CONFIGURATION GUIDE | PUBLIC
SAP TM 9.6 FPS02
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Configuration Guide for Courier Express Parcel

THE BEST RUN **SAP**

Content

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1 Configuration Guide for Courier Express Parcel

About This Document

This document describes the configuration settings for the "Courier Express Parcel (CEP)" scenario. Implement this scenario as described, and once you have verified the functionality, modify the data to suit your own environment and operating conditions.

Change History

Version	Date	Description
1.0	December 2013	Initial release
2.0	December 2014	Update for TM 9.2

Important SAP Notes

You must read the following SAP Notes before you start using this test scenario. These SAP Notes contain the most recent corrections required to test the scenario.

Make sure that you have the current version of each SAP Note, which you can find on SAP Service Marketplace at http://service.sap.com/notes.

SAP Note Number	Description
1738013	TM: Integration with ERP Enhancement Packages
1951993	Display of consolidated events not correct if one event message matches multiple expected events

2 The Scenario

Use

This document describes the configuration settings for the "Courier Express Parcel" scenario for SAP Transportation Management (SAP TM). 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:

- Enterprise structure definition 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.

> **i Note**
>
> 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 | –@ERP001 |

> **Example**
>
> Name of shipping point in SAP ERP: 1200
>
> Name of shipping point in SAP TM: SP1200@ERP001

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 *Courier Express Parcel* scenario, refer to the following guides in SAP Solution Manager under ▶ *SAP Transportation Management* ❯ *Configuration Structures* ❯ *Basic Settings for SAP TM* `<release>` ◗ :

- Integration of SAP TM with SAP ERP
- Integration of SAP TM and SAP Event Management
- Output Management Configuration Guide
- Visual Business Configuration with SAP TM

System Prerequisites

The scenario requires an ERP system to be configured for at least 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
  - Logistics invoice verification
  - Invoice document creation (ERS settlement)
  - Transfer to accounting
- FI/CO
  - The processes listed above
  - Country-specific legal requirements (such as tax calculation)

Geographic and Organizational Unit Prerequisites

This scenario is based on a transportation network in the United States with a plant and shipping point in Chicago. To use the transportation network as described in this guide, the plant used in the customer system should be located in the same area.

The following organizational structures and document types are used by default, and need to be adjusted to customer-specific organizational structures once the functions have been verified:

Business Object	Value
Company Code	3000
Controlling Area	2000
Plant	3100
Storage Location	0001
Shipping Point	3105

Business Object	Value
Sales Organization	3000
Distribution Channel	10
Division	00
Sales Document Type	OCEP

3 Master Data

3.1 Master Data Setup in SAP ERP

3.1.1 Defining Shipping Condition

Procedure

1. In Customizing for SAP ERP, choose ▌▶ *Logistics Execution* ❯ *Shipping* ❯ *Basic Shipping Functions* ❯ *Shipping Point and Goods Receiving Point Determination* ❯ *Define Shipping Conditions* ▐.
2. Enter the following data:

SC	Description
99	CEP

3. Save your entries.

3.1.2 Defining Sales Order Type

Procedure

1. In Customizing for SAP ERP, choose ▌▶ *Sales and Distribution* ❯ *Sales* ❯ *Sales Documents* ❯ *Sales Document Header* ❯ *Define Sales Document Types* ▌.
2. Select OR and choose *Copy As...*
3. Enter the following data:

Field	Value
Sales Document Type	**OCEP**
Description	**CEP Order**
Shipping Conditions	**99**

4. Save your entries.

3.1.3 Defining Shipping Points

Procedure

1. In Customizing for SAP ERP, choose ▌▶ *Enterprise Structure* ❯ *Definition* ❯ *Logistics Execution* ❯ *Define, Copy, Delete, Check Shipping Point* ▌.
2. Choose the *Define Shipping Point* activity.
3. Choose the *New Entries* pushbutton and enter shipping point **3105**:
4. Save your entries.

