SAP Transportation Management

Configuration Guide for Domestic Inbound Transportation

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Icons in Body Text

Icon	Meaning
	Caution
	Example
	Note
	Recommendation
	Syntax

Additional icons are used in SAP Library documentation to help you identify different types of information at a glance. For more information, see *Help on Help → General Information Classes and Information Classes for Business Information Warehouse* on the first page of any version of *SAP Library*.

Typographic Conventions

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

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Configuration Guide for Domestic Inbound Transportation

This document contains the master data and customizing settings for the *Domestic Inbound Transportation* scenario. You must implement this scenario as described and once you have verified the functionality, you can modify the data to suit your own environment and operating conditions.

Change History

Version	Date	Description
1.0	December 2010	Initial version
1.1	April 2011	Harmonized configuration and master data; scenarios based on IDES
2.0	September 2012	Revised for SAP TM 9.0

The Scenario

Some settings in this guide can be copied from the existing SAP ERP configuration. In particular, SAP ERP Customizing settings can be reused for the following:

- Defining enterprise structure and relevant assignments
- Financial accounting
- Controlling

If you require a scenario-specific enterprise structure, we recommend that you copy the existing, standard configuration settings (such as *Country Template for Company Codes incl. G/L Accounts*) and change them as necessary (for example, changing addresses).

Business system groups, logical systems, RFC connections, and system connections used throughout this guide are examples only. Replace these with your own data.

This guide also assumes the use of Business Add-Ins (BAdIs), which add a prefix or suffix to master data objects transferred from SAP ERP to SAP TM (see SAP Note 458914). An overview of the prefixes and suffixes used is provided in the following table:

Business Object	Prefix	Suffix
Carrier	CA–	None
Customer	CU–	None
Plant	PL–	None
Shipping Point	SP–	None
Supplier	SU–	None
System	None	–@QV5750

For example:

Shipping point name in SAP ERP: 1200

Shipping point name in SAP TM: SP1200@QV5750

If you have not implemented the corresponding BAdI in your system, the names of the objects are not changed.

Prerequisites

Before you begin to configure the *Domestic Inbound Transportation* scenario, see the following guides in SAP Solution Manager under *SAP Transportation Management* →*Configuration Structures* →*Basic Settings for SAP TM 9.0*:

- Basic Settings and Integration for ERP

- Basic Settings for SAP TM
- Integration of SAP TM and SAP Event Management
- Integration of Output Management
- Basic Settings for Visual Business

System Prerequisites

Your SAP ERP system must be configured to run the following processes:

- SD: Order-to-cash process:
    - Sales order entry
    - Delivery creation
    - Posting goods issue
    - Billing document creation
    - Transfer to accounting
- MM: Purchase order process:
    - Purchase order entry
    - Inbound delivery processing
    - Posting goods receipt
    - Logistics invoice verification
    - Invoice document creation (ERS settlement)
    - Transfer to accounting
- FI/CO
    - Supporting the processes listed above
    - Country-specific legal requirements (such as tax calculation)

Geography

The *Domestic Inbound Transportation* scenario describes a national transportation network with two vendors.

Goods to be shipped are ordered by the ordering party and delivered to production plants in Munich and Dingolfing, Germany.

The goods are shipped from the vendor locations at which they were manufactured.

To use the transportation network as described in this document, you must ensure that the vendors and plants used in the customer system are located in the same vicinity.

The following organizational structures and document types are used by default and must be changed to customer-specific organizational structures as required.

Company code	1000
Controlling area	1000
Plant	• 1200 • 1400
Purchasing organization	1000
Storage location	0001
Shipping point	• 1200 • 1400
Purchase order type	NDI

Organizational Unit Configuration

Activities

- Defining Organizational Units in SAP ERP [Page 15]
- Defining Organizational Units in SAP TM [Page 21]

Defining Organizational Units in SAP ERP

The following IDES organizational units are used throughout this document:

- Controlling area 1000 (CO Europe)
- Company code 1000 (IDES AG)
- Purchasing organization 1000 (IDES Deutschland)
- Plants 1200 (Dresden) and 1400 (Stuttgart)

More Information

- Defining Plants [Page 16]
- Defining Storage Locations [Page 17]
- Defining Shipping Points and Receiving Points [Page 18]
- Assigning Goods Receiving Points for Inbound Deliveries [Page 20]

Defining Plants

Procedure

1. In Customizing for SAP ERP, choose *Enterprise Structure* →*Definition* →*Logistics – General* →*Define, Copy, Delete, Check Plant*.
2. Choose *Define Plant*.
3. Select plants 1200 (Dresden) and 1400 (Stuttgart).
4. Choose *Address* or press `SHIFT+F5` and check that the addresses for the plants are as follows:
   - For plant 1200:

Field	Value
Name	Plant Dresden
Street/House Number	St. Petersburger Str. 9
Postal Code/City	01069 Dresden
Country	DE (Germany)
Region	14 (Saxony)
Time Zone	CET
Language	EN

   - For plant 1400:

Field	Value
Name	Plant Stuttgart
Search Term	STUTTGART
Street/House Number	Sieglestr. 26
Postal Code/City	70469 Stuttgart
Country	DE (Germany)
Region	08 (Baden-Wuerttemberg)
Time Zone	CET
Language	EN

Defining Storage Locations

Procedure

1. In Customizing for SAP ERP, choose *Enterprise Structure* →*Definition* →*Materials Management* →*Maintain Storage Location* .

2. Enter plant `1200` and choose *Continue*.

3. Delete all of the existing entries and create a new entry as follows:

Field	Value
SLoc	DIT1
Description	TM-DIT: StLoc

4. Repeat this procedure for plant 1400.

Defining Shipping Points and Receiving Points

In this procedure, you define shipping points and receiving points for the plants. The system uses the receiving point as the destination for the inbound transportation. The receiving point is then transferred to SAP TM using the Core Interface, resulting in a corresponding location of type 1003 (Shipping point) in SAP TM.

Procedure

1. In Customizing for SAP ERP, choose *Enterprise Structure* →*Definition* →*Logistics Execution* →*Define, Copy, Delete, Check Shipping Point*.
2. Choose *Define Shipping Point*.
3. Select entry `1200` (shipping/receiving Dresden) and choose *Details* or press `CTRL+SHIFT+F2`.
4. On the *Details* screen, choose *Address*.
5. Enter the following data:

Field	Value
Name	Shipping/Receiving Dresden
Street/House Number	St. Petersburger Str. 9
Postal Code/City	01069 Dresden
Country/Region	DE (Germany)
Region	14 (Saxony)
Time Zone	CET
Language	EN

6. Choose *Back* or press `F3` to return to the overview screen.
7. Select entry `1400` (shipping/receiving Stuttgart) and choose *Details* or press `CTRL+SHIFT+F2`.
8. On the *Details* screen, choose *Address*.
9. Enter the following data:

Field	Value
Name	Shipping/Receiving Stuttgart
Street/House Number	Sieglestr. 26
Postal Code/City	70469 Stuttgart
Country/Region	DE (Germany)

Field	Value
Region	08 (Baden-Wuerttemberg)
Time Zone	CET
Language	EN

Assigning Goods Receiving Points for Inbound Deliveries

In this Customizing activity, you assign goods receiving points to the combination of plant and storage location.

Procedure

1. In Customizing for SAP ERP, choose *Logistics Execution* →*Shipping* →*Basic Shipping Functions* →*Shipping Point and Goods Receiving Point Determination* →*Assign Goods Receiving Points for Inbound Deliveries* .

2. Create entries with the following data:

Plant	Storage Location	Shipping Point
1200	DIT1	1200
1400	DIT1	1400

Defining Organizational Units in SAP TM

Activities

Transferring Organizational Data from SAP ERP to SAP TM

In this procedure, you create and activate an integration model, which selects the plant and receiving point data and transfers it to SAP TM, thereby creating or updating locations and business partners.

In SAP TM, locations of type `1001` (plant) are created for the plants. Locations of type `1003` (shipping points) are created for the receiving points. The system automatically creates business partners with role `BBP000` (vendor) for plants and shipping points. The business partners are assigned to the location.

Procedure

1. On the *SAP Easy Access* screen in SAP ERP, choose *Logistics* →*Central Functions* →*Supply Chain Planning Interface* →*Core Interface Advanced Planner and Optimizer* →*Integration Model* →*Create* .

2. Enter the following data:

Field	Value
Model Name	DIT
Logical System	Logical System ID of SAP TM target system
APO Application	ORG_DATA

3. In the *Material Dependent Objects* screen area, select the *Plants* checkbox.

4. In the *General Selection Options for Materials* screen area, enter plants `1200` and `1400` (multiple values).

5. In the *Material Independent Objects* screen area, select the *Shipping Points* checkbox and choose *Special Restrictions* to the right to open the respective selection screen.

6. Enter the shipping points `1200` and `1400` as multiple values.

7. Choose *Program* →*Execute* to continue. The system lists the selected filter objects (plants and shipping points) on the results screen along with the respective number of filtered objects.

8. Choose *Generate IM* to create the integration model.

9. Exit the transaction.

10. On the SAP Easy Access screen in SAP ERP, choose *Logistics* →*Central Functions* →*Supply Chain Planning Interface* →*Core Interface Advanced Planner and Optimizer* →*Integration Model* →*Activate* .

11. Enter the following data:

Field	Value
Model Name	DIT

Field	Value
Logical System	Logical System ID of SAP TM target system
APO Application	ORG_DATA

12. Choose *Program* →*Execute* to continue. The created version of the selected integration model is listed.

13. Click the red cross (indicating that the integration model version is inactive) in the *New Status* column. The icon changes to a check mark (indicating that the integration model is active).

14. Choose *Start* from the toolbar to start the activation.

15. If necessary, confirm all dialog boxes to run the data transfer.

Defining Business Partners for Receiving Points and Plants

Procedure

1. Open *SAP NetWeaver Business Client* and choose *Master Data* →*General* →*Define Business Partner* .

2. Choose *Organization* or press `CTRL+F5`.

3. Enter the following data:

Field	Value
BP Number	SP-1200
Create in BP Role	Business Partner (Gen.)
Grouping	0002 (External Number Assignment)

4. Choose the *Address* tab page and enter the following data:

Field	Value
Name	Shipping/Receiving Dresden
Search Term 1/2	DRESDEN
Street/House Number	St. Petersburger Str. 9
Postal Code/City	01069 Dresden
Country	DE
Region	14
Time Zone	CET
Language	Blank

5. Save your entries.

6. Repeat the above steps using the following data:

Field	Value
BP Number	SP-1400
Create in BP Role	Business Partner (Gen.)
Grouping	0002 (External Number Assignment)
Field	**Value**
Name	Receiving/Shipping Point, Plant 1400

Field	Value
Search Term 1/2	STUTTGART
Street/House Number	Sieglestr. 26
Postal Code/City	70469 Stuttgart
Country	DE
Region	08
Time Zone	CET
Language	EN

7. Repeat the above steps using the following data:

Field	Value
BP Number	PL-1200
Create in BP Role	Business Partner (Gen.)
Field	**Value**
Name	Plant Dresden
Search Term 1/2	DRESDEN
Street/House Number	St. Petersburger Str. 9
Postal Code/City	01069 Dresden
Country	DE
Region	14
Time Zone	CET
Language	EN

8. Repeat the above steps using the following data:

Field	Value
BP Number	PL-1400
Create in BP Role	Business Partner (Gen.)
Field	**Value**
Name	Plant Stuttgart
Search Term 1/2	TM-DIT
Street/House Number	Heilbronner Str. 319-339

Field	Value
Postal Code/City	70469 Stuttgart
Country	DE
Region	08
Time Zone	CET
Language	EN

Assigning Business Partners to Locations for Receiving Points and Plants

Procedure

1. In your *SAP Transportation Management* system, open *SAP NetWeaver Business Client* and choose *Master Data* →*Transportation Network* →*Locations* →*Define Location*.

2. On the initial screen, enter the following data:

Field	Value
Location	SP1200@<*logical system*>
Location Type	1003 (Shipping Point)

3. Choose *Change* or press `F6`.

4. Choose the *General* tab page and enter the following data:

Field	Value
BP Number	SP-1200

5. Save your entries.

6. Repeat the above steps using the following data:

Field	Value
Location	SP1400@<*logical system*>
Location Type	1003 (Shipping Point)
BP Number	SP-1400

7. Repeat the above steps using the following data:

Field	Value
Location	PL1200@<*logical system*>
Location Type	1001 (Production Plant)
BP Number	PL-1200

8. Repeat the above steps using the following data:

Field	Value
Location	PL1400@<*logical system*>
Location Type	1001 (Production Plant)
BP Number	PL-1400

Maintaining Geographical Data for Receiving Point and Shipping Point Locations

Procedure

1. In *SAP NetWeaver Business Client* (NWBC), choose *Master Data* →*Transportation Network* →*Locations* →*Define Location* .

2. On the initial screen, enter the following data:

Field	Value
Location	SP1200@<*logical system*>
Location Type	1003 (shipping point)

3. Choose *Change*.

4. On the *General* tab page, enter the following data in the *Geographical Data* screen area:

	Sign	Degree	Minutes	Seconds
Longitude	+	13	44	42
Latitude	+	51	2	53

5. In the Geographical Data screen area, enter the time zone `CET` and precision `1200`.

6. Return to the initial screen.

7. Repeat the above steps using the following data:

Field	Value
Location	SP1400@<*logical system*>
Location Type	1003 (shipping point)

	Sign	Degree	Minutes	Seconds
Longitude	+	9	10	29
Latitude	+	48	48	51

8. Enter time zone `CET` and precision `1200`.

Defining Organizational Units for Transportation Planning and Execution Organization and Group

Procedure

1. In *SAP NetWeaver Business Client* (NWBC), choose *Master Data* →*Organization* →*Create Organization and Staffing.*

2. In the *Create Root Organizational Object* dialog box, enter the current date in the *Valid From* field and December 31, 9999 in the *Valid To* field.

3. Choose the *Continue* pushbutton.

4. Choose the *Basic Data* tab page and enter the following data:

Field	Value
Organizational Unit	DIT-PEORG-1
Description	DIT Planning & Execution Org. DE

5. Choose the *Org. Data* tab page.

6. Choose *Create* and enter the following data:

Field	Value
Org. Unit Function	13 (Planning and Execution)
Org. Unit Role	1 (Organization)

The system completes the *Org. ID* field on the *Org. Data* tab page automatically. The ID for transportation planning and execution organization is required in the following configuration steps:

- Defining Freight Unit Types [Page 109]
- Defining Freight Order Types [Page 124]
- Defining Conditions for Event Handler Types [Page 207].

7. Choose the *Address* tab page and enter the following data:

Field	Value
Subtype	Main address
City	Frankfurt
Country	DE

8. Select the new organizational unit listed under *Staff Assignments (Structure)*.

9. Choose *Create* to create a subordinate organizational unit.
10. Choose the relationship *Is line supervisor of Organizational unit* and continue.
11. Choose the *Basic Data* tab page and enter the following data:

Field	Value
Organizational Unit	DIT-PEGRP-1
Description	DIT Planning & Execution Group DE

12. Choose the *Org. Data* tab page.
13. Choose *Create* and enter the following data:

Field	Value
Org. Unit Function	13 (Planning and Execution)
Org. Unit Role	3 (Group)

The system completes the *Org. ID* field on the *Org. Data* tab page automatically. The ID for transportation planning and execution organization is required in the following configuration steps:

- Defining Freight Unit Types [Page 109]
- Defining Freight Order Types [Page 124].

14. Choose the *Address* tab page and enter the following data:

Field	Value
Subtype	Main address
City	Frankfurt
Country	DE

Defining Organizational Units for Purchasing Organization and Group

Procedure

1. In *SAP NetWeaver Business Client* (NWBC), choose *Master Data* →*Organization* →*Create Organization and Staffing* .

2. In the *Create Root Organizational Object* dialog box, enter the current date in the *Valid From* field and December 31, 9999 in the *Valid To* field.

3. Choose the *Basic Data* tab page and enter the following data:

Field	Value
Organizational Unit	DIT-PORG-1
Description	DIT Purchasing Organization DE

4. Choose the *Org. Data* tab page.

5. Choose *Create* and enter the following data:

Field	Value
Org. Unit Function	2 (Purchasing)
Org. Unit Role	1 (Organization)

The system completes the *Org. ID* field on the *Org. Data* tab page automatically. The ID for the purchasing organization is required in the following configuration steps:

- Defining Freight Order Types [Page 124]
- Defining Freight Agreements [Page 276]
- Defining Mapping of Organization Units and Further Settings for Transportation Service Purchase Orders [Page 258].

6. Choose the *Address* tab page and enter the following data:

Field	Value
Subtype	Main address
City	Frankfurt
Country	DE

7. Select the new organizational unit listed under *Staff Assignments (Structure)*.

8. Choose *Create* to create a subordinate organizational unit.

9. Choose the relationship *Is line supervisor of Organizational unit* and continue.

10. Choose the *Basic Data* tab page and enter the following data:

Field	Value
Organizational Unit	DIT-PGRP-1
Description	DIT Purchasing Group DE

11. Choose the *Org. Data* tab page.

12. Choose *Create* and enter the following data:

Field	Value
Org. Unit Function	2 (Purchasing)
Org. Unit Role	3 (Group)

The system completes the *Org. ID* field on the *Org. Data* tab page automatically. The ID for the purchasing organization is required in the following configuration steps:

- Defining Freight Order Types [Page 124]
- Defining Freight Agreements [Page 276]
- Defining Mapping of Organization Units and Further Settings for Transportation Service Purchase Orders [Page 258].

13. Choose the *Address* tab page and enter the following data:

Field	Value
Subtype	Main address
City	Frankfurt
Country	DE

Configuring Process Order Processing

Activities

- Defining Document Types for Purchase Orders [Page 36]
- Maintaining and Assigning Partner Schema for Purchasing [Page 39]
- Defining Vendor Master [Page 45]
- Defining Material Master [Page 67]
- Maintaining Purchasing Contracts and Source Lists [Page 85]

Configuring Document Types for Purchase Orders and Purchase Requisitions

Activities

- Defining Document Types for Purchase Orders [Page 36]
- Defining Document Types for Purchase Requisitions [Page 37]

Defining Document Types for Purchase Orders

Procedure

1. In Customizing for SAP ERP, choose *Materials Management* →*Purchasing* →*Purchase Order* →*Define Document Types*.

2. Create an entry with the following data by copying document type `NB` and all of its dependent entries:

Field	Value
Type	DIT1
Doc. Type Descript.	TM-DIT: Standard PO

Defining Document Types for Purchase Requisitions

Procedure

1. In Customizing for SAP ERP, choose *Materials Management* →*Purchasing* →*Purchase Requisition* →*Define Document Types*.

2. Create an entry with the following data by copying document type `NB` **without** dependent entries:

Field	Value
Type	DIT1
Doc. Type Descript.	TM-DIT: Standard PR

3. Select the new document type and choose *Allowed item categories* from the tree structure.

4. Create an entry with the following data:

Field	Value
ItCat.	Blank
Text for Item Cat.	Standard

5. Select the new entry and choose *Link purchase requisition – document type* from the tree structure.

6. Create new entries with the following data:

Field	Value
Document Type	DIT1
Item Category of Reference Document (Purchasing Document)	Blank
Item Category of Current Document (Purchase Requisition)	Blank
R/S (Contract Release / SA Schedule Line)	Blank

Field	Value
Document Type	MK
Item Category of Reference Document (Purchasing Document)	Blank
Item Category of Current Document (Purchase Requisition)	Blank
R/S (Contract Release / SA Schedule Line)	Selected

Maintaining and Assigning Partner Schema for Purchasing

Activities

Defining Permissible Partner Roles for Each Vendor Account Group

Procedure

1. In Customizing for SAP ERP, choose *Materials Management →Purchasing →Partner Determination →Partner Roles →Define Permissible Partner Roles per Account Group* .

2. Check the following data and enter any values that are missing:

Partner Function	Account Group
OA	0001
OA	0002
VN	0001
PI	0001
PI	0005
GS	0001
GS	0002

In IDES, the partner function key `PI` (invoicing party) for language key `EN` (English) is replaced by partner function key `IP` (invoice presented by)..

Defining Partner Schemas for Vendor Account Groups

Procedure

1. In Customizing for SAP ERP, choose *Materials Management* →*Purchasing* →*Partner Determination* →*Partner Settings in Vendor Master Record* →*Define Partner Schemas*.

2. Select partner schema `L1` (Vendor) and choose *Partner Functions in Procedure* in the tree structure.

3. Check the following entries and create them if they do not exist:

Partner Function	No Change	Mandatory
OA	Deselected	Deselected
VN	Selected	Selected
PI	Deselected	Deselected
GS	Deselected	Deselected

In IDES, partner function key `PI` (invoicing party) for language key `EN` (English) is replaced by partner function key `IP` (invoice presented by)..

Assigning Partner Schemas to Vendor Account Groups

Procedure

1. In Customizing for SAP ERP, choose *Materials Management →Purchasing →Partner Determination →Partner Settings in Vendor Master Record →Assign Partner Schemas to Account Groups*.

2. Check the following data and create any entries that do not exist:

Field	Value
Account Group	0001
Partner Schema Purchasing Organization	L1

Defining Partner Schemas for Purchasing Document Types

Procedure

1. In Customizing for SAP ERP, choose *Materials Management* →*Purchasing* →*Partner Determination* →*Partner Settings in Purchasing Documents* →*Define Partner Schemas* .
2. Select partner schema `0001` (contracts).
3. Choose *Partner Functions in Procedure* from the tree structure.
4. Check the following data and enter any values that are missing:

Partner Function	No Change	Mandatory	End	Higher Level
OA	Deselected	Deselected	Deselected	Deselected
VN	Selected	Selected	Deselected	Selected
PI	Deselected	Deselected	Deselected	Deselected
GS	Deselected	Deselected	Deselected	Deselected

5. Choose *Partner Determination Procedures* from the tree structure.
6. Select partner schema `0002` (purchase order):
7. Choose *Partner Functions in Procedure* from the tree structure.
8. Check the following data and enter any values that are missing:

Partner Function	No Change	Mandatory	End	Higher Level
OA	Deselected	Deselected	Deselected	Deselected
VN	Selected	Selected	Deselected	Selected
PI	Deselected	Deselected	Deselected	Deselected
GS	Deselected	Deselected	Deselected	Deselected

In IDES, the partner function key `PI` (invoicing party) for language key `EN` (English) is replaced by partner function key `IP` (invoice presented by)..

Assigning Partner Schemas to Purchasing Document Types

In this Customizing activity, you assign partner schemas to purchasing document types for partner assignments in purchasing documents.

Procedure

1. In Customizing for SAP ERP, choose *Materials Management →Purchasing →Partner Determination →Partner Settings in Purchasing Documents →Assign Partner Schemas to Document Types*.

2. Check the following data and create any entries that are missing:

Document Category	Document Type	Partner Schema
Purchase Order	DIT1	0002
Contract	MK	0001

Defining Vendor Master

Activities

Maintaining Vendor Account Groups

Procedure

1. In Customizing for SAP ERP, choose *Logistics – General* →*Business Partner* →*Vendors* →*Control* →*Define Account Groups and Field Selection (Vendor)* .
2. Select account group `0001`.
3. Choose *Details* or press `F2`.
4. Select the *Vendor sub-range relevant* checkbox.

Defining Vendor Master (Vendor Company)

In this procedure, you create the vendor master data for the vendor company. The vendor is the seller company in terms of purchasing and accounting. Therefore, you have to define the vendor master for both accounting and purchasing. The vendor is also to be used as the invoicing party.

Procedure

1. On the *SAP Easy Access* screen in SAP ERP, choose *Logistics* →*Materials Management* →*Purchasing* →*Master Data* →*Vendor* →*Central* →*Create* .

2. Create new master data as specified below. In each case, choose *Enter* to switch to the next screen.

    1. On the *Initial Screen*, enter the following data:

Field	Value
Vendor	DIT-VN-10
Company Code	1000
Purchasing Organization	1000
Account Group	0001

    2. On the *Create Vendor: Address* screen, enter the following data:

Field	Value
Title	Company
Name	TM-DIT: Vendor 1 / Munich
Search Term	TM-DIT
Street/House Number	Frankfurter Ring 195
Postal Code/City	80687 Munich
Country	DE
Region	09
Language	EN

    3. On the *Create Vendor: Control* screen, leave all of the values initial.

    4. On the *Create Vendor: Payment Transactions* screen, leave all of the values initial.

    5. On the *Create Vendor: Contact Persons* screen, leave all of the values initial.

    6. On the *Create Vendor: Accounting Information Accounting* screen, enter reconciliation account `160000` and cash management group `E1`.

7. On the *Create Vendor: Payment Transactions Accounting* screen, enter payment terms `0001`.

8. On the *Create Vendor: Correspondence Accounting* screen, leave all of the values initial.

9. On the *Create Vendor: Purchasing Data* screen, enter the following data:

Field	Value
Order Currency	EUR
Terms of Payment	0001
Incoterms	EXW Munich (DIT-VN-10)
GR-based Invoice Verification	Selected
Automatic Purchase Order	Selected
Purchasing Group	P01
Planned Delivery Time	1 (day)
Confirmation Control	0004

10. On the *Create Vendor: Partner Functions* screen, enter the following data:

Partner Function	Number
VN	DIT-VN-10
PI	DIT-VN-10
GS	DIT-VN-10
OA	DIT-VN-10

In IDES, partner function key `PI` (invoicing party) for language key `EN` (English) is replaced by partner function key `IP` (invoice presented by)..

3. Create new master data as specified below.

1. On the *Initial Screen*, enter the following data:

Field	Value
Vendor	DIT-VN-20
Company Code	1000
Purchasing Organization	1000
Account Group	0001

Field	Value
Vendor (Reference)	DIT-VN-10

2. On the *Create Vendor: Address* screen, enter the following data:

Field	Value
Title	Company
Name	TM-DIT: Vendor 2 / Nuremberg
Search Term	TM-DIT
Street/House Number	Nopitschstr. 67
Postal Code/City	90441 Nuremberg
Country	DE
Region	09
Language	EN

3. On the *Create Vendor: Control* screen, leave all of the values initial.

4. On the *Create Vendor: Payment Transactions* screen, leave all of the values initial.

5. On the *Create Vendor: Contact Persons* screen, leave all of the values initial.

6. On the *Create Vendor: Accounting Information Accounting* screen, enter reconciliation account `160000` and cash management group `E1`.

7. On the *Create Vendor: Payment Transactions Accounting* screen, enter payment terms `0001`.

8. On the *Create Vendor: Purchasing Data* screen, enter the following data:

Field	Value
Order Currency	EUR
Terms of Payment	0001
Incoterms	EXW Nuremberg (DIT-VN-20)
GR-based Invoice Verification	Selected
Automatic Purchase Order	Selected
Purchasing Group	P01
Planned Delivery Time	1 (day)
Confirmation Control	0004

9. On the *Create Vendor: Partner Functions* screen,enter the following data:

Partner Function	Number
VN	DIT-VN-20
PI	DIT-VN-20
GS	DIT-VN-20
OA	DIT-VN-20

4. Create new master data as specified below.

1. On the *Initial Screen*, enter the following data:

Field	Value
Vendor	DIT-VN-30
Company Code	1000
Purchasing Organization	1000
Account Group	0001

2. On the *Create Vendor: Address* screen, enter the following data:

Field	Value
Title	Company
Name	TM-DIT: Vendor 3/ Dortmund
Search Term	TM-DIT
Street/House Number	Arminiusstr. 59
Postal Code/City	44149 Dortmund
Country	DE
Region	05
Language	EN

3. On the *Create Vendor: Control* screen, leave all of the values initial.

4. On the *Create Vendor: Payment Transactions* screen, leave all of the values initial.

5. On the *Create Vendor: Contact Persons* screen, leave all of the values initial.

6. On the *Create Vendor: Accounting Information Accounting* screen, enter reconciliation account `160000` and cash management group `E1`.

