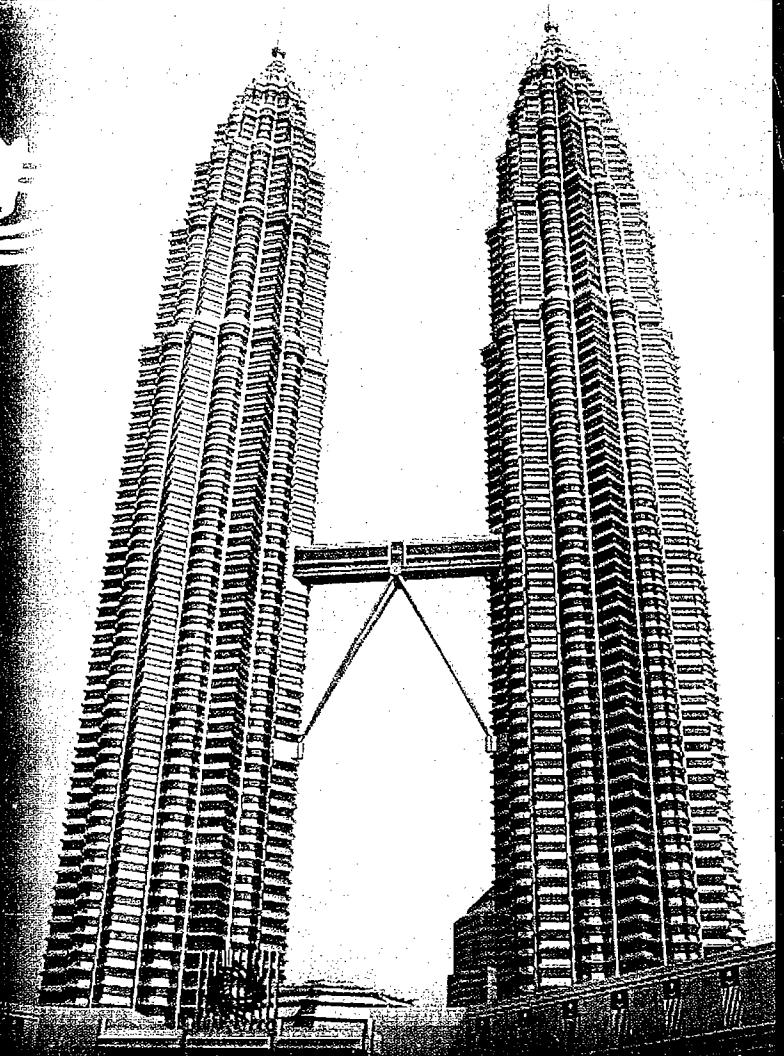


SAP@e *Me*

**Helps to Reach
The Heights
in SAP**



CROSS APPLICATIONS - II

Ganapati Adimulam

INDEX

SNO	Chapter	Pages
1	Introduction	02
2	IDocs & Message Type	11
3	Communication Settings	12
4	Outbound & Inbound	02
5	Distribute Master Data via Standard IDoc	39
6	Filtering	21
7	Trouble Shooting & Recovery	07
8	Custom IDocs	30
9	Extended IDocs	34
10	Transactional Data	14
11	Miscellaneous	02

1. Introduction to ALE

We Never Compromise In Quality. Would You?

ALE (Application Linking and Enabling)

ALE is SAP's technology to support distributed yet integrated processes across several SAP systems.

(OR)

Application Link Enabling (ALE) is a set of business processes and tools that allow applications on different computer systems to be linked. This can be done between different SAP systems as well as between SAP and non-SAP systems.

Distributed Process:

A distributed process is one in which part of a business process(Sales) is carried out on one system and part(Finance) on another. The two systems would exchange data with each other at appropriate points to stay synchronized.

Need for Distributed Process:

- Business in Different Geographical Locations.
- Non availability of dedicated network.
- Cultural and language differences in Geographical locations.
- Running of Mission-critical Applications (Like Maintenance downtime etc.).
- Separate up gradation of Modules.

Distributed SAP SYSTEM – CHALLENGES(Advantages) :

- A system that understands the syntax and semantics of the data. It was important from the very beginning to base the distribution of data on business rules, not on database replication techniques.
- Distributed systems that can maintain their autonomy while being integrated as one logical SAP system. The systems should be able to operate independently and support logical processing of transactions and data.
- Distributed systems that can handle different data models. A local implementation should be able to customize the system to meet its local needs.
- Receiving systems that can handle their own problems and not tie up the sending system.
- Systems that maintain continued operation in spite of network failure. Changes made to either system should be synchronized after the network connection is restored.
- A sound technology and methodology that can be used in all distribution scenarios.

SAP Distributed environment:

ALE allows for efficient and reliable communication between distributed processes across physically separate SAP systems.

ALE is based on application to application integration using messaging architecture. A message defines data that is exchanged between two processes. IDocs are containers that hold data exchanged between the two systems.

1. Introduction to ALE

We Never Compromise In Quality. Would You?

Benefits of ALE :

- Integration with non-SAP systems: ALE architecture allows third party applications to integrate with SAP system.
- Reliable Distribution: Once message type created and the receiver of the message is determined, ALE delivers the message to the recipient. If there is any network problem it will buffer the message and delivers the message once the network is restored. It also ensures that the message is not delivered twice.
- Release Upgrade: Any of the distributed system can be upgraded to the new release of SAP without affecting the functionality. The ALE layer ensures backward compatibility of messages exchanged between systems.
- ALE may also reduce costs, in particular costs of upgrading. If the whole business is run on one integrated system you have to upgrade the whole system, even if only one part of your company (e.g. human resources) requires an update. So the entire company is affected by the upgrade project and all users have to be trained for the new release. Within a distributed environment with release independent interfaces, like those provided by ALE, you can focus the upgrade project on that part of the company that has to be upgraded. The other parts of the company are not involved and need no training. This can save a lot of money. Furthermore, existing investments are protected.
- Imagine your company has several sister companies in different countries. Each company uses its own local SAP installation. When one company creates master data, e.g., material or customer master, it is very likely that these data should be known to all associates. ALE allows you to immediately trigger an IDoc sent to all associates as soon as the master record is created in one system.
- Another common scenario is that a company uses different installations for company accounting and production and sales. In that case, ALE allows you to copy the invoices created in SD immediately to the accounting installation.

2. IDocs & Message Type in Detail

We Never Compromise In Quality. Would You?

IDocs

Note : ALE Uses IDoc(Intermediate Document) to carry the Data across the Distributed Systems.

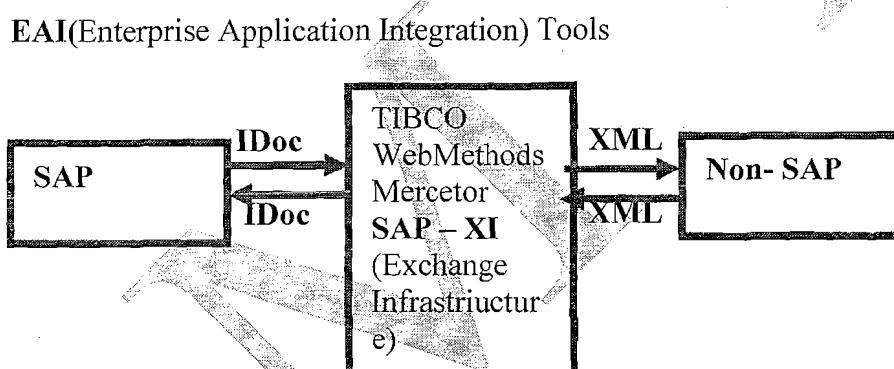
Note : IDoc is SAP's Own Format so that only SAP Systems Can Understand the data in IDoc Format.

Scenario1: SAP – SAP



Note : Since Both the systems are SAP Systems, they can understand the data in IDoc Format.

Scenario2: SAP <> Non - SAP



When the Communication is between SAP <> Non SAP , The data in IDoc Format should be Converted in other format(XML here) and the Any other format should be converted into IDoc , We Can go for any EAI Tool which can do the above Conversion With no Loss Of Data.

Note : IDoc is Collection of Segments AND Each segment is collection Of Fields.

Note : SAP ALE Consultant role is always to Work with IDocs irrespective of the Other System(SAP/Non-SAP).

2. IDocs & Message Type in Detail

We Never Compromise In Quality. Would You?

IDOC Design Guide Lines(Syntax Rules)

- IDOC Type defines the structure and format of the business document that is to be exchanged.
- Analyze the Application Data to be transferred Via IDoc AND

Identify the List Of required Segments

Make Sure that the related data is grouped into one segment

Decide the Parent & Child Segments

Decide the Minimum & Maximum No Of Repetitions of each Segment

Decide the mandatory/optional segments

Make Sure that the Segment length is not more than 1000 bytes(Char).

Segments

- Segment defines the format and structure of a data record. Segments are reusable components.
- For each segment SAP creates
 - Segment Type (version independent)
 - Segment Definition (version dependent)
 - Segment Documentation
- The last 3 characters is the version of the segment
- Definitions keep changing as per the version but the segment type remains the same

Note: Fields in any segment can contain only alphanumeric values(Data Types).

Data Types	Description
CHAR	Character String
CLNT	Client
CUKY	Currency Key, referenced by CURR fields
DATS	Date Field (YYYYMMDD) stored as

2. IDocs & Message Type in Detail

We Never Compromise In Quality. Would You?

	char(8)
LANG	Language Key
NUMC	Character field with only digits
TIMS	Time Field (HHMMSS), stored as char(6)

Note : All the Standard Segment names starts with E1 and So that it is recommended to start the Custom Segments with Z1.

IDOC Run-Time Components

- An IDOC is an instance of an IDOC Type

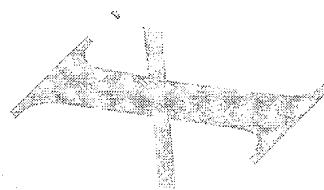
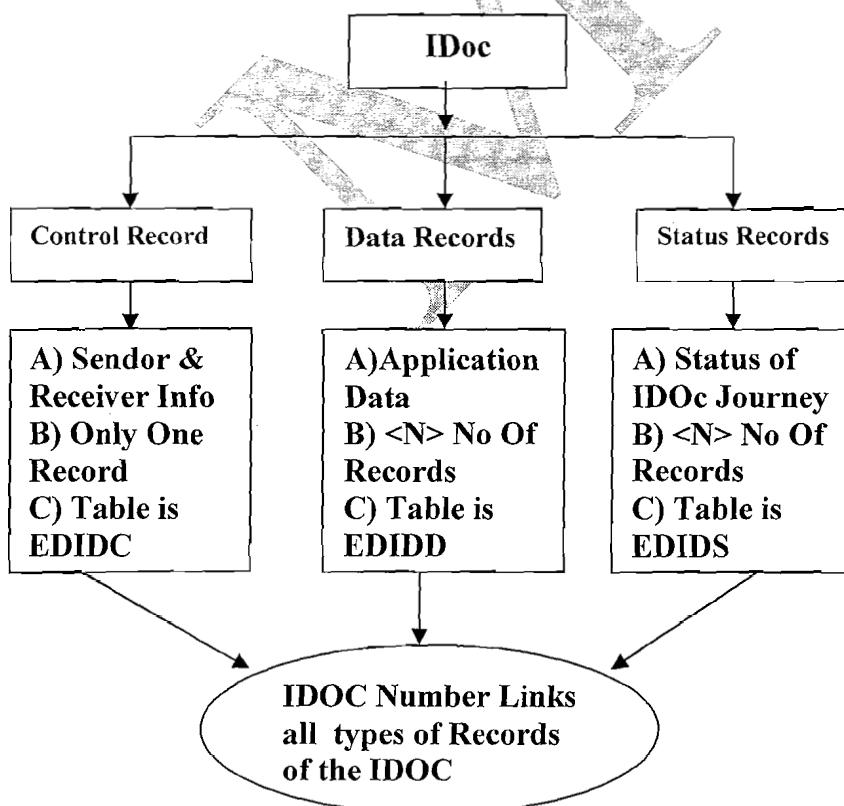
At run time the following events occur

One control record is attached to the IDOC

Segments are translate into data records

Status records are attached

A unique IDOC no. is allocated by SAP



2. IDocs & Message Type in Detail

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IDoc Creation :

IDoc is Collection of Segments

Each segment is collection Of Fields.

Ex : IDoc : DEBMAS01 (Customer Master) - Standard IDoc.

Segment Name	Fields from the Segment	Description
E1KNA1M	KUNNR , NAME1,ORT01,LAND1,...	Customer General Data
E1KNB1	KUNNR, BUKRS,ZTERM,...	Customer Company Code Details
E1KNBK	KUNNR,BANKS,BANKL,..	Customer Bank Details
Etc...		

Note : All the Standard Segments starts with E1 so that it is recommended to start the Custom Segment names with Z1.



IDoc Creation Is a TWO Step Procedure.

- 1) Create the required Segments through Segment Editor(WE31).
- 2) Create the IDoc (Arrange the already Created Segments in the required Order) though IDoc Editor(WE30).

Step 1 (Segment Creation) in Detail :

Execute WE31 and

Development segments: Initial screen

Version	Segm. definition	Release	Release	No. of...	Lgth	Date of las...
	Z1KNA1					

2. IDocs & Message Type in Detail

We Never Compromise In Quality. Would You?

Development segments: Create segment definition

Segment type attributes

Segment type	Z1KNA1	<input type="checkbox"/> Qualified segment
Short Description	Customer General Data	

Segm. definition Released

Last changed by

Po...	Field Name	Data element	ISO c...	Ex...
1	KUNNR	KUNNR	<input type="checkbox"/>	10
2	KTOKD	KTOKD	<input type="checkbox"/>	4
3	NAME1	NAME1	<input type="checkbox"/>	30
4	ORT01	ORT01	<input type="checkbox"/>	25
5	LAND1	LAND1	<input type="checkbox"/>	3
6			<input type="checkbox"/>	
7			<input type="checkbox"/>	

SAVE it and BACK.

Segment Edit Goto Utilities Environment System Help

Developer screen

Set release Cancel release Object directory entry Cancel F12

Segment type Z1KNA1 Customer General Data

Definitions

Version	Segm. definition	Release	Release	No.of...	Lgth	Date of las...
000	Z2KNA1000	<input type="checkbox"/>		5	72	04.02.2008

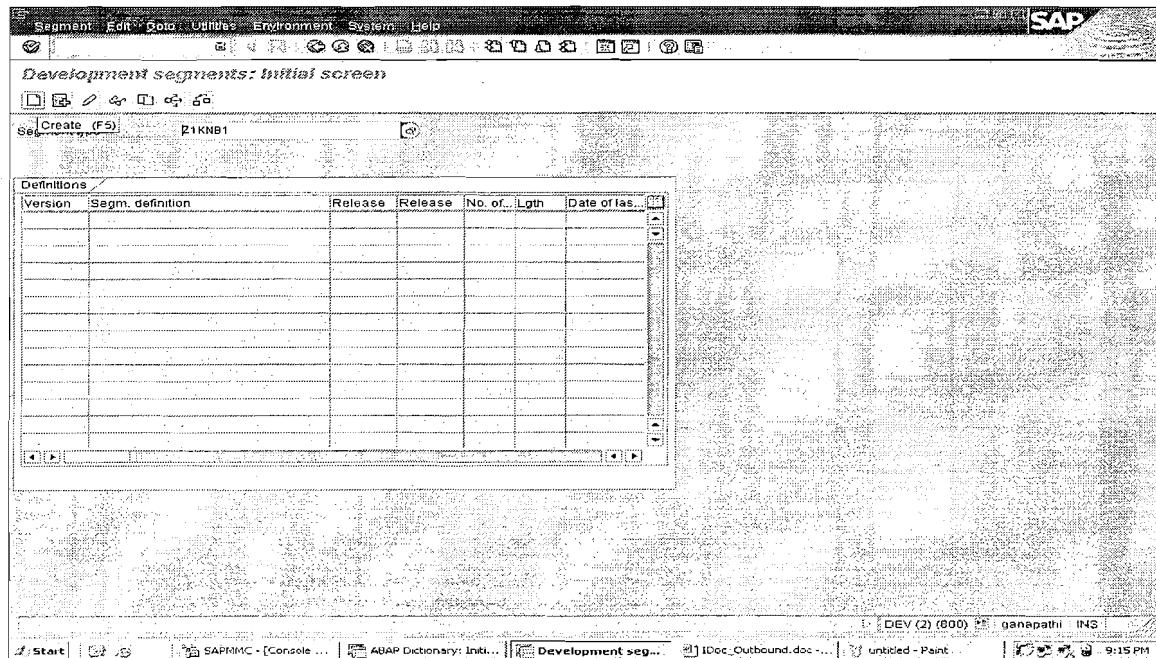
Edit -> Set release .

2. IDocs & Message Type in Detail

We Never Compromise In Quality. Would You?

Note : Releasing the Segment indicates that the Segment Development is Complete so that further Changes are not allowed and also to make it available in IDoc Creation.

2nd Segment : Customer Company Code Information



Development segments: Change segment definition Z2KNB1000

Segment type attributes

Segment type	Z1KNB1	<input type="checkbox"/> Qualified segment
Short Description	Customers from Company Codes	

Segment definition details

Segm. definition	Z2KNB1000	<input type="checkbox"/> Released
Last changed by	SAPUSER	

Field mapping table

Po...	Field Name	Data element	ISO c...	Ex...
1	BUKRS	BUKRS	<input type="checkbox"/>	4
2	KUNNR	KUNNR	<input type="checkbox"/>	10
3	ZTERM	DZTERM	<input type="checkbox"/>	4
4			<input type="checkbox"/>	
5			<input type="checkbox"/>	
6			<input type="checkbox"/>	

2. IDocs & Message Type in Detail

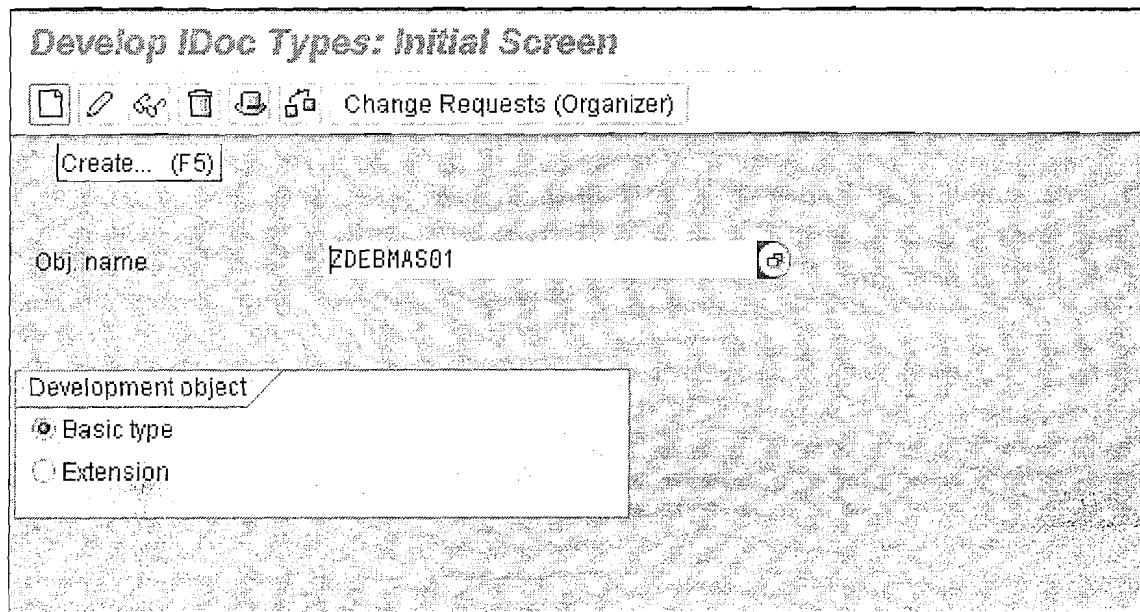
We Never Compromise In Quality. Would You?

SAVE , BACK and Edit -> Set Release.

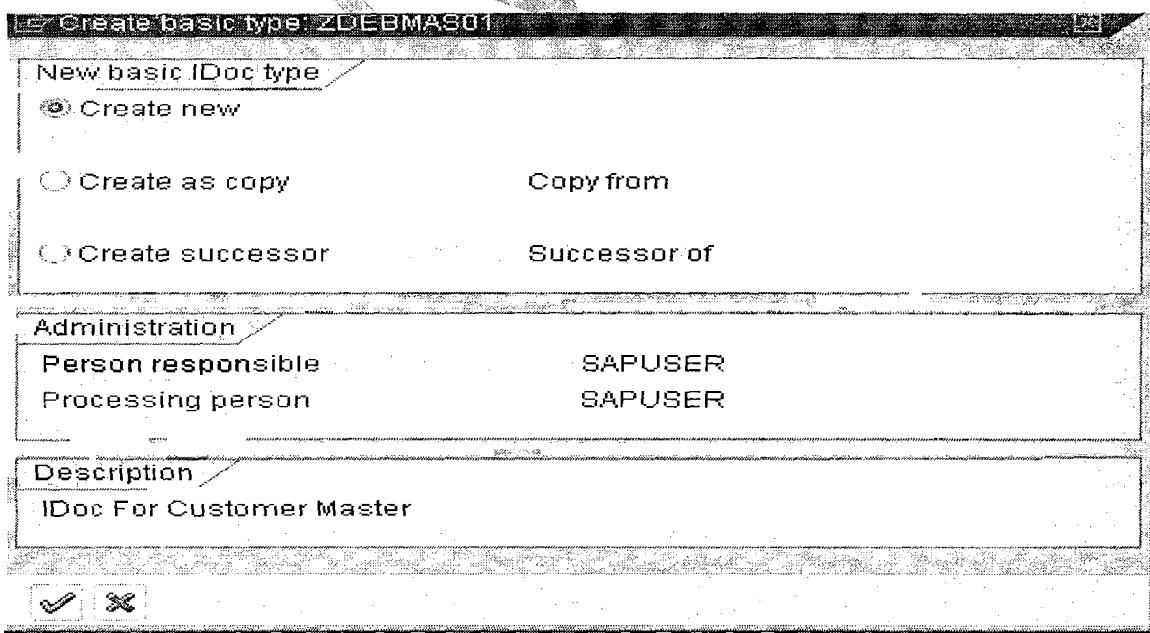
Note : Standard Segment names starts with E1 so that it is recommended to start the Custom Segment with Z1.

Step 2 (IDoc Creation) in Detail :

Execute WE30 (IDoc Editor)



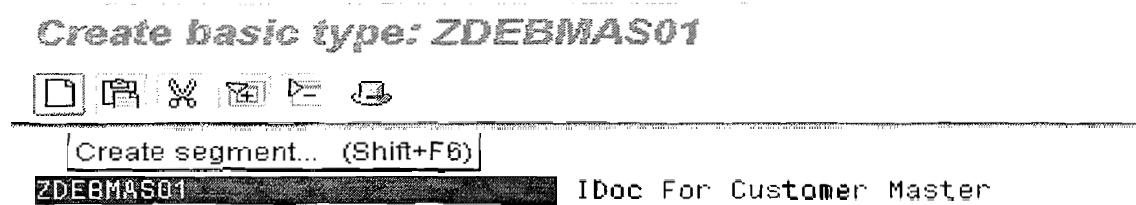
Select Basic type option, Name for IDoc (Obj.name) and Click on Create .



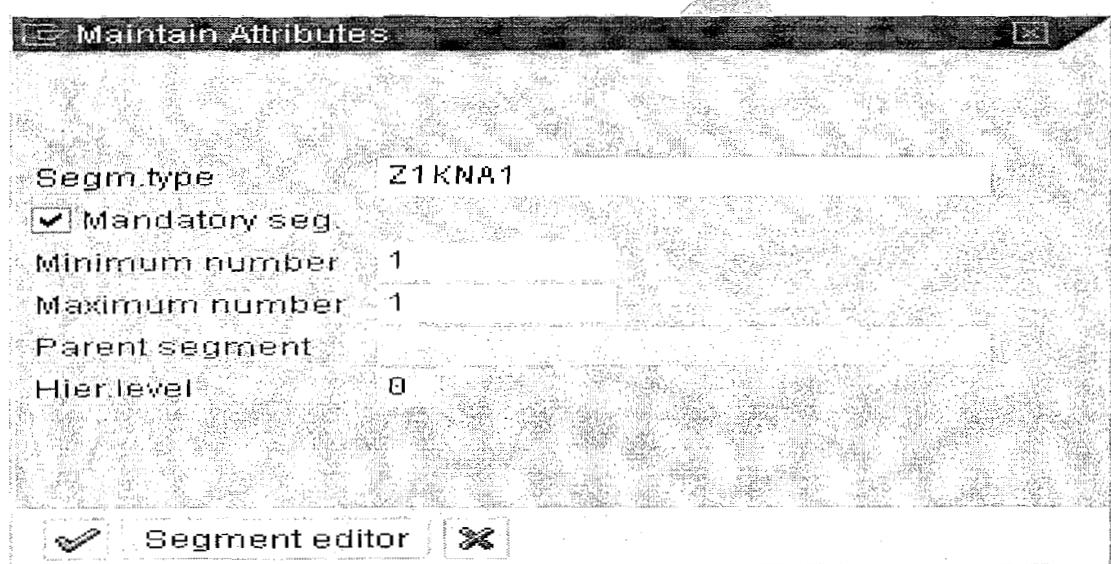
2. IDocs & Message Type in Detail

We Never Compromise In Quality. Would You?

Select Create new and Provide the Description then Continue (ENTER).



Select the IDoc Name and Say Create (Insert) Segment .



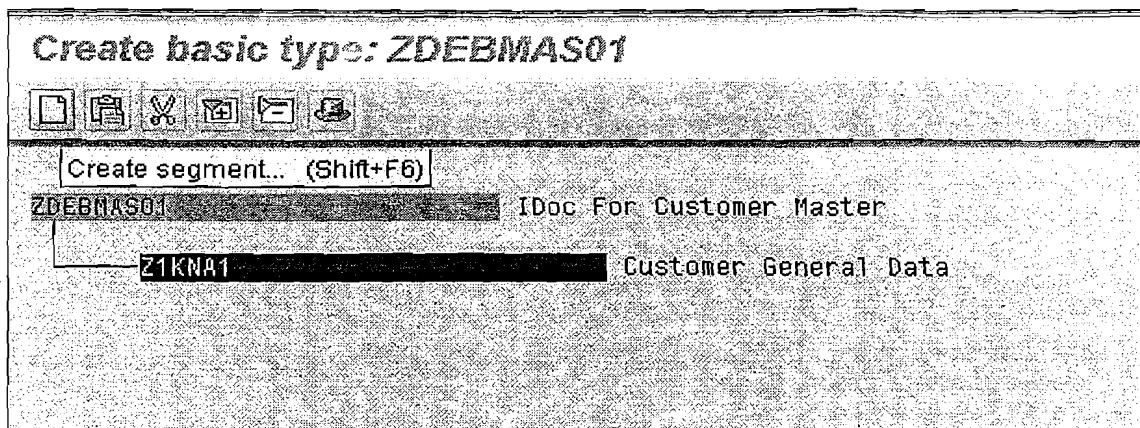
ENTER.

TO ADD NEXT SEGMENT

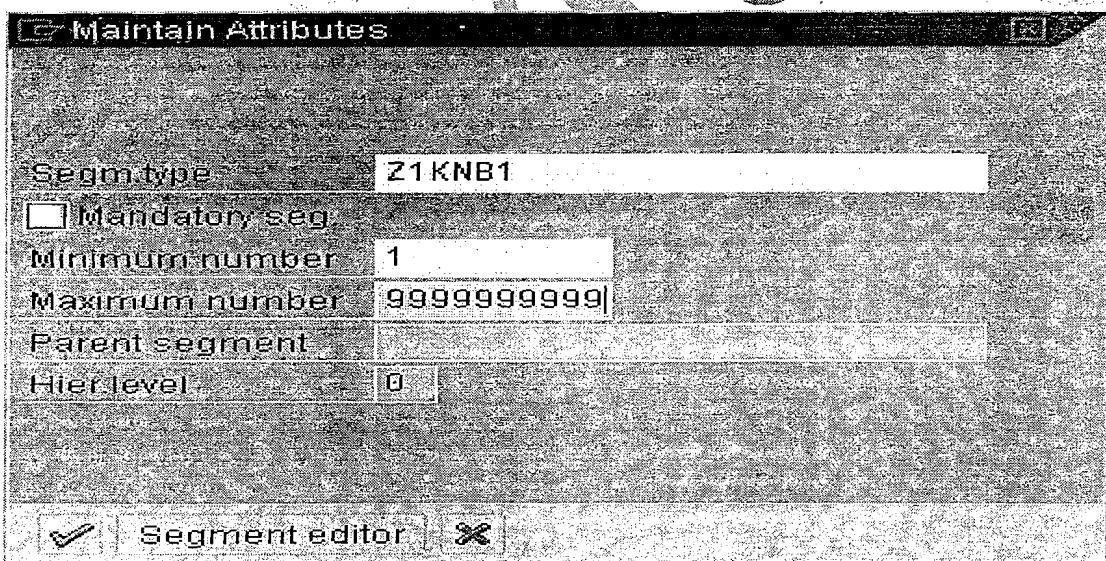
Select the Segment after which you want to ADD the new Segment and Create (Insert) Segment .

2. IDocs & Message Type in Detail

We Never Compromise In Quality. Would You?



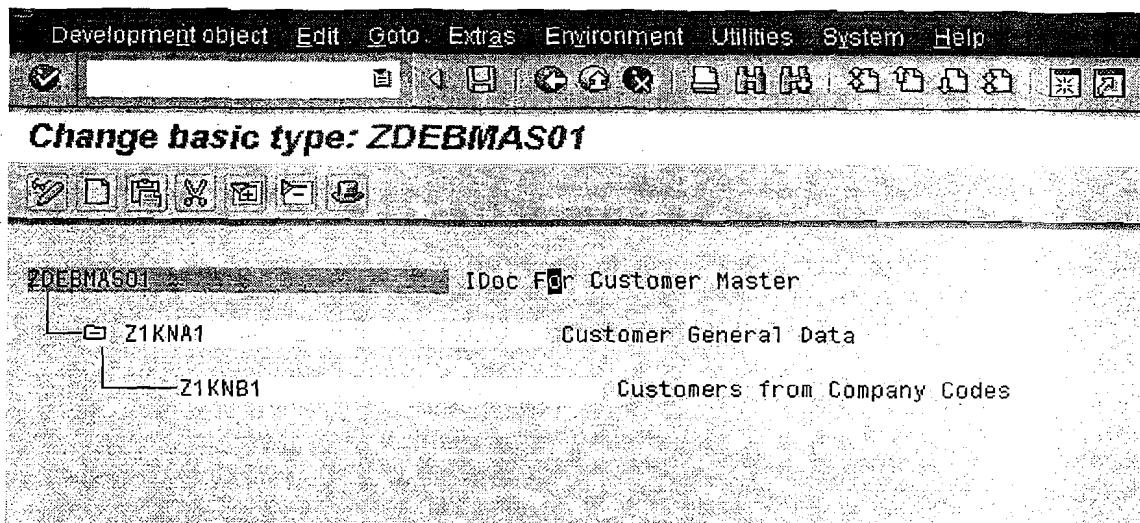
Select the right option and then Continue(ENTER).



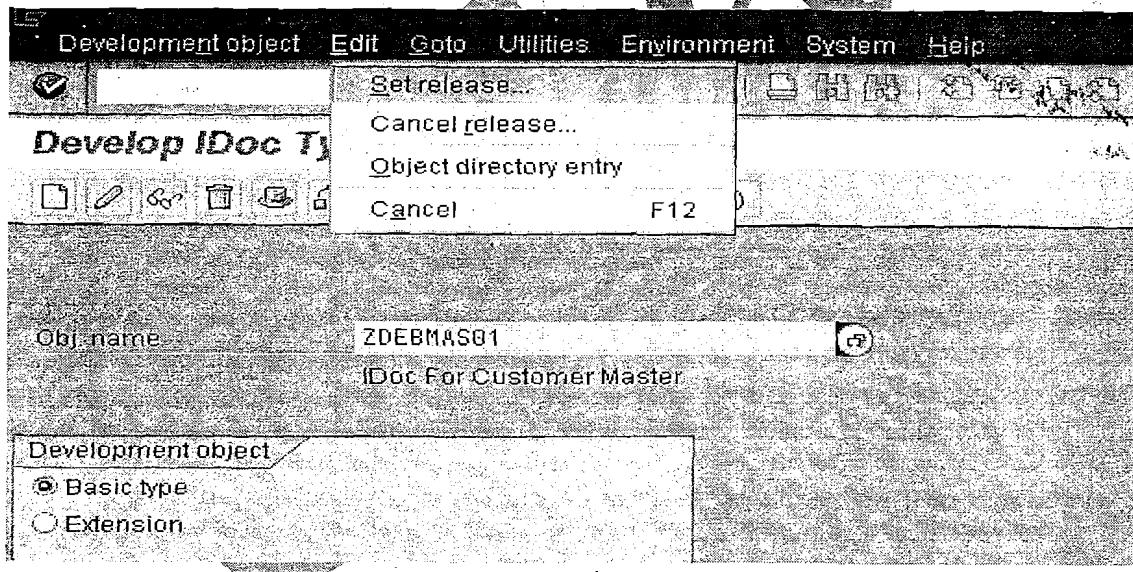
ENTER.

2. IDocs & Message Type in Detail

We Never Compromise In Quality. Would You?



SAVE , BACK , Check and Set release, Which Indicates that the IDoc is Completed and make it available to transfer Data and to avoid the further Changes.



Congratulations ! . IDoc ZDEBMAS01(Customer Master) is Created Successfully with TWO Segments : Z1KNA1 and Z1KNB1.

Message Type : Message Type is the Unique Identification of the Application Data which is been transferred through the IDoc.

Note : The Same IDoc Can be used to transfer more than one type of Application Data So that IDoc name is not enough to Identify the Application Data Currently being

2. IDocs & Message Type in Detail

We Never Compromise In Quality. Would You?

transferred to IDoc. So that we need something to Identify the Same, that Some thing is this Message Type.

IDoc ZBLOANS For Bank Loans

Segment	Description
Z1EL	Entertainment Loan
Z1ML	Marriage Loan
Z1CL	Course Loans
Z1HL	Home Loans
Z1PL	Personal Loans

Common Segments For all types Of Loans

Message Type	List Of Segments
ZMEL-Entertainment Loans	Z1EL + Common Segments
ZMML-Marriage Loans	Z1ML + Common Segments
ZMCL-Course Loans	Z1MCL + Common Segments
ZMHL-Home Loans	Z1MHL + Common Segments
ZMPL-Personal Loans	Z1MPL + Common Segments

Note : While Creating Message Types, We Cannot provide the List Of Segments to be Considered So that While Writing Program For Generating the IDoc for Message type ZMML(Marriage Loans) , We have to Fill the Data only for the respective Segments ie Segments Z1ML + Common Segments. Similarly at the receiving System.

Ex 2 :

IDoc	Message Type
ALEREQ01	MATFET (Fetch Material)
ALEREQ01	DEBFET (Fetch Customer)
ALEREQ01	CREFET (Fetch Vendor)
ALEREQ01	COSFET (Fetch Cost Center)

Note : The Same IDoc ALEREQ01 is used to fetch any Master Data and Fetching Each Master Data through a Different Message Type.

3. ALE Communication Settings

We Never Compromise In Quality. Would You?

ALE Communication Settings :

Note : Communication Settings acts as bridge between the Participated Systems and so these are one time settings.

Note : Sending Data To and From SAP System is always via Client So that the Participating Client should be Identified Uniquely.

SENDOR
Clients :
800
810

RECIEVER
Clients :
100
110

Requirement: Maintain the Communication Settings Between SENDOR System (800 Client) and RECEIVER System(810 Client) Of the same SAP Server.

- 1) Identify the Participated Clients Uniquely i.e by giving unique Names(Logical Systems) for each Client.

Execute SALE to Define the New Logical Systems and Link the Logical Systems to the Participated Clients.

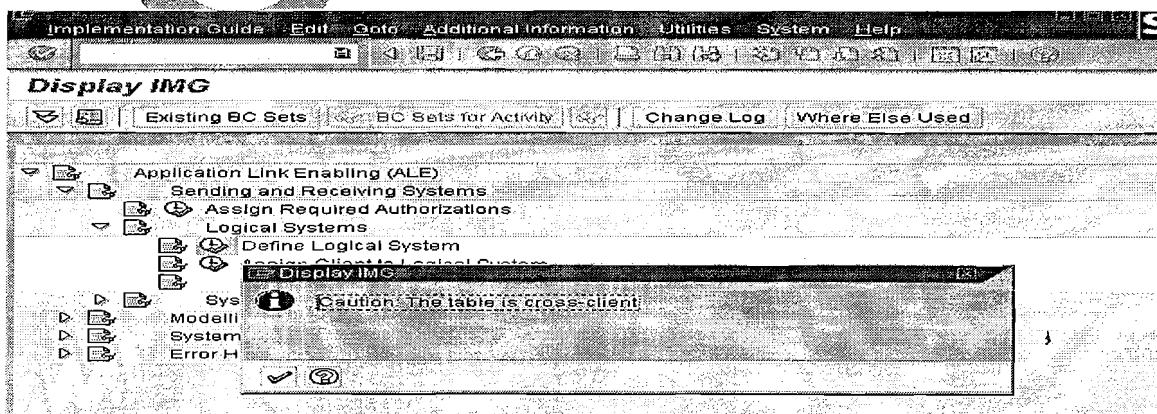
SENDOR
Client - 800

RECIEVER
Client - 810

LOGON TO 800:

EXECUTE Transaction SALE.

A) Sending & Receiving Systems -> Logical Systems -> Define Log.Sys



3. ALE Communication Settings

We Never Compromise In Quality. Would You?

ENTER

**Note : Notice the Caution - The Table is Cross – Client.
i.e The Same Data is Created in all the Clients of the Same SAP
Server Automatically .**

Change View "Logical Systems": Overview

Log.System	Name
APOCLNT100	APOCLNT100
APOCLNT800	APOCLNT800
APOCLNT801	APOCLNT801
APOCLNT802	APOCLNT801
APOCLNT810	APOCLNT801
AT2CLNT801	AT2 System
B2B_IDES	BTB IDES IAC
B3TCLNT800	ID3 client 800
BBP_DIT	Procurement nach IDES
BC619CNTRL	BC619 Central System

New Entries

Log.System	Name
SENDOR	800 Client
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Enter the Logical System Name and Description -> SAVE it.

Add one more Logical System through New Entries for Receiver Client 810 and
SAVE it.

3. ALE Communication Settings

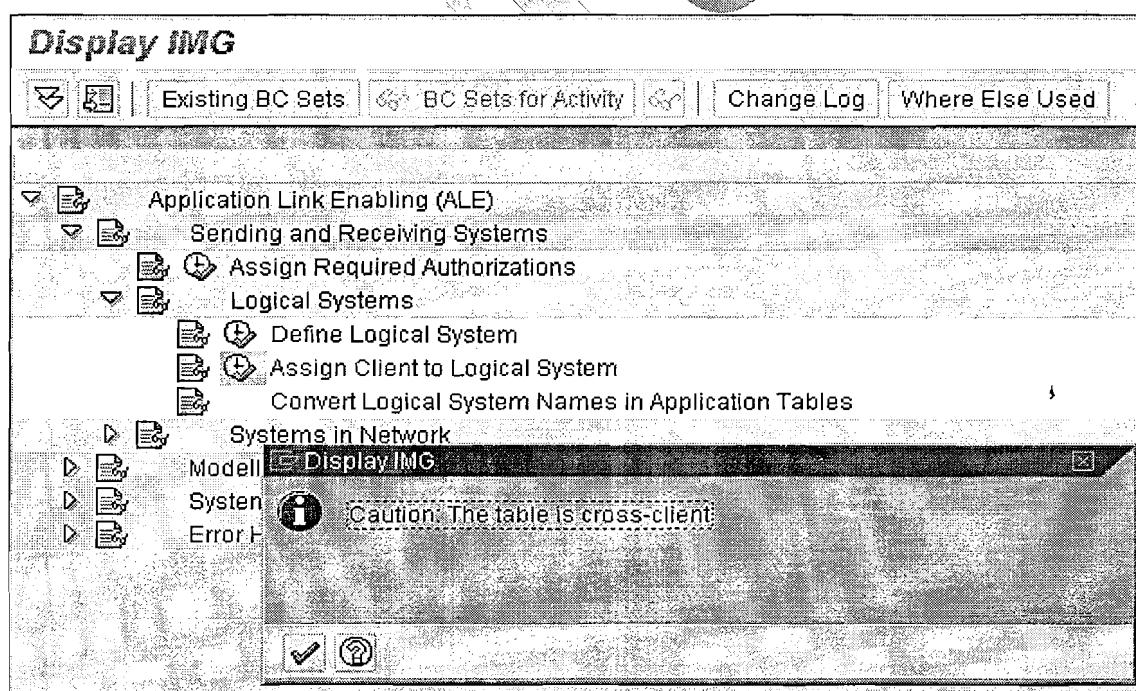
We Never Compromise In Quality. Would You?

Note : Here We Work with Two Clients (800 and 810) of the Same Server so that the Logical Systems are created automatically in all the Clients, Else the same should be Created in the Receiver Client.

B) BACK to the Initial Screen of SALE

Sending & Receiving Systems

→ Logical Systems -> Assign Client to Logical System.

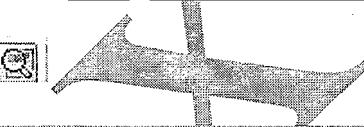


3. ALE Communication Settings

We Never Compromise In Quality. Would You?

Change View "Clients": Overview				
Details (Ctrl+Shift+F2)		City	Crcy	Changed on
Client	Name	Walldorf	DEM	03.07.2000
000	SAP AG	Walldorf	EUR	17.07.2002
066	early Watch	Frankfurt- Deutschland	EUR	25.10.2002
800	IDES-ALE: Central FI Syst	Barcelona - Spanien	DEM	23.03.2001
810	IDES-ALE: Sales System	Porto - Portugal	DEM	02.08.2002
811	IDES-ALE: Production	Dallas, USA	DEM	18.02.1999
812	IDES-ALE: Warehouse			

Select the Participated Client (800) and Details



Change View "Clients": Details

New Entries

Client	800 IDE	SENDOR , the Logical System which was Already Created.
City	Frankf	Last Changed By
Logical System	SENDUR	Date
Std currency	EUR	
Client role	Customizing	

Changes and Transports for Client-Specific Objects

Changes without automatic recording
 Automatic recording of changes
 No changes allowed
 Changes w/o automatic recording, no transports allowed

Enter the Logical System Name , Which is Already Created AND SAVE it.

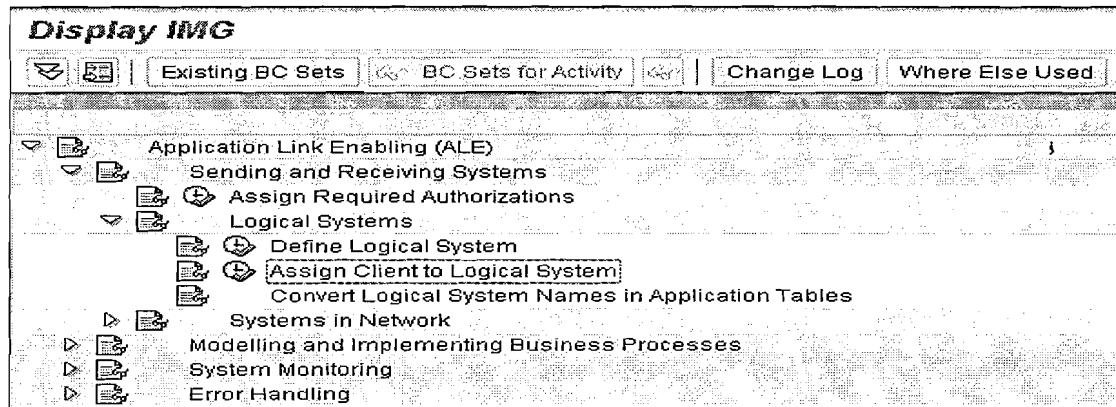
Note : Repeat the Same in the RECEIVER System i.e to Link the Client 810 to the Logical System RECEIVER .

3. ALE Communication Settings

We Never Compromise In Quality. Would You?

LOGON to 810 Client (RECEIVER)

Execute Transaction SALE .



Sending & Receiving Logical Systems ->

→ Logical Systems -> Assign Client to Logical System.

Change View "Clients": Overview

Client	Name	City	Crcy	Changed on
000	SAP AG	Walldorf	DEM	03.07.2000
066	early Watch	Walldorf	EUR	17.07.2002
800	IDES-ALE: Central FI Syst	Frankfurt- Deutschland	EUR	06.02.2008
810	IDES-ALE: Sales System	Barcelona- Spanien	DEM	23.03.2001
811	IDES-ALE: Production	Porto - Portugal	DEM	02.08.2002
812	IDES-ALE: Warehouse	Dallas, USA	DEM	18.02.1999

Select the Receiver Client 810 and Click on Details

Change View "Clients": Details

The screenshot shows the SAP Change View 'Clients': Details screen for Client 810. A tooltip box is overlaid on the Logical System field, containing the text: 'RECEIVER , the Logical System which was Already Created.' The Logical System field currently contains 'RECEIVER'.

Client	810 IDES-ALE:
City	Barcelona - S
Logical System	RECEIVER
Std currency	DEM
Client role	Customizing

Changes and Transports for Client-Specific Objects

Changes without automatic recording
 Automatic recording of changes
 No changes allowed
 Changes w/o automatic recording, no transports allowed

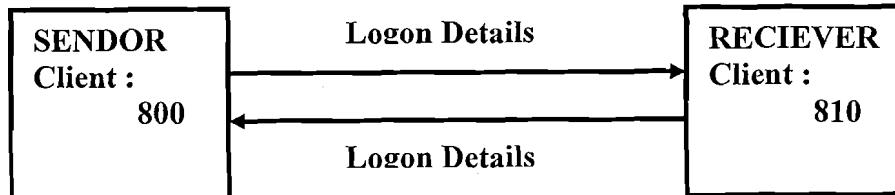
Enter the Logical System RECEIVER and SAVE it.

3. ALE Communication Settings

We Never Compromise In Quality. Would You?

Note : Now the Participated Clients 800 as named as SENDOR and 810 as RECEIVER.

2) Maintain RFC Destinations(SM59)

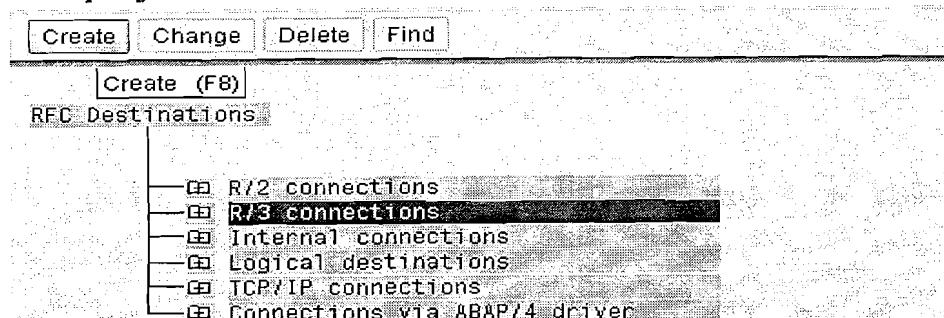


Note : in the RFC Destination, We Provide the Receiver Sys Details(IP Address) and the Logon Details of the Receiver Client.

LOGON to SENDOR Client(800)

EXECUTE SM59.

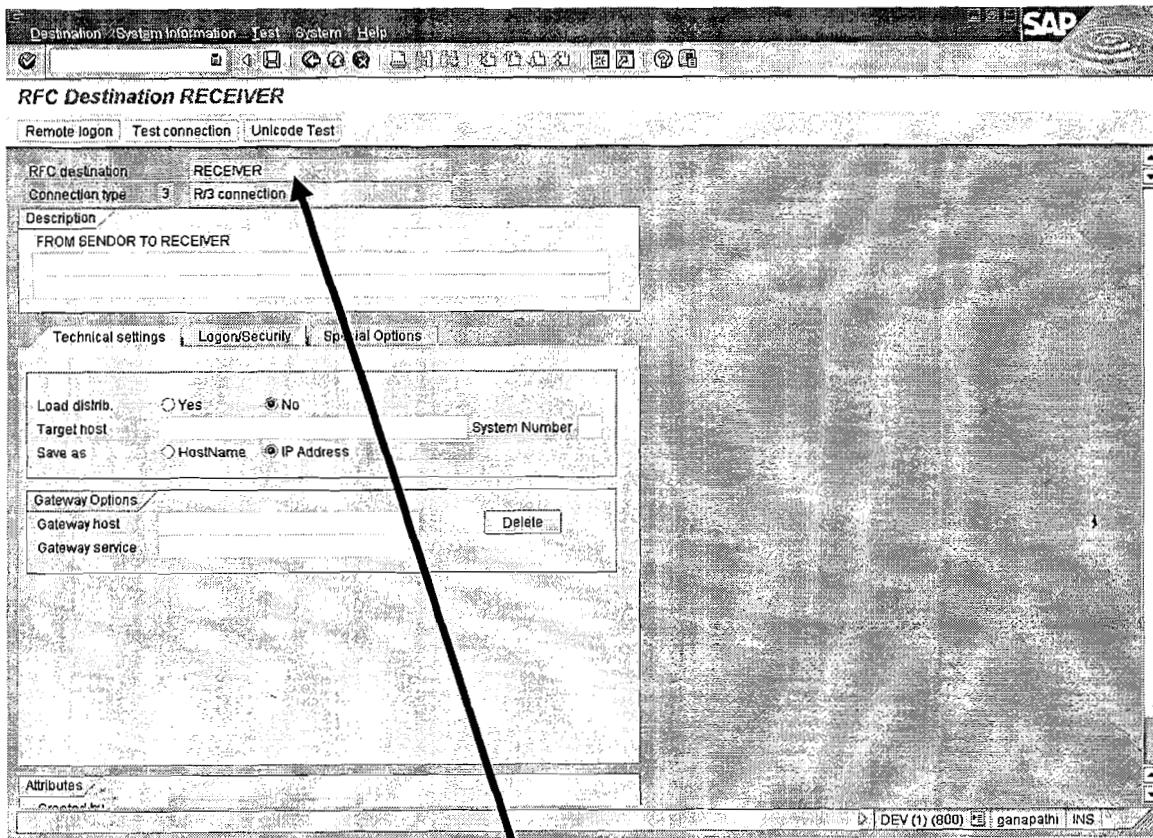
Display and maintain RFC destinations



Select R/3 Connections -> Create.

3. ALE Communication Settings

We Never Compromise In Quality. Would You?



PROVIDE

REF Destination – RECEIVER (Logical System Name of 810) and Description
ENTER



3. ALE Communication Settings

We Never Compromise In Quality. Would You?

RFC Destination RECEIVER

Remote logon Test connection Unicode Test

RFC destination: RECEIVER
Connection type: 3 R/3 connection

Description: FROM SENDER TO RECEIVER

Technical settings Logon/Security Special Options

Load distrib: Yes No
Target host: ganapathi System Number: 00
Save as: HostName IP Address

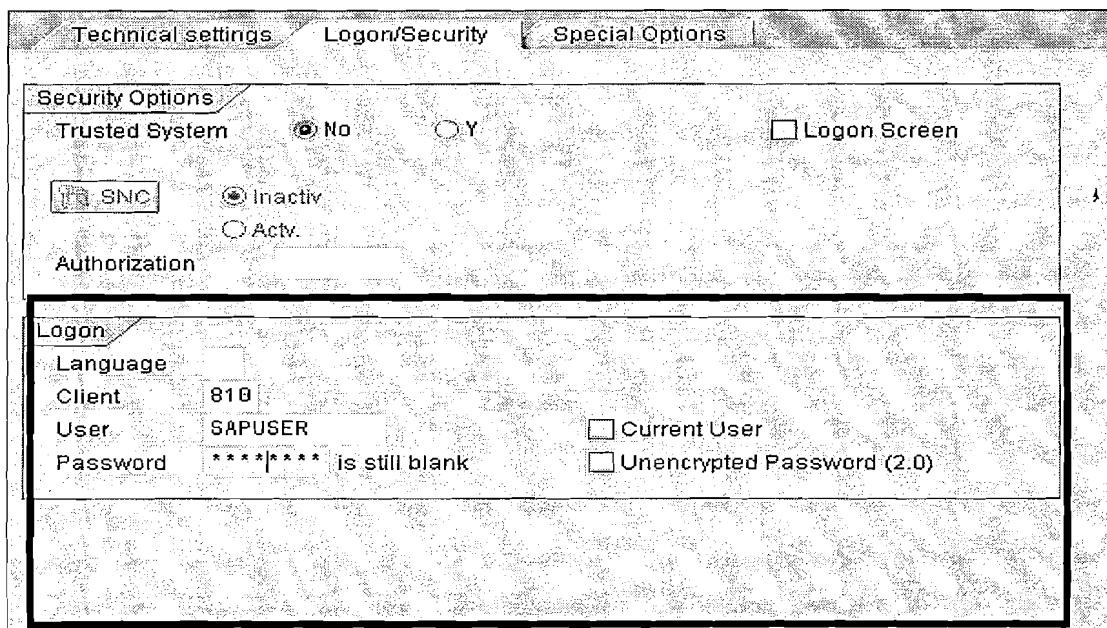
Gateway Options
Gateway host Delete
Gateway service

Provide the HostName (SAP Application Server Name) and System Number of the Receiver SAP System.

Click On Logon/Security to provide the Logon Details of the RECEIVER's Client.

3. ALE Communication Settings

We Never Compromise In Quality. Would You?

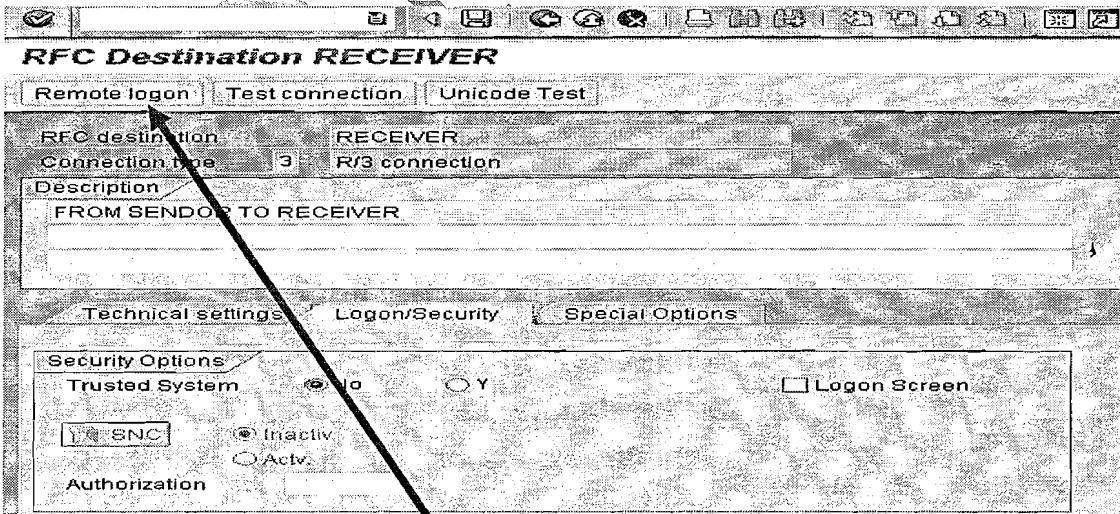


Provide : Client of the RECEIVER, USER and Password.

SAVE it and Continue with Information



TESTING the RFC Destination :

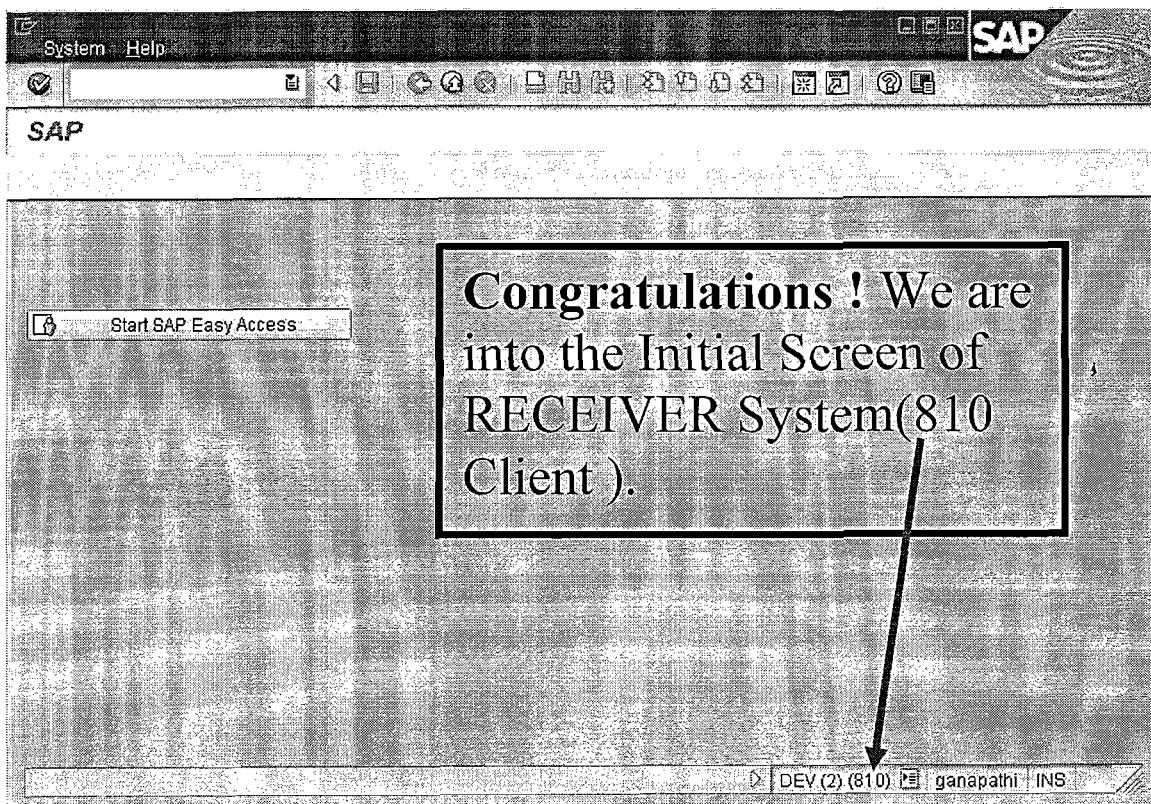


Click On Remote Logon Remote logon from the Same Screen.

3. ALE Communication Settings

We Never Compromise In Quality. Would You?

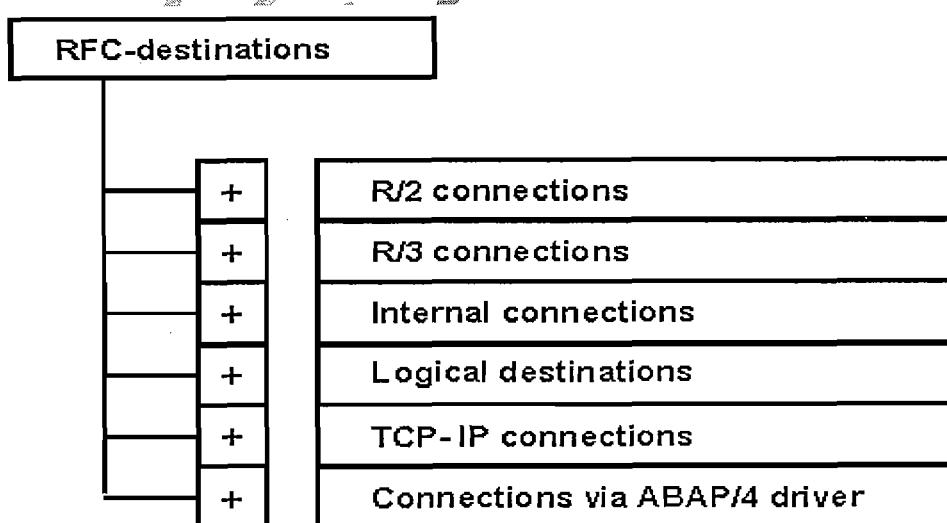
And Make sure that you are able to LOGON to the RECEIVER System(Client).



Note : Repeat the RFC Destination From RECEIVER to SENDOR If Required i.e When the Communication is TWO WAY.

RFC Destination in Detail :

Connection (Destination Type) :



3. ALE Communication Settings

We Never Compromise In Quality. Would You?

- **R/2 connections (Type 2)** - Type 2 entries specify R/2 systems.
- **R/3 connections (Type 3)** - Type 3 entries specify R/3 systems
- **TCP/IP Connections (Type T)**

Type T destinations are connections to external programs that use the RFC API to receive RFCs.

Destination Parameters

Technical settings

- **Connection type** : Enter an existing connection type or choose one via the field entry help according to the above types discussed.
- **Trace** : Mark the *Trace* option to have the RFC communication logged and stored in a file. You can then display the file, both in the calling and receiving system, using report RSRFCTRC.
- **Load balance** : If you choose load balancing, you must specify the following information:

Target system (For a list of available servers, log on to the target system and choose *Tools -> Administration, Monitor -> System Monitor -> Servers*.)

Target host : The name of a server host of the target system that you want to use as a port to the system.

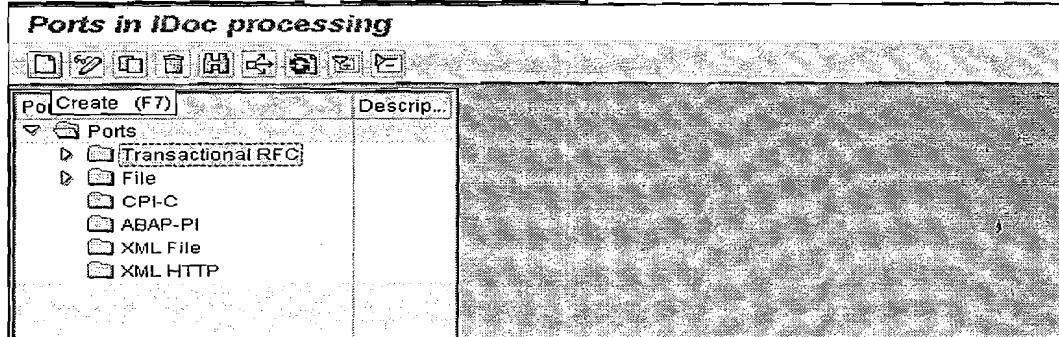
System number

3) Define the Port – WE31(Part Of Communication Settings)

Which Defines the Medium of transferring Data.

Note : ALE Uses tRFC Port (Transactional RFC).

LOGON to SENDOR : EXECUTE WE21



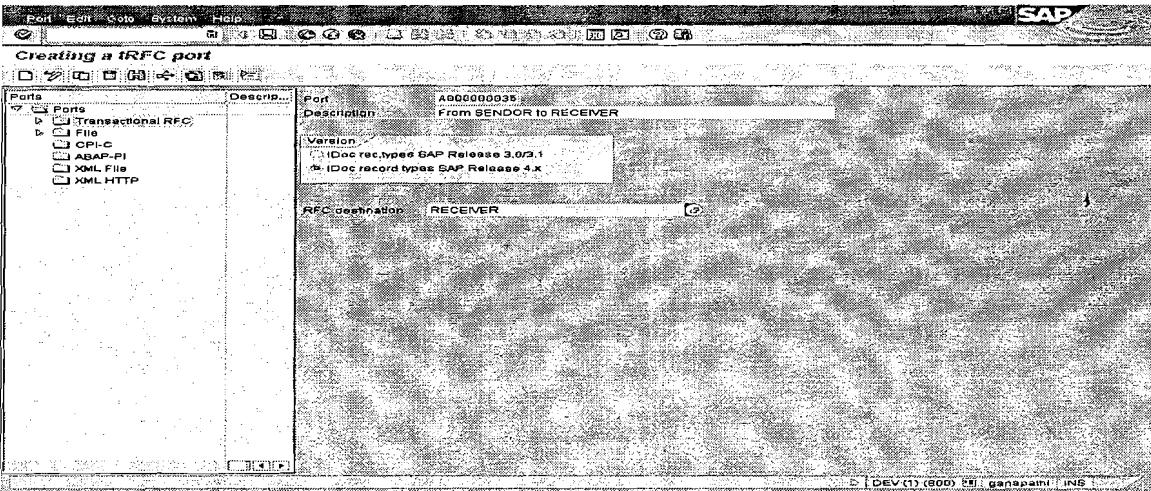
3. ALE Communication Settings

We Never Compromise In Quality. Would You?

Select Transactional RFC (Transactional RFC) and Create .



Continue with Generate Port name



Enter the Description and RFC Destination (Logical System Name) of the Receiver's Client(RECEIVER).

SAVE. (Port is A000000035), Which was Already Created in the Previous Step.

Note : Repeat the Port Creation , When the Communication is a TWO Way Communication.

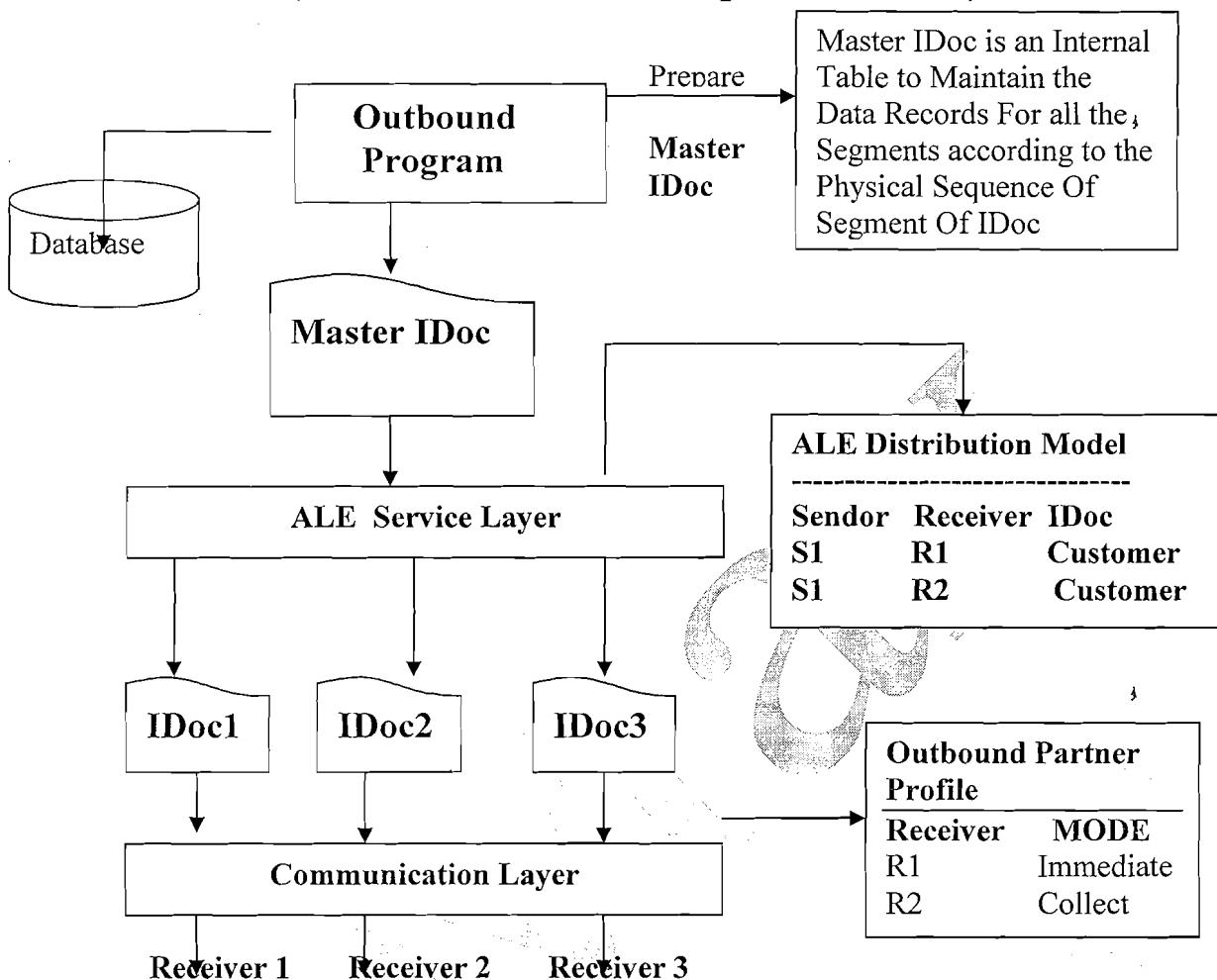
Note : All the Communication Settings are Completed . i.e the Bridge is Ready so that the data can be transferred via IDocs between SENDOR(800) and RECEIVER(810).

