiy is complete, Go to Transaction Code '**WE20**' in the Source System (**ID2**). Select the '**Partner Type LS**' folder and click on the create icon

Partner profiles

D 🎾 🗗 C 🗊 🗹 b 🗛 🖬 🖻 🎦	
Partner Description Partner Profiles Partner Type B Bank Restrict Type B Pageoffs provider	Partner No. II ST100 Partn.Type LS Logical system
 Partner Type GP Business Partner Partner Type KU Customer Partner Type LI Vendor Partner Type LS Logical system Partner Type SP Service provider (IS-U deregulation) Partner Type US User (first 10 characters, no check) 	Post processing: permitted agent Classification Ty. US Agent AB13 Lang. EN English
	Outbound parmtrs.

Give the Partner no. as the 'Target Logical System' in this case 'IST100'. The Agent name and the type needs to be maintained as well.

The message type related to the G/L accounts, i.e-'**GLMAST**' needs to be maintained in the '**Outbound Parameters**' Section, as the G/L accounts will be moving through IDocs from ID2 to IST Systems.

Click on the confor adding the 'Outbound parameter'. A new screen opens up and following values needs to be feeded in the screen-

Field	Value
Message Type	GLMAST
Receiver Port	IST100
Output Mode	Transfer IDOC Immediately
IDOC Type (Basic Type)	GLMAST01

Partner profiles	: Outbound parameters
1	
Partner No. Partn.Type Partner Role	IST100 System Test LS Logical system
불 Message Type	GLMAST Master data G/L accounts (master ID/
Message code	
Message function	Test
Outbound Options	Message Control 👘 Post Processing: Permitted Agent 👘 Tele 📊 💽 💽
Receiver port Pack. Size Queue Processing	Ist Client 100 1
	Output Mode 2
Collect/Doce	
Collectibles	
IDoc Type	
Basic type	GLMAST01 Master data G/L accounts: Max.
Extension	
View	
Cancel Processing Af	er Syntax Error
Seg. release in IDoc type	Segment Appl. Rel.

Press 📙 to save the 'Outbound parameters' and the Partner profile.

Step-4: Configuration of Distribution Model

In the Source System (ID2) go to Transaction Code 'BD64'. Click on	Change icon 뾛 to g	o to the 'Change
Distrbution Model' view and click on the 'Create Model View' icon	Create model view	

Change Distribution Model 67 👕 🔍 🖅 🎦 📲 System View 🛛 🍞 Filter model display Create model view Add BAPI Add message type Distribution Model Description/ technical name Business obje ▽ Model views ALE_SYNC CRM Scenarios ALE_SYNC . No short text exists CRMSZ ▶ 🎇 Central User Administration CUASMP 💥 Customizing Data Synchronization CONTRLDATA Example of MM contract distribution (filering at hea MM-PUR1 Example of MM contract distribution (filtering at iten MM-PUR2) Example of distributing test settings QM-CONTR 💥 HR <-> FI Scenario HRFICOUPLI 🔀 Internet Scenarios INTERNET K Logistics Scenarios K Master Data Distribution (MDM) LOGISTICS MASTERDATA

A new screen pops-up and the following details are to be entered as shown in the figure

🖻 Edit Model View		\boxtimes
Short text	AB Distribution Model	
Technical name	GLACCOUNT	
Maint. system	IST100	
Start date	22.04.2011	
End Date	31.12.9999	
✓ ×		

After the **'Distribution Model'** is created, the message type needs to be added to the same. Click on the **'Add Message Type'** icon.

Distribution Model Changed				
🌮 🗊 😨 📧 🗲 System View 🌾 Filter model display 🗋 Create model view 🗋 Add BAPI 🚺 Add message type				
Distribution Model Description/ technical name Business object				
▽ Model views				
ALE_SYNC	ALE_SYNC . No short text exists			
🔀 CRM Scenarios	CRMSZ			
Central User Administration	CUAGL			
🔀 Customizing Data Synchronization	CONTRLDATA			
Example of MM contract distribution (filering at healing)	MM-PUR1			
Example of MM contract distribution (filtering at iten	MM-PUR2			
Example of distributing test settings	QM-CONTR			
🔀 HR <-> FI Scenario	HRFICOUPLI			
🔀 Internet Scenarios	INTERNET			
🔀 Logistics Scenarios	LOGISTICS			
Master Data Distribution (MDM)	MASTERDATA			
AB Distribution Model	GLACCOUNT			

A new screen pops-up, and the following values needs to be filled in.