7. On the *Create Vendor: Purchasing Data* screen, enter the following data:

Field	Value
Order Currency	EUR
Terms of Payment	0001
Incoterms	EXW Dortmund (DIT-VN-30)
GR-based Invoice Verification	Selected
Automatic Purchase Order	Selected
Purchasing Group	P01
Planned Delivery Time	1 (day)
Confirmation Control	0004

8. On the *Create Vendor: Partner Functions* screen,enter the following data:

Partner Function	Number
VN	DIT-VN-30
PI	DIT-VN-30
GS	DIT-VN-30
OA	DIT-VN-30

5. Create new master data as specified below.

1. On the *Initial Screen*, enter the following data:

Field	Value
Vendor	DIT-VN-40
Company Code	1000
Purchasing Organization	1000
Account Group	0001

2. On the *Create Vendor: Address* screen, enter the following data:

Field	Value
Title	Company
Name	TM-DIT: Vendor 4 / Dortmund
Search Term	TM-DIT
Street/House Number	Hauert 11
Postal Code/City	44227 Dortmund

Field	Value
Country	DE
Region	05
Language	EN

3. On the *Create Vendor: Control* screen, leave all of the values initial.
4. On the *Create Vendor: Payment Transactions* screen, leave all of the values initial.
5. On the *Create Vendor: Contact Persons* screen, leave all of the values initial.
6. On the *Create Vendor: Accounting Information Accounting* screen, enter reconciliation account `160000` and cash management group `E1`.
7. On the *Create Vendor: Purchasing Data* screen, enter the following data:

Field	Value
Order Currency	EUR
Terms of Payment	0001
Incoterms	EXW Dortmund (DIT-VN-40)
GR-based Invoice Verification	Selected
Automatic Purchase Order	Selected
Purchasing Group	P01
Planned Delivery Time	1 (day)
Confirmation Control	0004

8. On the *Create Vendor: Partner Functions* screen,enter the following data:

Partner Function	Number
VN	DIT-VN-40
PI	DIT-VN-40
GS	DIT-VN-40
OA	DIT-VN-40

6. Create new master data as specified below.
   1. On the *Initial Screen*, enter the following data:

Field	Value
Vendor	DIT-VN-50

Field	Value
Company Code	1000
Purchasing Organization	1000
Account Group	0001

2. On the *Create Vendor: Address* screen, enter the following data:

Field	Value
Title	Company
Name	TM-DIT: Vendor 5 / Kassel
Search Term	TM-DIT
Street/House Number	Henschelplatz 1
Postal Code/City	34127 Kassel
Country	DE
Region	06
Language	EN

3. On the *Create Vendor: Control* screen, leave all of the values initial.

4. On the *Create Vendor: Payment Transactions* screen, leave all of the values initial.

5. On the *Create Vendor: Contact Persons* screen, leave all of the values initial.

6. On the *Create Vendor: Accounting Information Accounting* screen, enter reconciliation account `160000` and cash management group `E1`.

7. On the *Create Vendor: Payment Transactions Accounting* screen, enter payment terms `0001`.

8. On the *Create Vendor: Correspondence Accounting* screen, leave all of the values initial.

9. On the *Create Vendor: Purchasing Data* screen, enter the following data:

Field	Value
Order Currency	EUR
Terms of Payment	0001
Incoterms	EXW Kassel (DIT-VN-50)
GR-based Invoice Verification	Selected
Automatic Purchase Order	Selected

Field	Value
Purchasing Group	P01
Planned Delivery Time	1 (day)
Confirmation Control	0004

10. On the *Create Vendor: Partner Functions* screen,enter the following data:

Partner Function	Number
VN	DIT-VN-50
PI	DIT-VN-50
GS	DIT-VN-50
OA	DIT-VN-50

Defining Vendor Master for Vendor Locations (Goods Supplier)

In this procedure, you create vendor master data for the individual ship-from locations, which differ from the vendor location that represents the company's headquarters in this country. Once you have created the vendor master data, it is transferred to SAP TM via CIF. The corresponding locations with location type 1011 (vendor) are created in SAP TM.

Procedure

1. On the *SAP Easy Access* screen in SAP ERP, choose *Logistics* →*Materials Management* →*Purchasing* →*Master Data* →*Vendor* →*Purchasing* →*Create*.

2. Create new master data as follows:

    1. On the initial screen, enter the following data:

Field	Value
Vendor	DIT-VN-21
Purchasing Organization	1000
Account Group	0002

    2. On the *Create Vendor: Address* screen, enter the following data:

Field	Value
Title	Company
Name1	TM-DIT: Vendor 2 / Bamberg
Search Term	TM-DIT
Street/House Number	Hafenstr. 18
Postal Code/City	96052 Bamberg
Country	DE
Region	09
Time Zone	CET
Language	EN

    3. On the *Create Vendor: Purchasing Data* screen, enter order currency `EUR`.

    4. On all of the other screens, leave the values initial.

3. Create new master data with the following data:

    1. On the initial screen, enter the following data:

Field	Value
Vendor	DIT-VN-31
Purchasing Organization	1000
Account Group	0002

2. On the *Create Vendor: Address* screen, enter the following data:

Field	Value
Title	Company
Name	TM-DIT: Vendor 3 / Essen
Search Term	TM-DIT
Street/House Number	Hammacher Str. 100
Postal Code/City	45127 Essen
Country	DE
Region	05
Time Zone	CET
Language	EN

3. On the *Create Vendor: Purchasing Data* screen, enter order currency `EUR`.
4. On all of the other screens, leave the values initial.

Maintaining Vendor Master for Vendor Subranges

Procedure

1. On the *SAP Easy Access* screen in SAP ERP, choose *Logistics* →*Materials Management* →*Purchasing* →*Master Data* →*Vendor* →*Purchasing* →*Change (Current)* .

2. On the initial screen, enter vendor `DIT-VN-20` and purchasing organization `1000`.

3. Select the *Partner functions* checkbox.

4. Choose *Enter* and navigate to the *Change Vendor: Partner Functions* screen.

5. In the menu, choose *Extras* →*Sub-ranges* to maintain vendor-specific subranges (VSR) of products.

6. Enter the following data:

Vendor Subrange (VSR)	VSR Description
P01	Product Group 01

7. In the menu, choose *Extras* →*Alternative Data* to maintain VSR-specific purchasing data.

8. Enter the following data on the *Alternative Data* screen:

Field	Value
Vendor Subrange	P01
Purchasing Data	Not selected
Partner Functions	Selected

9. Choose *Enter* to continue.

10. On the *Alternative Data: Partner Functions* screen, enter the following data:

Partner Function	Number
OA	DIT-VN-21
GS	DIT-VN-21

11. Return to the *Alternative Data Overview* screen.

12. Maintain the next vendor master with the following data.

13. On the initial screen, enter vendor `DIT-VN-30` and purchasing organization `1000`.

14. Select the *Partner functions* checkbox.

15. Choose *Enter* and navigate to the *Purchasing Organization Data: Partner Functions* screen.

16. In the menu, choose *Extras* →*Sub-ranges* to maintain vendor-specific subranges (VSR) of products.

17. On the *Purchasing Organization Data: Vendor Subranges* screen, enter the following data:

Vendor Subrange (VSR)	VSR Description
P01	Product Group 01

18. In the menu, choose *Extras* →*Alternative Data* to maintain VSR-specific purchasing data.

19. On the *Alternative Data* screen, maintain the following data:

Field	Value
Vendor Subrange	P01
Purchasing Data	Not selected
Partner Functions	Selected

20. Choose *Enter* to continue.

21. On the *Alternative Data: Partner Functions* screen, enter the following data:

Partner Function	Partner No.
OA	DIT-VN-31
GS	DIT-VN-31

22. Return to the *Alternative Data Overview* screen.

Defining Vendor Master for Carrier

Procedure

1. On the *SAP Easy Access* screen in SAP ERP, choose *Logistics* →*Materials Management* →*Purchasing* →*Master Data* →*Vendor* →*Central* →*Create* .

2. Create new master data as specified below. In each case, choose *Enter* to switch to the next screen.

    1. On the initial screen, enter the following data:

Field	Value
Vendor No.	DIT-CR-10
Company Code	1000
Purchasing Organization	1000
Account Group	0005

    2. On the Create Vendor: Address screen, enter the following data:

Field	Value
Title	Company
Name	TM-DIT: Carrier 1
Search Term	TM-DIT
Street / House Number	Landsberger Str. 250
Postal Code / City	80687 Munich
Country	DE
Region	09
Language	EN

    3. On the *Create Vendor: Control* screen, leave the values initial.

    4. On the *Create Vendor: Accounting Information Accounting* screen, enter the following data:

Field	Value
Reconciliation Account	160000
Cash Management Group	E1

    5. On the *Create Vendor: Payment Transactions Accounting* screen, enter payment terms `0001`.

6. On the *Create Vendor: Purchasing Data* screen, enter the following data:

Field	Value
Order Currency	EUR
Terms of Payment	0001
Evaluated Receipt Settlement (AutoEvalGRSetmt Del.)	Not selected
Service-based Invoice Verification (Srv.-Based Inv. Ver.)	Selected
Purchasing Group	P01

7. On the *Create Vendor: Partner Functions* screen, enter the following data:

Partner Function	Partner No.
VN	DIT-CR-10
PI	DIT-CR-10

In IDES, partner function key `PI` (invoicing Party) for language key `EN` (English) is replaced by partner function key `IP` (invoice presented by)..

3. Create new master data as follows:

1. On the initial screen, enter the following data:

Field	Value
Vendor No.	DIT-CR-20
Company Code	1000
Purchasing Organization	1000
Account Group	0005

2. On the Create Vendor: Address screen, enter the following data:

Field	Value
Title	Company
Name	TM-DIT: Carrier 2
Search Term	TM-DIT
Street/House Number	Eifelstr. 30
Postal Code/City	51371 Leverkusen

Field	Value
Country	DE
Region	05
Language	EN

3. On the *Create Vendor: Control* screen, leave the values initial.

4. On the *Create Vendor: Accounting Information Accounting* screen, enter the following data:

Field	Value
Reconciliation Account	160000
Cash Management Group	E1

5. On the *Create Vendor: Payment Transactions Accounting* screen, enter payment terms `0001`.

6. On the *Create Vendor: Purchasing Data* screen, enter the following data:

Field	Value
Order Currency	EUR
Terms of Payment	0001
Goods Receipt based Invoice Verification (GR-Based Inv. Verif.)	Selected
Evaluated Receipt Settlement (AutoEvalGRSetmt Del.)	Not selected
Service-based Invoice Verification (Srv.-Based Inv. Ver.)	Selected
Purchasing Group	P01

7. On the *Create Vendor: Partner Functions* screen, enter the following data:

Partner Function	Partner No.
VN	DIT-CR-20
PI	DIT-CR-20

Transferring Vendor Master Data from SAP ERP to SAP TM

In this procedure, you create and activate an integration model, which selects the vendor master data and transfers it to SAP TM, creating or updating vendor locations and business partners.

Vendor locations of location type 1011 (vendor) are created in SAP TM for the vendor master of account group 0001 or 0002. Vendor locations of location type 1020 (transportation service provider) are created for the vendor master of account group 0005. Business partners with role `BBP000` (vendor) are created automatically for the vendor masters of account groups 0001 and 0002. Business partners with role `CRM010` (carrier) are created automatically for the vendor master of account group 0005. The business partner is assigned to the location.

Procedure

1. On the *SAP Easy Access* screen in SAP ERP, choose *Logistics* →*Central Functions* →*Supply Chain Planning Interface* →*Core Interface Advanced Planner and Optimizer* →*Integration Model* →*Create*.

2. Enter the following data:

Field	Value
Model Name	DIT-IM-001
Logical System	Logical system ID of SAP TM target system
APO Application	VENDOR

3. Choose *Enter* to continue.

4. Select *Vendors* (in the *Material Independent Objects* screen area) and choose the pushbutton to the right to specify the restrictions.

5. In the *Vendors* screen area, enter the following data:

Field	Value
Vendor	DIT*
Purchasing Org.	1000
Create Loc./BP	2 (both location and business partner)

6. Choose *Program* →*Execute* to continue. The selected filter object *Material Master Data* and the number of filtered objects are listed on the result screen.

7. Choose *Generate IM* to create the integration model.

8. Exit the transaction.

9. On the *SAP Easy Access* menu, choose *Logistics* →*Central Functions* →*Supply Chain Planning Interface* →*Core Interface Advanced Planner and Optimizer* →*Integration Model* →*Activate*.

10. Enter the following data:

Field	Value
Model Name	DIT-IM-001
Logical System	Logical System ID of SAP TM target system
APO Application	VENDOR

11. Choose *Program* →*Execute* to continue. The created version of the selected integration model is listed.

12. Choose the cross (indicating that the integration model version is inactive) in the first row and column *New Status*. The icon changes to a check mark (indicating that the integration model is active).

13. Choose *Start* to begin activation.

14. If necessary, confirm all dialog boxes to run the data transfer.

Maintaining Geographical Data for Vendor Locations

Procedure

1. In SAP TM, open SAP NetWeaver Business Client and choose *Master Data* →*Transportation Network* →*Locations* →*Define Location* .

2. On the initial screen, enter the following data:

Field	Value
Location	SUDIT-VN-10@<*logical system*>
Location Type	1011 (vendor)

3. Choose *Change*.

4. Choose the *General* tab page.

5. Check the following geographical data and enter any that is missing:

	Sign	Degree	Minutes	Seconds
Longitude	+	11	35	50
Latitude	+	48	11	16

6. Enter the time zone `CET` and precision `1200`.

7. Return to the initial screen and enter the following data for location `SUDIT-VN-20@<logical system>` (type `1011`):

	Sign	Degree	Minutes	Seconds
Longitude	+	11	3	31
Latitude	+	49	25	45

8. Enter the time zone `CET` and precision `1200`.

9. Return to the initial screen and enter the following data for location `SUDIT-VN-21@<logical system>` (type `1011`):

	Sign	Degree	Minutes	Seconds
Longitude	+	10	52	26
Latitude	+	49	54	30

10. Enter the time zone `CET` and precision `1200`.

11. Return to the initial screen and enter the following data for location `SUDIT-VN-30@<logical system>` (type `1011`):

	Sign	Degree	Minutes	Seconds

	Sign	Degree	Minutes	Seconds
Longitude	+	7	25	16
Latitude	+	51	31	14

12. Enter the time zone `CET` and precision `1200`.

13. Return to the initial screen and enter the following data for location `SUDIT-VN-31@<`*`logical system`*`>` (type `1011`):

	Sign	Degree	Minutes	Seconds
Longitude	+	7	1	9
Latitude	+	51	27	48

14. Enter the time zone `CET` and precision `1200`.

15. Return to the initial screen and enter the following data for location `SUDIT-VN-40@<`*`logical system`*`>` (type `1011`):

	Sign	Degree	Minutes	Seconds
Longitude	+	7	24	6
Latitude	+	51	29	23

16. Enter the time zone `CET` and precision `1200`.

17. Return to the initial screen and enter the following data for location `SUDIT-VN-50@<`*`logical system`*`>` (type `1011`):

	Sign	Degree	Minutes	Seconds
Longitude	+	9	29	9
Latitude	+	51	20	1

18. Enter the time zone `CET` and precision `1200`.

Assigning Locations to Incoterm Locations

Procedure

1. In SAP TM, open SAP NetWeaver Business Client and choose *Master Data* →*Transportation Network* →*Locations* →*Assign Location to Incoterm Location.*.

2. Create entries with the following data:

Incoterm Location (Free Text)	Location
Munich (DIT-VN-10)	SUDIT-VN-10@<*logical system*>
Nuremberg (DIT-VN-20)	SUDIT-VN-20@<*logical system*>
Bamberg (DIT-VN-21)	SUDIT-VN-21@<*logical system*>
Dortmund (DIT-VN-30)	SUDIT-VN-30@<*logical system*>
Essen (DIT-VN-31)	SUDIT-VN-31@<*logical system*>
Dortmund (DIT-VN-40)	SUDIT-VN-40@<*logical system*>
Kassel (DIT-VN-50)	SUDIT-VN-50@<*logical system*>

Defining Material Master

Activities

- Defining Material Masters [Page 68]
- Transferring Material Master Data from SAP ERP to SAP TM [Page 83]

Defining Material Masters

Procedure

1. On the *SAP Easy Access* screen in SAP ERP, choose *Logistics* →*Materials Management* →*Material Master* →*Material* →*Create (General)* →*Immediately*.

2. On the initial screen, enter the following data:

Field	Value
Material	DIT-PROD-10-1
Industry Sector	M (Mechanical Engineering)
Material Type	ROH (Raw Material)

3. Choose *Select View(s)* and select the following views:
   - Basic Data 1
   - Purchasing
   - MRP 1
   - MRP 2
   - General Plant Data / Storage 1
   - Accounting 1

4. Select the *Create views selected* checkbox and choose *Org. Levels*.

5. In the *Organizational Levels* dialog box, enter plant `1200` and storage location `DIT1`.

6. Continue to maintain your master data as follows:

   1. Choose the *Basic Data 1* tab page and enter the following information:

Field	Value
Material Description	Material for Domestic Inbound Transp.
Base Unit of Measure	EA (each)
Material Group	001
General Item Category Group	NORM
Gross Weight	5.0
Weight Unit	KG (kilogram)
Net Weight	5.0
Volume	20000

Field	Value
Volume Unit	CCM (cubic centimeter)
Material Group for Packaging	-

2. Choose the *Purchasing* tab page and enter the following data:

Field	Value
Purchasing Group	P01
Automatic Purchase Order Allowed (Autom. PO)	Selected
Purchasing Value Key	3
Source List	Selected

3. Choose the *MRP 1* tab page and enter the following data:

Field	Value
MRP Type	PD
MRP Controller	001
Lot Size	EX

4. Choose the *MRP 2* tab page and enter the following data:

Field	Value
Procurement Type	F
Storage Location for External Procurement (Storage Loc. for EP)	DIT1
Planned Delivery Time	1 (day)
Scheduling Margin Key	000

5. Choose the *Accounting 1* tab page and enter the following data:

Field	Value
Valuation Class	3000
Price Control	S
Standard Price	10.00

7. Save your entries and return to the initial screen.

8. Repeat the above steps using the following data:

On the initial screen, enter the following data:

Field	Value
Material	DIT-PROD-10-2
Industry Sector	M (Mechanical Engineering)
Material Type	ROH (Raw Material)
Copy From Material	DIT-PROD-10-1

On the *Organizational Levels* tab page, enter the following data:

Field	Value	Field	Value
Plant	1200	*Copy From*	1200
Storage Location	DIT1	*Copy From*	DIT1

On the *Basic Data 1* tab page, enter the following data:

Field	Value
Gross Weight	10.0
Weight Unit	KG (kilogram)
Net Weight	10.0
Volume	30000
Volume Unit	CCM (cubic centimeter)

9. Repeat the above steps using the following data:

   On the initial screen, enter the following data:

Field	Value
Material	DIT-PROD-20-1
Industry Sector	M (Mechanical Engineering)
Material Type	ROH (Raw Material)
Copy From Material	DIT-PROD-10-1

   On the *Organizational Levels* tab page, enter the following data:

Field	Value	Field	Value
Plant	1200	*Copy From*	1200
Storage Location	DIT1	*Copy From*	DIT1

   On the *Basic Data 1* tab page, enter the following data:

Field	Value
Gross Weight	7.0
Weight Unit	KG (kilogram)
Net Weight	7.0
Volume	25000
Volume Unit	CCM (cubic centimeter)

On the *Accounting 1* tab page, enter the standard price `20.00`.

10. Repeat the above steps using the following data:

    On the initial screen, enter the following data:

Field	Value
Material	DIT-PROD-20-2
Industry Sector	M (Mechanical Engineering)
Material Type	ROH (Raw Material)
Copy From Material	DIT-PROD-20-1

On the *Organizational Levels* tab page, enter the following data:

Field	Value	Field	Value
Plant	1200	*Copy From*	1200
Storage Location	DIT1	*Copy From*	DIT1

11. Repeat the above steps using the following data:

    On the initial screen, enter the following data:

Field	Value
Material	DIT-PROD-21-1
Industry Sector	M (Mechanical Engineering)
Material Type	ROH (Raw Material)
Copy From Material	DIT-PROD-20-1

On the *Organizational Levels* tab page, enter the following data:

Field	Value	Field	Value
Plant	1200	*Copy From*	1200
Storage Location	DIT1	*Copy From*	DIT1

On the *Basic Data 1* tab page, enter the following data:

Field	Value
Gross Weight	6.0
Weight Unit	KG (kilogram)
Net Weight	6.0
Volume	30000
Volume Unit	CCM (cubic centimeter)

On the *Accounting 1* tab page, enter the standard price `21.00`.

12. Repeat the above steps using the following data:

    On the initial screen, enter the following data:

Field	Value
Material	DIT-PROD-21-2
Industry Sector	M (Mechanical Engineering)
Material Type	ROH (Raw Material)
Copy From Material	DIT-PROD-21-1

On the *Organizational Levels* tab page, enter the following data:

Field	Value	Field	Value
Plant	1200	*Copy From*	1200
Storage Location	DIT1	*Copy From*	DIT1

On the *Basic Data 1* tab page, enter the following data:

Field	Value
Gross Weight	7.0
Weight Unit	KG (kilogram)
Net Weight	7.0
Volume	30000
Volume Unit	CCM (cubic centimeter)

13. Repeat the above steps using the following data:

    On the initial screen, enter the following data:

Field	Value

Field	Value
Material	DIT-PROD-30-1
Industry Sector	M (Mechanical Engineering)
Material Type	ROH (Raw Material)
Copy From Material	DIT-PROD-21-1

On the *Organizational Levels* tab page, enter the following data:

Field	Value	Field	Value
Plant	1400	*Copy From*	1200
Storage Location	DIT1	*Copy From*	DIT1

On the *Basic Data 1* tab page, enter the following data:

Field	Value
Material Group	001
Gross Weight	2.0
Weight Unit	KG (kilogram)
Net Weight	2.0
Volume	10000
Volume Unit	CCM (cubic centimeter)

On the *Accounting 1* tab page, enter the standard price `30.00`.

14. Repeat the above steps with the following data:

    On the initial screen, enter the following data:

Field	Value
Material	DIT-PROD-30-2
Industry Sector	M (Mechanical Engineering)
Material Type	ROH (Raw Material)
Copy From Material	DIT-PROD-30-1

On the *Organizational Levels* tab page, enter the following data:

Field	Value	Field	Value
Plant	1400	*Copy From*	1400
Storage Location	DIT1	*Copy From*	DIT1

On the *Basic Data 1* tab page, enter the following data:

Field	Value
Material Group	001
Gross Weight	3.0
Weight Unit	KG (kilogram)
Net Weight	3.0
Volume	10000
Volume Unit	CCM (cubic centimeter)

15. Repeat the above steps with the following data:

    On the initial screen, enter the following data:

Field	Value
Material	DIT-PROD-31-1
Industry Sector	M (Mechanical Engineering)
Material Type	ROH (Raw Material)
Copy From Material	DIT-PROD-30-1

    On the *Organizational Levels* tab page, enter the following data:

Field	Value	Field	Value
Plant	1400	*Copy From*	1400
Storage Location	DIT1	*Copy From*	DIT1

    On the *Basic Data 1* tab page, enter the following data:

Field	Value
Gross Weight	2.0
Weight Unit	KG (kilogram)
Net Weight	2.0
Volume	20000
Volume Unit	CCM (cubic centimeter)

    On the *Accounting 1* tab page, enter the standard price `31.00`.

16. Repeat the above steps using the following data:

    On the initial screen, enter the following data:

Field	Value
Material	DIT-PROD-31-2
Industry Sector	M (Mechanical Engineering)
Material Type	ROH (Raw Material)
Copy From Material	DIT-PROD-31-1

On the *Organizational Levels* tab page, enter the following data:

Field	Value	Field	Value
Plant	1400	*Copy From*	1400
Storage Location	DIT1	*Copy From*	DIT1

On the *Basic Data 1* tab page, enter the following data:

Field	Value
Gross Weight	3.0
Weight Unit	KG (kilogram)
Net Weight	3.0
Volume	20000
Volume Unit	CCM (cubic centimeter)

17. Repeat the above steps with the following data:

    On the initial screen, enter the following data:

Field	Value
Material	DIT-PROD-40-1
Industry Sector	M (Mechanical Engineering)
Material Type	ROH (Raw Material)
Copy From Material	DIT-PROD-31-1

On the *Organizational Levels* tab page, enter the following data:

Field	Value	Field	Value
Plant	1400	*Copy From*	1400
Storage Location	DIT1	*Copy From*	DIT1

On the *Basic Data 1* tab page, enter the following data:

Field	Value

Field	Value
Gross Weight	11.0
Weight Unit	KG (kilogram)
Net Weight	11.0
Volume	25000
Volume Unit	CCM (cubic centimeter)

On the *Accounting 1* tab page, enter the standard price `40.00`.

18. Repeat the above steps with the following data:

    On the initial screen, enter the following data:

Field	Value
Material	DIT-PROD-40-2
Industry Sector	M (Mechanical Engineering)
Material Type	ROH (Raw Material)
Copy From Material	DIT-PROD-40-1

On the *Organizational Levels* tab page, enter the following data:

Field	Value	Field	Value
Plant	1400	*Copy From*	1400
Storage Location	DIT1	*Copy From*	DIT1

On the *Basic Data 1* tab page, enter the following data:

Field	Value
Gross Weight	12.0
Weight Unit	KG (kilogram)
Net Weight	12.0
Volume	25000
Volume Unit	CCM (cubic centimeter)

19. Repeat the above steps with the following data:

    On the initial screen, enter the following data:

Field	Value
Material	DIT-PROD-50-1

Field	Value
Industry Sector	M (Mechanical Engineering)
Material Type	ROH (Raw Material)
Copy From Material	DIT-PROD-40-1

On the *Organizational Levels* tab page, enter the following data:

Field	Value	Field	Value
Plant	1400	*Copy From*	1400
Storage Location	DIT1	*Copy From*	DIT1

On the *Basic Data 1* tab page, enter the following data:

Field	Value
Gross Weight	1.0
Weight Unit	KG (kilogram)
Net Weight	1.0
Volume	20000
Volume Unit	CCM (cubic centimeter)

On the *Accounting 1* tab page, enter the standard price `50.00`.

20. Repeat the above steps with the following data:

    On the initial screen, enter the following data:

Field	Value
Material	DIT-PROD-50-2
Industry Sector	M (Mechanical Engineering)
Material Type	ROH (Raw Material)
Copy From Material	DIT-PROD-50-1

On the *Organizational Levels* tab page, enter the following data:

Field	Value	Field	Value
Plant	1400	*Copy From*	1400
Storage Location	DIT1	*Copy From*	DIT1

21. Repeat the above steps with the following data:

    On the initial screen, enter the following data:

Field	Value
Material	DIT-PROD-30-1
Industry Sector	M (Mechanical Engineering)
Material Type	ROH (Raw Material)
Copy From Material	DIT-PROD-21-1

On the *Organizational Levels* tab page, enter the following data:

Field	Value	Field	Value
Plant	1200	*Copy From*	1200
Storage Location	DIT1	*Copy From*	DIT1

On the *Basic Data 1* tab page, enter the following data:

Field	Value
Material Group	001
Gross Weight	2.0
Weight Unit	KG (kilogram)
Net Weight	2.0
Volume	10000
Volume Unit	CCM (cubic centimeter)

On the *Accounting 1* tab page, enter the standard price `30.00`.

22. Repeat the above steps with the following data:

    On the initial screen, enter the following data:

Field	Value
Material	DIT-PROD-30-2
Industry Sector	M (Mechanical Engineering)
Material Type	ROH (Raw Material)
Copy From Material	DIT-PROD-30-1

On the *Organizational Levels* tab page, enter the following data:

Field	Value	Field	Value
Plant	1200	*Copy From*	1400
Storage Location	DIT1	*Copy From*	DIT1

On the *Basic Data 1* tab page, enter the following data:

Field	Value
Material Group	001
Gross Weight	3.0
Weight Unit	KG (kilogram)
Net Weight	3.0
Volume	10000
Volume Unit	CCM (cubic centimeter)

23. Repeat the above steps with the following data:

    On the initial screen, enter the following data:

Field	Value
Material	DIT-PROD-31-1
Industry Sector	M (Mechanical Engineering)
Material Type	ROH (Raw Material)
Copy From Material	DIT-PROD-30-1

    On the *Organizational Levels* tab page, enter the following data:

Field	Value	Field	Value
Plant	1200	*Copy From*	1400
Storage Location	DIT1	*Copy From*	DIT1

    On the *Basic Data 1* tab page, enter the following data:

Field	Value
Gross Weight	2.0
Weight Unit	KG (kilogram)
Net Weight	2.0
Volume	20000
Volume Unit	CCM (cubic centimeter)

    On the *Accounting 1* tab page, enter the standard price `31.00`.

24. Repeat the above steps with the following data:

    On the initial screen, enter the following data:

Field	Value
Material	DIT-PROD-31-2
Industry Sector	M (Mechanical Engineering)
Material Type	ROH (Raw Material)
Copy From Material	DIT-PROD-31-1

On the *Organizational Levels* tab page, enter the following data:

Field	Value	Field	Value
Plant	1200	*Copy From*	1400
Storage Location	DIT1	*Copy From*	DIT1

On the *Basic Data 1* tab page, enter the following data:

Field	Value
Gross Weight	3.0
Weight Unit	KG (kilogram)
Net Weight	3.0
Volume	20000
Volume Unit	CCM (cubic centimeter)

25. Repeat the above steps with the following data:

    On the initial screen, enter the following data:

Field	Value
Material	DIT-PROD-40-1
Industry Sector	M (Mechanical Engineering)
Material Type	ROH (Raw Material)
Copy From Material	DIT-PROD-31-1

On the *Organizational Levels* tab page, enter the following data:

Field	Value	Field	Value
Plant	1200	*Copy From*	1400
Storage Location	DIT1	*Copy From*	DIT1

On the *Basic Data 1* tab page, enter the following data:

Field	Value

Field	Value
Gross Weight	11.0
Weight Unit	KG (kilogram)
Net Weight	11.0
Volume	25000
Volume Unit	CCM (cubic centimeter)

On the *Accounting 1* tab page, enter the standard price `40.00`.