Note : Since all these Settings involves System Details , BASIS Consultants will take care of Building the Bridge (Communication Settings) in Realtime and also it is one time job between each sendor and Receiver.

4. Outbound & Inbound Process

We Never Compromise In Quality. Would You?

ssOutbound (IDoc Generation & Dispatch Process) in Detail



Outbound Process

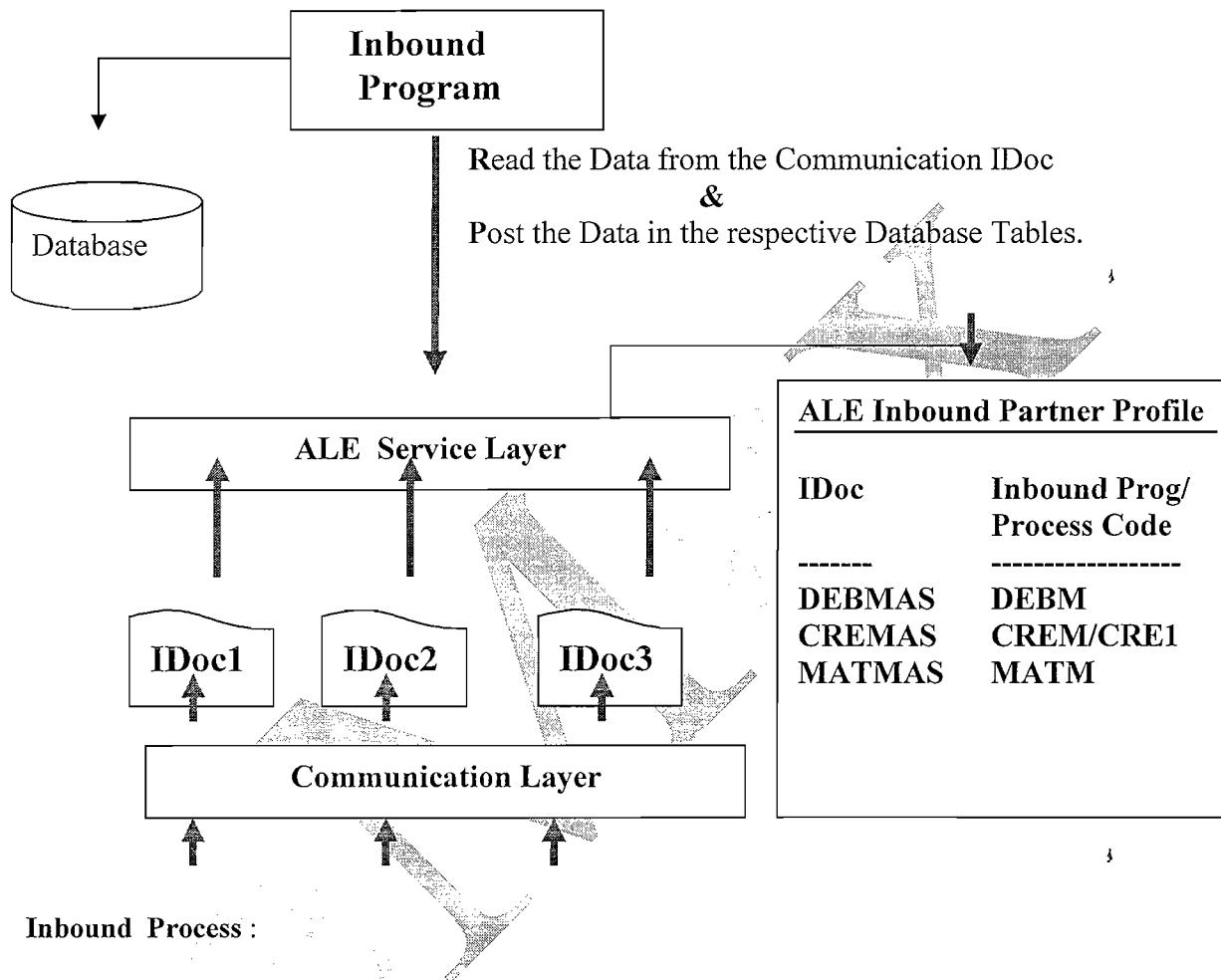
- 1) **Identify the need for Sending the IDoc :** Whenever the Master Data is Created in the System, It Consults the ALE Layer to determine whether any system is interested in the data. If So, ALE Layer starts the Process to send Material Master data to the interested Party.
- 2) **Generated the Master IDoc :** The Document / Master Data to be sent is read from the database abd Formatted into an IDoc Format. This IDoc is Called Master IDoc.
- 3) **Generate the Communication IDoc :** ALE Service Layer generates a Separate IDoc from the Master IDoc for each recipient who is interested in the Data. These recipient – specific IDocs are called Communication IDocs and Stored in the Database.
Note : The Recipients are determined from the Distribution Model that Maintains the list of Messages(IDocs) exchanged between two Systems and their direction Flow.
- 4) **Deliver the Communication IDoc :** This Step Delivers the IDocs to the appropriate recipients using the Asynchronous Communication Method and using the details from the Outbound Partner Profile. Asynchronous

4. Outbound & Inbound Process

We Never Compromise In Quality. Would You?

Communication Method allows the Sending System to Continue its Processing without having to wait for the destination system to receive / Process the IDoc.

Inbound (IDoc Receiving & Posting) Process in Detail :



Inbound Process :

Note : The Inbound Process receives the IDoc and Creates the Application Document(Data) in the Receiver System.

1. **Store the IDoc in Database :** IDoc is received in the System and stored in the Database.
2. **Invoke the Posting Program/Function Module :** Posting Program is identified from the Inbound Partner Profile and the IDoc is then transferred to the Posting Program.
3. **Create the Application Document(Data) :** The Posting Program reads the data from the Segments of the IDoc and Creates the Application Document in the System(Updates the respective Database Tables).

5. Distributing the Master Data Via Standard IDocs

We Never Compromise In Quality. Would You?

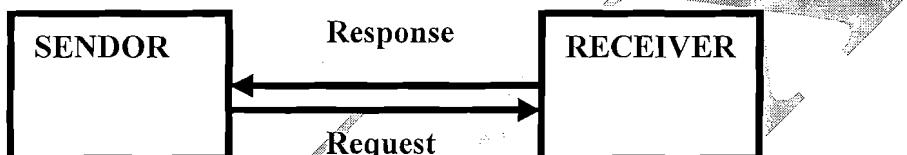
Distributing Master Data

Types Of Distributing Master Data:

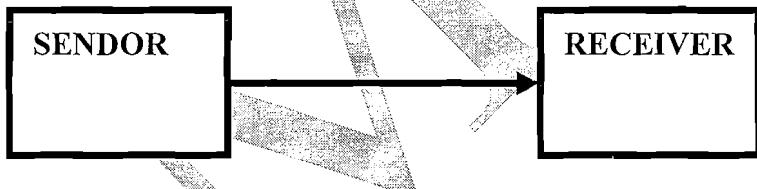
- 1) Send / Push Whole Copy.



- 2) Get/Fetch/Pull Whole Copy



- 3) Send Changes Only (Change Pointers Technique)



- 1) Send / Push Whole Copy in Detail.



Note : IDocs , Message Types , Outbound and Inbound Programs are already provided by SAP . So that When We use standard IDos to transfer Data, It is enough to Configure both Sender and Receiver Systems Because everything is already Provided by SAP.

Requirement: Transfer the Cost Center Master Data and Post(Create) the Same in the RECEIVER(810).

5. Distributing the Master Data Via Standard IDocs

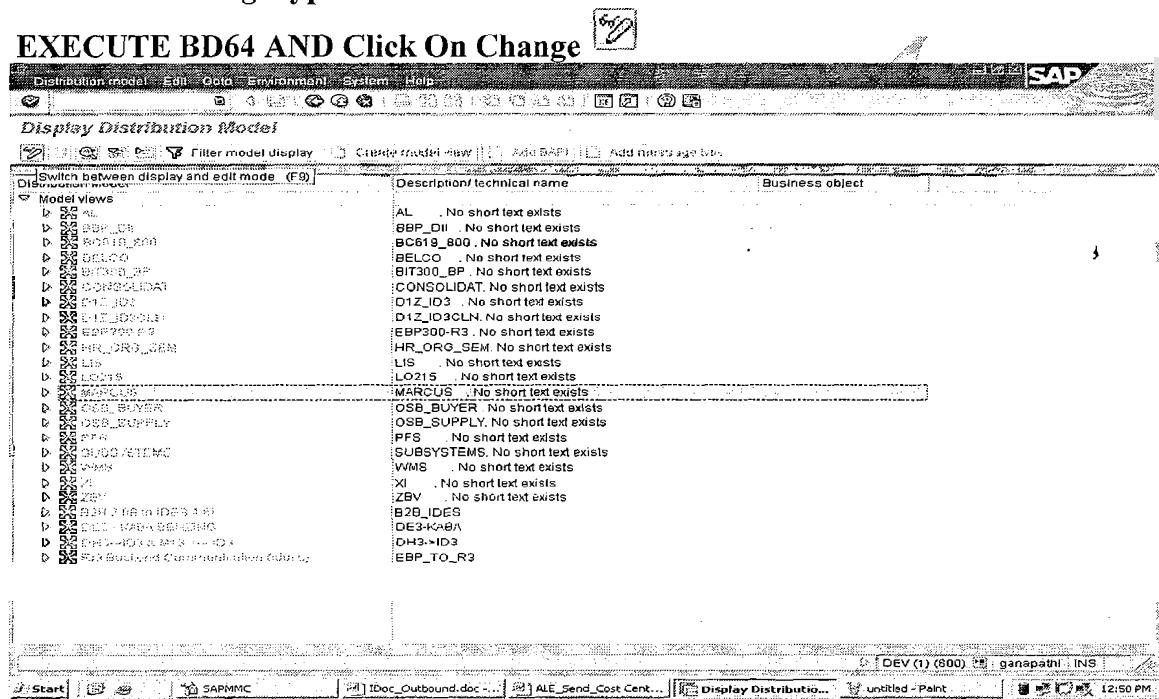
We Never Compromise In Quality. Would You?

Steps to Transfer the Data through Standard IDoc : Maintain Outbound Configurations For COSMAS:

Make Sure that all the Communication Settings are in Place. (Already Completed & Tested).

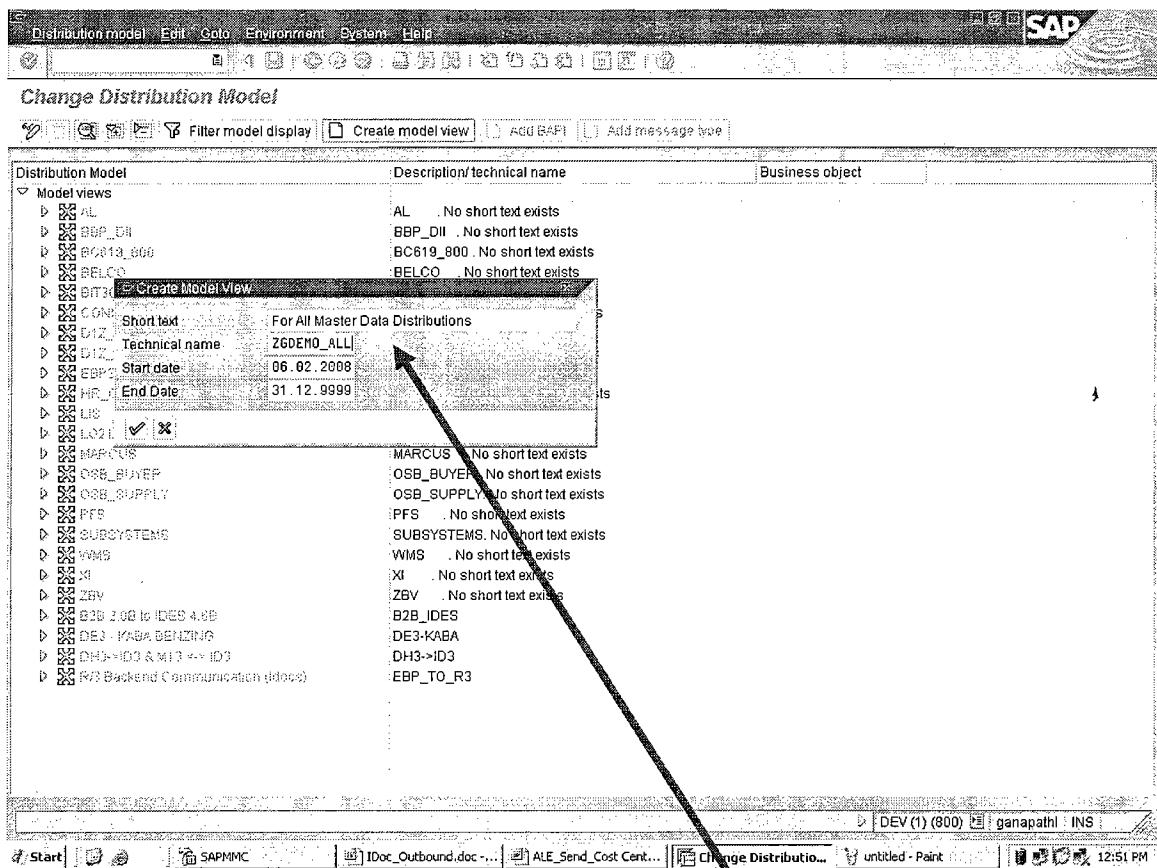
- 2) Maintain the Distribution Model (BD64)
- 3) Maintain Outbound Partner Profile (WE20)

A) Maintain Distribution Model in Detail: Create the Distribution Model and Add the Message type to be transferred.



5. Distributing the Master Data Via Standard IDocs

We Never Compromise In Quality. Would You?



Click On Create model view AND Enter Short text, Technical Name(Distribution Model), ENTER

SAVE it.

Note : Now Distribution Model is Created . So that we Can use the same Distribution Model to Send any Message to any Receiver. No Need to Create a new Distribution Model for each receiver and Message Type.

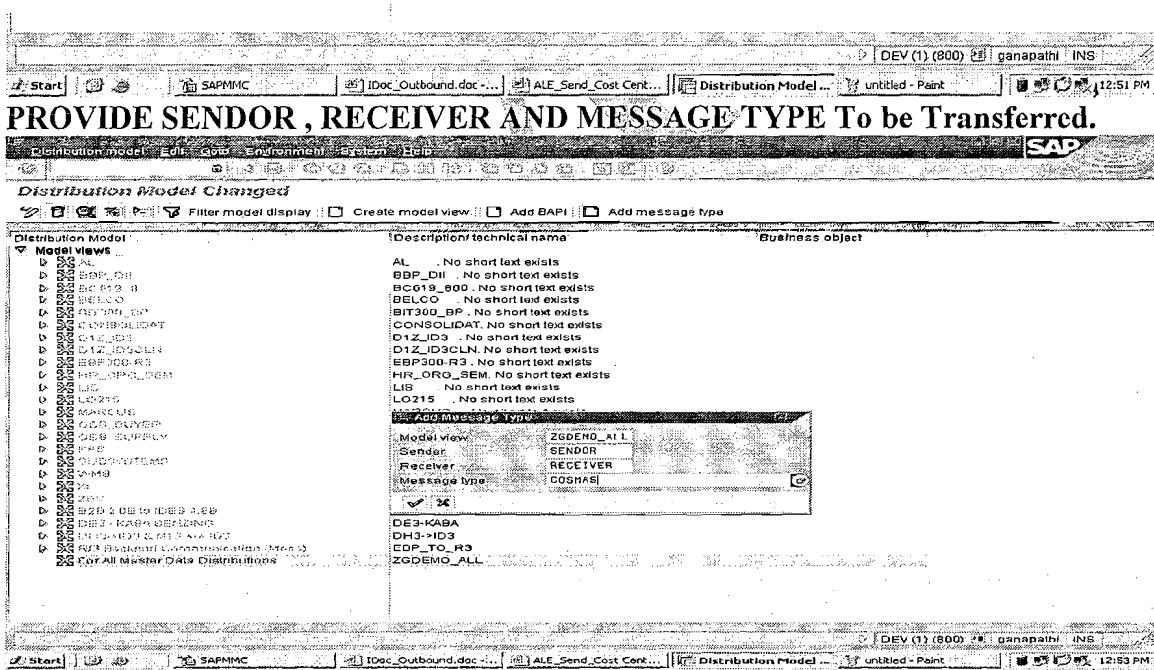
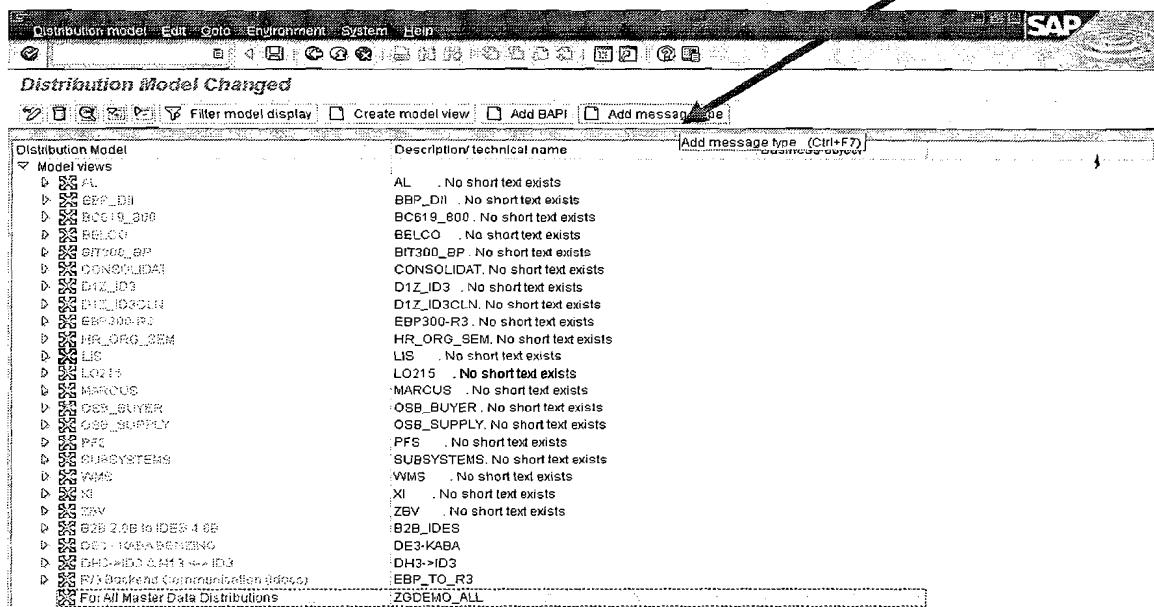
Note : Distribution Model Acts as a BAG to Carry the List Of Receiver Details for any Message Type and Any Receiver from the SENDOR.

5. Distributing the Master Data Via Standard IDocs

We Never Compromise In Quality. Would You?

For Each Message type to be Transferred :

Select the Distribution Model and Click On Add Message Type



SAVE it.

5. Distributing the Master Data Via Standard IDocs

We Never Compromise In Quality. Would You?

The screenshot shows the SAP Distribution Model screen. The main table lists various distribution models with their descriptions and business objects. A callout box highlights the addition of SENDOR and RECEIVER details.

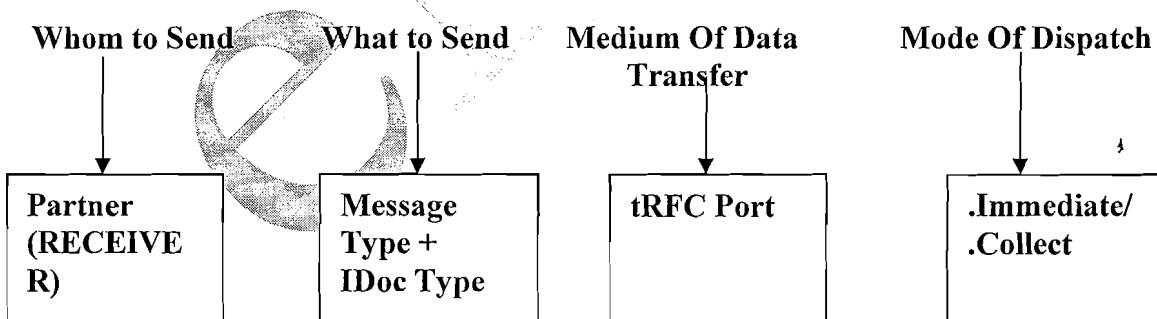
Distribution Model	Description/technical name	Business object
Model views		
AL	...No short text exists	
BBP_DII	BBP_DII . No short text exists	
BC619_800	BC619_800 . No short text exists	
BELCO	BELCO . No short text exists	
BIT300_BP	BIT300_BP . No short text exists	
CONSOLIDAT	CONSOLIDAT. No short text exists	
D1Z_ID3	D1Z_ID3 . No short text exists	
D1Z_ID3CLN	D1Z_ID3CLN. No short text exists	
EBP300-R3	EBP300-R3 . No short text exists	
HR_ORG_SEM	HR_ORG_SEM. No short text exists	
LIS	LIS . No short text exists	
LO215	LO215 . No short text exists	
MARCUS	MARCUS . No short text exists	
OSB_BUYER	OSB_BUYER . No short text exists	
OSB_SUPPLY	OSB_SUPPLY. No short text exists	
PFS	PFS . No short text exists	
SUBSYSTEMS	SUBSYSTEMS. No short text exists	
WMS	WMS . No short text exists	
XI	XI . No short text exists	
ZBV	ZBV . No short text exists	
B2B 3.0D to IDES 4.0B		
DR3-KABA BENZING		
DH3>ID3 & M11>ID3		
FO3 Backend Communication (3docs)		
For All Master Data Distributions		
800 Client		
810 Client		
COSMAS		
ZODEMO_ALL		
SENDER		
RECEIVER		
Master cost center		

Notice that , the Sendor, Receiver and Message Type Details Are ADDED.

Note : Repeat the ADD Message type Steps for each message type to be Transferred.

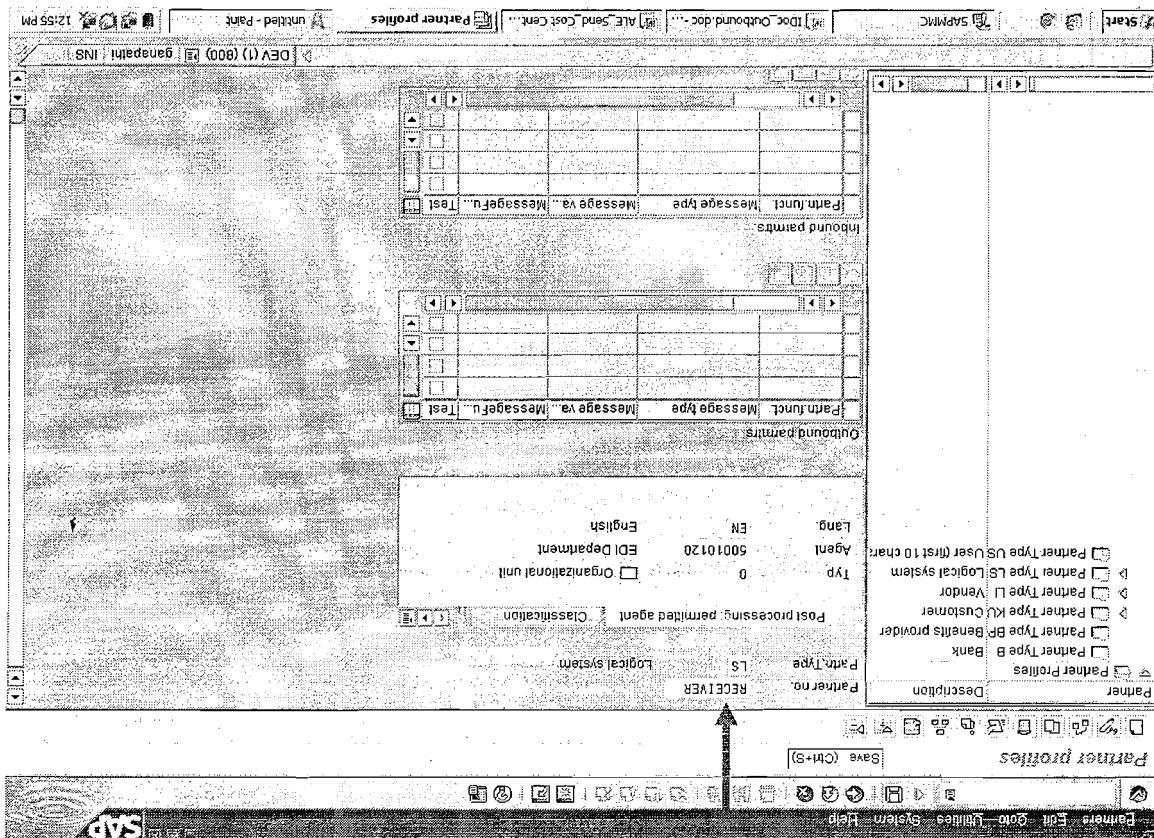
B) Maintain Outbound Partner Profile(WE20) :

Note: In the Outbound Partner Profile , We Maintain the Below Information.

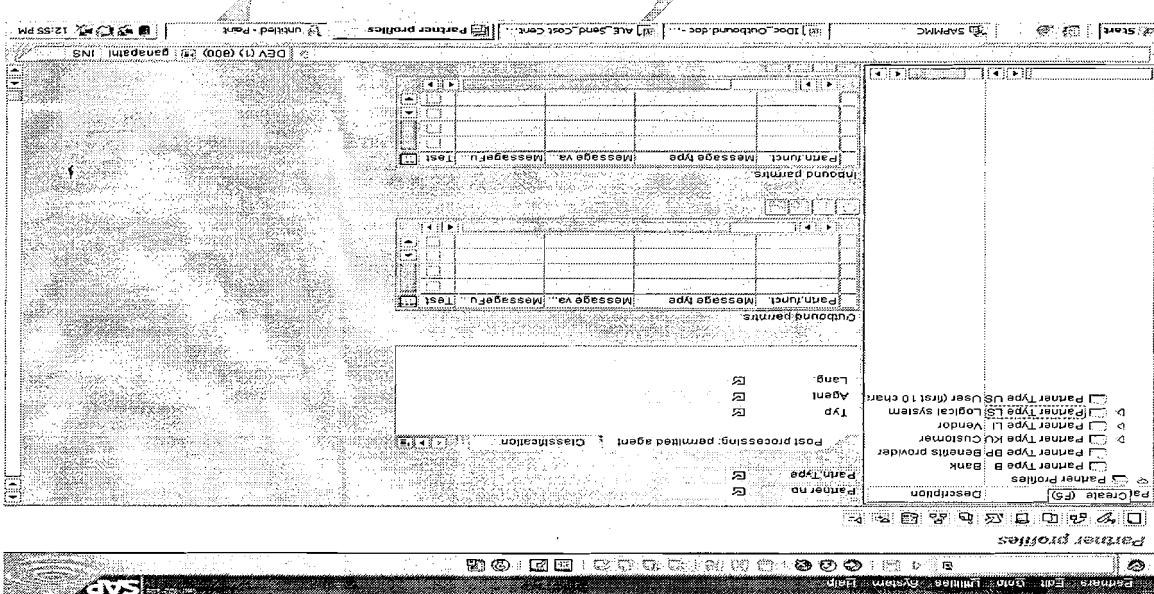


Note : We always Create Only One Profile for each receiving(Partner) and One Entry for each Message type we transfer .

SAVE IT.



Enter Partner No (Receiver Logical System Name) and SAVE it.



EXECUTE WE20 AND Select Partner type LS and Create.

We Never Compromise In Quality. Would You?

5. Distributing the Master Data Via Standard IDocs

5. Distributing the Master Data Via Standard IDocs

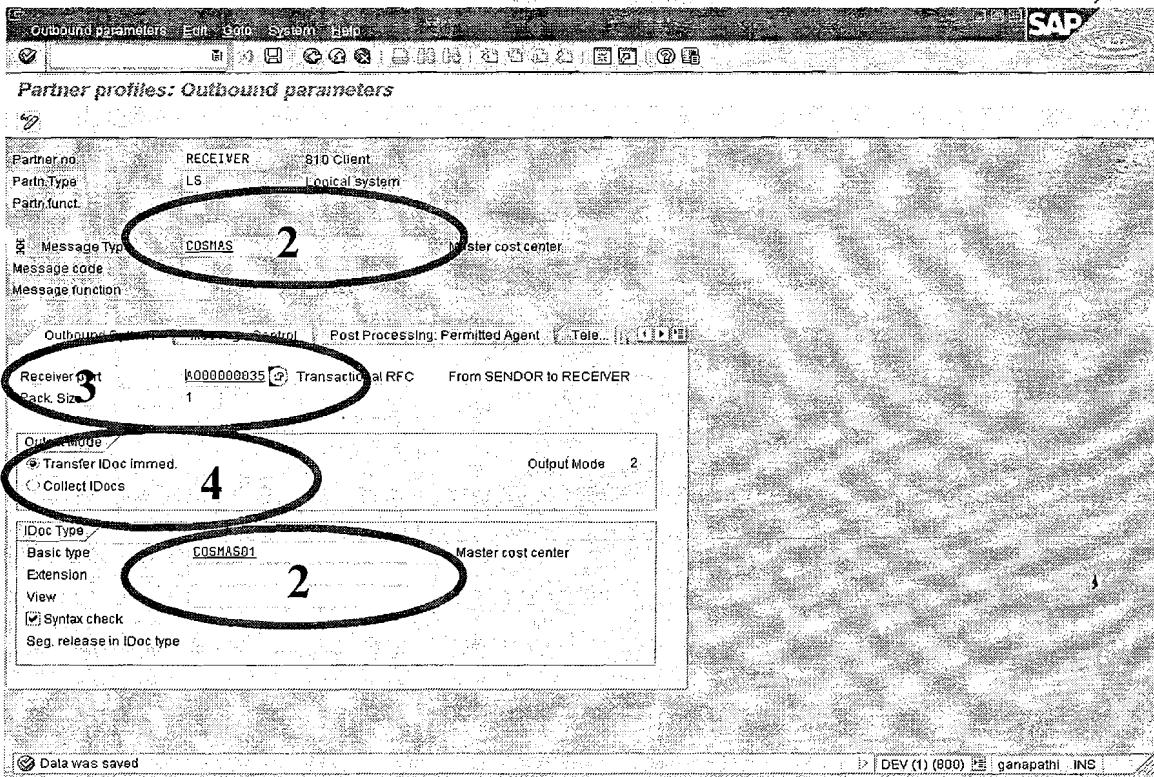
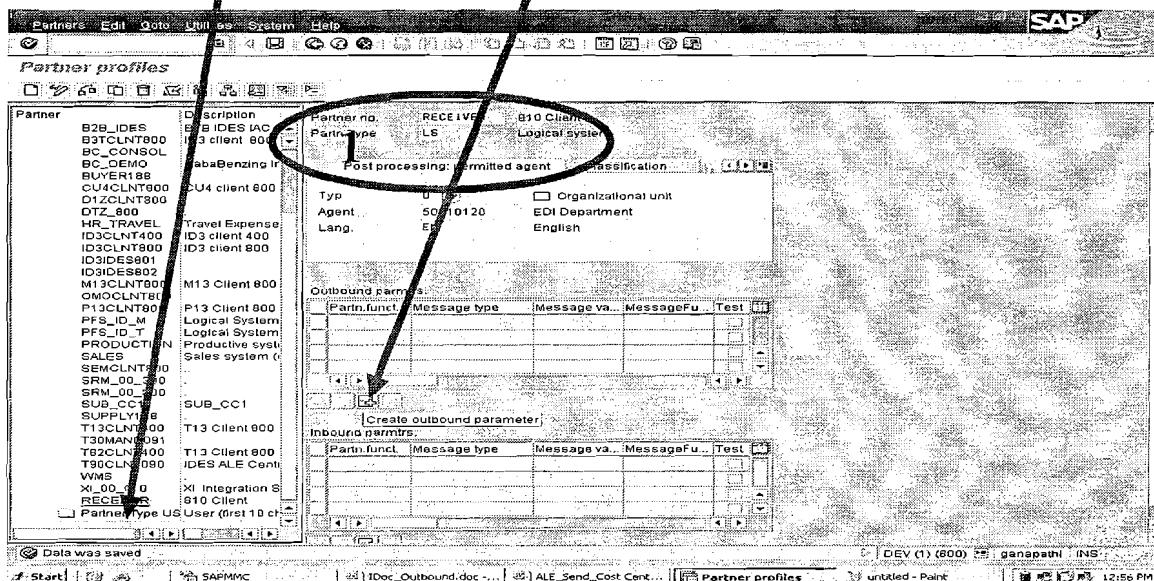
We Never Compromise In Quality. Would You?

Note : A Profile is Created For RECEIVER (810 Client) So that we have to use the Same Profile, every time we transfer a new Message type to this Reciever.

For Each New Message to be Transferred to the Same Partner (RECEIVER):

From the Same Screen – WE20

Select the Partner and Click Create Outbound Parameters



5. Distributing the Master Data Via Standard IDocs

We Never Compromise In Quality. Would You?

ENTER

- 1 = WHOM TO SEND (RECEIVER)
- 2 = WHAT TO SEND (MESSAGE TYPE + IDOC)
- 3 = MEDIUM OF DATA TRANSFER (PORT)
- 4 = MODE OF DATA TRANSFER(IMMEDIATE/COLLECT)

SAVE it.

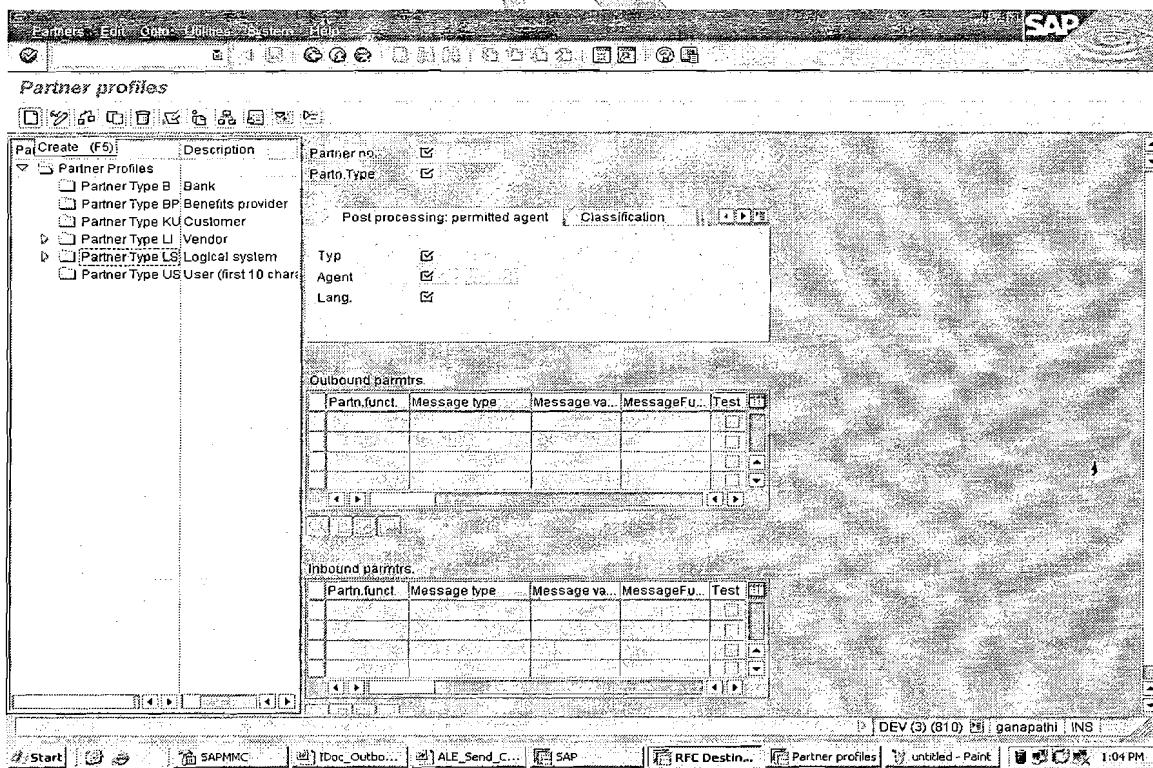
NOTE : ALL THE OUTBOUND CONFIGURATION SETTINGS ARE COMPLETED . We Can Transfer the IDOC But it Fails in Posting the IDoc in the INBOUND (RECEIVER) Sys. So Before We Transfer the Cost Center Master Data , it is better to Complete the INBOUND Settings also to TEST the Complete Cycle.

INBOUND Configuration Settings:

MAINTAIN INBOUDB Partner Profile (WE20) :

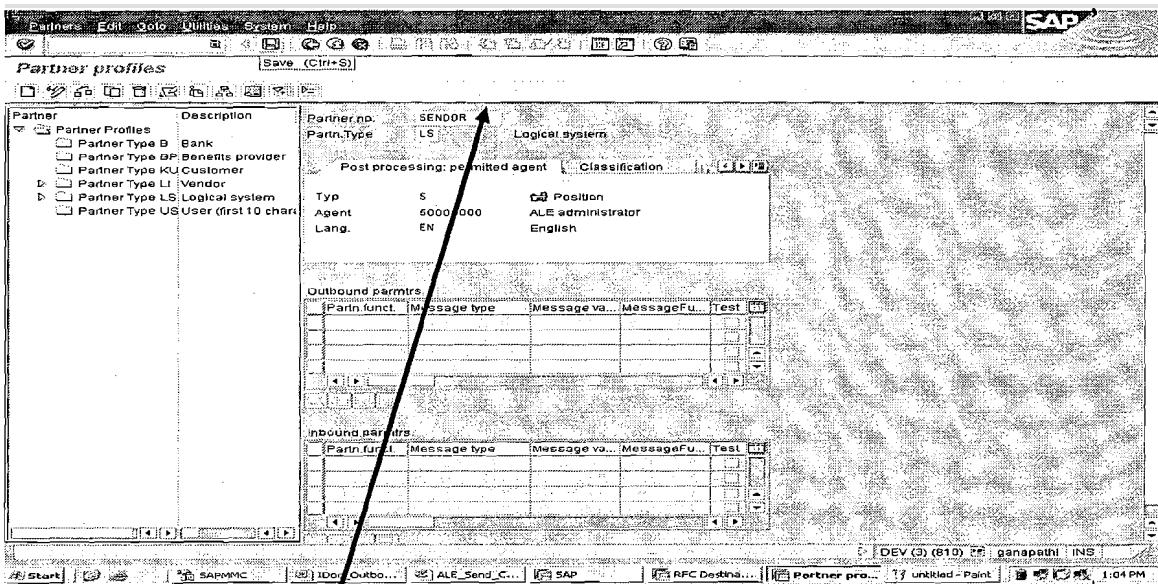
Logon to RECEIVER(810)

EXECUTE WE20 AND Select Partner type LS Partner Type LS and Create .



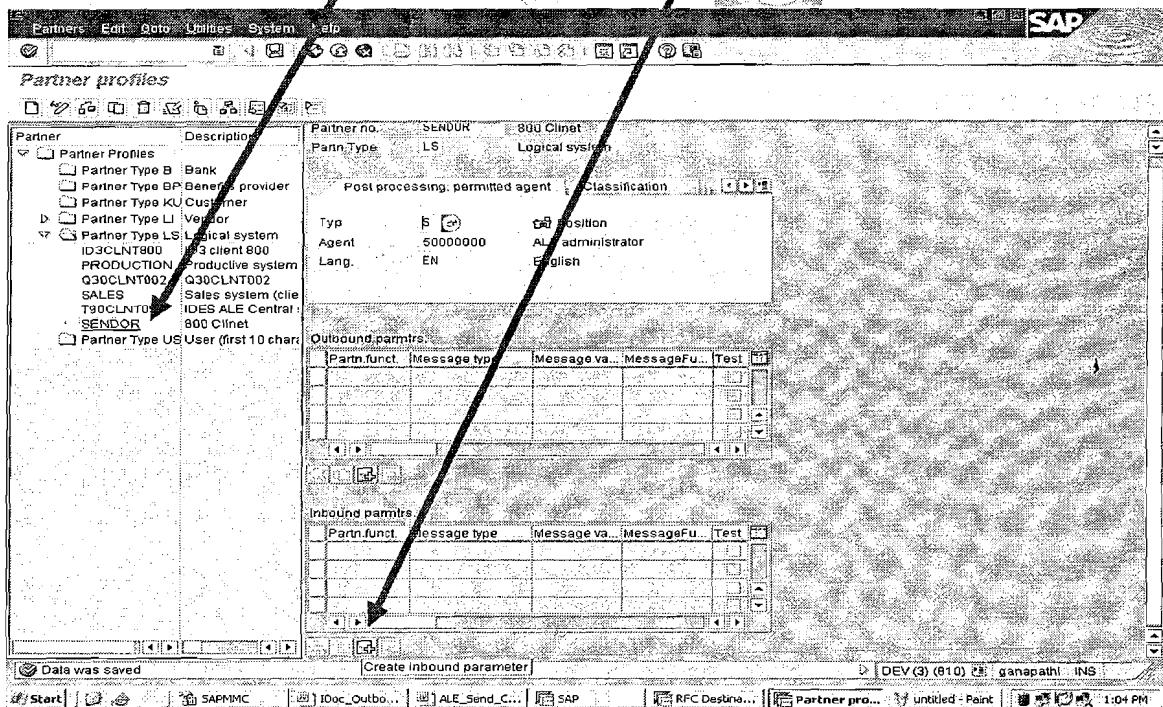
5. Distributing the Master Data Via Standard IDocs

We Never Compromise In Quality. Would You?



**Enter Partner no as SENDOR
SAVE IT.**

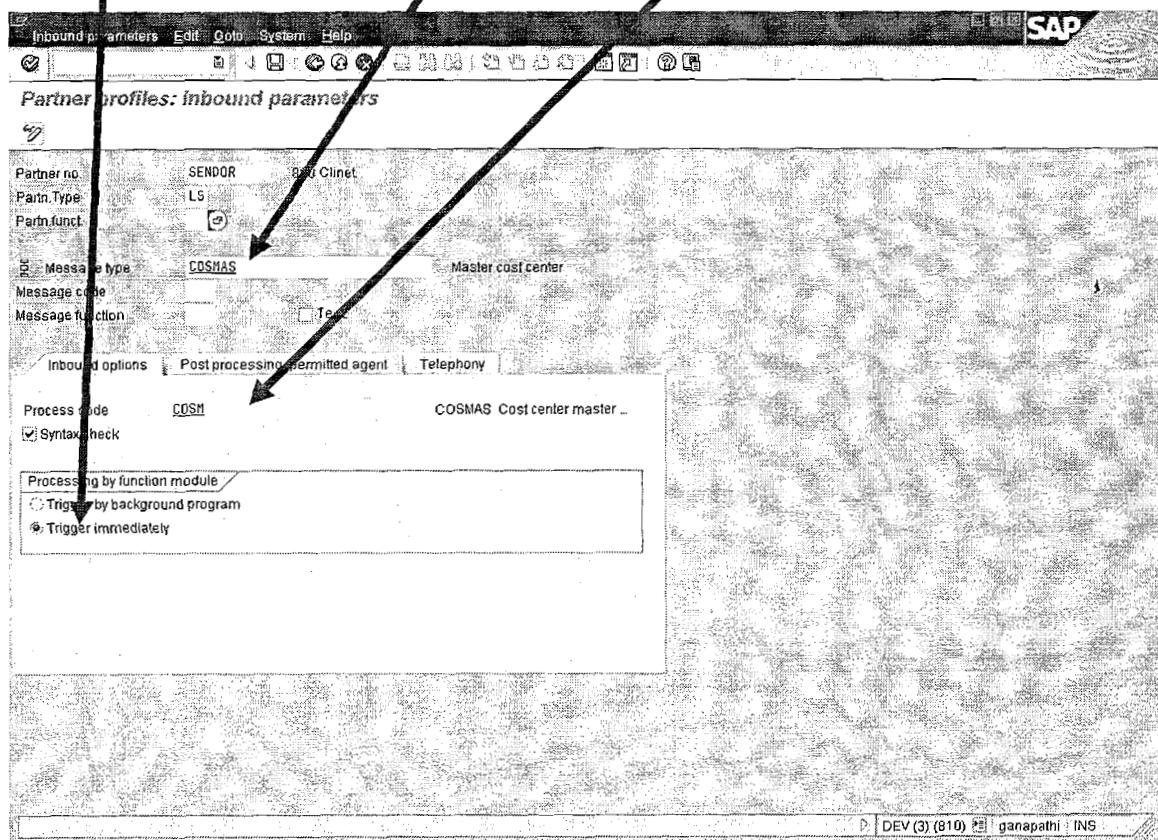
SELECT THE Partner SENDOR AND CLICK ON CREATE INBOUND PARAMETERS .



5. Distributing the Master Data Via Standard IDocs

We Never Compromise In Quality. Would You?

ENTER MESSAGE TYPE (COSMAS) , PROCESS CODE(COSM) AND Trigger Immediately.



SAVE IT.

NOTE : BOTH OUTBOUND AND INBOUND CONFIGURATION SETTINGS ARE COMPLETED. WE CAN TEST THE COMPLETE PROCESS OF SENDING THE COST CENTER AND RECEIVE IT AND POST(CREAT) THE SAME IN THE RECEIVER SYSTEM.

5. Distributing the Master Data Via Standard IDocs

We Never Compromise In Quality. Would You?

TESTING THE PROCESS :

1. EITHER CREATE A NEW COST CENTER (KS01) / SELECT THE EXISTING COST CENTER FOR BD16.

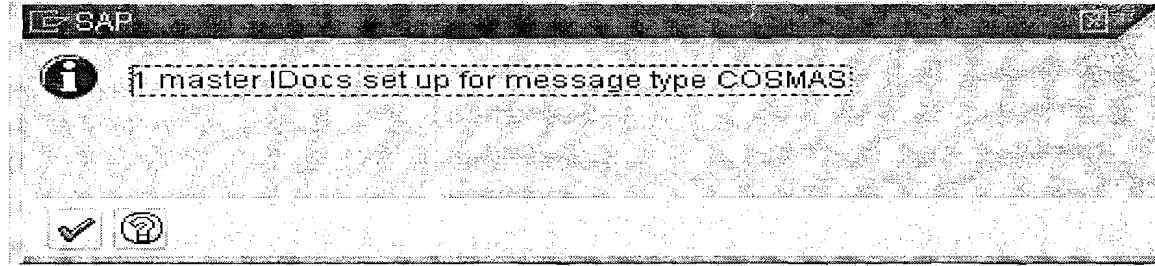
EXECUTE BD16(SEND COST CENTER) AT SENDOR SYSTEM

Send cost center

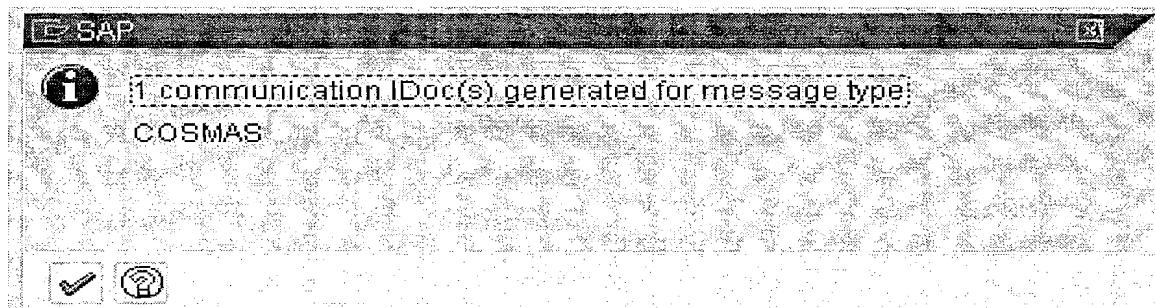
Controlling area	1000	to	<input type="button" value="→"/>
Cost center	3500	to	<input type="button" value="→"/>
Message type	COSMAS		
Target system	RECEIVER		
Parallel processing			
Server group			
Cost centers per process	20		

Enter the Controlling Area 1000(Standard) , Cost Center - 3500 , Message type – COSMAS and Target System as RECEIVER and

EXECUTE IT



ENTER

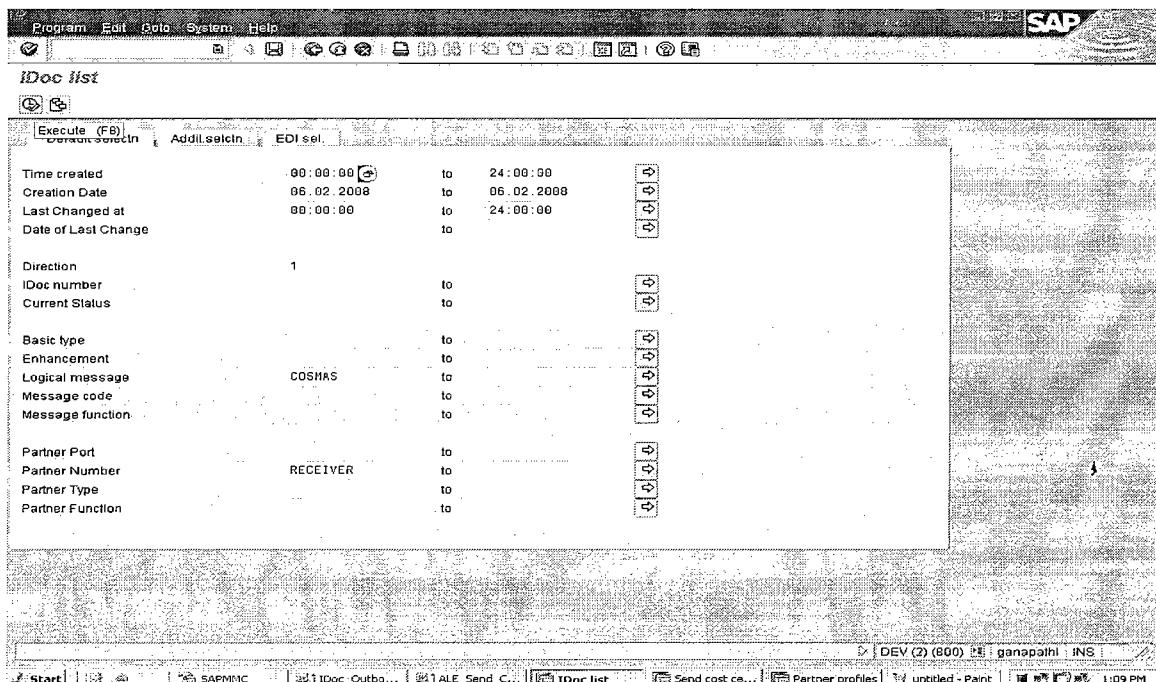


5. Distributing the Master Data Via Standard IDocs

We Never Compromise In Quality. Would You?

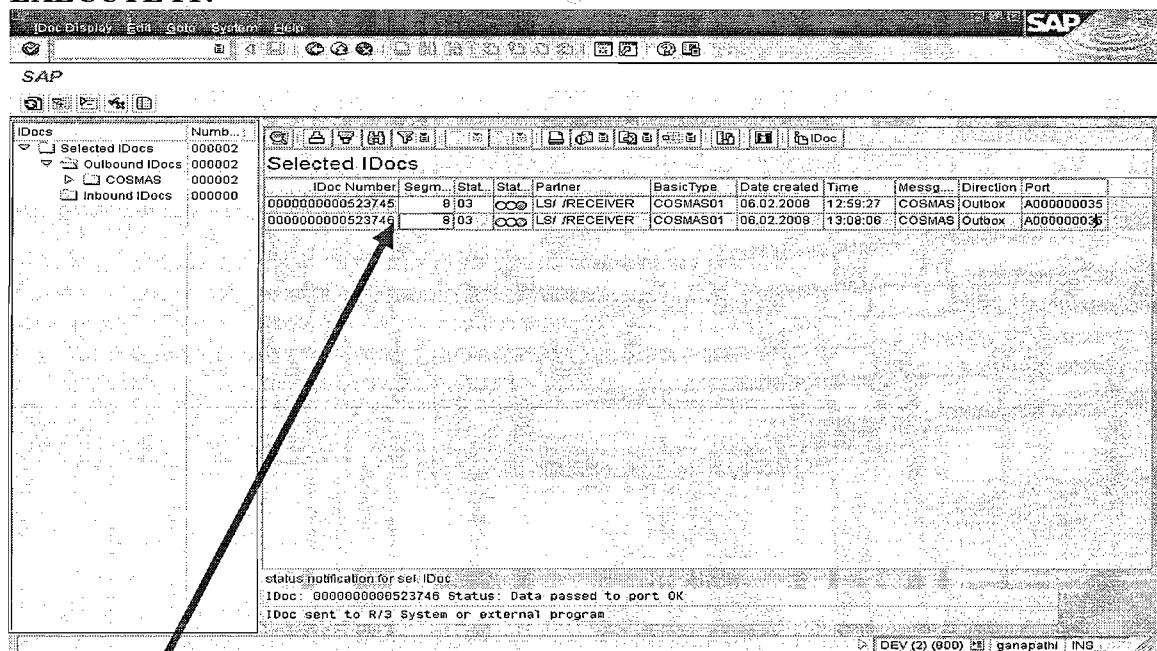
ENTER .

EXECUTE WE02 / WE05 TO CHECK THE IDOC NO AND DATA RECORDS AND STATUS OF IDOC.



ENTER DIRECTION(1 – OUTBOUND), LOGICAL MESSAGE(COSMAS) AND PARTNER NO(RECEIVER).

EXECUTE IT.

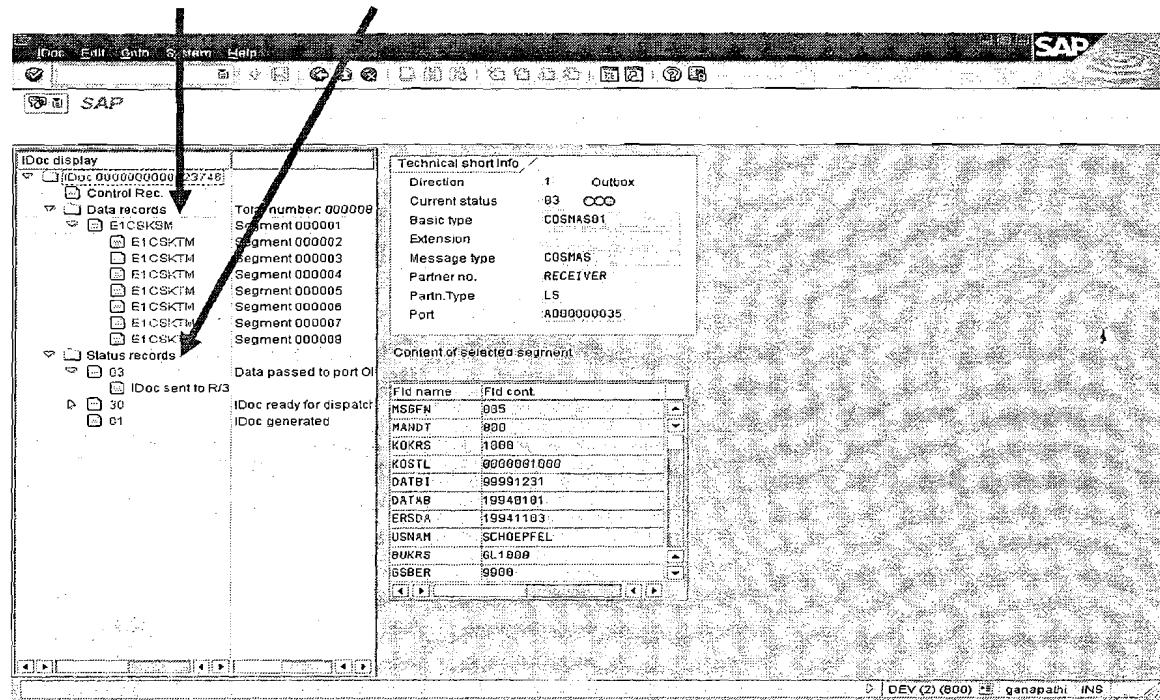


5. Distributing the Master Data Via Standard IDocs

We Never Compromise In Quality. Would You?

Notice that the IDoc is Successfully Generated and Dispatched.

**DOUBLE CLICK AND
CHECK DATA AND STATUS RECORDS.**

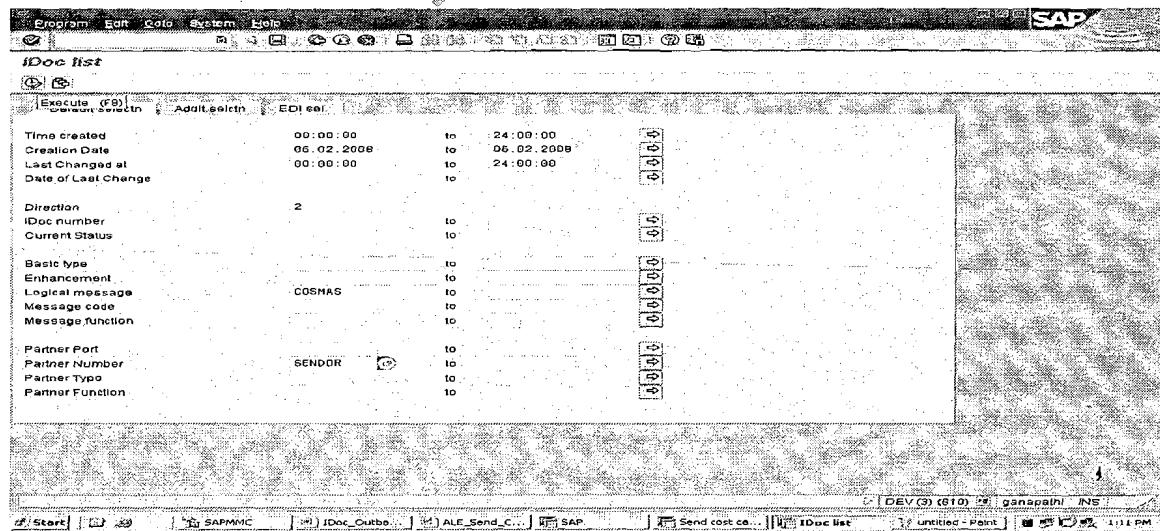


CONGRATULATIONS ! OUTBOUND PROCESS IS SUCCESSFUL.

TESTING THE INBOUND PROCESS:

**GO TO THE RECEIVER SYSTEM AND MAKE SURE THAT IT IS POSTED
SUCCESSFULLY.**

EXECUTE WE02/WE05 TO CHECK THE IDOC STATUS in Client 810.

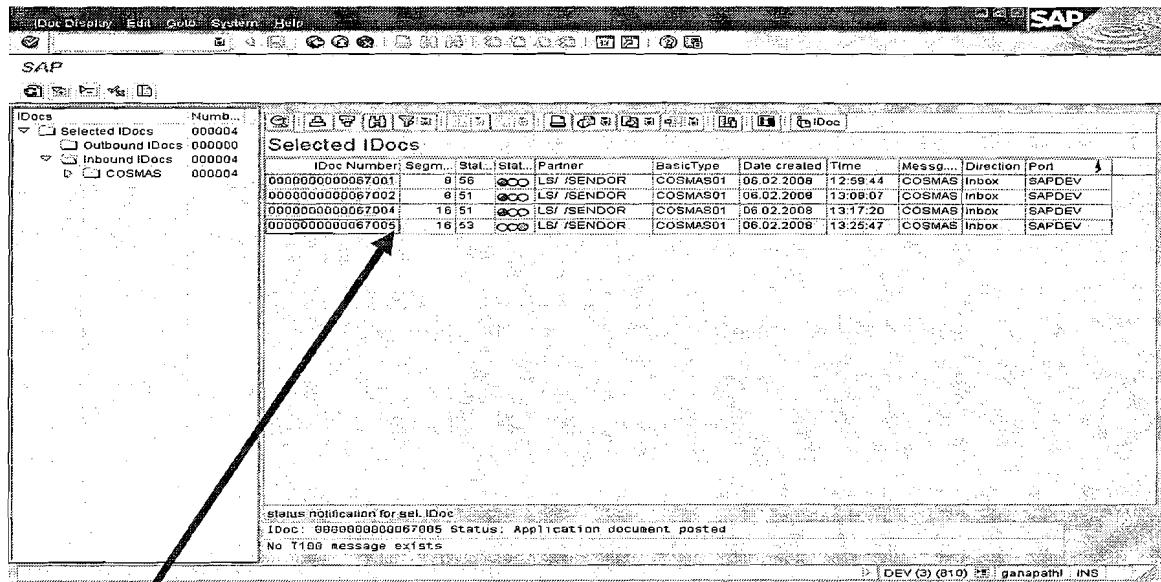


5. Distributing the Master Data Via Standard IDocs

We Never Compromise In Quality. Would You?

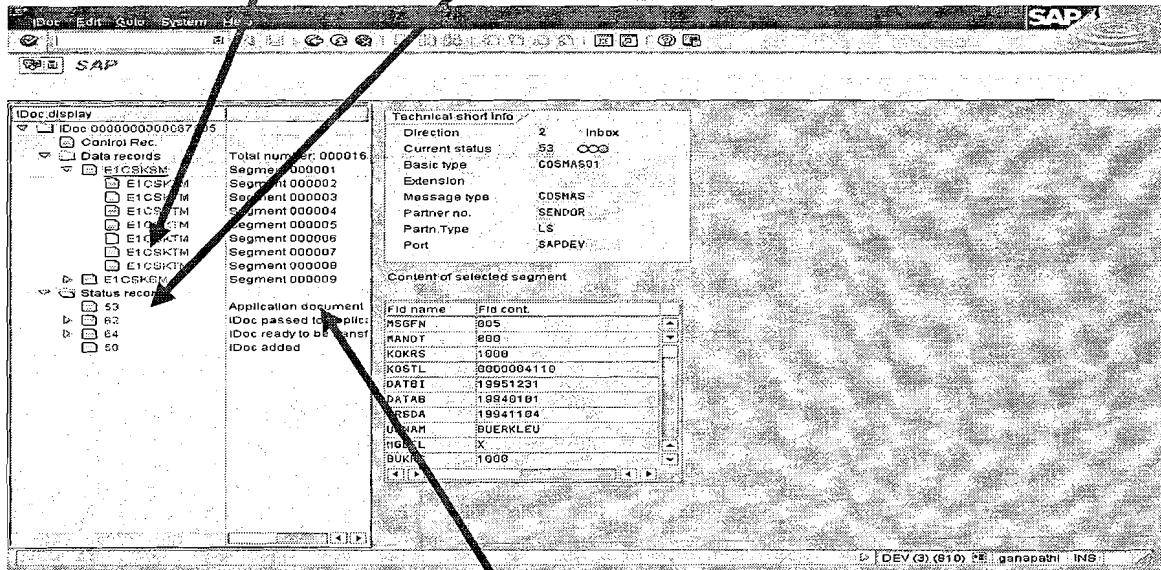
ENTER DIRECTION(2 -INBOUND), LOGICAL MESSAGE (COSMAS) AND PARTNER NUMBER(SENDOR).

EXECUTE .



DOUBLE CLICK ON THE LATEST IDOC(CHECK DATE AND TIME ALSO)

CHECK THE DATA AND STATUS RECORDS



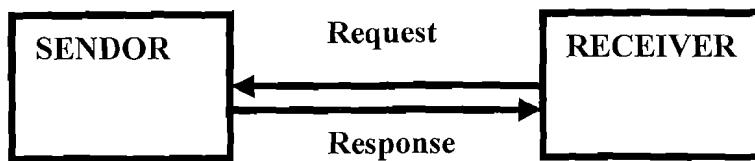
CONGRATULATIONS – APPLICATION DOCUMENT IS POSTED SUCCESSFULLY.

NOTE : THE COST CENTER POSTING CAN ALSO BE CHECKED THROUGH KS03(DISPLAY COST CENTER) FOR THE EXISTENCE OF COST CENTER.

5. Distributing the Master Data Via Standard IDocs

We Never Compromise In Quality. Would You?

2) Get/Fetch/Pull Whole Copy



NOTE : EITHER REQUEST / RESPONSE ACROSS THE DISTRIBUTED SYSTEMS IS ALWAYS Via MESSAGE TYPES AND IDOCs.

NOTE : THE SAME IDOC ALEREQ01 IS USED TO REQUEST ANY APPLICATION DATA(IDOC).

EXAMPLE :

Request(Fetch) Message Type	Response(Send) Message Type
MATFET	MATMAS(Material Master)
DEBFET	DEBMAS(Customer Master)
CREFET	CREMAS(Vendor Master)
COSFET	COSMAS(Cost Center)

NOTE : WE CALL REQUEST AS FETCH AND RESPONSE AS SEND.