🖻 Add Message Ty	pe	
Model view	GLACCOUNT	
Sender	ID2100	
Receiver	IST100	
Message Type	GLMAST	đ
✓ ×		

Press enter and the following distribution model appears.

Change Distribution Model

💅 🗊 😨 📧 😤 System View 🌾 Filter model display 🗋 Create model view 🗋 Add BAPI 🗋 Add message type			
Distribution Model		Description/ technical name	Business object
🗢 Model views			
D 🔀 ALE_SYNC		ALE_SYNC . No short text exists	
🔀 CRM Scenar		CRMSZ	
🕞 🕅 Central User		CUASMP	
🔀 Customizing		CONTREDATA	
🕞 🕅 Example of N		MM-PUR1	
🕞 🕅 🔀 Example of N		MM-PUR2	
D 🔀 Example of d		QM-CONTR	
🔀 HR <-> FI Sc		HRFICOUPLI	
🔀 Internet Scer		INTERNET	
🔀 Logistics Sce		LOGISTICS	
🔀 Master Data		MASTERDATA	
🗢 🖂 🔀 AB Distributio	on Model	GLACCOUNT	
🗢 Ţ Logical s	ystem for ID2100	ID2100	
🗢 🌅 Syste	m Test	IST100	
D 🗗 🤇	LMAST	Master data G/L accounts (master IDOC)	

Step-5: Configuration of Partner Profiles in Target System

For configuring the Partner Profile in the Target System, the '**Source System**' has to be defined as a logical system. In the Target System (**IST**), Go to Transaction Code '**BD54'** and click on New Entries and maintain the Target System (**ID2100**) and press to save the details.

New Entries: Overview of Added Entries			
Logical Systems			
	Log.System	Name 📑	
	ID2100	Logical System for ID2	
ł	17	TZ	

After the above activitiy is complete, Go to Transaction Code '**WE20**' in the Target System (**IST**). Select the '**Partner Type LS**' folder and click on the create icon .

Partner profiles				
D 🎾 🖧 C 🛈 🗹 🖥 🖶 🖻 🖻				
Partner Description ♥ ③ Partner Profiles □ □ Partner Type B Bank □ Partner Type BP Benefits provider	Partner No. ID2100 Partn.Type LS Logical system			
Partner Type GP Business Partner Partner Type GU Customer Partner Type LI Vendor Partner Type LS Logical system Partner Type US Vser (first 10 chara Partner Type US User (first 10 chara	Ty. US GOUSER Agent AB13 Lang. EN English			
	Outbound parmtrs.			
	Partner Role Message Type Message var. MessageFu Test			

Give the Partner no. as the 'Source Logical System' in this case 'ID2100'. The Agent name and the type needs to be maintained as well.

The message type related to the G/L accounts, i.e-'GLMAST' needs to be maintained in the 'Inbound Parameters' Section., as the G/L accounts will be moving through IDocs from ID2 to IST Systems.

Click on the kind icon for adding the 'Inbound parameters'. A new screen opens up and following values needs to be feeded in the screen-

Partner No.-ID2100

Message Type-'GLMAST'

Process Code-'GLMA'

Processing by Function Module-Trigger Immediately

Partner profiles: Inbound parameters		
1		
Partner No. Partn.Type	LS Logical system	
Partner Role		
불 Message type	GLMAST Master data G/L accounts (
Message code		
Message function	Test	
Inbound options	Post processing: permitted agent Telephony	
Process code	GLMAST G/L account master	
Cancel Processing After Syntax Error		
Processing by Function Module		
O Trigger by backgro	und program	
📔 🖲 Trigger Immediate	ly	

Press 🔲 to save the '**Inbound parameters**' and the Partner profile.

Step-6: Transferring G/L Accounts

Take a G/L account which is already created in the Source SAP System (ID2), but is not there in the Target SAP System (IST). Take a note of the G/L Account and the company code.