26. Repeat the above steps with the following data:

    On the initial screen, enter the following data:

Field	Value
Material	DIT-PROD-40-2
Industry Sector	M (Mechanical Engineering)
Material Type	ROH (Raw Material)
Copy From Material	DIT-PROD-40-1

On the *Organizational Levels* tab page, enter the following data:

Field	Value	Field	Value
Plant	1200	*Copy From*	1400
Storage Location	DIT1	*Copy From*	DIT1

On the *Basic Data 1* tab page, enter the following data:

Field	Value
Gross Weight	12.0
Weight Unit	KG (kilogram)
Net Weight	12.0
Volume	25000
Volume Unit	CCM (cubic centimeter)

27. Repeat the above steps with the following data:

    On the initial screen, enter the following data:

Field	Value
Material	DIT-PROD-50-1

Field	Value
Industry Sector	M (Mechanical Engineering)
Material Type	ROH (Raw Material)
Copy From Material	DIT-PROD-40-1

On the *Organizational Levels* tab page, enter the following data:

Field	Value	Field	Value
Plant	1200	*Copy From*	1400
Storage Location	DIT1	*Copy From*	DIT1

On the *Basic Data 1* tab page, enter the following data:

Field	Value
Gross Weight	1.0
Weight Unit	KG (kilogram)
Net Weight	1.0
Volume	20000
Volume Unit	CCM (cubic centimeter)

On the *Accounting 1* tab page, enter the standard price `50.00`.

28. Repeat the above steps with the following data:

    On the initial screen, enter the following data:

Field	Value
Material	DIT-PROD-50-2
Industry Sector	M (Mechanical Engineering)
Material Type	ROH (Raw Material)
Copy From Material	DIT-PROD-50-1

On the *Organizational Levels* tab page, enter the following data:

Field	Value	Field	Value
Plant	1200	*Copy From*	1400
Storage Location	DIT1	*Copy From*	DIT1

Transferring Material Master Data from SAP ERP to SAP TM

In this procedure, you create and activate an integration model, which selects the material master data and transfers it to SAP TM, thereby creating or updating product master data.

Procedure

1. On the *SAP Easy Access* screen in SAP ERP, choose *Logistics* →*Central Functions* →*Supply Chain Planning Interface* →*Core Interface Advanced Planner and Optimizer* →*Integration Model* →*Create* .

2. Enter the following data:

Field	Value
Model Name	DIT-IM-001
Logical System	Logical system ID of SAP TM target system
APO Application	MATERIAL

3. Select *Materials* (in the *Material Dependent Objects* screen area).

4. In the *General Selection Options for Materials* screen area, enter the following data:

Field	Value
Material	DIT-PROD*
Plant (multiple values)	1200 & 1400

5. Choose *Program* →*Execute* to continue. The selected filter objects (material master data and plants) with the respective number of filtered objects are listed on the result screen.

6. Choose *Generate IM* to create the integration model.

7. Exit the transaction.

8. On the *SAP Easy Access* screen, choose *Logistics* →*Central Functions* →*Supply Chain Planning Interface* →*Core Interface Advanced Planner and Optimizer* →*Integration Model* →*Activate* .

9. Enter the following data:

Field	Value
Model Name	DIT-IM-001
Logical System	Logical system ID of SAP TM target system
APO Application	MATERIAL

10. Choose *Program* →*Execute* to continue. The created version of the selected integration model is listed.

11. Choose the cross (indicating that the integration model version is inactive) in the first row and column *New Status*. The icon changes to a check mark (indicating that the integration model is active).

12. Choose *Start* to begin activation.

13. If necessary, confirm all dialog boxes to run the data transfer.

Maintaining Purchasing Contracts and Source Lists

Activities

- Maintaining Purchasing Contracts [Page 86]
- Maintaining Source Lists [Page 94]

Maintaining Purchasing Contracts

In this procedure, you create purchasing contracts, which are used for reference when creating purchase orders.

Procedure

1. On the *SAP Easy Access* screen in SAP ERP, choose *Logistics* →*Materials Management* →*Purchasing* →*Outline Agreement* →*Contract* →*Create*.

2. On the initial screen, enter the following data:

Field	Value
Vendor	DIT-VN-10
Agreement Type	MK
Agreement Date	Current date
Purch. Organization	1000
Purchasing Group	P01

3. Choose *Enter* to continue.

4. On the *Header Data* screen, enter the following data:

Field	Value
Validity Start	Current date
Validity End	December 31, 9999
Payment Terms	0001
Incoterms	Blank
Invoicing Party	DIT-VN-10

5. Choose *Enter* to continue.

6. On the *Item Overview* screen, enter the following data:

Item	Item Category	Material	Target Quantity	Net Price	Plant	Storage Location
10	Blank	DIT-PROD-10-1	100000	10.00	1200	DIT1
20	Blank	DIT-PROD-10-2	100000	10.00	1200	DIT1

7. Choose *Enter* to continue.

8. Select all items.
9. Choose *Item* →*Details* to switch to the item details screen for the first item.
10. Enter the following data for each item. Choose *Enter* to switch to the next item.

Item	Tax Code	Vendor Material
10	V1	P10-1
20	V1	P10-2

11. Save your entries and return to the initial screen.
12. On the initial screen, enter the following data:

Field	Value
Vendor	DIT-VN-20
Agreement Type	MK
Agreement Date	current date
Purch. Organization	1000
Purchasing Group	P01

13. Choose *Enter* to continue.
14. On the *Header Data* screen, enter the following data:

Field	Value
Validity Start	Current date
Validity End	December 31, 9999
Payment Terms	0001
Incoterms	Blank
Invoicing Party	DIT-VN-20

15. Choose *Enter* to continue.
16. On the *Item Overview* screen, enter the following data:

Item	Item Category	Material	Target Quantity	Net Price	Plant	Storage Location
10	Blank	DIT-PROD-20-1	100000	20.00	1200	DIT1
20	Blank	DIT-PROD-20-	100000	20.00	1200	DIT1

Item	Item Category	Material	Target Quantity	Net Price	Plant	Storage Location
		2				
30	Blank	DIT-PROD-21-1	100000	21.00	1200	DIT1
40	Blank	DIT-PROD-21-2	100000	21.00	1200	DIT1

17. Choose *Enter* to continue.

18. Select all items.

19. Choose *Item →Details* to switch to the item details screen for the first item.

20. Enter the following data for each item. Choose *Enter* to switch to the next item.

Item	Tax Code	Vendor Material
10	V1	P20-1
20	V1	P20-2
30	V1	P21-1
40	V1	P21-2

21. On the *Item Overview* screen, select all items.

22. Choose *Item →Additional Functions →Additional Data* to switch to the additional data screen for the first item.

23. Enter the following data for each item. Choose *Enter* to switch to the next item.

Item	Vendor Subrange	Incoterms
10	Blank	EXW Nuremberg (DIT-VN-20)
20	Blank	EXW Nuremberg (DIT-VN-20)
30	P01	EXW Bamberg (DIT-VN-21)
40	P01	EXW Bamberg (DIT-VN-21)

24. Save your entries and return to the initial screen.

25. On the initial screen, enter the following data:

Field	Value
Vendor	DIT-VN-30
Agreement Type	MK
Agreement Date	current date
Purch. Organization	1000
Purchasing Group	P01

26. Choose *Enter* to continue.

27. On the *Header Data* screen, enter the following data:

Field	Value
Validity Start	Current date
Validity End	December 31, 9999
Payment Terms	0001
Incoterms	Blank
Invoicing Party	DIT-VN-30

28. Choose *Enter* to continue.

29. On the *Item Overview* screen, enter the following data:

Item	Item Category	Material	Target Quantity	Net Price	Plant	Storage Location
10	Blank	DIT-PROD-30-1	100000	30.00	1400	DIT1
20	Blank	DIT-PROD-30-2	100000	30.00	1400	DIT1
30	Blank	DIT-PROD-31-1	100000	31.00	1400	DIT1
40	Blank	DIT-PROD-31-2	100000	31.00	1400	DIT1
50	Blank	DIT-PROD-30-1	100000	30.00	1200	DIT1

Item	Item Category	Material	Target Quantity	Net Price	Plant	Storage Location
60	Blank	DIT-PROD-30-2	100000	30.00	1200	DIT1
70	Blank	DIT-PROD-31-1	100000	31.00	1200	DIT1
80	Blank	DIT-PROD-31-2	100000	31.00	1200	DIT1

30. Choose *Enter* to continue.
31. Select all items.
32. Choose *Item* →*Details* to switch to the item details screen for the first item.
33. Enter the following data for each item. Choose *Enter* to switch to the next item.

Item	Tax Code	Vendor Material
10	V1	P30-1
20	V1	P30-2
30	V1	P31-1
40	V1	P31-2

34. Return to the *Item Overview* screen and select all of the items.
35. Choose *Item* →*Additional Functions* →*Additional Data* to switch to the additional data screen for the first item.
36. Enter the following data for each item. Choose *Enter* to switch to the next item.

Item	Vendor Subrange	Incoterms
10	Blank	EXW Dortmund (DIT-VN-30)
20	Blank	EXW Dortmund (DIT-VN-30)
30	P01	EXW Essen (DIT-VN-31)
40	P01	EXW Essen (DIT-VN-31)

37. Save your entries and return to the initial screen.

38. Enter the following data:

Field	Value
Vendor	DIT-VN-40
Agreement Type	MK
Agreement Date	Current date
Purch. Organization	1000
Purchasing Group	P01

39. Choose *Enter* to continue.

40. On the *Header Data* screen, enter the following data:

Field	Value
Validity Start	Current date
Validity End	December 31, 9999
Payment Terms	0001
Incoterms	Blank
Invoicing Party	DIT-VN-40

41. Choose *Enter* to continue.

42. On the *Item Overview* screen, enter the following data:

Item	Item Category	Material	Target Quantity	Net Price	Plant	Storage Location
10	Blank	DIT-PROD-40-1	100000	40.00	1400	DIT1
20	Blank	DIT-PROD-40-2	100000	40.00	1400	DIT1
40	Blank	DIT-PROD-40-1	100000	40.00	1200	DIT1
50	Blank	DIT-PROD-40-2	100000	40.00	1200	DIT1

43. Choose *Enter* to continue.

44. Select all items.

45. Choose *Item* →*Details* to switch to the item details screen for the first item.

46. Enter the following data. Choose *Enter* to switch to the next item.

Item	Tax Code	Vendor Material
10	V1	P40-1
20	V1	P40-2

47. Save your entries and return to the initial screen.

48. Enter the following data:

Field	Value
Vendor	DIT-VN-50
Agreement Type	MK
Agreement Date	Current date
Purch. Organization	1000
Purchasing Group	P01

49. Choose *Enter* to continue.

50. On the *Header Data* screen, enter the following data:

Field	Value
Validity Start	Current date
Validity End	December 31, 9999
Payment Terms	0001
Incoterms	Blank
Invoicing Party	DIT-VN-50

51. Choose *Enter* to continue.

52. On the *Item Overview* screen, enter the following data:

Item	Item Category	Material	Target Quantity	Net Price	Plant	Storage Location
10	Blank	DIT-PROD-50-1	100000	50.00	1400	DIT1
20	Blank	DIT-PROD-50-2	100000	50.00	1400	DIT1

Item	Item Category	Material	Target Quantity	Net Price	Plant	Storage Location
30	Blank	DIT-PROD-50-1	100000	50.00	1200	DIT1
40	Blank	DIT-PROD-50-2	100000	50.00	1200	DIT1

53. Choose *Enter* to continue.

54. Select all items.

55. Choose  *Item* →*Details*  to switch to the item details screen for the first item.

56. Enter the following data. Choose *Enter* to switch to the next item.

Item	Tax Code	Vendor Material
10	V1	P50-1
20	V1	P50-2

Maintaining Source List

In this procedure, you maintain the source list, which includes all valid sources allowed for purchasing.

Procedure

1. On the *SAP Easy Access* menu for SAP ERP, choose *Logistics* →*Materials Management* →*Purchasing* →*Master Data* →*Source List* →*Follow-On Functions* →*Generate* .

2. Enter the following data:

Field	Value
Material	DIT-PROD*
Plant (from – to)	1200 & 1400
Outline Agreements Only	Selected
Valid From	Current date
Valid To	December 31, 9999
MRP Indicator	1
Become Invalid	Selected
Test Run	Not selected

3. Choose *Program* →*Execute* to start the selection.

4. Select all listed entries to be added (and to become invalid if available).

Configuring Managing Transportation Requirements

Activities

- Configuring Transfer of Purchase Orders and Inbound Deliveries [Page 96]
- Configuring Transportation Requirements Types and Type Determina [Page 101]
- Configuring Freight Unit Building for Transportation Requirement [Page 108]

Configuring Transfer of Purchase Orders and Inbound Deliveries

Activities

Defining Control Keys for Document Transfer

Procedure

1. In Customizing for SAP ERP, choose *Integration with Other SAP Components →Transportation Management →Order Integration →Define Control Keys for Document Transfer*.

2. Check the following entries and create any that are missing:

Field	Value
Control Key	0006
PO to TMS	Selected
Inbound Delivery	Selected
Control Key Description	Transfer PO, Inb. Delivery, Sched. inactive

Activating Transfer of Purchase Orders

Procedure

1. In Customizing for SAP ERP, choose *Integration with Other SAP Components →Transportation Management →Order Integration →Activate Transfer of Purchase Orders*.

2. Create the following entries:

Field	Value
Purchasing Organization	1000
Purchasing Group	P01
Order Type (Purchasing)	DIT1
Control Key	0006
TM No.	Blank
The *TM No.* field enables multiple SAP TM systems to be integrated from one SAP ERP system using SAP NetWeaver PI. If only one SAP TM system is integrated, you can leave the *TM No.* field blank..	

Configuring Message Output Determination for Transferring Inbound Deliveries to SAP TM

Procedure

1. In Customizing for SAP ERP, choose *Materials Management* →*Purchasing* →*Messages* →*Output Control* →*Message Determination Schemas* →*Define Message Schemas for Inbound Delivery* .
2. Choose the activity *Maintain Message Schema for Inbound Delivery*.
3. On the *Procedures* view, select the *E10001 (Inbound Delivery)* row.
4. Choose subordinate view *Control Data* from the dialog structure.
5. Create a new entry with the following data:

Field	Value
Step	3
Counter	1
Condition Type	TRD0
Requirement	441
If step 3, counter 1 is already in use, choose another unique combination..	

6. Save your entries.

Maintaining Message Output for Transferring Inbound Deliveries to SAP TM

Procedure

1. On the SAP Easy Access menu of your SAP ERP system, choose *Logistics* →*Materials Management* →*Purchasing* →*Master Data* →*Messages* →*Inbound Delivery* →*Create* or enter transaction `MN24` in the command field.
2. Enter the output type `TRD0`.
3. Press `ENTER` to continue.
4. Select *Delivery Type* and press `ENTER`
5. Create a new entry with the following data:

Field	Value
Delivery Type	EL
Function	Blank
Partner	Blank
Medium	8 (Special Function)
Date/Time	4 (Send immediately (when saving the application))
Language	Blank

6. Save your entries.

Configuring Transportation Requirements Types and Type Determination

Activities

Defining Order-Based Transportation Requirement Types

Procedure

1. In Customizing for *Transportation Management*, choose *Integration* →*ERP Logistics Integration* →*Order-Based Transportation Requirement* →*Define Order-Based Transportation Requirement Types*.

2. Enter a new OTR type with the following data:

Field	Value
OTR Type	DIT1
Description	DIT: Order-based Trsp. Requirement
Is Default Type	Deselected
Number Range Interval	01
BW Relevance	Selected
Output Profile	/SCMTMS/TRQ_FWO_PRINT
Propagate Changes	B (Synchronous Propagation of Changes, Fallback to Asynchronous)
Plan on Requested or Confirmed *Quantities*	01 (Plan on Requested Quantities)

If you intend to use SAP Event Management and, therefore, select the *EM Integration Active* checkbox, you must enter the logical name of the Event Management system in the *Event Manager* field. The logical name of the system is specified in the *Integration of SAP TM and SAP Event Management* configuration guide.

Defining Delivery-Based Transportation Requirement Types

In this procedure, you specify types of delivery-based transportation requirements (DTR). You use these types to define DTR parameters that determine how the system processes the business document.

Procedure

1. In Customizing for *Transportation Management*, choose *Integration* →*ERP Logistics Integration* →*Delivery-Based Transportation Requirement* →*Define Delivery-Based Transportation Requirement Types.*

2. Create a new entry with the following data:

Field	Value
DTR Type	DIT2
Description	DIT: Delivery-based Trsp. Requirement
Default Type	Deselected
Number Range Interval	06
BW Relevance	Selected
Propagate Changes	B (Synchronous Propagation of Changes, Fallback to Asynchronous)
Plan on Requested or Confirmed Quantities	01 (Plan on Requested Quantities)

Defining Conditions for OTR Type Determination

Only one condition is permitted for determining order-based transportation requirements. The condition definition is described in the *Basic Settings for SAP TM* document. The following description is about the scenario-specific decision table record only.

Procedure

1. Open SAP NetWeaver Business Client and choose *Application Administration* →*General Settings* →*Conditions* →*Edit Condition*.
2. On the *Edit Condition Definition* screen, enter the condition `ZOTR_TYPE`.
3. Choose *Continue*.
4. Check that the following entries exist on the *Data Access Definition* tab page and create any that are missing:

Field	Value
Column Position in BRFplus Decision Table	10
Data Access Definition for Conditions	/SCMTMS/TRQ_ORD_CAT
Data Object Description	TR: Original Order Category
Name of BO Used in Condition	/SCMTMS/TRQ
Name of BO Node Used in Condition	ROOT
Name of the Field of the BO Node	BASE_BTD_TCO
Column Position in BRFplus Decision Table	20
Data Access Definition for Conditions	/SCMTMS/TRQ_ORD_TYPE
Data Object Description	TR: ERP Order Type
Name of BO Used in Condition	/SCMTMS/TRQ
Name of BO Node Used in Condition	ROOT
Name of the Field of the BO Node	BASE_BTD_PROCTCO

5. Choose the *Decision Table* tab page and choose *Edit*.
6. In the *Table Contents* area, choose *Insert New Row* to create a new condition record.
7. Maintain each parameter value of the new condition record as given below and choose *OK* to continue.
   - In the *TR: Original Order Category* column, choose the icon in your new row and enter the following data:

Field	Value

Field	Value
Selection Option	Is equal to
Parameter Value	001 (= Purchase Order)

- In the *TR: ERP Order Type* column for the same row, choose the icon and enter the following data:

Field	Value
Selection Option	Is equal to
Parameter Value	DIT1

8. In the *OTR Type* column for the same row, choose the icon and set parameter `OTR` type to `DIT1`.

Defining Conditions for DTR Type Determination

Only one condition is permitted for determining delivery-based transportation requirements. The condition definition is described in the *Basic Settings for SAP TM* document. The following description is about the scenario-specific decision table record only.

Procedure

1. In SAP NetWeaver Business Client, choose *Application Administration* →*General Settings* →*Conditions* →*Edit Condition*.
2. On the *Edit Condition Definition* screen, enter `ZDTR_TYPE`.
3. Choose *Continue*.
4. Check the *Data Access Definition* tab page for the following entries. If the entries do not exist, create them and save the changed condition.

Field	Value
Column Position in BRFplus Decision Table	30
Data Access Definition for Conditions	/SCMTMS/TRQ_DLV_TYPE
Data Object Description	TR: ERP Delivery Type
Name of BO Used in Condition	/SCMTMS/TRQ
Name of BO Node Used in Condition	ROOT
Name of the Field of the BO Node	BASE_BTD_PROCTCO
Column Position in BRFplus Decision Table	50
Data Access Definition for Conditions	/SCMTMS/TRQ_SRC_LOC
Data Object Description	*TR: Source Location ID*
Name of BO Used in Condition	/SCMTMS/TRQ
Name of BO Node Used in Condition	ROOT
Name of the Field of the BO Node	SRC_LOC_ID

5. Choose the *Decision Table* tab page and choose *Edit*.
6. In the *Table Contents* area, choose *Insert New Row* to create a new condition record.
7. Maintain the parameters given below and choose *OK* to continue.
   - In the *TR: ERP Delivery Type* column, choose the icon in your new row and enter the following data:

Field	Value
Selection Option	is equal to

Field	Value
Parameter Value	EL

- In the *TR: Source Location* column, choose the icon in your new row and enter the following data:

Field	Value
Selection Option	Matches pattern
Parameter Value	SUDIT*

- In the *DTR Type* column, choose the icon in your new row and set the `DTR` type parameter to `DIT2`.

Configuring Freight Unit Building for Transportation Requirements

Activities

- Defining Freight Unit Types [Page 109]
- Defining Freight Unit Building Rules [Page 111]
- Defining Conditions for Freight Unit Building Rule Determination [Page 114]
- Defining OTR Types for Automatic Freight Unit Creation [Page 116]
- Defining DTR Types for Automatic Freight Unit Creation [Page 117]

Defining Freight Unit Types

Procedure

1. In Customizing for *Transportation Management*, choose *Planning* →*Freight Unit* →*Define Freight Unit Types*.

2. Create a freight unit type with the following header data:

Field	Value
Freight Unit Type	DIT3
Description	DIT: Freight Unit Type
Is Default Type	Deselected

3. In the *Basic Settings* screen area, select the *Freight Unit Can Be Deleted* checkbox.

4. In the *Number Range Settings* screen area, enter the following data:

Field	Value
Time for Drawing	S (Draw Number When Saving Document)
Number Range Interval	FU

5. In the *Change Controller Settings* screen area, enter default change strategy `DEF_CHACO`.

6. In the *Additional Settings* screen area, enter the following data:

Field	Value
Dangerous Goods Profile	Blank
Rule for PU/DLV Window Determination	Blank (Pick-Up and Delivery as Defined in OTR and DTR)
BW Relevance	Selected

7. In the *Freight Order Determination* screen area, enter freight order type `DIT4`.

8. In the *Organizational Unit Determination* screen area, enter the following data:

Field	Value
Execution Organization	Organization ID for Transportation Planning and Execution Organization as defined in Defining Organizational Units for Transportation Planning and Execution Organization and Group [Page 30].
Execution Group	Organization ID for Transportation Planning and Execution Group as defined in Defining Organizational Units for Transportation

Field	Value
	Planning and Execution Organization and Group [Page 30].

When you enter your organizational data, enter the organizational unit ID that the system created automatically and **not** `DIT-PEORG-1`. For more information, see Defining Organizational Units for Transportation Planning and Execution Organization Group [Page 30].

Defining Freight Unit Building Rules

Procedure

1. In SAP NetWeaver Business Client for SAP TM, choose *Application Administration →Planning →General Settings →Freight Unit Building Rule →Create Freight Unit Building Rule*.

2. Choose the *General Data* tab page and enter the following data:

Field	Value
Freight Unit Building Rule	DIT-FUBR-01
Description	DIT: Freight Unit Building R1
Document Type	DIT3
Freight Unit Building Strategy	Consolidate Per Item
Incompatibility Settings	Blank
Critical Quantity	Pieces
Item Split Allowed	Selected

3. Choose the *Planning Quantities* tab page and enter the following data:

Field	Value
Planning Quantity	Pieces
Unit of Measure of Split Quantity	EA
Split Quantity	100
Rounding Quantity	1

Field	Value
Planning Quantity	Gross Weight
Unit of Measure of Split Quantity	TO
Split Quantity	1.0
Rounding Quantity	0.001

Field	Value
Planning Quantity	Gross Volume
Unit of Measure of Split Quantity	M3
Split Quantity	5.0

Field	Value
Rounding Quantity	0.001

5. Choose the *Advanced Settings* tab page and enter the process controller strategy settings `FUB_AUTO`.

6. Repeat the above steps with the following data:

   On the *General Data* tab page, enter the following data:

Field	Value
Freight Unit Building Rule	DIT-FUBR-02
Description	DIT: Freight Unit Building R2
Freight Unit Type	DIT3
Freight Unit Building Strategy	Consolidate Per Item
Incompatibility Settings	Blank
Critical Quantity	Pieces
Item Split Allowed	Selected

   On the *Planning Quantities* tab page, enter the following data:

Field	Value
Planning Quantity	Pieces
Unit of Measure of Split Quantity	EA
Split Quantity	200
Rounding Quantity	1

Field	Value
Planning Quantity	Gross Weight
Unit of Measure of Split Quantity	TO
Split Quantity	5.0
Rounding Quantity	0.001

Field	Value
Planning Quantity	Gross Volume
Unit of Measure of Split Quantity	M3
Split Quantity	5.0

Field	Value
Rounding Quantity	0.001

7. Choose the *Advanced Settings* tab page and enter the process controller strategy settings `FUB_AUTO`.

Defining Conditions for Freight Unit Building Rule Determination

Procedure

1. In SAP NetWeaver Business Client for SAP TM, choose *Application Administration* →*General Settings* →*Conditions* →*Create Condition* .

2. On the initial screen, enter condition type `/SCMTMS/FUBR`.

3. Enter the following data:

Field	Value
Condition	DIT-FUBR-DET-COND-01
Description	DIT: FUB Rule Determination Condition
Origin of Condition	Condition Based on BRFplus Decision Table

4. Choose *Continue*.

5. On the *Data Access Definition* tab page, choose *Create* and enter the following data:

Field	Value
Column Position in BRFplus Decision Table	10
Data Access Definition for Condition	/SCMTMS/TRQ_ITEM_PRD
Data Object Description	TR Item: Product
Name of BO Used in Condition	/SCMTMS/TRQ
Name of BO Node Used in Condition	ITEM
Name of the Field of the BO Node	PRODUCT_ID

6. Choose the *Decision Table* tab page and choose *Edit*.

7. In the *Table Contents* area, choose *Insert New Row* to create a new condition record.

8. Enter the parameter of the new condition record as given below.

9. Choose *OK* to continue.

    - In the *TR: Item Product* column, choose the icon in your new row and enter the following data:

Field	Value
Selection Option	Matches pattern
Parameter Value	DIT-PROD*

Field	Value
Parameter: Freight Unit Building Rule	DIT-FUBR-01

10. Repeat the above steps for the next condition record.

    - In the *TR: ERP Delivery Type* column, choose the icon in your new row and enter the following data:

Field	Value
Selection Option	Matches pattern
Parameter Value	DIT-PROD-40*
Parameter: Freight Unit Building Rule	DIT-FUBR-02

11. Select the second entry and choose *Move Up* to move it above the first entry.

Defining OTR Types for Automatic Freight Unit Creation

Procedure

1. In Customizing for *Transportation Management*, choose *Integration* →*ERP Logistics Integration* →*Order-Based Transportation Requirement* →*Define Order-Based Transportation Requirement Types*.

2. Select OTR type `DIT1`.

3. Choose *Details* and enter the following data:

Field	Value
Automatic Freight Unit Building	Selected
Freight Unit Building Rule	Blank
FU Building Rule Condition	DIT-FUBR-DET-COND-01

If you intend to use Event Management and, therefore, select the *EM Integration Active* checkbox, you must enter the logical name of the Event Management system in the *Event Manager* field. The logical name of the system is specified in the *Integration of SAP TM and SAP Event Management* configuration guide.

Defining DTR Types for Automatic Freight Unit Creation

Procedure

1. In Customizing for *Transportation Management*, choose *Integration* →*ERP Logistics Integration* →*Delivery-Based Transportation Requirement* →*Define Delivery-Based Transportation Requirement Types*.

2. Select DTR type `DIT2`.

3. Choose *Details* and enter the following data:

Field	Value
Automatic Freight Unit Building	Selected
Freight Unit Building Rule	Blank
FU Building Rule Condition	DIT-FUBR-DET-COND-01

Configuring Planning Freight and Selecting Carriers

Activities

- Defining Means of Transport [Page 119]
- Configuring Freight Order Type [Page 122]
- Defining Conditions for Determining FU Loading and Unloading Duration [Page 126]
- Configuring Selection Settings for Planning [Page 128]
- Configuring Planning Settings [Page 139]
- Defining Transportation Networks [Page 148]
- Defining Vehicle Resources [Page 158]
- Defining and Assigning Calendar Resources [Page 162]

Defining Means of Transport

Procedure

1. In Customizing for *Transportation Management*, choose *Master Data* →*Resources* →*Define Means of Transport* .
2. Choose *New Entries*.
3. Enter a new means of transport with the following data:

Field	Value
Means of Transport	DIT_MT
MTr Description	DIT: Truck (Multiresource)
Standard Code	031
Transportation Mode	01 (Road)
Superordinate MTr	Blank
Multiresource	Selected
No. of Individual Resources	Deselected
Low Speed	40
Medium Speed	60
High Speed	80
Average Speed	70
Distance Factor	1
Schedule MTr	Deselected
Your Own MTr	Deselected
Passive	Deselected
No Capacity	Deselected
No Direct Load	Deselected
Lock Multiresource	Deselected
GIS Quality	Deselected

4. Return to the overview screen.
5. Enter a new means of transport with the following data:

Field	Value

Field	Value
Means of Transport	DIT_MT10
Description	DIT: Trucks of carrier DIT-CR-10 (MR)
Standard Code	031
Transportation Mode	01 (Road)
Superordinate MTr	DIT_MT
Multiresource	Selected
No. of Individual Resources	Blank
Low Speed	40
Medium Speed	60
High Speed	80
Average Speed	70
Distance Factor	1
Schedule MTr	Deselected
Your Own MTr	Deselected
Passive	Deselected
No Capacity	Deselected
No Direct Load	Deselected
Lock Multiresource	Deselected
GIS Quality	Deselected

6. Return to the overview screen.

7. Enter a new means of transport with the following data:

Field	Value
Means of Transport	DIT_MT20
Description	DIT: Trucks of carrier DIT-CR-20 (MR)
Standard Code	031
Transportation Mode	01 (Road)
Superordinate MTr	DIT_MT
Multiresource	Selected

Field	Value
No. of Individual Resources	Blank
Low Speed	40
Medium Speed	60
High Speed	80
Average Speed	70
Distance Factor	1
Schedule MTr	Deselected
Your Own MTr	Deselected
Passive	Deselected
No Capacity	Deselected
No Direct Load	Deselected
Lock Multiresource	Deselected
GIS Quality	Deselected

This scenario does not use a geographical information system (GIS). You therefore have to enter a distance factor and an average speed. If you have established a connection to a GIS provider, select the *GIS Quality* attribute.