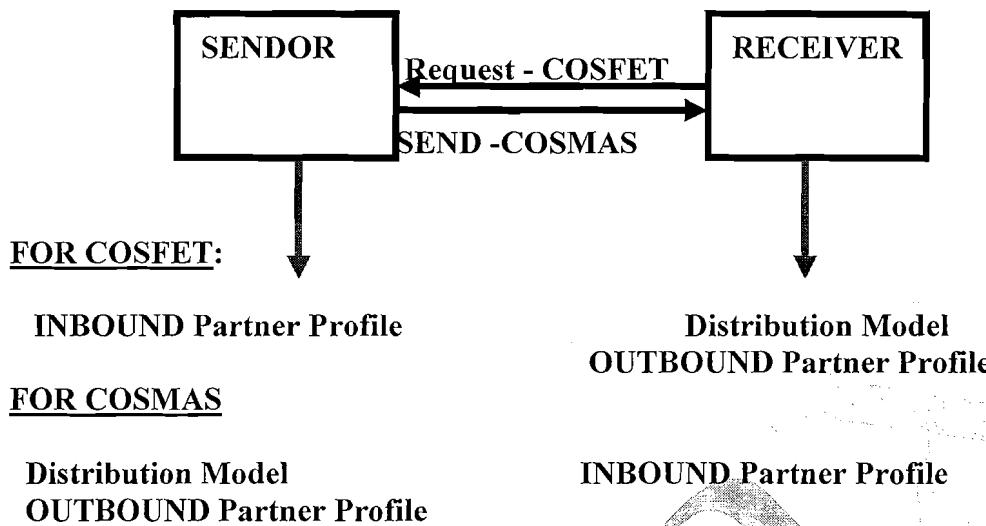


Application	Message Type	IDoc Type	Outbound Program/ Transaction	Inbound Program/ Process Code
Send Materials	MATMAS	MATMAS01,02,..	BD10	MATM
Fetch Materials	MATFET	ALEREQ01	BD11	MATF
Send Customers	DEBMAS	DEBMAS01,02,...	BD12	DEBM
Fetch Customers	DEBFET	ALEREQ01	BD13	DEBF
Send Vendors	CREMAS	CREMAS01,02,...	BD14	CRE1
Fetch Vendors	CREFET	ALEREQ01	BD15	CREF
Send Cost Centers	COSMAS	COSMAS01,02,...	BD16	COSM
Fetch Cost Centers	COSFET	ALEREQ01	BD17	COSF

5. Distributing the Master Data Via Standard IDocs

We Never Compromise In Quality. Would You?

CONFIGURATION REQUIRED :



NOTE : CONFIGURATION For COSMAS IS ALREADY COMPLETED IN SEND COST CENTER .(IN CASE OF SEND WHOLE COPY) SO THAT IT IS ENOUGH TO CONFIGURE FOR COSFET I.E FROM RECEIVER TO SENDOR .

NOTE : COMMUNICATION SETTINGS ARE ALREADY CREATED FROM SENDOR TO RECEIVER AND THE SAME COMMUNICATION SETTINGS ARE REQUIRED FROM RECEIVER(810) TO SENDOR(800).

- 1. EXECUTE SALE TO DEFINE AND LINK THE LOGICAL SYSTEM TO THE CLIENT(SALE).**
- 2. MAINTAIN RFC DESTINATION TO SENDOR(SM59)**
- 3. CREATE A PORT TO SENDOR SYS.(WE21)**

5. Distributing the Master Data Via Standard IDocs

We Never Compromise In Quality. Would You?

OUTBOUND CONFIGURATION FOR COSFET AT RECEIVER :

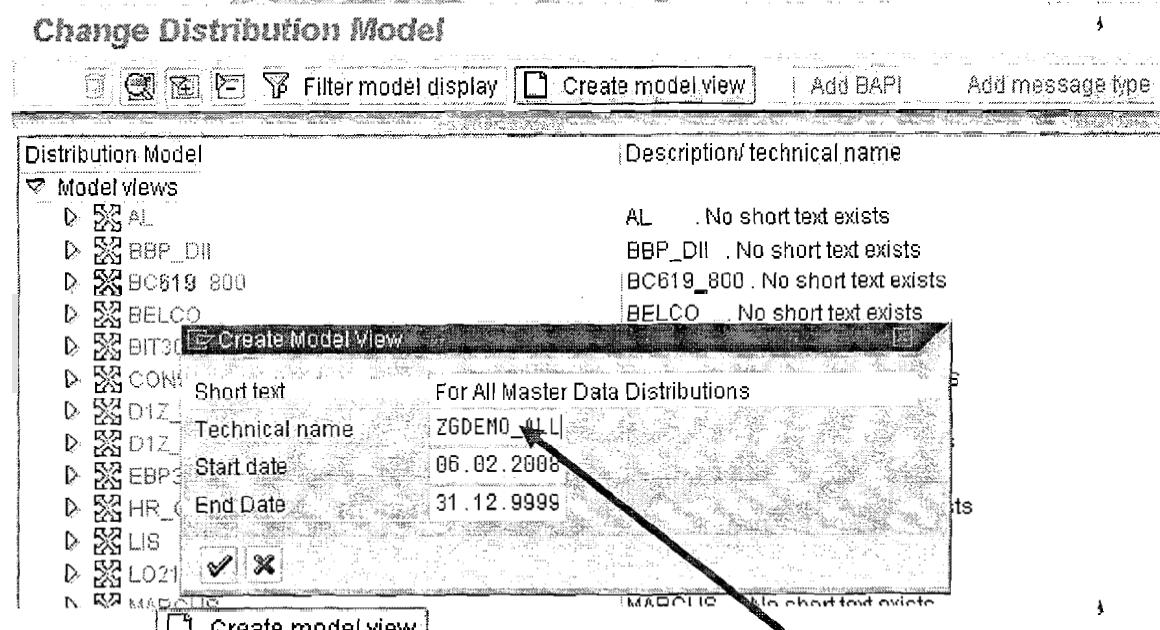
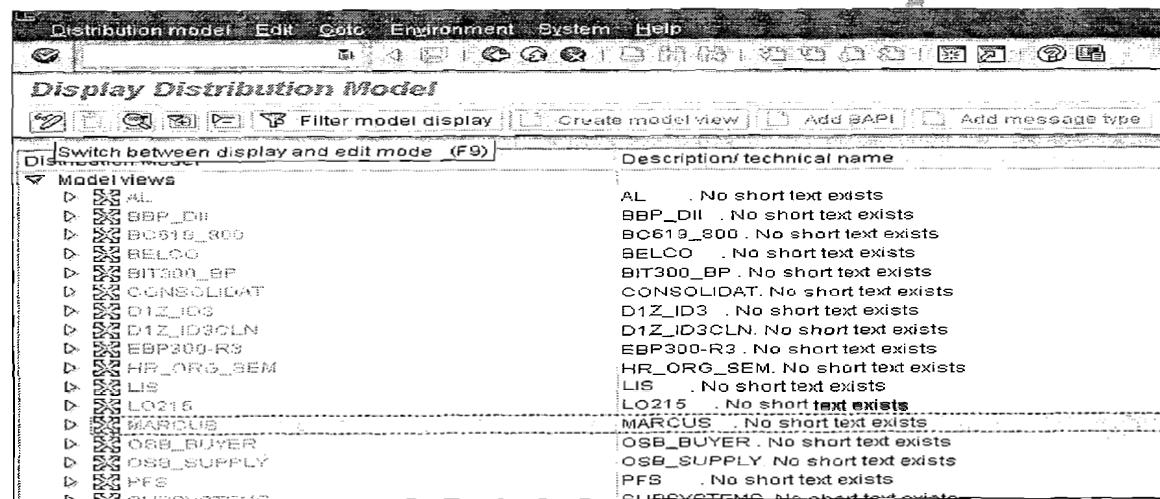
LOGON TO RECEIVER(810)

A) Maintain Distribution Model: Create the Distribution Model and Add the Message type to be transferred.

LOGON TO RECEIVER (810)

A) MAINTAIN DISTRIBUTION MODEL AND ADD MESSAGE TYPE

EXECUTE BD64 AND Click On Change 



Click On AND Enter Short text, Technical Name(Distribution Model) , ENTER
SAVE it.

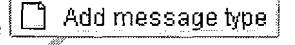
5. Distributing the Master Data Via Standard IDocs

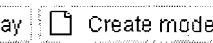
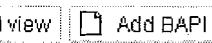
We Never Compromise In Quality. Would You?

Note : Now Distribution Model is Created . So that we Can use the same Distribution Model to Send any the Message . No Need to Create a new Distribution Model for each Message Type to be Transferred.

Note : Distribution Model Acts as a BAG to Carry the List Of Receiver Details for all Message Types

For Each Message type to be Transferred :

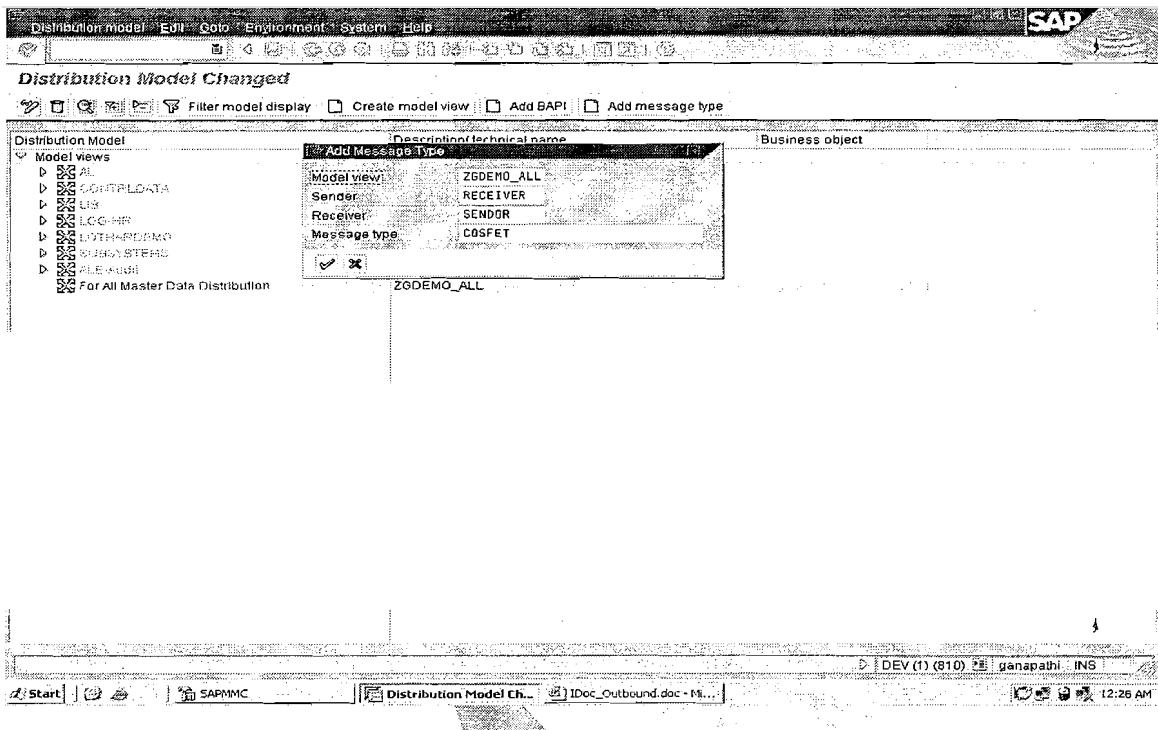
Select the Distribution Model and Click On Add Message Type 

Distribution Model Changed	
     Filter model display   	
Distribution Model	Description/technical name
Model views	Add mes
AL	AL . No short text exists
BBP_DII	BBP_DII . No short text exists
BC619_800	BC619_800 . No short text exists
BELCO	BELCO . No short text exists
BIT300_BP	BIT300_BP . No short text exists
CONSOLIDAT	CONSOLIDAT. No short text exists
D1Z_ID3	D1Z_ID3 . No short text exists
D1Z_ID3CLN	D1Z_ID3CLN. No short text exists
EBP300-R3	EBP300-R3 . No short text exists
HR_ORG_SEM	HR_ORG_SEM. No short text exists
LIS	LIS . No short text exists
LO215	LO215 . No short text exists
MARCUS	MARCUS . No short text exists
OSB_BUYER	OSB_BUYER . No short text exists
OSB_SUPPLY	OSB_SUPPLY. No short text exists
PFS	PFS . No short text exists
SUBSYSTEMS	SUBSYSTEMS. No short text exists
WMS	WMS . No short text exists
XI	XI . No short text exists
ZBV	ZBV . No short text exists
B2B 2.0B to IDES 4.6B	B2B_IDES
DE3 - KABA BENZING	DE3-KABA
DH3->ID3 & M13 <-> ID3	DH3->ID3
R3 Backend Communication (docs)	EBP_TO_R3
For All Master Data Distributions	ZGDEMO_ALL

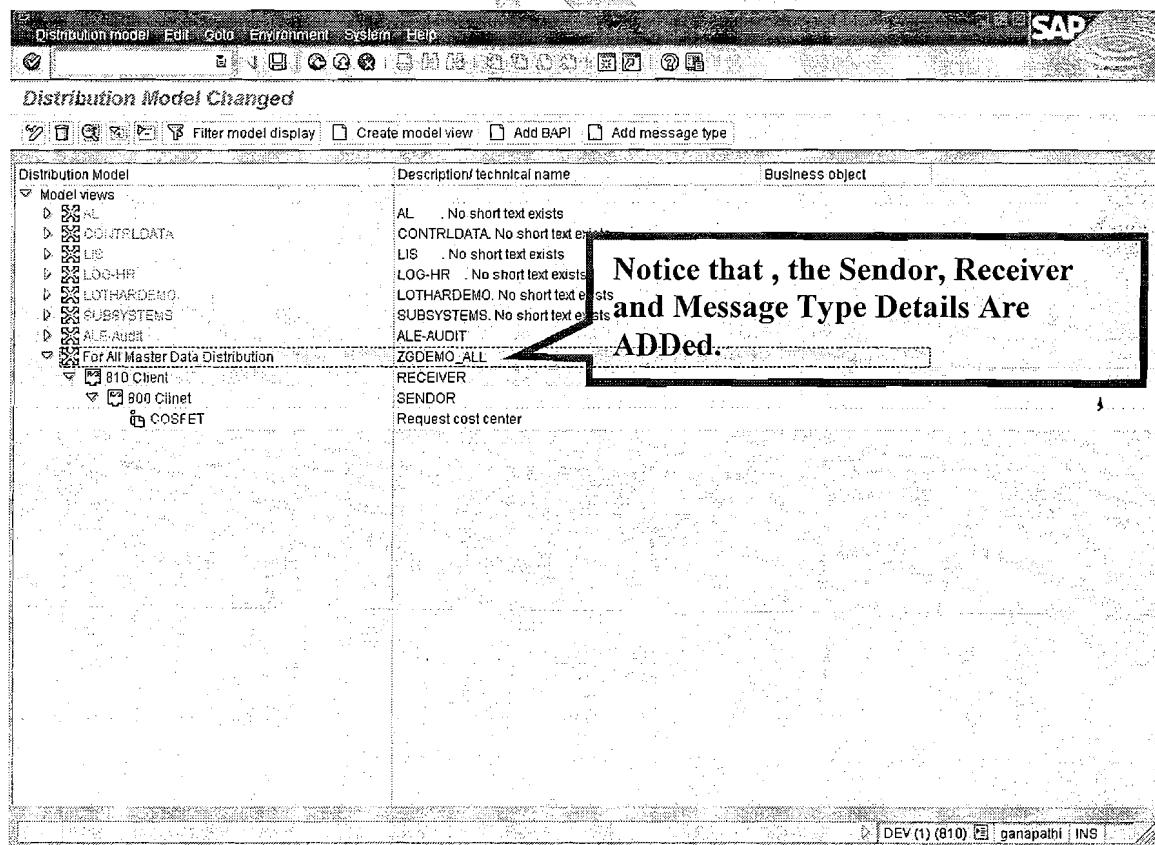
PROVIDE SENDOR , RECEIVER AND MESSAGE TYPE To be Transferred.

5. Distributing the Master Data Via Standard IDocs

We Never Compromise In Quality. Would You?



ENTER AND SAVE it.



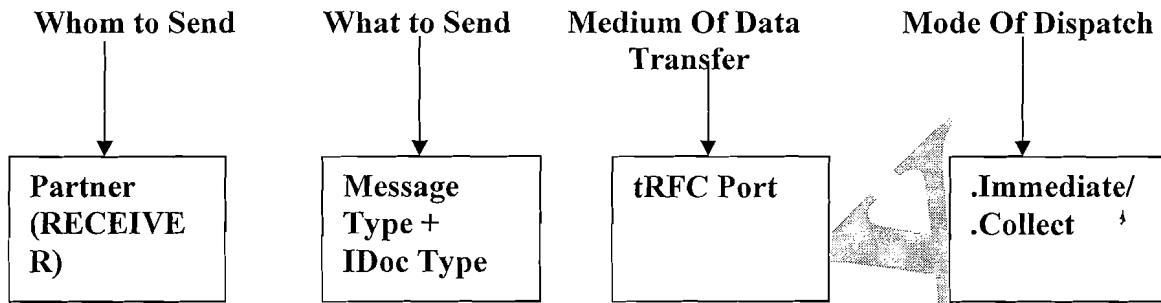
5. Distributing the Master Data Via Standard IDocs

We Never Compromise In Quality. Would You?

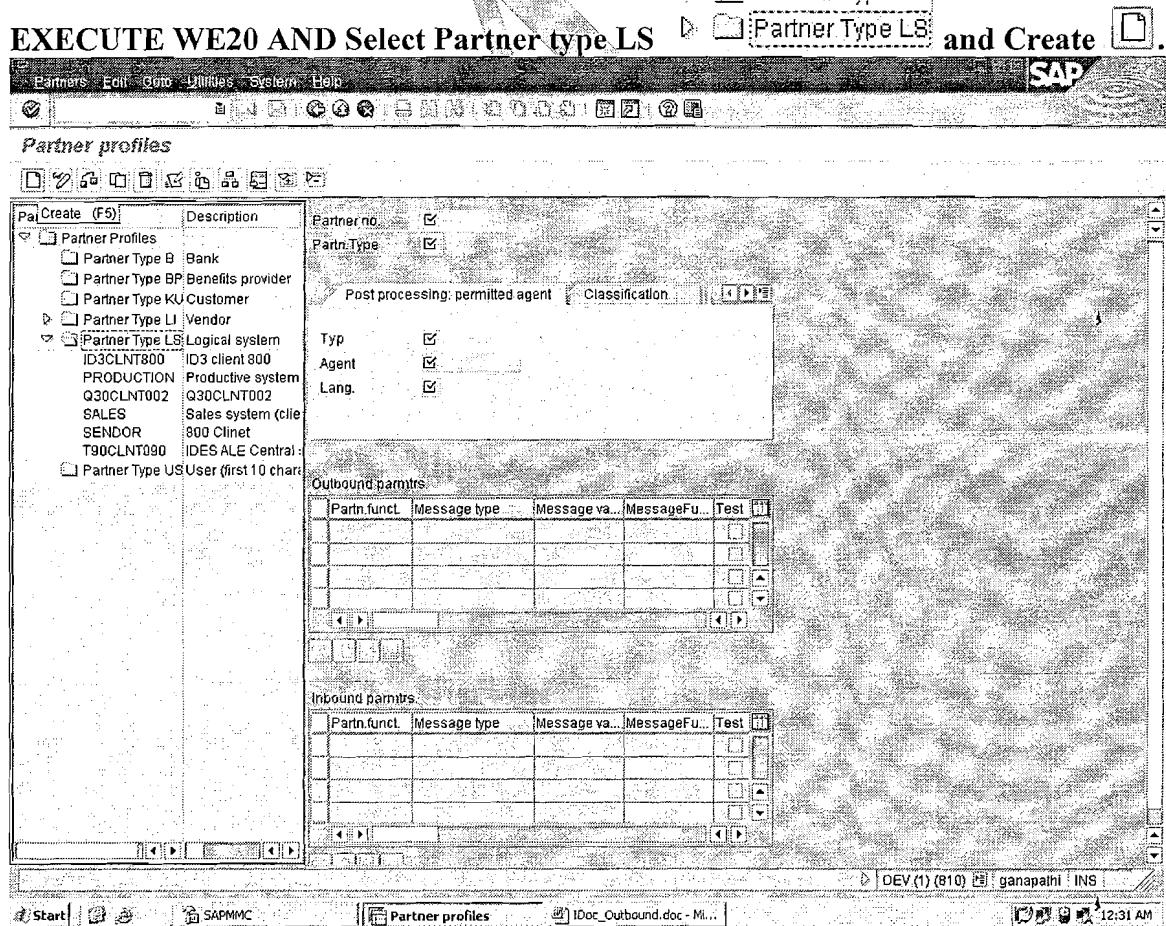
Note : Repeat the ADD Message type Steps for each message type to be Transferred.

B) Maintain Outbound Partner Profile(WE20) :

Note: In the Outbound Partner Profile , We Maintain the Below Information.



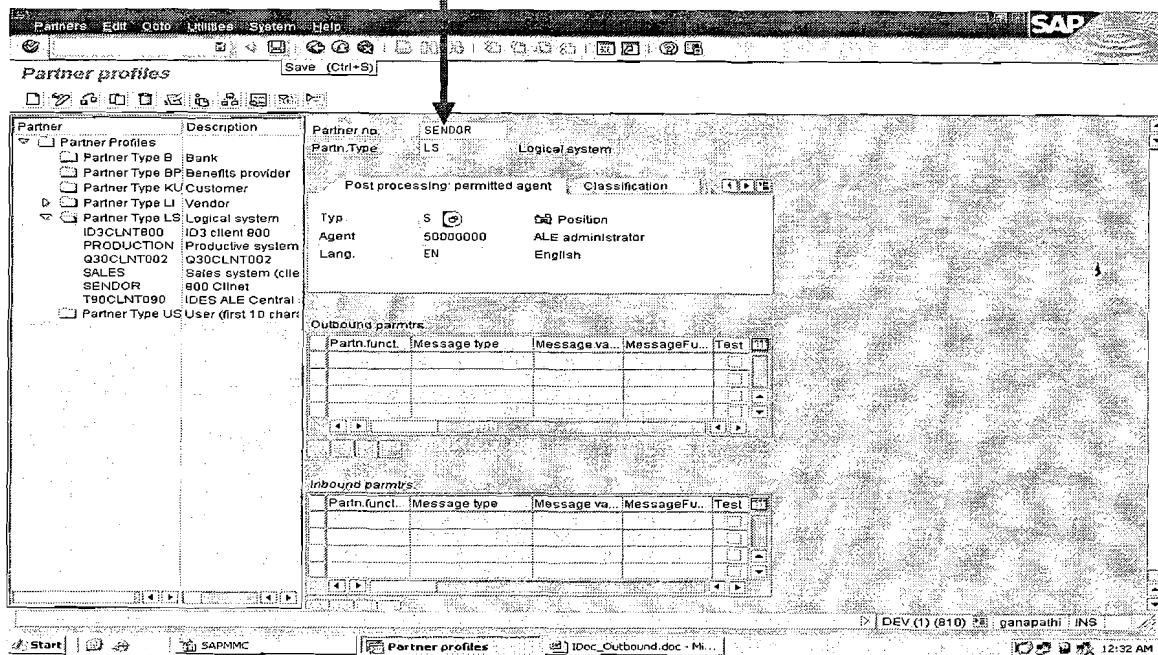
Note : We always Create Only One Profile for each receiving(Partner) and One Entry for each Message type we transfer .



5. Distributing the Master Data Via Standard IDocs

We Never Compromise In Quality. Would You?

Enter Partner No (Receiver Logical System Name) and SAVE it.



SAVE IT.

Note : A Profile is Created For RECEIVER(800 Client) So that we have to use the Same Profile, every time WE REQUEST a new Message type.

NOTE : INFAC THIS PARTNER(SENDOR) IS ALREADY CREATED AS THE INBOUND PARTNER PROFILE FOR COSMAS. SO WE CANNOT CREATE THE SAME AGAIN AND NOT REQUIRED ALSO.

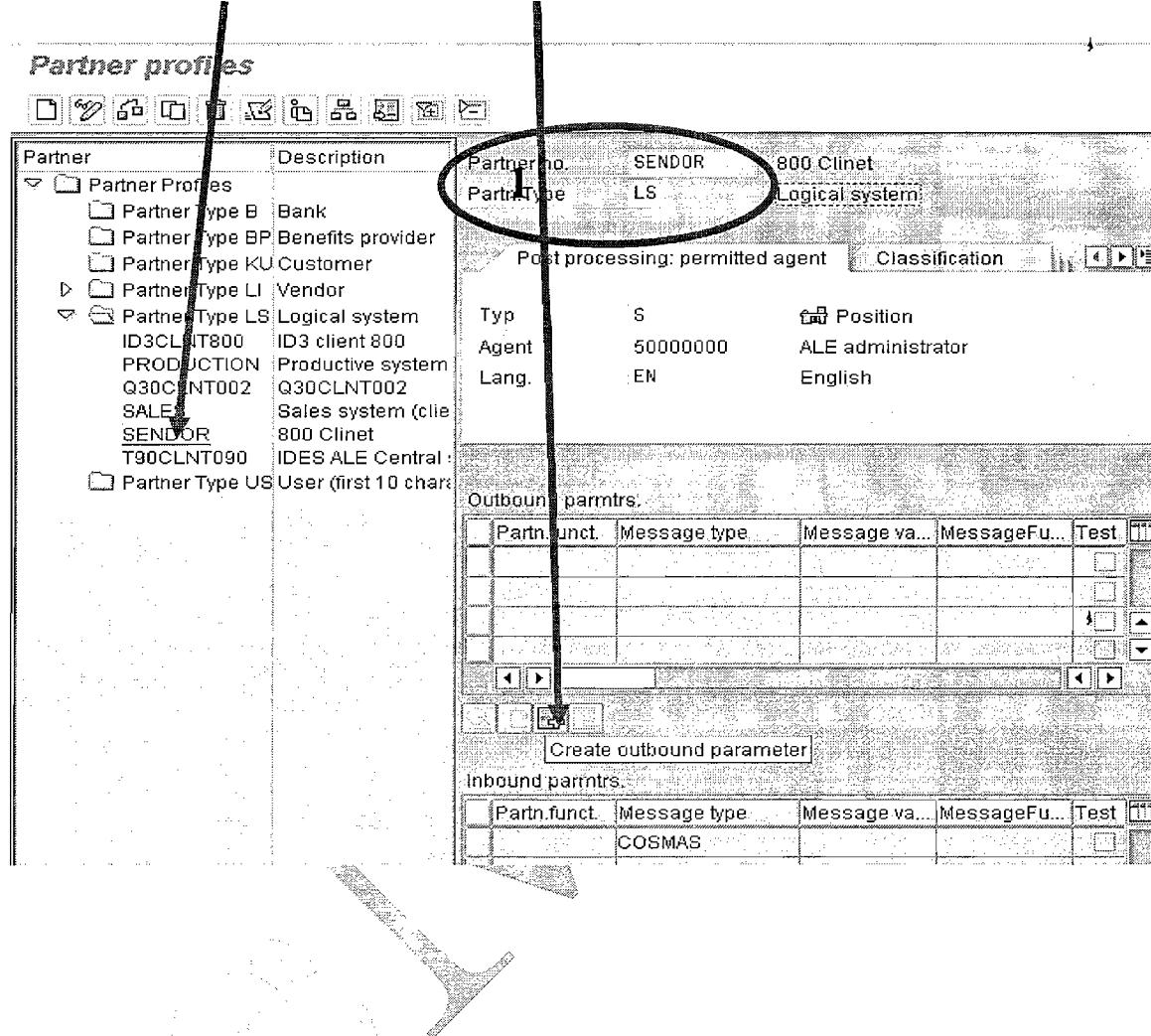
5. Distributing the Master Data Via Standard IDocs

We Never Compromise In Quality. Would You?

For Each New Message to be Requested From the Same Partner (SENDOR):

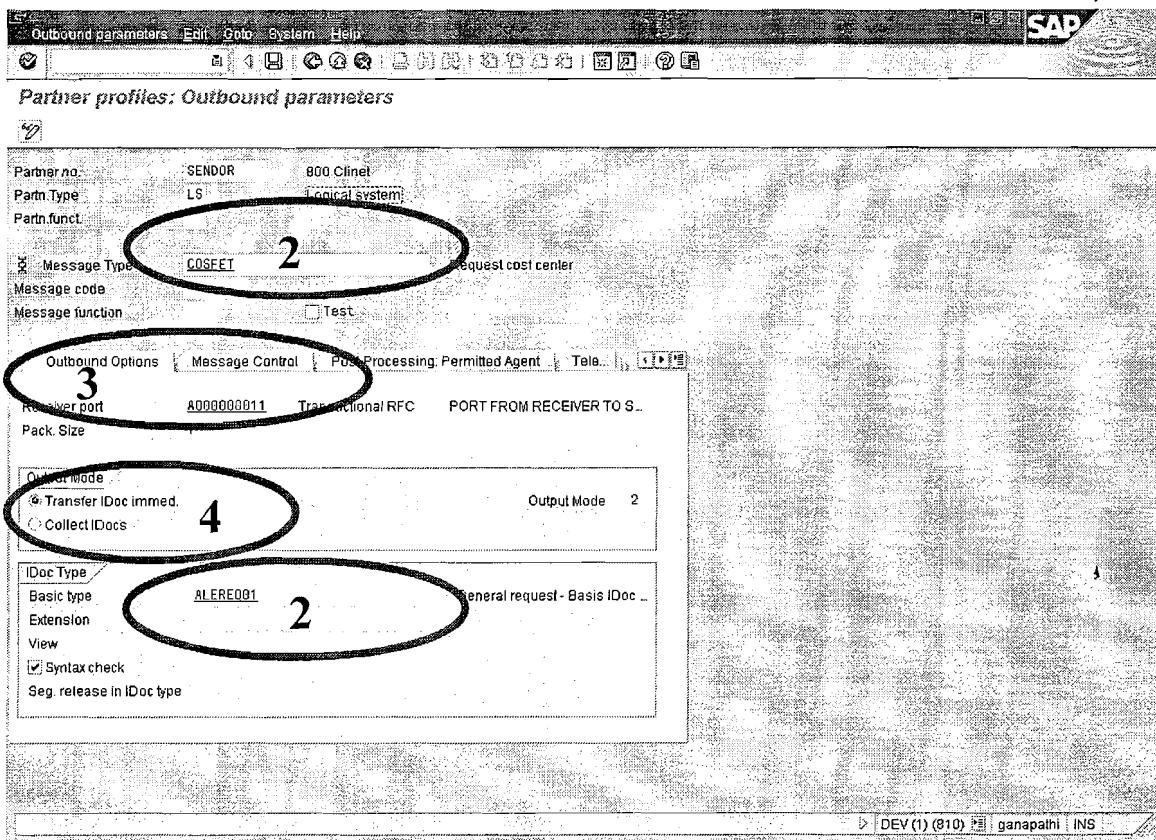
From the Same Screen – WE20

Select the Partner and Click Create Outbound Parameters



5. Distributing the Master Data Via Standard IDocs

We Never Compromise In Quality. Would You?



SAVE IT.

- 2 = WHOM TO SEND (RECEIVER)
- 2 = WHAT TO SEND (MESSAGE TYPE + IDoc Type)
- 3 = MEDIUM OF DATA TRANSFER (PORT)
- 4 = MODE OF DATA TRANSFER(IMMEDIATE/COLLECT)

NOTE : ALL THE OUTBOUND CONFIGURATION SETTINGS ARE COMPLETED . We Can Request the IDoc But it Fails in , Posting the IDoc in the INBOUND Sys. So Before We Request for the Cost Center Master Data , it is better to Complete the INBOUND Settings also to TEST the Complete Cycle.

5. Distributing the Master Data Via Standard IDocs

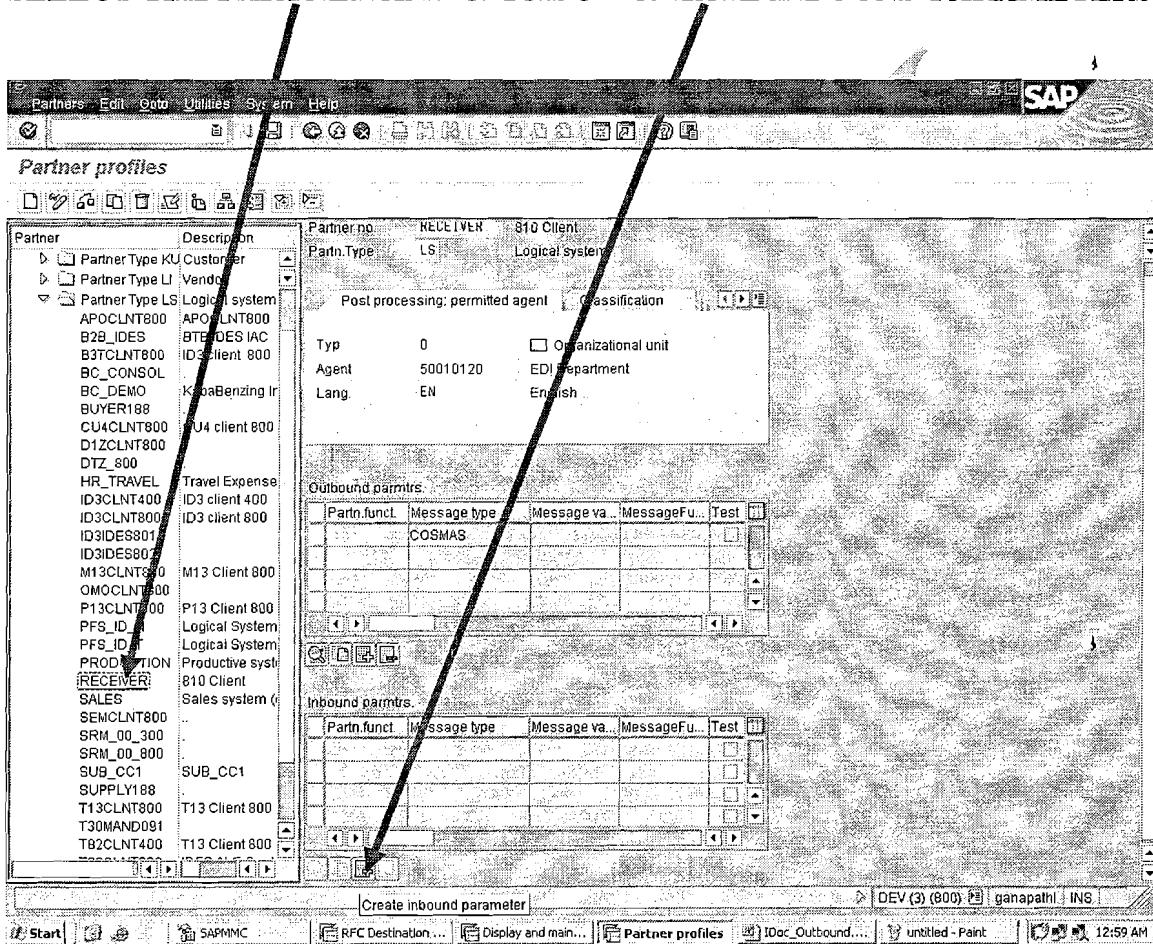
We Never Compromise In Quality. Would You?

MAINTAIN INBOUDB Partner Profile (WE20) :

LOGON TO SENDOR (800)

CREATE PARTNER FOR RECEIVER , WHICH WAS ALREADY CREATED AS AN OUTBOUND PARTNER FOR COSMAS AND NOW ADD INBOUND PARAMETERS FOR COSFET.

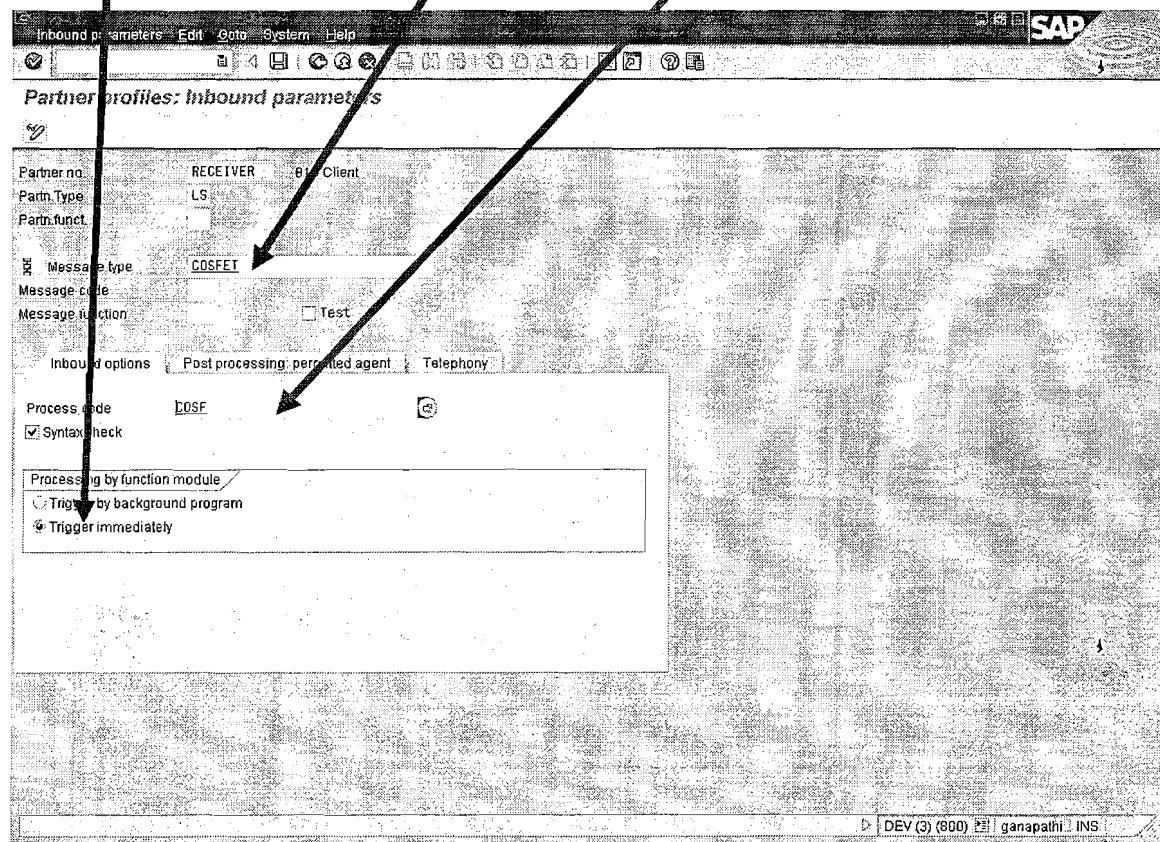
EXECUTE WE20 , Partner Type as LS
SELECT THE PARTNER AND CLICK ON CREATE INBOUND PARAMETERS.



5. Distributing the Master Data Via Standard IDocs

We Never Compromise In Quality. Would You?

ENTER MESSAGE TYPE (COSFET) , PROCESS CODE(COSF) AND TriggerImmediately.



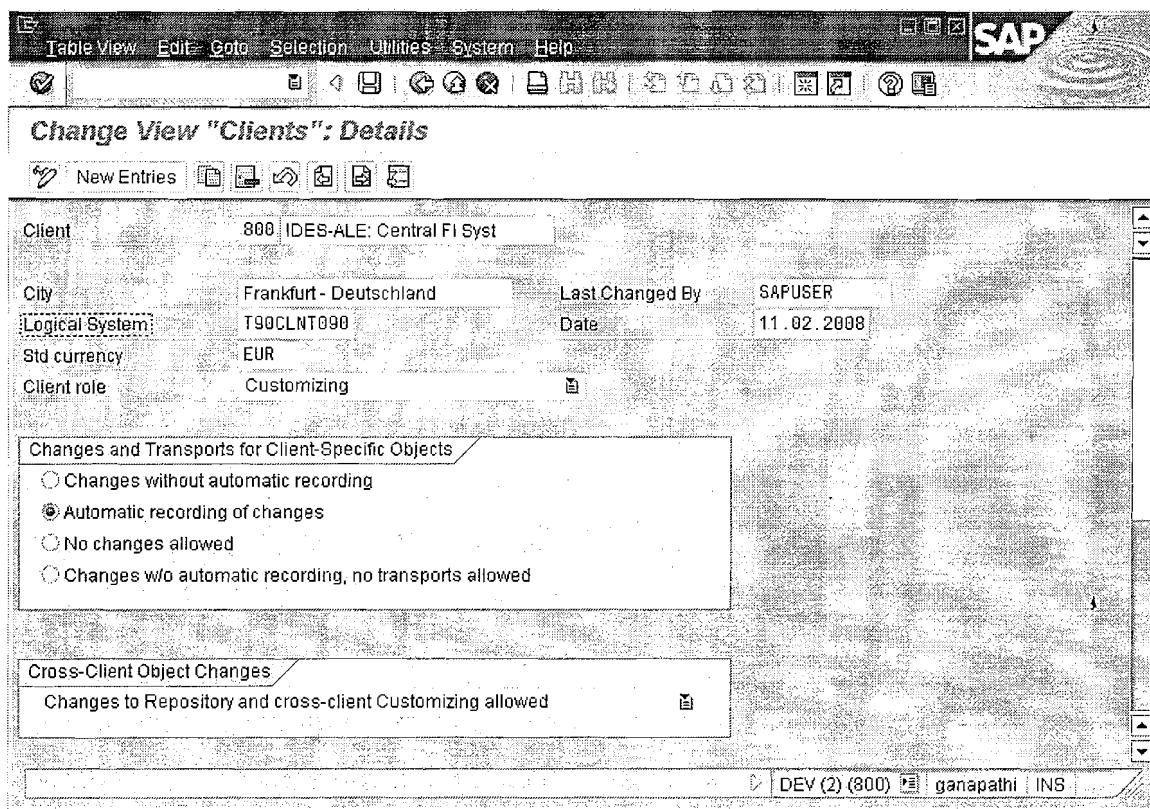
SAVE IT.

NOTE : BOTH OUTBOUND AND INBOUND CONFIGURATION SETTINGS ARE COMPLETED. WE CAN TEST THE COMPLETE PROCESS OF REQUESTING THE COST CENTER AND RECEIVE IT AND POST(CREATE) THE SAME IN THE REQUESTING SYSTEM.

5. Distributing the Master Data Via Standard IDocs

We Never Compromise In Quality. Would You?

TESTing :



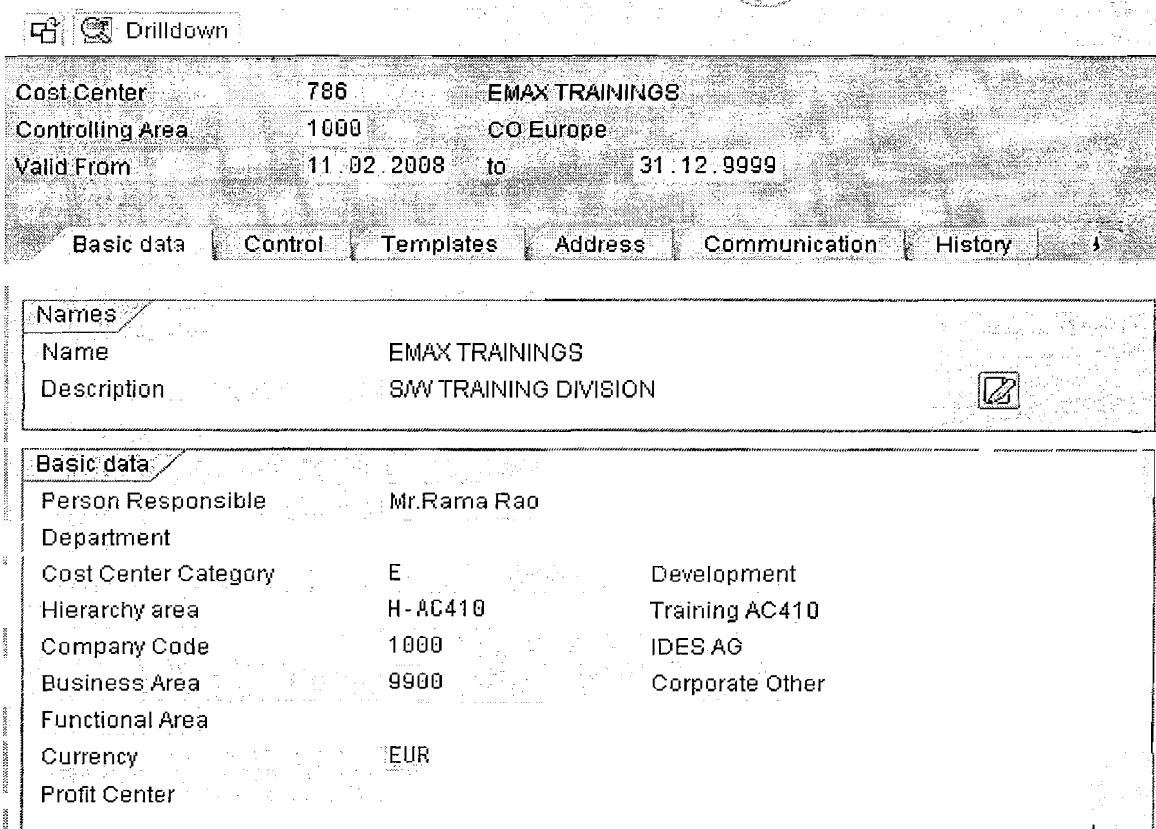
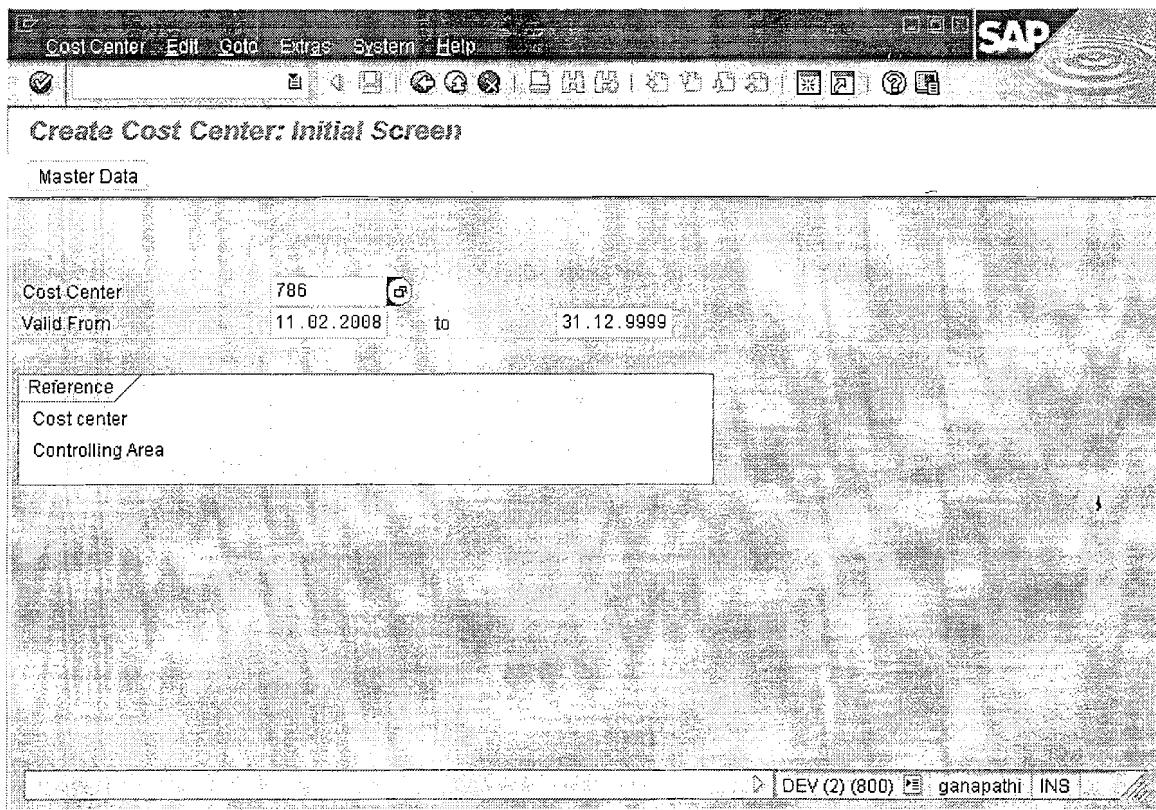
Create a New Cost Center at Sendor System(800).
EXECUTE KSO1(CREATE COST CENTER)

NOTE : COST CENTER CREATION IS ALLOWED ONLY WHEN THE LOGICAL SYSTEM OF THE CURRENT CLIENT IS

SO BEFORE CREATING THE COST CENTER, CHANGE THE LOGICAL SYSTEM NAME OF CLIENT 800 FROM SENDOR TO

5. Distributing the Master Data Via Standard IDocs

We Never Compromise In Quality. Would You?



SAVE it. Cost Center 786 is Created in 800(SENDOR).

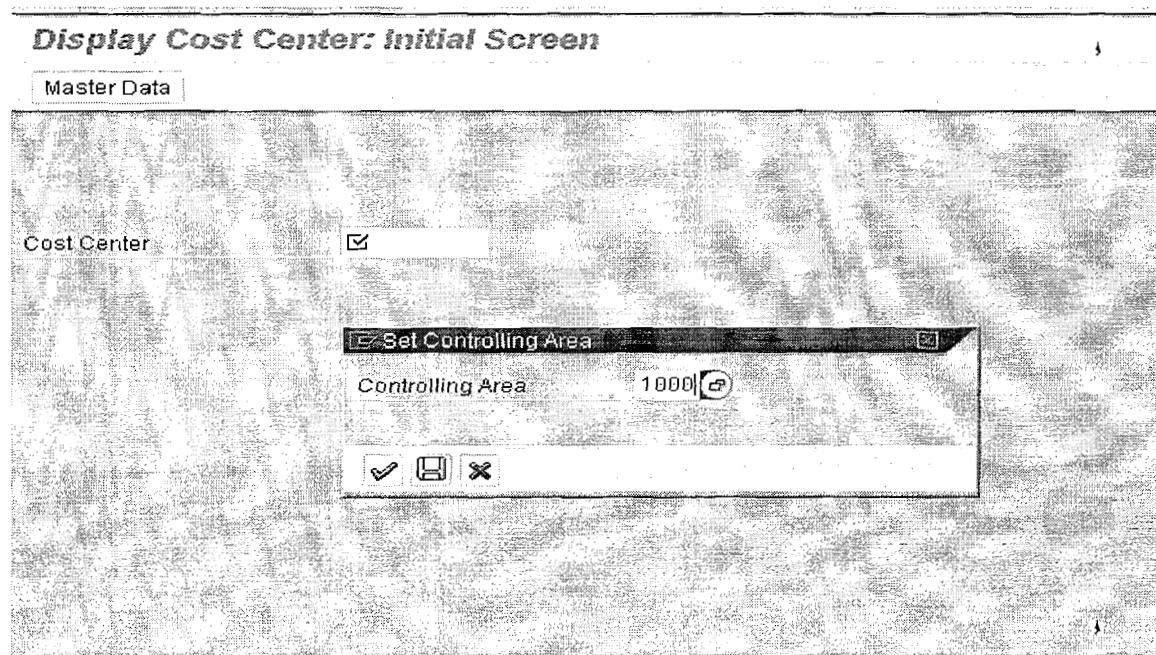
5. Distributing the Master Data Via Standard IDocs

We Never Compromise In Quality. Would You?

Now Let us request the Cost Center 786 From RECEIVER Sys and also Make sure that it is Received at RECEIVER and Also Posted (Created) Successfully.

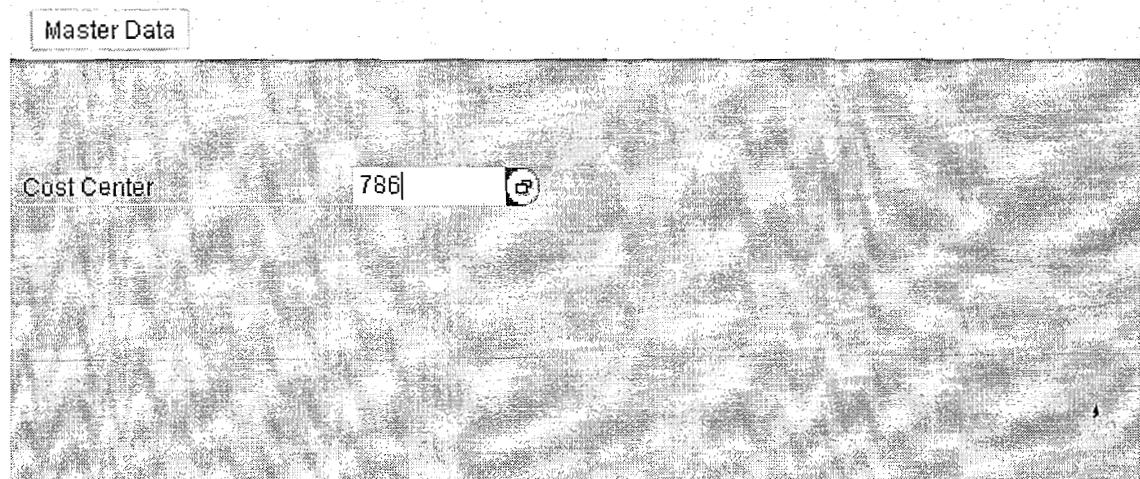
Before Request, Check the Cost Center at RECEIVER and Make sure that it is not available(Created) And After Requesting it should be Created Successfully.

Execute KS03 At RECEIVER System(810).



ENTER

Display Cost Center: Initial Screen

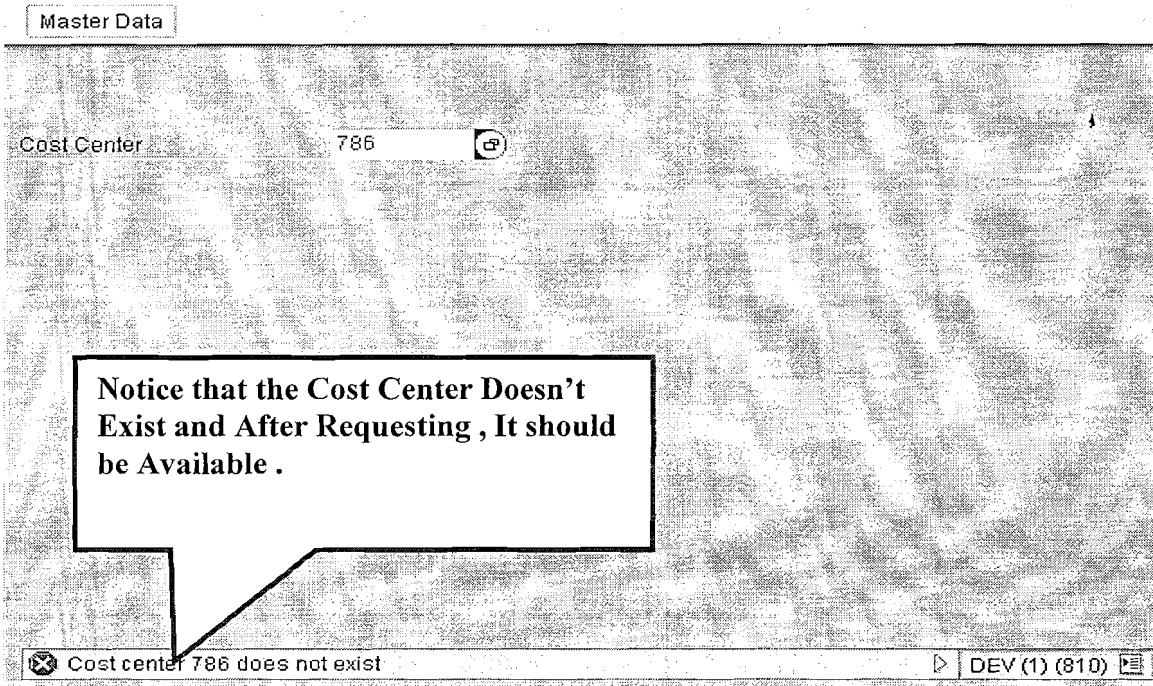


ENTER

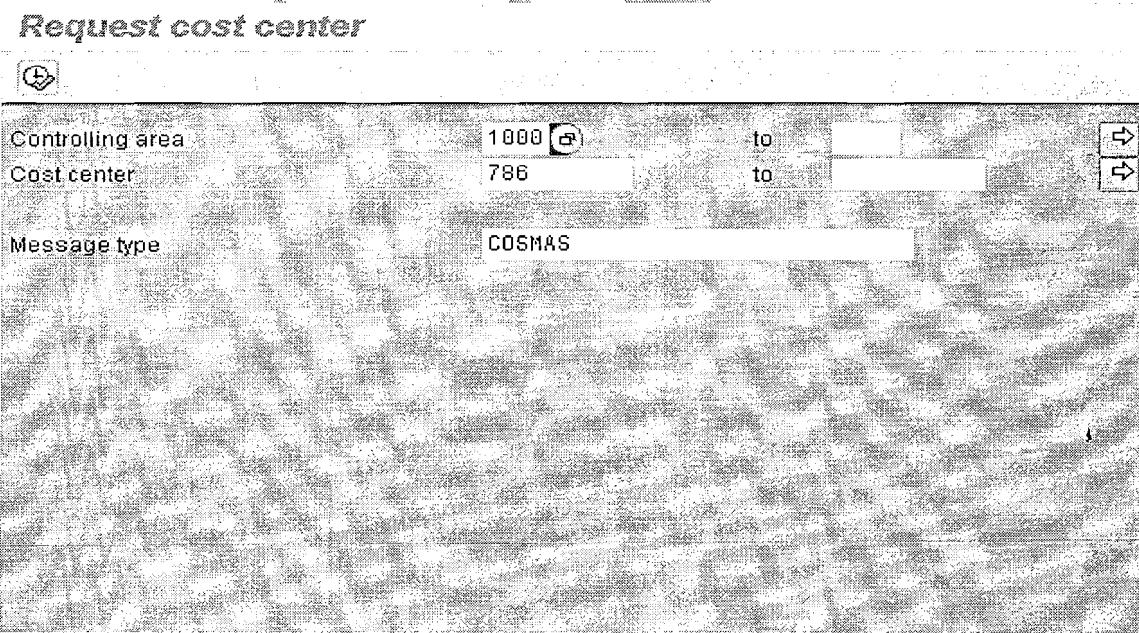
5. Distributing the Master Data Via Standard IDocs

We Never Compromise In Quality. Would You?

Display Cost Center: Initial Screen

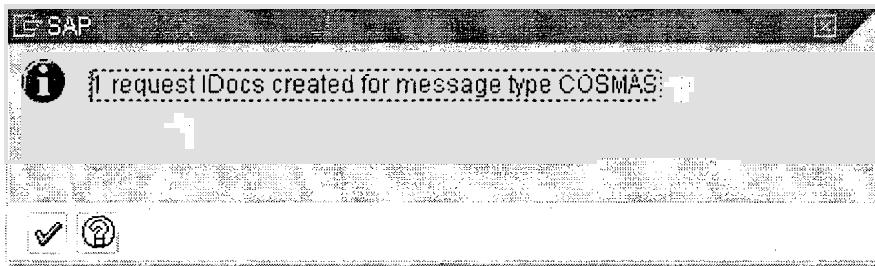


Requesting (Fetching/Pulling) Cost Center: EXECUTE BD17(Request Cost Center) at RECEIVER Sys(810)



5. Distributing the Master Data Via Standard IDocs

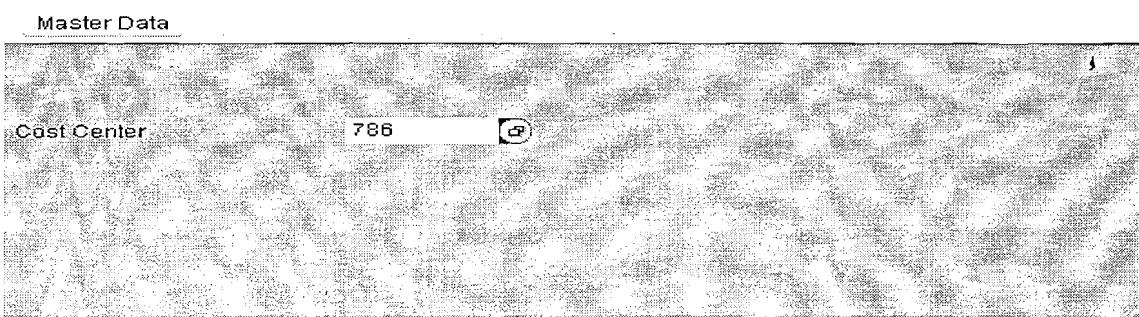
We Never Compromise In Quality. Would You?



Check For the Successful Cost Center Creation , If Not Created then Check the IDoc Status to identify the reason to fail.

EXECUTE KS03(Display Customer) at RECEIVER Sys(810)

Display Cost Center: Initial Screen



5. Distributing the Master Data Via Standard IDocs

We Never Compromise In Quality. Would You?

Display Cost Center: Basic Screen

Drilldown

Cost Center	786	EMAX TRAININGS	
Controlling Area	1000	CO Europe	
Valid From	11.02.2008	to	31.12.9999

Basic data Control Templates Address Communication History

Names

Name	EMAX TRAININGS
Description	SW TRAINING DIVISION

Basic data

Person Responsible	Mr.Rama Rao	
Department		
Cost Center Category	E	Development
Hierarchy area	H-AC410	
Company Code	1000	IDES AG
Business Area	9900	Corporate Other
Currency	EUR	
Profit Center		

Congratulations! Cost Center 786 is Created Successfully in RECEIVER (810) System .

5. Distributing the Master Data Via Standard IDocs

We Never Compromise In Quality. Would You?

Summary Of Fetch Cost Center :

The IDocs to be Exchanged(Transferred) between SENDOR and RECEIVER- Which gives the Actual Status Of IDocs

- 1)Request COSFET - Status Code(03-Dispatch OK) at RECEIVER.
- 2)Post COSFET - Status Code (53 – Posted Successfully) at SENDOR.
- 3)Send COSMAS -Status Code(03-Dispatch OK) at SENDOR.
- 4)Post COSMAS - Status Code (53 – Posted Successfully) at RECEIVER.

1) REQUEST for Cost Center

IDoc display		Technical short info
<input type="checkbox"/> Doc 0000000000058003		Direction 1 Outbox
<input type="checkbox"/> Control Rec.		Current status 03 COO
<input type="checkbox"/> Data records	Total number: 000003	Basic type ALEREQ01
<input type="checkbox"/> <input type="checkbox"/> E1ALER1	Segment 000001	Extension
<input type="checkbox"/> E1ALEQ1	Segment 000002	Message type COSFET
<input type="checkbox"/> <input type="checkbox"/> E1ALEQ1	Segment 000003	Partner no. SENDOR
<input type="checkbox"/> Status records	Data passed to port O1	Partn.Type LS
<input type="checkbox"/> 03		Port A0000000011
<input type="checkbox"/> <input type="checkbox"/> IDoc sent to O3		
<input type="checkbox"/> 30	IDoc ready for dispatch	
<input type="checkbox"/> 01	IDoc generated	
Content of selected segment		
<input type="checkbox"/> Fld name	<input type="checkbox"/> Fld cont.	
HESSTYP	COSMAS	
HESSTYP40	COSMAS	

EXECUTE WE02 For COSFET at RECEIVER , Direction – 01(Outbound).

2) Post COSFET at SENDOR

IDoc display		Technical short info
<input type="checkbox"/> Doc 0000000000524753		Direction 2 Inbox
<input type="checkbox"/> Control Rec.		Current status 53 COO
<input type="checkbox"/> Data records	Total number: 000003	Basic type ALEREQ01
<input type="checkbox"/> <input type="checkbox"/> E1ALER1	Segment 000001	Extension
<input type="checkbox"/> E1ALEQ1	Segment 000002	Message type COSFET
<input type="checkbox"/> <input type="checkbox"/> E1ALEQ1	Segment 000003	Partner no. RECEIVER
<input type="checkbox"/> Status records		Partn.Type LS
<input type="checkbox"/> 53	Application document post	Port SAPDEV
<input type="checkbox"/> 62	IDoc passed to application	
<input type="checkbox"/> 64	IDoc ready to be transferred	
<input type="checkbox"/> 50	IDoc added	
Content of selected segment		
<input type="checkbox"/> Fld name	<input type="checkbox"/> Fld cont.	
HESSTYP	COSMAS	
HESSTYP40	COSMAS	

EXECUTE WE02 For COSFET at SENDOR , Direction – 02(INbound).

3)SEND COSMAS (Cost Center)

EXECUTE WE02 For COSMAS at SENDOR(800) , Direction – 01(Outbound).

IDoc display		Technical short info
<input type="checkbox"/> Doc 00000000005247		Direction 1 Outbox
<input type="checkbox"/> Control Rec.		Current status 03 COO
<input type="checkbox"/> Data records	Total number: 000002	Basic type COSMAS01
<input type="checkbox"/> <input type="checkbox"/> E1CSKSM	Segment 000001	Extension
<input type="checkbox"/> E1CSKTM	Segment 000002	Message type COSMAS
<input type="checkbox"/> Status records	Data passed to port OK	Partner no. RECEIVER
<input type="checkbox"/> 03		Partn.Type LS
<input type="checkbox"/> <input type="checkbox"/> IDoc sent to O3		Port A0000000035
<input type="checkbox"/> 30	IDoc ready for dispatch (AL)	
<input type="checkbox"/> 01	IDoc generated	
Content of selected segment		
<input type="checkbox"/> Fld name	<input type="checkbox"/> Fld cont.	
HSGFN	005	
HANDT	800	
KOKRS	1000	
KOSTL	0000000786	
DATB1	99991231	
DATKB	200896211	
ERSDA	20000211	
USNAM	SAPUSER	
BKZER	X	

4) Post COSMAS (Cost Center)

Execute WE02 For COSMAS at RECEIVER(810),Direction02(INbound).