Display G/L Account Centrally			
🖻 🕼 🐼 🔄 🖌 🍺 😨 Edit financial statement version Edit set Edit cost element			
G/L Account 21155213 Other Creditors Company Code CAB1			
Type/Description Control Dat	a Create/bank/interest Key word/translation Inf. IP		
Control in chart of accounts			
Account Group 🛛 A001 Balance Sheet account group 🗈			
O P&L statement acct			
Balance sheet account			
Description			
Short Text	Other Creditors		
G/L Acct Long Text	Sundry Creditors		

Go to Transaction code '**BD18**' in Source System (**ID2**) and enter the following details as given and click on execute



On executing the following Pop-up's should come one after another.

🕞 Information	\times
1 master IDocs set up for message type GLMAST	
[] Information	
I communication IDoc(s) generated for message type GLMAST	

These pop-ups suggest that the the G/L accounts has been created in the Target System IST100 through the IDOC functionality.

Step-7: Status Check of the IDOCS

🖌 🔞

To check the status of the IDOCS, Go to Transaction Code '**BD87**' in the Source System and the enter the following details as shown and click on '**Execute**'

Select IDocs				
₽				
Doc Number		to		<
Created On		to		
Created At	17:00:00	to	17:30:00	
Changed On	22.04.2011	to	22.04.2011	
Changed At	00:00:00	to	00:00:00	
Doc Status		to		c >
Partner System		to		4
Selection Options for IDoc				
Message Type	BLMAST	0		->

The IDOC Status '03' indicates that the IDOC has been processed sucessfully and is sent to the Target System

Status Monitor for ALE Messages

🛐 🛅 🔁 🕞 🍞 Select IDocs 🛛 🛷 Display IDocs 🛱 Trace IDocs	Drocess	
IDocs	IDoc Status	Number
▷ 1 IDoc selection		
🗢 📕 Logical system for ID2100		1
🗢 🛃 IDocs in outbound processing		1
🗢 🧧 Data passed to port OK	03	1
🗢 🛅 GLMAST		1
EA(083) : IDoc sent to SAP system or external program		1

To check the status of the IDOCS in the Target System, Go to Transaction Code **'BD87'** and the enter the following details as shown and click on **'Execute'**

	to		=
	to		
17:00:00	to	17:30:00	
22.04.2011	to	22.04.2011	
00:00:00	to	00:00:00	
	to		-
	to		-
-			
GLMAST	0		-
	17:00:00 22:04:2011 00:00:00	to 17:00:00 to 22:04:2011 to 00:00:00 to to to 5LMAST	to to 17:00:00 to 22:04:2011 to 22:04:2011 to 00:00:00 to 00:00:00 to 6LMAST (2)

The IDOC Status '53', indicates that the IDOC has been received successfully in the Target System and the G/L account has been created in IST system.

Status Monitor for ALE Messages

🛐 🔚 🔚 🕞 🍞 Select IDocs 🛷 Display IDocs 🖨 Trace IDocs 🕒 Process			
IDocs	IDoc Status	Number	
F IDoc selection			
🗸 🛃 IST100		1	
🗢 😰 IDoc in inbound processing		1	
🗢 🧉 Application document posted	53	1	
က် GLMAST		1	
🚺 (000) : (without error message)		1	

Note- Step 1 to Step 5 mentioned above needs to be done only once for a given Source System and given Receiver System, where as Step 6 and Step 7 needs to be executed as much number of times the transferring of G/L accounts is performed.

List of Transactions for transferring other SAP Business objects

Apart from the G/L accounts, there are other SAP objects which can be transferred using the IDOC functionality from the Source system to a receiver system. The only difference would be in the IDOC message types for each of these SAP objects.

Here is a consolidated list of the transaction codes which can be used along with their purposes.

Transaction Codes	Purpose
BD10	Send Material
BD12	Send Customer
BD14	Send Vendor
BD16	Send Cost Centre
BD24	Send Cost Elements
BD25	Send Activity Type
BD27	Send Cost Centre activity Prices
BD28	Send Obj\Cost Element Control data

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Related Contents

T-codes for Data Distribution across clients

http://forums.sdn.sap.com/thread.jspa?threadID=1809116

http://forums.sdn.sap.com/thread.jspa?threadID=1932579

For more information, visit the Enterprise Resource Planning homepage.

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