When you save your data, the system may issue a message stating that the IGS or GIS tool is currently unavailable. Ignore this message.

Configuring Freight Order Type

Activities

- Defining Freight Settlement Document Types [Page 123]
- Defining Freight Order Types [Page 124]

Defining Freight Settlement Document Types

Procedure

1. In Customizing for *Transportation Management*, choose *Settlement* →*Freight Settlement* →*Define Freight Settlement Document Types*.

2. Create the following entry:

Field	Value
FSD Type	DIT5
Description	DIT: Freight Settlement Document
FSD Category	10 (Freight Settlement Document)
No. Range Interval	01
Track Changes	Selected
BW Relevance	Selected
Output Profile	/SCMTMS/TOR_INV_PREP (SFIR ERP Integration Profile)
Add. Output Profile	/SCMTMS/SFIR/PRINT (SFIR Profile for Printing)

Defining Freight Order Types

In this Customizing activity, you define a new freight order type that contains an enhanced save strategy.

Procedure

1. In Customizing for *Transportation Management*, choose *Freight Order Management* →*Freight Order* →*Define Freight Order Types*.
2. Choose *New Entries*.
3. Create a freight order type with the following settings:

Field	Value
Freight Order Type	DIT4
Description	DIT: Freight Order Type
Default Type	Deselected
Freight Order Can Be Subcontracted	01 (Relevant for Subcontracting)
Shipper/Consignee Determination	P (Determination Based on Predecessor Documents)
Fix Document When Saving	Not selected
Freight Order Can Be Deleted	Selected
Time for Drawing	S (Draw Number When Saving Document)
Number Range Interval	FO
Default Change Strategy	DEF_CHACO
Default MTr for Type	Blank
Condition for Def MTr	Blank
Output Profile	/SCMTMS/TOR
Execution Org.	Organization ID for Transportation Planning and Execution Organization as defined in Defining Organizational Units for Transportation Planning and Execution Organization and Group [Page 30].
Execution Group	Organization ID for Transportation Planning and Execution Organization as defined in Defining Organizational Units for Transportation Planning and Execution Organization and Group [Page 30].

Field	Value
Purchase Org.	Organization ID for Purchasing Organization as defined in Defining Organizational Unit for Purchasing Organization and Group [Page 32].
Purchase Group	Organization ID for purchasing group as defined in Defining Organizational Unit for Purchasing Organization and Group [Page 32].
Default FSD Type	DIT5
Shipment Creation Relevance	N (No Shipment Creation in ERP)
BW Relevance	Selected
Track Changes	Selected

Defining Conditions for Determining FU Loading and Unloading Duration

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose *Application Administration* →*General Settings* →*Conditions* →*Create Condition*.
2. On the New Condition Definition screen, enter condition type `/SCMTMS/FU_LOAD_DURA`.
3. Choose *Continue*.
4. In the header area of the next screen, enter the following data:

Field	Value
Condition	DIT-LDUR-COND-01
Description	DIT: Loading/Unloading Durations Determination Condition
Origin of Condition	Condition Based on BRFplus Decision Table

5. On the *Data Access Definition* tab page, choose *Create* and enter the following data:

Field	Value
Column Position in BRFplus Decision Table	10
Data Access Definition for Conditions	/SCMTMS/PLNG_SRV_SET
Data Object Description	Blank
Data Element Used for Input Help	/SCMTMS/SERV_TIME_DEF

Field	Value
Column Position in BRFplus Decision Table	20
Data Access Definition for Conditions	/SCMTMS/PLNG_MTR
Data Object Description	Blank
Data Element Used for Input Help	/SAPAPO/TR_TRATY

Field	Value
Column Position in BRFplus Decision Table	30
Data Access Definition for Conditions	/SCMTMS/TOR_TYPE
Data Object Description	Blank
Data Element Used for Input Help	/SCMTMS/TOR_TYPE

7. Choose the *Decision Table* tab page and choose *Edit*.

8. In the *Table Contents* area, choose *Insert New Row* to create a new condition record.

9. Enter the parameters for the new condition record as specified below. In each case, choose *OK* to continue.

Parameter	Value
Service Time Setting	A (Freight Unit and Means of Transport Dependent)
Selected Means of Transport	DIT_MT10
Document Type (TO Type)	DIT3
Load	00:01:00
Unload	00:01:00

10. Repeat the steps above to enter the next condition record.

Parameter	Value
Service Time Setting	A (Freight Unit and Means of Transport Dependent)
Selected Means of Transport	DIT_MT20
Document Type (TO Type)	DIT3
Load	00:02:00
Unload	00:02:00

Configuring Selection Settings for Planning

Activities

- Defining Time-Related Selection Attributes [Page 129]
- Defining Geographical Selection Attributes [Page 133]
- Defining Additional Selection Attributes [Page 134]
- Defining Selection Profiles [Page 135]
- Defining Capacity Selection Settings [Page 136]
- Defining Carrier Selection Settings [Page 137]

Defining Time-Related Selection Attributes

In this procedure you define time-related attributes for selection profiles.

The time-related selection, described below, considers all transportation requirements to be planned with a calculated pick-up date and time, starting from the current date and time of transportation planning plus four hours (defined as offset) and ending with the fifth working day from the current date (rounded horizon to full day). The delivery date and time of the transportation requirement is not considered in the time-related selection.

For example, if the current date and time is Monday June 14, 2010 at 9:00, the pick-up window for planning starts on Monday June 14, 2010 at 13:00 and ends on Friday June 18, 2010 since the specified factory calendar specifies Monday to Friday as working days. All transportation requirements with a calculated pick-up date and time within this pick-up window are selected during transportation planning, regardless of the delivery date or time.

Procedure

1. Open SAP NetWeaver Business Client from SAP TM and choose *Application Administration* →*Planning* →*Selection Profile Attributes* →*Time-Related Selection Attributes* →*Create Time-Related Selection Attributes* .

2. In the *General Data* screen area, enter the following data:

Field	Value
Time-Rel. Sel. Attributes	DIT-TIME-SEL-01
Description	DIT: Time-Related Selection for Freight Units

3. In the *Demand Horizon* screen area, enter the following data:

Field	Value
Absolute or Relative Horizon	Use Relative Horizon
Round Horizon to Full Days	Selected
Time Zone for Rounding the Horizon	CET
Factory Calendar for Offset / Duration Calculation	01 (Germany)

4. In the *Other Settings* screen area, enter the following data:

Field	Value
Use Index Time for Selection	Use Index Time of Stop
Combination of Pick-Up and Delivery Windows	Combine Pick-Up Window with Source Location, Delivery Window with Destination Location

5. In the *Pick-Up Window* screen area, enter the following data:

Field	Value
Ignore Pick-Up Window	Selected
Pick-Up in Days	Blank
Additional Duration (hh:mm)	Blank
Offset Direction	Blank
Offset in Days	Blank
Additional Offset (hh:mm)	00:00
Start Date	Blank
Start Time	Blank
End Date	Blank
End Time	Blank

6. In the *Delivery Window* screen area, enter the following data:

Field	Value
Ignore Delivery	Deselected
Delivery in Days	10
Additional Duration (hh:mm)	-
Offset Direction	Past
Offset in Days	5
Additional Offset (hh:mm)	-
Start Date	-
Start Time	-
End Date	-
End Time	-

7. In SAP NetWeaver Business Client, choose *Application Administration* →*Planning* →*Selection Profile Attributes* →*Time-Related Selection Attributes* →*Create Time-Related Selection Attributes* .

8. In the *General Data* screen area, enter the following data:

Field	Value
Time-Rel. Sel. Attributes	DIT-TIME-SEL-02
Description	DIT: Time-Related Selection for Freight Orders

9. In the *Demand Horizon* screen area, enter the following data:

Field	Value
Absolute or Relative Horizon	Use Relative Horizon
Round Horizon to Full Days	Selected
Time Zone for Rounding the Horizon	CET
Factory Calendar for Offset / Duration Calculation	01 (Germany)

10. In the *Other Settings* screen area, enter the following data:

Field	Value
Use Index Time for Selection	Use Index Time of Stop
Combination of Pick-Up and Delivery Windows	Combine Pick-Up Window with Source Location, Delivery Window with Destination Location

11. In the *Pick-Up Window* screen area, enter the following data:

Field	Value
Ignore Pick-Up Window	Deselected
Pick-Up in Days	10
Additional Duration (hh:mm)	Blank
Offset Direction	Future
Offset in Days	0
Additional Offset (hh:mm)	2:00
Start Date	Blank
Start Time	Blank
End Date	Blank
End Time	Blank

12. In the *Delivery Window* screen area, enter the following data:

Field	Value
Ignore Delivery	Selected
Delivery in Days	Blank
Additional Duration (hh:mm)	Blank

Field	Value
Offset Direction	Blank
Offset in Days	Blank
Additional Offset (hh:mm)	Blank
Start Date	Blank
Start Time	Blank
End Date	Blank
End Time	Blank

Defining Geographical Selection Attributes

Procedure

1. Open SAP NetWeaver Business Client in SAP TM and choose *Application Administration* →*Planning* →*Selection Profile Attributes* →*Geographical Selection Attributes* →*Create Geographical Selection Attributes*.

2. In the General Data screen area, enter the following data:

Field	Value
Geographical Selection Attributes	DIT-GEO-SEL-01
Description	DIT: Geographical Selection
Both Locations	Selected

3. Choose the *Source Zones* tab page and enter the following data:

Sign	Option	Lower Value	Upper Value
Inclusive	=	DIT-PC-CR10	Blank
Inclusive	=	DIT-PC-CR20	Blank

4. Choose the *Destination Zones* tab page and enter the following data:

Sign	Option	Lower Value	Upper Value
Inclusive	=	DIT-PL-1200 (for example, PL1200@<*logical system*>)	Blank
Inclusive	=	DIT-PL-1400 (for example, PL1400@<*logical system*>)	Blank

Defining Additional Selection Attributes

In this procedure, you define additional attributes for selection profiles.

Procedure

1. Open SAP NetWeaver Business Client in SAP TM and choose *Application Administration* →*Planning* →*Selection Profile Attributes* →*Additional Selection Attributes* →*Create Additional Selection Attributes* .

2. In the General Data screen area, enter the following data:

Field	Value
Additional Selection Attributes	DIT-ADD-SEL-01
Description	DIT: Additional Selection of Freight Units
Planned Requirements	Include in Selection
Blocked Documents	Exclude in Selection

3. Choose the *Selection Values* tab page, enter the following data, and save:

Business Object	Field Name	Sign	Option	Lower Limit	Upper Limit
/SCMTMS/TO	TOR_TYPE	Inclusive	=	DIT3	Blank

4. In SAP NetWeaver Business Client, choose *Application Administration* →*Planning* →*Selection Profile Attributes* →*Additional Selection Attributes* →*Create Additional Selection Attributes* .

5. In the *General Data* screen area, enter the following data:

Field	Value
Additional Selection Attributes	DIT-ADD-SEL-02
Description	DIT: Additional Selection for Freight Orders
Planned Requirements	Include in Selection
Blocked Documents	Exclude in Selection

6. Choose the *Selection Values* tab page and enter the following data:

Business Object	Field Name	Sign	Option	Lower Limit	Upper Limit
/SCMTMS/TO	TOR_TYPE	Inclusive	=	DIT4	Blank

Defining Selection Profiles

In this procedure, you define selection profiles for transportation requirements and freight orders.

Procedure

1. Open SAP NetWeaver Business Client in SAP TM and choose *Application Administration* →*Planning* →*Selection Profiles* →*Create Selection Profile*.

2. In the *General Data* screen area, enter the following data:

Field	Value
Selection Profile	DIT-GEN-SEL-01
Description	DIT: Selection Profile for Freight Units
Maximum Number of Selected Objects	1000

3. In the *Profile Assignments* screen area, enter the following data:

Field	Value
Time-Related Selection Attributes	DIT-TIME-SEL-01
Geographical Selection Attributes	DIT-GEO-SEL-01
Additional Selection Attributes	DIT-ADD-SEL-01

4. In SAP NetWeaver Business Client, choose *Application Administration* →*Planning* →*Selection Profiles* →*Create Selection Profile*.

5. In the *General Data* screen area, enter the following data:

Field	Value
Selection Profile	DIT-GEN-SEL-02
Description	DIT: Selection Profile for Freight Orders
Maximum Number of Selected Objects	100

6. In the *Profile Assignments* screen area, enter the following data:

Field	Value
Time-Related Selection Attributes	DIT-TIME-SEL-02
Geographical Selection Attributes	DIT-GEO-SEL-01
Additional Selection Attributes	DIT-ADD-SEL-02

Defining Capacity Selection Settings

In this procedure, you define the settings used to select transportation capacities during transportation planning.

Procedure

1. Open SAP NetWeaver Business Client in SAP TM and choose *Application Administration* →*Planning* →*Planning Profile Settings* →*Capacity Selection Settings* →*Create Capacity Selection Settings* .

2. In the *General Data* screen area, enter the following data:

Field	Value
Capacity Selection Settings	DIT-CAP-SEL-01
Description	DIT: Capacity Selection of Vehicle Resources

3. Choose the *Vehicle Resources* tab page and enter the following data:

Attributes for Vehicle Resource Selection	Sign	Option	Lower Limit	Upper Limit
MTRTCO062_I (Means of Transport)	Inclusive	Pattern	DIT*	Blank

Defining Carrier Selection Settings

Procedure

1. Open SAP NetWeaver Business Client in SAP TM and choose *Application Administration* →*Planning* →*Planning Profile Settings* →*Carrier Selection Settings* →*Create Carrier Selection Settings* .

2. In the *General Data* screen area, enter the following data:

Field	Value
Carrier Selection Settings	DIT-CAR-SEL-01
Description	DIT: Carrier Selection Settings
Check Incompatibilities	Not selected
Incompatibility Settings	-
Type of Carrier Selection Settings	General Carrier Selection

3. In the *Other Settings* screen area, enter the following data:

Field	Value
Transportation Allocation Usage	Do Not Use Transportation Allocation
Business Share Usage	Do Not Use Business Shares
Strategy	Costs
Carrier Cost Origin	Use Transportation Charges from TCM (Transportation Charge Management)

4. Choose the *Advanced Settings* tab page and enter the following data:

Field	Value
Planning Strategy	TSPS_DEF
Optimizer Runtime	6
Consider Manual Assignment as Fixed	Selected
Action for Manual Rankings	Keep
Overall Carrier Availability	Deselected
Transportation Charge Interpretation	Accept Carriers with Charges of Zero as Highest Costs
Common Currency	EUR
Action After Carrier Selection Run	Assign Best Carrier

Field	Value
Continuous Move Type	Use Transportation Lane Settings
Continuous Move Information	Selected
Reaction to CM Removal	Blank
Check Distance and Duration	Selected
Continuous Move Means of Transport Check	Deselected
CM Cost Recalculation for TCM	No Recalculation
Use Tendered Objects for Optimization	Deselected
Tender Without Optimizer Result	Deselected
Tendering Manager	Blank
Tendering Profile	Blank

Configuring Planning Settings

Activities

- Defining Optimizer Settings [Page 140]
- Defining Cost Function Settings [Page 141]
- Defining Planning Cost Settings [Page 142]
- Defining Planning Profiles [Page 146]

Defining Optimizer Settings

Procedure

1. Open SAP NetWeaver Business Client in SAP TM and choose *Application Administration* →*Planning* →*Planning Profile Settings* →*Optimizer Settings* →*Create Optimizer Settings*.

2. In the *General Data* screen area, enter the following data:

Field	Value
Optimizer Settings	DIT-OPT-SET-01
Description	DIT: Optimizer Settings
Planning Strategy	VSR_1STEP
Freight Order Building Rule	New Freight Order when Resource is Empty

3. In the *Transportation Proposal Settings* screen area, enter the following data:

Field	Value
Accept Transportation Proposals	Save Route and Freight Orders
Planning Strategy for Transportation Proposals	VSR_1STEP
Max. Number of Transportation Proposals	5

4. In the *Optimizer Performance Settings* screen area, enter the following data:

Field	Value
Maximum Number of Parallel Processes	2
Maximum Number of Transshipment Locations	3

5. In the *Optimizer Runtime* screen area, enter the following data:

Field	Value
Maximum Runtime (Seconds)	60
Max. Time Without Improvement (Sec./FU)	1
Automatic Runtime Regulation	12 (Good Quality)

6. In the *Consider Constraints* screen area, select *Consider Capacities During Optimization* in the *Consider Capacities During Optimization* field.

Defining Cost Function Settings

In this procedure, you define a profile for the transportation costs.

Procedure

1. Open SAP NetWeaver Business Client in SAP TM and choose *Application Administration* →*Planning* →*Planning Profile Settings* →*Cost Functions Settings* →*Create Cost Function Settings*.

2. In the *General Data* screen area, enter the following data:

Field	Value
Cost Function	DIT-COST-FNC-SET-01
Description	DIT: Cost Function Settings

3. Enter the following values in the table:

Segment	Load	Load Costs	Slope
0001	0,000	500,000	0,000
0002	5,000	500,000	20,000-
0003	10,000	400,000	30,000-
0004	15,000	250,000	50,000-
0005	20,000	0,000	0,000

Defining Planning Cost Settings

Procedure

1. Open SAP NetWeaver Business Client in SAP TM and choose *Application Administration* →*Planning* →*Planning Profile Settings* →*Planning Costs Settings* →*Create Planning Costs Settings*.

2. In the *General Data* screen area, enter the following data:

Field	Value
Planning Costs Settings	DIT-PLAN-COST-SET-01
Description	DIT: Planning Cost Settings

3. In the *Direct Shipment Options* screen area, leave the *Currency for Direct Shipment Options* field blank.

4. In the *Freight Unit Costs* screen area, enter the following data:

Field	Value
Earliness/Delay Cost Basis	Earliness/Delay Costs Defined in Planning Costs
Costs for Non-Delivery	99999999999999
Costs for Earliness per Day	9999
Costs for Lateness per Day	9999

5. In the *Means-of-Transport Costs* table, enter the following data:

Field	Value
Means of Transport	DIT_MT10
Calculation Basis for Costs per Distance: Planning Costs:	Take into Account Costs per Distance and Distance Unit
Calculation Basis for Costs per Distance: Lane	Do Not Take into Account Costs per Transportation Lane
Fixed Costs	500.000

6. Select the row containing your means of transport and choose the *Means-of-Transport Cost Details* tab page.

7. In the *Distance* screen area, enter the following means of transport-dependent data:

Field	Value
Costs per Distance	1.000

Field	Value
Maximum Distance	0.000
Unit of Measure	KM (Kilometer)

8. In the *Quantity Costs* screen area, enter the following data:

Field	Value
Costs Basis for Quantity	No Costs
Costs per Quantity	0.000
Unit of Measure	Blank

9. In the *Penalty Costs* screen area, enter the following data:

Field	Value
Premature Pickup	0.000
Delayed Pickup	0.000
Premature Delivery	100.000
Delayed Delivery	100.000

10. In the *Duration* screen area, enter the following data:

Field	Value
Costs per Duration Unit	0.000
Maximum Duration	0.000
Unit of Measure	Blank

11. In the *Additional Stops* screen area, enter the following data:

Field	Value
Costs per Additional Intermediate Stop	25.000
Maximum Number of Stops	5.000

12. Choose the *Cost Functions* tab page and enter the following data:

Field	Value
Unit of Measure	TO (Ton)
Cost Function	DIT-COST-FNC-SET-01

13. Create a new row in the *Means-of-Transport Costs* table using the following data:

Field	Value

Field	Value
Means of Transport	DIT_MT20
Calculation Basis for Costs per Distance: Planning Costs	Take into Account Costs per Distance and Distance Unit
Calculation Basis for Costs per Distance: Lane	Do Not Take into Account Costs per Transportation Lane
Fixed Costs	500.000

14. Select the means of transport and choose the *Means-of-Transport Cost Details* tab page.

15. In the *Distance* screen area, enter the following data:

Field	Value
Costs per Distance	1.000
Maximum *Distance*	0.000
Unit of Measure	KM (Kilometer)

16. In the *Quantity Costs* screen area, enter the following data:

Field	Value
Costs Basis for Quantity	No Costs
Costs per Quantity	0.000
Unit of Measure	Blank

17. In the *Penalty Costs* screen area, enter the following data:

Field	Value
Premature Pickup	0.000
Delayed Pickup	0.000
Premature Delivery	100.000
Delayed Delivery	100.000

18. In the *Duration* screen area, enter the following data:

Field	Value
Costs per Duration Unit	0.000
Maximum Duration	0.000
Unit of Measure	Blank

19. In the *Additional Stops* screen area, enter the following data:

Field	Value
Costs per Additional Intermediate Stop	30.000
Maximum Number of Stops	5.000

20. Choose the *Cost Functions* tab page and enter the following data:

Field	Value
Unit of Measure	TO (Ton)
Cost Function	DIT-COST-FNC-SET-01

Defining Planning Profiles

Procedure

1. Open SAP NetWeaver Business Client (NWBC) in SAP TM and choose *Application Administration* →*Planning* →*Planning Profiles* →*Create Planning Profile*.

2. In the *General Data* screen area, enter the following data:

Field	Value
Planning Profile	DIT-PLAN-PROF-01
Description	DIT: Planning Profile

3. In the *Planning Horizon* screen area, enter the following data:

Field	Value
Duration in Days	10
Additional Duration (hh:mm)	Blank
Offset in Days	Blank
Additional Offset (hh:mm)	Blank
Factory Calendar for Offset / Duration Calculation	01
Round Horizon to Full Days	Selected
Time Zone for Rounding the Horizon	CET

4. In the *Profile Assignments* screen area, enter the following data:

Field	Value
Selection Profile for Freight Orders	DIT-GEN-SEL-02
Selection Profile for Freight Bookings	Blank
Capacity Selection Settings	DIT-CAP-SEL-01
Optimizer Settings	DIT-OPT-SET-01
Planning Costs Settings	DIT-PLAN-COST-SET-01
Incompatibility Settings	Blank
Carrier Selection Settings	DIT-CAR-SEL-01

5. In the *Business Document Type* screen area, enter the following data:

Field	Value

Field	Value
Type Determination Rule	Defined per Category in Planning Profile
Default Type for Vehicle Resources	DIT4
Default Type for Passive Vehicle Resources	-

6. In the *Manual Planning* screen area, enter the following data:

Field	Value
Manual Planning Strategy	VSRI_DEF
Consider Fixing Status	Warning When Changing Fixed Documents

7. In the *Scheduling* screen area, enter the following data:

Field	Value
Scheduling Strategy	VSS_DEF
Consider Freight Unit Dates	Consider Freight Unit Dates
Scheduling Direction	Not Specified

8. In the *Check* screen area, enter the following data:

Field	Value
Check Strategy	VSR_CHECK
Take Capacities into Account	Warning

9. In the *Loading and Unloading Duration* screen area, enter the following data:

Field	Value
Dependence	Freight Unit and Means of Transport Dependent
Condition for Loading/Unloading Duration	DIT-LDUR-COND-01

Defining Transportation Networks

Activities

- Defining Transportation Zones [Page 149]
- Defining Transportation Lanes [Page 152]
- Defining Carrier Profiles [Page 157]

Defining Transportation Zones

Procedure

1. Open SAP NetWeaver Business Client (NWBC) in SAP TM and choose *Master Data* →*Transportation Network* →*Transportation Zones* →*Define Transportation Zone* .

2. Choose *Create* to create a new transportation zone.

3. Enter the following data:

Field	Value
Zone	DIT-PC-CR10
Description	Postal Code Zone of Carrier DIT-CR-10

4. Select your transportation zone in the table and choose the change icon to change the zone type (*Type* column) to *P (Postal Code Zone)*.

5. Choose the *Zone – Postal Code* tab page.

6. Choose *Create* to create the following entries:

Field	Value
Country	DE
Postal Code – From	80000
Postal Code – To	80999

Field	Value
Country	DE
Postal Code – From	90400
Postal Code – To	90699

Field	Value
Country	DE
Postal Code – From	96000
Postal Code – To	96099

8. Choose *Create* to create a new transportation zone with the following data:

Field	Value
Zone	DIT-PC-CR20
Description	Postal Code Zone of Carrier DIT-CR-20

9. Select your new transportation zone and choose the change icon to change the zone type (*Type* column) to *P (Postal Code Zone)*.

10. Choose the *Zone – Postal Code* tab page.

11. Choose *Create* to create the following entries:

Field	Value
Country	DE
Postal Code – From	34000
Postal Code – To	34999

Field	Value
Country	DE
Postal Code – From	44000
Postal Code – To	45999

12. Choose *Create* to create a new transportation zone using the following data:

13. Enter the following data:

    Maintain Zone

Field	Value
Zone	DIT-PL-1200
Description	Direct Zone for Plant Dresden

14. Select your new transportation zone and choose the change icon to change the zone type (*Type* column) to *D (Direct Zone)*.

15. Choose the *Zone – Location* tab page to assign locations to the transportation zone.

16. Choose *Create* to create new entries:

Location	Description
SP1200 (Location of Type 1003 (Shipping Point)). For example, SP1200@<*logical system*>.	Shipping/Receiving Dresden

17. Choose *Create* to create a new transportation zone using the following data:

Field	Value
Zone	DIT-PL-1400
Description	Direct Zone for Plant Stuttgart

18. Select your new transportation zone and choose the change icon to change the zone type (*Type* column) to *D (Direct Zone)*.

19. Choose the *Zone – Location* tab page to assign locations to the transportation zone.

20. Choose *Create* to create new entries:

Location	Description
SP1400 (Location of Type 1003 (Shipping Point)). For example, SP1400@<*logical system*>.	Shipping/Receiving Stuttgart

21. Select all of the transportation zones you have created.

22. Choose *Calculate Coordinates* to determine the geocoordinates for the transportation zone.

Defining Transportation Lanes

Procedure

1. Open SAP NetWeaver Business Client in SAP TM and choose *Master Data* →*Transportation Network* →*Transportation Lanes* →*Define Transportation Lane*.