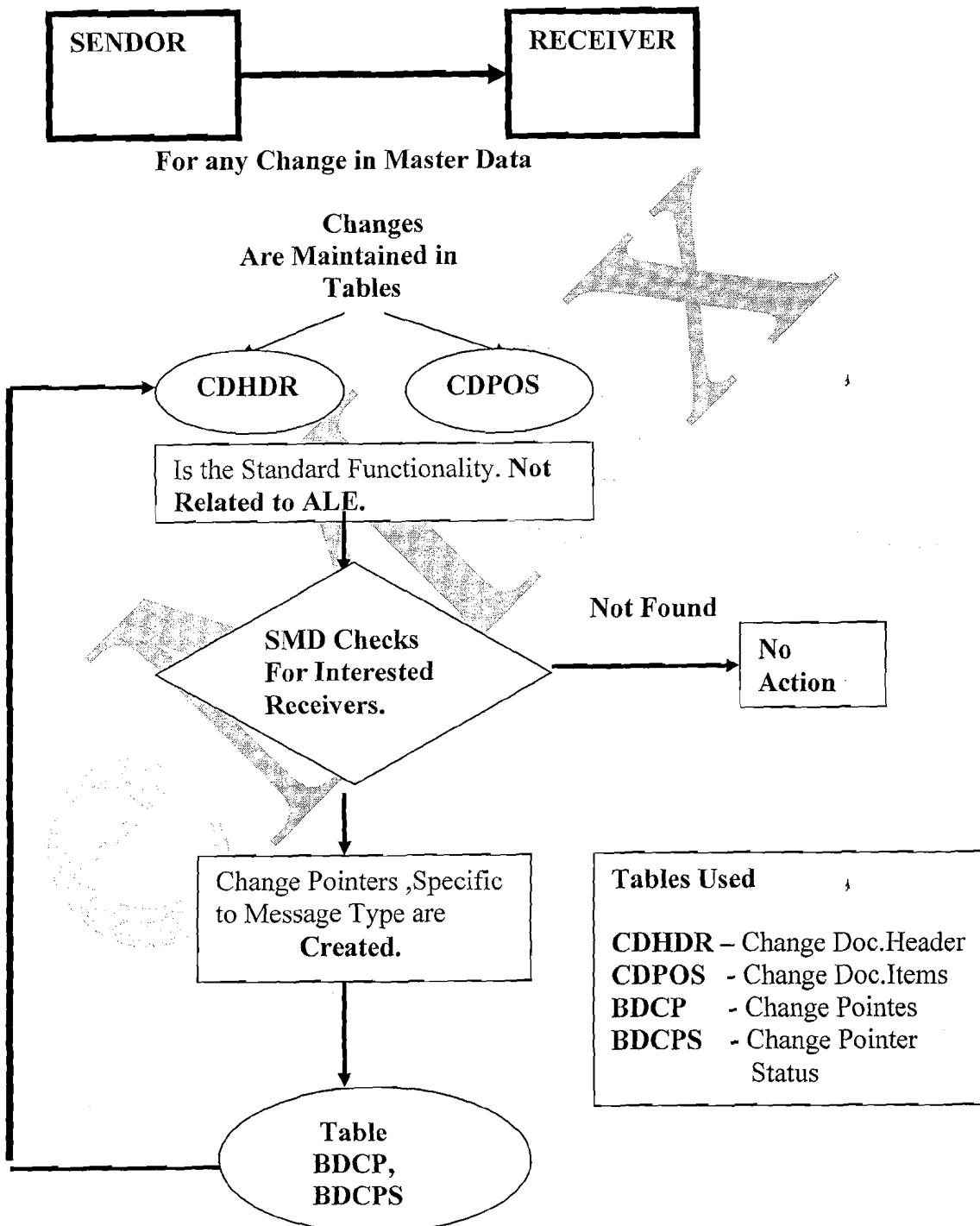
IDoc display		Technical short info
<input type="checkbox"/> Doc 000000000063019		Direction 2 Inbox
<input type="checkbox"/> Control Rec.		Current status 53 COO
<input type="checkbox"/> Data records	Total number: 000002	Basic type COSMAS01
<input type="checkbox"/> <input type="checkbox"/> E1CSKSM	Segment 000001	Extension
<input type="checkbox"/> E1CSKTM	Segment 000002	Message type COSMAS
<input type="checkbox"/> Status records		Partner no. T90CLH1999
<input type="checkbox"/> 62	Application document post	Partn.Type LS
<input type="checkbox"/> 62	IDoc passed to application	Port SAPDEV
<input type="checkbox"/> 61	IDoc ready to be transferred	
<input type="checkbox"/> 50	IDoc added	
Content of selected segment		
<input type="checkbox"/> Fld name	<input type="checkbox"/> Fld cont.	
HSGFN	005	
HANDT	800	
KOKRS	1000	
KOSTL	0000000786	
DATB1	99991231	
DATKB	200896211	
ERSDA	20000211	
USNAM	SAPUSER	
BKZER	X	
PKZER	X	

5. Distributing the Master Data Via Standard IDocs

We Never Compromise In Quality. Would You?

3) Change Pointers (Send Changes Only):

Send Changes Only (Change Pointers Technique)



5. Distributing the Master Data Via Standard IDocs

We Never Compromise In Quality. Would You?

NOTE :

To Generate Any IDoc From Change Pointers technique, The Set of tables to be accessed is same i.e BDCP,BDCPS,CDHDR and CDPOS. So that Only One Outbound Program(RBDMIDOC) is enough to generate any IDOC(Customer, Vendor, Material...) from Change Pointers.

NOTE :

Outbound Program RBDMIDOC(Tcode – BD21) , Checks for the Change Pointers for the given Message type in BDCP and also the status in BDCPS if Changes are not yet Sent then it generates the IDocs only with those Changes. And After Generating IDocs it also Updates the Status of Change Pointers in BDCPS . Because this program always make sure that Only one IDoc is generated with all the changes until we execute this Outbound Program.

Change Pointers Specific Configuration :

These Configurations are required Only at Outbound System, i.e along with Generic Outbound Configurations

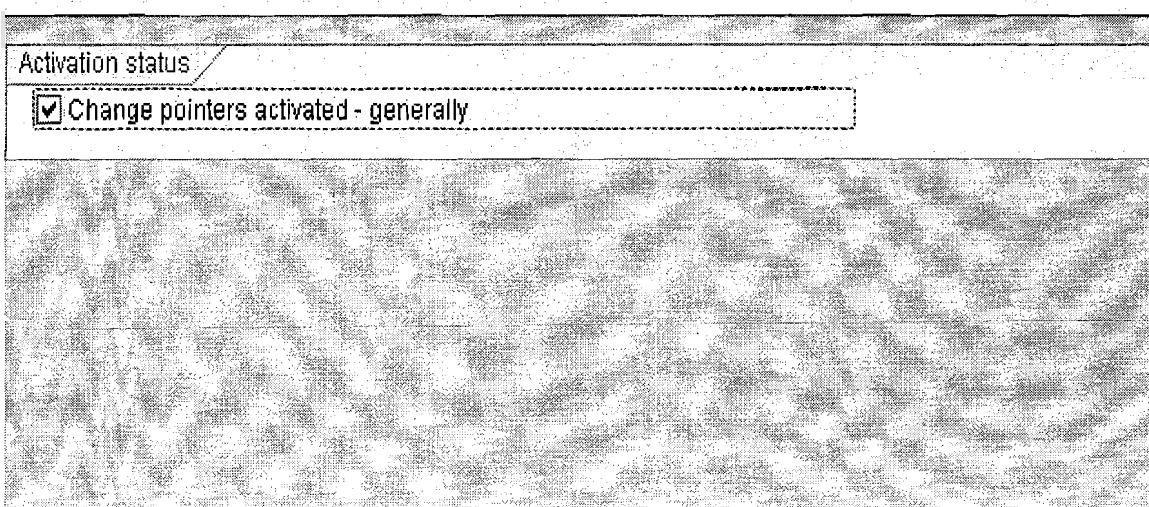
Such as Distribution Model – BD64
 Outbound Partner Profile – WE20

No Change Pointers Specific Settings are required at Inbound System, Because IDoc is Generated at Outbound System by considering the Change Pointers and where as Inbound as Process the IDoc as it is.

LOGON to SENDOR System

- 1) EXECUTE BD61, Activate Change Pointers Globally(Generally).

Activate Change Pointers Generally



Select the Checkbox and SAVE it.

5. Distributing the Master Data Via Standard IDocs

We Never Compromise In Quality. Would You?

2) Enable Change Pointers for a Message type

EXECUTE BD50.

Change View "Activate Change pointers for Message Type": Overview	
Messg.Type	active
COSMAS	<input checked="" type="checkbox"/>
CRECOR	<input type="checkbox"/>
CREMAS	<input type="checkbox"/>
DANGEROUSGOOD	<input type="checkbox"/>
DEBCOR	<input type="checkbox"/>
DEBMAS	<input type="checkbox"/>
ECMMAS	<input type="checkbox"/>
ECMREV	<input type="checkbox"/>
GLCORE	<input type="checkbox"/>
GLMAST	<input type="checkbox"/>
HRMD_A	<input type="checkbox"/>
HRMD_ABA	<input type="checkbox"/>
HRMD_B	<input type="checkbox"/>
INFREC	<input type="checkbox"/>

Check the Message Type – Here it is COSMAS

and SAVE it.

3) Specify the Fields for Which Change Pointers are to be Written(BD52)

Note: For Standard Master Data Objects Such as Cost Centers, Material, Customers and Vendor Objects, SAP already provides a list of fields for which change Pointers are written.

If you are happy with those fields, you can SKIP this Step.

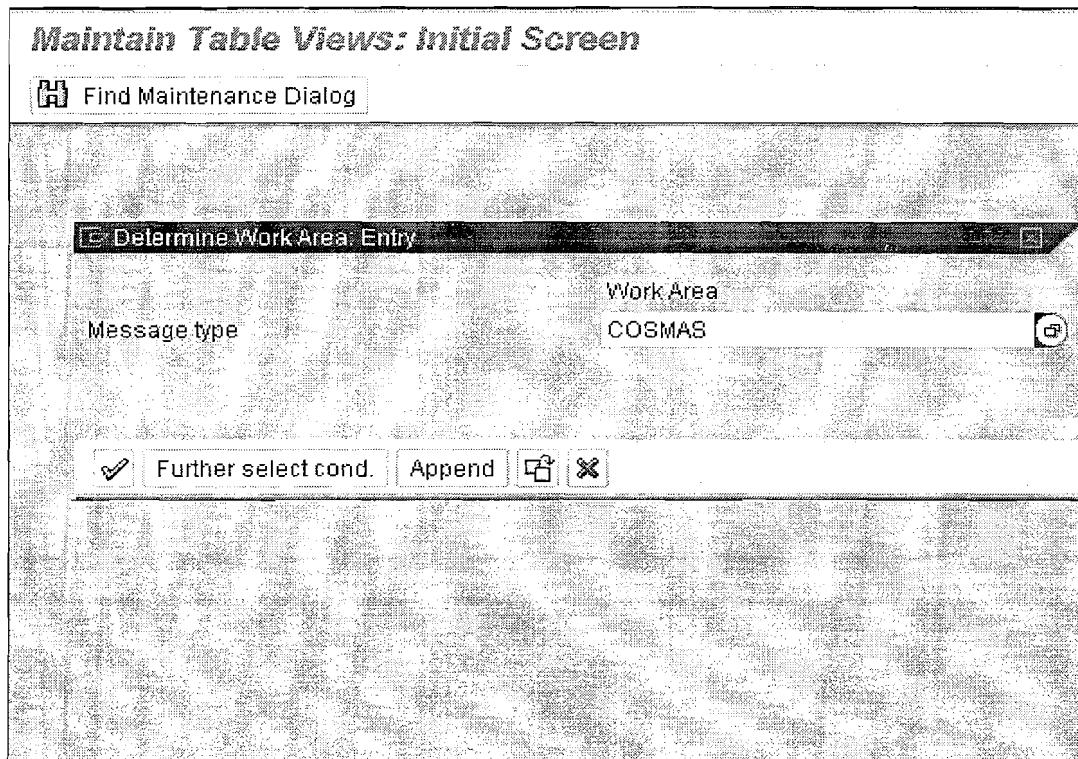
If you are not interested with certain fields we can ignore by deselecting and new entries can also be added .

Note : In Realtime, Generally We Skip this, Because SAP Already includes all the Mandatory Fields.

5. Distributing the Master Data Via Standard IDocs

We Never Compromise In Quality. Would You?

EXECUTE BD52 to activate the Change Pointers for Message type and it's Fields.



ENTER THE MESSAGE TYPE (COSMAS) AND PRESS ENTER.

The screenshot shows the 'Change View "Change document items for message type": Overview' screen. At the top, there are buttons for 'New Entries' and other navigation icons. Below is a table titled 'Change document items for message type'.

Object	Table Name	Field Name
KOSTL	CSKSB	MBTEI
KOSTL	CSKSB	CRED
KOSTL	CSKSB	BKZER
KOSTL	CSKSB	BKZKP
KOSTL	CSKSB	BKZKS
KOSTL	CSKSB	BKZOB
KOSTL	CSKSB	BUKRS
KOSTL	CSKSB	DATAB
KOSTL	CSKSB	DATBI
KOSTL	CSKSB	DATLT
KOSTL	CSKSB	ERSDA
KOSTL	CSKSB	ETYPE
KOSTL	CSKSB	GSSBR
KOSTL	CSKSB	JV_JIBCL
KOSTL	CSKSB	JV_JIBSA
KOSTL	CSKSB	KEY
KOSTL	CSKSB	KHINR
KOSTL	CSKSB	KOKRS

5. Distributing the Master Data Via Standard IDocs

We Never Compromise In Quality. Would You?

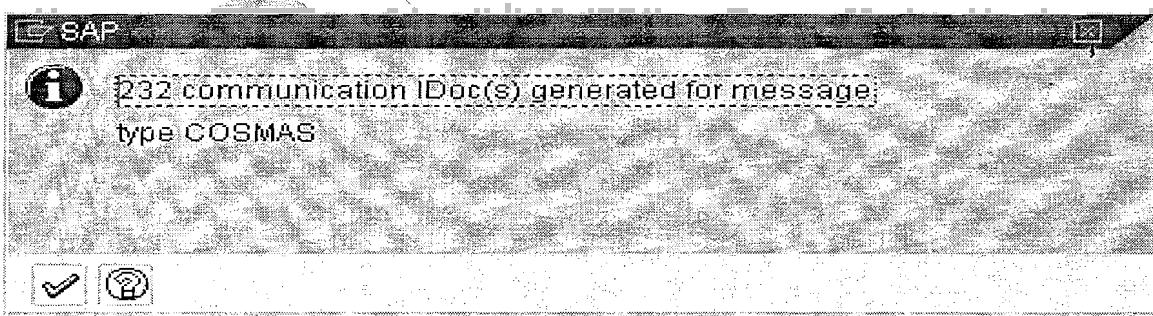
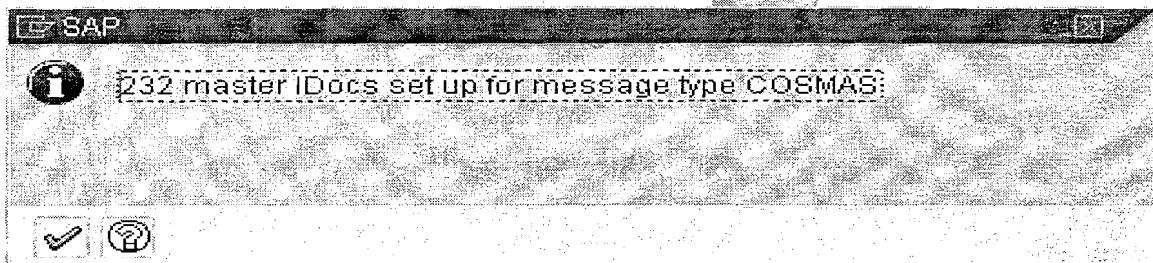
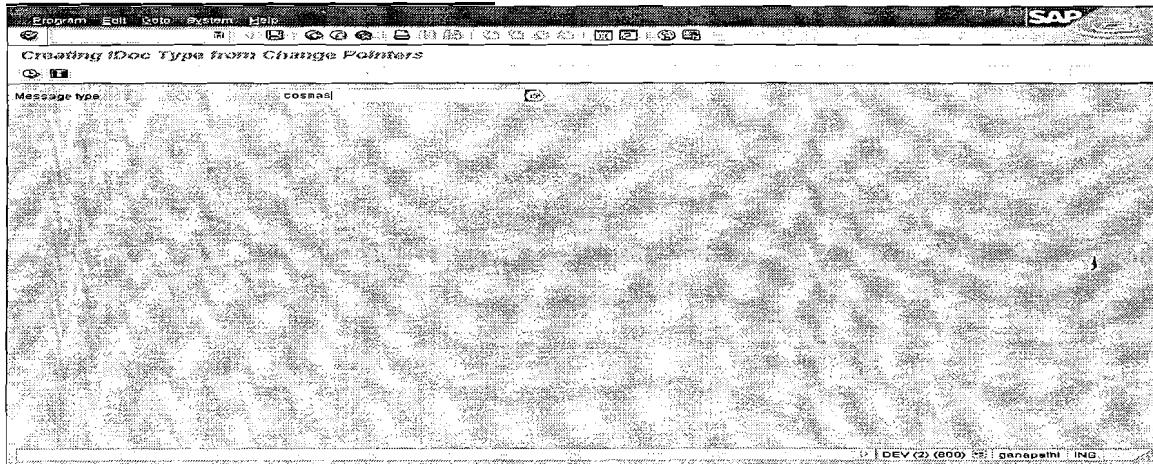
To Add Additional Fields New Entries AND Add ,

To Delete , Select the Entry to be deleted, .

Testing :

EXECUTE RBDMIDOC Program

CASE 1 : Execute for the First time



Note : Notice that there are many IDOcs generated when we run the Program RBDMIDOC for first time.

CASE 2 : Run the Program with No Changes in Cost Center Master Data

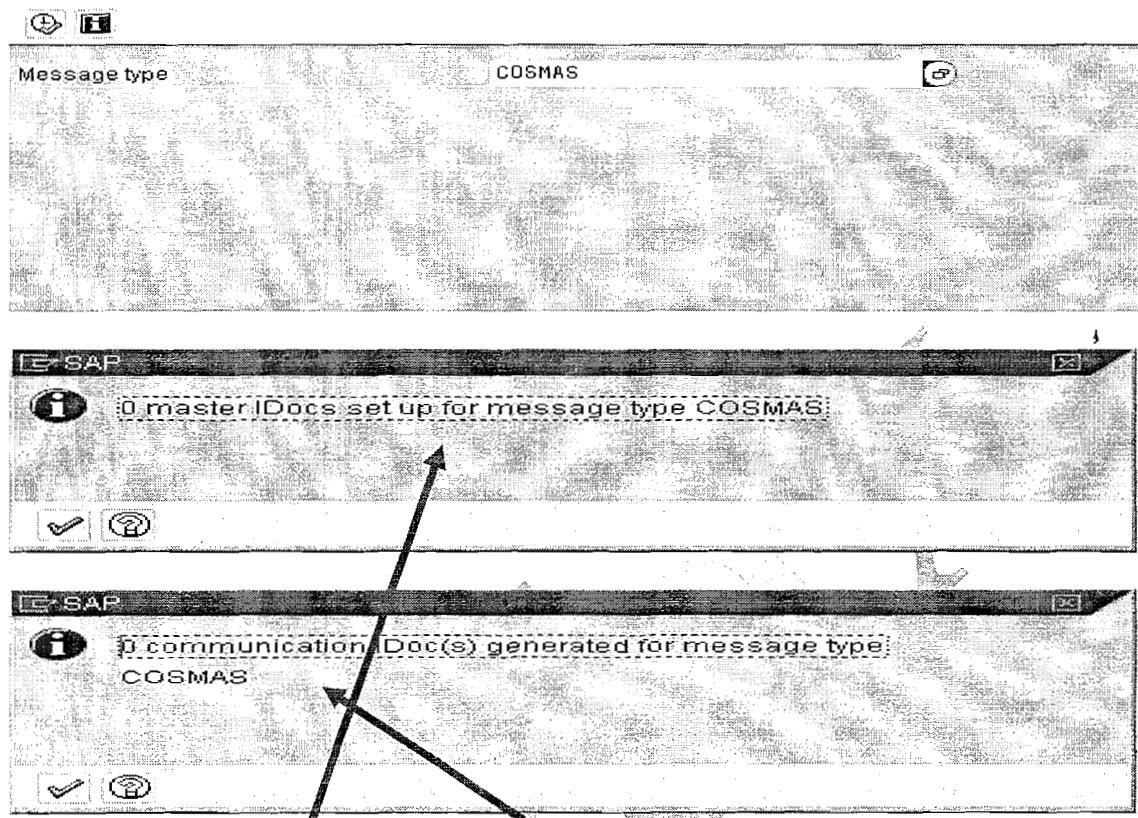
Run the Same Program Again , Since All the Changes are already sent, No IDOCs should be Generated.

5. Distributing the Master Data Via Standard IDocs

We Never Compromise In Quality. Would You?

EXECUTE RBDMIDOC Program

Creating IDoc Type from Change Pointers



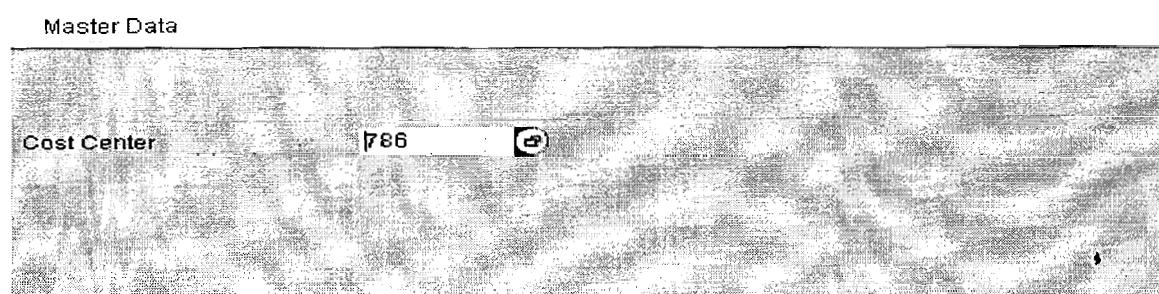
Note : Notice that No Master and Communication IDOCs are Generated.

CASE 3 : Run the Program, by changing some Cost Centers :

Change Some the Data Of Some Cost Centers , and Execute RBDMIDOC and Make Sure that IDocs are generated for the Changed Cost Centers.

Execute KS02 to Change Cost Centers

Change Cost Center: Initial Screen



5. Distributing the Master Data Via Standard IDocs

We Never Compromise In Quality. Would You?

Change Cost Center: Basic Screen

Drilldown

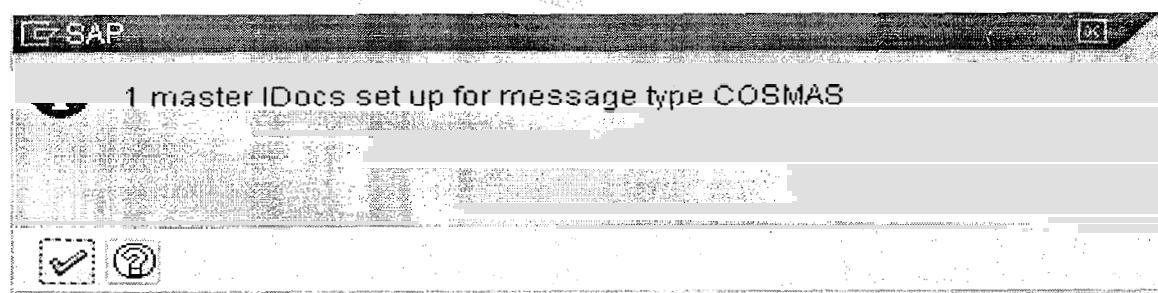
Cost Center:	786	EMAX TRAININGS																															
Controlling Area:	1000	CO_Europe																															
Valid From:	11.02.2008	to	31.12.9999																														
Basic data Control Templates Address Communication History																																	
<table border="1"><tr><td>Names</td></tr><tr><td>Name: IMAX TRAININGS</td></tr><tr><td>Description: SWV TRAINING DIVISION</td></tr><tr><td colspan="2">Basic data</td></tr><tr><td>Person Responsible:</td><td>Mr. Ganapati Adimulam</td></tr><tr><td>Department:</td><td></td></tr><tr><td>Cost Center Category:</td><td>E</td><td>Development</td></tr><tr><td>Hierarchy area:</td><td>H-AC410</td><td>Training AC410</td></tr><tr><td>Company Code:</td><td>1000</td><td>IDES AG</td></tr><tr><td>Business Area:</td><td>9900</td><td>Corporate Other</td></tr><tr><td>Functional Area:</td><td>EUR</td><td></td></tr><tr><td>Currency:</td><td></td><td></td></tr><tr><td>Profit Center:</td><td></td><td></td></tr></table>				Names	Name: IMAX TRAININGS	Description: SWV TRAINING DIVISION	Basic data		Person Responsible:	Mr. Ganapati Adimulam	Department:		Cost Center Category:	E	Development	Hierarchy area:	H-AC410	Training AC410	Company Code:	1000	IDES AG	Business Area:	9900	Corporate Other	Functional Area:	EUR		Currency:			Profit Center:		
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Business Area:	9900	Corporate Other																															
Functional Area:	EUR																																
Currency:																																	
Profit Center:																																	

Change Name and Person Responsible and SAVE it.
EXECUTE

Creating IDoc Type from Change Pointers

Execute (F8)

cosmas



CONGRATULATIONS! , One IDOC is Generated Because Only One Cost Center is Changed. To Check IDOC Contents , Execute WE02/WE05 .

6.Filtering

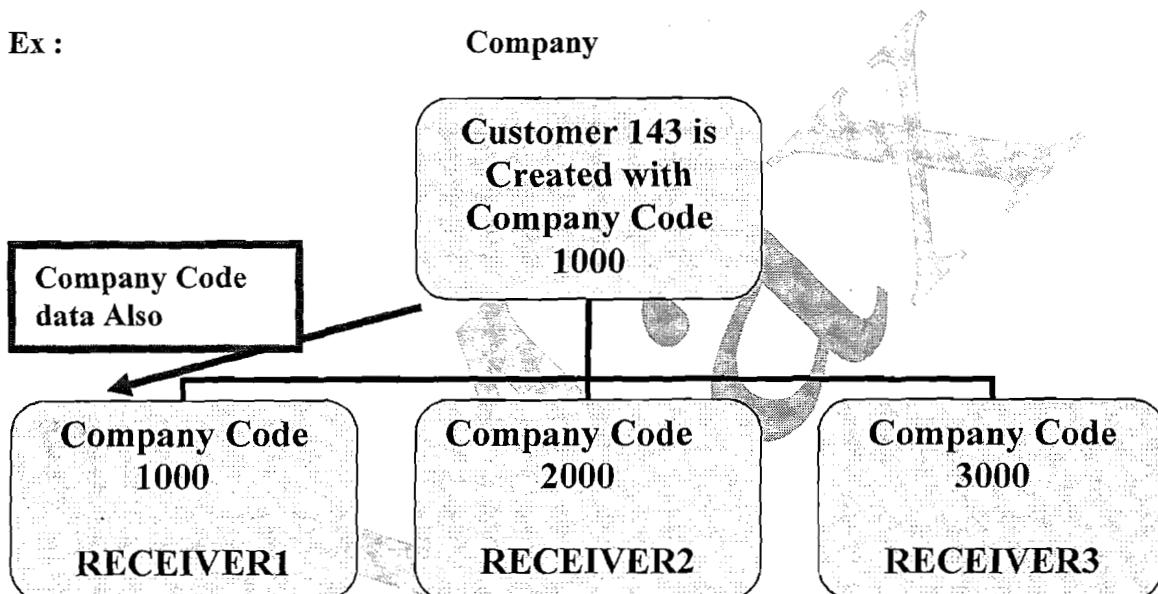
We Never Compromise in Quality. Would You ?

IDoc Filetering :

Filetering at IDOC Level Creates a Communication IDoc in which an Object's views are filtered out, based on the filters specified in the Distribution Model(BD64).

Business Scenario : A Company has 10 Individual Business Centers(Company Codes). Each Company Code Operates individually on its own SAP System. When ever a customer to be Created , all Company Codes need the General Data of the Customer and Company Code is to the Specific Company Code.

Ex :



Since Customer is from Company Code 1000, Distribute the Company Code Information Only to Company Code 1000 Sys and all other Information to all the Systems.

Note : In this Filtering , When a Master IDOC is Created, the IDOC Consults the Distribution Model and Determines whether any filter Objects are Specified for a receiver, If So, the Value in the filter object is Compared to Values in the Master IDOC's data records. If the value doesn't match, the data record is dropped in the Commuinication IDOC for the Receiver.

Note : SAP Already Provides some filter groups for each Standard Messages type , so that when we found the filter object for the required Message type , it is enough to Provide the Filter Values at Distribution Model Level.

6.Filtering

We Never Compromise in Quality. Would You ?



Note: Here Transfer the Company Code Information, Only when the Customer is Create in Company Code 1000.

Configuration required in Only at Distribution Model :

Display Distribution Model	
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Filter model display <input type="checkbox"/> Create model view <input type="checkbox"/> Add BAPI <input type="checkbox"/> Add message type	
Distribution Model	Description/technical name
Model views	
AL	AL . No short text exists
BBP_DII	BBP_DII . No short text exists
BC619_800	BC619_800 . No short text exists
BELCO	BELCO . No short text exists
BIT300_BP	BIT300_BP . No short text exists
CONSOLIDAT	CONSOLIDAT. No short text exists
D1Z_ID3	D1Z_ID3 . No short text exists
D1Z_ID3CLN	D1Z_ID3CLN. No short text exists
EBP300-R3	EBP300-R3 . No short text exists
HR_ORG_SEM	HR_ORG_SEM. No short text exists
LIS	LIS . No short text exists
LO215	LO215 . No short text exists
MARCUS	MARCUS . No short text exists
OSB_BUYER	OSB_BUYER . No short text exists
OSB_SUPPLY	OSB_SUPPLY. No short text exists
PFS	PFS . No short text exists
SUBSYSTEMS	SUBSYSTEMS. No short text exists
WMS	WMS . No short text exists
XI	XI . No short text exists
ZBV	ZBV . No short text exists
B2B_IDES 2.0B to IDES 4.6B	B2B_IDES
DE3 - KABA BENZING	DE3-KABA
DH3->ID3 & M13 <-> ID3	DH3->ID3
For All Master Data Distributions	ZGDEMO_ALL

Select the Distribution Model Which is already Created and Click On Add Message

Type Add message type

6.Filtering

We Never Compromise in Quality. Would You ?

Add Message Type

Model view	ZGDEMO_ALL
Sender	sendor
Receiver	RECEIVER
Message type	DEBMAS

DEBMAS -> Message type For Customer Master.

Distribution Model Changed

Distribution Model	Description/technical name
OSB_BUYER	OSB_BUYER . No short text exists
OSB_SUPPLY	OSB_SUPPLY . No short text exists
PFS	PFS . No short text exists
SUBSYSTEMS	SUBSYSTEMS . No short text exists
WMS	WMS . No short text exists
XI	XI . No short text exists
ZBV	ZBV . No short text exists
B2B 2.0B to IDES 4.6B	B2B_IDES
DE3 - KABA BENZING	DE3-KABA
DH3->ID3 & M13 <-> ID3	DH3->ID3
For All Master Data Distributions	ZGDEMO_ALL
800 Client	SENDOR
810 Client	RECEIVER
COSMAS	Master cost center
DEBMAS	Customer master data distribution
No filter set	

Currently No Filer Set.

Double Click On , to Set the Values for the Filters.

Change Filter

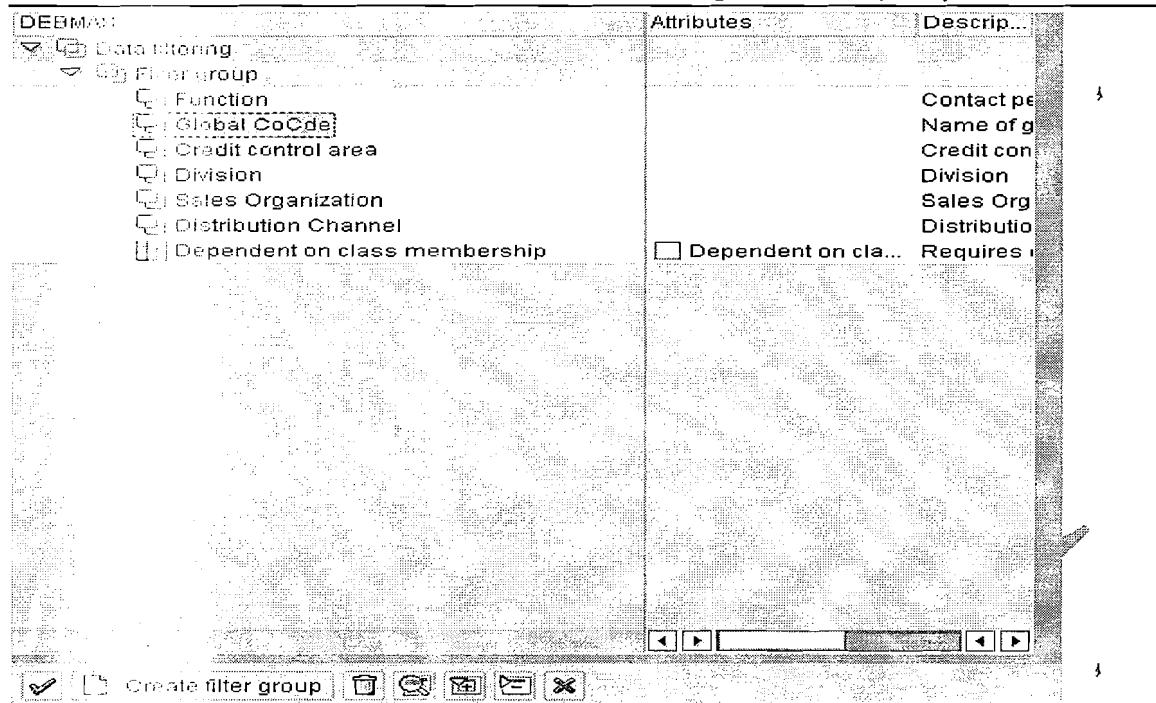
DEBMAS	Attributes	Descri...
Data filtering		

Create filter group Create filter group

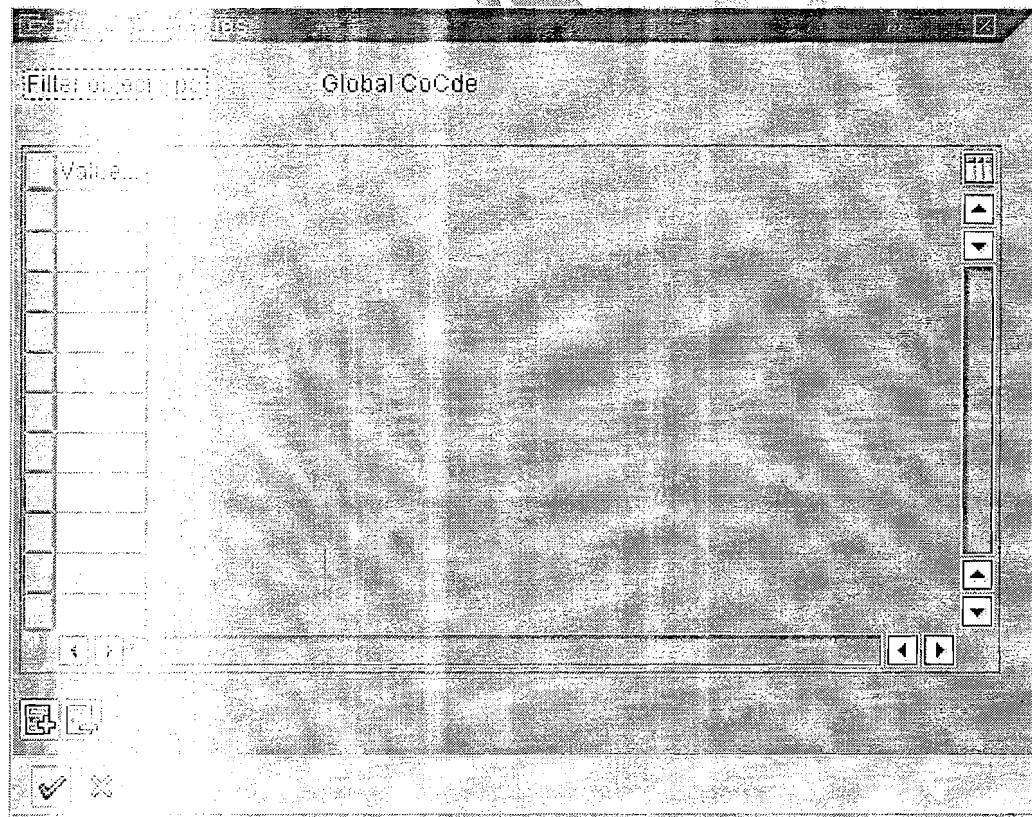
Click On Create filter group

6.Filtering

We Never Compromise in Quality. Would You ?



Double Click On Global CoCode

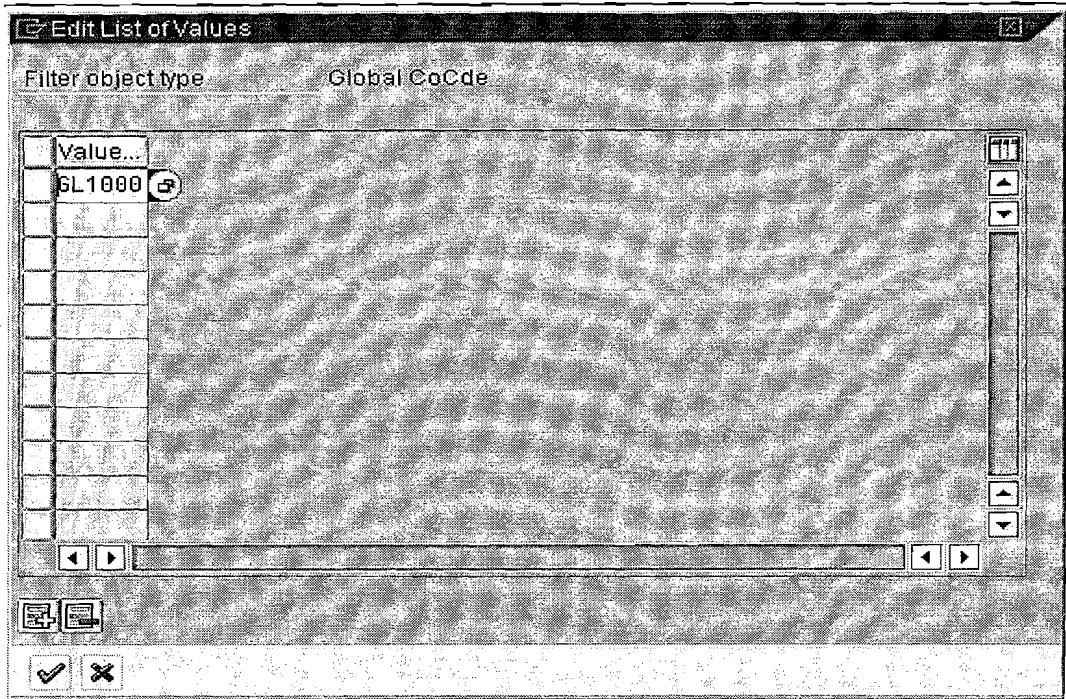


Click On Insert Rows and Enter Value Company Code GL1000(1000)

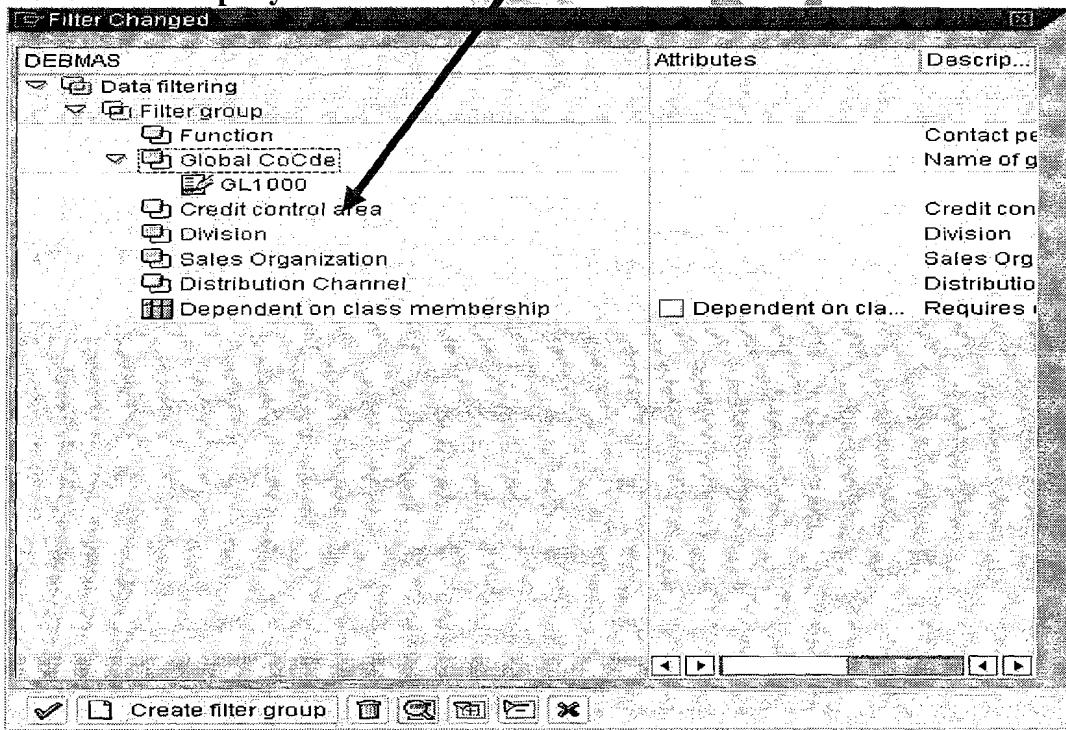
Page 4 of 21 By Ganapati Adimulam

6.Filtering

We Never Compromise in Quality. Would You ?



Notice the Company Code GL1000 is Added.



SAVE it.

6.Filtering

We Never Compromise in Quality. Would You ?

2 . Maintain the Outbound Partner Profile, for Message type DEBMAS

EXECUTE WE20 , Select the Partner type LS -> RECEIVER->

Create Outbound Parameters

Create outbound parameter

Partner profiles

Partner	Description
Part Type BP	Benefits provider
Part Type KU	Customer
Part Type LI	Vendor
Part Type LS	Logical system
APOCLNT800	APOCLNT800
B2B_IDES	BTB IDES IAC
B3TCLNT800	ID3 client 800
BC_CONSOL	KabaBenzing Ir
BC_DEMO	
BUYER188	CU4 client 800
CU4CLNT800	
D1ZCLNT800	
DTZ_800	Travel Expense
HR_TRAVEL	ID3 client 400
ID3CLNT400	ID3 client 800
ID3CLNT800	
ID3IDE8001	
ID3IDE8002	
M13CLNT800	M13 Client 800
OMOCENT800	
P13CLNT800	P13 Client 800
PFS_IDC_M	Logical System
PFS_IDC_T	Logical System
PRODUCTION	Productive syst
RECEIVER	810 Client
SALI_S	Sales system (
SEMCLNT800	
CRM on Line	

Partner no: RECEIVER 810 Client
Part Type: LS Logical system

Post processing: permitted agent Classification

Type: 0 Organizational unit
Agent: 50010120 EDI Department
Lang: EN English

Outbound parms

Partn.funct.	Message type	Message va...	MessageFu...	Test
	COSMAS			

Inbound parms

Partn.funct.	Message type	Message va...	MessageFu...	Test

Create outbound parameter

Partner profiles: Outbound parameters

Partner.no.	RECEIVER	810 Client
Partn.Type	LS	Logical system
Partn.funct.		
Message Type	DEBMAS	
Message code		
Message function		<input type="checkbox"/> Test
Outbound Options		
Receiver port	A000000035	
Output Mode	<input checked="" type="radio"/> Transfer IDoc immed. <input type="radio"/> Collect IDocs	
	<input type="radio"/> Start subsystem	<input checked="" type="radio"/> Do not start subsystem
IDoc Type		
Basic type	DEBMAS01	
Extension		
View		

6.Filtering

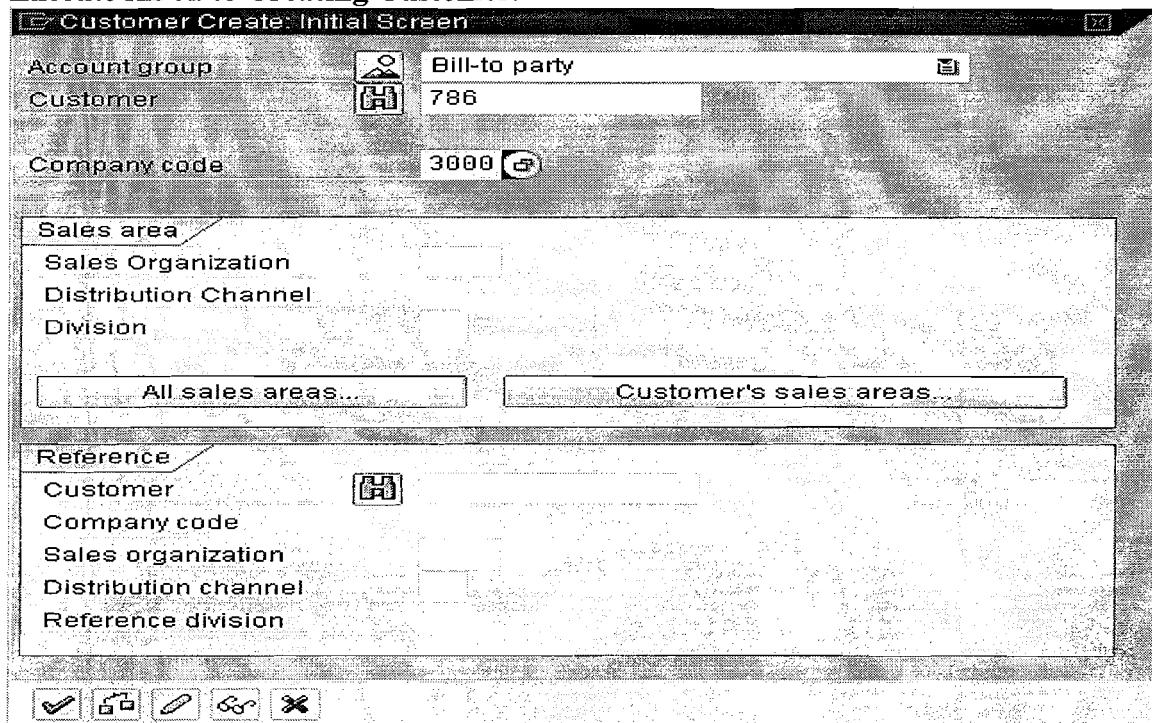
We Never Compromise in Quality. Would You ?

SAVE it.

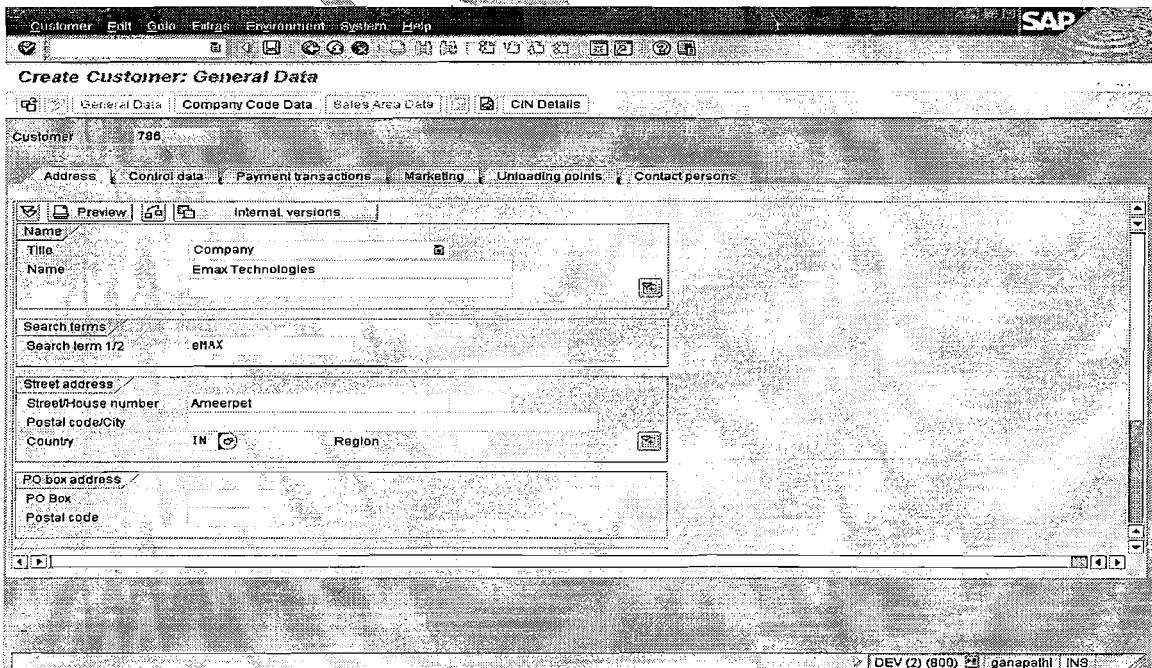
Testing :

Create a Customer in Company Code 3000.

Execute XD01 to Creating Customer.



ENTER



6.Filtering

We Never Compromise in Quality. Would You ?

The screenshot shows the SAP Customer Data entry screen. At the top, there are tabs for General Data, Company Code Data, Sales Area Data, and CIN Details. Below these, the Customer ID is set to 786 and the Company Code is set to 3000 IDES-US INC. There are several tabs at the bottom: Account management, Payment transactions, Correspondence, Insurance, and Withholding tax. The main area contains sections for Accounting Information, Interest calculation, Reference data, and a large empty space for notes.

SAVE it.

Test the Send Customer :

Execute BD12(Send Customer)

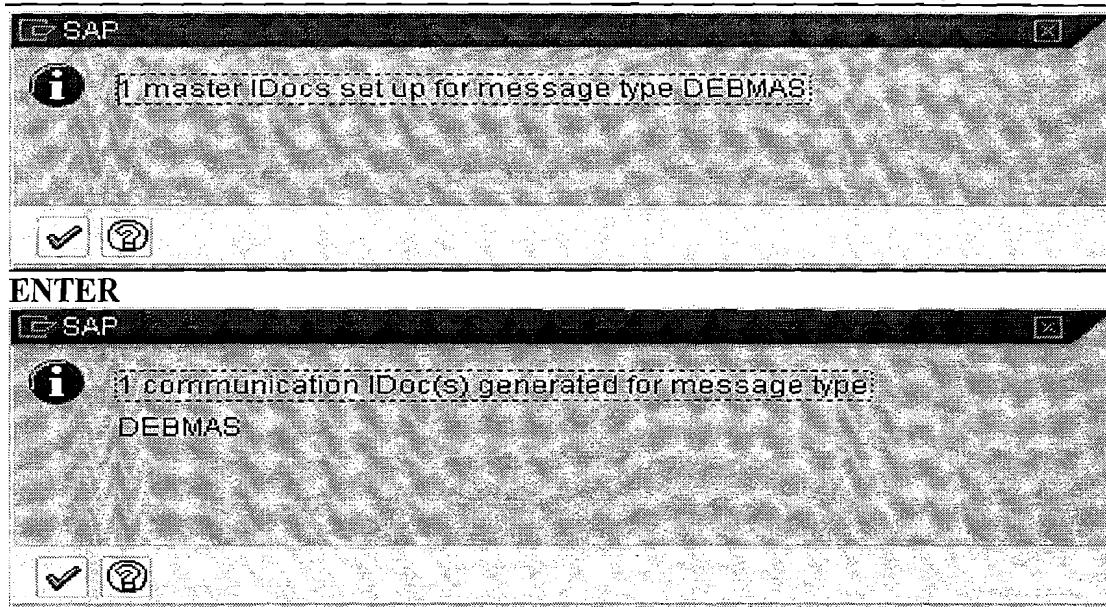
Send Customers

The screenshot shows the SAP BD12 configuration screen. It includes fields for Customer (786), Class (DEBMAS), Output type (RECEIVER), and Logical system (RECEIVER). Other sections include Parallel processing, Server group, and No. of customers per process (20).

EXECUTE IT.

6.Filtering

We Never Compromise in Quality. Would You ?



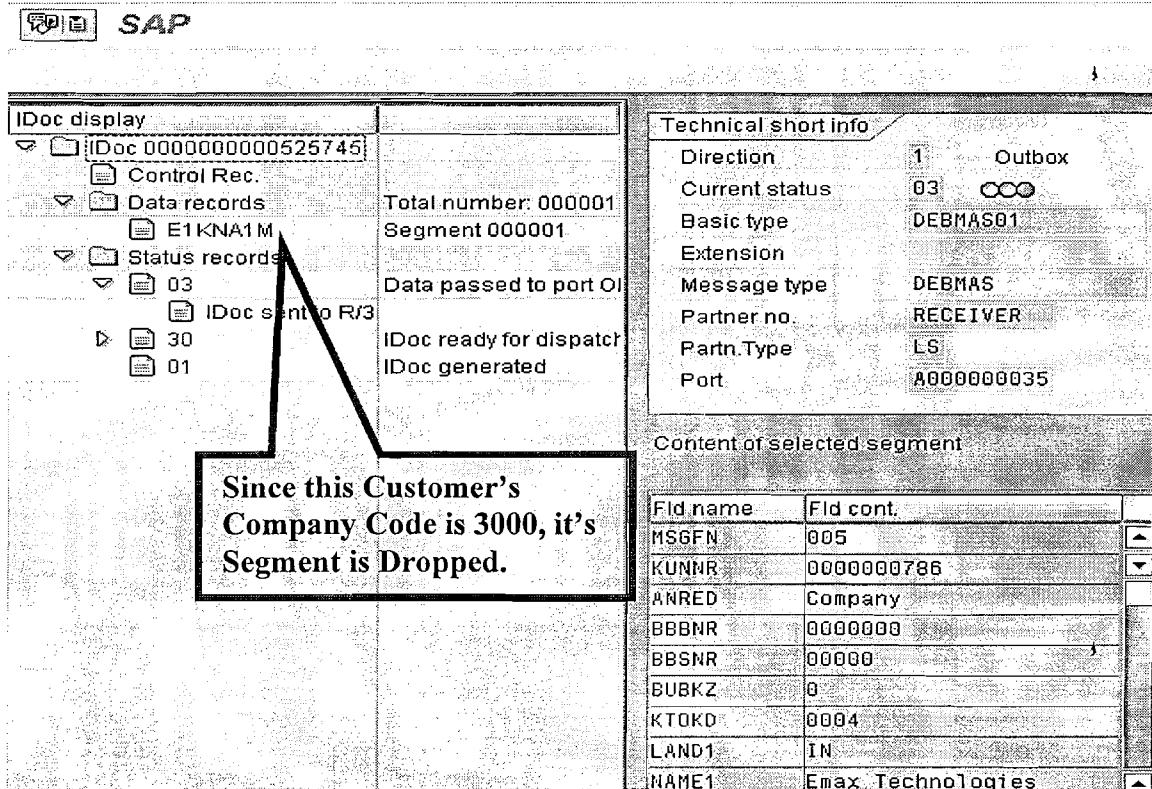
Check for the IDOC :
Executer WE05

IDoc list	
Default selectn	Addit.selectn
Time created	00:00:00 to 24:00:00
Creation Date	11.02.2008 to 11.02.2008
Last Changed at	00:00:00 to 24:00:00
Date of Last Change	
Direction	1
IDoc number	
Current Status	
Basic type	
Enhancement	
Logical message	DEBMAS
Message code	
Message function	
Partner Port	
Partner Number	RECEIVER
Partner Type	
Partner Function	

6.Filtering

We Never Compromise in Quality. Would You ?

Execute it.



CASE 2 : Send Customer From Company Code 1000 and Make Sure that Company Code data(Segment) is also Carried along with all Customer segments.

The screenshot shows the 'Send Customers' dialog. It has fields for Customer (1000), Class, Output type (DEBMAS), and Logical system (RECEIVER). Below these are sections for 'Parallel processing' (Server group, No. of customers per process 20) and a large processing area.

6.Filtering

We Never Compromise in Quality. Would You ?



ENTER



Check for the IDoc Status :

EXECUTE WE05

A screenshot of a SAP application window titled "IDoc list". The title bar says "SAP". The menu bar includes "Program", "Edit", "Goto", "System", and "Help". The main area shows a table of IDoc list results. The table has columns for various parameters like Time created, Creation Date, Last Changed at, Date of Last Change, Direction, IDoc number, Current Status, Basic type, Enhancement, Logical message, Message code, Message function, Partner Port, Partner Number, Partner Type, and Partner Function. One row in the table is highlighted with a yellow background, showing "DEBMAS" in the Logical message column. The status bar at the bottom right shows "DEV (2) (800) [ganapathi] OVR".

EXECUTE

6.Filtering

We Never Compromise in Quality. Would You ?

SAP

IDoc display

▽ IDoc 00000000000525748

- Control Rec.
- ▽ Data records
 - ▽ E1KNA1M
 - ▷ E1KNWVM
 - ▷ E1KNWVM
 - ▷ E1KNWVM
 - ▷ E1KNWVM
 - ▷ E1KNB1M
 - ▷ E1KNKAM
 - ▷ E1KNKKM
 - ▷ E1KNKAM
 - ▷ E1KNKKM
 - ▷ E1KNKKM
 - ▷ E1KNKAM
 - ▷ E1KNKKM
 - ▷ E1KNKAM
 - ▷ E1KNKKM
 - ▷ E1KNKKM
 - ▽ Status records
 - ▷ 3
 - ▷ 30
 - ▷ 01

Total number: 000037

Segment 000001

Segment 000002

Segment 000008

Segment 000017

Segment 000023

Segment 000030

Segment 000032

Segment 000033

Segment 000034

Segment 000035

Segment 000036

Segment 000037

Data passed to port OI

IDoc ready for dispatch

IDoc generated

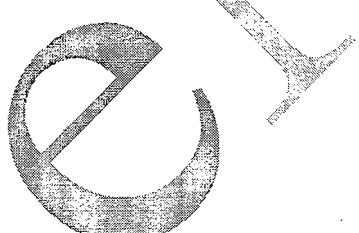
Technical short info

Direction	1	Outbox
Current status	03	OOO
Basic type	DEBMAS01	
Extension		
Message type	DEBMAS	4
Partner no.	RECEIVER	
Partn.Type	LS	
Port	A0000000035	

Content of selected segment

Flid name	Flid cont
MSGFN	005
BUKRS	GL1000
ZUAWA	002
BUSAB	D1
AKOMT	0000140000
TERM	ZB01
VZSKZ	02
ZINDT	00000000
ZTNRT	01

Since this Customer's Company Code is 1000, Segment is also Carried



6.Filtering

We Never Compromise in Quality. Would You ?

Segment Filtering

Creates a Communication IDoc in which Segments of a Particular type are Completely removed from the IDoc.

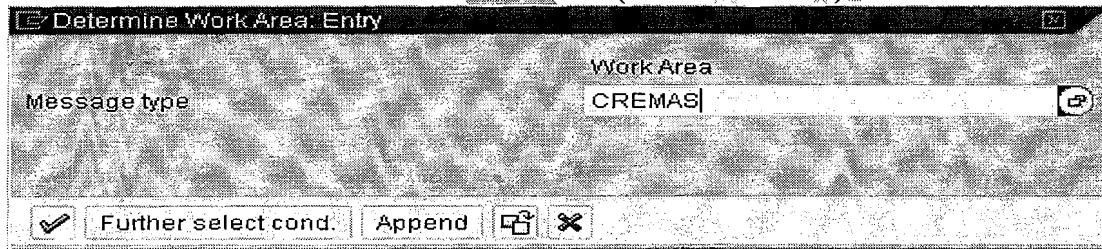
Note : The Difference between Segment Filtering and IDOC Filtering is In IDOC Filtering , Segments that do not contain relevant data for a receiving system are Filtered Out where as in Segment Filtering, a Segement of a Particular type is Completely removed from IDoc.

Note : In Segment Filtering, For Each Sendor , Receiver and Message type Combination , We Can Specify the List of segments to be dropped/removed. When a Master IDoc is created, it consults the Segment filters and removes any Unwanted Segments to create the Communication IDoc for a receiver.

Configuration Required :

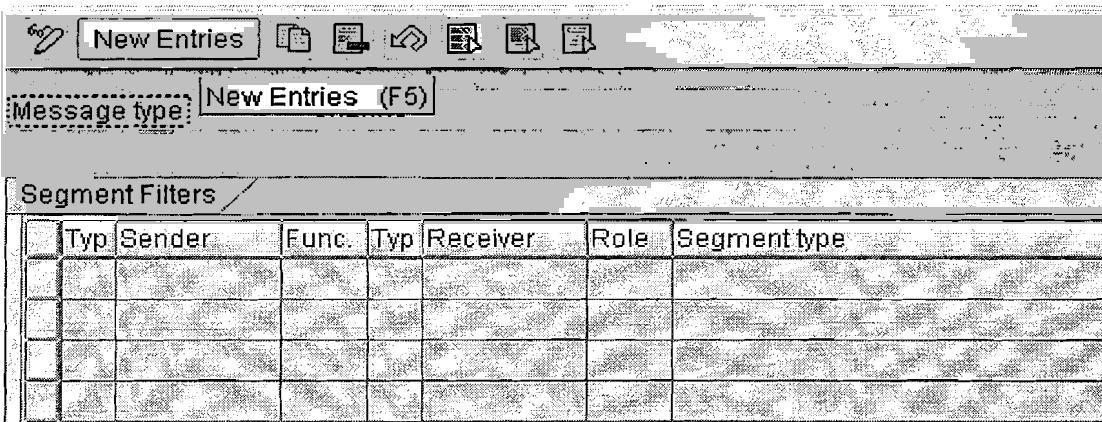
Execute BD56

ENTER THE MESSAGE TYPE CREMAS (Vendor Master)



ENTER

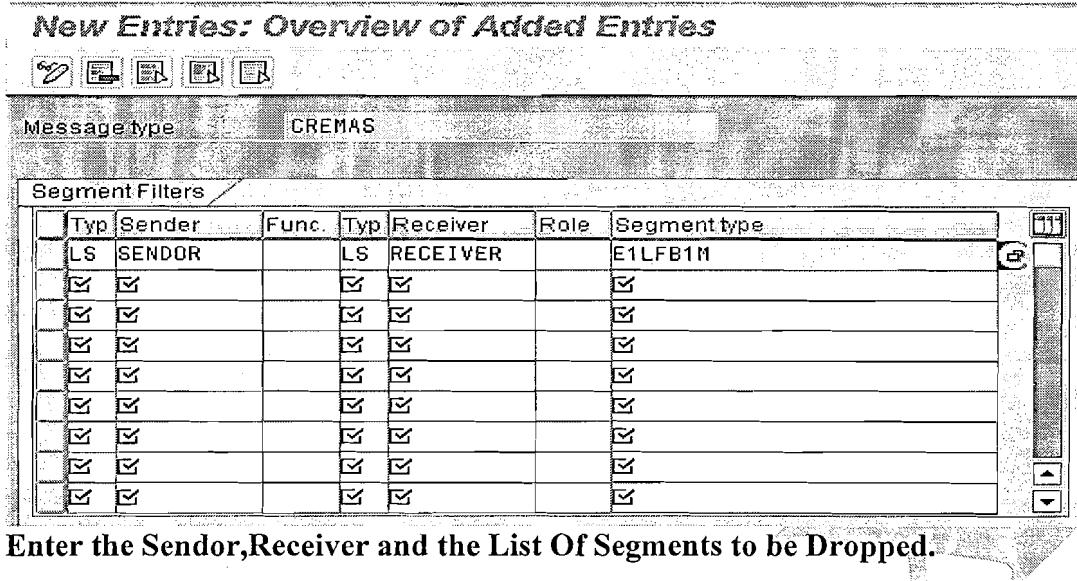
Change View "Segment Filters": Overview



New Entries

6.Filtering

We Never Compromise in Quality. Would You ?



Enter the Sendor,Receiver and the List Of Segments to be Dropped.

Note : Make Sure that Partner profiles should be Created Both SENDOR and RECEIVER in the System where the Segment Filtering is done.

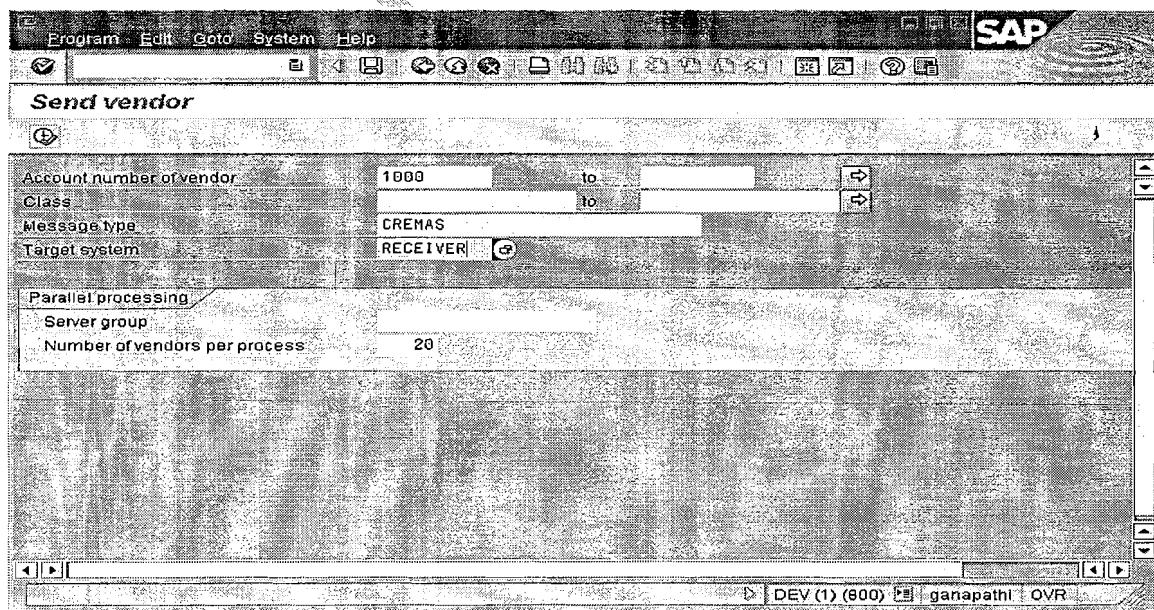
SAVE it.

Note : Make Sure that Distribution Model and Outbound Partner Profile is Also Maintained.

Here Segment E1LFB1(Company Code Data) is Dropped between SENDOR and RECEIVER.

Testing :

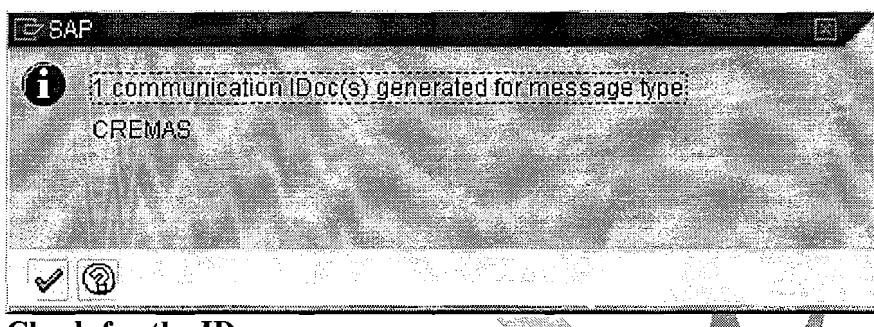
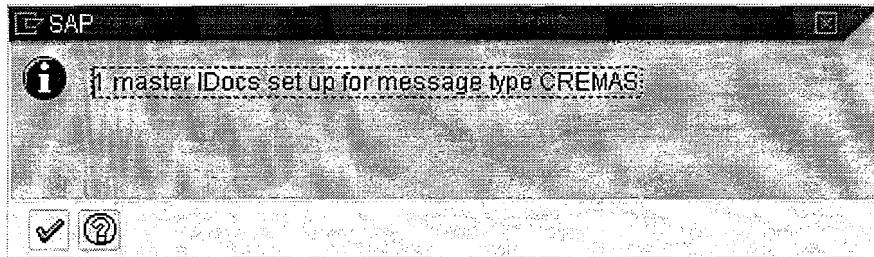
Execute BD14 (Send Vendor)



6.Filtering

We Never Compromise in Quality. Would You ?

Here Vendor 1000 , exists in Company Code 1000. But the Company Code Segment is dropped in the Segment Filtering.