2. On the *Tr. Lane* tab page, enter the following data:

Field	Value
Start Location/Zone	DIT-PC-CR10
Destination Location/Zone	DIT-PL-1200

3. Choose *Create* to create a new transportation lane.

4. In the *Means of Transport* screen area, choose *Create* to assign a means of transport to the transportation lane.

5. Enter the following data for the means of transport:

Field	Value
Means of Transport	DIT_MT10
Validity Start Date	<Current date>
Validity End Date	December 31, 2999
Relevant to Carrier Selection	Selected
Priority/Costs	Neither Costs Nor Priority

6. Choose *Copy and Close*.

7. When prompted, create a proposal for the transportation distance and duration. The result should be as follows:

Field	Value
Transportation Distance	600,000
Transportation Duration	5:18

8. Select the new entry on the *Means of Transport* screen.

9. In the *Carrier (Select Means of Transport)* screen area, choose *Create*.

10. Enter the following data for the carrier:

Field	Value
BP Number	DIT-CR-10
Transportation Costs	Blank

Field	Value
Priority	Blank

11. Choose *Copy and Close*.
12. Return to the initial screen.
13. On the *Tr. Lane* tab page, create a new transportation lane as follows:

Field	Value
Start Location/Zone	DIT-PC-CR20
Destination Location/Zone	DIT-PL-1400

14. Choose *Create* to create a new transportation lane.
15. In the *Means of Transport* screen area, choose *Create* to assign a means of transport to the transportation lane.
16. Enter the following data for the means of transport:

Field	Value
Means of Transport	DIT_MT20
Validity Start Date	<Current date>
Validity End Date	December 31, 2999
Relevant to Carrier Selection	Selected
Priority/Costs	Neither Costs Nor Priority

17. Choose *Copy and Close*.
18. When prompted, create a proposal for the transportation distance and duration. The result should be as follows:

Field	Value
Transportation Distance	619,000
Transportation Duration	5:37

19. Select the new entry on the*Means of Transport* screen.
20. In the *Carrier (Select Means of Transport)* screen area, choose *Create*.
21. Enter the following data:

Field	Value
BP Number	DIT-CR-20
Transportation Costs	Blank

Field	Value
Priority	Blank

22. Choose *Copy and Close*.

23. Repeat steps 13 to 22 with a source location of `DIT-PC-CR20` and a destination location of `DIT-PL-1200`.

24. Return to the initial screen.

25. In SAP NetWeaver Business Client, choose *Master Data* →*Transportation Network* →*Define Transportation Lane* .

26. On the *Intra-Zone Lane/Loc. Transp. Lane* tab page, enter the location/transportation zone `DIT-PC-CR10`.

27. Choose *Create* to create a new transportation lane.

28. In the *Means of Transport* screen area, choose *Create* to assign a means of transport to the transportation lane.

29. Enter the following data for the means of transport:

Field	Value
Means of Transport	DIT_MT10
Validity Start Date	<Current date>
Validity End Date	December 31, 2999
Relevant to Carrier Selection	Not selected
Priority/Costs	Neither Costs Nor Priority

30. Choose *Copy and Close*.

31. When prompted, create a proposal for the transportation distance and duration. The result should be as follows:

Field	Value
Transportation Distance	0,000
Transportation Duration	0:00

32. Select the new entry on the*Means of Transport* screen.

33. In the *Carrier (Select Means of Transport)* screen area, choose *Create*.

34. Enter the following data:

Field	Value
BP Number	DIT-CR-10

Field	Value
Transportation Costs	Blank
Priority	Blank

35. Choose *Copy and Close*.

36. Return to the initial screen.

37. On the *Intra-Zone Lane/Loc. Transp. Lane* tab page, enter the location/transportation zone `DIT-PC-CR20`.

38. Choose *Create* to create a new transportation lane.

39. In the *Means of Transport* screen area, choose *Create* to assign a means of transport to the transportation lane.

40. Enter the following data for the means of transport:

Field	Value
Means of Transport	DIT_MT20
Validity Start Date	<Current date>
Validity End Date	December 31, 2999
Relevant to Carrier Selection	Not selected
Priority/Costs	Neither Costs Nor Priority

41. Choose *Copy and Close*.

42. When prompted, create a proposal for the transportation distance and duration. The result should be as follows:

Field	Value
Transportation Distance	0,000
Transportation Duration	0:00

43. Select the new entry on the*Means of Transport* screen.

44. In the *Carrier (Select Means of Transport)* screen area, choose *Create*.

45. Enter the following data:

Field	Value
BP Number	DIT-CR-20
Transportation Costs	Blank
Priority	Blank

46. Choose *Copy and Close*.

47. Return to the initial screen.

Defining Carrier Profiles

Procedure

1. Open SAP NetWeaver Business Client in SAP TM and choose *Master Data* →*General* →*Define Carrier Profiles.*
2. Choose *Create*.
3. In the *Maintain Carrier Profile* dialog box, enter business partner `DIT-CR-10`.
4. Choose the *Transportation* tab page and check that the transportation lane-specific data for each means of transport to which the carrier is assigned is displayed.
5. Choose *Create* to create a carrier profile.
6. In the *Maintain Carrier Profile* dialog box, enter business partner `DIT-CR-20`.
7. Choose the *Transportation* tab page and check that the transportation lane-specific data for each means of transport to which the carrier is assigned is displayed.

Defining Vehicle Resources

Procedure

1. Open SAP NetWeaver Business Client in SAP TM and choose *Master Data* →*Resources* →*Define Resource* .
2. On the initial screen, choose *Create Resources*.
3. On the *Vehicle* tab page, enter the following data:

Field	Value
Resource	DIT-TRUCK-MR-CR10
Location	Blank
Means of Transport	DIT_MT10
Time Zone	CET
Continuous Dimension	MASS (Mass)
Factory Calendar	01
Capacity	24
Unit	TO (tons)
Short Description	DIT: Truck (Multi-Resource) of carrier DIT-CR-10

4. Press `ENTER`.
5. Choose the *General Data* tab page and select the *Finite Scheduling* checkbox.
6. Choose the *Transportation* tab page and enter the following data:

Field	Value
From Date	Current date
To Date	December 31, 9999
Owner	DIT-CR-10

7. Choose the *Time-Cont. Capacity* tab page and enter the following data:

Continuous Dimension	Capacity	Unit
Mass	24	TO (ton)
Volume	90	M3 (cubic meter)

8. Select resource `DIT-TRUCK-MR-CR10` and choose *Copy Resources*.

9. In the *Copy Resources* dialog box, enter the following data:

Field	Value
Resource	DIT-TRUCK-MR-CR20
Resource Category	T
Location	Blank
Short Description	DIT: Truck (Multi-Resource) of carrier DIT-CR-20

10. Choose *Copy Object* to create the new resource.
11. Select the new resource and choose the *General Data* tab page.
12. Enter means of transport `DIT_MT20`.
13. Choose the *Transportation* tab page and enter owner `DIT-CR-20`.
14. Choose *Definitions* or press `F8`.
15. On the *Change/Create Definitions* screen, choose the *Breaks* tab page and enter the following data:

Field	Value
Break Pattern	DIT-2200-0500
Break Number	1
Break Start	22:00:00
Break End	05:00:00

16. Choose the *Shifts* tab page and enter the following data:

Field	Value
Shift	DIT-0700-0700
Valid To	December 31, 9999
Start	07:00:00
End	07:00:00
Break Pattern	DIT-2200-0500

17. Choose the *Shift Sequences* tab page and enter the following data:
18.

Field	Value
Shift Sequence	DIT-MOSU-0700-0700

Field	Value
Day Number	1 (Monday)
Valid To	December 31, 9999
Non-Workdays	2 (Can Only Start or Finish on a Workday)
Shift 1	DIT-0700-0700

19. Select the new entry and choose *Copy*.

20. In the *Copy Shift Programs* dialog box, enter the following data:

Field	Value
To Shift Sequence	DIT-MOSU-0700-0700
To Day Number	2 (Tuesday)
Valid To	December 31, 9999

21. Continue to copy the shift sequence for the remaining days of the week (Wednesday to Sunday) by entering values 3 to 7 respectively in the *To Day Number* field.

22. Once you have created shift sequences for all seven days, choose *Back* to return to the *Resources* screen.

23. Choose *Capacity Variants* or press `F6`.

24. On the *Create Resources: Capacity Variants* screen, select resource `DIT-TRUCK-MR-CR10` on the *Cap. Var. Shift Sequence* tab page.

25. Choose *Interval* or press `F5`.

26. In the *Create Resources: Capacity Variants* dialog box, enter the following data:

Field	Value
Capacity Variant	1
From	Current date
To	December 31, 9999
Shift Sequence	DIT-MOSU-0700-0700
First Day	1 (Monday)
Workdays	Workdays According to the Factory Calendar

27. Choose *Continue*.

28. On the *Create Resources: Capacity Variants* screen, select resource `DIT-TRUCK-MR-CR20` on the*Cap. Var. Shift Sequence* tab page.

29. Choose *Interval* or press `F5`.

30. In the *Create Resources: Capacity Variants* dialog box, enter the following data:

Field	Value
Capacity Variant	1
From	Current date
To	December 31, 9999
Shift Sequence	DIT-MOSU-0700-0700
First Day	1 (Monday)
Workdays	Workdays According to the Factory Calendar

31. Return to the *Resources* screen.

32. On the *Vehicles* tab page, enter active variant `1`.

Defining and Assigning Calendar Resources

Activities

- Defining Calendar Resources [Page 163]
- Assigning Calendar Resources to Locations [Page 169]

Defining Calendar Resources

In this procedure, you define resources for operating times at locations.

Procedure

1. Open SAP NetWeaver Business Client in SAP TM and choose *Master Data* →*Resources* →*Define Resource.*.

2. On the initial screen, choose *Create Resources*.

3. Choose the *Calendar* tab page and create the following resources. For each resource, enter the time zone as `CET`, the factory calendar `01`, and the active variant `1`.

Resource	Location	Short Description
DIT-OT-VN10	SUDIT-VN-10<@*logical system name*>	DIT: Operating Times Supplier DIT-VN10
DIT-OT-VN20	SUDIT-VN-20<@*logical system name*>	DIT: Operating Times Supplier DIT-VN20
DIT-OT-VN21	SUDIT-VN-21<@*logical system name*>	DIT: Operating Times Supplier DIT-VN21
DIT-OT-VN30	SUDIT-VN-30<@*logical system name*>	DIT: Operating Times Supplier DIT-VN30
DIT-OT-VN31	SUDIT-VN-31<@*logical system name*>	DIT: Operating Times Supplier DIT-VN31
DIT-OT-VN40	SUDIT-VN-40<@*logical system name*>	DIT: Operating Times Supplier DIT-VN40
DIT-OT-VN50	SUDIT-VN-50<@*logical system name*>	DIT: Operating Times Supplier DIT-VN50
DIT-OT-SP1200	SP1200<@*logical system name*>	DIT: Operating Times Shipping/Receiving Point 1200
DIT-OT-SP1400	SP1400<@*logical system name*>	DIT: Operating Times Shipping/Receiving Point 1400
DIT-OT-SP1200-CR10	SP1200<@*logical system name*>	DIT: Operating Times Ship./Rcv.Pt. 1200 for carrier DIT-CR-10
DIT-OT-SP1400-CR20	SP1400<@*logical system name*>	DIT: Operating Times Ship./Rcv.Pt. 1400 for carrier DIT-CR-20
DIT-OT-VN10-CR10	SUDIT-VN-10<@*logical system name*>	Operating Times Supplier DIT-VN-10 for carrier DIT-CR-

Resource	Location	Short Description
		20
DIT-OT-VN30-CR20	SUDIT-VN-30<@*logical system name*>	Operating Times Supplier DIT-VN-30 for carrier DIT-CR-20
DIT-OT-VN31-CR20	SUDIT-VN-31<@*logical system name*>	Operating Times Supplier DIT-VN-31 for carrier DIT-CR-20
DIT-OT-VN40-CR20	SUDIT-VN-40<@*logical system name*>	Operating Times Supplier DIT-VN-40 for carrier DIT-CR-20

4. Press `ENTER`.
5. Choose *Definitions* or press `F8`.
6. On the *Change/Create Definitions* screen, choose the *Shifts* tab page. Enter the following data:

Shift	Valid To	Start	End	Break Pattern
DIT-0600-2200	December 31, 9999	06:00:00	22:00:00	Blank
DIT-0700-0800	December 31, 9999	07:00:00	08:00:00	Blank
DIT-0800-0900	December 31, 9999	08:00:00	09:00:00	Blank
DIT-1400-1500	December 31, 9999	14:00:00	15:00:00	Blank
DIT-1500–1600	December 31, 9999	15:00:00	16:00:00	Blank

7. Choose the *Shift Sequences* tab page and enter the following data:

Field	Value
Shift Sequence	DIT-MOFR-0600-2200
Day Number	1 (Monday)
Valid To	December 31, 9999
Non-Workdays	Can Only Start or Finish on a Workday
Shift 1	DIT-0600-2200

8. Select your new entry and choose *Copy*.
9. In the *Copy Shift Programs* dialog box, enter the following data:

Field	Value
To Shift Sequence	DIT-MOFR-0600-2200
To Day Number	2 (Tuesday)
Valid To	December 31, 9999

10. Repeat the process to create shift sequences for Wednesday (day number 3) to Friday (day number 5).

11. Select an entry and choose *Copy*.

12. In the *Copy Shift Programs* dialog box, enter the following data:

Field	Value
Shift Sequence	DIT-MOFR-0700-0800
Day Number	1 (Monday)
Valid To	December 31, 9999
Non-Workdays	Can only Start or Finish on a Workday
Shift 1	DIT-0700-0800

13. Repeat the process to copy shift sequence `DIT-MOFR-0700-0800` for Tuesday to Friday.

14. Select an entry and choose *Copy*.

15. In the *Copy Shift Programs* dialog box, enter the following data:

Field	Value
Shift Sequence	DIT-MOFR-0800-0900
Day Number	1 (Monday)
Valid To	December 31, 9999
Non-Workdays	Can only Start or Finish on a Workday
Shift 1	DIT-0800-0900

16. Repeat the process to copy shift sequence `DIT-MOFR-0800-0900` for Tuesday to Friday.

17. Select an entry and choose *Copy*.

18. In the *Copy Shift Programs* dialog box, enter the following data:

Field	Value
Shift Sequence	DIT-MOFR-1400-1500

Field	Value
Day Number	1 (Monday)
Valid To	December 31, 9999
Non-Workdays	Can only Start or Finish on a Workday
Shift 1	DIT-1400-1500

19. Repeat the process to copy shift sequence `DIT-MOFR-1400-1500` for Tuesday to Friday.
20. Select an entry and choose *Copy*.
21. In the *Copy Shift Programs* dialog box, enter the following data:

Field	Value
Shift Sequence	DIT-MOFR-1500-1600
Day Number	1 (Monday)
Valid To	December 31, 9999
Non-Workdays	Can only Start or Finish on a Workday
Shift 1	DIT-1500-1600

22. Repeat the process to copy shift sequence `DIT-MOFR-1500-1600` for Tuesday to Friday.
23. Return to the *Resources* screen.
24. Select all new calendar resources.
25. Choose *Capacity Variants*.
26. Select the following resources:
    - DIT-OT-SP1200
    - DIT-OT-SP1400
    - DIT-OT-VN10
    - DIT-OT-VN20
    - DIT-OT-VN21
    - DIT-OT-VN30
    - DIT-OT-VN31
    - DIT-OT-VN40
    - DIT-OT-VN50

27. Choose *Interval* or press `F5`.

28. Enter the following data:

Field	Value
Capacity Variant	1
From	Current date
To	December 31, 9999
Shift Sequence	DIT-MOFR-0600-2200
First Day	1
Work Days	Workdays According to the Factory Calendar
Shift Factors	Blank

29. Select resource `DIT-OT-SP1200-CR10` and choose *Interval* or press `F5`.

30. Enter the following data:

Field	Value
Capacity Variant	1
From	Current date
To	December 31, 9999
Shift Sequence	DIT-MOFR-0700-0800
First Day	1
Work Days	Workdays According to the Factory Calendar
Shift Factors	Blank

31. Select resource `DIT-OT-SP1400-CR20` and choose *Interval* or press `F5`.

32. Enter the following data:

Field	Value
Capacity Variant	1
From	Current date
To	December 31, 9999
Shift Sequence	DIT-MOFR-0800-0900
First Day	1
Work Days	Workdays According to the Factory Calendar

Field	Value
Shift Factors	Blank

33. Select resources `DIT-OT-VN10-CR10`, `DIT-OT-VN30-CR20` and `DIT-OT-VN31-CR20` and choose *Interval* or press `F5`.

34. Enter the following data:

Field	Value
Capacity Variant	1
From	Current date
To	December 31, 9999
Shift Sequence	DIT-MOFR-1400-1500
First Day	1
Work Days	Workdays According to the Factory Calendar
Shift Factors	Blank

35. Select resources `DIT-OT-VN30-CR20` and `DIT-OT-VN40-CR20` and choose *Interval* or press `F5`.

36. Enter the following data:

Field	Value
Capacity Variant	1
From	Current date
To	December 31, 9999
Shift Sequence	DIT-MOFR-1500-1600
First Day	1
Work Days	Workdays According to the Factory Calendar
Shift Factors	Blank

Assigning Calendar Resources to Locations

In this procedure, you assign the calendar resources for operating times to the relevant locations.

Procedure

1. Open SAP NetWeaver Business Client in SAP TM and choose *Master Data* →*Transportation Network* →*Locations* →*Define Location* .
2. On the initial screen, enter location `SUDIT-VN-10@<logical system>` and location type `1011` (vendor).
3. Choose *Change*.
4. Choose the *Resources* tab page and enter the following data:

Field	Value
Operating Times	Selected
Outbound	DIT-OT-VN10

5. Choose *More Resources*.
6. Choose *Insert Row* for outbound.
7. Enter the following data:

Field	Value
Means of Transport	DIT_MT10
Operating Times of Location (Outbound)	DIT-OT-VN10-CR10
Valid	1

8. Repeat the above steps with the following data:

Parameter	Value
Location	SUDIT-VN-20@<*logical system*>
Operating Times	Selected
Outbound	DIT-OT-VN20

9. Repeat the above steps with the following data:

   Initial Screen

Parameter	Value
Location	SUDIT-VN-21@<*logical system*>
Operating Times	Selected

Parameter	Value
Outbound	DIT-OT-VN21

10. Repeat the above steps with the following data:

Parameter	Value
Location	SUDIT-VN-30@<*logical system*>
Operating Times	Selected
Outbound	DIT-OT-VN30
Means of Transport	DIT_MT20
Operating Times of Location (Outbound)	DIT-OT-VN30-CR20
Valid	1

11. Repeat the above steps with the following data:

Parameter	Value
Location	SUDIT-VN-31@<*logical system*>
Operating Times	Selected
Outbound	DIT-OT-VN31
Means of Transport	DIT_MT20
Operating Times of Location (Outbound)	DIT-OT-VN31-CR20
Valid	1

12. Repeat the above steps with the following data:

Parameter	Value
Location	SUDIT-VN-40@<*logical system*>
Operating Times	Selected
Outbound	DIT-OT-VN40
Means of Transport	DIT_MT20
Operating Times of Location (Outbound)	DIT-OT-VN40-CR20
Valid	1

13. Repeat the above steps with the following data:

Parameter	Value
Location	SUDIT-VN-50@<*logical system*>

Parameter	Value
Operating Times	Selected
Outbound	DIT-OT-VN50

14. Repeat the above steps with the following data:

Parameter	Value
Location	SP1200@<*logical system*>
Operating Times	Selected
Inbound	DIT-OT-SP1200

15. Choose *More Resources*.
16. Choose *Insert Row* for inbound.
17. Enter the following data:

Field	Value
Means of Transport	DIT_MT10
Operating Times of Location (Inbound)	DIT-OT-SP1200-CR10
Valid	1

18. Repeat the above steps with the following data:

Parameter	Value
Location	SP1400@<*logical system*>
Operating Times	Selected
Inbound	DIT-OT-SP1400

19. Choose *More Resources*.
20. Choose *Insert Row* for inbound.
21. Enter the following data:

Field	Value
Means of Transport	DIT_MT20
Operating Times of Location (Inbound)	DIT-OT-SP1400-CR20
Valid	1

Configuring Inbound Processing and Receipt Confirmation Without Warehouse Management

Activities

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Defining Partner Determination for Inbound Delivery

Activities

Defining Partner Determination [Page 174]

Defining Partner Determination

Procedure

1. In Customizing for SAP ERP, choose *Logistics Execution* →*Shipping* →*Basic Shipping Functions* →*Partners* →*Set Up Partner Determination for Deliveries*.
2. On the *Partner Determination Procedures* screen, select the entry `EL`.
3. In the tree structure, choose *Partner Functions in Procedure*.
4. On the *Partner Functions in Procedure* screen, check the following entry and create any missing data:

Field	Value
Partner Function	GS
Not Modifiable	Deselected
Mandatory Function	Deselected

Configuring Monitoring and Executing Freight

Activities

- Configuring Integration for Event Handling into SAP EM [Page 176]
- Configuring Event Handling in SAP EM [Page 182]
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Configuring Integration for Event Handling into SAP EM

Activities

- Defining Events for Business Documents [Page 177]
- Defining Order-Based Transportation Requirement Types for Execution [Page 178]
- Defining Delivery-Based Transportation Requirement Types for Execution [Page 179]
- Defining Freight Unit Types for Execution Tracking [Page 180]
- Defining Freight Order Types for Execution Tracking [Page 181]

Defining Events for Business Documents

Procedure

1. In Customizing for *Transportation Management*, choose *Integration* →*Tracking and Tracing of Processes and Documents* →*Define Transportation Activities for Tracking and Tracing*.

2. Choose the *Event for Business Document* view from the structure on the left.

3. Create the following new entries:

Event	Short Description	Transportation Activity	Stop Category
DIT_ODT20_LOAD_ARR	Arrival at Loading Location	04 (Arrival)	Blank
DIT_ODT20_LOAD_DEP	Departure from Loading Location	03 (Departure)	Blank
DIT_ODT20_UNLOAD_ARR	Arrival at Unloading Location	04 (Arrival)	Blank
DIT_ODT20_UNLOAD_DEP	Departure from Unloading Location	03 (Departure)	Blank

Defining Order-Based Transportation Requirement Types for Execution Tracking

Procedure

1. In Customizing for SAP TM, choose *Integration* →*ERP Logistics Integration* →*Order-Based Transportation Requirement* →*Define Order-Based Transportation Requirement Types*.

2. Select OTR type `DIT1`.

3. Choose *Details* and maintain the following data:

Field	Value
EM Integration Active	Selected
Event Manager	Logical system (see note below)

If you intend to use Event Management and, therefore, select the *EM Integration Active* checkbox, you must enter the logical name of the Event Management system in the *Event Manager* field. The logical name of the system is specified in the *Integration of SAP TM and SAP Event Management* configuration guide.

Defining Delivery-Based Transportation Requirement Types for Execution

In this procedure, you define the delivery-based transportation requirement (DTR) types as relevant for execution tracking by SAP EM.

Procedure

1. In Customizing for SAP TM, choose *Integration* →*ERP Logistics Integration* →*Delivery-Based Transportation Requirement* →*Define Delivery-Based Transportation Requirement Types*.

2. Select DTR type `DIT2`.

3. Choose *Details* and maintain the following data:

Field	Value
Event Management Integration Active	Selected
Event Manager	Logical system (see note below)

If you intend to use SAP Event Management and, therefore, select the *EM Integration Active* checkbox, you must enter the logical name of the SAP Event Management system in the *Event Manager* field. The logical name of the system is specified in the *Integration of SAP TM and SAP Event Management* configuration guide.

Defining Freight Unit Types for Execution Tracking

In this Customizing activity, you specify the freight unit type as relevant for execution tracking by SAP EM.

Procedure

1. In Customizing for *Transportation Management*, choose *Planning* →*Freight Unit* →*Define Freight Unit Types*.
2. Select freight unit type `DIT3` and choose *Details*.
3. Enter the following settings:

Field	Value
Execution Tracking Relevance	3 (Execution Tracking with External Event Management)
Event Management Settings: Application Object Type	ODT20_FU
Last Expected Event	UNLOAD_END

Defining Freight Order Types for Execution Tracking

In this Customizing activity, you specify the freight order type as relevant for execution tracking by SAP EM.

Procedure

1. In Customizing for *Transportation Management*, choose *Freight Order Management* →*Freight Order* →*Define Freight Order Types*.
2. Select freight order type `DIT4` and choose *Details*.
3. Enter the following settings:

Field	Value
Execution Tracking Relevance	3 (Execution Tracking with External Event Management)
Propagate Execution Info	Selected
Event Management Application Object Type	ODT20_TO
Last Expected Event	POD

Configuring Event Handling in SAP EM

Activities

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- Assigning Multitask Activities to Event Messages [Page 184]
- Defining Rule Sets [Page 193]
- Defining Alert Framework Integration with SAP EM [Page 198]
- Defining Alert Categories for Alert Framework [Page 200]
- Defining Conditions for Event Handler Types [Page 207]
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Defining Internal Event Codes

Procedure

1. In Customizing for SAP Event Management, choose *Event Handlers and Event Handler Data →Codes →Event Codes →Define Internal Event Codes and Internal Event Code Groups.*

2. Choose the *Internal Event Codes* view from the tree structure.

3. Create the following entries:

Interval Event Code	Description	Status Icon Schema ID
DIT_ODT20_LOAD_ARR	Arrival at Loading Location	DEFAULT
DIT_ODT20_LOAD_DEP	Departure from Loading Location	DEFAULT
DIT_ODT20_UNLOAD_ARR	Arrival at Unloading Location	DEFAULT
DIT_ODT20_UNLOAD_DEP	Departure from Unloading Location	DEFAULT

Assigning Multitask Activities to Event Messages

Procedure

1. In Customizing for SAP EM, choose *Reactions to Event Messages* →*Define Rule Sets* .
2. Choose the *Multitask Activities* view from the dialog structure.
3. Create an entry with the following data:

Field	Value
Activity	DIT_ODT20_TO_ARRIV_L
Description	TM-DIT: Set Transp. Status to “Arrived” and Send Data to TM

4. Select your new entry and choose the *Tasks* view (subordinate to the *Multitask Activities* view) from the dialog structure.
5. Create entries with the following data:

Field	Value
Task Sequence	10
Task	IS_EVENT_ARRIVAL
Task Description	Check If Internal Event Code = DIT_ODT20_LOAD_ARR
Activity	EVENT_CODE_CHECK
Previous Task for Condition Execution	Blank
Logical Operator	Blank
Previous Return Code	Blank
Final Task	Blank
Log Task	Selected
Internal Event Code	DIT_ODT20_LOAD_ARR

Field	Value
Task Sequence	12
Task	CHECK_SENDER
Task Description	Check if Sender Name is TM
Activity	IS_EQUAL

Field	Value
Previous Task for Condition Execution	IS_EVENT_ARRIVAL
Logical Operator	=
Previous Return Code	Blank
Final Task	Blank
Log Task	Selected
Activity Parameters: *Field 1*	<EVENT_MSG-HDR-SNDNAM>
Activity Parameters: *Field 2*	TM

Field	Value
Task Sequence	15
Task	CHECK_REPROCESSING
Task Description	Check for Reprocessing
Activity	CHECK_REPROCESS_FLAG
Previous Task for Condition Execution	CHECK_SENDER
Logical Operator	<>
Previous Return Code	Blank
Final Task	Blank
Log Task	Selected

Field	Value
Task Sequence	20
Task	SEND_DATE_TO_TM
Task Description	Send Data to TM
Activity	TM_MAINTAIN_EXEC_INF
Previous Task for Condition Execution	CHECK_REPROCESSING
Logical Operator	=
Previous Return Code	Blank

Field	Value
Final Task	Blank
Log Task	Selected
BAPI Commit	Selected

Field	Value
Task Sequence	30
Task	STATUS_SET
Task Description	Set Transportation Status to “Arrived”
Activity	STATUS_SET
Previous Task for Condition Execution	IS_EVENT_ARRIVAL
Logical Operator	=
Previous Return Code	Blank
Final Task	Blank
Log Task	Selected
Activity Parameters: *Status Attribute Name*	ODT20_TRANSPORT
Activity Parameters: *Status Attribute Value*	ARRIVED

Field	Value
Task Sequence	40
Task	IS_EVENT_LATE
Task Description	Check If Expected Event is too Late
Activity	IS_EE_LATE
Previous Task for Condition Execution	IS_EVENT_ARRIVAL
Logical Operator	=
Previous Return Code	Blank
Final Task	Blank
Log Task	Selected

Field	Value
Task Sequence	45
Task	ALERT_CREATE
Task Description	Create Alert for Activity ID DIT_ODT20_EE_LATE’
Activity	ALERT_CREATE
Previous Task for Condition Execution	IS_EVENT_LATE
Logical Operator	=
Previous Return Code	Blank
Final Task	Blank
Log Task	Selected
Activity ID for Alert Framework Integration	DIT_ODT20_EE_LATE

9. Choose the *Multitask Activities* view from the dialog structure.
10. Select the new activity and choose *Copy as…*
11. Create an entry with the following data:

Field	Value
Activity	DIT_ODT20_TO_ARRIV_U
Description	TM-DIT: Set Transp. Status to “Arrived” and Send Data to TM

12. Choose *Copy All* to copy the dependent entries.
13. Choose *Enter* to continue.
14. Select your new entry and choose the *Tasks* view (subordinate to the *Multitask Activities* view) from the dialog structure.
15. Select the following entry:

Field	Value
Task Sequence	10
Task	IS_EVENT_ARRIVAL

16. Choose *Details*.
17. Enter the following data:

Field	Value

Field	Value
Task Description	Check If Internal Event Code = DIT_ODT20_UNLOAD_ARR
Internal Event Code	DIT_ODT20_UNLOAD_ARR

18. Choose the *Multitask Activities* view from the dialog structure.

19. Create an entry with the following data:

Field	Value
Activity	DIT_ODT20_TO_DEPRT_L
Description	TM-DIT: Set Transp. Status to “In Transit” and Send Data to TM

20. Select your new entry and choose the *Tasks* view (subordinate to the *Multitask Activities* view) from the dialog structure.

21. Create entries with the following data:

Field	Value
Task Sequence	10
Task	IS_EVENT_DEPARTURE
Task Description	Check If Internal Event Code = DIT_ODT20_LOAD_DEP
Activity	EVENT_CODE_CHECK
Previous Task for Condition Execution	Blank
Logical Operator	Blank
Previous Return Code	Blank
Final Task	Blank
Log Task	Selected
Internal Event Code	DIT_ODT20_LOAD_DEP

Field	Value
Task Sequence	12
Task	CHECK_SENDER
Task Description	Check if Sender Name is TM
Activity	IS_EQUAL
Previous Task for Condition Execution	IS_EVENT_DEPARTURE

Field	Value
Logical Operator	=
Previous Return Code	Blank
Final Task	Blank
Log Task	Selected
Activity Parameters: *Field 1*	<EVENT_MSG-HDR-SNDNAM>
Activity Parameters: *Field 2*	TM

Field	Value
Task Sequence	15
Task	CHECK_REPROCESSING
Task Description	Check for Reprocessing
Activity	CHECK_REPROCESS_FLAG
Previous Task for Condition Execution	CHECK_SENDER
Logical Operator	<>
Previous Return Code	Blank
Final Task	Blank
Log Task	Selected

Field	Value
Task Sequence	20
Task	SEND_DATE_TO_TM
Task Description	Send Data to TM
Activity	TM_MAINTAIN_EXEC_INF
Previous Task for Condition Execution	CHECK_REPROCESSING
Logical Operator	=
Previous Return Code	Blank
Final Task	Blank

Field	Value
Log Task	Selected
BAPI Commit	Selected

Field	Value
Task Sequence	30
Task	STATUS_SET
Task Description	Set Transportation Status to “In Transit”
Activity	STATUS_SET
Previous Task for Condition Execution	IS_EVENT_DEPARTURE
Logical Operator	=
Previous Return Code	Blank
Final Task	Blank
Log Task	Selected
Activity Parameters: *Status Attribute Name*	ODT20_TRANSPORT
Activity Parameters: *Status Attribute Value*	IN_TRANSIT

Field	Value
Task Sequence	40
Task	IS_EVENT_LATE
Task Description	Check If Expected Event is too Late
Activity	IS_EE_LATE
Previous Task for Condition Execution	IS_EVENT_DEPARTURE
Logical Operator	=
Previous Return Code	Blank
Final Task	Blank
Log Task	Selected

Field	Value

Field	Value
Task Sequence	45
Task	ALERT_CREATE
Task Description	Create Alert for Activity ID DIT_ODT20_EE_LATE’
Activity	ALERT_CREATE
Previous Task for Condition Execution	IS_EVENT_LATE
Logical Operator	=
Previous Return Code	Blank
Final Task	Blank
Log Task	Selected
Activity ID for Alert Framework Integration	DIT_ODT20_EE_LATE

25. Choose the *Multitask Activities* view from the dialog structure.
26. Select your new activity and choose *Copy as…*
27. Create an entry with the following data:

Field	Value
Activity	DIT_ODT20_TO_DEPRT_U
Description	TM-DIT: Set Transp. Status to “In Transit” and Send Data to TM

28. Choose *Copy All* to copy the dependent entries.
29. Choose *Enter* to continue.
30. Select your new entry and choose the *Tasks* view (subordinate to the *Multitask Activities* view) from the dialog structure.
31. Select the following entry:

Field	Value
Task Sequence	10
Task	IS_EVENT_DEPARTURE

32. Choose *Details*.
33. Enter the following data:

Field	Value

Field	Value
Task Description	Check If Internal Event Code = DIT_ODT20_UNLOAD_DEP
Internal Event Code	DIT_ODT20_UNLOAD_DEP

Defining Rule Sets

Procedure

1. In Customizing for SAP EM, choose *Reactions to Event Messages* →*Define Rule Sets* .

2. Choose the *Rule Sets* view from the dialog structure.

3. Create an entry with the following data:

Field	Value
Rule Set	DIT_ODT20_TO
Description	TM-DIT: Freight Order for Transportation Execution Visibility Process

4. Select your new entry and choose the *Rules* view (subordinate to the *Rule Sets* view) from the dialog structure.

5. Create entries with the following data:

Field	Value
Rule Sequence	10
Rule	LOADING ARRIVAL
Description	Set Transp. Status to “Arrived” and Send Data to TM System
Condition	Blank
Activity	DIT_ODT20_TO_ARRIV_L
True Rule	Blank
False Rule	Blank

Field	Value
Rule Sequence	20
Rule	LOADING BEGIN
Description	Set Transp. Status to “Loading Started” and Send Data to TM System
Condition	Blank
Activity	ODT20_TO_LOAD_BEG
True Rule	Blank

Field	Value
False Rule	Blank

Field	Value
Rule Sequence	30
Rule	LOADING END
Description	Set Transp. Status to “Loaded” and Send Data to TM System
Condition	Blank
Activity	ODT20_TO_LOAD_END
True Rule	Blank
False Rule	Blank

Field	Value
Rule Sequence	40
Rule	PROOF OF PICKUP
Description	Set Transp. Status to “Loading Checked” and Send Data to TM System
Condition	Blank
Activity	ODT20_TO_POPU
True Rule	Blank
False Rule	Blank

Field	Value
Rule Sequence	50
Rule	LOADING DEPARTURE
Description	Set Transp. Status to “In Transit” and Send Data to TM System
Condition	Blank
Activity	DIT_ODT20_TO_DEPRT_L
True Rule	Blank
False Rule	Blank

Field	Value

Field	Value
Rule Sequence	60
Rule	UNLOADING ARRIVAL
Description	Set Transp. Status to “Arrived” and Send Data to TM System
Condition	Blank
Activity	DIT_ODT20_TO_ARRIV_U
True Rule	Blank
False Rule	Blank

Field	Value
Rule Sequence	70
Rule	UNLOADING BEGIN
Description	Set Transp. Status to “Unloading Started” and Send Data to TM System
Condition	Blank
Activity	ODT20_TO_UNLOAD_BEG
True Rule	Blank
False Rule	Blank

Field	Value
Rule Sequence	80
Rule	UNLOADING END
Description	Set Transp. Status to “Unloaded” and Send Data to TM System
Condition	Blank
Activity	ODT20_TO_UNLOAD_END
True Rule	Blank
False Rule	Blank

Field	Value
Rule Sequence	90
Rule	POD

Field	Value
Description	Set Transp. Status to “Completely Delivered” and Send Data to TM System
Condition	Blank
Activity	ODT20_TO_POD
True Rule	Blank
False Rule	Blank

Field	Value
Rule Sequence	100
Rule	UNLOADING DEPARTURE
Description	Set Transp. Status to “In Transit” and Send Data to TM System
Condition	Blank
Activity	DIT_ODT20_TO_DEPRT_U
True Rule	Blank
False Rule	Blank

Field	Value
Rule Sequence	110
Rule	SEND ALERT DELAY
Description	Send Alert Delay
Condition	Blank
Activity	ODT20_TO_DELAY
True Rule	Blank
False Rule	Blank

Field	Value
Rule Sequence	120
Rule	CANCEL
Description	Cancel Freight Order
Condition	Blank

Field	Value
Activity	ODT20_TO_CANCEL
True Rule	Blank
False Rule	Blank

Field	Value
Rule Sequence	130
Rule	BLOCK
Description	Block for Execution
Condition	Blank
Activity	ODT20_TO_BLOCK
True Rule	Blank
False *Rule*	Blank

Field	Value
Rule Sequence	140
Rule	UNBLOCK
Description	Unblock for Execution
Condition	Blank
Activity	ODT20_TO_UNBLOCK
True Rule	Blank
False Rule	Blank

12. Choose the *Rule Sets* view from the dialog structure.
13. Choose *Copy As...* or press `F6`.
14. Create an entry with the following data:

Field	Value
Rule Set	DIT_ODT20_FU
Description	TM-DIT: Freight Unit for Transportation Execution Visibility Process

15. Choose *Copy All* to copy the dependent entries.
16. Choose *Enter* to continue.

Defining Alert Framework Integration with SAP EM

In this Customizing activity, you define the condition for determining event handlers.

Procedure

1. In Customizing for SAP EM, choose *Reactions to Event Messages* →*Define Alert Framework Connection* →*Define Alert Framework Integration to SAP Event Management* .
2. Choose the *Assign Alert Categories* view from the dialog structure.
3. Create an entry with the following data:

Field	Value
Activity Parameter ID	DIT_ODT20_EE_LATE
Description	TM-DIT: Create Alert to Category DIT_ODT20_EE_LATE if Expected Event is too Late
Alert Category	DIT_ODT20_EE_LATE
Communication Method	INT (Internet E-mail Address)
Communication Data	RESP_EMAIL_ADDR

4. Select your new entry and choose the *Map Event Management Parameters* view from the dialog structure.
5. Create entries with the following data:

Container Element	EM Attribute ID	Leading Zeros Indicator
FREIGHT_ORDER_ID	CNTR_ODT20_FREIGHT_ORDER_ID	Selected
TSP_INT	SYST_ODT20_TSP_INT	Deselected
EV_MSG_DATE	EVENT MSG TRANSMISSION DATE	Deselected
EV_MSG_TIME	EVENT MSG TRANSMISSION TIME	Deselected
EV_MSG_TIMEZONE	EVENT MSG TRANSMISSION TIMEZONE	Deselected
EV_REP_DATE	EVENT REPORTING DATE	Deselected
EV_REP_TIME	EVENT REPORTING TIME	Deselected
EV_REP_TIMEZONE	EVENT REPORTING TIMEZONE	Deselected

Container Element	EM Attribute ID	Leading Zeros Indicator
EV_REP_LOC_ID1	EVENT REPORTING LOCATION CODE ID1	Deselected
EV_REP_LOC_ID2	EVENT REPORTING LOCATION CODE ID2	Deselected
EV_REP_PARTNER_ID	EVENT REPORTING PARTNER CODE ID	Deselected
EV_CODE_INT	EVENT CODE (INTERNAL)	Deselected
EV_CODE_EXT	EVENT CODE (EXTERNAL)	Deselected
EV_CODE_DESC	EVENT CODE DESCRIPTION	Deselected
EV_REASON_CODE_ID	EVENT REASON CODE ID	Deselected
EV_REASON_CODE_TEXT	EVENT REASON TEXT	Deselected

Defining Alert Categories for Alert Framework

In this Customizing activity, you define the alert category with message details. A simple version of fixed user assignment is described here. Alternatively, you can use role-based user assignment or rule-based recipient assignment. To send a message by e-mail, you must configure communication settings that are not included in the scope of this guide. You must also assign an e-mail address to the user that is assigned to the alert category.

Procedure

1. In Customizing for SAP EM, choose *Reactions to Event Messages* →*Define Alert Framework Connection* →*Define Alert Categories* .
2. Choose *Change Alert Definition* to switch to edit mode.
3. Choose *Create Alert Category*.
4. In the *Properties* area, create the following entry:

Field	Value
Alert Category ID	DIT_ODT20_EE_LATE
Description	TM-DIT: Expected Events too Late
Classification	EM_ALERT
Priority	2 (High)
Maximum Number of Deliveries	9
Expiry Time in Min.	1,440

5. Choose the *Container* tab page.
6. Create container elements with the following data:

Field	Value
Container Element	EV_CODE_DESC
Name	EV_CODE_DESC
Short Description	Event Description
Data Type	Blank
ABAP Dictionary Reference	Selected
Structure	/SAPTRX/BAPI_EH_CONSOLIDATE
Field	EVENT_CONS_TEXT
Field	**Value**

Field	Value
Container Element	EV_CODE_EXT
Name	EV_CODE_EXT
Short Description	Event Code (external)
Data Type	Blank
ABAP Dictionary Reference	Selected
Structure	/SAPTRX/BAPI_EH_CONSOLIDATE
Field	EVTID

Field	Value
Container Element	EV_CODE_INT
Name	EV_CODE_INT
Short Description	Event Code (internal)
Data Type	Blank
ABAP Dictionary Reference	Selected
Structure	/SAPTRX/BAPI_EH_CONSOLIDATE
Field	EVENT_CODE

Field	Value
Container Element	EV_MSG_DATE
Name	EV_MSG_DATE
Short Description	Event Message Receipt Date
Data Type	Blank
ABAP Dictionary Reference	Selected
Structure	/SAPTRX/BAPI_EH_CONSOLIDATE
Field	MESSAGE_RECEIVED_DATE

Field	Value
Container Element	EV_MSG_TIME
Name	EV_MSG_TIME
Short Description	Event Message Receipt Time

Field	Value
Data Type	Blank
ABAP Dictionary Reference	Selected
Structure	/SAPTRX/BAPI_EH_CONSOLIDATE
Field	MESSAGE_RECEIVED_TIME

Field	Value
Container Element	EV_MSG_TIMEZONE
Name	EV_MSG_TIMEZONE
Short Description	Event Message Receipt Time Zone
Data Type	Blank
ABAP Dictionary *Reference*	Selected
Structure	/SAPTRX/BAPI_EH_CONSOLIDATE
Field	MESSAGE_RECEIVED_TIMEZONE

Field	Value
Container Element	EV_REASON_CODE_ID
Name	EV_REASON_CODE_ID
Short Description	Event Reason Code
Data Type	Blank
ABAP Dictionary Reference	Selected
Structure	/SAPTRX/BAPI_EH_CONSOLIDATE
Field	STATUS_REASON_CODE

Field	Value
Container Element	EV_REASON_CODE_TEXT
Name	EV_REASON_CODE_TEXT
Short Description	Event Reason Text
Data Type	Blank
ABAP Dictionary Reference	Selected
Structure	/SAPTRX/BAPI_EH_CONSOLIDATE

Field	Value
Field	STATUS_REASON_TEXT

Field	Value
Container Element	EV_REP_DATE
Name	EV_REP_DATE
Short Description	Event Reporting Date
Data Type	Blank
ABAP Dictionary Reference	Selected
Structure	/SAPTRX/BAPI_EH_CONSOLIDATE
Field	EVENT_REPORTED_DATE

Field	Value
Container Element	EV_REP_LOC_ID1
Name	EV_REP_LOC_ID1
Short Description	Event Reporting Location ID (Part 1)
Data Type	Blank
ABAP Dictionary Reference	Selected
Structure	/SAPTRX/BAPI_EH_CONSOLIDATE
Field	LOCATION_ID_PART1

Field	Value
Container Element	EV_REP_LOC_ID2
Name	EV_REP_LOC_ID2
Short Description	Event Reporting Location ID (Part 2)
Data Type	Blank
ABAP Dictionary Reference	Selected
Structure	/SAPTRX/BAPI_EH_CONSOLIDATE
Field	LOCATION_ID_PART2

Field	Value
Container Element	EV_REP_PARTNER_ID

Field	Value
Name	EV_REP_PARTNER_ID
Short Description	Event Reporting Partner ID
Data Type	Blank
ABAP Dictionary Reference	Selected
Structure	/SAPTRX/BAPI_EH_CONSOLIDATE
Field	REPORTING_PARTNER_ID

Field	Value
Container Element	EV_REP_TIME
Name	EV_REP_TIME
Short Description	Event Reporting Time
Data Type	Blank
ABAP Dictionary Reference	Selected
Structure	/SAPTRX/BAPI_EH_CONSOLIDATE
Field	EVENT_REPORTED_TIME

Field	Value
Container Element	EV_REP_TIMEZONE
Name	EV_REP_TIMEZONE
Short Description	Event Reporting Time Zone
Data Type	Blank
ABAP Dictionary Reference	Selected
Structure	/SAPTRX/BAPI_EH_CONSOLIDATE
Field	EVENT_REPORTED_TIMEZONE

Field	Value
Container Element	FREIGHT_ORDER_ID
Name	FREIGHT_ORDER_ID
Short Description	Freight Order
Data Type	Blank

Field	Value
ABAP Dictionary Reference	Selected
Structure	/SAPTRX/ODT20
Field	ODT20_TOR_ID
Field	**Value**
Container Element	TSP_INT
Name	TSP_INT
Short Description	Carrier ID
Data Type	Blank
ABAP Dictionary Reference	Selected
Structure	/SAPTRX/ODT20
Field	ODT20_TSP_I

14. Choose the *Long and Short Text* tab page.

15. Enter message details with the following data:

Field	Value
Message Title	`&SYST-SYSID&`(`&SYST-MANDT&`): Event `&EV_CODE_INT&` (`&EV_CODE_DESC&`) at Location `&EV_REP_LOC_ID1&` reported too late

Long Text
 	
(E-Mail, Fax)
	Carrier:
	
	`&TSP_INT&`
	
	Freight Order Number:
	
	`&FREIGHT_ORDER_ID&`
	
	Event Message Details
	
	---------- 	
	
	Event:
	
	`&EV_CODE_INT&` – `&EV_CODE_DESC&`
	
	Received at:
	
	`&EV_MSG_DATE&` `&EV_MSG_TIME&` `&EV_MSG_TIMEZONE&`
	
	Reported at:

Field	Value
	&EV_REP_DATE& &EV_REP_TIME& &EV_REP_TIMEZONE& Reported by: &EV_REP_PARTNER_ID& Location: &EV_REP_LOC_ID1& – &EV_REP_LOC_ID2& Reason: &EV_REASON_CODE_ID& – &EV_REASON_CODE_TEXT&

16. Choose *Check Expressions in Text* for the message title and long text.
17. Choose *Fixed Recipients*.
18. Assign a user to the alert category.

Defining Conditions for Event Handler Types

In this Customizing activity, you define conditions for determining event handlers.

For this scenario, a condition with logical expressions is used that is suitable for only a small number of conditions and condition expressions. For more complex scenarios, use condition functions.

Procedure

1. In Customizing for SAP EM, choose *Event Handlers and Event Handler Data* →*Event Handlers* →*Define Conditions for Event Handler Types and Event Handler Sets* .
2. Choose the *EH Type Conditions* view from the dialog structure.
3. Create an entry with the following data:

Field	Value
Condition	DIT_ODT20_TO
Description	TM-DIT: AO Type = ODT20_TO and OrgID for Transportation Execution

4. Select your new entry and choose *Condition Editor*.
5. Choose *Personal Settings for Condition Editor*.
6. Enter the following settings:

Field	Value
Display of Operands/Operators: *Display technical names*	Selected
User Interface: *Direct Text Entry* (traditional mode)	Selected
Call Mode: *Full Screen*	Selected

7. Choose *Enter* to continue.
8. Return to the condition editor.
9. Enter the following data as separate rows in the given sequence:

Parameter	Value
Expression 1	`&_SAPTRX_EH_HDR.AO_TYPE&`
Operator	=

Parameter	Value
Expression 2	ODT20_TO
And/Or	and
Expression 1	(
Expression 1	&_SAPTRX_EH_HDR.AO_SYSTEM&
Operator	=
Expression 2	Logical system of SAP TM system
And/Or	and
Expression 1	&C_EXEC_ORG_ID&
Operator	=
Expression 2	Organization ID for Transportation Execution as defined in Define Organizational Units for Transportation Planning and Execution Organization and Group [Page 30]
And/Or	Blank
Expression 1	)

10. Choose the *EH Type Conditions* view from the dialog structure.
11. Select your new condition and choose *Copy As...*
12. Create an entry with the following data:

Field	Value
Condition	DIT_ODT20_FU
Description	TM-DIT: AO Type = ODT20_FU and OrgID for Transportation Execution

13. Select your new entry and choose *Condition Editor*.
14. Enter the following data for the condition:

Parameter	Value
Expression 1	&_SAPTRX_EH_HDR.AO_TYPE&
Operator	=
Expression 2	ODT20_FU
And/Or	and

Parameter	Value
Expression 1	(
Expression 1	`&_SAPTRX_EH_HDR.AO_SYSTEM&`
Operator	=
Expression 2	Logical system of SAP TM system
And/Or	and
Expression 1	`&C_EXEC_ORG_ID&`
Operator	=
Expression 2	Organization ID for Transportation Execution as defined in Define Organizational Units for Transportation Planning and Execution Organization and Group [Page 30]
And/Or	Blank
Expression 1	)

When you enter your organizational data, enter the organizational unit ID that the system created automatically and **not** `DIT-PEORG-1`. For more information, see Defining Organizational Units for Transportation Planning and Execution Organization Group [Page 30].

Defining Profiles for Expected Events

Procedure

1. In Customizing for SAP EM, choose *Event Handlers and Event Handler Data* →*Expected Events* →*Define Profiles for Expected Events* .

2. Choose the *Update Expected Events Profile* view from the dialog structure.

3. Create the following entry:

Field	Value
Expected Event Profile	DIT_ODT20_TO
Description	TM-DIT: Transportation Execution for Freight Order

4. Select your new entry and choose the *Update Expected Profile Groups* view from the dialog structure.

5. Create the following entry:

Field	Value
Group	100
Generate	Selected
Description	All Expected Events for Freight Order – Carrier Party

6. Select your new entry and choose the *Update Profile Items* view from the dialog structure.

7. Create item 10 as follows:

    1. In the *Expected Event* screen area, enter the following data:

Field	Value
Event Code	DIT_ODT20_LOAD_ARR (Arrival at Loading Location)
Generated From	LOAD_BEGIN
Reprocess Expected Event	Selected

    2. In the *Expected Message Date* screen area, enter the following data:

Field	Value
Date Rule	5 (Relative to Event with Same Location)

Field	Value
Duration	:15
Duration Sign	+ (Add Duration)
Group Number	100
Item Number	10
Calculation Rule	3 (Expected Event Date)
Tolerance	Blank
Tolerance Rule	Blank

3. In the *Expected Event Date* screen area, enter the following data:

Field	Value
Date Rule	5 (Relative to Event with Same Location)
Duration	:01
Duration Sign	– (Subtract Duration)
Group Number	100
Item Number	20
Calculation Rule	3 (Expected Event Date)
Tolerance	Blank
Tolerance Rule	Blank

4. In the *Expected Event Requirements* screen area, enter the following data:

Field	Value
EE Requirement Type	R (Required)
Set Rule	1 (New Set)

5. In the *Expected Event Functions* screen area, select the following checkboxes leaving the respective fields blank:

    - Partner Function: Do Not Set

- Check Partner: Do Not Check
- Data Function: Do Not Set
- Check Data: Do Not Check

8. Create item 20 as follows:

    1. In the *Expected Event* screen area, enter the following data:

Field	Value
Event Code	LOAD_BEGIN (Loading Begin)
Generated From	LOAD_BEGIN
Reprocess Expected Event	Selected

    2. In the *Expected Message Date* screen area, enter the following data:

Field	Value
Date Rule	5 (Relative to Event with Same Location)
Duration	1:00
Duration Sign	+ (Add Duration)
Group Number	100
Item Number	20
Calculation Rule	3 (Expected Event Date)
Tolerance	Blank
Tolerance Rule	Blank

    3. In the *Expected Event Date* screen area, enter the following data:

Field	Value
Date Rule	1 (From Application System)
Duration	Blank
Duration Sign	Blank

Field	Value
Group Number	Blank
Item Number	Blank
Calculation Rule	3 (Expected Event Date)
Tolerance	:30
Tolerance Rule	L (Set Latest Date)

4. In the *Expected Event Requirements* screen area, enter the following data:

Field	Value
EE Requirement Type	A (Any Requirement in Set)
Set Rule	2 (Same Set)

5. In the *Expected Event Functions* screen area, select the following checkboxes leaving the respective fields blank:

   - Partner Function: Do Not Set
   - Check Partner: Do Not Check
   - Data Function: Do Not Set
   - Check Data: Do Not Check

9. Create item 30 as follows:

   1. In the *Expected Event* screen area, enter the following data:

Field	Value
Event Code	LOAD_END (Loading End)
Generated From	LOAD_END
Reprocess Expected Event	Selected

   2. In the *Expected Message Date* screen area, enter the following data:

Field	Value
Date Rule	5 (Relative to Event with Same Location)
Duration	1:00

Field	Value
Duration Sign	+ (Add Duration)
Group Number	100
Item Number	30
Calculation Rule	3 (Expected Event Date)
Tolerance	Blank
Tolerance Rule	Blank

3. In the *Expected Event Date* screen area, enter the following data:

Field	Value
Date Rule	1 (From Application System)
Duration	Blank
Duration Sign	Blank
Group Number	Blank
Item Number	Blank
Calculation Rule	3 (Expected Event Date)
Tolerance	:30
Tolerance Rule	L (Set Latest Date)

4. In the *Expected Event Requirements* screen area, enter the following data:

Field	Value
EE Requirement Type	A (Any Requirement in Set)
Set Rule	2 (Same Set)

5. In the *Expected Event Functions* screen area, select the following checkboxes leaving the respective fields blank:

   - Partner Function: Do Not Set
   - Check Partner: Do Not Check
   - Data Function: Do Not Set

- Check Data: Do Not Check

10. Create item 40 as follows:

    1. In the *Expected Event* screen area, enter the following data:

Field	Value
Event Code	POPU (Proof of Pick-Up)
Generated From	LOAD_END
Reprocess Expected Event	Selected

    2. In the *Expected Message Date* screen area, enter the following data:

Field	Value
Date Rule	5 (Relative to Event with Same Location)
Duration	0:15
Duration Sign	+ (Add Duration)
Group Number	100
Item Number	40
Calculation Rule	3 (Expected Event Date)
Tolerance	Blank
Tolerance Rule	Blank

    3. In the *Expected Event Date* screen area, enter the following data:

Field	Value
Date Rule	5 (Relative to Event with Same Location)
Duration	:01
Duration Sign	+ (Add Duration)
Group Number	100
Item Number	30

Field	Value
Calculation Rule	3 (Expected Event Date)
Tolerance	Blank
Tolerance Rule	Blank

4. In the *Expected Event Requirements* screen area, enter the following data:

Field	Value
EE Requirement Type	R (Required)
Set Rule	2 (Same Set)

5. In the *Expected Event Functions* screen area, select the following checkboxes leaving the respective fields blank:
   - Partner Function: Do Not Set
   - Check Partner: Do Not Check
   - Data Function: Do Not Set
   - Check Data: Do Not Check

11. Create item 50 as follows:

1. In the *Expected Event* screen area, enter the following data:

Field	Value
Event Code	DIT_ODT20_LOAD_DEP (Departure from Loading Location)
Generated From	LOAD_END
Reprocess Expected Event	Selected

2. In the *Expected Message Date* screen area, enter the following data:

Field	Value
Date Rule	5 (Relative to Event with Same Location)
Duration	1:00
Duration Sign	+ (Add Duration)

Field	Value
Group Number	100
Item Number	50
Calculation Rule	3 (Expected Event Date)
Tolerance	Blank
Tolerance Rule	Blank

3. In the *Expected Event Date* screen area, enter the following data:

Field	Value
Date Rule	5 (Relative to Event with Same Location)
Duration	:01
Duration Sign	+ (Add Duration)
Group Number	100
Item Number	40
Calculation Rule	3 (Expected Event Date)
Tolerance	:30
Tolerance Rule	L (Set Latest Date)

4. In the *Expected Event Requirements* screen area, enter the following data:

Field	Value
EE Requirement Type	A (Any in Requirement Set)
Set Rule	2 (Same Set)

5. In the *Expected Event Functions* screen area, select the following checkboxes leaving the respective fields blank:

   - Partner Function: Do Not Set
   - Check Partner: Do Not Check
   - Data Function: Do Not Set
   - Check Data: Do Not Check

12. Create item 60 as follows:

1. In the *Expected Event* screen area, enter the following data:

Field	Value
Event Code	DIT_ODT20_UNLOAD_ARR (Arrival at Unloading Location)
Generated From	UNLOAD_BEGIN
Reprocess Expected Event	Selected

2. In the *Expected Message Date* screen area, enter the following data:

Field	Value
Date Rule	5 (Relative to Event with Same Location)
Duration	1:00
Duration Sign	+ (Add Duration)
Group Number	100
Item Number	60
Calculation Rule	3 (Expected Event Date)
Tolerance	Blank
Tolerance Rule	Blank

3. In the *Expected Event Date* screen area, enter the following data:

Field	Value
Date Rule	5 (Relative to Event with Same Location)
Duration	:01
Duration Sign	– (Subtract Duration)
Group Number	100
Item Number	70
Calculation Rule	3 (Expected Event Date)

Field	Value
Tolerance	Blank
Tolerance Rule	Blank

4. In the *Expected Event Requirements* screen area, enter the following data:

Field	Value
EE Requirement Type	R (Required)
Set Rule	1 (New Set)

5. In the *Expected Event Functions* screen area, select the following checkboxes leaving the respective fields blank:

   - Partner Function: Do Not Set
   - Check Partner: Do Not Check
   - Data Function: Do Not Set
   - Check Data: Do Not Check

13. Create item 70 as follows:

1. In the *Expected Event* screen area, enter the following data:

Field	Value
Event Code	UNLOAD_BEGIN (Unloading Begin)
Generated From	UNLOAD_BEGIN
Reprocess Expected Event	Selected

2. In the *Expected Message Date* screen area, enter the following data:

Field	Value
Date Rule	5 (Relative to Event w/ Same Location)
Duration	1:00
Duration Sign	+ (Add Duration)
Group Number	100
Item Number	70

Field	Value
Calculation Rule	3 (Expected Event Date)
Tolerance	Blank
Tolerance Rule	Blank

3. In the *Expected Event Date* screen area, enter the following data:

Field	Value
Date Rule	1 (From Application System)
Duration	Blank
Duration Sign	Blank
Group Number	Blank
Item Number	Blank
Calculation Rule	3 (Expected Event Date)
Tolerance	:30
Tolerance Rule	L (Set Latest Date)

4. In the *Expected Event Requirements* screen area, enter the following data:

Field	Value
EE Requirement Type	A (Any in Requirement Set)
Set Rule	2 (Same Set)

5. In the *Expected Event Functions* screen area, select the following checkboxes leaving the respective fields blank:

    - Partner Function: Do Not Set
    - Check Partner: Do Not Check
    - Data Function: Do Not Set
    - Check Data: Do Not Check

14. Create item 80 as follows:

    1. In the *Expected Event* screen area, enter the following data:

Field	Value
Event Code	UNLOAD_END (Unloading End)
Generated From	UNLOAD_END
Reprocess Expected Event	Selected

2. In the *Expected Message Date* screen area, enter the following data:

Field	Value
Date Rule	5 (Relative to Event with Same Location)
Duration	1:00
Duration Sign	+ (Add Duration)
Group Number	100
Item Number	80
Calculation Rule	3 (Expected Event Date)
Tolerance	Blank
Tolerance Rule	Blank

3. In the *Expected Event Date* screen area, enter the following data:

Field	Value
Date Rule	1 (From Application System)
Duration	Blank
Duration Sign	Blank
Group Number	Blank
Item Number	Blank
Calculation Rule	3 (Expected Event Date)
Tolerance	:30