**Check for the IDoc
IDoc list**

	Execute (F8)	Detail selectn	Addit.selectn	EDI sel.	
Time created	00:00:00			to 24:00:00	<input type="button" value="→"/>
Creation Date	11.02.2008			to 11.02.2008	<input type="button" value="→"/>
Last Changed at	00:00:00			to 24:00:00	<input type="button" value="→"/>
Date of Last Change				to	<input type="button" value="→"/>
Direction	1				<input type="button" value="→"/>
IDoc number				to	<input type="button" value="→"/>
Current Status				to	<input type="button" value="→"/>
Basic type				to	<input type="button" value="→"/>
Enhancement				to	<input type="button" value="→"/>
Logical message	CREMAS			to	<input type="button" value="→"/>
Message code				to	<input type="button" value="→"/>
Message function				to	<input type="button" value="→"/>
Partner Port				to	<input type="button" value="→"/>
Partner Number	RECEIVER	R		to	<input type="button" value="→"/>
Partner Type				to	<input type="button" value="→"/>
Partner Function				to	<input type="button" value="→"/>

6.Filtering

We Never Compromise in Quality. Would You ?

SAP

IDoc display

Notice that , Segment E1LFB1M Is Dropped.

Total number: 000011

Segment 000001
Segment 000002
Segment 000003
Segment 000005
Segment 000007
Segment 000010
Segment 000011

Control Rec.

Data records

E1LFA1M
E1LFM1M
E1LFM1M
E1LFM1M
E1LFM1M
E1LFBKM
E1LFBKM

Status records

03
30
01

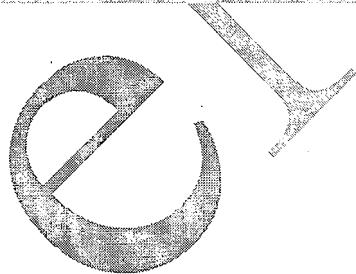
Technical short info

Direction: 1 Outbox
Current status: 03 OOC
Basic type: CREMAS01
Extension: CREMAS
Message type: RECEIVER
Partner no.: LS
Partn. Type: A000000035
Port:

Data passed to port OI
IDoc ready for dispatch
IDoc generated

Content of selected segment

Fld.name	Fld cont.
MSGFN	005
LIFNR	0000001000
EKORG	1
ERDAT	19941108
ERNAM	BALLER
LOEVM	X
WAERS	EUR
VERKF	Frau Schwarz
TELF1	1234567



6.Filtering

We Never Compromise in Quality. Would You ?

Reduced IDoc Type

This Technique allows to the field level i.e we can specify the list Segments and Segment Fields allowed to the receivers.

Scenario : Two Systems A and B , decided to Maintain the Standard Price for Material master Data Locally on their Systems. They want to receive very limited data from the Central System. So that We Can Reduce the Standard IDoc to the Reduced IDoc with the Required list Of Segments and Segment Fields.

Note : The Reduced IDoc type gets a New Message type and the the Reduced IDoc type is defined from the Standard IDoc by Enabling and Disabling the List Of Segments and Even fields .

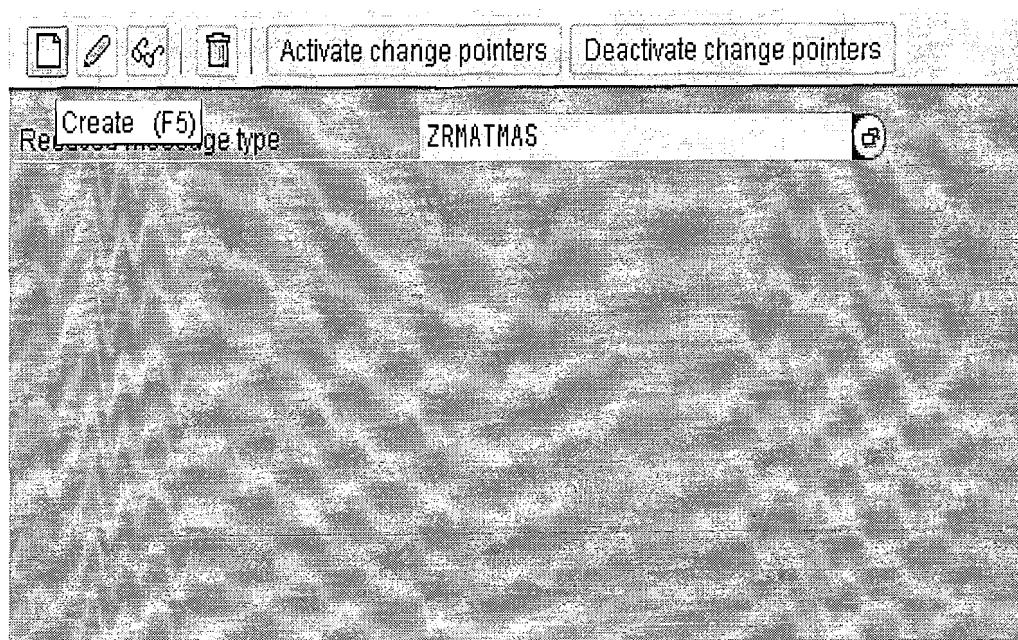
Note : In Both Distribution Model and Outbound Partner Profile , the New (Reduced) Message type should be Configured.

Steps to Define(Create) a Reduced IDoc type :

- 1) Analyze the Data to decide the list of Segments and Fields to be Included.
- 2) Execute BD53

Enter the name for the reduced Message type and Create.

IDoc Reduction Maintenance: Initial Screen



6.Filtering

We Never Compromise in Quality. Would You ?

Selection of Message Type as Reference for the Reduction

Reduced message type	ZRMATMAS
Message type reference	MATMAS

Enter the Standard Message type to be reduced.

Enter Description of Reduced message type

Reduced message type	ZRMATMAS
Description	Reduced Message type for Material Master
Message type reference	MATMAS
Description	Material master

Enter the Description and Press ENTER.

- 4) The System Copies the latest version of IDoc associated with the standard Message type and By Default all the Mandatory Segments are Activated . To Activate the Additional segments to be Included, Click On the Segment to Activate and Click On the Select button. The Color of the segment will turn from red to white.

IDoc Reduction Maintenance: Initial Screen

Select Deselect

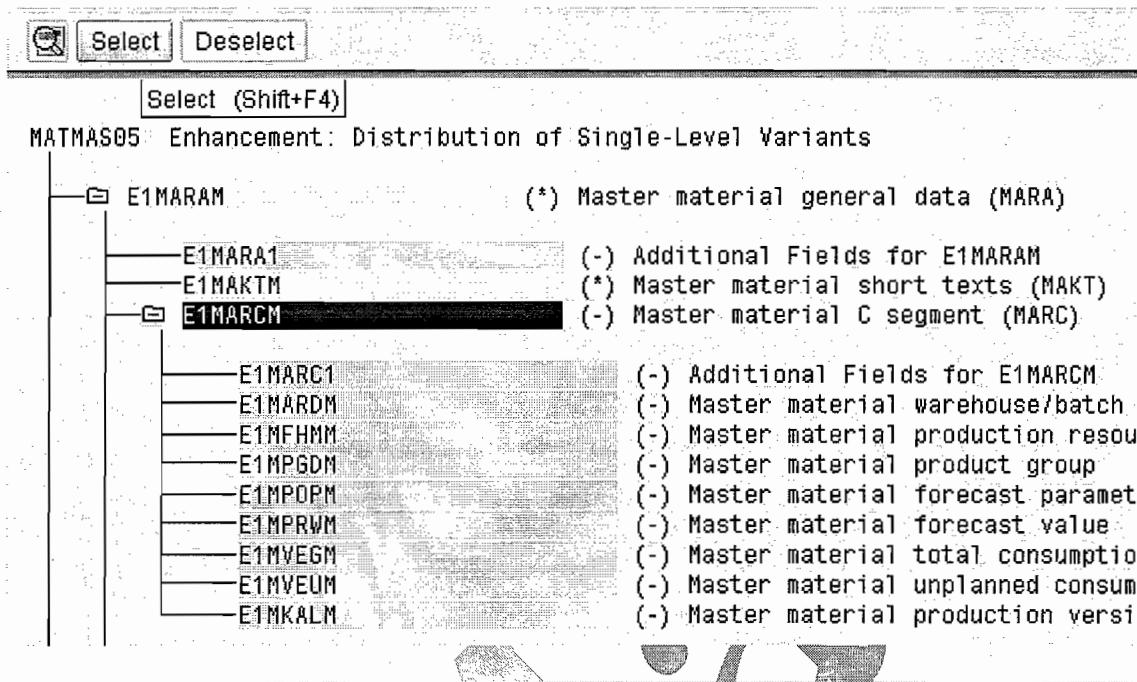
MATMAS05 Enhancement: Distribution of Single-Level Variants

E1MARAM	(*) Master material general data (MARA)
E1MARA1	(-) Additional Fields for E1MARAM
E1MAKTM	(*) Master material short texts (MAKT)
E1MARCM	(-) Master material C segment (MARC)
E1MARMM	(-) Master material units of measure
E1MBEWM	(-) Master material material valuation
E1MLGNM	(-) Master material material data per
E1MVKE	(-) Master material sales data (MVKE)
E1MLANM	(-) Master material tax classification
E1MIXHM	(-) Master material long text header
E1CUCFG	(-) CU: Configuration data
E1UPSLINK	(-) Reference from Object to Superior UPS

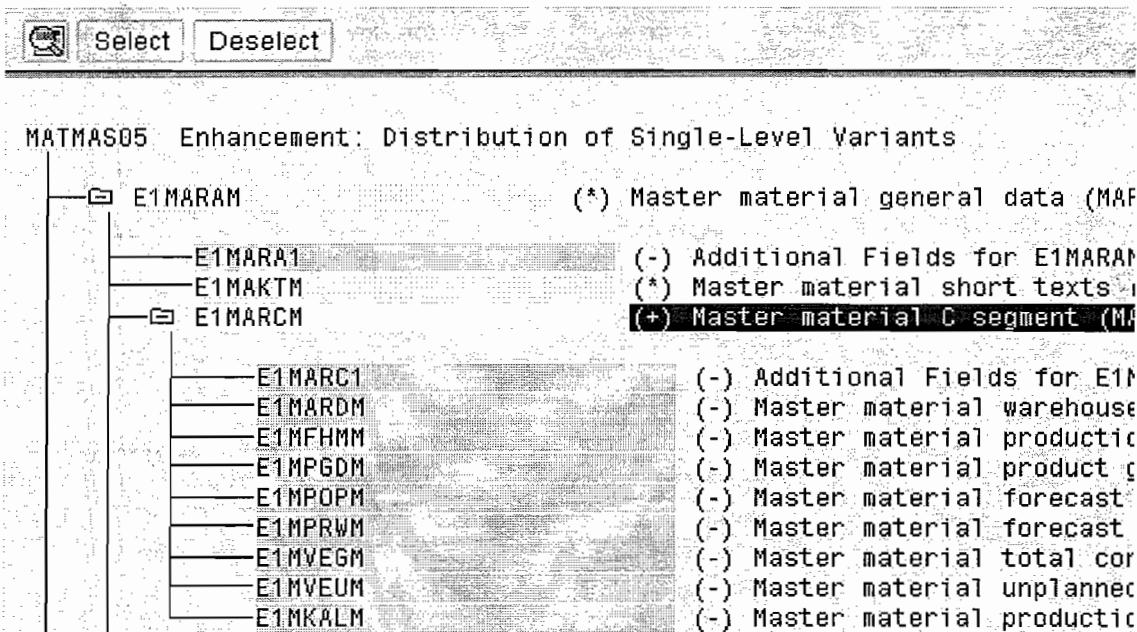
6.Filtering

We Never Compromise in Quality. Would You ?

IDoc Reduction Maintenance: Initial Screen



IDoc Reduction Maintenance: Initial Screen



Notice the Color of the Segment E1MARCM.

Note : Repeat this for each segment to Added(Activated).

- 5) To Activate the required fields from the Activated Segments, Double Click any active Segment, it displays all the fields from the segment and Mandatory fields are selected by default and in Green Color and are automatically Activated. To Activate

6.Filtering

We Never Compromise in Quality. Would You ?

Additional Fields , Click the Check box next to the Field and Click on Select button.
Repeat this Step for all the Segments Activated in the Previous Step.

IDoc Reduction Maintenance: Initial Screen																																																									
<input type="checkbox"/> Select <input type="checkbox"/> Deselect																																																									
MATMAS05 Enhancement: Distribution of Single-Level Variants																																																									
<ul style="list-style-type: none"> - E1MARAM <ul style="list-style-type: none"> - E1MARA1 - E1MAKTM - E1MARCM <ul style="list-style-type: none"> - E1MARC1 <ul style="list-style-type: none"> E1MARDM E1MFHMM E1MPGDM E1MPOPM E1MPRVM E1MVEGM E1MVEUM E1MKALM - E1NARMM - E1NBEWM - E1NLGNM - E1NVKEM - E1MLANM - E1MTXHM - E1CUCFG 	Segment E1MARCM: Fields <table border="1"> <thead> <tr> <th>Field</th> <th>Text</th> </tr> </thead> <tbody> <tr><td>MSGFN</td><td>(*) Function</td></tr> <tr><td>WERKS</td><td>(*) Plant</td></tr> <tr><td>PSTAT</td><td>(*) Maintenance status</td></tr> <tr><td><input type="checkbox"/> LYORM</td><td>(-) Deletion Indicator</td></tr> <tr><td><input type="checkbox"/> BWTTY</td><td>(-) Valuation Category</td></tr> <tr><td><input type="checkbox"/> MAABC</td><td>(-) ABC indicator</td></tr> <tr><td><input type="checkbox"/> KZKRI</td><td>(-) Indicator: Critical part</td></tr> <tr><td><input type="checkbox"/> EKGRP</td><td>(-) Purchasing Group</td></tr> <tr><td><input type="checkbox"/> AUSME</td><td>(-) Unit of issue</td></tr> <tr><td><input type="checkbox"/> DISPR</td><td>(-) Material: MRP profile</td></tr> <tr><td><input type="checkbox"/> DISMM</td><td>(-) MRP Type</td></tr> <tr><td><input type="checkbox"/> DISPO</td><td>(-) MRP Controller</td></tr> <tr><td><input type="checkbox"/> PLIFZ</td><td>(-) Planned delivery time in days</td></tr> <tr><td><input type="checkbox"/> WEBAZ</td><td>(-) Goods receipt processing time in days</td></tr> <tr><td><input type="checkbox"/> PERKZ</td><td>(-) Period indicator</td></tr> <tr><td><input type="checkbox"/> AUSSS</td><td>(-) Assembly scrap in percent</td></tr> <tr><td><input type="checkbox"/> DISLS</td><td>(-) Lot size (materials planning)</td></tr> <tr><td><input type="checkbox"/> BESKZ</td><td>(-) Procurement Type</td></tr> <tr><td><input type="checkbox"/> SOBSL</td><td>(-) Special procurement type</td></tr> <tr><td><input type="checkbox"/> MINBE</td><td>(-) Reorder point</td></tr> <tr><td><input type="checkbox"/> EISBE</td><td>(-) Safety stock</td></tr> <tr><td><input type="checkbox"/> BSTMI</td><td>(-) Minimum lot size</td></tr> <tr><td><input type="checkbox"/> BSTMA</td><td>(-) Maximum lot size</td></tr> <tr><td><input type="checkbox"/> BSTFE</td><td>(-) Fixed lot size</td></tr> <tr><td><input type="checkbox"/> BSTRF</td><td>(-) Rounding value for purchase order</td></tr> </tbody> </table>	Field	Text	MSGFN	(*) Function	WERKS	(*) Plant	PSTAT	(*) Maintenance status	<input type="checkbox"/> LYORM	(-) Deletion Indicator	<input type="checkbox"/> BWTTY	(-) Valuation Category	<input type="checkbox"/> MAABC	(-) ABC indicator	<input type="checkbox"/> KZKRI	(-) Indicator: Critical part	<input type="checkbox"/> EKGRP	(-) Purchasing Group	<input type="checkbox"/> AUSME	(-) Unit of issue	<input type="checkbox"/> DISPR	(-) Material: MRP profile	<input type="checkbox"/> DISMM	(-) MRP Type	<input type="checkbox"/> DISPO	(-) MRP Controller	<input type="checkbox"/> PLIFZ	(-) Planned delivery time in days	<input type="checkbox"/> WEBAZ	(-) Goods receipt processing time in days	<input type="checkbox"/> PERKZ	(-) Period indicator	<input type="checkbox"/> AUSSS	(-) Assembly scrap in percent	<input type="checkbox"/> DISLS	(-) Lot size (materials planning)	<input type="checkbox"/> BESKZ	(-) Procurement Type	<input type="checkbox"/> SOBSL	(-) Special procurement type	<input type="checkbox"/> MINBE	(-) Reorder point	<input type="checkbox"/> EISBE	(-) Safety stock	<input type="checkbox"/> BSTMI	(-) Minimum lot size	<input type="checkbox"/> BSTMA	(-) Maximum lot size	<input type="checkbox"/> BSTFE	(-) Fixed lot size	<input type="checkbox"/> BSTRF	(-) Rounding value for purchase order				
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<input type="button" value="Select (Shift+F4)"/>																																																									

6.Filtering

We Never Compromise in Quality. Would You ?

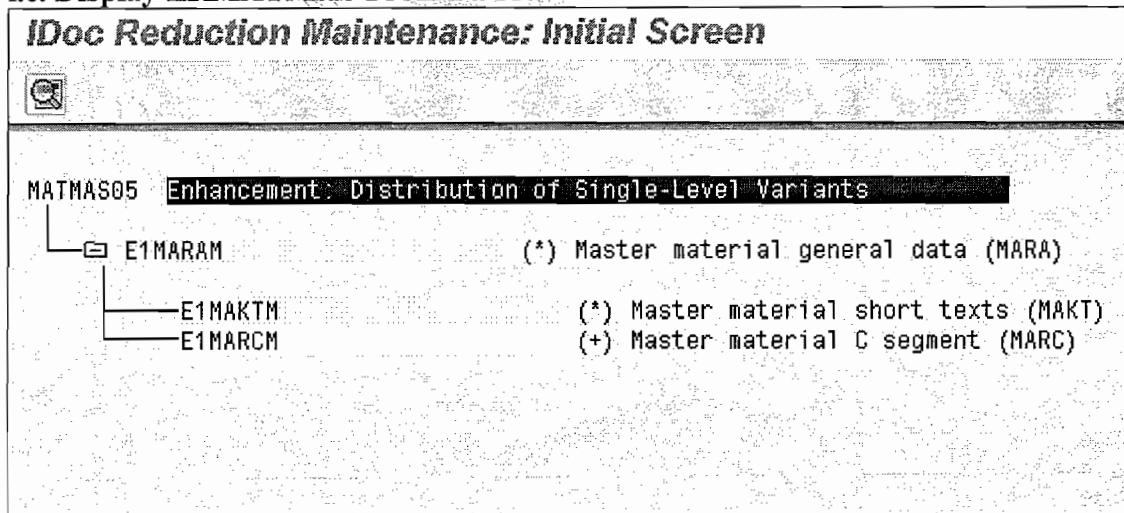
Field	Text
MSGFN	(*) Function
WERKS	(*) Plant
PSTAT	(*) Maintenance status
<input type="checkbox"/> LVORM	(+) Deletion Indicator
<input type="checkbox"/> BWTTY	(+) Valuation Category
<input type="checkbox"/> MAABC	(-) ABC indicator
<input type="checkbox"/> KZKRI	(-) Indicator: Critical part
<input type="checkbox"/> EKGRP	(+) Purchasing Group
<input type="checkbox"/> AUSME	(-) Unit of issue
<input type="checkbox"/> DISPR	(+) Material: MRP profile
<input type="checkbox"/> DISMM	(+) MRP Type
<input type="checkbox"/> DISPO	(+) MRP Controller
<input type="checkbox"/> PLIFZ	(+) Planned delivery time in days
<input type="checkbox"/> WEBAZ	(+) Goods receipt processing time in days
<input type="checkbox"/> PERKZ	(-) Period indicator
<input type="checkbox"/> AUSSS	(-) Assembly scrap in percent
<input type="checkbox"/> DISLS	(-) Lot size (materials planning)
<input type="checkbox"/> BESKZ	(+) Procurement Type
<input type="checkbox"/> SOBSL	(+) Special procurement type
<input type="checkbox"/> MINBE	(+) Reorder point
<input type="checkbox"/> EISBE	(+) Safety stock
<input type="checkbox"/> BSTMI	(-) Minimum lot size
<input type="checkbox"/> BSTMA	(-) Maximum lot size
<input type="checkbox"/> BSTFE	(-) Fixed lot size

Notice the Color of the Fields Selected (other than Mandatory Fields).

6) Save it and BACK to the Initial Screen then Activate Change Pointes.

Display the Reduced IDoc (Message) type to Verify the Same .
i.e. Display ZRMATMAS From BD53.

IDoc Reduction Maintenance: Initial Screen



Note : Please Test by Adding the New Message type in Distribution Model and Outbound Partner Profile.

7. Trouble Shooting & Recovery

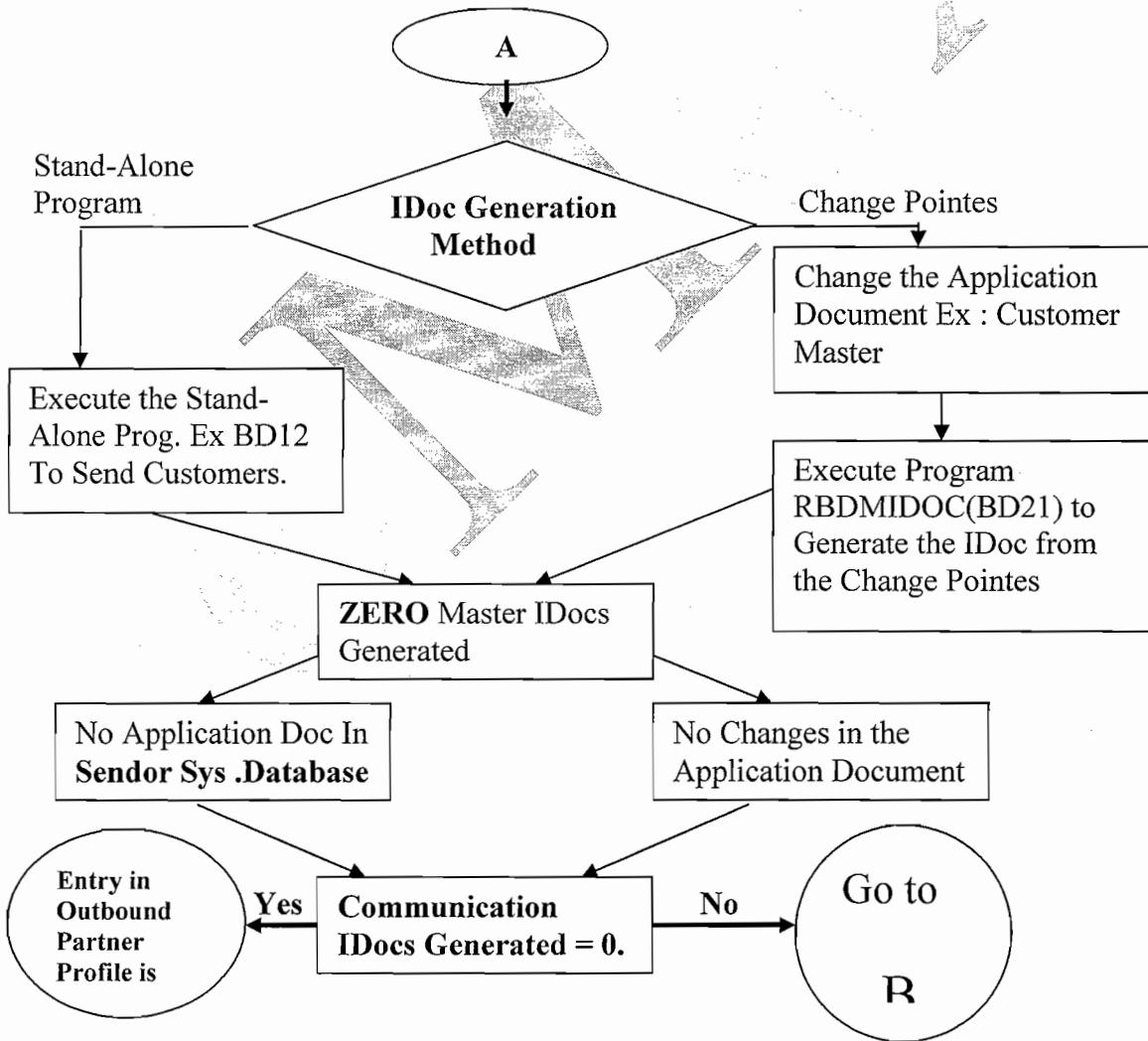
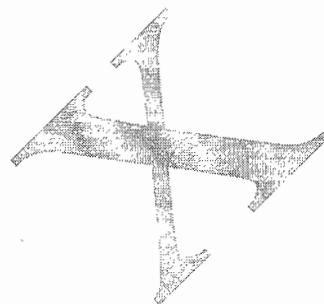
We Never Compromise In Quality. Would You?

Note : Even If You Carry out all the Configuration steps exactly and test the Components thoroughly, any system will experience problems at some point. In this Chapter, We Will discuss what is considered successful process execution and how to Trouble shoot the system when it fails and How to restart the system from the Point of Failure.

This section helps us logically to navigate to the point where an error has occurred and the reason for it.

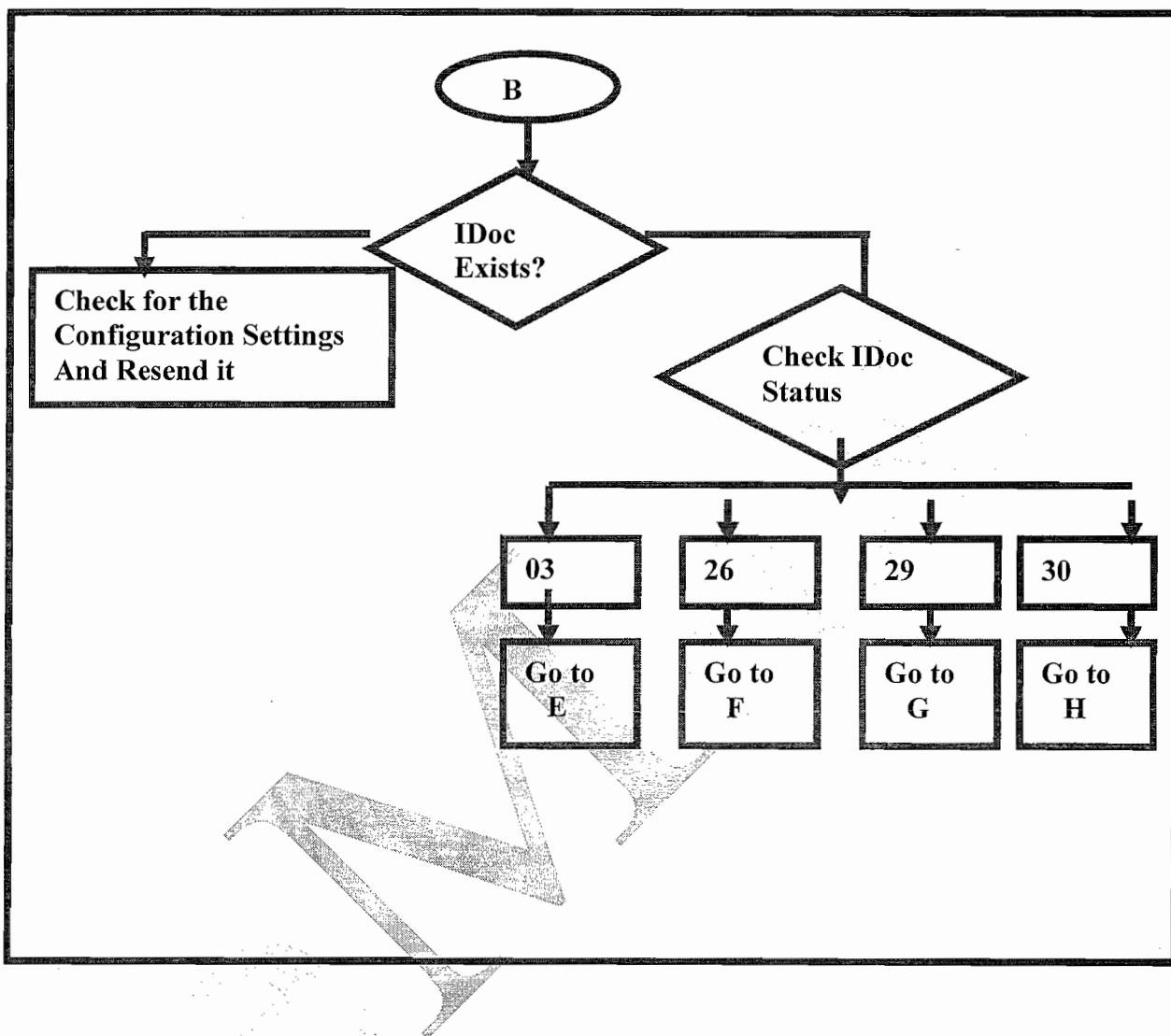
The Points of Failure in an Outbound Process are as Follows.

- 1) An Error in the Change Pointer Process
- 2) An Error in the Stand-Alone Program
- 3) An Error in the ALE-EDI Interface Layer
- 4) An Error in the IDoc Structure(Syntax)
- 5) An Error in Sending the IDoc to a remote System



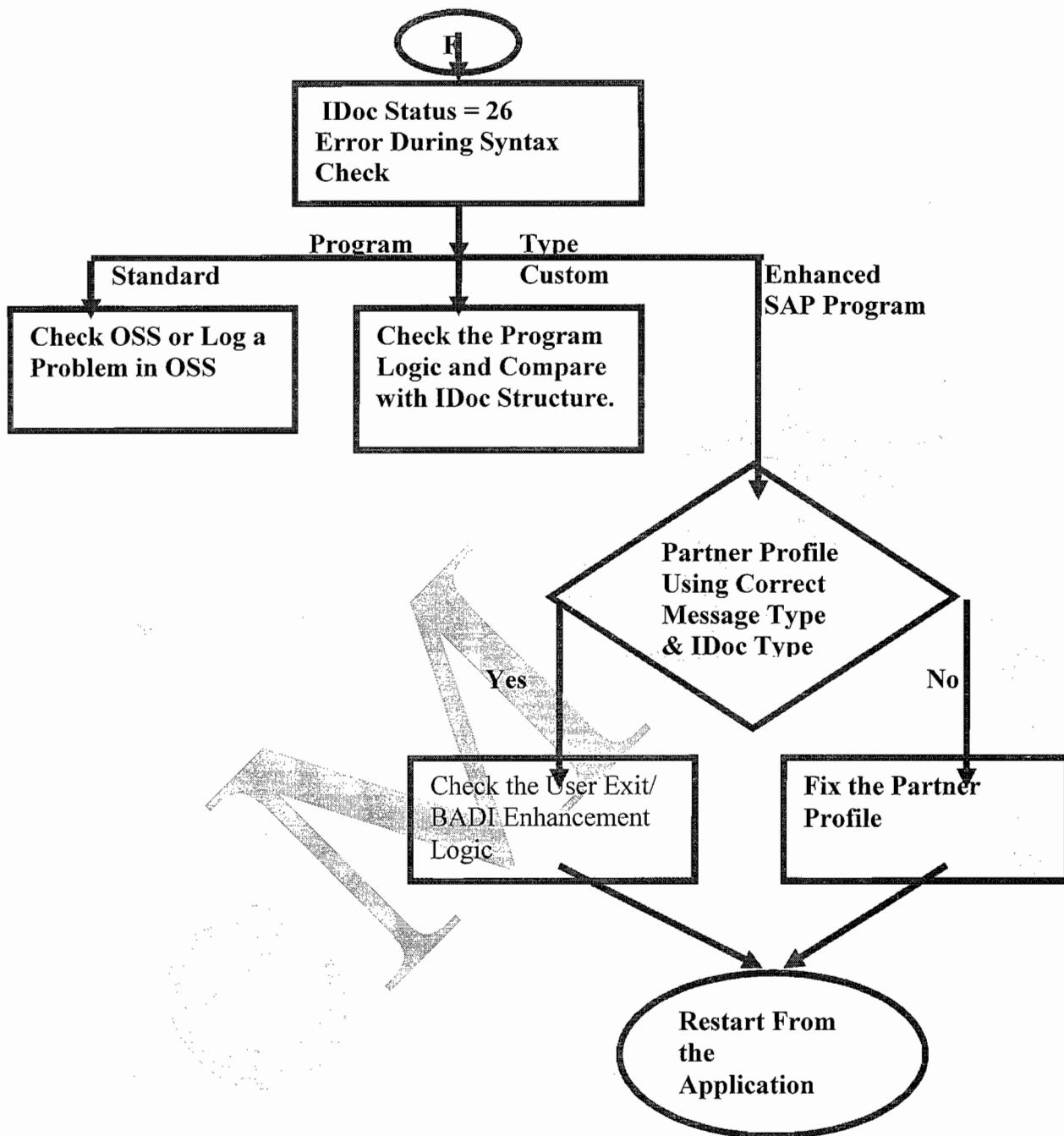
7. Trouble Shooting & Recovery

We Never Compromise In Quality. Would You?



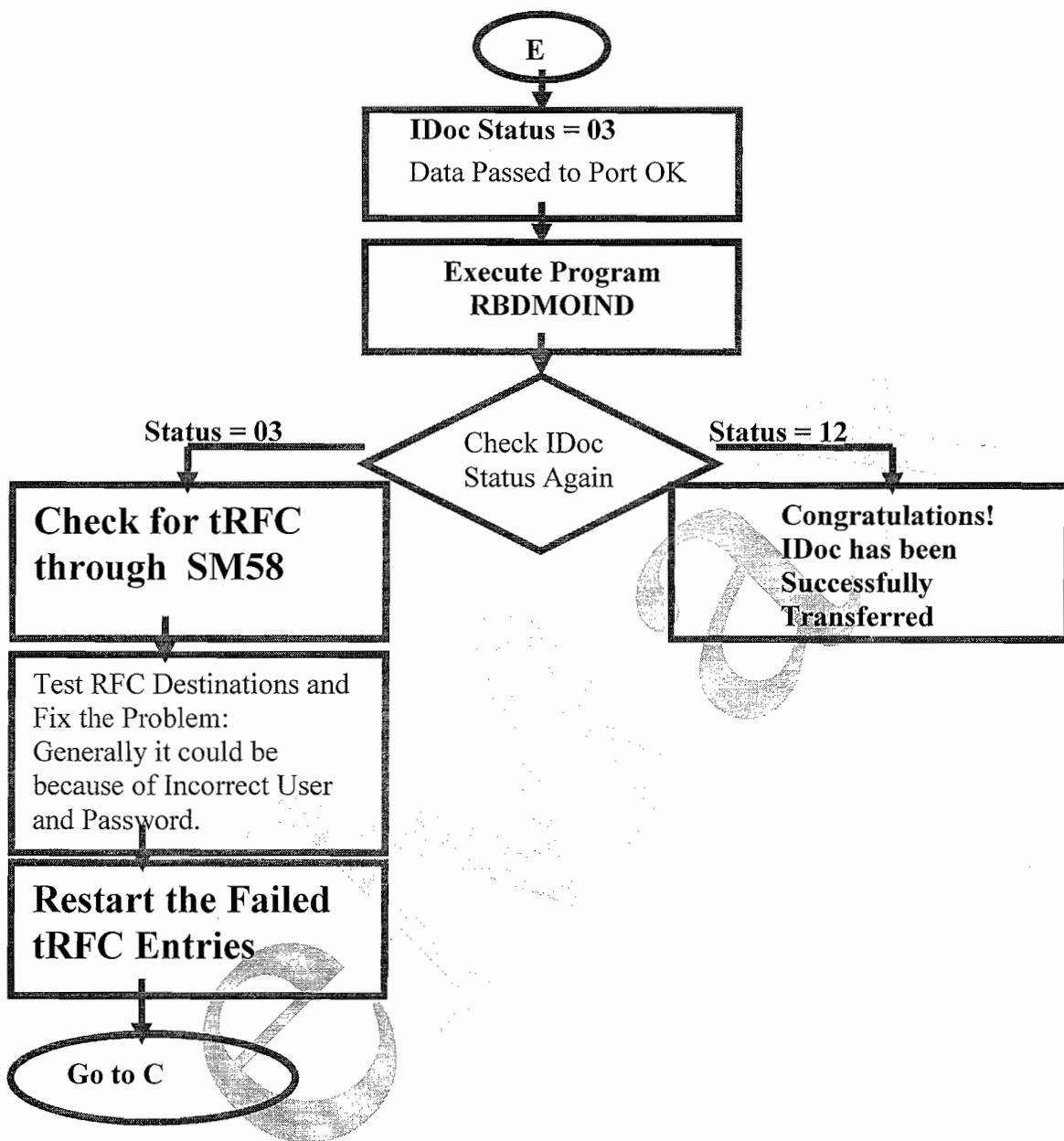
7. Trouble Shooting & Recovery

We Never Compromise In Quality. Would You?



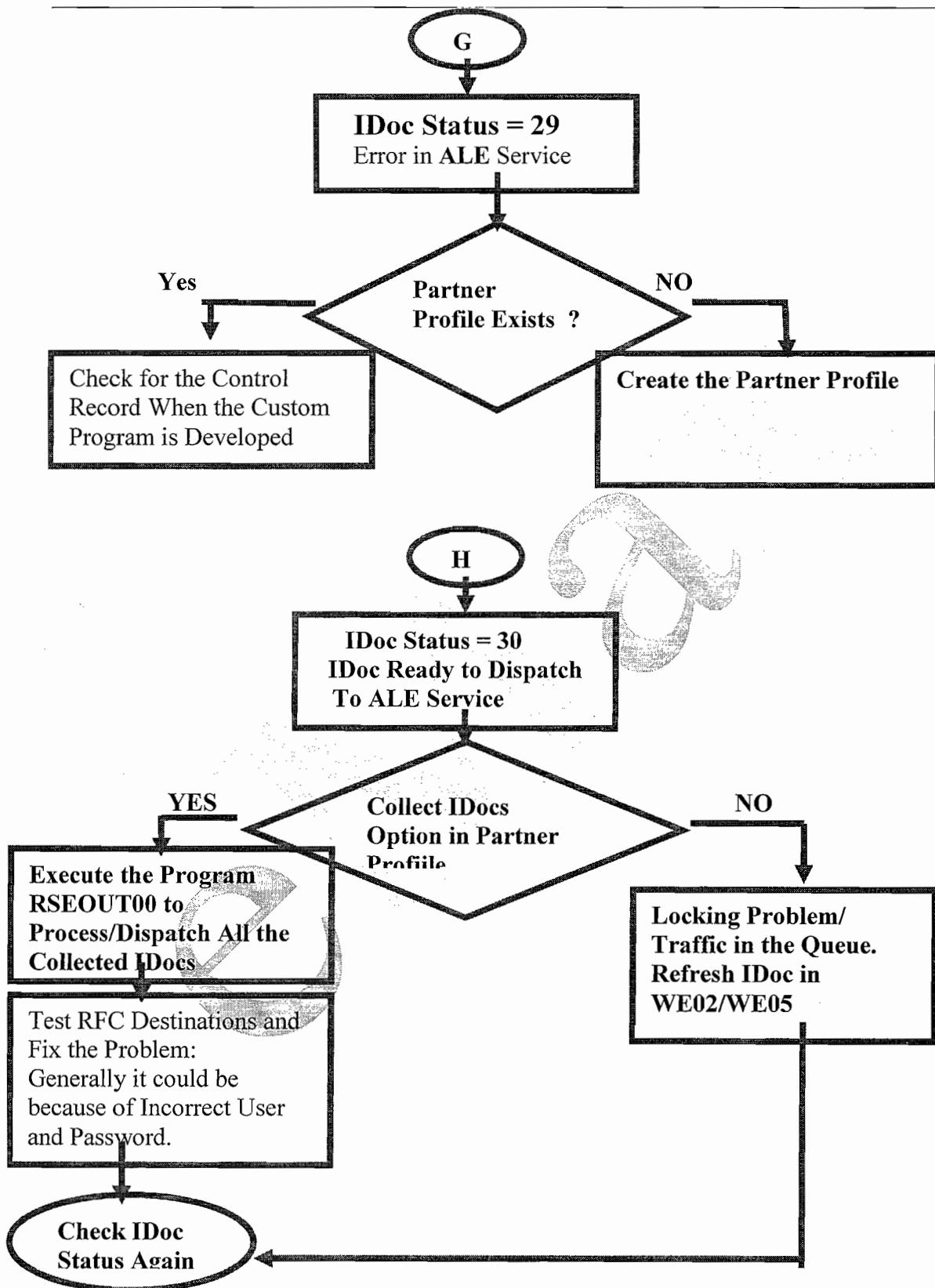
7. Trouble Shooting & Recovery

We Never Compromise In Quality. Would You?



7. Trouble Shooting & Recovery

We Never Compromise In Quality. Would You?



7. Trouble Shooting & Recovery

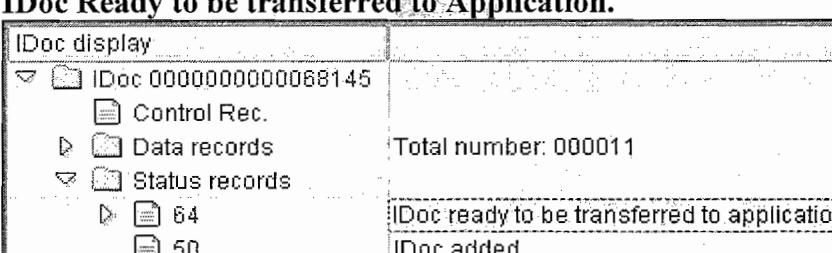
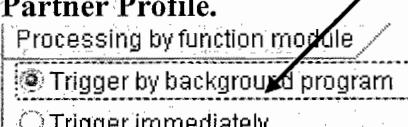
We Never Compromise In Quality. Would You?

Inbound Process :

The Successful Status Code Sequence

Status Code	Meaning
50	IDoc Added
64	IDoc Ready to be transferred to Application
62	IDoc Passed to Application
53	Application Document Posted Successfully.

Possible Errors in Inbound Process:

Status Code	Meaning
64	<p>IDoc Ready to be transferred to Application.</p>  <p>Check for the Trigger background Option in Inbound Partner Profile.</p>  <p>IF Selected , All the IDocs wait for Processing So that Execute the Standard Program RBDAPP01 to Process all the IDocs which are ready to Transferred to the Application. ELSE. Refresh It. So that It will be Out of the Queue. ENDIF.</p>

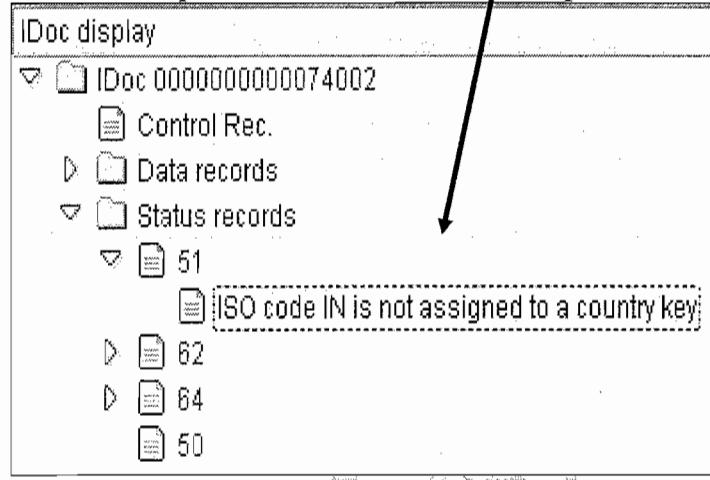
7. Trouble Shooting & Recovery

We Never Compromise In Quality. Would You?

51

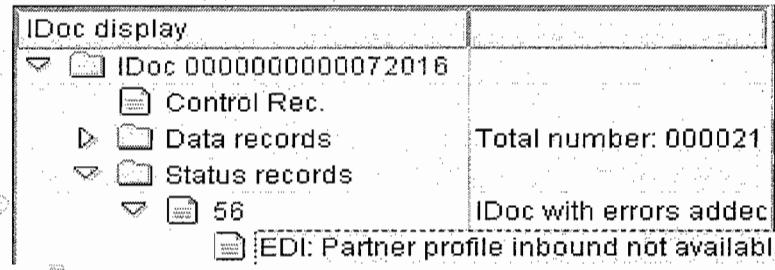
Application Document Posted Successfully.

Note: The Reason Could be the Data . Any way the status Text provides the Detailed Description.



56

Inbound Partner Profile is Not Available

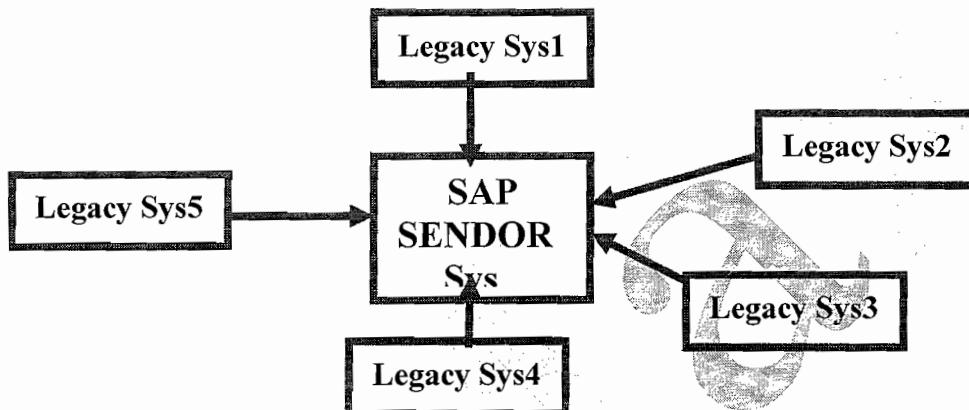


8. Working With Custom IDoc:

We Never Compromise In Quality. Would You?

Note: When there is no Standard IDoc to meet the Customer requirements to transfer the Application Data , We go for our own (Custom) IDoc. Make Sure that you follow all IDoc design Guidelines(Syntax Rules).

Requirement: Send the SAP Customer No and Corresponding Legacy System Customer No and Legacy System Name From SENDOR to RECEIVER.



Note: Here the Customer Master Data is Created in SAP System(SENDOR) from various Legacy Systems and the SAP and Legacy System Customer No Details are Maintained in One Custom Table and Same Information has be to transferred to the RECEIVER SAP System Via IDoc.

IDoc : ZDEBMAS01 (Customer Mapping IDoc)



Z1MAPPING (Mapping Data Segment)

Create the Custom Table and Respective Data Elements then IDoc and Segments in the SENDOR System.

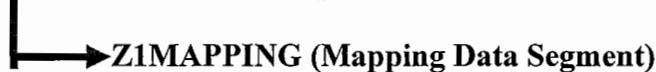
8. Working With Custom IDoc:

We Never Compromise In Quality. Would You?

Logon to SENDOR System :

Steps to Create the IDoc :

IDoc : ZDEBMAS01 (Customer Mapping IDoc)



1) Create the Segment Z1MAPPING

Execute WE31 (Segment Editor)

Development segments: Initial screen

SAP SE31 - Development segments: Initial screen. The table lists segment definitions with columns for Version, Segm. definition, Release, No. of, Lgth, and Date.

Version	Segm. definition	Release	Release	No. of	Lgth	Date

Enter the Name for the Segment and Say Create

Development segments: Change segment definition Z2MAPPING

SAP SE31 - Development segments: Change segment definition Z2MAPPING. The screen shows segment type attributes and a detailed view of fields.

Segment type attributes:

- Segment type: Z1MAPPING
- Short Description: Customer Mapping
- Qualified segment:

Detailed view of fields:

Pos.	Field Name	Data element	ISO c...	Ex...
1	SKUNNR	ZSKUNNR	<input type="checkbox"/>	10
2	LKUNNR	ZLKUNNR	<input type="checkbox"/>	10
3	LEGSYS	ZLEGSYS	<input type="checkbox"/>	20
4			<input type="checkbox"/>	
5			<input type="checkbox"/>	
6			<input type="checkbox"/>	
7			<input type="checkbox"/>	

8. Working With Custom IDoc:

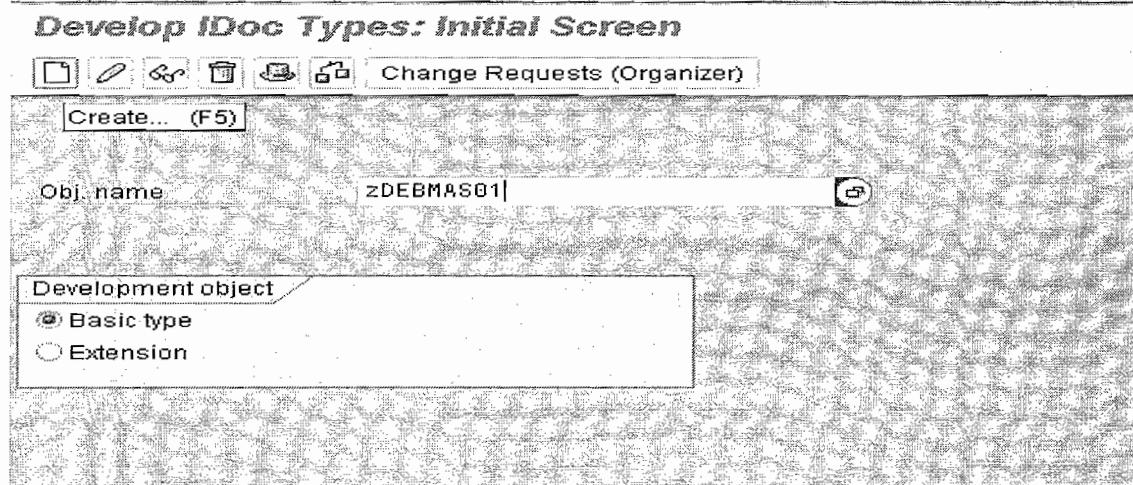
We Never Compromise In Quality. Would You?

Enter the List Of Fields for the Segments and SAVE it.

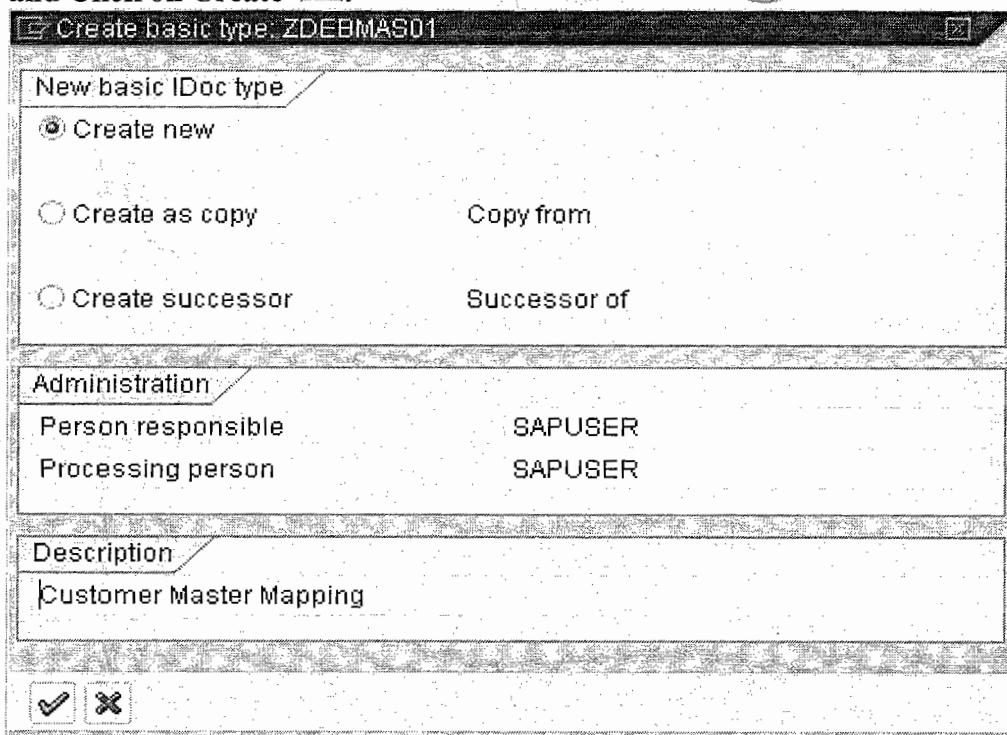
Note : Repeat the Same for further Segments if required and here one Segment is enough.

Creation Of IDoc :

Execute WE30 (IDoc Editor)



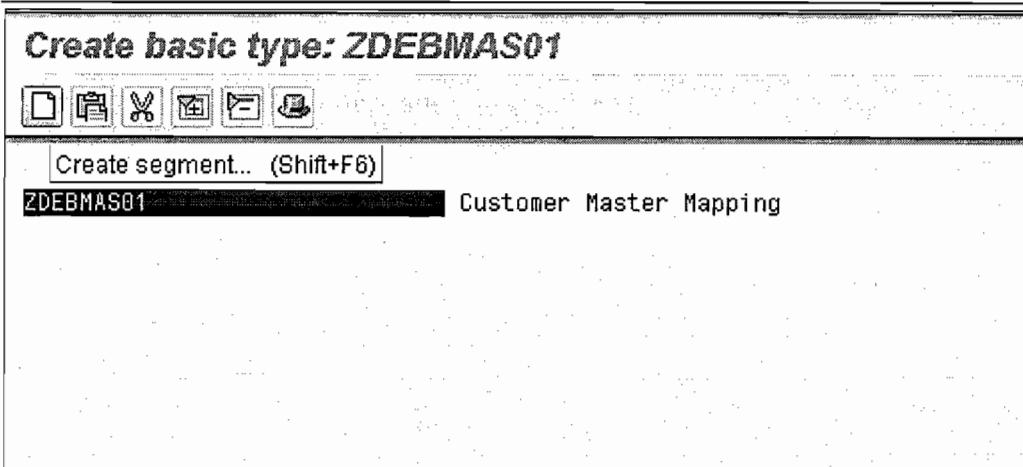
Enter the Obj.name (IDoc Name) ZDEBMAS01 and Select Basic type Basic type and Click on Create



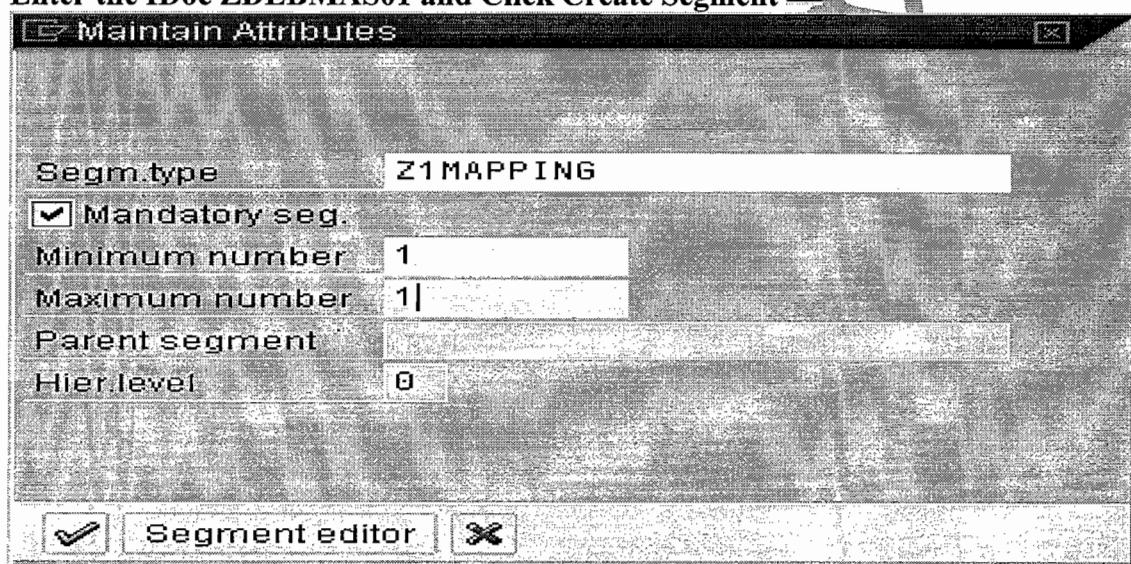
Enter the Description

8. Working With Custom IDoc:

We Never Compromise In Quality. Would You?



Enter the IDoc ZDEBMAS01 and Click Create Segment



Enter Segment type Z1MAPPING , Check Mandatory Segment Mandatory seg. , Minimum and Maximum Number as 1 , Because We Can have Only One entry for each SAP Customer.

Press ENTER and SAVE it.

8. Working With Custom IDoc:

We Never Compromise In Quality. Would You?

Change basic type: ZDEBMAS01

ZDEBMAS01 Customer Master Mapping

ZIMAPPING Customer Mapping

Outbound Configuration :

1) Create a New Message Type (WE81)

Execute WE81 and Click On

Display View "EDI: Logical Message Types": Overview

Display -> Change (Ctrl+F1) Message type	Short text
ABSEN1	Attendance/Absence in CC1
ACCONF	Confirmation of IDoc processing from the application
ACCSTA	Returnable packaging account statement transmission
ACCSTAREQ	Request for returnable packaging account statement
ACC_ACT_ALLOC	Accounting: Post activity allocation
ACC_ASSET_TRANSFER	Accounting: Post acquisition from transfer
ACC_ASSET_TRANS_ACQ_POST	Accounting: Post acquisition from transfer
ACC_BILLING	Accounting: Post invoice (OAG: LOAD RECEIVABLE)
ACC_BILLING_REVERSE	Accounting: Post billing doc.reversal (OAG: LOAD RECEIV
ACC_DOCUMENT	Accounting: Posting
ACC_DOCUMENT_REVERSE	Accounting: Post Reversal

8. Working With Custom IDoc:

We Never Compromise In Quality. Would You?

Change View "EDI: Logical Message Types": Overview

The screenshot shows a SAP application window titled 'Change View "EDI: Logical Message Types": Overview'. At the top, there is a toolbar with several icons and a button labeled 'New Entries (F5)'. Below the toolbar is a table with two columns: 'Message type' and 'Short text'. The table contains 18 rows of data, each representing a different logical message type. The data is as follows:

Message type	Short text
ABSEN1	Attendance/Absence in CC1
ACCONF	Confirmation of IDoc processing from the application
ACCSTA	Returnable packaging account statement transmission
ACCSTAREQ	Request for returnable packaging account statement
ACC_ACT_ALLOC	Accounting: Post activity allocation
ACC_ASSET_TRANSFER	Accounting: Post acquisition from transfer
ACC_ASSET_TRANS_ACQ_POST	Accounting: Post acquisition from transfer
ACC_BILLING	Accounting: Post invoice (OAG: LOAD RECEIVABLE)
ACC_BILLING_REVERSE	Accounting: Post billing doc.reversal (OAG: LOAD RECEIVABLE)
ACC_DOCUMENT	Accounting: Posting
ACC_DOCUMENT_REVERSE	Accounting: Post Reversal
ACC_EMPLOYEE_EXP	FI/CO: HR posting GL(AcctngEmployeeExpnses)
ACC_EMPLOYEE_PAY	FI/CO: HR posting AP(AcctngEmployeePayables)
ACC_EMPLOYEE_REC	FI/CO: HR posting AR(AcctngEmployeeRcvbles)
ACC_GL_POSTING	Accounting: General G/L account posting
ZMDEBMAS	Message Type For Customer Mapping

Click On New Entries

New Entries

New Entries: Overview of Added Entries

The screenshot shows a SAP application window titled 'New Entries: Overview of Added Entries'. At the top, there is a toolbar with several icons. Below the toolbar is a table with two columns: 'Message type' and 'Short text'. The table contains 1 row of data, which is the newly added entry 'ZMDEBMAS' with the description 'Message Type For Customer Mapping'. The table has scroll bars on the right side.

Message type	Short text
ZMDEBMAS	Message Type For Customer Mapping

Enter Message type and Short text and SAVE it.

8. Working With Custom IDoc:

We Never Compromise In Quality. Would You?

2) Link Message Type + IDoc Type(WE82)

EXECUTE WE82

Display View "Output Types and Assignment to IDoc Types"



Message type	Basic type	Extension	Release
ABCEDF	WILDHAGEN_TEST01		45A
ABSEN1	ABSEN1		30A
ACCONF	ACCONF01		31G
ACC_ACT_ALLOC	ACC_ACT_ALLOC01		40A
ACC_ACT_ALLOC	ACC_ACT_ALLOC02		40C
ACC_ASSET_TRANS...	ACC_ASSET_TRANS...		40C
ACC_ASSET_TRANS...	ACC_ASSET_TRANS...		40C
ACC_BILLING	ACC_BILLING01		40A
ACC_BILLING	ACC_BILLING02		40C
ACC_BILLING_REV...	ACC_BILLING_REV...		46C
ACC_DOCUMENT	ACC_DOCUMENT01		40B
ACC_DOCUMENT	ACC_DOCUMENT02		620

Click On

Change View "Output Types and Assignment to IDoc Types"



Message type	New Entries (F5)	Extension	Release
ABCEDF	WILDHAGEN_TEST01		45A
ABSEN1	ABSEN1		30A
ACCONF	ACCONF01		31G
ACC_ACT_ALLOC	ACC_ACT_ALLOC01		40A
ACC_ACT_ALLOC	ACC_ACT_ALLOC02		40C
ACC_ASSET_TRANS...	ACC_ASSET_TRANS...		40C
ACC_ASSET_TRANS...	ACC_ASSET_TRANS...		40C
ACC_BILLING	ACC_BILLING01		40A
ACC_BILLING	ACC_BILLING02		40C
ACC_BILLING_REV...	ACC_BILLING_REV...		46C
ACC_DOCUMENT	ACC_DOCUMENT01		40B
ACC_DOCUMENT	ACC_DOCUMENT02		620
ACC_DOCUMENT_RE...	ACC_DOCUMENT_RE...		620
ACC_EMPLOYEE_EXP	ACC_EMPLOYEE_EX...		40A
ACC_EMPLOYEE_EXP	ACC_EMPLOYEE_EX...		40C
ACC_EMPLOYEE_PAY	ACC_EMPLOYEE_PA...		40A
ACC_EMPLOYEE_PAY	ACC_EMPLOYEE_PA...		40C

8. Working With Custom IDoc:

We Never Compromise In Quality. Would You?

Click On New Entries

New Entries

New Entries: Overview of Added Entries

Message-type	Basic type	Extension	Release
ZMDEBMAS	ZDEBMAS01		47E
☒	☒		☒
☒	☒		☒
☒	☒		☒
☒	☒		☒
☒	☒		☒
☒	☒		☒
☒	☒		☒
☒	☒		☒
☒	☒		☒
☒	☒		☒
☒	☒		☒
☒	☒		☒
☒	☒		☒
☒	☒		☒

Enter Message Type(ZMDEBMAS),Basic Type(ZDEBMAS01) and Release 47E and SAVE it.

3) Maintain Distribution Model(BD64)

Distribution Model is Already Created from SENDOR While Sending Master Data through Standard IDocs So We Can use the Same for ADDing the Current Message type.

EXECUTE BD64 in SENDOR Sys(800 Client)

Click On



Display Distribution Model		Description/technical name
Switch between display and edit mode (F9)		
Model views		
☒	☒ AL	AL . No short text exists
☒	☒ BBP_DII	BBP_DII . No short text exists
☒	☒ BC619_800	BC619_800 . No short text exists
☒	☒ BELCO	BELCO . No short text exists
☒	☒ BIT300_BP	BIT300_BP . No short text exists
☒	☒ CONSOLIDAT	CONSOLIDAT . No short text exists
☒	☒ D1Z_ID3	D1Z_ID3 . No short text exists
☒	☒ D1Z_ID3CLN	D1Z_ID3CLN . No short text exists
☒	☒ EBP300-R3	EBP300-R3 . No short text exists
☒	☒ HR_ORG_SEMI	HR_ORG_SEMI . No short text exists
☒	☒ LIS	LIS . No short text exists
☒	☒ LO215	LO215 . No short text exists
☒	☒ MARCUS	MARCUS . No short text exists
☒	☒ OSB_BUYER	OSB_BUYER . No short text exists
☒	☒ OSB_SUPPLY	OSB_SUPPLY . No short text exists
☒	☒ PFS	PFS . No short text exists
☒	☒ SUBSYSTEMS	SUBSYSTEMS . No short text exists
☒	☒ WMS	WMS . No short text exists
☒	☒ XI	XI . No short text exists
☒	☒ ZBV	ZBV . No short text exists

8. Working With Custom IDoc:

We Never Compromise In Quality. Would You?

Select the Distribution Model and Click on Add Message type

Add message type

Change Distribution Model

Filter model display | Create model view | Add BAPI | Add message type

Distribution Model	Description/ technical name	Add mes
Model views		
AL	AL . No short text exists	
BBP_DII	BBP_DII . No short text exists	
BC619_800	BC619_800 . No short text exists	
BELCO	BELCO . No short text exists	
BIT300_BP	BIT300_BP . No short text exists	
CONSOLIDAT	CONSOLIDAT. No short text exists	
D1Z_ID3	D1Z_ID3 . No short text exists	
D1Z_ID3CLN	D1Z_ID3CLN. No short text exists	
EWP300-R3	EWP300-R3 . No short text exists	
HR_ORG_SEM	HR_ORG_SEM. No short text exists	
LIS	LIS . No short text exists	
LO215	LO215 . No short text exists	
MARCUS	MARCUS . No short text exists	
OSB_BUYER	OSB_BUYER . No short text exists	
OSB_SUPPLY	OSB_SUPPLY. No short text exists	
PFS	PFS . No short text exists	
SUBSYSTEMS	SUBSYSTEMS. No short text exists	
WMS	WMS . No short text exists	
XI	XI . No short text exists	
ZBV	ZBV . No short text exists	
B2B 2.0B to IDES 4.0B	B2B_IDES	
DE3 - KABA BENZINIC	DE3-KABA	
DH3->ID3 & M13 <-> ID3	DH3->ID3	
For All Master Data Distributions	ZGDEMO_ALL	
R/3 Backend Communication (idocs)	EWP_TO_R3	

Add Message Type

Model view	ZGDEMO_ALL
Sender	SENDOR
Receiver	RECEIVER
Message type	ZMDEBMAS

Enter the Sender, Receiver Logical Systems and Message type to be transferred.

Press ENTER and SAVE it.

Notice the Distribution Model After Adding the Message type.