Field	Value
Tolerance Rule	L (Set Latest Date)

4. In the *Expected Event Requirements* screen area, enter the following data:

Field	Value
EE Requirement Type	A (Any in Requirement Set)
Set Rule	2 (Same Set)

5. In the *Expected Event Functions* screen area, select the following checkboxes leaving the respective fields blank:
    - Partner Function: Do Not Set
    - Check Partner: Do Not Check
    - Data Function: Do Not Set
    - Check Data: Do Not Check

15. Create item 90 as follows:

1. In the *Expected Event* screen area, enter the following data:

Field	Value
Event Code	POD Proof of Delivery
Generated *From*	UNLOAD_END
Reprocess Expected Event	Selected

2. In the *Expected Message Date* screen area, enter the following data:

Field	Value
Date Rule	5 (Relative to Event with Same Location)
Duration	1:00
Duration Sign	+ (Add Duration)
Group Number	100
Item Number	90
Calculation Rule	3

Field	Value
	(Expected Event Date)
Tolerance	Blank
Tolerance Rule	Blank

3. In the *Expected Event Date* screen area, enter the following data:

Field	Value
Date Rule	5 (Relative to Event with Same Location)
Duration	:01
Duration Sign	+ (Add Duration)
Group Number	100
Item Number	80
Calculation Rule	3 (Expected Event Date)
Tolerance	Blank
Tolerance Rule	Blank

4. In the *Expected Event Requirements* screen area, enter the following data:

Field	Value
EE Requirement Type	A (Any in Requirement Set)
Set Rule	2 (Same Set)

5. In the *Expected Event Functions* screen area, select the following checkboxes leaving the respective fields blank:

   - Partner Function: Do Not Set
   - Check Partner: Do Not Check
   - Data Function: Do Not Set
   - Check Data: Do Not Check

16. Create item 100 as follows:

    1. In the *Expected Event* screen area, enter the following data:

Field	Value

Field	Value
Event Code	DIT_ODT20_UNLOAD_DEP Departure from Unloading Location
Generated From	UNLOAD_END
Reprocess Expected Event	Selected

2. In the *Expected Message Date* screen area, enter the following data:

Field	Value
Date Rule	5 (Relative to Event with Same Location)
Duration	1:00
Duration Sign	+ (Add Duration)
Group Number	100
Item Number	100
Calculation Rule	3 (Expected Event Date)
Tolerance	Blank
Tolerance Rule	Blank

3. In the *Expected Event Date* screen area, enter the following data:

Field	Value
Date Rule	5 (Relative to Event with Same Location)
Duration	:01
Duration Sign	+ (Add Duration)
Group Number	100
Item Number	90
Calculation Rule	3 (Expected Event Date)
Tolerance	:30

Field	Value
Tolerance Rule	L (Set Latest Date)

4. In the *Expected Event Requirements* screen area, enter the following data:

Field	Value
EE Requirement Type	A (Any in Requirement Set)
Set Rule	2 (Same Set)

5. In the *Expected Event Functions* screen area, select the following checkboxes leaving the respective fields blank:
    - Partner Function: Do Not Set
    - Check Partner: Do Not Check
    - Data Function: Do Not Set
    - Check Data: Do Not Check

17. Choose the *Update Expected Events Profile* view from the dialog structure.
18. Select your new expected events profile and choose *Copy As...*
19. Create an entry with the following data:

Field	Value
Expected Event Profile	DIT_ODT20_FU
Description	TM-DIT: Transportation Execution for Freight Unit

20. Choose *Copy All* to copy the dependent entries.
21. Choose *Enter* to continue.

Defining Event Handler Types

Procedure

1. In Customizing for SAP EM, choose *Event Handlers and Event Handler Data* →*Event Handlers* →*Define Event Handler Types* .
2. Choose the *Event Handler Types* view from the dialog structure.
3. Check that event handler type `ODT20_TO` exists.
4. Select the entry and choose *Details*.
5. Check that the priority is set to 2 (or higher) and change the priority if necessary.
6. Choose *Copy as…* to create a new event handler type based on the existing one.
7. Enter the following data for the new event handler type:

Field	Value
Event Handler Type	DIT_ODT20_TO
Description	TM-DIT: Freight Order for Transportation Execution Visibility Process
Priority	1
Condition	DIT_ODT20_TO
Rule Set	DIT_ODT20_TO
EE Profile	DIT_ODT20_TO

8. Choose *Enter* to continue.
9. When prompted to specify the objects to be copied, choose *Copy All*.
10. Confirm the information message about the number of copied entries.
11. Select the new event handler type and choose *Unexpected Event Codes* from the dialog structure.
12. Check that the following entries exist:

Internal Event Code	Description
BLOCK_FOR_EXEC	Block for Execution
CANCEL	Cancel
DELAYED	Unplanned Event – Delay
UNBLOCK_FOR_EXEC	Unblock for Execution

13. Choose the *Event Handler Types* view from the dialog structure.

14. Select your new event handler type and choose *Copy As...*

15. Create an entry with the following data:

Field	Value
Event Handler Type	DIT_ODT20_FU
Description	TM-DIT: Freight Unit for Transportation Execution Visibility Process
Condition	DIT_ODT20_FU
Rule Set	DIT_ODT20_FU
EE Profile	DIT_ODT20_FU

Configuring Settings for User and User Interface

Activities

Defining Authorization Profiles

Procedure

1. In Customizing for SAP EM, choose *Authorizations and Filters* →*Define Authorization Profiles*.
2. Choose the *Authorization Parameter Sets* view from the dialog structure.
3. Create the following entry:

Field	Value
Parameter Set	DIT_ODT20_CARRIER
Description	TM-DIT: Authorization Parameter for Carriers

4. Select your new entry and choose the subordinate view *Authorization Parameters* from the dialog structure.
5. Create an entry with the following data:

Field	Value
Parameter	ODT20_TSP_INT
Parameter Type	S (System Parameter)
Check Logic	- (Check If Authorization Exists for All Values (AND))

6. Choose the *Authorization Profiles* view from the dialog structure.
7. Create the following entry:

Field	Value
Authorization Profile ID	DIT_ODT20_CARRIER
Description	TM-DIT: Authorization Profile for Carriers

8. Select your new entry and choose the subordinate view *Authorization Profile Parameter Sets* from the dialog structure.
9. Create an entry with the following data:

Field	Value
Authorization Group No.	10
Set ID	DIT_ODT20_CARRIER

Assigning Authorization Profiles to Users

This document does not explain how to create users. The following procedure assumes that there is one user for each carrier to report events.

For information about defining and assigning user roles, see SAP Library for SAP Event Management under *SAP Event Management* →*Administration* →*Roles for SAP Event Management* →*SAP Event Management User*.

Procedure

1. On the *SAP Easy Access* menu in SAP EM, choose *Tools* →*Administration* →*User Maintenance* →*Role Administration* →*Roles*
2. In the *Role* field, enter `DIT_CARRIER_CR10`.
3. Choose *Create Single Role*.
4. In the *Description* field, enter `TM-DIT: Authorization for Carrier DIT-CR-10`.
5. Save your entries.
6. Choose the *Menu* tab page and choose *Transaction*.
7. In the *Assign Transactions* dialog box, enter transaction code `/SAPTRX/EM_START`.
8. Choose *Assign Transactions*.
9. In the *Node Details* screen area, change the entry in the *Text* field to `Web Interface – Search`.
10. Save your entries.
11. Select the *Authorizations* tab page.
12. Choose *Propose Profile Names* to automatically generate a profile name and profile text.
13. Save your entries.
14. Choose *Change Authorization Data*.
15. Choose *Manually* to manually select authorization objects.
16. Enter the authorization objects `X_EM_EH` and `X_EM_EVM`.
17. Choose *Continue*.
18. Expand the new nodes in full.
19. Enter the following data for the event handler authorizations:

Field	Value
Parameter (From)	ODT20_TSP_INT
Parameter Value of Length 255 (From)	DIT-CR-10

Field	Value
Activity	03 (Display)

20. Enter the following data for the event messages:

Field	Value
Sender Code ID (From)	*
Sender Code Set (From)	*
Activity	32 (Save)

21. Save your entries.
22. Choose *Generate* or press `SHIFT+F5`.
23. Choose *Back* to return to the *Change Roles* screen.
24. Choose the *User* tab page.
25. Enter the user ID for carrier `DIT-CR-10`.

    Save your entries.
26. Choose *Back* to return to the role maintenance screen.
27. Choose *Back* to return to the *Role Maintenance* screen.
28. Make sure that the *Role* field contains your new role and choose *Copy Role*.
29. In the *To Role* field, enter `DIT_CARRIER_CR20`.
30. Choose *Copy All*.
31. Choose *Change* to edit the new role.
32. Enter the description `TM-DIT: Authorization for Carrier DIT-CR-20`.
33. On the *Authorizations* tab page, choose *Propose Profile Name* to automatically generate a profile name and profile text.
34. Save your entries.
35. Choose *Change Authorization Data*.
36. Expand the *Manually* nodes in full.
37. Enter the following data for the event handler authorizations:

Field	Value
Parameter (From)	ODT20_TSP_INT
Parameter Value of Length 255 (From)	DIT-CR-20

Field	Value
Activity	03 (Display)

38. Save your entries.
39. Choose *Generate*.
40. Choose *Back* to return to the *Change Roles* screen.
41. Choose the *User* tab page.
42. Enter the user ID for carrier `DIT-CR-20`.
43. Save your entries.

Assigning Authorization Profiles to Event Handler Types

Procedure

1. In Customizing for SAP EM, choose *Event Management* →*Event Handlers and Event Handler Data* →*Event Handlers* →*Define Event Handler Types.* .
2. Choose the *Event Handler Types* view from the dialog structure.
3. Select entry `DIT_ODT20_TO` and choose *Details*.
4. Change the entry in the *Auth. Prof. ID* field to `DIT_ODT20_CARRIER`.

Defining Web Interface Transactions

In this Customizing activity, you define the Web interface transaction for event reporting.

Procedure

1. In Customizing for SAP EM, choose *Event Messages, Status Queries, and Web Interface →Web Interface →Define Web Interface Transactions*.

2. Create an entry with the following data:

Field	Value
Web Interface Transaction	DIT_ODT20_CARR_FO
Description for Tracking Scenario	TM-DIT: Freight Order Transportation Execution
Event Handler Set Indicator	- (No EH Sets)

Configuring Fields for User Profiles

Procedure

1. In Customizing for SAP EM, choose *Event Messages, Status Queries, and Web Interface →Web Interface →Configure Fields for User Profiles*.
2. Choose the *Build Groups of Configured Fields* view from the dialog structure.
3. Create new entries with the following data:

Field	Value
Group ID for Configured Fields	DIT_ODT20_CONSIGNEE
Configured Field Type	2 (Display)
EM Object	EH (Event Handler)
Short Description	Consignee
Long Description	Consignee
Merge Indicator	Selected
Group Separator	/
No. of Indexed Values	Blank
Event Handler Type	Blank

Field	Value
Group ID for Configured Fields	DIT_ODT20_SHIPPER
Configured Field Type	2 (Display)
EM Object	EH (Event Handler)
Short Description	Shipper
Long Description	Shipper
Merge Indicator	Selected
Group Separator	/
No. of Indexed Values	Blank
Event Handler Type	Blank

4. Choose the *Configure Fields for Display* view from the dialog structure.

5. Create new entries with the following data:

Field	Value
Configured Field	DIT_ODT20_ASD_FU_1
EM Attribute ID	CNTR_ODT20_ASSIGNED_FU
Short Description	Assigned Freight Units
Long Description	Assigned Freight Units
General Separator	Blank
Display Mode	Blank
Display Length	20
Number of Indexed Values	1
Leading Zero Indicator	Selected
Event Handler Type	Blank
Group Identifier for Configured Field	Blank
Field Order Number	Blank
Suppress Field	Blank
Drill-Down Type	E (Drill Down to another Event Handler)
Identifier Mapping Type	Blank

Field	Value
Configured Field	DIT_ODT20_ASD_FU_2
EM Attribute ID	CNTR_ODT20_ASSIGNED_FU
Short Description	Assigned Freight Units
Long Description	Assigned Freight Units
General Separator	Blank
Display Mode	Blank
Display Length	20
Number of Indexed Values	10
Leading Zero Indicator	Selected
Event Handler Type	Blank

Field	Value
Group Identifier for Configured Field	Blank
Field Order Number	Blank
Suppress Field	Blank
Drill-Down Type	E (Drill Down to another Event Handler)
Identifier Mapping Type	Blank

Field	Value
Configured Field	DIT_ODT20_CONS_INT
EM Attribute ID	SYST_ODT20_CONSIGNEE_INT
Short Description	Consignee
Long Description	Consignee
General Separator	Blank
Display Mode	Blank
Display Length	20
Number of Indexed Values	Blank
Leading Zero Indicator	Blank
Event Handler Type	Blank
Group Identifier for Configured Field	DIT_ODT20_CONSIGNEE
Field Order Number	1
Suppress Field	Blank
Drill-Down Type	Blank
Identifier Mapping Type	Blank

Field	Value
Configured Field	DIT_ODT20_CONS_DESC1
EM Attribute ID	CNTR_ODT20_CONSIGNEE_DESC
Short Description	Consignee Description
Long Description	Consignee Description

Field	Value
General Separator	Blank
Display Mode	Blank
Display Length	60
Number of Indexed Values	Blank
Leading Zero Indicator	Blank
Event Handler Type	Blank
Group Identifier for Configured Field	Blank
Field Order Number	Blank
Suppress Field	Blank
Drill-Down Type	Blank
Identifier Mapping Type	Blank

Field	Value
Configured Field	DIT_ODT20_CONS_DESC2
EM Attribute ID	CNTR_ODT20_CONSIGNEE_DESC
Short Description	Consignee Description
Long Description	Consignee Description
General Separator	Blank
Display Mode	Blank
Display Length	60
Number of Indexed Values	Blank
Leading Zero Indicator	Blank
Event Handler Type	Blank
Group Identifier for Configured Field	DIT_ODT20_CONSIGNEE
Field Order Number	2
Suppress Field	Blank
Drill-Down Type	Blank
Identifier Mapping Type	Blank

Field	Value
Configured Field	DIT_ODT20_SHIP_INT
EM Attribute ID	SYST_ODT20_SHIPPER_INT
Short Description	Shipper
Long Description	Shipper
General Separator	Blank
Display Mode	Blank
Display Length	20
Number of Indexed Values	Blank
Leading Zero Indicator	Blank
Event Handler Type	Blank
Group Identifier for Configured Field	DIT_ODT20_SHIPPER
Field Order Number	1
Suppress Field	Blank
Drill-Down Type	Blank
Identifier Mapping Type	Blank

Field	Value
Configured Field	DIT_ODT20_SHIP_DESC1
EM Attribute ID	CNTR_ODT20_SHIPPER_DESC
Short Description	Shipper Description
Long Description	Shipper Description
General Separator	Blank
Display Mode	Blank
Display Length	60
Number of Indexed Values	Blank
Leading Zero Indicator	Blank
Event Handler Type	Blank
Group Identifier for Configured Field	Blank

Field	Value
Field Order Number	Blank
Suppress Field	Blank
Drill-Down Type	Blank
Identifier Mapping Type	Blank

Field	Value
Configured Field	DIT_ODT20_SHIP_DESC2
EM Attribute ID	CNTR_ODT20_SHIPPER_DESC
Short Description	Shipper Description
Long Description	Shipper Description
General Separator	Blank
Display Mode	Blank
Display Length	60
Number of Indexed Values	Blank
Leading Zero Indicator	Blank
Event Handler Type	Blank
Group Identifier for Configured Field	DIT_ODT20_SHIPPER
Field Order Number	2
Suppress Field	Blank
Drill-Down Type	Blank
Identifier Mapping Type	Blank

9. Choose the view *Configure Fields for Selection* from the dialog structure.

10. Create a new entry with the following data:

Field	Value
Configured Field	DIT_ODT20_EH_TYPE_TO
EM Attribute ID	EVENT HANDLER TYPE
Short Description	EH Type = DIT_ODT20_TO
Long Description	Event Handler Type = DIT_ODT20_TO
General Separator	Blank

Field	Value
Display Mode	H (Hidden)
Display Length	Blank
Leading Zero Indicator	Not selected
Default Value	DIT_ODT20_TO
Minimum Value	Blank
Maximum Value	Blank
Event Handler Type	Blank
Group Identifier for Configured Field	Blank
Field Order Number	Blank
Suppress Field	Blank
Drill-Down Type	Blank
Identifier Mapping Type	Blank

If your SAP Event Management runs as an add-on of SAP Transportation Management (both systems on one server), we recommend that you remove the mandatory field for the location description. Instead of using a fixed value in the user profile, you can fill this field in the preprocessing functions.

For more information, see Customizing of *Event Management* under *Event Messages, Status Queries and Web Interface → Define Criteria for Event Message Processing*. You can retrieve the location description using function module `BAPI_LOCSRVAPS_GETLIST2`..

Defining User Profiles

Procedure

1. In Customizing for SAP EM, choose *Event Messages, Status Queries, and Web Interface →Web Interface →Define User Profiles*.

2. Choose the *Selection Profile* view from the dialog structure.

3. Create an entry with the following data:

Field	Value
Selection Profile	DIT_ODT20_CARR_FO
Description	TM-DIT: Selection of Freight Orders for Carrier

4. Select the new entry and choose the *Selection Profile Details* view from the dialog structure.

5. Create new entries with the following data:

Configured Field	Ord. Sel.	Input For.	Required Fld Ind.
ODT20_FO_ID	10	Range	Not selected
ODT20_PICKUP_DATE	20	Range	Not selected
ODT20_DELIV_DATE	30	Range	Not selected
ODT20_SHIPPER_INT	40	Single Input	Not selected
ODT20_CONSIGNEE_INT	50	Single Input	Not selected
DIT_ODT20_EH_TYPE_TO	90	Single input	Not selected
ODT20_EH_ACTIVE	91	Single input	Not selected
ODT20_TOR_CAT_TO	92	Single input	Not selected

6. Choose the *Selection Profile* view from the dialog structure.

7. Create an entry with the following data:

Field	Value
Selection Profile	DIT_ODT20_CARR_FU
Description	TM-DIT: Selection of Freight Units for Carrier

8. Select your new entry and choose the *Selection Profile Details* view from the dialog structure.

9. Create new entries with the following data:

Configured Field	Ord. Sel.	Input For.	Required Fld Ind.
ODT20_FU_ID	10	Range	Selected

10. Choose the *Display Profile* view from the dialog structure.

11. Create an entry with the following data:

Field	Value
Display Profile	DIT_ODT20_CARR_FO
Description	TM-DIT: Carrier View for Freight Orders

12. Select your new entry and choose the *Event Handler Display Details* view from the dialog structure.

13. Create new entries with the following data:

Configured Field	Display Level Ind.	Seq. Table	Seq. Det.
ODT20_CARRIER	All Screens	10	10
ODT20_FO_ID	All Screens	11	11
ODT20_TRACKING_NO	Detail Screens	Blank	12
DIT_ODT20_ASD_FU_1	Overview Screens	13	Blank
DIT_ODT20_ASD_FU_2	Detail Screens	Blank	13
ODT20_STAT_TRANSPORT	All Screens	14	14
ODT20_STAT_DELIVERY	All Screens	15	15
ODT20_SHIPPER_INT	Overview Screens	20	Blank
DIT_ODT20_SHIP_DESC1	Overview Screens	21	Blank
DIT_ODT20_SHIPPER	Detail Screens	Blank	20
ODT20_CONSIGNEE_INT	Overview Screens	22	Blank

Configured Field	Display Level Ind.	Seq. Table	Seq. Det.
DIT_ODT20_CONS_DESC1	Overview Screens	Blank	23
DIT_ODT20_CONDIGNEE	Detail Screens	Blank	22
ODT20_SOURCE_LOC_INT	Detail Screens	Blank	24
ODT20_DEST_LOC_INT	Detail Screens	Blank	26
ODT20_REQ_PICKUP_DAT	All Screens	28	28
ODT20_REQ_DELIV_DATE	All Screens	29	29
ODT20_GROSS_WEIGHT_G	Detail Screens	Blank	30
ODT20_GROSS_VOLUME_G	Detail Screens	Blank	31

14. Choose the view *Event Display Details* from the dialog structure.

15. Create entries with the following data:

Configured Field	Display Level Ind.	Seq. Table	Seq. Det.
EE_STAT_ICON	All Screens	1	1
EVT_DESC	All Screens	2	2
EXP_DATE_TIME	All Screens	3	3
REP_DATE_TIME	All Screens	4	4
EVT_REASON_TEXT	All Screens	5	5
EVT_LOCATION_ID	All Screens	6	6
EVT_LOCATION_DESC	All Screens	7	7
ODT20_CITY	All Screens	8	8
ODT20_COUNTRY	All Screens	9	9

16. Choose the *Display Profile* view from the dialog structure.

17. Create an entry with the following data:

Field	Value
Display Profile	DIT_ODT20_CARR_FU
Description	TM-DIT: Carrier View for Freight Units

18. Select your new entry and choose the *Event Handler Display Details* view from the dialog structure.

19. Create entries with the following data:

Configured Field	Display Level Ind.	Seq. Table	Seq. Det.
ODT20_FU_ID	All Screens	1	1
ODT20_FO_ID_IN_FU	All Screens	2	2
ODT20_TRACKING_NO	Detail Screens	Blank	3
ODT20_STAT_TRANSPORT	Detail Screens	Blank	4
ODT20_STAT_DELIVERY	Detail Screens	Blank	5
ODT20_SHIPPER_INT	Overview Screens	10	Blank
DIT_ODT20_SHIP_DESC1	Overview Screens	11	Blank
DIT_ODT20_SHIPPER	Detail Screens	Blank	10
ODT20_CONSIGNEE_INT	Overview Screens	12	Blank
DIT_ODT20_CONS_DESC1	Overview Screens	13	Blank
DIT_ODT20_CONSIGNEE	Detail Screens	Blank	12
ODT20_REQ_PICKUP_DAT	All Screens	14	14
ODT20_REQ_DELIV_DATE	All Screens	15	15
ODT20_GROSS_WEIGHT_G	Detail Screens	Blank	16
ODT20_GROSS_VOLUME_G	Detail Screens	Blank	16

20. Choose the *Event Display Details* view from the dialog structure.

21. Create entries with the following data:

Configured Field	Display Level Ind.	Seq. Table	Seq. Det.
EE_STAT_ICON	All Screens	1	1
EVT_DESC	All Screens	2	2
EXP_DATE_TIME	All Screens	3	3
REP_DATE_TIME	All Screens	4	4
EVT_REASON_TEXT	All Screens	5	5
EVT_LOCATION_ID	All Screens	6	6
EVT_LOCATION_DESC	All Screens	7	7
ODT20_CITY	All Screens	8	8
ODT20_COUNTRY	All Screens	9	9

22. Choose the *Event Message Profile* view from the dialog structure.

23. Create an entry with the following data:

Field	Value
Event Message Profile	DIT_ODT20_CARR_FO
Description	TM-DIT: Event Message Profile for Carrier
Confirmation of Expected Events	A (Confirmation of All Expected Events Possible)
Verify Data	Not selected
Message Class	Blank

24. Choose the *Event Reporting Items* view from the dialog structure.

25. Create an entry with the following data:

Field	Value
Internal Event Code	DIT_ODT20_LOAD_ARR
Action Order Number	1
Action Description	Arrival at Loading Loc.
Tracking ID Code Set	TOR_TEC

Field	Value
	(Tracking ID)

26. Select your new entry and choose the *Event Reporting Details* view (subordinate to the *Event Reporting Item* view) from the dialog structure.

27. Create new entries with the following data:

Configured Field	Required Fld Ind.	Ord. No.	Row Number
REP_DATE	Selected	1	Blank
REP_TIME	Selected	2	Blank
REP_TIMEZONE	Selected	3	Blank
EVT_LOCATION_ID	Selected	4	Blank
ODT20_REF_EVENT_LOC	Not selected	5	Blank
ODT20_LOC_DESC	Not selected	6	Blank
ODT20_LOC_CITY	Not selected	7	Blank
ODT20_LOC_COUNTRY	Not selected	8	Blank

28. Choose the *Event Reporting Items* view from the dialog structure.

29. Select entry `DIT_ODT20_LOAD_ARR` and choose *Copy as… (F6)*.

30. Create an entry with the following data:

Field	Value
Internal Event Code	LOAD_BEGIN
Ord. Act.	2
Action Description	Begin of Loading
Tracking ID Code Set	TOR_TEC (Tracking ID)

31. Choose *Enter* and then *Copy All* to copy dependent entries (reporting item details).

32. Repeat the above steps to add the following new event reporting items:

Internal Event Code	Ord. Act.	Action Description	Tracking ID Code Set
LOAD_BEGIN	2	Begin of Loading	TOR_TEC
LOAD_END	3	End of Loading	TOR_TEC

Internal Event Code	Ord. Act.	Action Description	Tracking ID Code Set
POPU	4	Proof of Pick-Up	TOR_TEC
DIT_ODT20_LOAD_DEP	5	Departure from Loading Loc.	TOR_TEC
DIT_ODT20_UNLOAD_ARR	6	Arrival at Unloading Loc.	TOR_TEC
UNLOAD_BEGIN	7	Begin of Unloading	TOR_TEC
UNLOAD_END	8	End of Unloading	TOR_TEC
POD	9	Proof of Delivery	TOR_TEC
DIT_ODT20_UNLOAD_DEP	10	Departure from Unloading Loc.	TOR_TEC
DELAYED	20	Delay	TOR_TEC

33. Select the `DELAYED` entry and choose the *Event Reporting Details* view (subordinate to the *Event Reporting Item*) view from the dialog structure.

34. Create additional entries with the following data:

Configured Field	Required Fld Ind.	Ord. No.	Row Number
EVT_REASON_TEXT	Selected	1	Blank
ODT20_DELAYED_EVT	Selected	1	Blank
ODT20_DELAY_DATE	Selected	1	Blank
ODT20_DELAY_TIME	Selected	1	Blank
ODT20_DELAY_TZON	Selected	1	Blank

35. Choose *User Profile* from the dialog structure.

36. Create new entries with the following data:

User Profile	Description	Event Msg Profile	Display Profile	Selection Profile
DIT_ODT20_CARR_FO	TM-DIT: Carrier User Profile for FO	DIT_ODT20_CARR_FO	DIT_ODT20_CARR_FO	DIT_ODT20_CARR_FO
DIT_ODT20_CA	TM-DIT: Carrier User Profile for	Blank	DIT_ODT20_CA	DIT_ODT20_CA

User Profile	Description	Event Msg Profile	Display Profile	Selection Profile
RR_FU	FU		RR_FU	RR_FU

Assigning User Profiles and Web Interface Transactions to Users

Procedure

1. In Customizing for SAP EM, choose *Event Messages, Status Queries, and Web Interface →Web Interface →Assign User Profiles and Web Interface Transactions to Users*.
2. Choose the *Selection Profile* view from the dialog structure.
3. In the *Determine Work Area: Entry* dialog box, enter the user ID for carrier `DIT-CR-10`.
4. Choose *Enter* to continue.
5. Create an entry with the following data:

Field	Value
Web Interface Transaction	DIT_ODT20_CARR_FO
User Profile	DIT_ODT20_CARR_FO
Web Entry Profile Order Number	1

6. In Customizing for SAP EM, choose *Event Messages, Status Queries, and Web Interface →Web Interface →Assign User Profiles and Web Interface Transactions to Users*.
7. Choose the *Selection Profile* view from the dialog structure.
8. In the *Determine Work Area: Entry* dialog box, enter the user ID for carrier `DIT-CR-20`.
9. Choose *Enter* to continue.
10. Create an entry with the following data:

Field	Value
Web Interface Transaction	DIT_ODT20_CARR_FO
User Profile	DIT_ODT20_CARR_FO
Web Entry Profile Order Number	1

Defining Links for Configured Fields

In this Customizing activity, you define the link between configured fields. The linked fields will allow you to navigate from the freight order view to the freight unit view using freight unit number.

Procedure

1. In Customizing for SAP EM, choose *Event Messages, Status Queries, and Web Interface →Web Interface →Assign Link to Configured Field*.
2. Choose the *Assign Target Configured Field* view from the dialog structure.
3. Create an entry using the following data:

Field	Value
Source Configured Field	DIT_ODT20_ASD_FU_1
User Profile	DIT_ODT20_CARR_FU
Target Configured Field	ODT20_FU_ID

4. Create another entry using the following data:

Field	Value
Source Configured Field	DIT_ODT20_ASD_FU_2
User Profile	DIT_ODT20_CARR_FU
Target Configured Field	ODT20_FU_ID

Configuring Settling Freight Orders

Activities

- Configuring Freight Settlement in SAP TM [Page 253]
- Configuring Freight Agreements [Page 255]
- Defining Mapping of Organization Units and Further Settings for Transportation Service Purchase Order [Page 258]
- Defining Master Data for Charge Management [Page 259]

Configuring Freight Settlement in SAP TM

Activities

Defining Freight Settlement Profiles [Page 254]

Defining Freight Settlement Profiles

Procedure

1. In Customizing for *Transportation Management*, choose *Settlement* →*Define Settlement Profile*.

2. Create a settlement profile with the following data:

Field	Value
Settlement Profile	DIT_SP_01
Description	DIT: Freight Settlement Profile
Data Source	01 (Planned Data)
Split/Consolidation Strategy	FSD_CREAT
Calculation Option	B (Copy All Charges)
Collective Invoice	Deselected

Configuring Freight Agreements

Activities

- Defining Freight Agreement Types [Page 256]
- Defining General Settings for Freight Agreements and Charge Mana [Page 257]

Defining Freight Agreement Types

Procedure

1. In Customizing for *Transportation Management*, choose *Master Data* →*Agreements and Service Products* →*Define Freight Agreement Settings* .