UH3->ID3 & M13 <-> ID3	DH3->ID3
For All Master Data Distributions	ZGDEMO_ALL
800 Client	SENDOR
810 Client	RECEIVER
COSMAS	Master cost center
CREMAS	Vendor master data distribution
DEBMAS	Customer master data distribution
ZMDEBMAS	Message Type For Customer Mapping

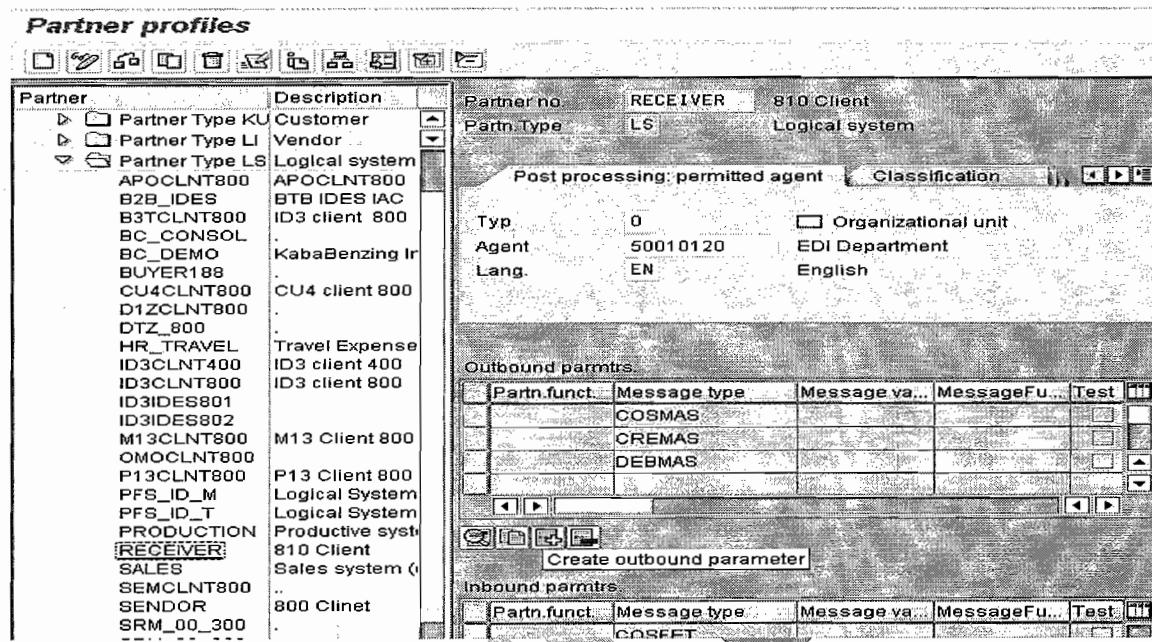
4) Outbound Partner Profile (WE20)

8. Working With Custom IDoc:

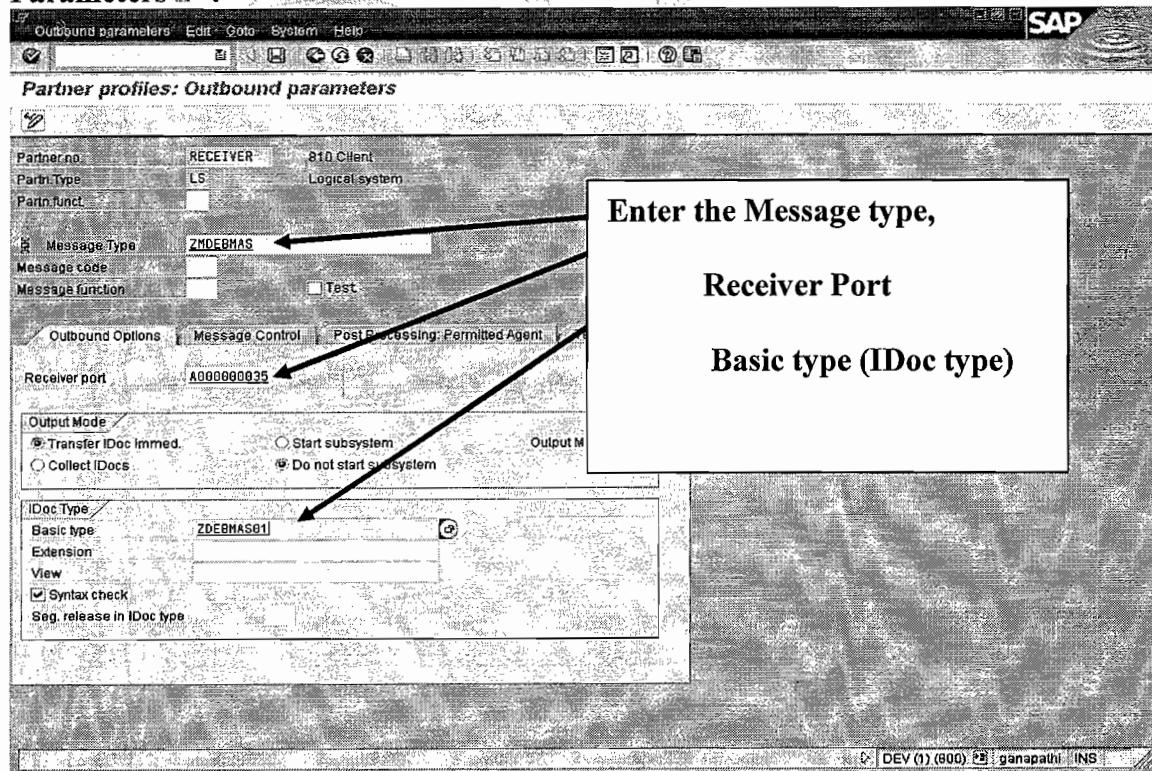
We Never Compromise In Quality. Would You?

Note : Partner Profile is already Created for RECEIVER. So that it is enough to ADD the Outbound Parameters to the Partner RECEIVER.

EXECUTE WE20



Select Partner type LS, Partner RECEIVER and Click On Create Outbound Parameters



8. Working With Custom IDoc:

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Enter the Message type, Receiver Port and Basic type (IDoc type) and SAVE it.

Since All the Outbound Configuration Settings are Completed , We Can Develop and Test the Custom Outbound Program.

OUTBOUND Program :

Steps to Develop the Custom Outbound Program:

- 1) Design the required Selection Screen
- 2) Declare Internal Tables and Work Areas for
 - a. Control Records - IT_Ctrl_recs
 - b. Data Records - IT_Data_recs
 - c. Communication IDocs - IT_Comm_IDOcs

**DATA : IT_DATA_RECs TYPE TABLE OF EDIDD,
IT_COMM_IDOCS TYPE TABLE OF EDIDC.**

Fill the Receiver Details into WA_CTRL_REC.

- 3) Select Data From the Database.
And Prepare the Master IDoc.
- 4) Transfer the Control to the ALE Service

i.e Call FM : MASTER_IDOC_DISTRIBUTE

**Note : Pass the Control record(Receiver Info) and
Data Records (Master IDoc)
Returns the Communication IDocs.**

- 5) COMMIT WORK.

Outbound Program :

```
*&-----  
*& Report ZGDEMO_OUTBOUND_IDOC  
**&  
*& AUTHOR : GANPATI . ADIMULAM  
** PURPOSE : TRANSFER THE SAP AND LEGACY CUSTOMER DETAILS FOR  
* THE GIVEN CUSTOMER NO(S) USING CUSTOM IDOC  
*&  
*&  
*& Report ZGDEMO_OUTBOUND_IDOC *  
*&  
*&  
*& AUTHOR : GANPATI . ADIMULAM  
** PURPOSE : TRANSFER THE SAP AND LEGACY CUSTOMER DETAILS FOR  
* THE GIVEN CUSTOMER NO(S) USING CUSTOM IDOC
```

8. Working With Custom IDoc:

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&-----

REPORT ZGDEMO_OUTBOUND_IDOC

DATA V_KUNNR TYPE KUNNR.

SELECTION-SCREEN BEGIN OF BLOCK B1 WITH FRAME TITLE
TEXT-000.

SELECT-OPTIONS: S_KUNNR FOR V_KUNNR.

PARAMETER : P_MESTYP LIKE EDMSG-MSGTYP OBLIGATORY
DEFAULT 'ZMDEBMAS',
P_LOGSYS LIKE TBDLST-LOGSYS.

SELECTION-SCREEN END OF BLOCK B1.

TYPES : BEGIN OF TY_KNA1,
KUNNR TYPE KUNNR,
LKUNNR TYPE ZLKUNNR,
LEGSYS TYPE ZLEGSYS,
END OF TY_KNA1.

DATA : WA_KNA1 TYPE TY_KNA1,
IT_KNA1 TYPE TABLE OF TY_KNA1.

DATA : WA_CTRL_REC TYPE EDIDC,
WA_DATA_RECS TYPE EDIDD,
WA_COMM_IDOCS TYPE EDIDC.

DATA : IT_DATA_RECS TYPE TABLE OF EDIDD,
IT_COMM_IDOCS TYPE TABLE OF EDIDC.

DATA : IT_MAPPING TYPE TABLE OF ZMAPPING,
WA_MAPPING TYPE ZMAPPING,
WA_Z1MAPPING TYPE Z1MAPPING.

DATA : V_MIDOCS TYPE I,
V_CIDOCs TYPE I,
V_DOCNUM TYPE I.

*PREPARE CONTROL RECORD
IF P_LOGSYS = SPACE.
WA_CTRL_REC-RCVPRT = SPACE.
ELSE.
WA_CTRL_REC-RCVPRT = 'LS'.
ENDIF.

8. Working With Custom IDoc:

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WA_CTRL_REC-RCVPRN = P_LOGSYS.
WA_CTRL_REC-MESTYP = P_MESTYP.
WA_CTRL_REC-IDOCTP = 'ZDEBMAS01'.

*READ THE APPLICATION DATA FROM DATABASE

```
SELECT KUNNR
      LKUNNR
      LEGSYS
  INTO TABLE IT_KNA1
  FROM KNA1
 WHERE KUNNR IN S_KUNNR.
```

*FOR EACH CUSTOMER TO BE TRANSFERRED
LOOP AT IT_KNA1 INTO WA_KNA1.

*PREPARE MASTER IDOC

*NOTE : MASTER IDOC IS THE DATA RECORDS INTERNAL TABLE FOR *ALL
THE SEGMENTS IN THE SAME PHYSICAL SEQUENCE OF IDOC.

*SEGMENT Z1MAPPING

WA_Z1MAPPING-SKUNNR = WA_KNA1-KUNNR. "SAP CUSTOMER NO
WA_Z1MAPPING-LKUNNR = WA_KNA1-LKUNNR. "LEGACY CUSTOMER
WA_Z1MAPPING-LEGSYS = WA_KNA1-LEGSYS. "LEGACY SYSTEM

WA_DATA_RECS-SEGNAM = 'Z1MAPPING'.
WA_DATA_RECS-SDATA = WA_Z1MAPPING.

"DATA IN SEGMENT FORMAT
APPEND WA_DATA_RECS TO IT_DATA_RECS.

*TRANSFER THE CONTROL TO ALE SERVICE LAYER

CALL FUNCTION 'MASTER_IDOC_DISTRIBUTE'

EXPORTING
 MASTER_IDOC_CONTROL = WA_CTRL_REC

* OBJ_TYPE = "

* CHNUM = "

TABLES

COMMUNICATION_IDOC_CONTROL = IT_COMM_IDOCS

MASTER_IDOC_DATA = IT_DATA_RECS

* EXCEPTIONS

* ERROR_IN_IDOC_CONTROL = 1

* ERROR_WRITING_IDOC_STATUS = 2

* ERROR_IN_IDOC_DATA = 3

* SENDING_LOGICAL_SYSTEM_UNKNOWN = 4

* OTHERS = 5

IF SY-SUBRC = 0.

8. Working With Custom IDoc:

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```
COMMIT WORK.  
REFRESH IT_DATA_RECS.  
ENDIF.  
ENDLOOP.
```

```
*DISPLAY COMMUNICATION IDOCS  
WRITE /30 'LIST OF COMMUNICATION IDOCS GENERATED'.  
ULINE.  
SKIP 1.
```

```
WRITE /30 'CLICK ON THE IDOC NO FOR MORE INFORMATION' COLOR 1 .  
SKIP 2.
```

```
LOOP AT IT_COMM_IDOCS INTO WA_COMM_IDOCS.  
WRITE :/30 WA_COMM_IDOCS-DOCNUM HOTSPOT .  
ENDLOOP.
```

```
*DESCRIBE IT_KNA1, TO FIND OUT THE NO OF MASTER IDOCS  
DESCRIBE TABLE IT_KNA1 LINES V_MIDOCS.  
MESSAGE I001(ZGDEMO_CLASSES) WITH V_MIDOCS P_MESTYP.
```

```
*DESCRIBE IT_COMM_IDOCS TO FIND OUT THE NO OF  
*COMMUNICATION IDOCS GENERATED  
DESCRIBE TABLE IT_COMM_IDOCS LINES V_CIDOCS.  
MESSAGE I002(ZGDEMO_CLASSES) WITH V_CIDOCS P_MESTYP.
```

```
*****  
* AT LINE-SELECTION. *  
*****
```

```
AT LINE-SELECTION.  
V_DOCNUM = SY-LISEL+30(16).
```

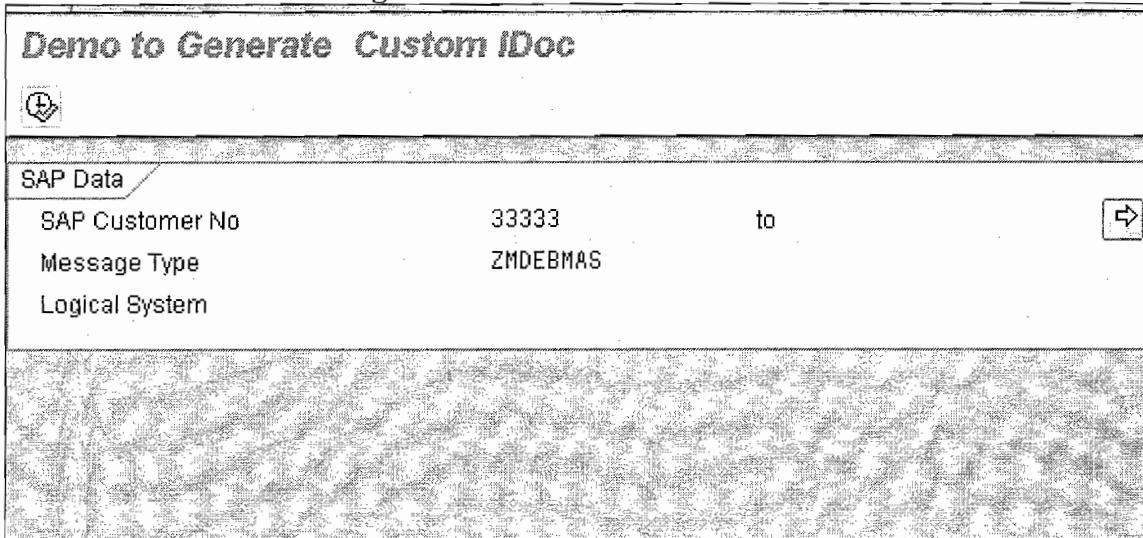
```
*SUBMIT THE PROGRAM SIMILAR TO THE WE02/WE05 FOR THE  
*SELECTED IDOC NO  
SUBMIT IDOC_TREE_CONTROL WITH DOCNUM = V_DOCNUM  
AND RETURN.
```

8. Working With Custom IDoc:

We Never Compromise In Quality. Would You?

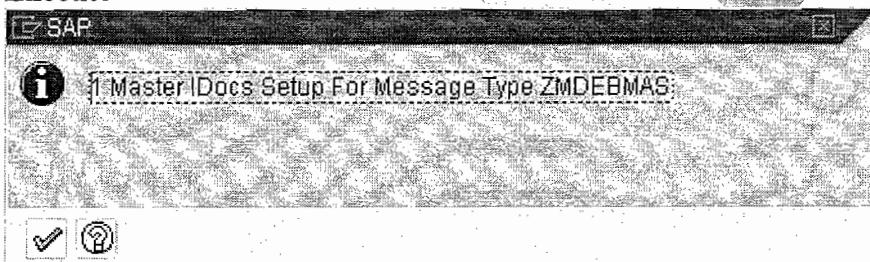
Testing :

Execute the Outbound Program

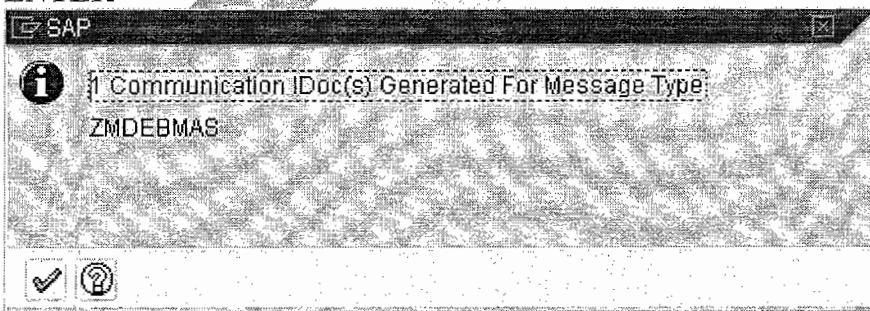


Enter SAP Customer No, Message Type (By Default) and Receiver Logical System . If Receiver System is not Provided then the System Considers all the receivers that are Configured in the Distribution and Model.

Execute



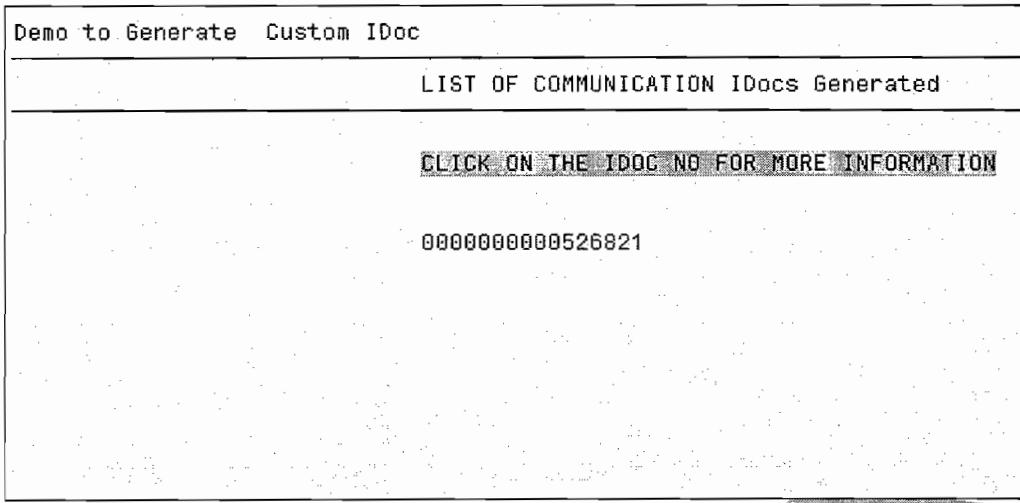
ENTER



ENTER

8. Working With Custom IDoc:

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Click On IDoc No for further Details

The screenshot shows the SAP "IDoc display" screen for IDoc 00000000000526821. The left pane shows a tree view with nodes like "Control Rec.", "Data records" (including "ZTMAPPING"), and "Status records" (with entries 03, 30, 01). The right pane contains two main sections: "Technical short info" and "Content of selected segment".

Technical short info:

Direction	1 Outbox
Current status	03
Basic type	ZDEBMAS01
Extension	
Message type	ZMDEBMAS
Partner no.	RECEIVER
Partn.Type	LS
Port	A000000035

Content of selected segment:

Fld.name	Fld cont
SKUNNR	0000033333
LKUNNR	LS_33333
LEGSYS	EMAX_SALES

Congratulations! IDoc is Generated and Dispatched (Data Passed Port to OK) Successfully.

Inbound Program :

Note : Outbound Programs Can be Implemented in any way(Program,Function Module...) and Where as INBOUND Programs should be always implemented as Function Module Only as they Can be Called(Executed) from the Remote (SENDOR) System.

Note : Inbound Program Should be Linked to the Process Code and the Process Code is Configured in the Inbound Partner Profile.

8. Working With Custom IDoc:

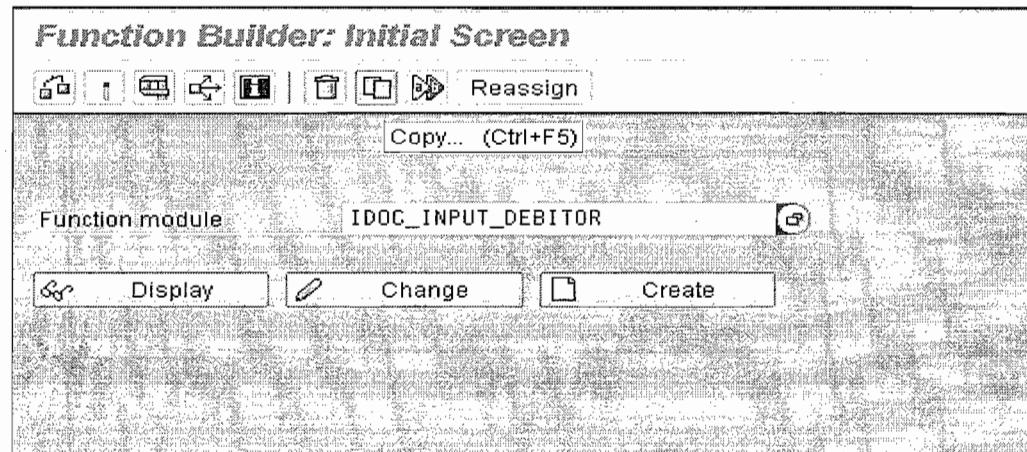
We Never Compromise In Quality. Would You?

Note : The Interface(Import/Export ...) Parameters of all the INBOUND Function Modules are Same So that SAP recommends to Copy any Standard Function Module and Implement the functionality Instead Of Creating a Custom Function Module.

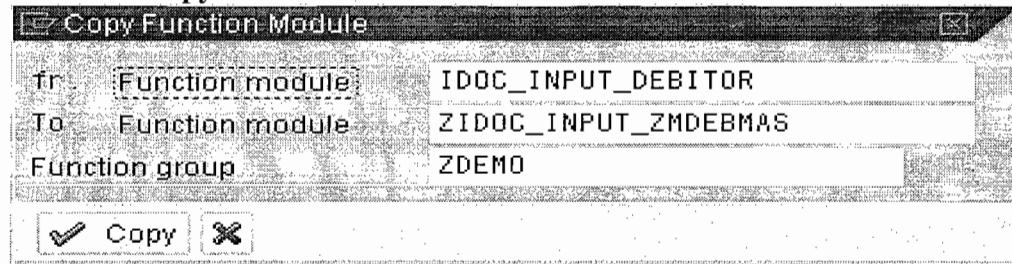
Note : Copy the standard Inbound Function Module IDOC_INPUT_DEBITOR to ZIDOC_INPUT_ZMDEBMAS.

LOGON to Receiver System :

Execute SE37



Click On Copy



Enter To Function Module ZIDOC_INPUT_ZMDEBMAS and Function Group ZDEMO and Click On Copy(ENTER)

8. Working With Custom IDoc:

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The screenshot shows the SAP SE11 transaction interface. The title bar says "Function module" and "ZIDOC_INPUT_ZMDEBMAS". The status bar says "Active". Below the title bar are tabs: Attributes, Import, Export, Changing, Tables, Exceptions, and Source code. The "Source code" tab is selected. The main area displays the ABAP code for the function module:

```
FUNCTION ZIDOC_INPUT_ZMDEBMAS.  
*"  
*""Local interface:  
*"  
IMPORTING  
*"  
    VALUE(INPUT_METHOD) LIKE BDWFAP_PAR-INPUTMETHD  
*"  
    VALUE(MASS_PROCESSING) LIKE BDWFAP_PAR-MASS_PROC  
*"  
    VALUE(PI_XD99_USED) TYPE CHAR1 DEFAULT SPACE  
*"  
EXPORTING  
*"  
    VALUE(WORKFLOW_RESULT) LIKE BDWFAP_PAR-RESULT  
*"  
    VALUE(APPLICATION_VARIABLE) LIKE BDWFAP_PAR-APPL_VAR  
*"  
    VALUE(IN_UPDATE_TASK) LIKE BDWFAP_PAR-UPDATETASK  
*"  
    VALUE(CALL_TRANSACTION_DONE) LIKE BDWFAP_PAR-CALLTRANS  
*"  
TABLES  
*"  
    IDOC_CONTRL STRUCTURE EDIDC  
*"  
    IDOC_DATA STRUCTURE EDIDD  
*"  
    IDOC_STATUS STRUCTURE BDIDOCSTAT  
*"  
    RETURN_VARIABLES STRUCTURE BDWFRETVAR  
*"  
    SERIALIZATION_INFO STRUCTURE BDI_SER  
*"  
EXCEPTIONS  
*"  
    WRONG_FUNCTION_CALLED  
*"  
  
ENDFUNCTION.
```

Delete the Existing Functionality and Activate it . AND use it for the Configuration and Later Implement the Corresponding Functionality to Post the Received IDoc.

Inbound Configuration :

- 1) Create a New Message Type (WE81)
- 2) Link Message Type + IDoc Type(WE82)
- 3) Link Message Type + IDoc Type + Function Module(WE57)
- 4) Define the Attributes Of the Function Module(BD51)
- 5) Create and Link Process Code to Function Module(WE42)
- 6) Maintain the Inbound Partner profile(WE20)

Note : Configuration 1 AND 2 (WE81,WE82) is Already Done at the SENDOR System . When the RECEIVER is the Client from the Same SAP Server then it is Created Automatically in all the Clients of the Same System because these settings are Cross Client. AND these two Settings are required in the RECEIVER System only when the RECEIVER is from a Different SAP System(Server).

So that here it is not required.

So Configuration 1 AND 2 are Completed (Done) Automatically as we already created the Same in the SENDOR System.

3. Link Message Type + IDoc Type + Function Module(WE57)

8. Working With Custom IDoc:

We Never Compromise In Quality. Would You?

Execute WE57

Display View "IDoc: Assignment of FM to Log. Message and IDoc Type"							
FM Name	FM BasicType	Enhanc.	Messg.Type	Var.	Fct.	Objec...	Descriptn
AFS_RETAIL_ART...	ZARTMAS01		ARTMAS				Create and change
AFS_RETAIL_ART...	ZARTMAS02		ARTMAS				Create and change
BAPI_IDOC_INPU...	ZACC_ACT_A...		ACC_ACT_AL...				Accounting: Post ac
BAPI_IDOC_INPU...	ZACC_ACT_A...		ACC_ACT_AL...				Accounting: Post ac
BAPI_IDOC_INPU...	ZACC_ASSET...		ACC_ASSET...				Accounting: Post ac
BAPI_IDOC_INPU...	ZACC_ASSET...		ACC_ASSET...				Accounting: Post ac
BAPI_IDOC_INPU...	ZACC_BILLI...		ACC_BILLING				Accounting: Post inv
BAPI_IDOC_INPU...	ZACC_BILLI...		ACC_BILLING				Accounting: Post inv
BAPI_IDOC_INPU...	ZACC_BILLI...		ACC_BILLIN...				Accounting: Post bil
BAPI_IDOC_INPU...	ZACC_DOCUM...		ACC_DOCUME...				Accounting: Posting
BAPI_IDOC_INPU...	ZACC_DOCUM...		ACC_DOCUME...				Accounting: Posting
BAPI_IDOC_INPU...	ZACC_DOCUM...		ACC_DOCUME...				Accounting: Post Re

Click On then New Entries.

New Entries: Details of Added Entries

Processing by	ZIDOC_INPUT_ZMDEBMAS
Module	ZIDOC_INPUT_ZMDEBMAS
Type	F
IDoc type	ZDEBMAS01
Basic type	ZDEBMAS01
Extension	
Message	ZMDEBMAS
Message type	ZMDEBMAS
Message code	
Msg.function	
Object	
Objecttype	
Direction	2

Enter the Function Module

IDoc Type

Message Type
Direction – 2(Inbound)

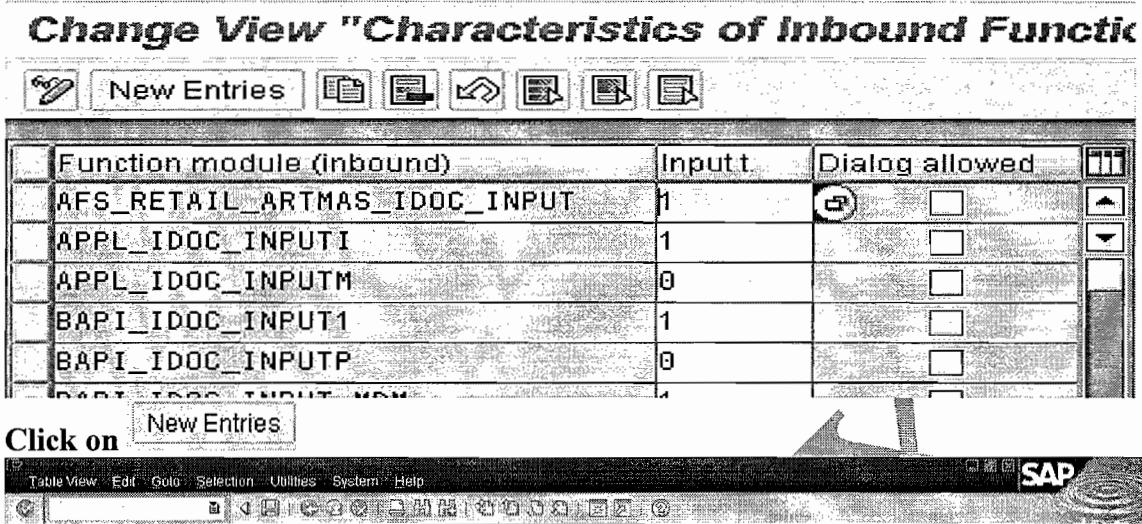
SAVE IT.

8. Working With Custom IDoc:

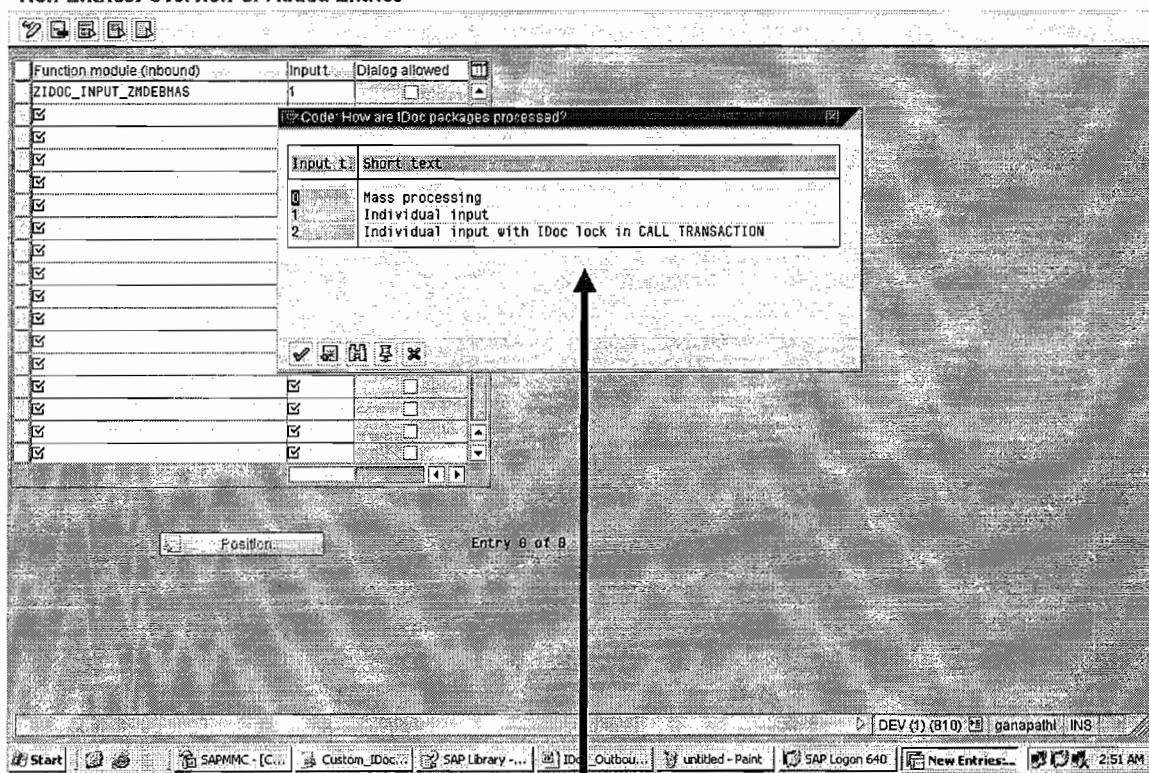
We Never Compromise In Quality. Would You?

4) Define the Attributes Of the Function Module(BD51)

Execute BD51



New Entries: Overview of Added Entries



Enter the INBOUND Function Module , Input type as 1 and SAVE it.

5) Create and Link Process Code to Function Module(WE42)

8. Working With Custom IDoc:

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Executer WE42

Display View "Inbound process code": Overview

Inbound process code	Description of process
A001	ALE_MATCOR
A002	ALE_MATCHE
AFSA	AFS inbound article
ALC2	Synchron. of cust. data betw.
ALEC	Control data adjustment bet
ALED	
ALFW	Forward IDOCs to another s
APLI	Inbound IDoc: Individual Pro
APLM	Inbound IDoc: Mass Proces
ASMO	ASSMOD Assortment modu
AUD1	ALEAUD processing inform
BAPI	Inbound BAPI IDoc: individu
BAPP	Inbound BAPI IDoc: Packagi
BBPC	
BLAC	BLAOCH Purchasing contra
BLAO	BLAORD Purchasing contra

Click On

Change View "Inbound process code": Overview

Inbound process code	Description of process
A001	ALE_MATCOR
A002	ALE_MATCHE
AFSA	AFS inbound article
ALC2	Synchron. of cust. data betw.
ALEC	Control data adjustment bet
ALED	
ALFW	Forward IDOCs to another s
APLI	Inbound IDoc: Individual Pro
APLM	Inbound IDoc: Mass Process
ASMO	ASSMOD Assortment modu
AUD1	ALEAUD processing inform

Click On New Entries

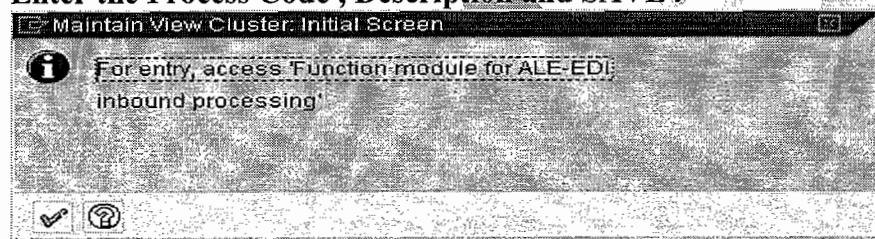
8. Working With Custom IDoc:

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New Entries: Details of Added Entries

Dialog Structure	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Inbound process code	
Logical message	
Process code	ZDEBM
Description	Send Customer Mapping Data
Identification	
Option ALE	
<input checked="" type="radio"/> Processing with ALE service <input type="radio"/> Processing w/o ALE service	
Processing type	
<input type="radio"/> Processing by task <input checked="" type="radio"/> Processing by function module <input type="radio"/> Processing by process	

Enter the Process Code , Description and SAVE .



ENTER, Select the Function Module from the Dropdown box

New Entries: Details of Added Entries

Process code	ZDEBM
Module (inbound)	ZIDOC_INPUT_ZMDEBMAS
Function module	
Maximum number of repeats	
IDoc packet	
Object type	
End event	
IDoc	
Object type	
Start event	
End event	
Application object	
Object type	
Start event	

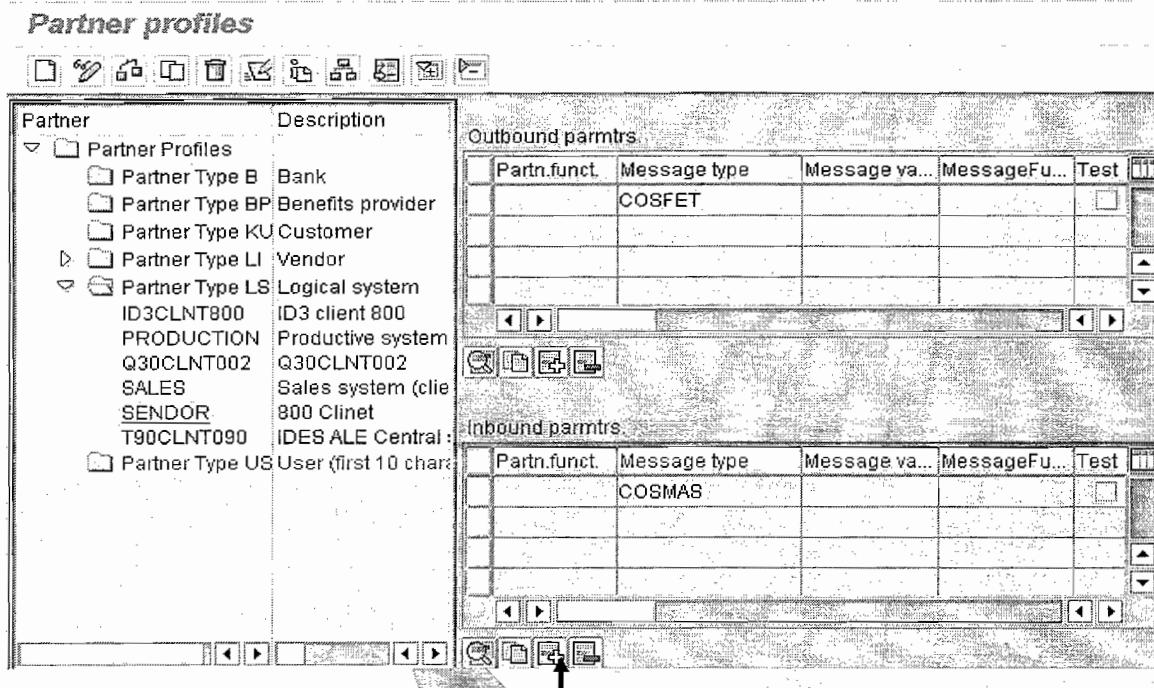
SAVE it.

8. Working With Custom IDoc:

We Never Compromise In Quality. Would You?

6) Maintain the Inbound Partner profile(WE20)

Execute WE20



Click On Create Inbound Parameters for Partner SENDOR.

Partner profiles: Inbound parameters

This screenshot shows the 'Inbound parameters' configuration screen for Partner SENDOR. The partner number is listed as 'SENDOR' with '800 Client' as the client. The 'Partn.type' is 'LS'. The 'Partn.funct' field contains 'ZMDEBMAS'. Below this, there are fields for 'Message type' (containing 'ZMDEBMAS'), 'Message code' (empty), and 'Message function' (empty). A callout box labeled 'Enter Message Type' points to the 'Message type' field. Another callout box labeled 'Process Code' points to the 'Partn.funct' field. The 'Inbound options' section includes 'Post processing: permitted agent' (set to 'ZDEBM'), 'Telephony' (unchecked), and 'Send Customer Mapping' (unchecked). Under 'Process code', there is a field with 'ZDEBM' and a checked 'Syntax check' checkbox. The 'Processing by function module' section has three radio button options: 'Trigger by background program' (unchecked), 'Trigger immediately' (checked), and another option that is partially visible. A red arrow points from the 'Process Code' callout box towards the 'Post processing' field.

8. Working With Custom IDoc:

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SAVE it.

INBOUND Configuration is Completed.

INBOUND Function Module(Program) :

Note : The Status Of IDoc Posting depends on the Processing Logic of INBOUND Function Module So that Final Status record i.e Successful Posting – Status Code 53 and Application Document Not Posted , Status Code – 51 should be Provided by the Function Module itself by APPENDING the respective record to Internal Table IDOC_STATUS .

FUNCTION ZIDOC_INPUT_ZMDEBMAS.