2. Choose *New Entries* to create a new entry with the following data:

Field	Value
Type	DIT6
Short Description	DIT: Freight Agreements
Default Type	Deselected
Track Changes	Selected
Multiple Parties	Deselected
FA No. Range	01
Text Schema	DEFAULT
Time Determination Type	Simple, Transit Time Only
Display Time Determination Type	Do Not Display

3. Save your entries.

Defining General Settings for Freight Agreements and Charge Management

Procedure

1. In Customizing for *Transportation Management*, choose *Basic Functions* →*Charge Calculation* →*Basic Settings for Charge Calculation* →*Define General Settings* .

2. Create an entry with the following data:

Field	Value
Organizational Unit	Organization ID for Purchasing Organization as defined in Defining Organizational Unit for Purchasing Organization and Group [Page 32]
Default Purchasing Organization	Organization ID for Purchasing Organization as defined in Defining Organizational Unit for Purchasing Organization and Group [Page 32]
Settlement Profile	DIT_SP_01
Local Currency	EUR

Defining Mapping of Organization Units and Further Settings for Transportation Service Purchase Order

Procedure

1. In Customizing for SAP ERP, choose *Integration with Other SAP Components →Transportation Management →Invoice Integration →Invoicing →Mapping of Organizational Units →Assign Organizational Units for Purchasing*.

2. Create the following entries:

Field Name	Value
Logical System	Logical system ID of your SAP TM system
TM Pur. Organization	Organization ID for purchasing organization as defined in Defining Organizational Unit for Purchasing Organization and Group [Page 32]
TM Purchasing Group	Organization ID for purchasing group as defined in Defining Organizational Unit for Purchasing Organization and Group [Page 32].
Purchasing Org.	1000
Purch. Group	P01
Plant	1200
Company Code	1000
Document Type	NB
Material Group	007

3. Save your entries.

Defining Master Data for Charge Management

Activities

- Defining Scales [Page 260]
- Defining Rate Tables [Page 264]
- Releasing Rate Tables [Page 272]
- Defining Charge Calculation Sheets [Page 273]
- Defining Freight Agreements [Page 276]
- Releasing Freight Agreements [Page 280]

Defining Scales

Procedure

1. Open SAP NetWeaver Business Client in SAP TM and choose *Master Data* →*Charge Management and Service Product Catalogs* →*Scales* →*Create Scale*.

2. Choose *Continue* to create a new scale without template.

3. On the *General Data* tab page, enter the following data:

Field	Value
Scale	DIT-SCALE-DIST-CR10
Description	DIT: Scale for distances (km) of carrier DIT-CR-10
Scale Base	DIST (Distance)
Scale Type	To-Scale (<=)
Scale Unit of Measure	KM (Kilometer)
Rounding Profile	0005 (Round Up/Down To 1.00)

4. Choose the *Items* tab page and enter the following data:

Distance	Calculation Type
50	Relative
100	Relative
150	Relative
200	Relative
250	Relative
300	Relative
350	Relative
400	Relative
450	Relative
500	Relative
550	Relative
600	Relative
650	Relative

Distance	Calculation Type
700	Relative
800	Relative
900	Relative
1,000	Relative

5. Repeat the process to create another scale using the following data.

6. On the *General Data* tab page, enter the following data:

Field	Value
Scale	DIT-SCALE-DIST-CR20
Description	DIT: Scale for distances (km) of carrier DIT-CR-20
Scale Base	DIST (= Distance)
Scale Type	To-Scale (<=)
Scale Unit of Measure	KM (Kilometer)
Rounding Profile	0005 (Round Up/Down To 1.00)

7. Choose the *Items* tab page and enter the following data:

Distance	Calculation Type
50	Relative
100	Relative
150	Relative
200	Relative
250	Relative
300	Relative
350	Relative
400	Relative
450	Relative
500	Relative
600	Relative
700	Relative

Distance	Calculation Type
800	Relative
900	Relative
1,000	Relative

8. Repeat the steps above to create another scale using the following data:

9. On the General Data tab page, enter the following data:

Field	Value
Scale	DIT-SCALE-WGHT-CR10
Description	DIT: Scale for weight of carrier DIT-CR-10
Scale Base	WEIGHT (Weight)
Scale Type	To Scale (<=)
Scale Unit of Measure	TO (Ton)
Rounding Profile	0005 (Rounding Up/Down to 1.00)

10. Choose the *Items* tab page and enter the following data:

11. Add scale items with the following data:

Weight	Calculation Type
10	Relative
15	Relative
20	Relative
30	Relative
40	Relative

12. Repeat the steps above to create another scale using the following data.

13. On the General Data tab page, enter the following data:

Field	Value
Scale	DIT-SCALE-WGHT-CR20
Description	DIT: Scale for weight of carrier DIT-CR-20
Scale Base	WEIGHT (Weight)
Scale Type	To Scale (<=)
Scale Unit of Measure	TO (Ton)

Field	Value
Rounding Profile	0005 (Rounding Up/Down to 1.00)

14. Choose the *Items* tab page and enter the following data:

Weight	Calculation Type
10	Relative
15	Relative
20	Relative
30	Relative
40	Relative

15. Repeat the steps above to create another scale using the following data.

16. On the General Data tab page, enter the following data:

Field	Value
Scale	DIT-SCALE-STOP
Description	DIT: Scale for number of stops
Scale Base	NUMBER (Number)
Scale Type	Same Scale (=)

17. Choose the Items tab page and enter the following data:

Number of Units	Calculation Type
1	Absolute
2	Absolute
3	Absolute
4	Absolute
5	Absolute
6	Absolute
7	Absolute
8	Absolute
9	Absolute

Defining Rate Tables

Procedure

1. Open SAP NetWeaver Business Client in SAP TM and choose *Master Data* →*Charge Management and Service Product Catalogs* →*Rate Tables* →*Create Rate Table Definition*.

2. Choose *Continue* to create a new rate table without template.

3. On the *General Data* tab page, enter the following data:

Field	Value
Rate Table	DIT-RATE-HAUF-CR10
Description	DIT: Rate table for FTL of carrier DIT-CR-10
Charge Usage	Service Provider
Charge Type	HAUF
Value Type	Absolute

4. Navigate to the area for scales and choose *Insert* to enter the following data. Then choose *Add Scale*.

Field	Value
Dimension	1
Reference Scale	DIT-SCALE-WGHT-CR10
Calculation Base	GROSS_WEIGHT (Gross Weight)
Minimum Value	Selected
Maximum Value	Deselected
Rel. Calc. Method	Selected
Rounding Profile	0005

5. Enter another row using the following data and then choose *Add Scale*:

Field	Value
Dimension	2
Transportation Charge Scale	DIT-SCALE-DIST-CR10
Calculation Base	ACTUAL_DIST
Minimum Value	Deselected

Field	Value
Maximum Value	Deselected
Rel. Calc. Method	Deselected
Rounding Profile	0005

6. Choose the *Dates and Values* tab page and enter the following data:

Field	Value
Valid From	Current date
Valid To	December 31, 9999
Aggregated Rate Desc.	Blank
Currency	EUR (Euro)
Rounding Profile	Blank

7. Select the validity period entered to enter the rate table values.

8. On the *Calculation Rules* tab page, enter the following data:

Field	Value
Calculation Base	GROSS_WEIGHT (Gross Weight)
Price Unit	1000
Unit of Measure	KG (Kilogram)
Rounding Profile	0007

9. Choose the *Excel Integration* tab page and choose *Download*.

10. In the *File Download* dialog box, save file `DIT-RATE-HAUF-CR10.XML.XLS` to your local drive.

11. Open the downloaded file using Microsoft Excel and confirm the warning message about the file format by choosing *Yes*.

12. Copy the rate table values below to your clipboard.

Gross Weight (TO)						
Actual Distance (KM)	Minimum	≤ 10	≤ 15	≤ 20	≤ 30	≤ 40
≤ 50	15.50	15.50	16.00	16.50	17.00	17.50
≤ 100	16.33	16.33	16.90	17.48	18.05	18.63
≤ 150	17.15	17.15	17.80	18.45	19.10	19.75

Gross Weight (TO)						
≤ 200	17.98	17.98	18.70	19.43	20.15	20.88
≤ 250	18.80	18.80	19.60	20.40	21.20	22.00
≤ 300	19.63	19.63	20.50	21.38	22.25	23.13
≤ 350	20.45	20.45	21.40	22.35	23.30	24.25
≤ 400	21.28	21.28	22.30	23.33	24.35	25.38
≤ 450	22.10	22.10	23.20	24.30	25.40	26.50
≤ 500	22.93	22.93	24.10	25.28	26.45	27.63
≤ 550	23.75	23.75	25.00	26.25	27.50	28.75
≤ 600	24.58	24.58	25.90	27.23	28.55	29.88
≤ 650	25.40	25.40	26.80	28.20	29.60	31.00
≤ 700	26.23	26.23	27.70	29.18	30.65	32.13
≤ 800	27.88	27.88	29.50	31.13	32.75	34.38
≤ 900	29.53	29.53	31.30	33.08	34.85	36.63
≤ 1,000	30.63	30.63	32.50	34.38	36.25	38.13

13. Switch to Excel, select the corresponding cells, and choose *Paste Special...*
14. In the *Paste Special* dialog box, select *Paste Values* and *Transpose*.
15. Save file `DIT-RATE-HAUF-CR10.XML.XLS` to your drive and confirm that you want to save the workbook in the given format by choosing *Yes*.
16. On the *Excel Integration* tab page, choose *Browse*.
17. Choose the XML spreadsheet that you saved to your disk.
18. On the *Excel Integration* tab page, choose *Upload* to upload the rate table values.
19. In SAP NetWeaver Business Client, choose *Master Data* →*Charge Management* →*Rate Tables* →*Create Rate Table Definition* .
20. Choose *Continue* to create a new rate table without template.
21. On the *General Data* tab page, enter the following data:

Field	Value
Rate Table	DIT-RATE-HAUF-CR20
Description	DIT: Rate table for FTL of carrier DIT-CR-20
Charge Usage	Service Provider

Field	Value
Charge Type	HAUF
Value Type	Absolute

22. Navigate to the area for scales and choose *Insert* to enter the following data. Then choose *Add Scale*.

Field	Value
Dimension	1
Reference Scale	DIT-SCALE-WGHT-CR20
Calculation Base	GROSS_WEIGHT (Gross Weight)
Minimum Value	Selected
Maximum Value	Deselected
Rel. Calc. Method	Selected
Rounding Profile	0005

23. Enter another row using the following data and then choose *Add Scale*:

Field	Value
Dimension	2
Reference Scale	DIT-SCALE-DIST-CR20
Calculation Base	ACTUAL_DIST
Minimum Value	Deselected
Maximum Value	Deselected
Rel. Calc. Method	Deselected
Rounding Profile	0005

24. Choose the *Dates and Values* tab page and enter the following data:

Field	Value
Valid From	Current date
Valid To	December 31, 9999
Aggregated Rate Desc.	-
Currency	EUR (Euro)
Rounding Profile	-

25. Select the validity period to enter the rate table values.

26. On the *Calculation Rules* tab page, enter the following data.

Field	Value
Calculation Base	GROSS_WEIGHT (Gross Weight)
Price Unit	1000
Unit of Measure	KG (Kilogram)
Rounding Profile	0007

27. Choose the *Excel Integration* tab page and choose *Download*.

28. Open the downloaded file using Microsoft Excel and confirm the warning message about the file format by choosing *Yes*.

29. Copy the rate table values below to your clipboard.

Gross Weight (TO)						
Actual Distance (KM)	Minimum	≤ 10	≤ 15	≤ 20	≤ 30	≤ 40
≤ 50	15.50	15.50	16.00	16.50	17.00	17.50
≤ 100	16.33	16.33	16.90	17.48	18.05	18.63
≤ 150	17.15	17.15	17.80	18.45	19.10	19.75
≤ 200	17.98	17.98	18.70	19.43	20.15	20.88
≤ 250	18.80	18.80	19.60	20.40	21.20	22.00
≤ 300	19.63	19.63	20.50	21.38	22.25	23.13
≤ 350	20.45	20.45	21.40	22.35	23.30	24.25
≤ 400	21.28	21.28	22.30	23.33	24.35	25.38
≤ 450	22.10	22.10	23.20	24.30	25.40	26.50
≤ 500	22.93	22.93	24.10	25.28	26.45	27.63
≤ 600	24.58	24.58	25.90	27.23	28.55	29.88
≤ 700	26.23	26.23	27.70	29.18	30.65	32.13
≤ 800	27.88	27.88	29.50	31.13	32.75	34.38
≤ 900	29.53	29.53	31.30	33.08	34.85	36.63
≤ 1,000	30.63	30.63	32.50	34.38	36.25	38.13

30. Switch to Excel, select the corresponding cells, and choose *Paste Special...*

31. In the *Paste Special* dialog box, select *Paste Values* and *Transpose*.

32. Save file `DIT-RATE-HAUF-CR20.XML.XLS` to your drive and confirm that you want to save the workbook in the given format by choosing *Yes*.

33. On the *Excel Integration* tab page, choose *Browse*.

34. Choose the XML spreadsheet that you saved to your disk.

35. On the *Excel Integration* tab page, choose *Upload* to upload the rate table values.

36. Open SAP NetWeaver Business Client in SAP TM and choose *Master Data* →*Charge Management* →*Rate Tables* →*Create Rate Table Definition*.

37. Choose *Continue* to create a new rate table without template.

38. On the General Data tab page, enter the following data:

Field	Value
Rate Table	DIT-RATE-STOP-CR10
Description	DIT: Rate table for additional stop charges of carrier DIT-CR-10
Charge Usage	Service Provider
Charge Type	STOP
Value Type	Absolute

39. Navigate to the area for scales and choose *Insert* to enter the following data. Then choose *Add Scale*.

Field	Value
Dimension	1
Reference Scale	DIT-SCALE-STOP
Calculation Base	NUMBER_OF_STOPS (Number of Stops)
Minimum Value	Deselected
Maximum Value	Deselected
Rel. Calc. Method	Deselected
Rounding Profile	Blank

40. Choose the *Dates and Values* tab page and enter the following data:

Field	Value
Valid From	Current date
Valid To	December 31, 9999

Field	Value
Aggregated Rate Desc.	Blank
Currency	EUR (Euro)
Rounding Profile	Blank

41. Select the validity period to enter the rate table values.

42. Enter the following data in the rate table:

Number of Stops	Value
1	0.00
2	0.00
3	25.00
4	50.00
5	75.00
6	100.00
7	125.00
8	150.00
9	175.00

43. Save your entries.

44. Open SAP NetWeaver Business Client in SAP TM and choose *Master Data* →*Charge Management* →*Rate Tables* →*Create Rate Table Definition* .

45. Choose *Continue* to create a new rate table without template.

46. On the *General Data* tab page, enter the following data:

Field	Value
Rate Table	DIT-RATE-STOP-CR20
Description	DIT: Rate table for additional stop charges of carrier DIT-CR-20
Charge Usage	Service Provider
Charge Type	STOP
Value Type	Absolute

47. Navigate to the area for scales and choose *Insert* to enter the following data. Then choose *Add Scale*.

Field	Value
Dimension	1
Reference Scale	DIT-SCALE-STOP
Calculation Base	NUMBER_OF_STOPS (Number of Stops)
Minimum Value	Deselected
Maximum Value	Deselected
Rel. Calc. Method	Deselected
Rounding Profile	Blank

48. Choose the *Dates and Values* tab page and enter the following data:

Field	Value
Valid From	Current date
Valid To	December 31, 9999
Aggregated Rate Desc.	Blank
Currency	EUR (Euro)
Rounding Profile	Blank

49. Select the validity period entered to enter the rate table values.

50. Enter the following data in the rate table:

Number of Stops	Value
1	0.00
2	0.00
3	0.00
4	30.00
5	60.00
6	90.00
7	120.00
8	150.00
9	180.00

51. Save your entries.

Releasing Rate Tables

Procedure

1. In SAP TM, open *SAP NetWeaver Business Client* and choose *Master Data* →*Charge Management and Service Product Catalogs* →*Rate Tables* →*Edit Rate Table Definition* .
2. On the initial screen, enter the rate table `DIT-RATE-HAUF-CR10`.
3. Choose *Continue*.
4. Choose the *Dates and Values* tab page.
5. Select the maintained validity period.
6. Choose *Release*.
7. Save your data.
8. Repeat the process for the following rate tables:
   - `DIT-RATE-HAUF-CR20`.
   - `DIT-RATE-STOP-CR10`.
   - `DIT-RATE-STOP-CR20`.

Defining Charge Calculation Sheets

Procedure

1. In SAP TM, open *SAP NetWeaver Business Client* and choose *Master Data* →*Charge Management and Service Product Catalogs* →*Calculation Sheets* →*Create Calculation Sheet*.
2. Choose *Continue* to create a new calculation sheet without a template.
3. On the *General Data* screen, enter the following data:

Field	Value
Calculation Sheet	DIT-TCCS-CR10
Description	DIT: Calculation Sheet of carrier DIT-CR-10
Charge Usage	Service Provider

4. In the *Items* screen area, select the first row (line 10).
5. Choose *Insert* to add a new item that is subordinate to the first item.
6. Enter the following data for the new item:

Field	Value
Line No.	20
Instruction Type (on the *Basic Data* tab page)	Standard
Charge Type (on the *Basic Data* tab page)	HAUF
Mandatory (on the *Basic Data* tab page)	No
Crcy (Currency) (on the *Rate* tab page)	EUR
Suppress Zero Values (on the *Rate* tab page)	Deselected

7. In the *Items* screen area, select the new row (line 20).
8. On the *Basic Data* tab page, select the *Calculation Resolution Base* checkbox.
9. Choose the *Rate* tab page and enter rate table `DIT-RATE-HAUF-CR10`.
10. In the *Items* screen area, select the first row in the table (line 10).
11. Choose *Insert* to add an item that is subordinate to the first item.
12. Enter the following data for the new item:

Field	Value
Line No.	30

Field	Value
Instruction Type (on the *Basic Data* tab page)	Standard
Charge Type (on the *Basic Data* tab page)	STOP
Mandatory (on the *Basic Data* tab page)	No
Crcy (Currency) (on the *Rate* tab page)	EUR
Suppress Zero Values (on the *Rate* tab page)	Selected

13. In the *Items* screen area, select the new row (line 30).
14. On the *Basic Data* tab page, blank the *Calculation Resolution Base* field.
15. Choose the *Rate* tab page and enter rate table `DIT-RATE-STOP-CR10`.
16. Save your entries.
17. In SAP TM, open *SAP NetWeaver Business Client* and choose *Master Data* →*Charge Management and Service Product Catalogs* →*Calculation Sheets* →*Create Calculation Sheet*.
18. Choose *Continue* to create a new calculation sheet without a template.
19. On the *General Data* tab page, enter the following data:

Field	Value
Calculation Sheet	DIT-TCCS-CR20
Description	DIT: Calculation Sheet of carrier DIT-CR-20
Charge Usage	Service Provider

20. In the *Items* screen area, select the first row (line 10).
21. Choose *Insert* to add a new item that is subordinate to the first item.
22. Enter the following data for the new item:

Field	Value
Line No.	20
Instruction Type (on the *Basic Data* tab page)	Standard
Charge Type (on the *Basic Data* tab page)	HAUF
Mandatory (on the *Basic Data* tab page)	No
Crcy (Currency) (on the *Rate* tab page)	EUR
Suppress Zero Values (on the *Rate* tab page)	Selected

23. In the *Items* screen area, select the new row (line 20).

24. On the *Basic Data* tab page, deselect the *Calculation Resolution Base* checkbox.
25. Choose the *Rate* tab page and enter rate table `DIT-RATE-HAUF-CR20`.
26. In the *Items* screen area, select the first row (line 10).
27. Choose *Insert* to add a new item that is subordinate to the first item.
28. Enter the following data for the new item:

Field	Value
Line No.	30
Instruction Type (on the *Basic Data* tab page)	Standard
Charge Type (on the *Basic Data* tab page)	STOP
Mandatory (on the *Basic Data* tab page)	No
Crcy (Currency) (on the *Rate* tab page)	EUR
Suppress Zero Values (on the *Rate* tab page)	Selected

29. In the *Items* screen area, select the new row (line 30).
30. On the *Basic Data* tab page, deselect the *Calculation Resolution Base* checkbox.
31. Choose the *Rate* tab page and enter rate table `DIT-RATE-STOP-CR20`.
32. Save your entries.

Defining Freight Agreements

Procedure

1. Open SAP NetWeaver Business Client in SAP TM and choose *Master Data* →*Charge Management and Service Product Catalogs* →*Freight Agreements* →*Create Freight Agreement*.

2. On the initial screen, enter the agreement type `DIT6`.

3. Choose *Continue*.

4. On the *General Data* screen, enter the following data:

Field	Value
Agreement	DIT-FA-CR10
Description	DIT: FA with carrier DIT-CR-10
Purchase Organization	Organization ID for Purchasing Organization as defined in Defining Organizational Unit for Purchasing Organization and Group [Page 32].
Carrier	DIT-CR-10
Valid From	Current date
Valid To	December 31, 9999
Agreement Priority	1
Exclusion Rule	Blank
Document Currency	EUR
Weight Profile	Blank

5. In the *Items* screen area, enter the following data (choose *Insert* →*Insert Product*):

Field	Value
Item Number	100
Description	FTL to Plant 1200
Calculation Sheet	DIT-TCCS-CR10

6. Select the *Payment Terms* tab page and enter terms of payment `0001`.

7. Select the *Preconditions* tab page and enter the following data:

Field	Value
Orientation	From

Field	Value
Source Type	Zone
Source	DIT-PC-CR10
Means of Transport	Blank
Transportation Mode	01 (Road)
Orientation	To
Destination Type	Zone
Destination	DIT-PL-1200
Means of Transport	Blank
Transportation Mode	01 (Road)

8. Open SAP NetWeaver Business Client in SAP TM and choose *Master Data* →*Charge Management and Service Product Catalogs* →*Freight Agreements* →*Create Freight Agreement*.

9. On the initial screen, enter the agreement type `DIT6`.

10. Choose *Continue*.

11. On the *General Data* screen, enter the following data:

Field	Value
Agreement	DIT-FA-CR20
Description	DIT: FA with carrier DIT-CR-20
Purchase Organization	Organization ID for Purchasing Organization as defined in Defining Organizational Unit for Purchasing Organization and Group [Page 32]
Carrier	DIT-CR-20
Valid From	Current date
Valid To	December 31, 9999
Agreement Priority	1
Exclusion Rule	Blank
Document Currency	EUR
Weight Profile	Blank

12. In the *Items* screen area, enter the following data (choose *Insert* →*Insert Product*):

Field	Value

Field	Value
Item Number	100
Description	FTL to Plant 1200
Calculation Sheet	DIT-TCCS-CR20

13. Select the *Payment Terms* tab page and enter the terms of payment `0001`.

14. Select the *Preconditions* tab page and enter the following data:

Field	Value
Orientation	From
Source Type	Zone
Source	DIT-PC-CR20
Means of Transport	Blank
Transportation Mode	01 (Road)
Orientation	To
Destination Type	Zone
Destination	DIT-PL-1200
Means of Transport	Blank
Transportation Mode	01 (Road)

15. In the *Items* screen area, enter the following data (choose *Insert* →*Insert Product*):

Field	Value
Item Number	200
Description	FTL to Plant 1400
Calculation Sheet	DIT-TCCS-CR20

16. Select the *Payment Terms* tab page and enter the terms of payment `0001`.

17. Select the *Preconditions* tab page and enter the following data:

Field	Value
Orientation	From
Source Type	Zone
Source	DIT-PC-CR20
Means of Transport	Blank

Field	Value
Transportation Mode	01 (Road)
Orientation	To
Destination Type	Zone
Destination	DIT-PL-1400
Means of Transport	Blank
Transportation Mode	01 (Road)

Releasing Freight Agreements

Procedure

1. In SAP TM, open *SAP NetWeaver Business Client* and choose *Master Data* →*Charge Management and Service Product Catalogs* →*Freight Agreements* →*Edit Freight Agreement*.
2. On the initial screen, enter freight agreement `DIT-FA-CR10`.
3. Choose *Continue*.
4. Choose *Set Status* →*Released*.
5. Save your entries.
6. Repeat the process for freight agreement `DIT-FA-CR20`.

Verifying Logistics Invoices Online

Activities

Defining Master Data for Invoice Verification [Page 282]

Defining Master Data for Invoice Verification

Activities

Maintaining Vendor Master (Carrier Company) for Invoice Verification [Page 283]

Maintaining Vendor Master (Carrier Company) for Invoice Verification

Procedure

1. On the *SAP Easy Access* screen in SAP ERP, choose *Logistics* →*Materials Management* →*Purchasing* →*Master Data* →*Vendor* →*Central* →*Change*.

2. On the initial screen, enter the following data:

Field	Value
Vendor	DIT-CR-10
Company Code	1000
Purch. Organization	Blank

3. In the *Company Code Data* screen area, select the *Payment Transactions* checkbox.

4. Choose *Enter* to continue.

5. On the *Payment Transactions Accounting* screen, select the *Chk. double inv.* checkbox.

6. In the *Invoice Verification* screen area, enter `515` in the *Tolerance Group* field.

Processing Evaluated Receipt Settlements (ERS) in ERP

Activities

Defining Master Data for Evaluated Receipt Settlements [Page 285]

Defining Master Data for Evaluated Receipt Settlement

Activities

- Maintaining Vendor Master (Carrier) for Evaluated Receipt Settlements [Page 286]
- Maintaining Condition Records for Processing Credit Memo Message Output in Evaluated Receipt Settlement (ERS) [Page 287]
- Maintaining EDI Partner Profiles for Credit Memo Message Output in Evaluated Receipt Settlement [Page 288]

Maintaining Vendor Master (Carrier) for Evaluated Receipt Settlement

Procedure

1. On the *SAP Easy Access* screen in SAP ERP, choose *Logistics* →*Materials Management* →*Purchasing* →*Master Data* →*Vendor* →*Purchasing* →*Change (Current)* .

2. On the initial screen, enter the following data:

Field	Value
Vendor	DIT-CR-20
Purchasing Organization	1000

3. In the *Purchasing Organization Data* screen area, select the *Purchasing Data* checkbox.

4. Choose *Enter* to switch to the *Purchasing Data* screen.

5. In the *Control Data* screen area, select the *AutoEvalGRSetmt Del.* checkbox (evaluated receipt settlement).

Maintaining Condition Records for Processing Credit Memo Message Output in Evaluated Receipt Settlement (ERS)

Procedure

1. In Customizing for SAP ERP, choose *Materials Management* →*Logistics Invoice Verification* →*Message Determination* →*Maintain Conditions* .
2. Choose the *Create Condition: Invoice Verification* activity.
3. On the initial screen, enter output type `ERS6`.
4. Choose *Enter* to continue.
5. In the *Key Combination* dialog box, choose *CoCode, Vendor*.
6. Choose *Enter* to continue.
7. Enter company code `1000` and choose *Execute*.
8. On the next screen, enter the following data:

Field	Value
Vendor	DIT-CR-20
Partner Function	VN
Medium	6 (EDI)
Date/Time	4 (Send Immediately (saving the application))
Language	EN

Maintaining EDI Partner Profiles for Credit Memo Message Output in Evaluated Receipt Settlement

Procedure

1. On the *SAP Easy Access* menu in SAP ERP, choose *Tools* →*ALE* →*ALE Administration* →*Runtime Settings* →*Partner Profiles*.

2. Choose *Create* to create a new partner profile.

3. Enter the following data:

Field	Value
Partner Number	DIT-CR-20
Partner Type	LI (Vendor)

4. Select the *Post Processing: Permitted Agent* tab page and enter the following data:

Field	Value
Type	US (User)
Agent	Your user ID
Language	EN

5. In the *Output Parameters* screen area, choose *Create Outbound Parameter*.

6. On the *Partner Profile: Output Parameters* screen, enter the following data (if the *Insert* pushbutton is disabled, save the document):

   General Data

Field	Value
Partner Role	VN (Vendor)
Message Type	GSVERF

7. On the *Outbound Options* tab page, enter the following data:

Field	Value
Receiver Port	<Defined receiver port> as defined in *IDoc Interface/Electronic Data Interchange*
Transfer IDOC Immed.	Selected
Basic Type	GSVERF03

8. Choose *Enter* to continue.

9. Check that the package size has automatically been entered as 1. If not, enter this value.

10. Choose the *Message Control* tab page.

11. Choose *Insert Row* and enter the following data:

Field	Value
Application	MR
Message Type	ERS6
Process Code	MRRL
Change Message	Deselected