```
**"-----  
***"Local interface:  
** IMPORTING  
**   VALUE(INPUT_METHOD) LIKE BDWFAP_PAR-INPUTMETHD  
**   VALUE(MASS_PROCESSING) LIKE BDWFAP_PAR-MASS_PROC  
**   VALUE(PI_XD99_USED) TYPE CHAR1 DEFAULT SPACE  
** EXPORTING  
**   VALUE(WORKFLOW_RESULT) LIKE BDWFAP_PAR-RESULT  
**   VALUE(APPLICATION_VARIABLE) LIKE BDWFAP_PAR-APPL_VAR  
**   VALUE(IN_UPDATE_TASK) LIKE BDWFAP_PAR-UPDATETASK  
**   VALUE(CALL_TRANSACTION_DONE) LIKE BDWFAP_PAR-CALLTRANS  
** TABLES  
**   IDOC_CTRL STRUCTURE EDIDC  
**   IDOC_DATA STRUCTURE EDIDD  
**   IDOC_STATUS STRUCTURE BDIDOCSTAT  
**   RETURN_VARIABLES STRUCTURE BDWFRETVAR  
**   SERIALIZATION_INFO STRUCTURE BDI_SER  
** EXCEPTIONS  
**   WRONG_FUNCTION_CALLED  
**-----
```

DATA : WA_DATA TYPE EDIDD,
 WA_STATUS TYPE BDIDOCSTAT,
 WA_Z1MAPPING TYPE Z1MAPPING,
 WA_ZMAPPING TYPE ZMAPPING.

*READ THE DATA FROM ALL THE SEGMENTS OF IDOC

LOOP AT IDOC_DATA INTO WA_DATA.

CASE WA_DATA-SEGNAM.

WHEN 'Z1MAPPING'.

WA_Z1MAPPING = WA_DATA-SDATA.

MOVE-CORRESPONDING WA_Z1MAPPING TO WA_ZMAPPING.

ENDCASE.

ENDLOOP.

8. Working With Custom IDoc:

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*UPDATE THE DATABASE TABLE

MODIFY ZMAPPING FROM WA_ZMAPPING.

*STATUS RECORD

IF SY-SUBRC = 0.

WA_STATUS-DOCNUM = WA_DATA-DOCNUM. "CURRENT IDOC NO

WA_STATUS-STATUS = 53. "SUCCESSFUL STATUS CODE

WA_STATUS-MSGTY = 'ZMDEBMAS'.

APPEND WA_STATUS TO IDOC_STATUS.

ELSE.

WA_STATUS-DOCNUM = WA_DATA-DOCNUM."CURRENT IDOC NO

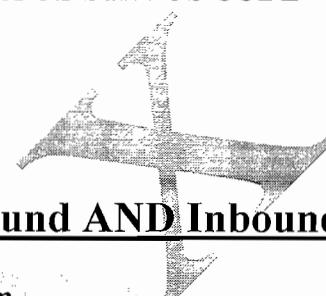
WA_STATUS-STATUS = 51. "UN SUCCESSFUL STATUS CODE

WA_STATUS-MSGTY = 'ZMDEBMAS'.

APPEND WA_STATUS TO IDOC_STATUS.

ENDIF.

ENDFUNCTION.



Testing the Complete Cycle (Both Outbound AND Inbound):

- 1) Create a New Customer at SENDOR System
- 2) Execute the Outbound Program at SENDOR System
- 3) Make Sure that IDoc is Generated and Dispatched Successfully from SENDOR
- 4) Make Sure that the IDoc is received by the RECEIVER System and also Posted (Created in the Custom Table Successfully).

Step 1 in Detail :

Execute XD01 and Create Customer Master

The screenshot shows the SAP Customer Create: Initial Screen (XD01). The interface is a classic SAP graphical user interface with a title bar and various input fields and dropdown menus. Key visible elements include:

- Account group:** A dropdown menu.
- Bill-to party:** A field containing the value "11111".
- Customer:** A dropdown menu.
- Company code:** A dropdown menu.
- Sales area:** A dropdown menu.
- Reference:** A dropdown menu.
- Customer's sales areas...**: A button or link.
- Toolbar:** Includes standard SAP icons for save, cancel, and other functions.

ENTER

8. Working With Custom IDoc:

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Create Customer: General Data

The screenshot shows the SAP interface for creating a customer. At the top, there are tabs for General Data, Company Code Data, Sales Area Data, CIN Details, and Legacy Data. The Legacy Data tab is highlighted with a red arrow pointing to it. Below the tabs, the customer number '11111' is entered. The main form contains fields for Name, Title, Company, Name, Search terms, Street address, Street/House number, Postal code/City, Country, and Region. The company field is filled with 'eMAX 11111 Technologies Ltd'. The search term field contains 'eMAX'. The street address is 'Street 11111'.

Click Legacy Data to Provide the Legacy Customer & System Data.

This screenshot shows the same SAP interface, but the Legacy Data tab is now selected, indicated by a red arrow. A modal dialog box titled 'Legacy Data' is open, displaying legacy customer information. It shows 'Legacy Customer No' as 'LS_234' and 'Legacy System' as 'eMAX_TRAININGS'.

Enter the Legacy System Details and SAVE it. Now Customer 11111 is Created and Ready to SEND.

8. Working With Custom IDoc:

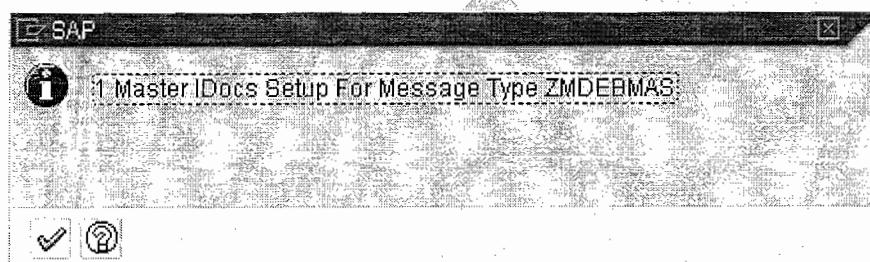
We Never Compromise In Quality. Would You?

Execute the Outbound (IDoc Generation) Program ZGDEMO_OUTBOUND_IDOC Demo to Generate AND Dispatch Custom IDoc

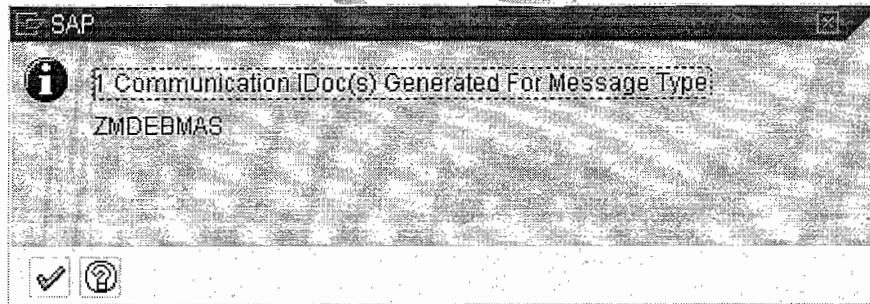
SAP Data

SAP Customer No	11111	to
Message Type	ZMDEBMAS	
Logical System		

Provide the SAP Customer to be transferred, Message type (Default) and Logical System and if not Provided , the System reads the receivers information from the Distribution Model and Outbound Partner Profile.



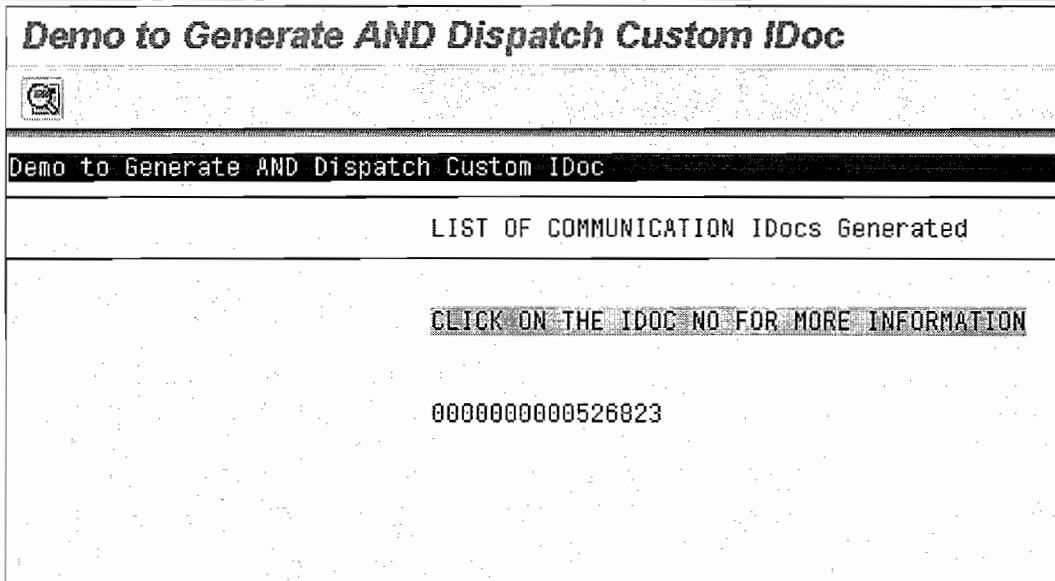
ENTER



ENTER

8. Working With Custom IDoc:

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IDoc display

IDoc 00000000000526823

- Control Rec.
- Data records
 - Z1MAPPING
- Status records
 - 03
 - 30
 - 01

Total number: 000001
Segment 000001
Data passed to port OI
IDoc ready for dispatch
IDoc generated

Technical short info

Direction	Outbox
Current status	03
Basic type	ZDEBMAS01
Extension	ZMDEBMAS
Message type	RECEIVER
Partner no.	LS
Partn.Type	A000000035
Port	

Content of selected segment

Fld.name	Fld.cont.
SKUNNR	0000011111
LKUNNR	LS_234
LEGSYS	EMAX_TRAININGS

Congratulations! IDoc is Successfully Generated and Dispatched from the SENDOR System.

8. Working With Custom IDoc:

We Never Compromise In Quality. Would You?

Logon to Receiver System :

Execute WE05/WE02 to Check the Posting Status Of the Received IDoc

IDoc list

The screenshot shows the SAP SE05 interface for viewing IDoc lists. At the top, there are three tabs: 'Default selectn' (selected), 'Addit.selectn', and 'EDI sel.'. Below the tabs, there are several search fields and their corresponding values:

Time created	00:00:00	to	24:00:00	→
Creation Date	17.02.2008	to	17.02.2008	→
Last Changed at	00:00:00	to	24:00:00	→
Date of Last Change		to		→

Below these are fields for 'Direction' (set to 2), 'IDoc number', and 'Current Status', each with a corresponding '→' button.

Further down, there are fields for 'Basic type' (ZMDEBMAS), 'Enhancement', 'Logical message', 'Message code', and 'Message function', each with a corresponding '→' button.

At the bottom, there are fields for 'Partner Port' (SAPDE), 'Partner Number', 'Partner Type', and 'Partner Function', each with a corresponding '→' button.

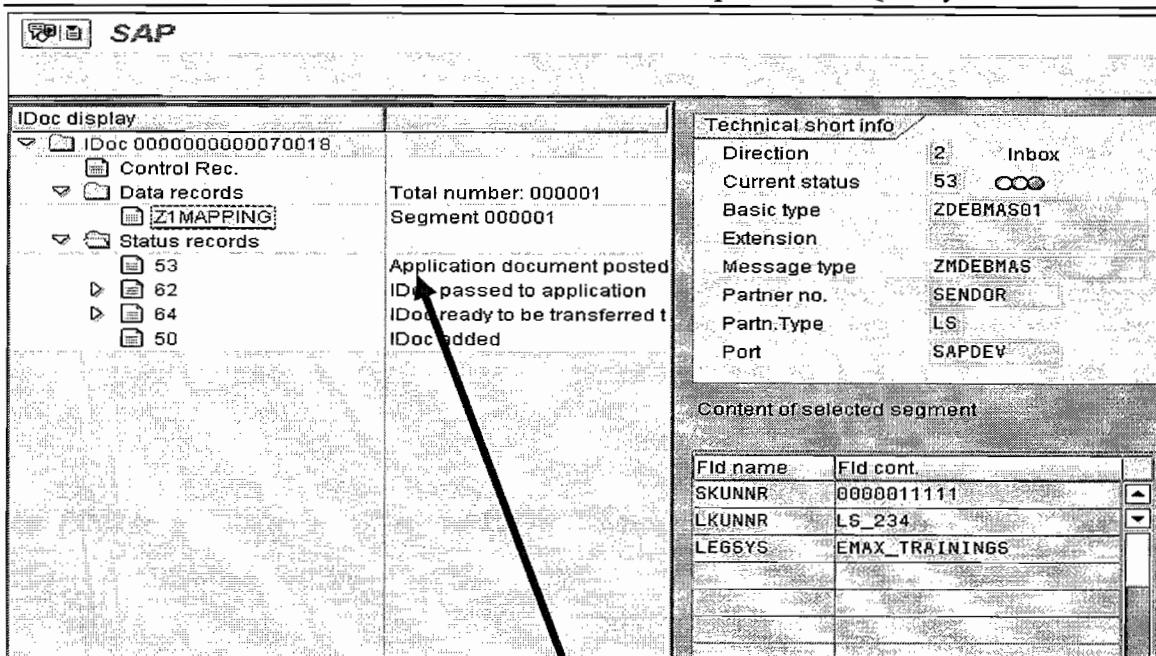
At the very bottom, there is a table titled 'Selected IDocs' showing a list of received IDocs:

IDoc	Numb...	Selected IDocs
Selected IDocs	000007	
Outbound Docs	000000	
Inbound IDocs	000007	
ZMDEBMAS	000007	
		Selected IDocs
		IDoc Number Segm... Stat... Stat... Partner BasicType Date created Time Messg... Direction Port
		00000000000070007 1 56 000 LS/ /SENDOR ZDEBMAS01 17.02.2008 01:30:48 ZMDEB... Inbox SAPDE
		00000000000070010 1 56 000 LS/ /SENDOR ZDEBMAS01 17.02.2008 01:37:26 ZMDEB... Inbox SAPDE
		00000000000070011 1 56 000 LS/ /SENDOR ZDEBMAS01 17.02.2008 01:39:04 ZMDEB... Inbox SAPDE
		00000000000070012 1 56 000 LS/ /SENDOR ZDEBMAS01 17.02.2008 01:53:34 ZMDEB... Inbox SAPDE
		00000000000070016 1 56 000 LS/ /SENDOR ZDEBMAS01 17.02.2008 03:59:54 ZMDEB... Inbox SAPDE
		00000000000070017 1 56 000 LS/ /SENDOR ZDEBMAS01 17.02.2008 04:02:55 ZMDEB... Inbox SAPDE
		00000000000070018 1 53 000 LS/ /SENDOR ZDEBMAS01 17.02.2008 04:09:19 ZMDEB... Inbox SAPDE

Double Click On the Latest IDoc

8. Working With Custom IDoc:

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Congratulations ! Application Document is Posted Successfully.

Note : Check the Same in the Database Table ZMAPPING in the RECEIVER System.

Data Browser: Table ZMAPPING Select Entries			
Table:	ZMAPPING	Displayed fields:	4 of 4 Fixed columns:
Client	SAP Customer No	Legacy Customer No	Legacy System
810	0000011111	LS_234	EMAX_TRAININGS

Notice that Custom Table ZMAPPING is also Updated Successfully.

Congratulations! Entire Process is Executed Successfully.

9. Working With Extended IDocs

We Never Compromise In Quality. Would You?

Extended IDoc = Standard IDoc + Additional Segments .

Note : When the Standard IDoc is not enough to Carry the whole data, New Segments Can be Added to the Standard IDoc to Carry the additional Segments.

Requirement : Create an Extended IDoc to Carry the Additional Customer Master Data along the with Standard Customer Master IDoc .

Additional Data : Legacy Customer and Legacy System Name through Segment Z1MAPPING.

Note : This Additioanal Data is available in Standard Table KNA1.

Steps to Create Extended IDocs:

Note: Creation Of Extended IDoc is Simply Adding the Required Segments after the required Segments of the Standard IDoc.

So Before we Create the Extended IDoc , We need to keep the Segments ready. Infact this segment Z1MAPPING is already created while working with Custom IDoc. Any way go through the below Steps to Create the Segments.

1) Create the Segment Z1MAPPING

Execute WE31 (Segment Editor)

Development segments: Initial screen

The screenshot shows the SAP SE31 Segment Editor. At the top, there are icons for creating, deleting, and modifying segments. Below that, a toolbar has 'Create (F5)' and 'Z1MAPPING' selected. A main table titled 'Definitions' lists segment definitions with columns for Version, Segm. definition, Release, No. of..., Lgth, and Date. The table is currently empty.

Enter the Name for the Segment and Say Create

9. Working With Extended IDocs

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Development segments: Change segment definition Z2MAPPING

Po...	Field Name	Data element	ISO.c...	Ex...
1	SKUNNR	ZSKUNNR	<input type="checkbox"/>	10
2	LKUNNR	ZLKUNNR	<input type="checkbox"/>	10
3	LEGSYS	ZLEGSYS	<input type="checkbox"/>	20
4			<input type="checkbox"/>	
5			<input type="checkbox"/>	
6			<input type="checkbox"/>	
7			<input type="checkbox"/>	

Enter the List Of Fields and their Data elements for the Segments and SAVE it.

Note : Create the Data Elements ZSKUNNR (SAP Customer No, CHAR,10),
ZLKUNNR(Legacy Customer, CHAR,10)
ZLEGSYS (Legacy System) in Data Dictionary.

Note : Repeat the Same for further Segments if required and here one Segment is enough.

2) Execute WE30 to Create the Extended IDoc

Develop IDoc Types: Initial Screen

Obj.name: EXDEBMAS

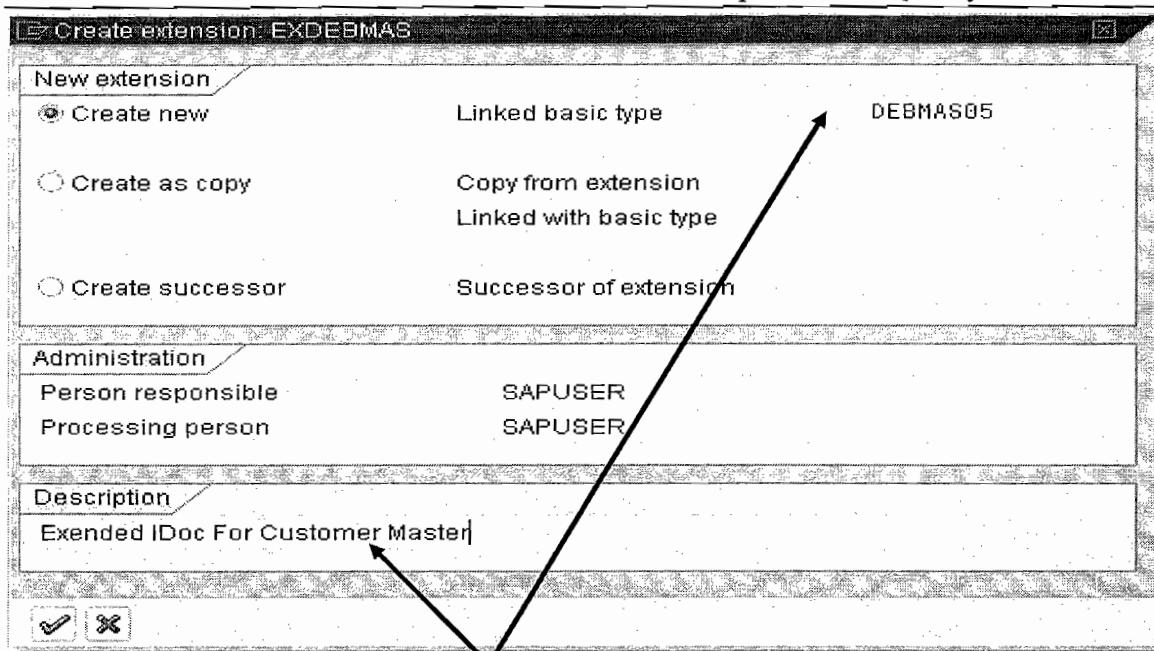
Development object:

Basic type
 Extension

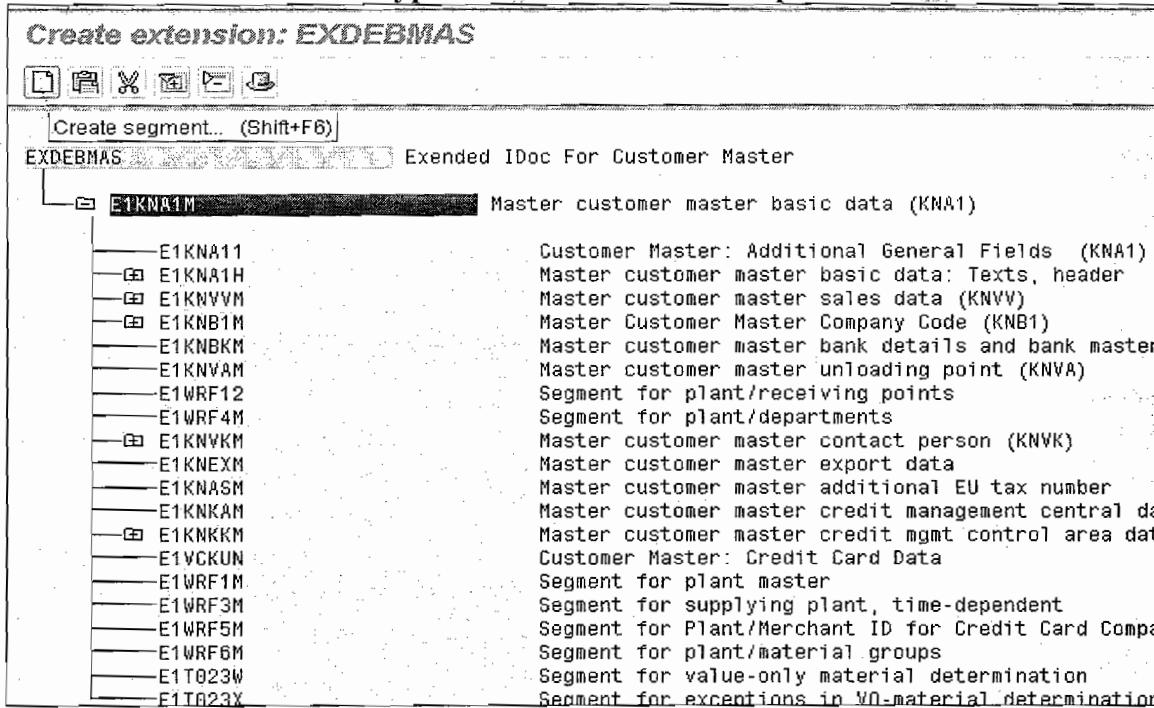
Select Extension and Enter the Name for Extended IDoc(Obj.Name) and Click On Create.

9. Working With Extended IDocs

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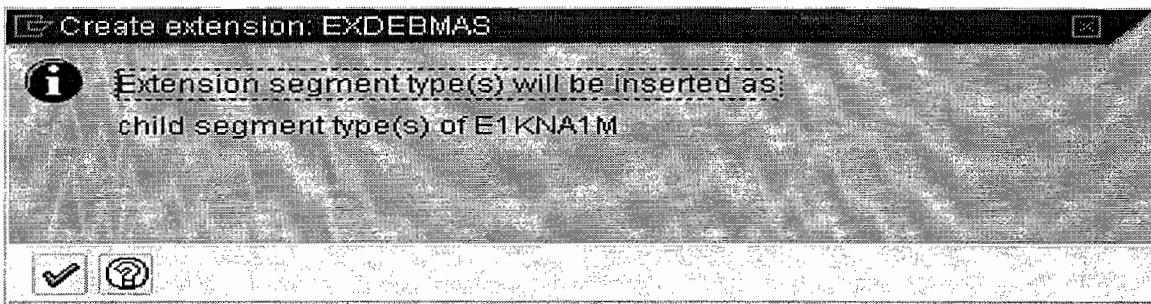
Provide the Standard IDoc type DEBMAS05 and Description then Press ENTER



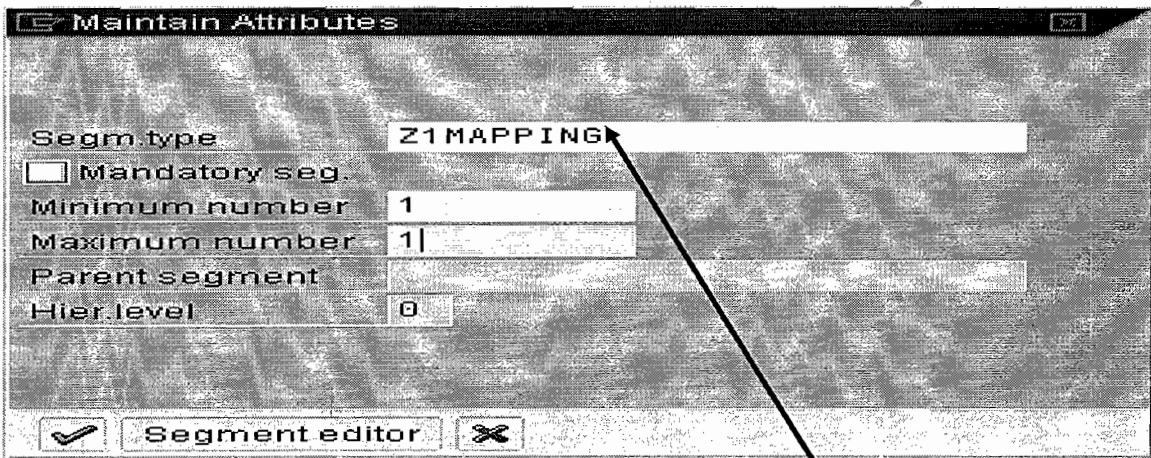
Select the Reference Segment E1KNA1M and Click On Create Segment

9. Working With Extended IDocs

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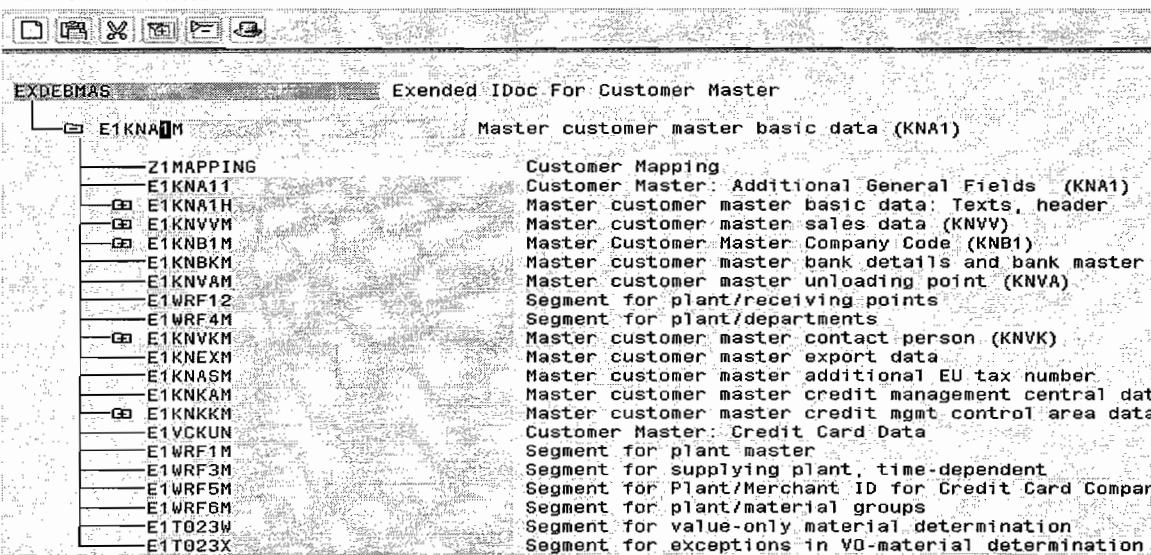


ENTER



Provide the Segment Details to be ADDED i.e Segment Z1MAPPING

Create extension: EXDEBMAS



Notice that the Segment Z1MAPPING is Added. So that it Can Carry Additional Data along with the Standard Segments(IDoc).

SAVE it.

9. Working With Extended IDocs

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Extended IDocs Outbound Configuration :

- 1) Link the Extended IDoc type + IDoc type + Message type .
- 2) Maintain the Distribution Model and ADD Message type DEBMAS
- 3) Maintain the Outbound Partner Profile

- 1) Link the Extended IDoc type + IDoc type + Message type (WE82)
Execute WE82

Display View "Output Types and Assignment to IDoc Type:

Message type	IDoc type	Extension	Release
ABCDEF	WILDHAGEN_TEST01		45A
ABSEN1	ABSEN1		30A
ACCONF	ACCONF01		31G
ACC_ACT_ALLOC	ACC_ACT_ALLOC01		40A
ACC_ACT_ALLOC	ACC_ACT_ALLOC02		40C
ACC_ASSET_TRANS...	ACC_ASSET_TRANS...		40C
ACC_ASSET_TRANS...	ACC_ASSET_TRANS...		40C
ACC_BILLING	ACC_BILLING01		40A
ACC_BILLING	ACC_BILLING02		40C
ACC_BILLING_REV...	ACC_BILLING_REV...		46C
ACC_DOCUMENT	ACC_DOCUMENT01		40B
ACC_DOCUMENT	ACC_DOCUMENT02		620
ACC_DOCUMENT_RE...	ACC_DOCUMENT_RE...		620
ACC_EMPLOYEE_EXP	ACC_EMPLOYEE_EX...		40A
ACC_EMPLOYEE_EXP	ACC_EMPLOYEE_EX...		40C
ACC_EMPLOYEE_PAY	ACC_EMPLOYEE_PA...		40A
ACC_EMPLOYEE_PAY	ACC_EMPLOYEE_PA...		40C

Click On

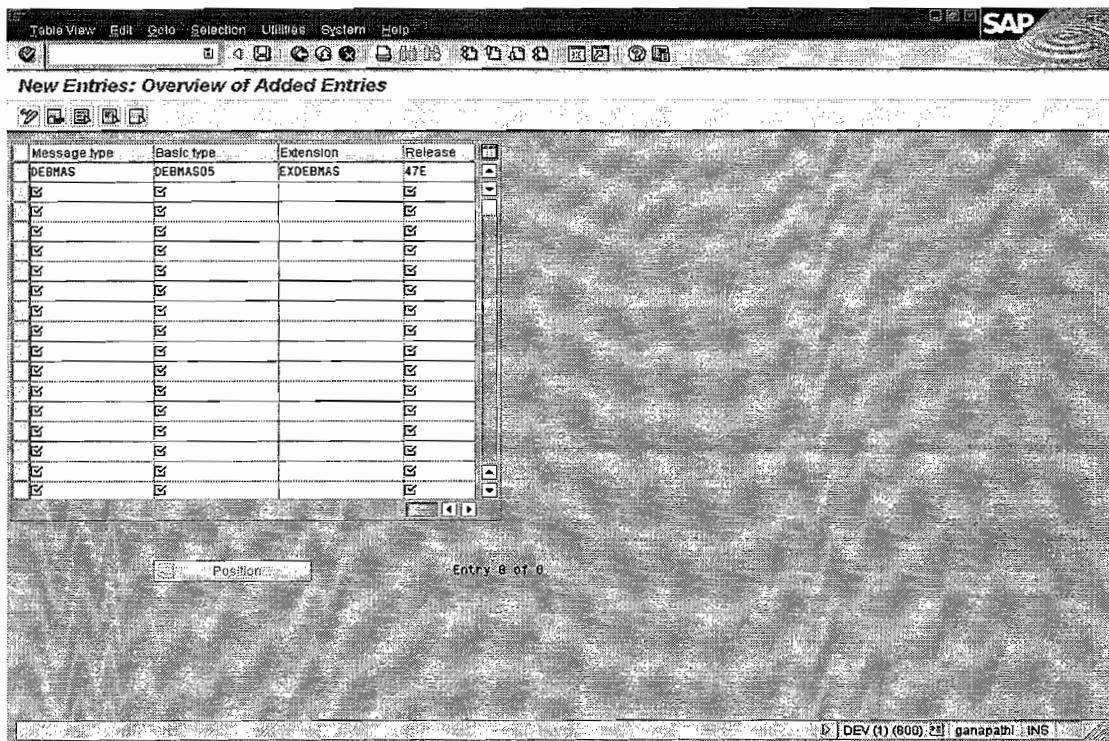
Change View "Output Types and Assignment to IDoc Type"

Message type	New Entries (F5)	Extension	Release
ABCDEF	WILDHAGEN_TEST01		45A
ABSEN1	ABSEN1		30A
ACCONF	ACCONF01		31G
ACC_ACT_ALLOC	ACC_ACT_ALLOC01		40A
ACC_ACT_ALLOC	ACC_ACT_ALLOC02		40C
ACC_ASSET_TRANS...	ACC_ASSET_TRANS...		40C
ACC_ASSET_TRANS...	ACC_ASSET_TRANS...		40C
ACC_BILLING	ACC_BILLING01		40A
ACC_BILLING	ACC_BILLING02		40C
ACC_BILLING_REV...	ACC_BILLING_REV...		46C
ACC_DOCUMENT	ACC_DOCUMENT01		40B
ACC_DOCUMENT	ACC_DOCUMENT02		620

New Entries New Entries

9. Working With Extended IDocs

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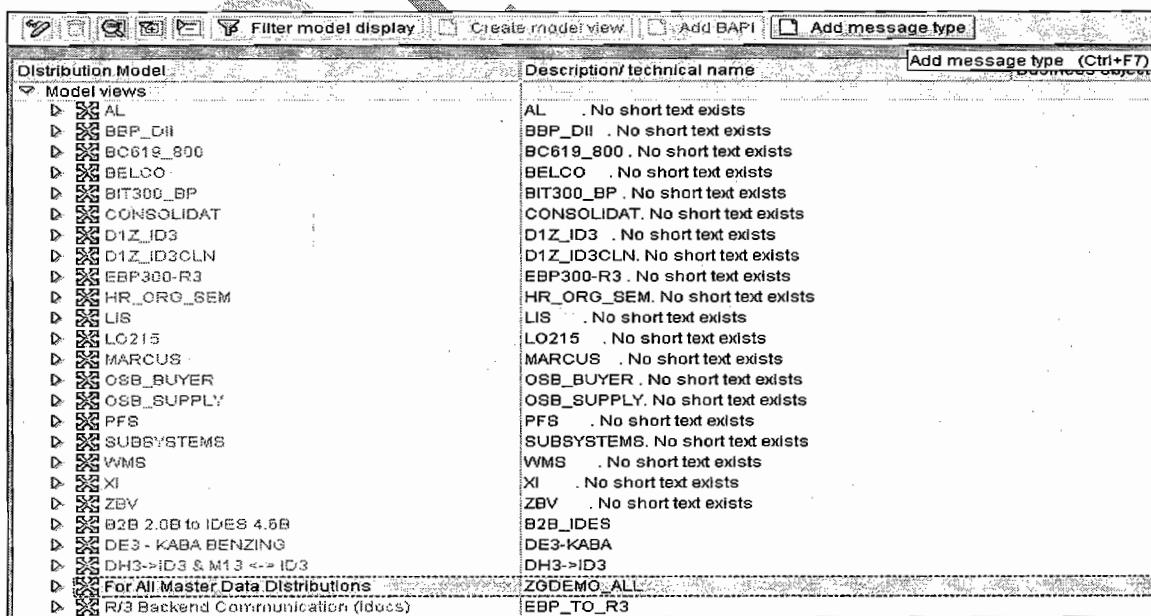


Enter Message type(DEBMAS), Standard IDoc type(DEBMAS05) and Extension I.e Extended IDoc EXDEBMAS and Release .

SAVE IT.

2) Maintain Distribution Model and ADD Message Type (BD64)

EXECUTE BD64 AND Click On Change



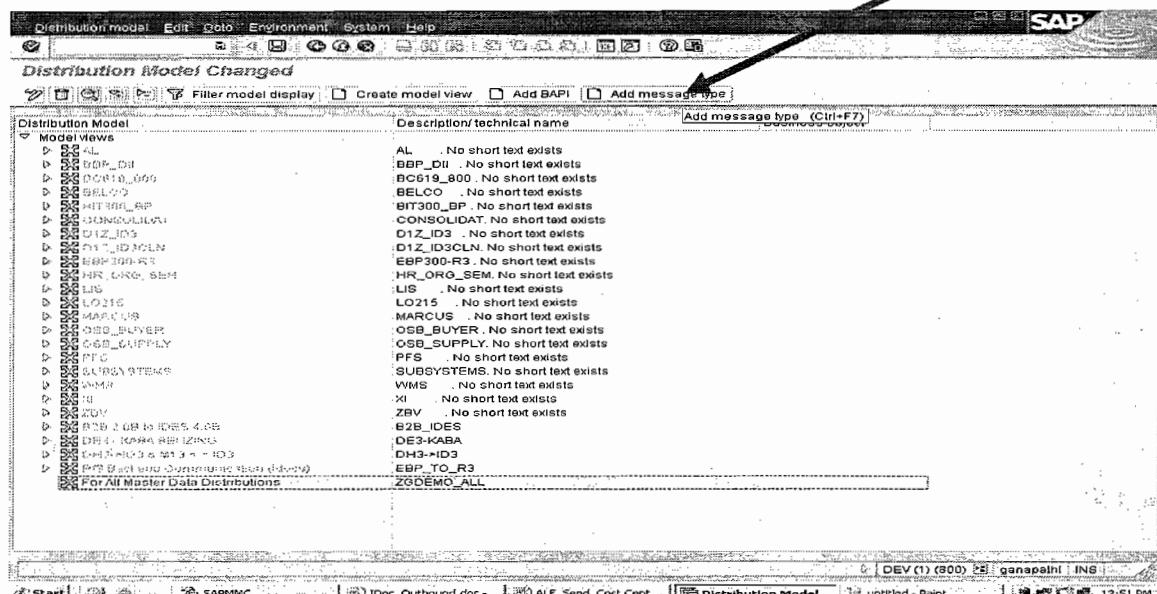
9. Working With Extended IDocs

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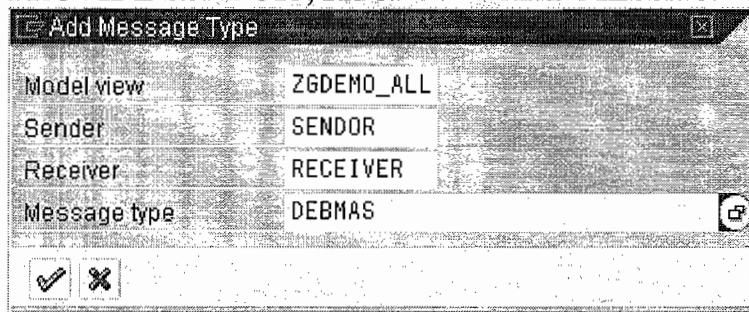
Note : Distribution Model is Created in SENDOR System. So that we can use the same Distribution Model to Send any Message to any Receiver. So No Need to Create a new Distribution Model for each receiver and Message Type.

For Each Message type to be Transferred :

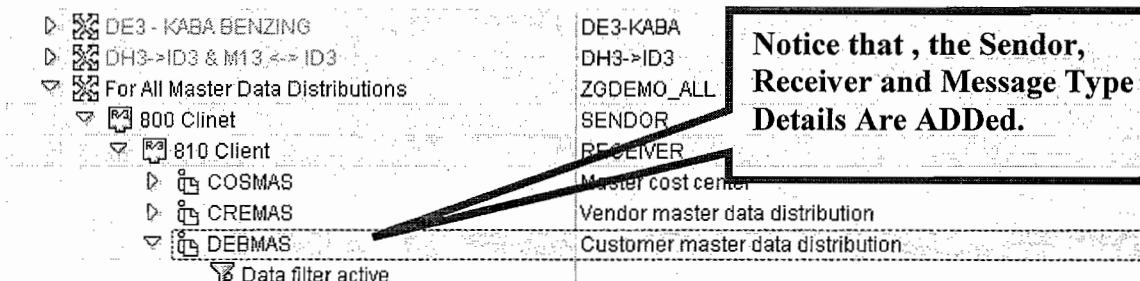
Select the Distribution Model and Click On Add Message Type



PROVIDE SENDOR , RECEIVER AND MESSAGE TYPE To be Transferred.



SAVE it.



9. Working With Extended IDocs

We Never Compromise In Quality. Would You?

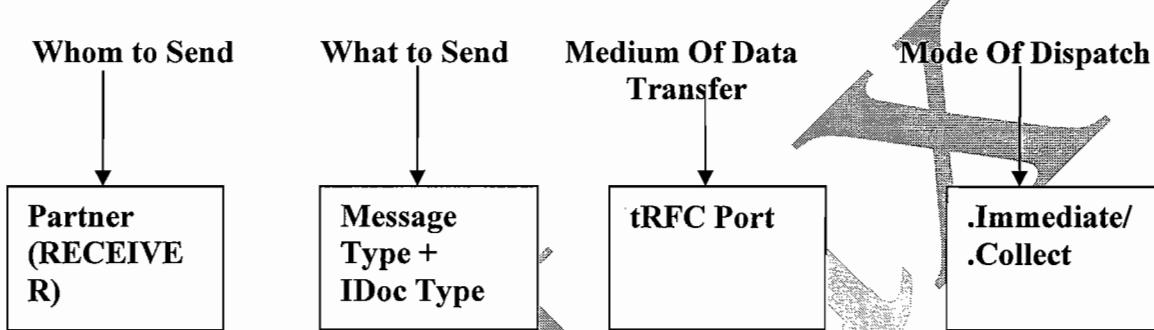
Note : Repeat the ADD Message type Steps for each message type to be Transferred.

3) Maintain Outbound Partner Profile(WE20) :

EXECUTE WE20

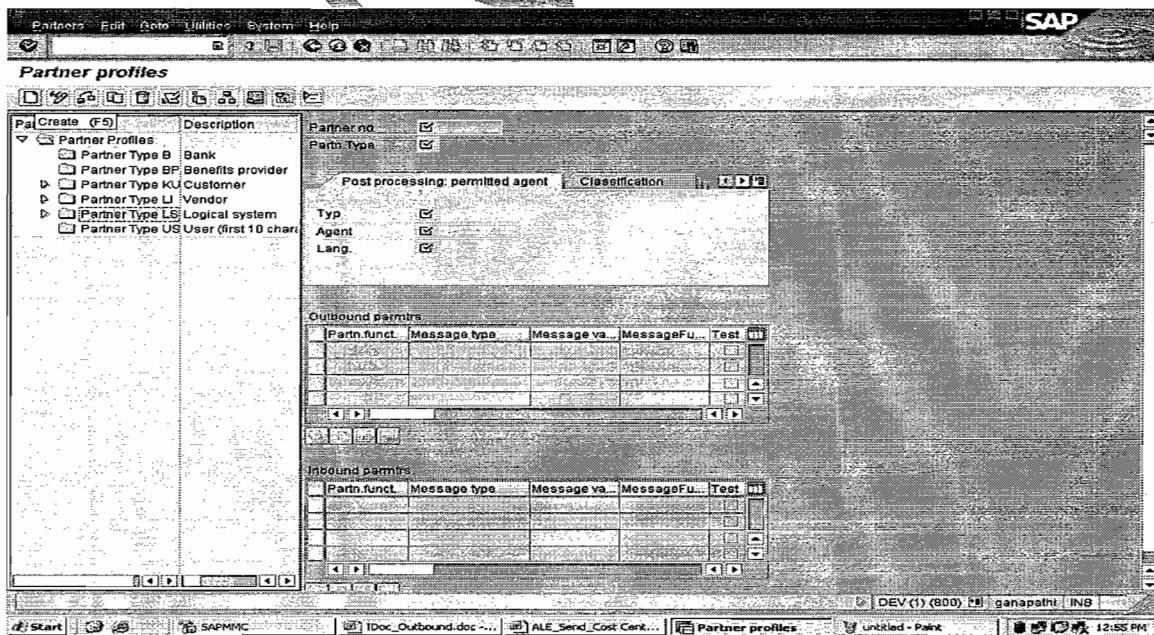
Create the Partner for Receiver Sys (If Doesn't Exist) and Add Message type (if Doesn't Exist) Else Change the Existing Message type of the Partner to Provide the Extended IDoc along with Standard IDoc.

Note: In the Outbound Partner Profile , We Maintain the Below Information.



Note : We CAN Create Only One Profile for each receiving(Partner) and One Entry for each Message type we transfer .

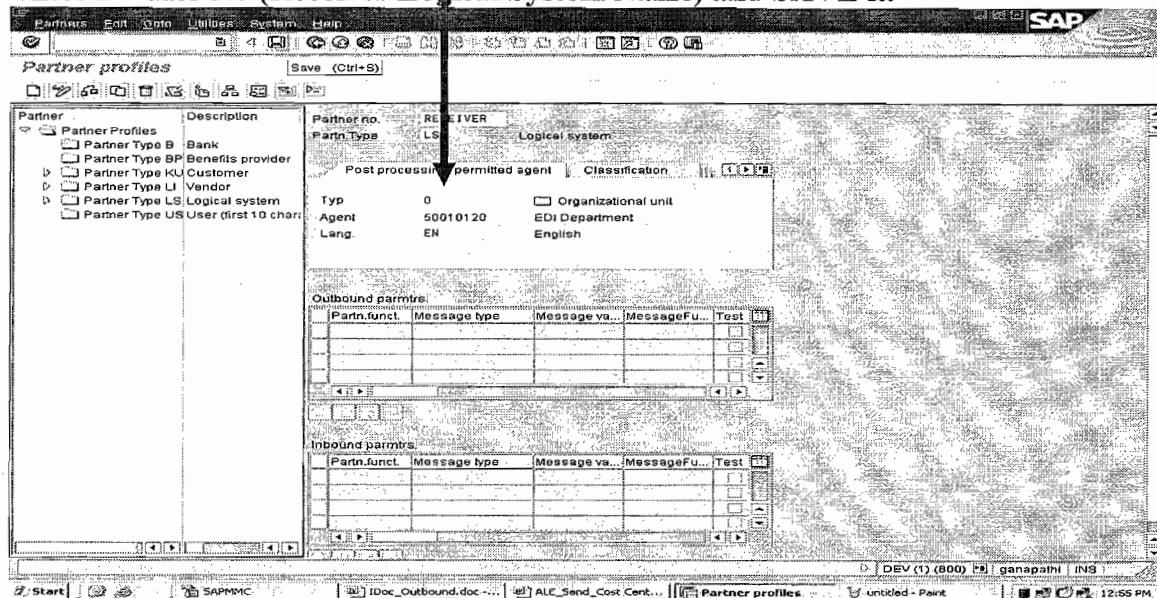
EXECUTE WE20 AND Select Partner type LS Partner Type LS and Create .



9. Working With Extended IDocs

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Enter Partner No (Receiver Logical System Name) and SAVE it.



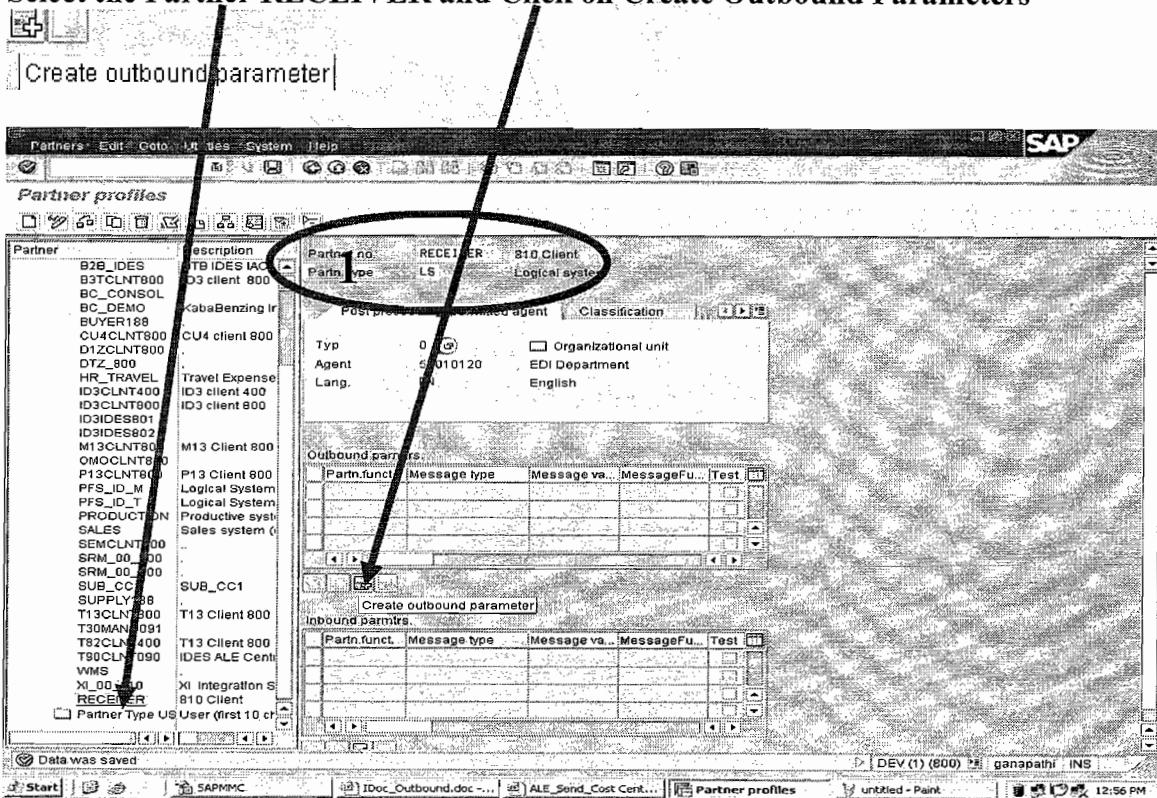
SAVE IT. (Create the Partner if Not Yet Created).

Note : A Profile is Created For RECEIVER (810 Client) So that we have to use the Same Profile, every time we transfer a new Message type to this Receiver.

For Each New Message to be Transferred to the Same Partner (RECEIVER):

From the Same Screen

Select the Partner RECEIVER and Click on Create Outbound Parameters



9. Working With Extended IDocs

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Partner profiles: Outbound parameters

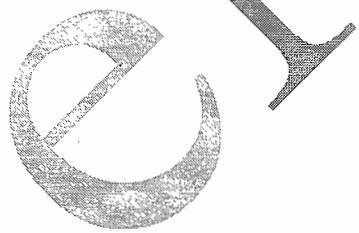
Partner no.	RECEIVER	810 Client
Partn.Type	LS	Logical system
Partn.funct		
<input checked="" type="checkbox"/> Message Type	2 DEBMAS	Customer master data distribution
Message code		
Message function	<input type="checkbox"/> Test	
Outbound Options		
Receiver port	3 A000000035	Transactional RFC
Pack. Size	From SENDOR to RECEIVER	
Input Mode		
<input checked="" type="radio"/> Transfer IDoc immed.		Output Mode 2
<input type="radio"/> Collect IDocs		
IDoc Type		
Basic type	2 DEBMAS05	Customer master
Extension	EXDEBMAS	
View		
<input checked="" type="checkbox"/> Syntax check		

Extended IDoc Name along
With Standard IDoc

Press ENTER

- 1 = WHOM TO SEND (RECEIVER)
- 2 = WHAT TO SEND (MESSAGE TYPE) + IDOC , Extended IDoc
- 3 = MEDIUM OF DATA TRANSFER (PORT)
- 4 = MODE OF DATA TRANSFER(IMMEDIATE/COLLECT)

SAVE it.



9. Working With Extended IDocs

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OUTBOUND Program Of Extended IDoc

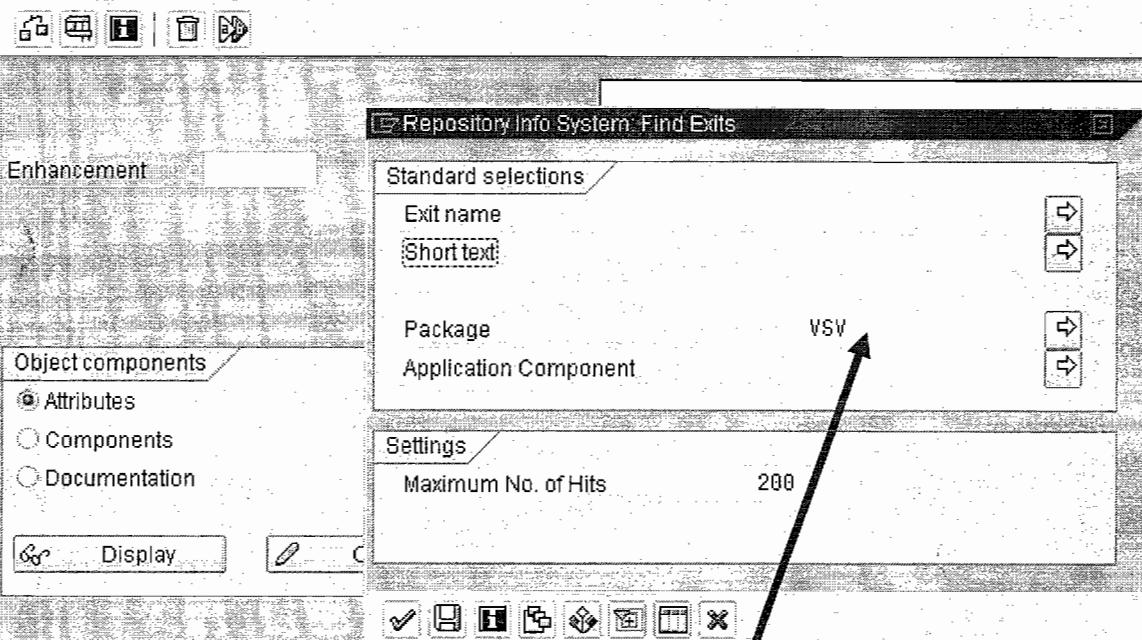
Note : In the Outbound Program Of Extended IDoc , it is enough to Fill the Data records only to the additional Segments without Changing the Standard Functionality. Which is Possible through Enhancements(Customer Exits/BADIs).

Note : Refer the Enhancements Concept(Chapter) to Locate and Implement the Enhancement.

1) Find out the Package of Outbound Program/Transaction BD12 (Send Customers)
AND the Package is VSV

2) Execute SMOD to Find out the Customer Exits from the package VSV

SAP Enhancements



Press F4 On Enhancements and Provide Package Name VSV and
ENTER.

Exit name	Short text
VSV00003	Read filter objects for customer master

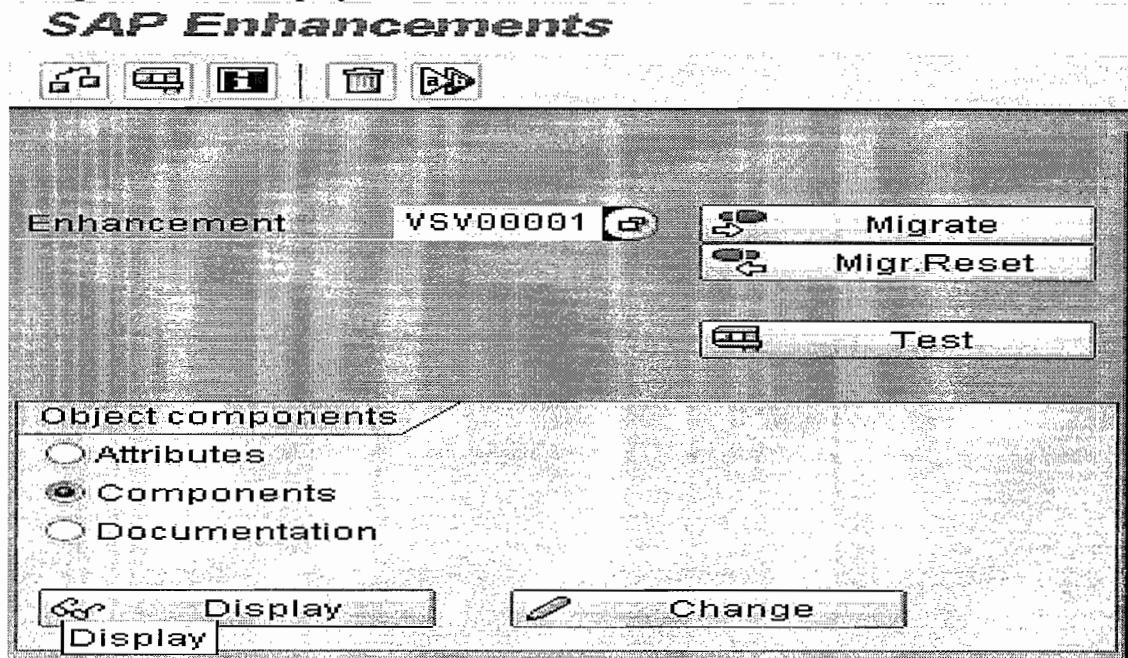
Notice the Enhancement Name VSV00003 and it Means VSV00001 and VSV00002 are also available.

9. Working With Extended IDocs

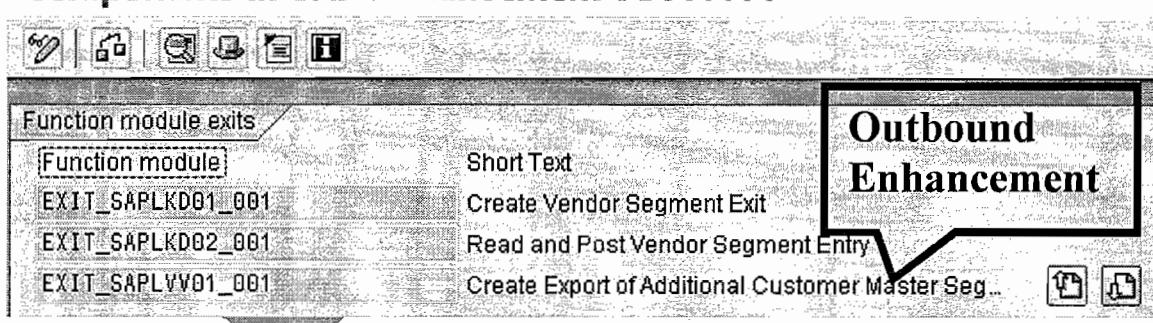
We Never Compromise In Quality. Would You?

Note : We Need to Check for the Components of each Enhancement to find out the right Function Module Exit to ADD the Custom Logic to Fill the Data into the Additional Segments in Extended IDoc.

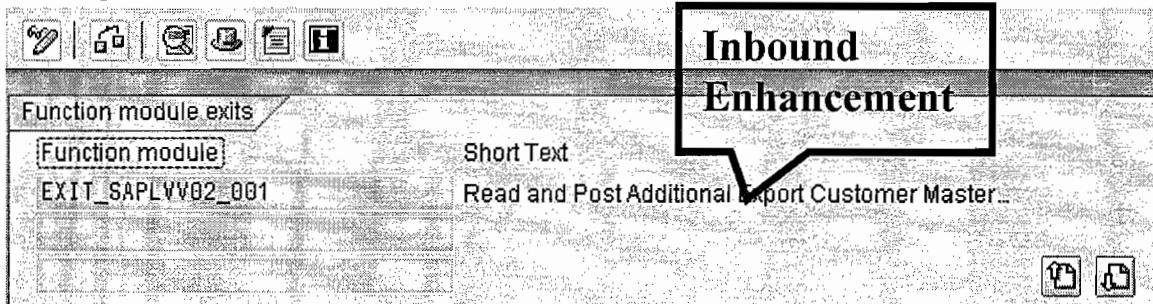
Back to the Initial Screen of SMOD and Enter Enhancement VSV00001 and Select Components and Display



Components in SAP Enhancement VSV00001



Components in SAP Enhancement VSV00001



9. Working With Extended IDocs

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Note : The Same Outbound Function Module Exit is triggered after Each Standard Segment Of Standard IDoc So that we can add the Data Records for the Additional Segments after the Standard Segment by checking the Standard Segment name .

Note : The Same Inbound Function Module Exit is triggered Only after Each Extended Segment So that we can read the Data Records only for the Additional Segments to Process and Post into the respective Database Table(s).

To Implement the Enhancement, Double Click On it : EXIT_SAPLVV01_001

Function Builder: Display EXIT_SAPLVV01_001

The screenshot shows the SAP Function Builder interface for the function module EXIT_SAPLVV01_001. The toolbar at the top includes icons for Save, Undo, Redo, Copy, Paste, Find, Replace, Insert, and Stop. Below the toolbar, the function module name 'EXIT_SAPLVV01_001' is displayed along with an 'Active' status indicator. A navigation bar below the title bar contains tabs for Attributes, Import, Export, Changing, Tables, Exceptions, and Source code. The main area displays the ABAP code for the function module:

```
FUNCTION EXIT_SAPLVV01_001.  
*"  
*'"Lokale Schnittstelle  
*"  
IMPORTING  
*"  
MESSAGE_TYPE LIKE TBDME-MESTYP  
*"  
IDOC_TYPE LIKE EDIDC-IDOCTP  
*"  
SEGMENT_NAME LIKE EDIDD-SEGNAM  
*"  
EXPORTING  
*"  
IDOC_CIMTYPE LIKE EDIDC-CIMTYP  
*"  
TABLES  
*"  
IDOC_DATA STRUCTURE EDIDD  
*"  
  
INCLUDE ZXVSVU01.  
*"  
ENDFUNCTION.
```

An arrow points from the text "Double Click On ZXVSVU01 to Create the Custom INCLUDE Program." to the line "INCLUDE ZXVSVU01." in the code.

Double Click On ZXVSVU01 to Create the Custom INCLUDE Program.

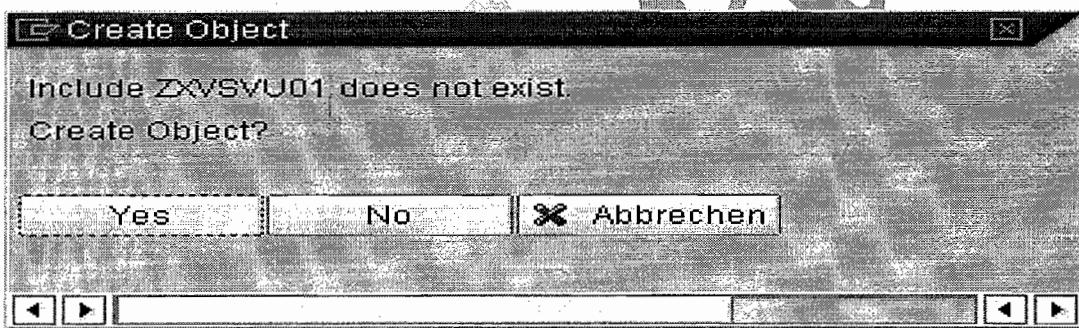
9. Working With Extended IDocs

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```
FUNCTION EXIT_SAPLVV01_001.  
  *--> Lokale Schnittstelle:  
    IMPORTING  
      MESSAGE_TYPE LIKE TBDME-MESTYP  
      IDOC_TYPE LIKE EDIDC-IDOCTP  
      SEGMENT_NAME LIKE EDIDD-SEGNAM  
    EXPORTING  
      IDOC_CIMTYPE LIKE EDIDC-CIMTYP  
    TABLES  
      IDOC_DATA_STRUCTURE EDIDD  
  
  INCLUDE ZXVSVU01.  
  
ENDFUNCTION.
```

(1) Program names ZX... are reserved for includes of exit function groups.

This is Warning Only So Press ENTER to Continue the INCLUDE Creation.



Yes , to Create it.

Outbound Logic to Add the Data Records to :

```
*&-----  
*& Include ZXVSVU01  
*&-----  
***"Lokale Schnittstelle:  
** IMPORTING  
**   MESSAGE_TYPE LIKE TBDME-MESTYP  
**   IDOC_TYPE LIKE EDIDC-IDOCTP  
**   SEGMENT_NAME LIKE EDIDD-SEGNAM  
** EXPORTING  
**   IDOC_CIMTYPE LIKE EDIDC-CIMTYP  
** TABLES  
**   IDOC_DATA_STRUCTURE EDIDD  
**-----
```

TYPES : BEGIN OF TY_KNA1,

Page 14 of 34

By Ganapati Adimulam

9. Working With Extended IDocs

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```
KUNNR TYPE KUNNR,  
LKUNNR TYPE ZLKUNNR,  
LEGSYS TYPE ZLEGSYS,  
END OF TY_KNA1.
```

```
DATA : WA_KNA1 TYPE TY_KNA1.  
DATA : WA_DATA TYPE EDIDD.
```

```
DATA : WA_E1KNA1M TYPE E1KNA1M,  
WA_Z1MAPPING TYPE Z1MAPPING.
```

```
CASE SEGMENT_NAME.
```

```
WHEN 'E1KNA1M'. "Standard Segment after which the New Segment is ADDED
```

```
READ TABLE IDOC_DATA INTO WA_DATA
```

```
WITH KEY SEGNAM =  
'E1KNA1M'.
```

```
WA_E1KNA1M = WA_DATA-SDATA.
```

```
SELECT SINGLE kunnr
```

```
lkunnr  
legsys
```

```
INTO WA_KNA1
```

```
FROM kna1
```

```
WHERE kunnr = WA_E1KNA1M-KUNNR.
```

```
*FILL DATA FOR ADDITIONAL SEGMENT
```

```
WA_Z1MAPPING-SKUNNR = WA_KNA1-KUNNR.
```

```
WA_Z1MAPPING-LKUNNR = WA_KNA1-LKUNNR.
```

```
WA_Z1MAPPING-LEGSYS = WA_KNA1-LEGSYS.
```

```
WA_DATA-SEGNAM = 'Z1MAPPING'.
```

```
WA_DATA-SDATA = WA_Z1MAPPING.
```

```
APPEND WA_DATA TO IDOC_DATA.
```

```
ENDCASE.
```

```
IDOC_CIMTYPE = 'EXDEBMAS'. "Extended IDoc Name
```

Note : After the Enhancement is Implemented, it (VSV00001) should be linked to the Active Project. Then Only the additional functionality can be carried along with the Standard Functionality.

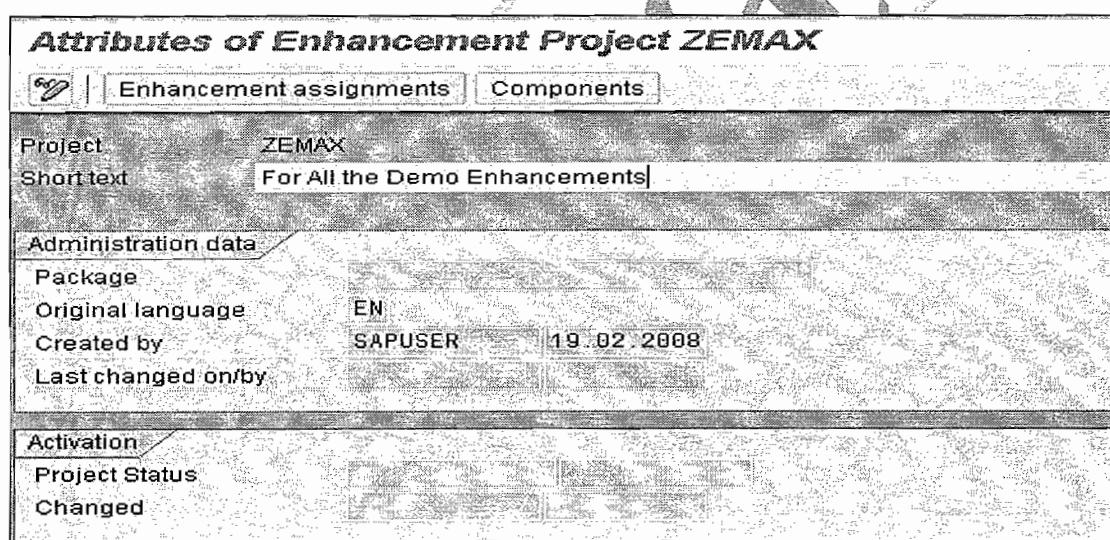
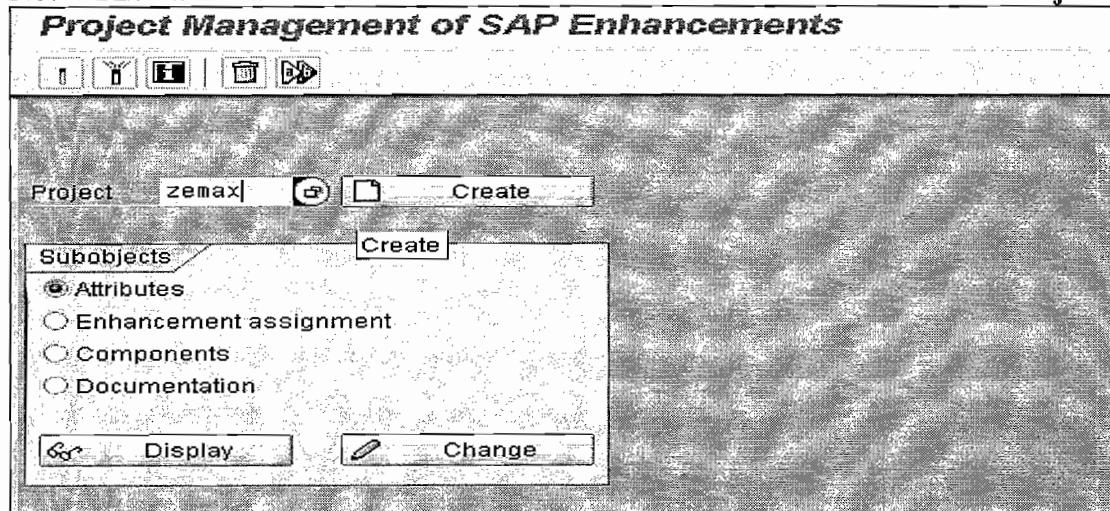
9. Working With Extended IDocs

We Never Compromise In Quality. Would You?

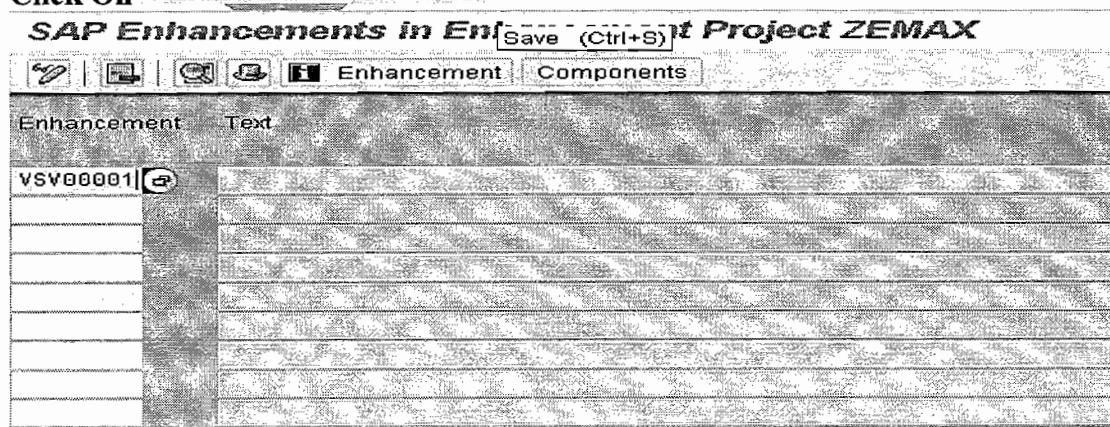
Execute Transaction CMOD to Link to the Active Project.

Enter the Project Name Create (If Not yet Created) Else Change the Existing Project.

Note: The Same Enhancement cannot be linked to more than one Active Project.



Click On Enhancement assignments



9. Working With Extended IDocs

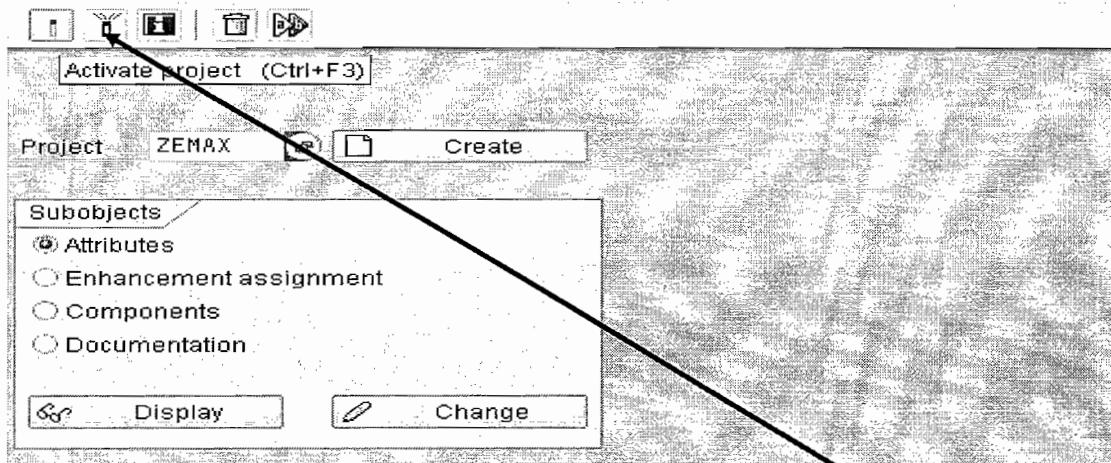
We Never Compromise In Quality. Would You?

Enter the Enhancement Name and SAVE it.

BACK to the Initial Screen Of CMOD and

Activate the Project.

Project Management of SAP Enhancements



Note : To Change the Implementation of the Enhancement, Deactivate the Project from Same Screen and Change it.

9. Working With Extended IDocs

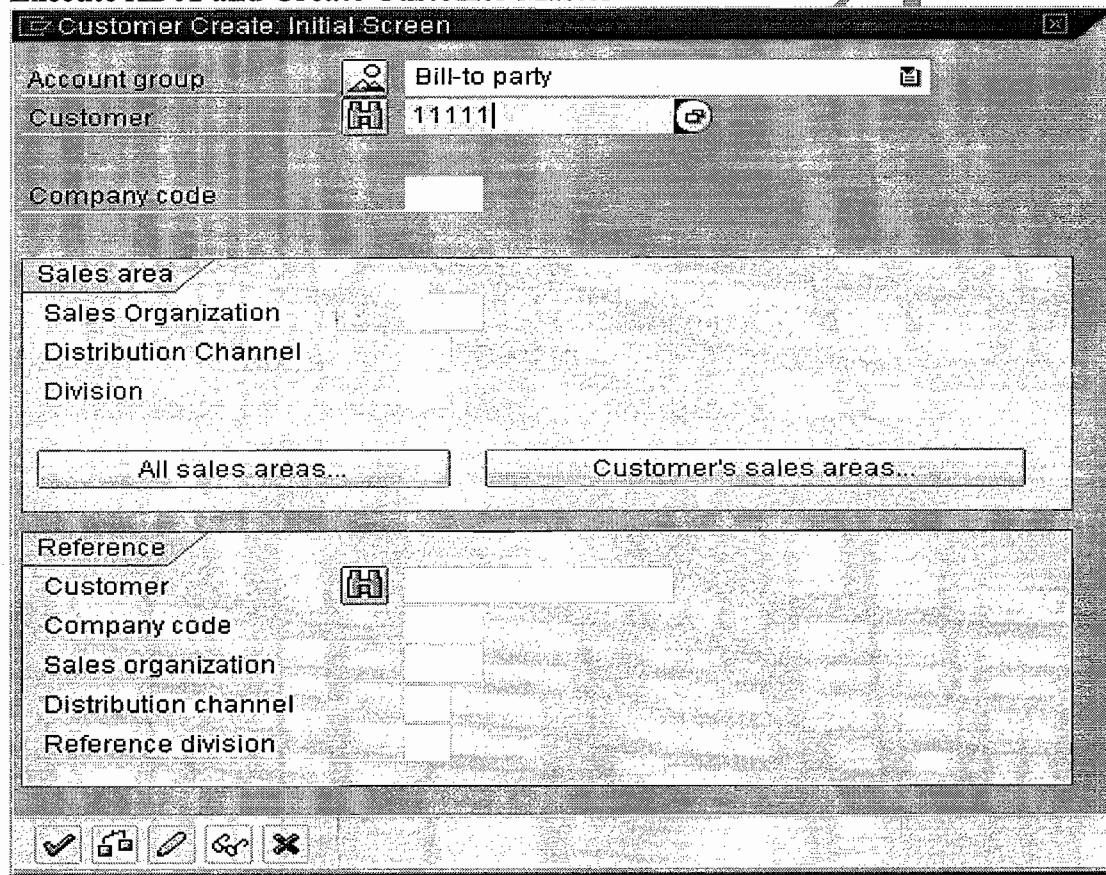
We Never Compromise In Quality. Would You?

Testing the Outbound Process Of Extended IDoc :

- 1) Create a New Customer in SENDOR System
- 2) SEND the Same Customer From SENDOR System
- 3) Check the IDoc and Make sure the Data is Carried through the Additional Segments along with Segments of Standard IDoc.

Step 1 in Detail :

Execute XD01 and Create Customer Master



ENTER

9. Working With Extended IDocs

We Never Compromise In Quality. Would You?

The screenshot shows the SAP KNA1 screen for customer data entry. At the top, there is a toolbar with several icons and tabs: General Data, Company Code Data, Sales Area Data, CIN Details, Legacy Data, Address, Control data, Payment transactions, Marketing, Unloading points, and Contact. The 'Legacy Data' tab is highlighted with a red arrow pointing to it from the top right. Below the toolbar, the customer number '11111' and name 'eMAX 11111 Technologies Ltd.' are displayed. The main area contains sections for Name, Search terms, Street address, and Time zone. A large red arrow points diagonally across the screen, originating from the 'Legacy Data' tab and ending near the bottom center. A callout box at the bottom left provides information about the Legacy Data tab.

Name	Company
Title	eMAX 11111 Technologies Ltd
Search terms	
Search term 1/2	EMAX
Street address	
Street/House number	Street 11111
Postal code/City	
Country	DE
Time zone	India
	Region
	UTC+53

Enter the Name, Search Term, Street, City,Country and Language

Click Legacy Data to Provide the Legacy Customer & System Data.

This Legacy Data TAB(Pushbutton) is
ADDED via Screen Enhancement(BADI)
To accept the Legacy Customer Details and
Updates into the respective Fields in KNA1.

9. Working With Extended IDocs

We Never Compromise In Quality. Would You?

Create Customer: General

General Data Company Code Data Sales Area Data CIN Details

Customer 11111 eMAX11111 Technologies Ltd

Legacy Data

Legacy Data

Legacy Customer No	LS_234
Legacy System	eMAX_TRAININGS

Enter the Legacy System Details and SAVE it. Now Customer 11111 is Created and Ready to SEND.

Step 2 in Detail (Send Customer) :

Execute the Send Customer Outbound (IDoc Generation) Transaction BD12

Send Customers

Customer 11111 to

Class to

Output type DEBMAS

Logical system

Parallel processing

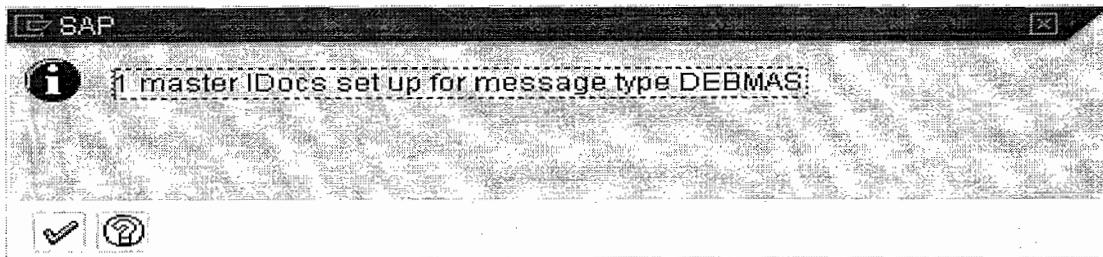
Server group

No. of customers per process 20

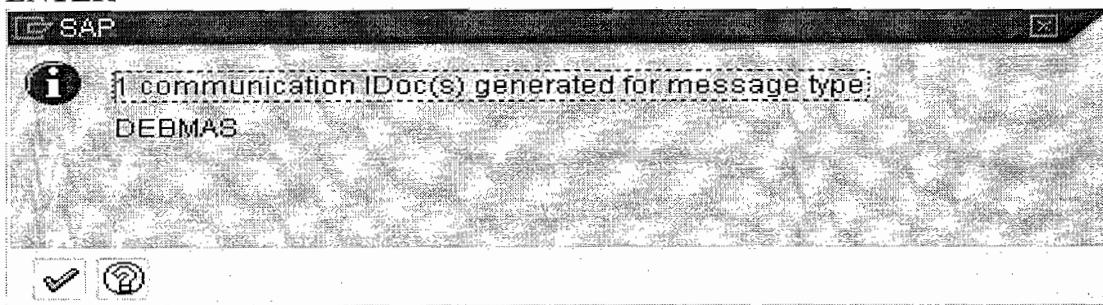
9. Working With Extended IDocs

We Never Compromise In Quality. Would You?

Enter the SAP Customer to be transferred, Message type (Default) and Logical System , if Logical System is not Provided , the System reads the receivers information from the Distribution Model .



ENTER



ENTER

Step 3 in Detail (Check the IDoc List) :

EXECUTE WE05

IDoc list

	Default selectn	Addit.selectn	EDI sel.
Time created	00:00:00	to 24:00:00	
Creation Date	19.02.2008	to 19.02.2008	
Last Changed at	00:00:00	to 24:00:00	
Date of Last Change		to	
Direction	1		
IDoc number			
Current Status			
Basic type			
Enhancement			
Logical message	DEBMAS		
Message code			
Message function			
Partner Port			
Partner Number	RECEIVER		

**Direction –
1(Outbound)**

**Logical Message
(Message Type) -
DEBMAS**

**Partner Number -
RECEIVER**

Execute

Page 21 of 34

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9. Working With Extended IDocs

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SAP

IDoc Number	Segm...	Stat...	Stat...	Partner	BasicType	Date created	Time	Messg...
0000000000527745	1	03	000	LS/ /RECEIVER	DEBMAS01	19.02.2008	15:07:15	DEBMAS
0000000000527746	1	03	000	LS/ /RECEIVER	DEBMAS01	19.02.2008	15:10:16	DEBMAS
0000000000527747	1	03	000	LS/ /RECEIVER	DEBMAS01	19.02.2008	15:10:32	DEBMAS
0000000000527748	1	03	000	LS/ /RECEIVER	DEBMAS01	19.02.2008	15:15:07	DEBMAS
0000000000527749	2	03	000	LS/ /RECEIVER	DEBMAS05	19.02.2008	15:16:40	DEBMAS
0000000000527750	2	03	000	LS/ /RECEIVER	DEBMAS05	19.02.2008	15:17:57	DEBMAS
0000000000527751	2	03	000	LS/ /RECEIVER	DEBMAS05	19.02.2008	15:20:51	DEBMAS
0000000000527752	2	03	000	LS/ /RECEIVER	DEBMAS05	19.02.2008	15:24:24	DEBMAS
0000000000527753	3	03	000	LS/ /RECEIVER	DEBMAS05	19.02.2008	15:26:10	DEBMAS

Double Click on the Selected(Latest IDoc) and refer the Message type, Date and time ... etc.

Fld-name	Fld cont.
SKUNNR	0000011111
LKUNNR	LS_234
LEGSYS	EMAX_TRAININGS

Notice the Additional Data is Filled into the Additional Segment Z1MAPPING.

9. Working With Extended IDocs

We Never Compromise In Quality. Would You?

Inbound Process of Extended IDoc:

Inbound Configuration :

1) Link the Extended IDoc type + IDoc type + Message type (WE82)

Change View "Output Types and Assignment to IDocs"

Message type	New Entries (F5)	Basic type	Extension	Release
ABCEDF	WILDHAGEN_TEST01			45A
ABSEN1	ABSEN1			30A
ACCONF	ACCONF01			31B
ACC_ACT_ALLOC	ACC_ACT_ALLOC01			40A
ACC_ACT_ALLOC	ACC_ACT_ALLOC02			40C
ACC_ASSET_TRANS...	ACC_ASSET_TRANS...			40C
ACC_ASSET_TRANS...	ACC_ASSET_TRANS...			40C
ACC_BILLING	ACC_BILLING01			40A
ACC_BILLING	ACC_BILLING02			40C
ACC_BILLING_REV...	ACC_BILLING_REV...			46C
ACC_DOCUMENT	ACC_DOCUMENT01			40B
ACC_DOCUMENT	ACC_DOCUMENT02			620
ACC_DOCUMENT_RE...	ACC_DOCUMENT_RE...			620
ACC_EMPLOYEE_EXP	ACC_EMPLOYEE_EX...			40A
ACC_EMPLOYEE_EXP	ACC_EMPLOYEE_EX...			40C
ACC_EMPLOYEE_PAY	ACC_EMPLOYEE_PA...			40A
ACC_EMPLOYEE_PAY	ACC_EMPLOYEE_PA...			40C

Click On New Entries

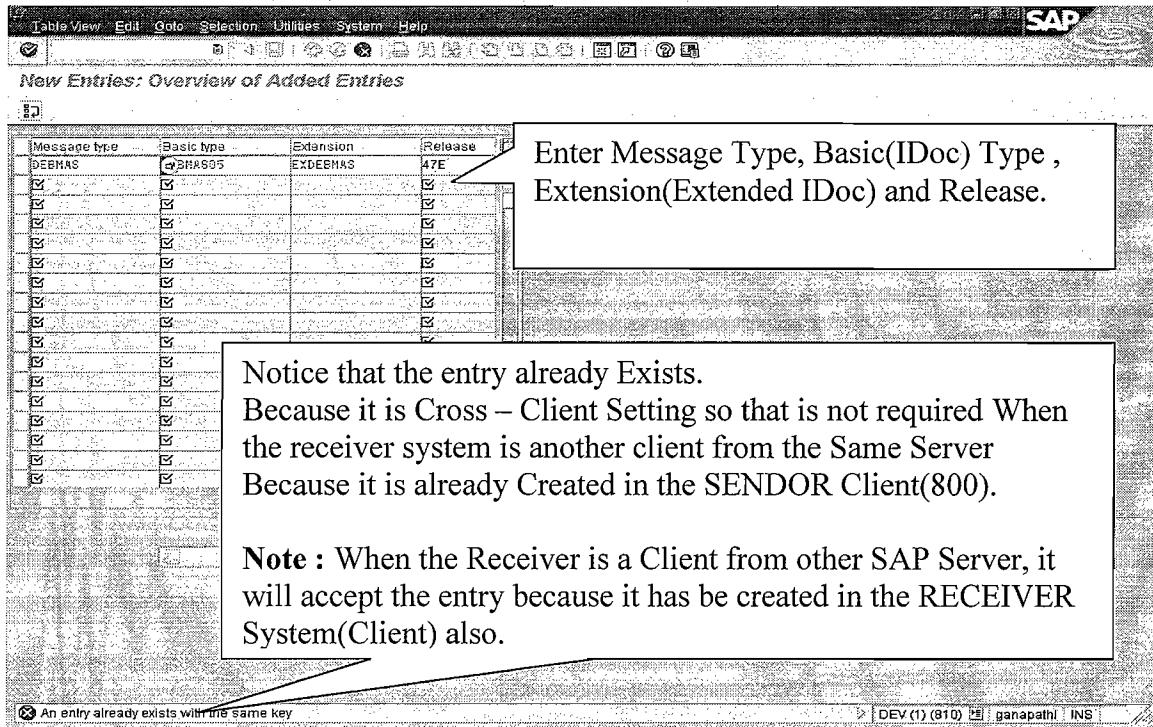


Table View Edit Go to Selection Utilities System Help

SAP

New Entries: Overview of Added Entries

Enter Message Type, Basic(IDoc) Type , Extension(Extended IDoc) and Release.

Message type Basic type Extension Release

DEBEMAS DEBEMAS DEBEMAS 47E

Notice that the entry already Exists.
Because it is Cross – Client Setting so that is not required When
the receiver system is another client from the Same Server
Because it is already Created in the SENDOR Client(800).

Note : When the Receiver is a Client from other SAP Server, it will accept the entry because it has been created in the RECEIVER System(Client) also.

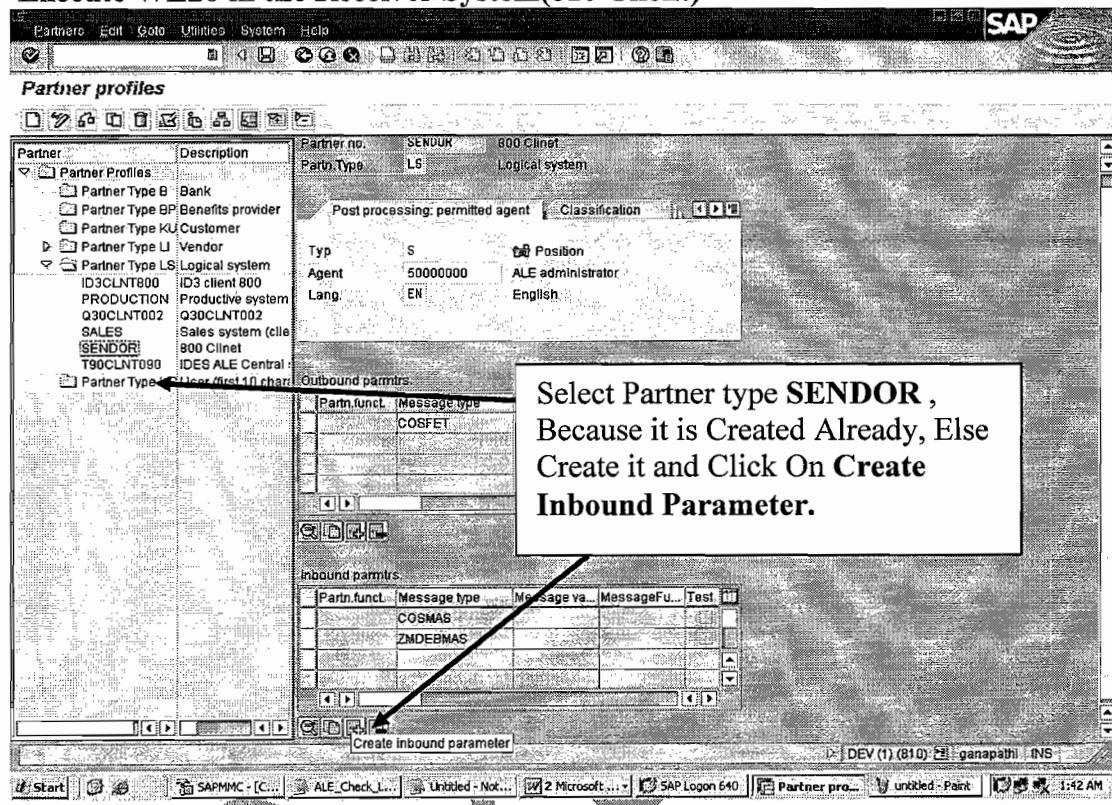
An entry already exists with the same key DEV(1)(810) ganapathi INS

9. Working With Extended IDocs

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2) Maintain the INbound Partner Profile

Execute WE20 in the Receiver System(810 Client)



Enter the Message type DEBMAS , Process Code DEBM and SAVE it.

Partner profiles: Inbound parameters

Partner no.	SENDAR	800 Client
Partn.Type	LS	
Partn.funct.		
Message type	DEBMAS	
Message code		
Message function		<input type="checkbox"/> Test
Inbound options	Post processing: permitted agent	Telephony
Process code	DEBM	
<input checked="" type="checkbox"/> Syntax check		
Processing by function module		
<input type="radio"/> Trigger by background program		
<input checked="" type="radio"/> Trigger immediately		

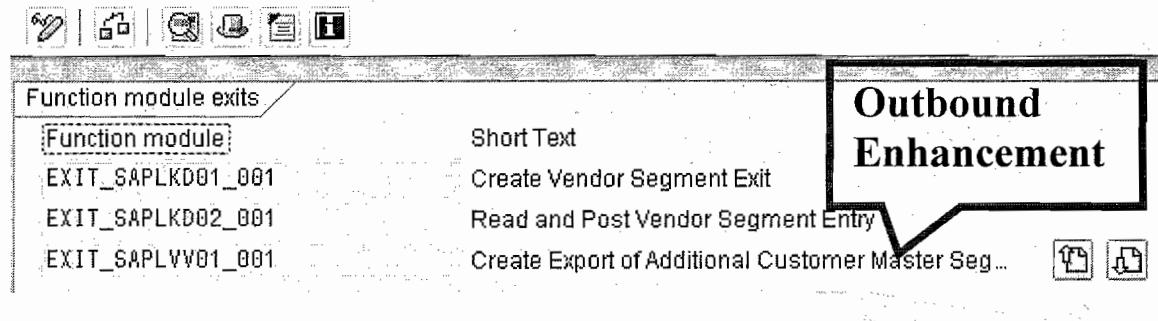
9. Working With Extended IDocs

We Never Compromise In Quality. Would You?

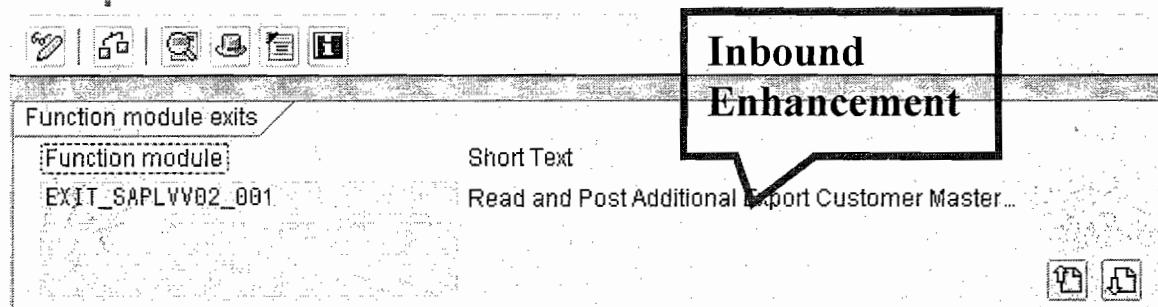
Implementing the Inbound Exit :

Note : In the Outbound Process itself , We Identified both Outbound and Inbound Function Module Exits as below.

Components in SAP Enhancement VSV00001



Components in SAP Enhancement VSV00001



Notice the enhancement details which are already Identified.
Enhancement is VSV00001.

Function Module Exit is EXIT_SAPLVV02_001 to Read and Post Additional Customer Master Data.

Note : The Same Enhancement(VSV00001) is already Implemented at SENDOR System for Outbound Exit . So that When the Receiver is a Client is From a Different SAP Server, again the same Enhancement VSV00001 can be Implemented for Inbound FM Exit and Linked to another Project.

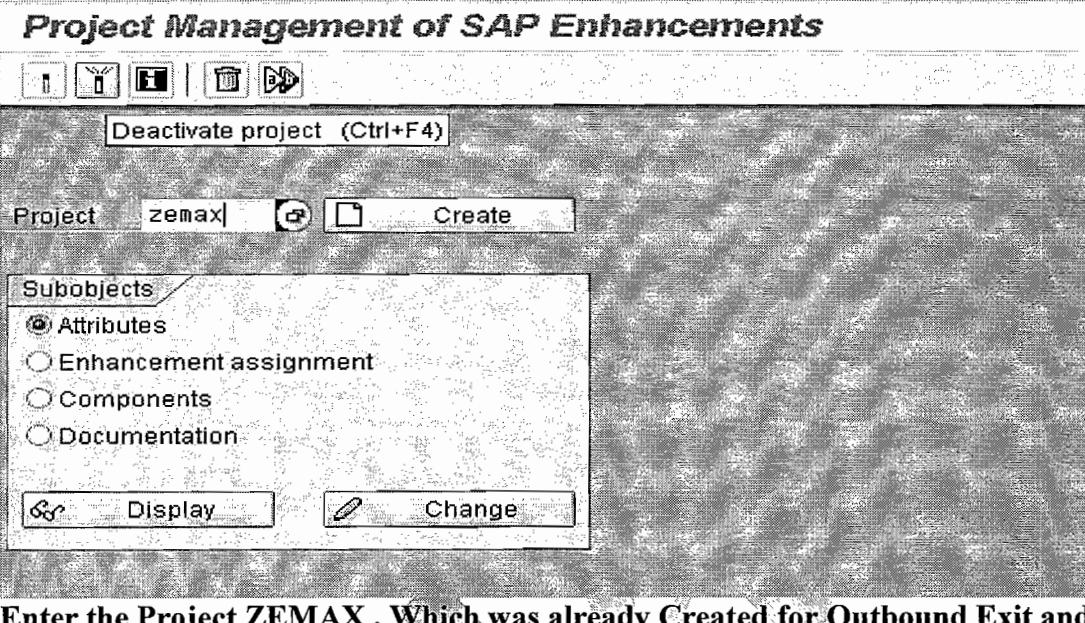
Here the Client (810) is another Client from the same Server so that we cannot link the enhanement to another Project , So that We need to Deactivate the Existing Project to Implement the Inbound Function Module Exit from the Same Enhancement VSV00001.

9. Working With Extended IDocs

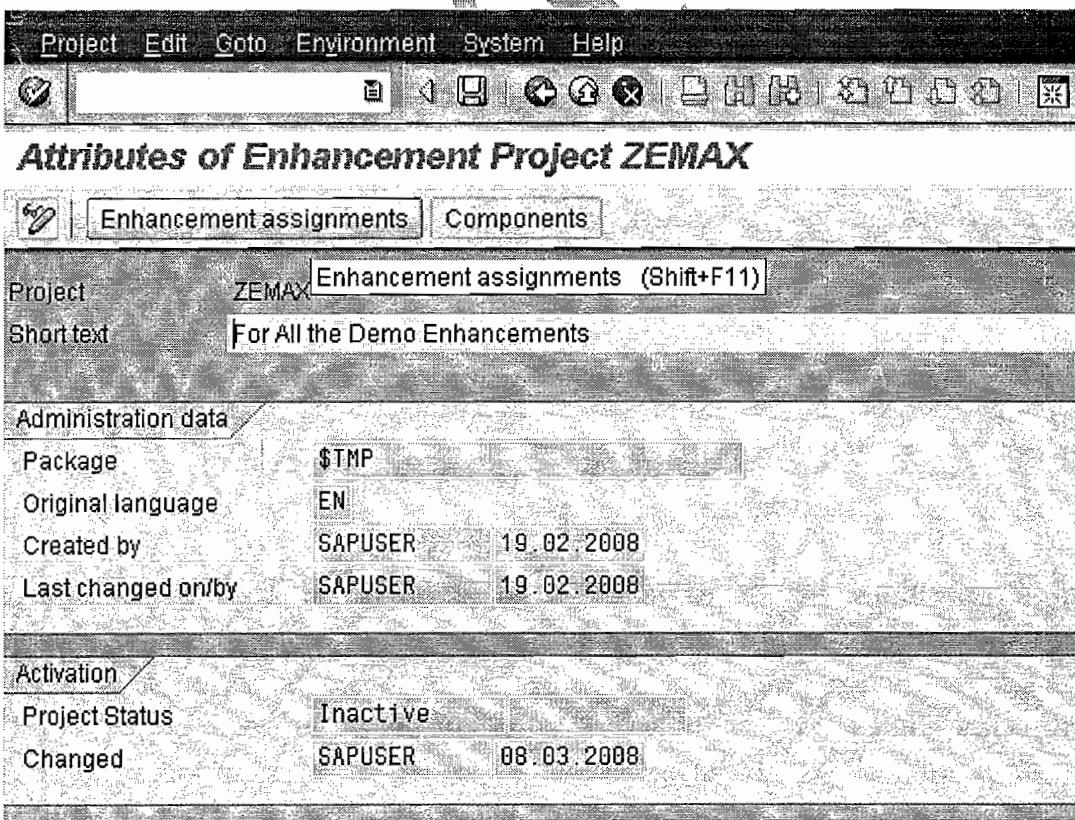
We Never Compromise In Quality. Would You?

Steps to Implement the Inbound Function Module Exit:

- 1) Execute CMOD in the RECEIVER System.



Enter the Project ZEMAX , Which was already Created for Outbound Exit and Click On Deactivate and Change Change to Implement the INBOUND Exit.

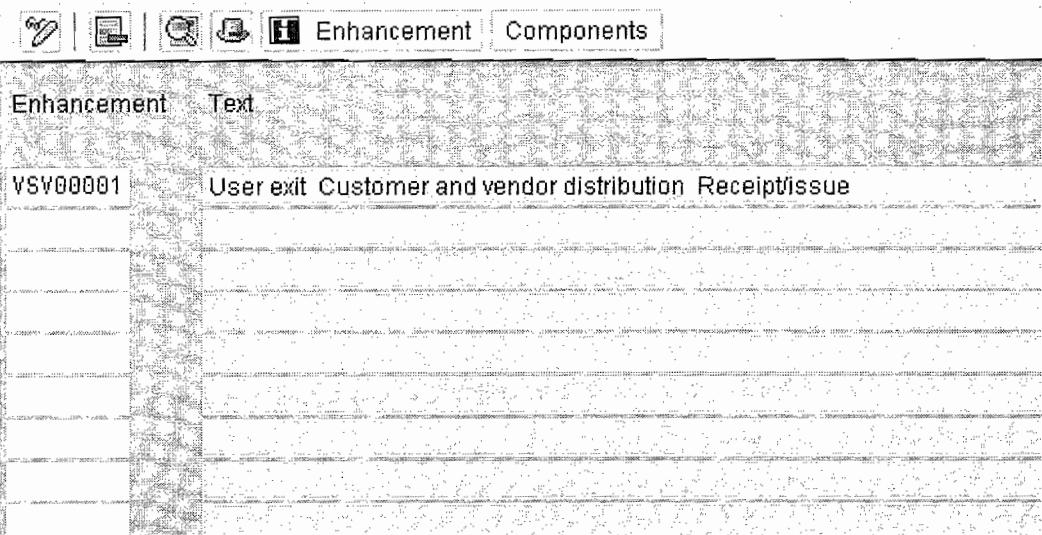


9. Working With Extended IDocs

We Never Compromise In Quality. Would You?

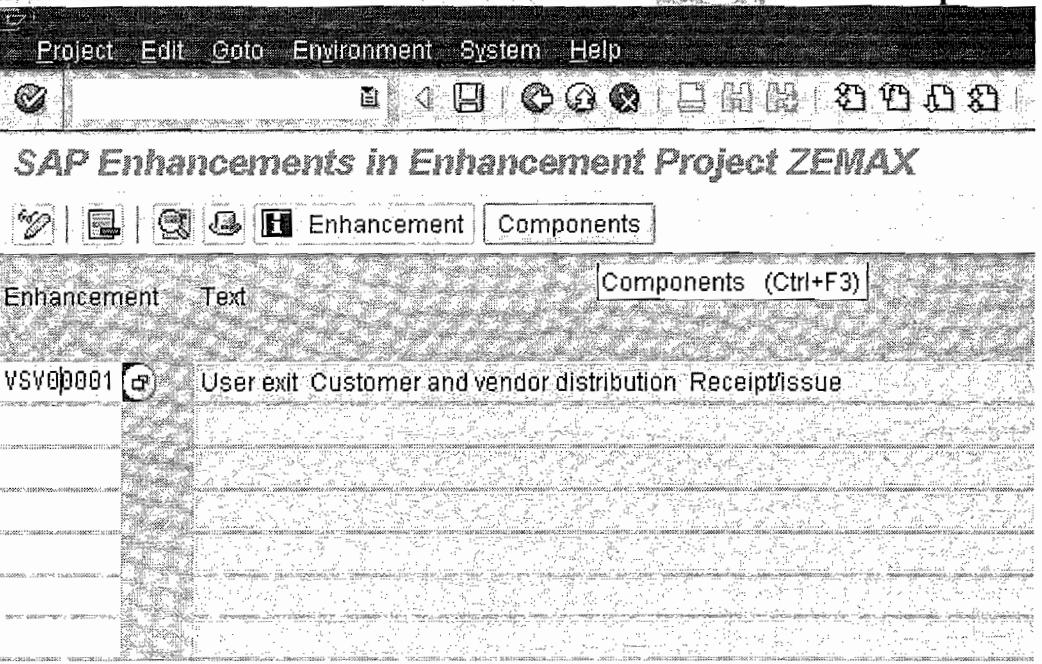
Click On Enhancement Assignments ,

SAP Enhancements in Enhancement Project ZEMAX



Notice that the Enhancement VSV00001 is already available , Because it was already Implemented for Outbound Exit in the SENDOR System.

Place the Cursor on the Enhancement VSV00001 and Click On Components



9. Working With Extended IDocs

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Change ZEMAX

The screenshot shows the SAP Change ZEMAX interface. At the top, there are icons for enhancement assignments and enhancement management. Below is a table with the following data:

Project			ZEMAX	For All the Demo Enhancements	
Enhancement	Impl	Exp	VSV00001	User exit	Customer and vendor
Function exit	✓			EXIT_SAPLKD01_001 EXIT_SAPLKD02_001 EXIT_SAPLVV01_001 EXIT_SAPLVV02_001	

Double Click on Inbound Function Module Exit EXIT_SAPLVV02_001
To implement it.

The screenshot shows the SAP ABAP editor with the function module EXIT_SAPLVV02_001. The code is as follows:

```
FUNCTION EXIT_SAPLVV02_001
*"-*- Lokale Schnittstelle:
*"- IMPORTING
*"-     IDOC_CONTROL LIKE EDIDC STRUCTURE EDIDC
*"-     INPUT_METHOD LIKE BDWFAP_PAR-INPUTMETHOD
*"- EXPORTING
*"-     WORKFLOW_RESULT LIKE BDWF_PARAM-RESULT
*"- TABLES
*"-     IDOC_DATA STRUCTURE EDIDD
*"-     IDOC_STATUS STRUCTURE BDIDOCSTAT
*"-     PFTINFO_WORTBLFS STRUCTURE PPOWERFTRW
*"------ Double Click on this Custom INCLUDE Program
INCLUDE ZXVSVU02
*"------ ENDFUNCTION.
```

A callout box highlights the line "INCLUDE ZXVSVU02" with the text "Double Click on this Custom INCLUDE Program".

9. Working With Extended IDocs

We Never Compromise In Quality. Would You?

The screenshot shows the SAP Function Builder interface with the title "Function Builder: Display EXIT_SAPLVV02_001". The code editor contains the following ABAP code:

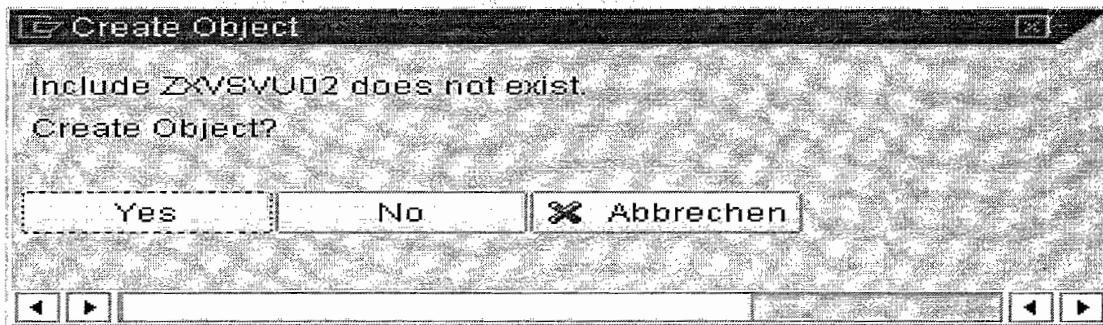
```
FUNCTION EXIT_SAPLVV02_001
  *"-*- Lokale Schnittstelle:
  *"-*
  *"-* IMPORTING
  *"-*   IDOC_CONTROL LIKE EDIDC STRUCTURE EDIDC
  *"-*   INPUT_METHOD LIKE BDWFAP_PAR-INPUTMETHOD
  *"-* EXPORTING
  *"-*   WORKFLOW_RESULT LIKE BDWF_PARAM-RESULT
  *"-* TABLES
  *"-*   IDOC_DATA STRUCTURE EDIDD
  *"-*   IDOC_STATUS STRUCTURE BDIDOCSTAT
  *"-*   RETURN_VARIABLES STRUCTURE BDWFRETVAR

  INCLUDE ZXSVU02.

ENDFUNCTION.
```

Below the code editor, status bars show "Ln 20, Col 1" and "Ln 1 - Ln 20 of 20 lines". The SAP taskbar at the bottom includes icons for Start, SAPMM - [Cons...], 2 Notepad, Extended_IDocs..., SAP Logon 640, Function Builder..., and Paint, along with the current user "DEV (1) (81D)" and session "ganapathi".

Press ENTER Whenever you get the Warning Message , While Creating the Custom INCLUDE



Click On YES to Continue the Creation Of INCLUDE

9. Working With Extended IDocs

We Never Compromise In Quality. Would You?

Implement the Functionality, i.e Read the Data From Additional Segments and Update the respective Database Table fields in KNA1.

```
*&-----  
*& Include          ZXVSVU02  
*&-----  
* This Exit Triggers After Creating the Data into Database For All the  
* Segments From the Standard IDoc and Also this Segment Triggers Only  
* After Each Newly Added Segment , AND We Need to Collect it update the  
* respective DB Table.  
*"  
***"Lokale Schnittstelle:  
**      IMPORTING  
**          IDOC_CONTROL LIKE EDIDC STRUCTURE EDIDC  
**          INPUT_METHOD LIKE BDWFAP_PAR-INPUTMETHD  
**      EXPORTING  
**          WORKFLOW_RESULT LIKE BDWF_PARAM-RESULT  
**      TABLES  
**          IDOC_DATA STRUCTURE EDIDD  
**          IDOC_STATUS STRUCTURE BDIDOCSTAT  
**          RETURN_VARIABLES STRUCTURE BDWFRETVAR  
*"  
DATA : WA_IDOC_DATA      TYPE EDIDD,  
      WA_Z1MAPPING    TYPE Z1MAPPING.  
  
LOOP AT IDOC_DATA INTO WA_IDOC_DATA.  
  
CASE WA_IDOC_DATA-SEGNAME.  
  WHEN 'Z1MAPPING'.  
    WA_Z1MAPPING = WA_IDOC_DATA-SDATA.  
  
    UPDATE KNA1 SET LKUNNR = WA_Z1MAPPING-LKUNNR  
          LEGSYS = WA_Z1MAPPING-LEGSYS  
    WHERE   KUNNR = WA_Z1MAPPING-SKUNNR.  
  
ENDCASE.  
  
ENDLOOP.
```

**SAVE, Check and Activate it.
BACK again BACK**

9. Working With Extended IDocs

We Never Compromise In Quality. Would You?

Change ZEMAX			
		Enhancement assignments	
Project	Impl.	Exp.	ZEMAX For All the Demo Enhancements
Enhancement	Impl.	Exp.	VSV00001 User exit Customer and vendor
Function exit			EXIT_SAPLK01_001 EXIT_SAPLK02_001 EXIT_SAPLVV01_001 EXIT_SAPLVV02_001

ACTIVATE it.

BACK to the Initial Screen Of CMOD.



Project Management of SAP Enhancements

Activate project (Ctrl+F3)

Project	ZEMAX	Create	
Subobjects			
<input checked="" type="radio"/> Attributes			
<input type="radio"/> Enhancement assignment			
<input type="radio"/> Components			
<input type="radio"/> Documentation			
	Display		Change

Activate the Project

9. Working With Extended IDocs

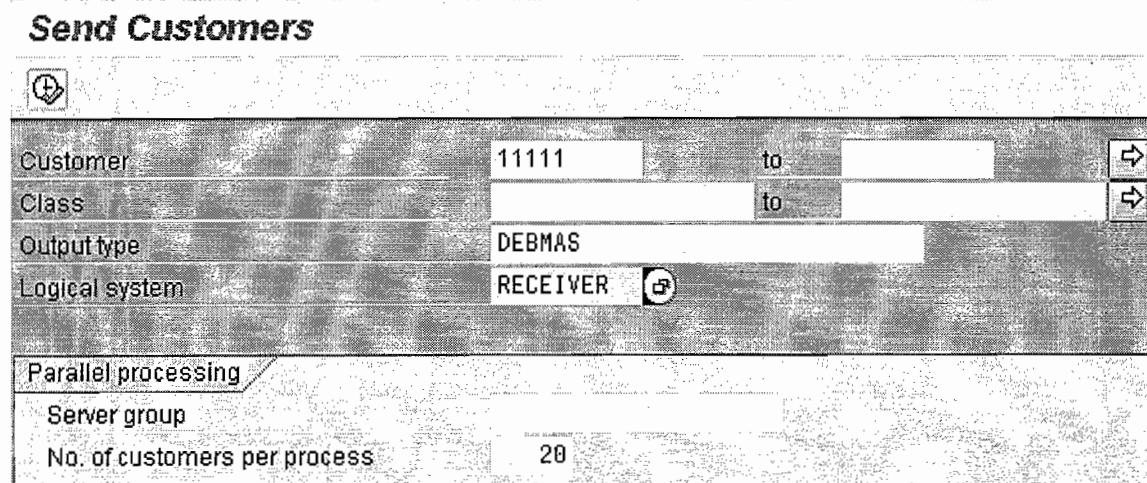
We Never Compromise In Quality. Would You?

Testing both Outbound AND Inbound Process:

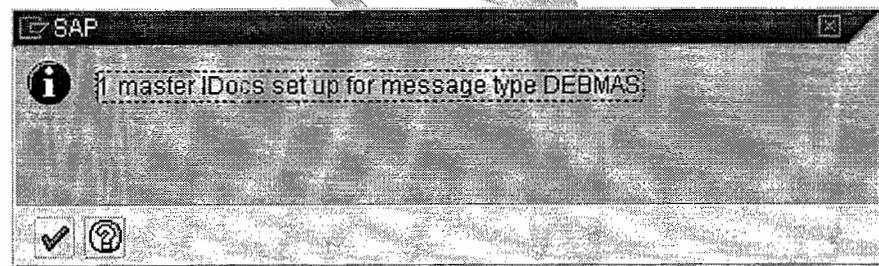
Send the Same Customer 11111 which is Already Sent from the SENDOR and Make sure that it is Created Successfully in RECEIVER System.

Send Customer :

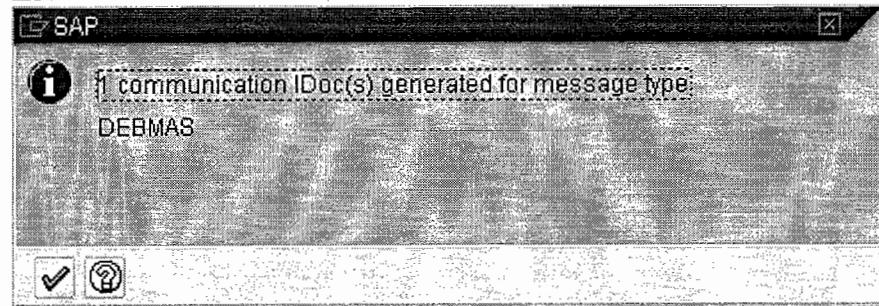
Execute the Send Customer Outbound (IDoc Generation) Transaction BD12



Provide the SAP Customer to be transferred, Message type (Default) and Logical System and if not Provided , the System reads the receivers information from the Distribution Model and Outbound Partner Profile.



ENTER



ENTER

9. Working With Extended IDocs

We Never Compromise In Quality. Would You?

Note : Since Outbound Process is Already Tested(Checked) , it is enough to Check the Status of IDoc in the RECEIVER System and check the DB Table KNA1.

Execute WE05 in the RECEIVER System.

IDoc list

Default selectn Addit.selectn EDI sel.

Time created	00:00:00	to	24:00:00	↔
Creation Date	08.03.2008	to	08.03.2008	↔
Last Changed at	00:00:00	to	24:00:00	↔
Date of Last Change		to		↔
Direction	2			
IDoc number		to		↔
Current Status		to		↔
Basic type		to		↔
Enhancement		to		↔
Logical message	DEBMAS	to		↔
Message code		to		↔
Message function		to		↔
Partner Port		to		↔
Partner Number	SENDER	to		↔

Execute

IDocs Numb...

Selected IDocs 000003

Outbound IDocs 000000

Inbound IDocs 000003

DEBMAS 000003

Selected IDocs

IDoc Number	Segm...	Stat...	Stat...	Partner	BasicType	Date created	Time	Messg...
0000000000074001	3 56	000	LSt /SENDER	DEBMAS05	08.03.2008	02:40:11		DEBMAS
0000000000074002	3 51	000	LSt /SENDER	DEBMAS05	08.03.2008	02:43:41		DEBMAS
0000000000074003	3 53	000	LSt /SENDER	DEBMAS05	08.03.2008	02:46:24		DEBMAS

Double Click On the Latest IDoc to check all types of records.

9. Working With Extended IDocs

We Never Compromise In Quality. Would You?

The screenshot shows the SAP IDoc display interface. On the left, a tree view shows an IDoc with Control Rec., Data records (including E1KNA1M and Z1MAPPING), and Status records (including 53). Status record 53 indicates "Account 0000011111 has been created". On the right, the "Technical short info" panel displays various parameters: Direction (2, Inbox), Current status (53, DEBMAS05), Basic type (EXDEBMAS), Extension (DEBMAS), Message type (SENDOR), Partner no. (LS), Partn.Type (SAPDEV), and Port (SAPDEV). Below this is the "Content of selected segment" panel, which shows a table with three rows: SKUNNR (0000011111), LKUNNR (LS_234), and LEGSYS (EMAX_TRAININGS).

Notice that the Status Record has shown as the 11111 has been Created .
Check the Database Table KNA1 for the Same.

Execute SE11 and Check for the 11111 in Table KNA1.

The screenshot shows the SAP Data Browser for Table KNA1. The table has columns: Customer, Country, Name, Search term, Street, Legacy Customer No, and Legacy System. A new entry is visible: Customer 0000011111, Country DE, Name eMAX 11111 Technologies Ltd, Search term EMAX, Street Street 11111, Legacy Customer No LS_234, and Legacy System EMAX_TRAININGS. A callout box points to this row with the text: "Notice that the Customer 11111 is Created In RECEIVER(810) with Additional Data." Another callout box at the bottom left says: "Congratulations! The Entire Process i.e Both Outbound and Inbound Process is Completely Successful For the Extended IDoc."

10. Distributing the Transactional Data

We Never Compromise in Quality. Would You?

Note : Distributing the Transactional Data Via ALE is Always through Message Control.

Message Control : Is Referred as Output Control/Conditioning Technique. We Use this technique for Output Determination.

The Basic Concept behind the Message Control is to generate and Manage Outputs from an Application and Control their **timing and Medium Of Exchange**.

For Example , We Can Create the following outputs when a Sales Order is Entered in the System.

- A) An Internal Mail Message to the Production Control Staff Immediately.
- B) A Sales Order response to the Customer Via Fax Immediately.
- C) Printed Output for Warehouse Personnel When Necessary.
- D) A Sales Order response to the Customer Via EDI.
- E) A Sales to another System Via ALE.

Benefits Of Message Control :

- 1) **Disconnecting the Process of Creating an Application Document from the Process Generating Outputs :** Ex : The Purchase Order Transaction ME21/ME21N doesn't have any logic in its code to generate the IDocs for ALE/EDI Process. This Separation helps keep errors in One Process from affecting the Process of the other Component.
- 2) **Automatically Proposing output based on Business rules specified in Message Control :** Rules Can be Very Generic / Very Specific. After the Business Rules are Encapsulated in Message Control, the Output is Proposed is Proposed Only When the Business Conditions are met.
- 3) **Overriding the Automatic Proposal :** Although you can set up the system for Automatic Proposal, the System allows for the Outputs to be Edited to Change or Delete before they are sent If Required.
- 4) **Manually Selecting an Output :** Some Business rules require human Intelligence and therefore cannot be encapsulated in the Message Control. So that Purchasing Manager can Manually Select the Output type while Creating the Sending the Purchase Order.
- 5) **Generating Multiple Outputs :** The System Can Propose Any Number Of Desired Outputs(Ex : Printed Output,ALE,EDI,Mail...)

10. Distributing the Transactional Data

We Never Compromise in Quality. Would You?

- 6) **Controlling the time, Medium and Language Of the Output Messages**
- 7) **Retransmitting an Output :** If a Printed Output is Lost or An ALE/EDI Transmission Fails and the same can be re-transmitted(resend) the Output without having to Duplicate the Application Document in the System.
- 8) **Monitoring the Results of Execution .** The Result Of Processing an Output type are Logged in the System and so they can be Monitored from the Application Document.

Note: Message Control Components for Various SAP Applications can be accessed via Transaction NACE (Old) / NACO (New Transaction).

Initial Screen Of NACE/NACO.

Conditions for Output Control	
Condition records	Procedures
Output types	Access sequences
Application	Description
CF	Error Control
CV	Document Management
E1	Inbound Delivery
EA	Purchasing RFQ
EF	Purchase Order
EL	Purch. SchAgrRelease
ES	Entry Sheet
EV	Purch. Outline Agr.
K1	Sales activities
M1	Rough Goods Receipt
MD	Direct Procurement
ME	Inventory Management
MR	Invoice Verification
NF	Nota fiscal
P1	Direct Production
PA	JIT Call
RS	Automotive
V1	Sales
V2	Shipping
V3	Billing

EF is the Application ID

10. Distributing the Transactional Data

We Never Compromise in Quality. Would You?

Requirement: Send the Purchase Order from the SENDOR System to the RECEIVER System as a Purchase Order.

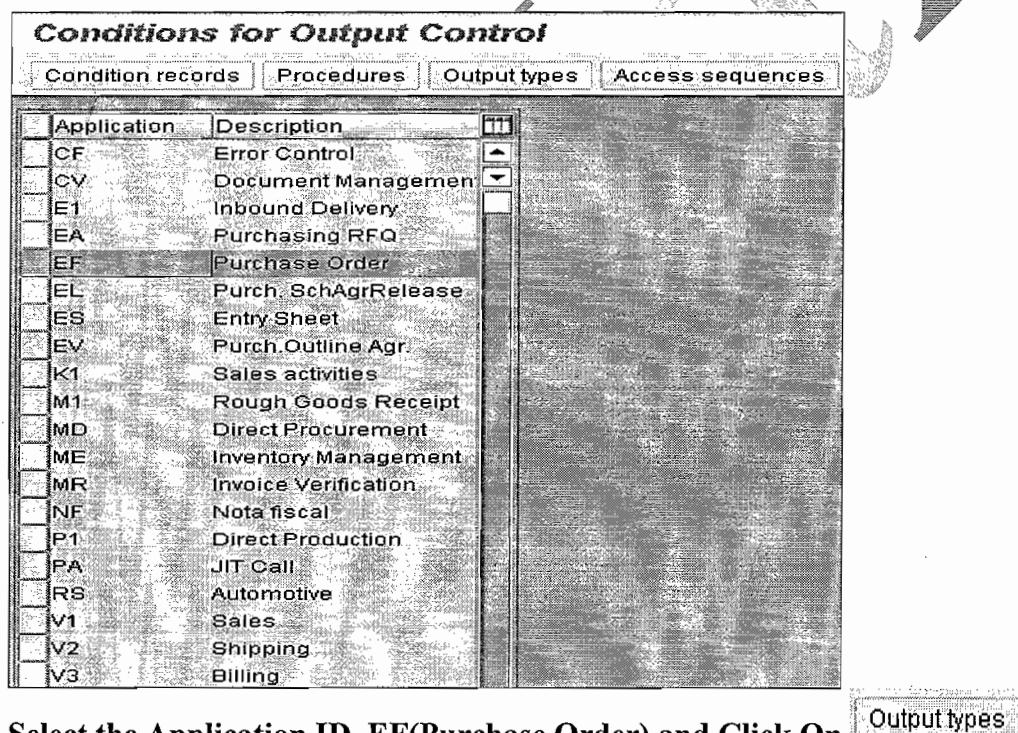
Details Of PO :

Message Type : ORDERS
IDoc Type : ORDERS01,ORDERS02,...

Message Control Details :

Note : Make Sure that the Output type used to transfer the Data through ALE is available in the List of Output Mediums.

To Check the Same : Execute NACE/NACO Transaction

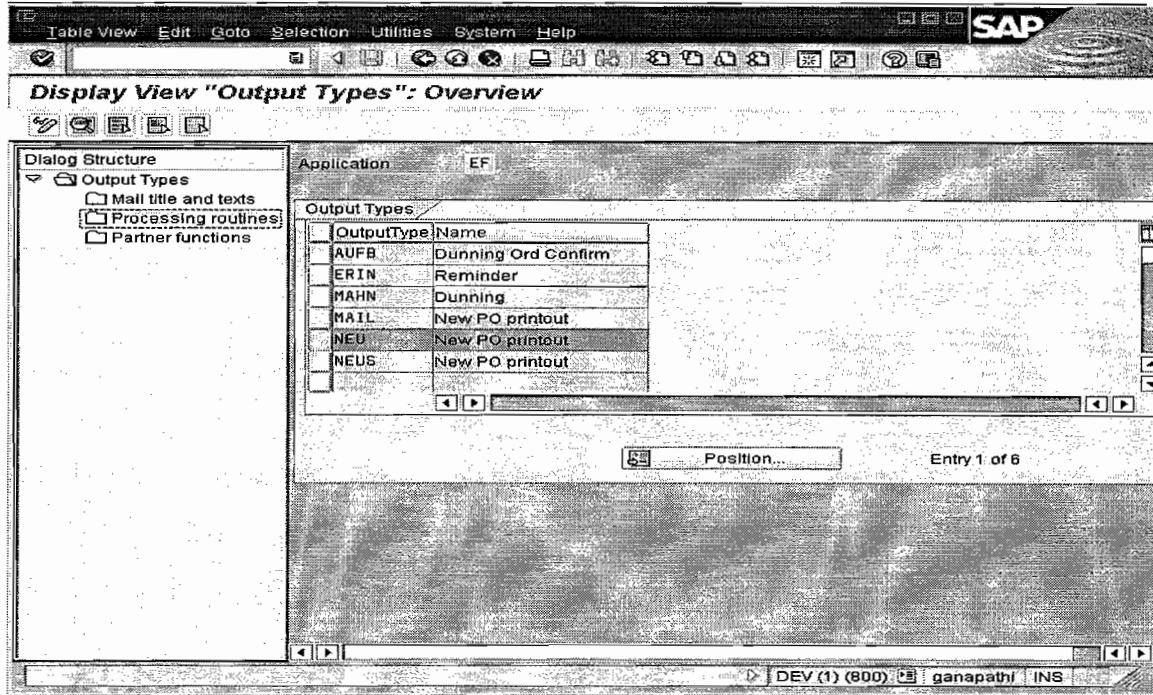


Select the Application ID EF(Purchase Order) and Click On

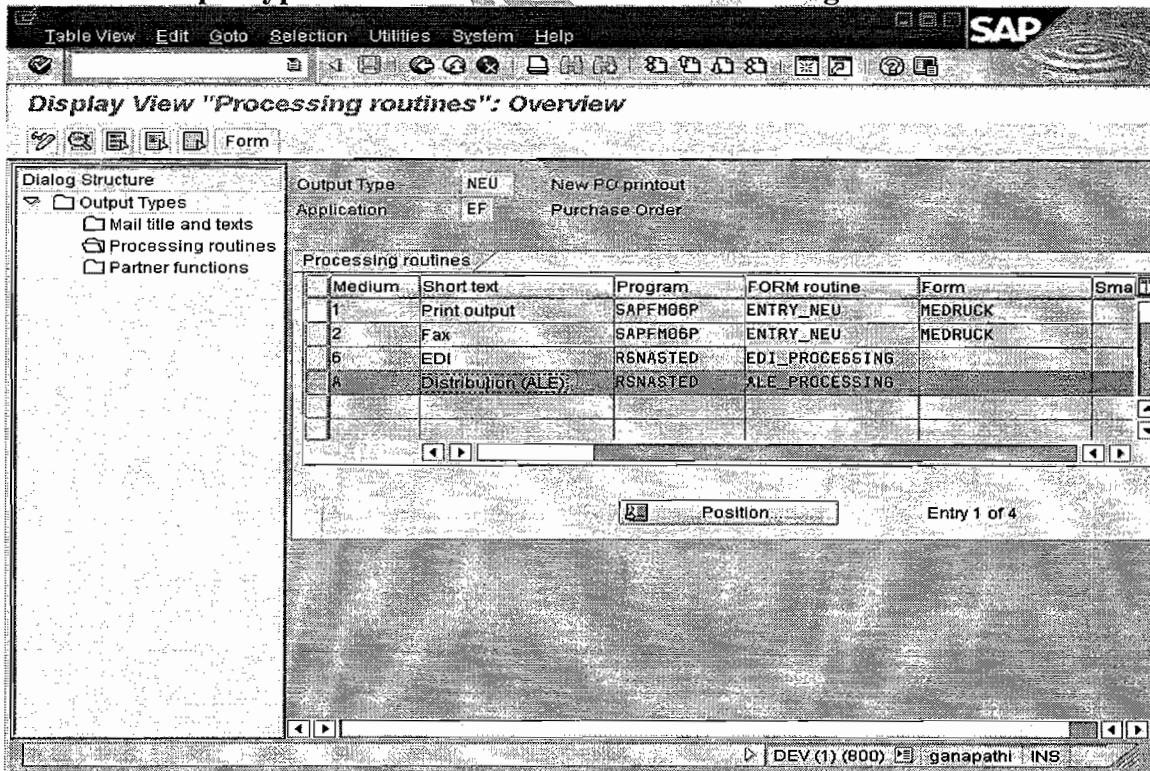
Output types

10. Distributing the Transactional Data

We Never Compromise in Quality. Would You?



Select the Output type NEU and Double Click On Processing Routines.



Notice that an entry for ALE is Available if not the Same Entry should be ADDED.

10. Distributing the Transactional Data

We Never Compromise in Quality. Would You?

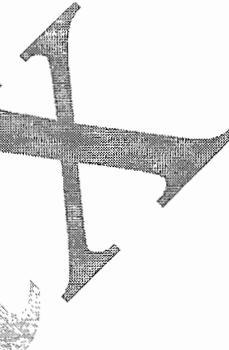
To ADD it , Click On Change -> New Entries and Enter the Same Details and SAVE it.

Note : We Can use the Output type NEU to Send the Data through ALE.

The IDoc can be Sent Automatically at the time of Saving the PO itself for the same we need to Maintain the Condition Records based on which the IDoc is Transferred.

Execute NACE/NACO

Conditions for Output Control	
Condition records	Procedures
Output types	Access sequences
Application	Description
CF	Error Control
CV	Document Management
E1	Inbound Delivery
EA	Purchasing RFQ
EF	Purchase Order
EL	Purch. SchAgrRelease
ES	Entry Sheet
EV	Purch. Outline Agr.
K1	Sales activities
M1	Rough Goods Receipt
MD	Direct Procurement
ME	Inventory Management
MR	Invoice Verification
NF	Nota fiscal
P1	Direct Production
PA	JIT Call
RS	Automotive
V1	Sales
V2	Shipping
V3	Billing

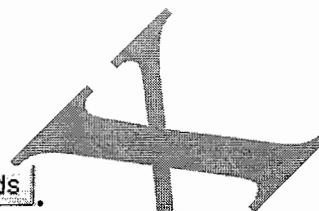
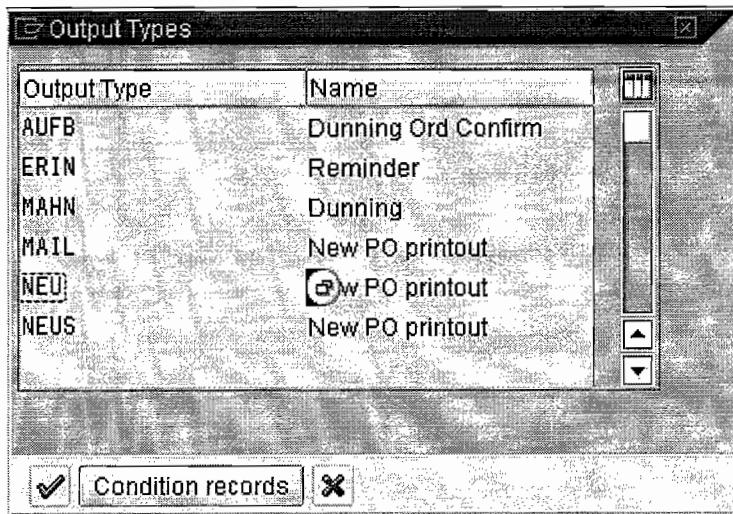


Select the Application EF (Purchase Order) and Click On Condition Records

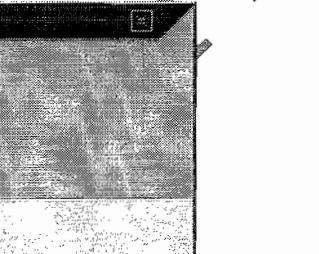
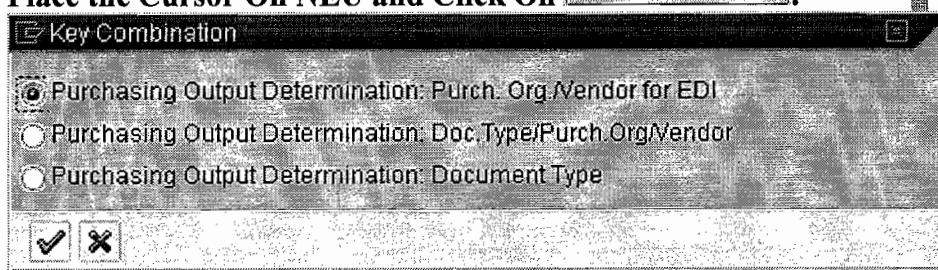
Condition records

10. Distributing the Transactional Data

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Place the Cursor On NEU and Click On Condition records.



Notice that We Can Maintain Values for the above Options. So that based on these values output type is Proposed and Issued.

Note : We Will Go for the Manual Sending so that we can Understand the Procedure .

Configuration Required at SENDOR System :

1) Add the Message Type to the Distribution Model If Available else Create the Distribution Model and ADD the Message Type.

Execute BD64 -> Click On Display->Change ()

10. Distributing the Transactional Data

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Change Distribution Model	
<input type="button" value="New"/> <input type="button" value="Delete"/> <input type="button" value="Copy"/> <input type="button" value="Print"/> <input type="button" value="Filter model display"/> <input type="button" value="Create model view"/> <input type="button" value="Add BAPI"/> <input type="button" value="Add message type"/>	
Distribution Model	Description/technical name
► BC619_800	BC619_800 . No short text exists
► BELCO	BELCO . No short text exists
► BIT300_BP	BIT300_BP . No short text exists
► CONSOLIDAT	CONSOLIDAT. No short text exists
► D1Z_ID3	D1Z_ID3 . No short text exists
► D1Z_ID3CLN	D1Z_ID3CLN. No short text exists
► EBP300-R3	EBP300-R3 . No short text exists
► HR_ORG_SEM	HR_ORG_SEM. No short text exists
► LIS	LIS . No short text exists
► LO215	LO215 . No short text exists
► MARCUS	MARCUS . No short text exists
► OSB_BUYER	OSB_BUYER . No short text exists
► OSB_SUPPLY	OSB_SUPPLY. No short text exists
► PFS	PFS . No short text exists
► SUBSYSTEMS	SUBSYSTEMS. No short text exists
► WMS	WMS . No short text exists
► XI	XI . No short text exists
► ZBV	ZBV . No short text exists
► B2B 2.0B to IDES 4.6B	B2B_IDES
► DE3 - KABA BENZING	DE3-KABA
► DH3->ID3 & M13 <-> ID3	DH3->ID3
► For All Master Data Distributions	ZGDEMO_ALL
► R/3 Backend Communication (Idocs)	EBP_TO_R3

Select the Distribution Model ZGDEMO_ALL Which was already Created and
 Click On Add Message Type

<input type="button" value="Add Message Type"/>	
Model view	ZGDEMO_ALL
Sender	SENDOR
Receiver	RECEIVER
(Message type)	ORDERS
<input checked="" type="checkbox"/> <input type="checkbox"/>	

ENTER.

<input type="checkbox"/> For All Master Data Distributions	ZGDEMO_ALL
<input checked="" type="checkbox"/> 800 Client	SENDOR
<input checked="" type="checkbox"/> 810 Client	RECEIVER
<input type="checkbox"/> COSMAS	Master cost center
<input type="checkbox"/> CREMAS	Vendor master data distribution
<input type="checkbox"/> DEBMAS	Customer master data distribution
<input type="checkbox"/> ORDERS	Purchase order / order
<input type="checkbox"/> ZMDEBMAS	Message Type For Customer Mapping

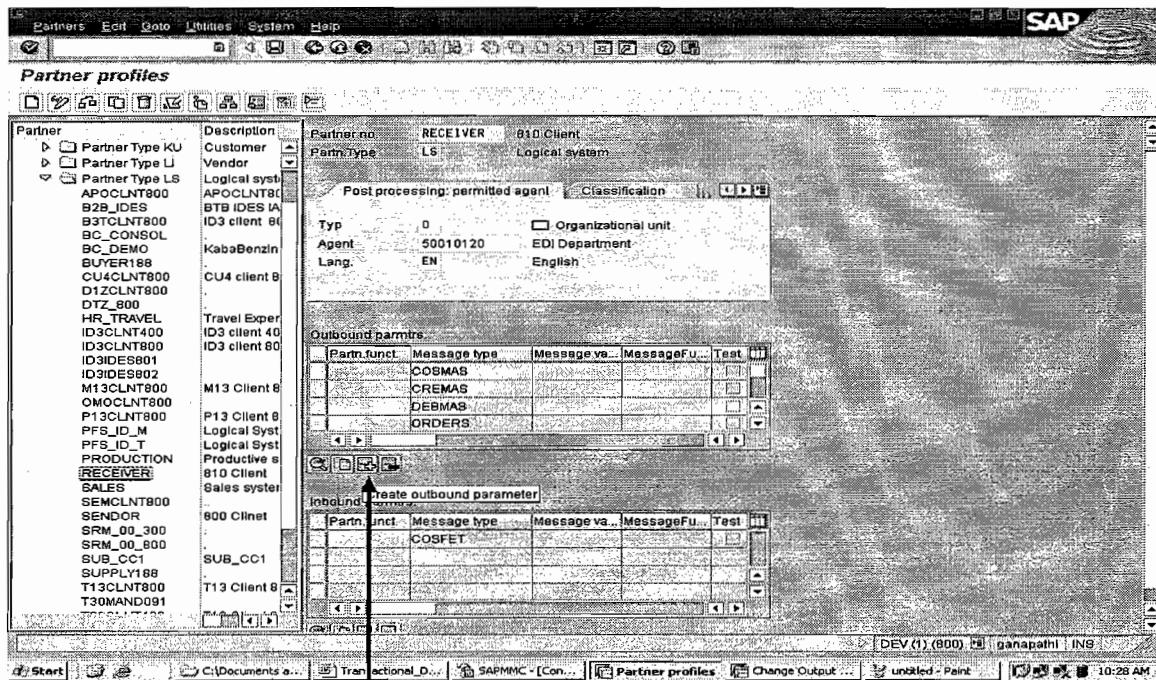
10. Distributing the Transactional Data

We Never Compromise in Quality. Would You?

Notice that Message Type ORDERS is Added to the Distribution Model ZGDEMO_ALL.

2) ADD an Entry to the Outbound Partner Profile if available Else Create the Outbound Partner Profile and Add the Message type, IDoc type ...

Execute WE20.

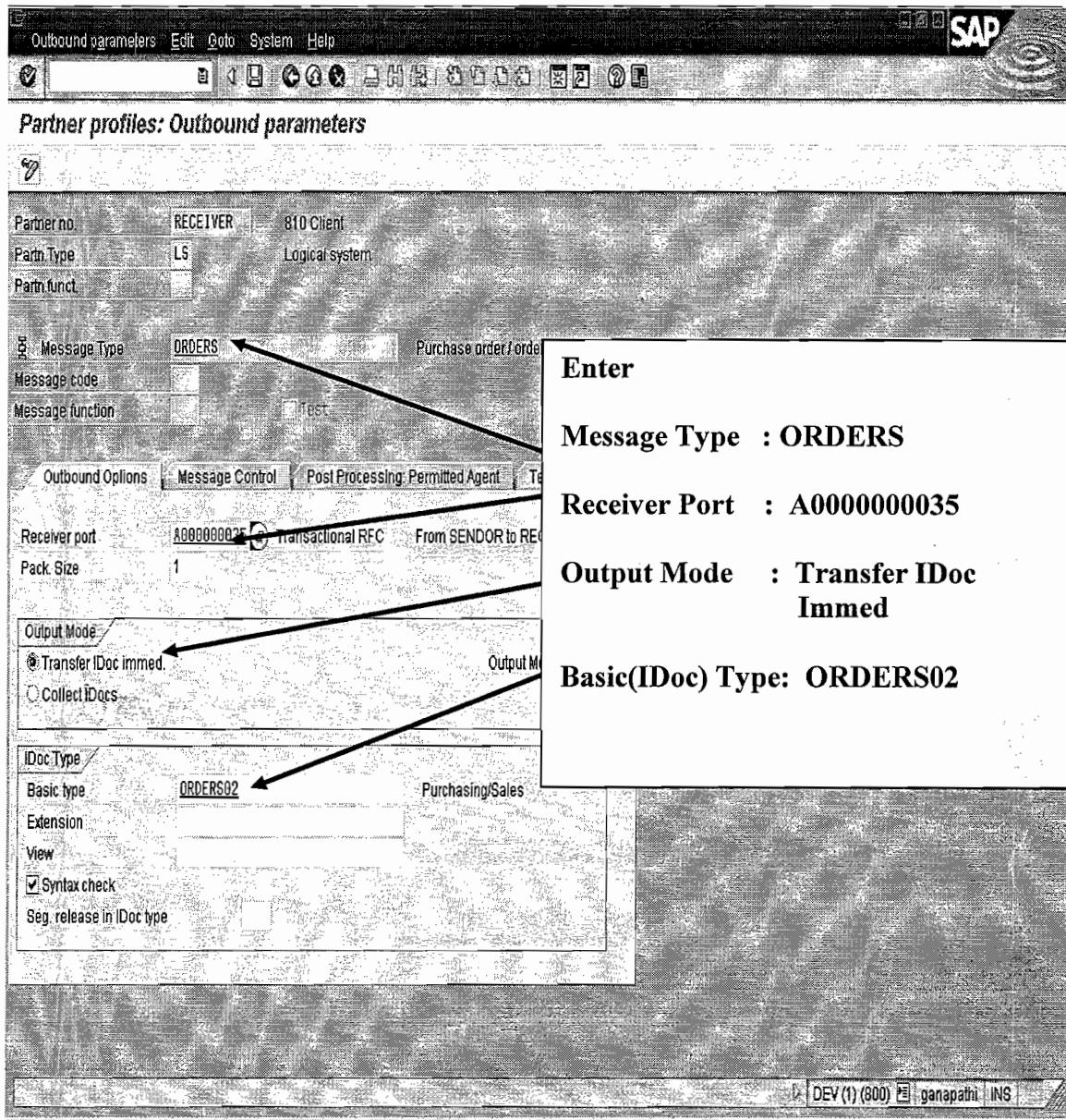


Select the Partner RECEIVER From List Of Partners of type LS and Click On Create Outbound Parameters.



10. Distributing the Transactional Data

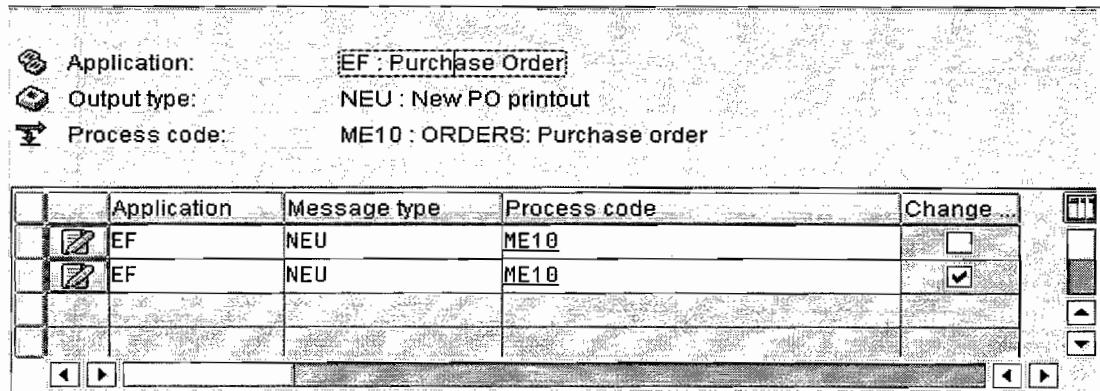
We Never Compromise in Quality. Would You?



Click On Message Control Message Control

10. Distributing the Transactional Data

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Enter

Application as EF (Purchase Order), Message Type (NEU) and Process Code ME10(Outbound Function Module) and Change

One Entry for Create PO

EF	NEU	ME10	<input type="checkbox"/>
----	-----	------	--------------------------

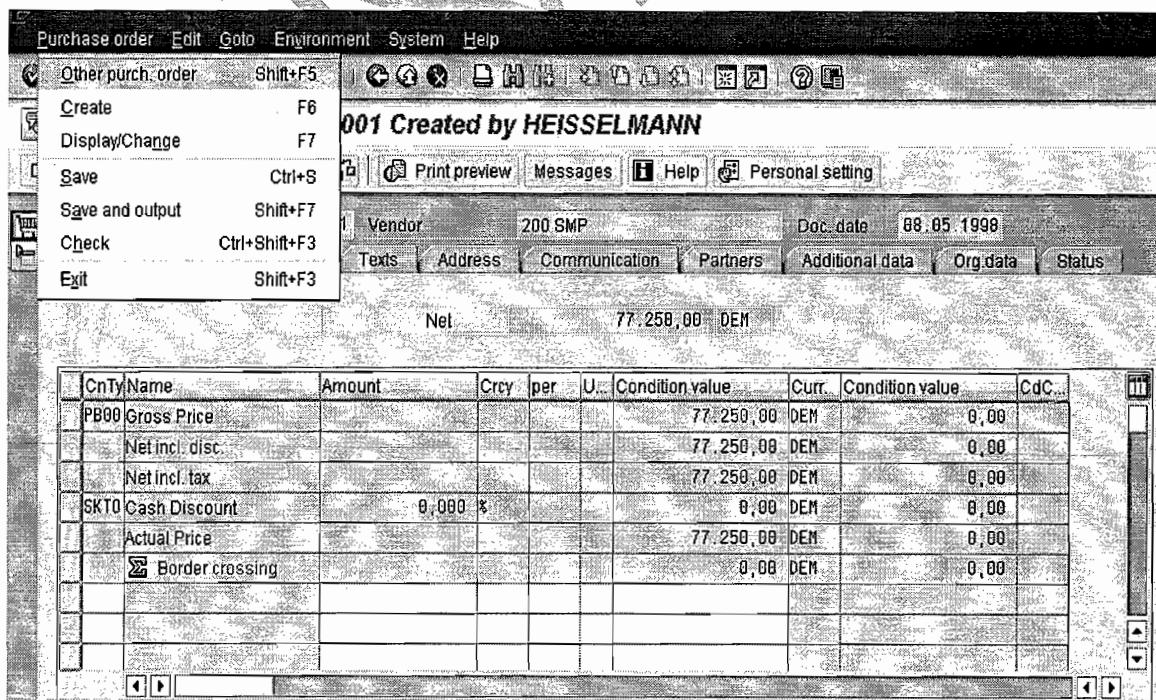
One More Entry for Change PO

EF	NEU	ME10	<input checked="" type="checkbox"/>
----	-----	------	-------------------------------------

SAVE it.

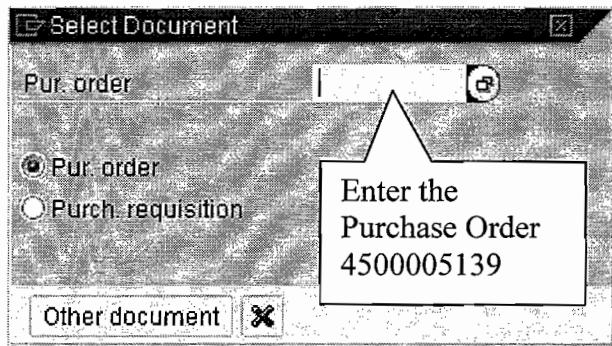
Testing :

Execute ME22N (Change Purchase Order).



10. Distributing the Transactional Data

We Never Compromise in Quality. Would You?



Standard PO 4500005139 Created by Markus Schunter

Document overview on | Print preview | Messages | Help | Personal settings

Delivery/invoice | Conditions | Texts | Address | Communication | Partners | Additional data | Org. data | Status

Net: 80.000,00 DEM

CnTy	Name	Amount	Crcy	per	U..	Condition value	Curr.	Condition value	CdC...
PB00	Gross Price					80.000,00	DEM		0,00
	Net incl. disc.					80.000,00	DEM		0,00
	Net incl. tax					80.000,00	DEM		0,00
SKTO	Cash Discount	3.000 -				2.400,00	DEM		0,00
	Actual Price					77.600,00	DEM		0,00

Condition rec. | Activate | Update

S. Item	A. I.	Material	Short text	PO quantity	O... C...	Deliv. date	Net price	Curr...	Per	O... M...
10		DPC1005	Festplatte 2113 MBss / A1	100	PC	030.06.1998	800,00	DEM	1	PC Hard

Change Some Data in the PO if Possible .

Click On Messages to Configure the Manual Output Type

10. Distributing the Transactional Data

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Enter The Output type NEU and Medium – Distribution(ALE)

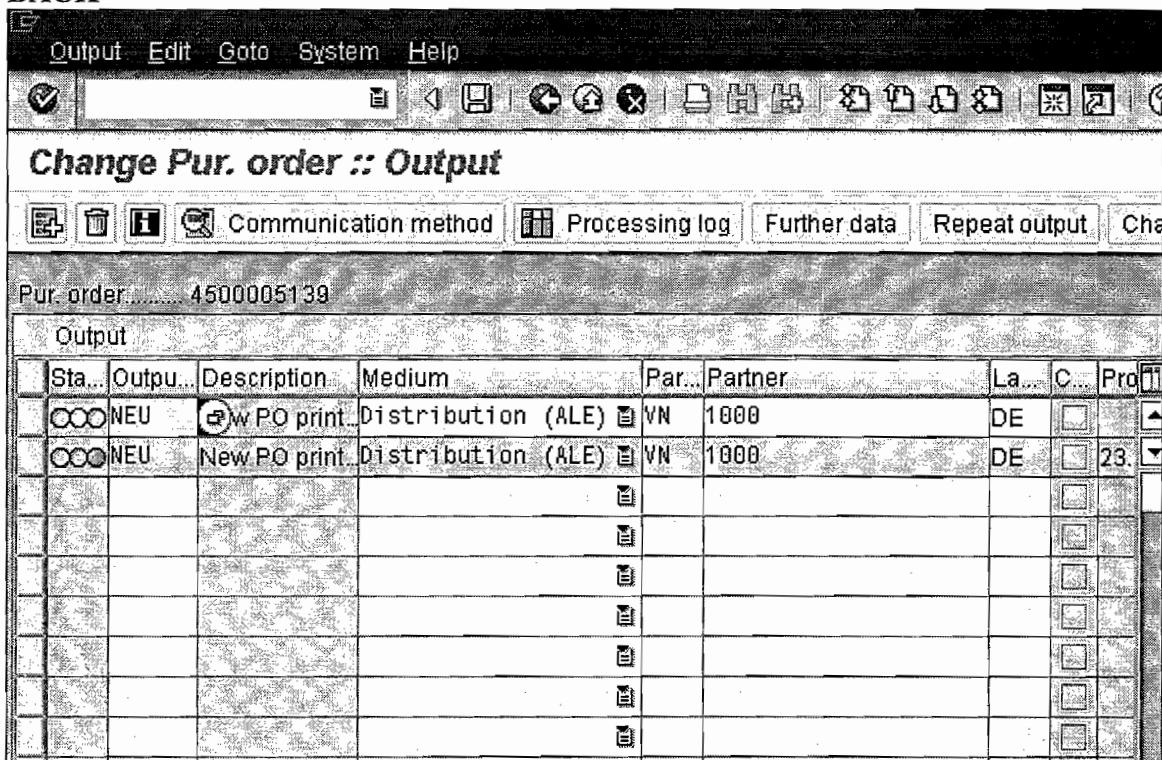
Click On Further Data

Vendor	1000	C.E.B. BERLIN
Output Type	Distribution (A)	
Creation	Select Dispatch time as Send Immediately (When Saving the Application.)	
23.03.2008 14:42:01		
Requested processing	Send immediately (when saving the application)	
Dispatch time	00:00:00	Time to 00:00:00
Actual processing	Not processed	
General data		
<input checked="" type="checkbox"/> Manually changed	Created by	SAPUSER
<input type="checkbox"/> Locked		

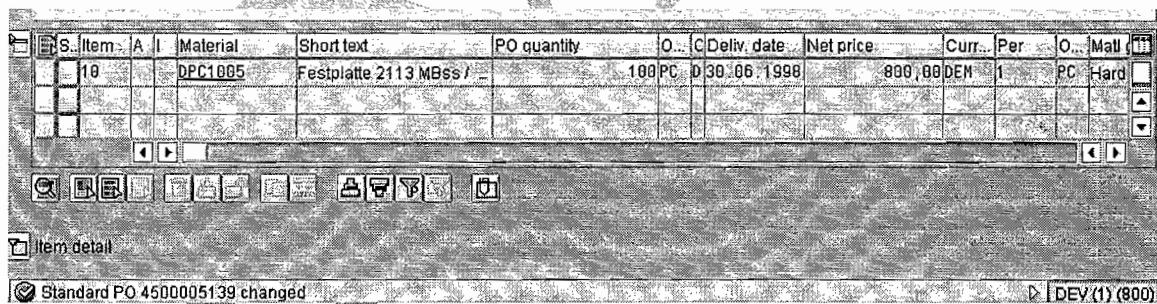
10. Distributing the Transactional Data

We Never Compromise in Quality. Would You?

BACK



SAVE it.

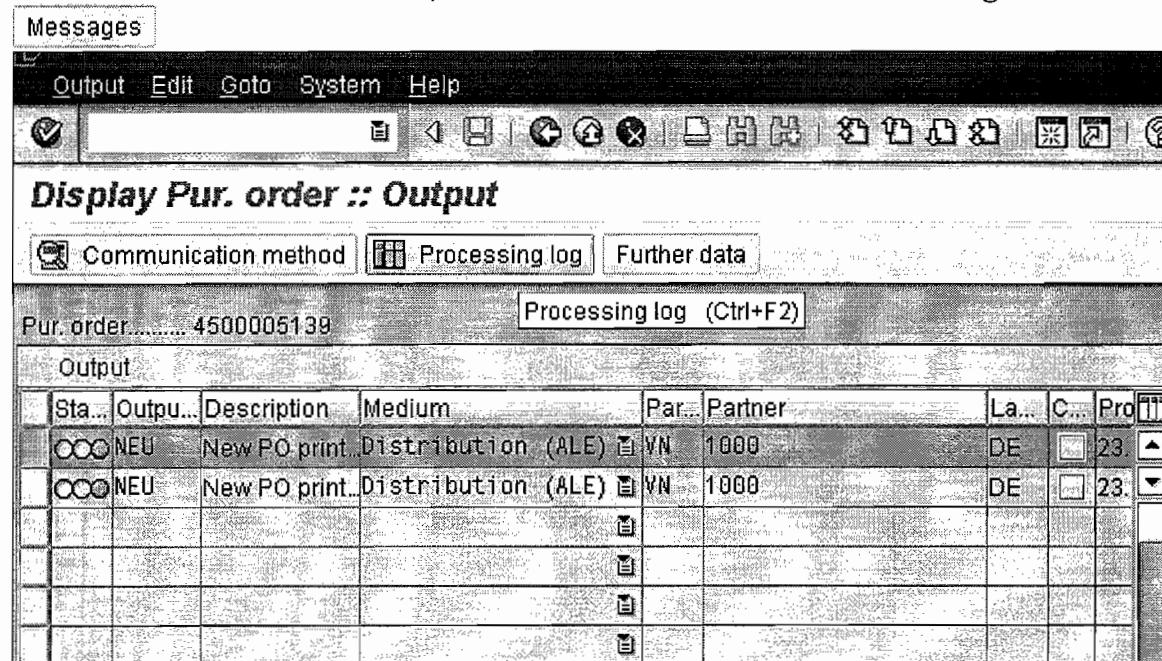


PO is Changed(Saved).

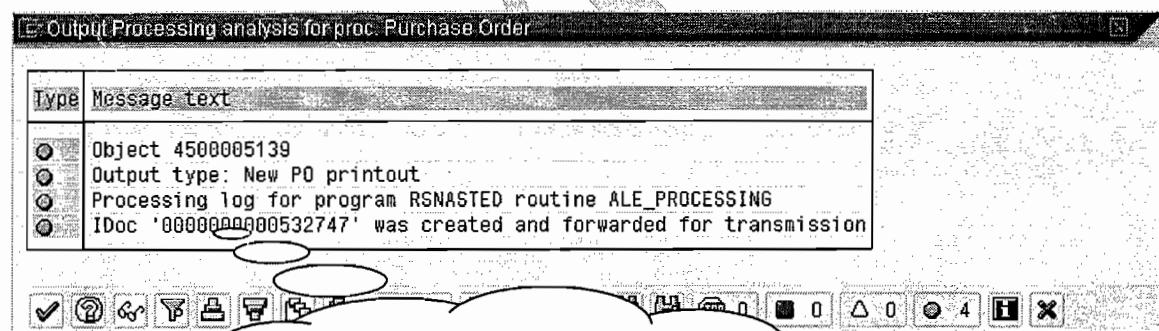
10. Distributing the Transactional Data

We Never Compromise in Quality. Would You?

To Check the IDoc Generated , From the Same Screen Click on Messages



Select the First/latest Output Entry and Click on Processing Log



Congratulations !
Notice the IDoc Generated.

11. IMPORTANT TRANSACTION CODES

We Never Compromise in Quality. Would You ?

Main Menus

WEDI	Main menu for EDI-related activities
BALE	Main menu for ALE-related activities.
SALE	Main menu for ALE configuration.
NACE	Main menu for Message Control configuration

IDoc Definition

SE11	Data Dictionary
WE31	Segment Editor
WE30	IDoc editor to create and extend IDoc type
BD53	Reduce IDoc for master data
WE60	IDoc documentation (IDoc structure and segment definition)
WE61	IDoc Documentation (control record, data record, and status records)

IDoc Monitoring

WE02	IDoc Display
WE05	IDoc Lists
WE07	IDoc Statistics

Configuration (Basic Infrastructure for ALE & EDI)

WE20	Maintain partner profile manually
BD82	Generate partner profiles automatically
WE21	Port Definition
SM59	RFC Destination
BD64	Maintain customer Distribution Model

Testing

WE19	Test tool for IDocs
WE12	Convert an outbound to inbound IDoc.
WE16	Process an incoming IDoc file
WE17	Process an incoming status file

Reprocessing IDocs

BD88	Re-Process outbound IDocs
BD87	Re-Process inbound IDocs

Configuration of New IDoc Components

WE81	Create new message type
WE82	Link IDoc type and message type
WE41	Create outbound process code
WE42	Create inbound process code
WE57	Allocate inbound function module to message type

11. IMPORTANT TRANSACTION CODES

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BD51	Define settings for inbound function module
BD67	Assign input methods for a process code (inbound)

Programs :

RBDMIDOC – Creating IDoc Type from Change Pointers
 RSEOUT00 – Process all selected IDocs (EDI)
 RBDAPP01 - Inbound Processing of IDocs Ready for Transfer
 RSARFCEX - Execute Calls Not Yet Executed
 RBDMOIND - Status Conversion with Successful tRFC Execution
 RBDMANIN - Start error handling for non-posted IDocs
 RBDSTATE - Send Audit Confirmations

IMPORTANT TABLES

EDIDC	Control Records
EDIDS	Status Records
EDID2/3/4	Data Records (version 3c/3/4)
EDIMSG	Message Type and Assignment to IDoc
EDISDEF	IDoc Development: IDoc Segment definition
EDISEG	IDoc Segment with assignment to Segment type
EDISEGMENT	IDoc Segments
RFCDES	RFC Destinations.

REFERENCES

1. ALE,EDI, & IDoc Technologies for SAP
by Arvind Nagpal
2. SAP Library

I Have a shelf of ABAP Materials But Mr . Ganapati's Marterials is the First one where I was very Impressed .

Thanks for eMAX and Mr.Ganapati for Your Indepth and Step by Step Mateial which helped me to get job in **IBM Calcutta.**

Hussain
ABAP Consultant

In My Experience , I Noticed That some training centeres are good only for ABAP and some are good Only for

Cross-Apps but the eMAX is only the place where you can get good ABAP and Cross Applications by **Mr.Ganapati.**

Shushanth
ABAP Consultant, TCS

Congratulations to Mr.Ganapati Adimulam, the Most talented trainer and also the Author of "ABAP COMPLETE REFERENCE" (Volume-I,Volume-II & Cross Applications) to keep eMAX Technologies as Pioneer in SAP-ABAP Training .

His Realtime Experience at both Offshore and Onsite helps us to Place many ABAP Consultants on to the roles of MNC's.

P.V.Rama Rao
Director & Founder Of eMAX

I Personally Feel that getting the ABAP Training at eMAX by Mr Ganapati is Investing your effort in the ABAP Domain.

Many Of My friends are Expeinced the Same i.e They learnt ABAP at One Place, X- Apps at eMAX and it's is good to join at eMAX for ABAP to Save ur Money & Time.

Govind
ABAP Consultant,Cap Gemini