   The address maintenance dialog box appears.
5. Enter the following data:

Field	Value
Street/House Number	**W Damen Ave 2210**

Field	Value
Postal Code/City	`60608 Chicago`
Country	`US`
Region	`IL`
Time Zone	`CST`

6. Save your entries.

3.1.4 Assigning Shipping Point to Plant

Procedure

1. In Customizing for SAP ERP, choose ▣ *Enterprise Structure* ❯ *Assignment* ❯ *Logistics Execution* ❯ *Assign Shipping Point to Plant* ❳.
2. Select plant 3100 and choose the *Assign* pushbutton.
3. Select shipping point 3105 and choose *Confirm*.
4. Save your entries.

3.1.5 Defining Shipping Point Determination

Procedure

1. In Customizing for SAP ERP, choose ▣ *Logistics Execution* ❯ *Shipping* ❯ *Basic Shipping Functions* ❯ *Shipping Point and Goods Receiving Point Determination* ❯ *Assign Shipping Points* ❳.
2. Enter the following data:

Shipping Condition	Loading Group	Plant	Proposed Shipping Point
`99`	`0001`	`3100`	`3105`

3. Save your entries.

3.1.6 Assigning Shipping Point to Plant

Procedure

1. In Customizing for SAP ERP, choose ▶ *Navigation Structure* ❯ *Assignment* ❯ *Logistics Execution* ❯ *Assign Shipping Point to Plant* ❯.
2. Select plant 3100 and choose the *Assign* pushbutton.
3. Select shipping point 3105 and choose *Confirm*.
4. Save your entries.

3.1.7 Defining Customer Master Data

Procedure

1. On the *SAP Easy Access* screen for SAP ERP, choose ▶ *Logistics* ❯ *Sales and Distribution* ❯ *Master Data* ❯ *Business Partner* ❯ *Customer* ❯ *Create* ❯ *Complete* ❯ or call transaction `XD01`.
2. In the dialog box that appears, enter the following data:

Field	Value
Account group	`KUNA: General customers`
Customer	`CEP-CU-01`
Company code	`3000`
Sales organization	`3000`
Distribution channel	`10`
Division	`00`

3. Choose the *Continue* pushbutton.
4. On the *Address* tab page, enter the following information:

Field	Value
Name	**Vario Ltd**
Search term	**Vario Ltd**
Address	**S Damen Ave 2210, Chicago, IL, 60608**
Time Zone	**CST**

5. Save your entries.

    The *Create Customer: Company Code Data* screen appears.

6. On the *Account Management* tab page, enter reconciliation account **140000**.

7. Press ENTER .

    The *Create Customer: Sales Area Data* screen appears.

8. On the *Billing Documents* tab page, enter **0** for each tax classification in the *Taxes* table.

9. Remain on the *Billing Documents* tab page and enter the following data:

Field	Value
Incoterms	**FH**
Terms of Payment	**0001**
Account Assignment Group	**01**

10. Save your entries.

11. Repeat the steps above to create master data for the following customers (all other settings are the same as above):

Customer	Name	Search Term	Address	Time Zone
CEP-CU-02	**Groupon Inc**	**Groupon Inc**	**600 W Chicago Ave Ste 400, Chicago, IL 60654-2801**	**CST**
CEP-CU-03	**ServerCentral**	**ServerCentral**	**111 West Jackson Blvd, Suite 1600, Chicago, IL 60604**	**CST**

Customer	Name	Search Term	Address	Time Zone
CEP-CU-04	Trustwave Holdings	Trustwave Holdings	70 W. Madison St., Suite 1050, Chicago, IL 60602	CST

3.1.8 Updating Customer Master Data

Procedure

1. On the *SAP Easy Access* screen for SAP ERP, choose ▌▶ *Logistics* ❯ *Sales and Distribution* ❯ *Master Data* ❯ *Agreements* ❯ *Customer Material Information* ❯ *Create* ❩ or call transaction VD51.

2. Create a new entry using the following attributes.

Field	Value
Customer	CEP-CU-01
Sales Organization	3000
Distribution Channel	10

3. Press ENTER .
4. Insert material **CEP-PROD-01**, press ENTER , and choose *Info Record Details*.
5. Enter plant **3100** in the *Shipping* section.
6. Save your entries.
7. Repeat the above steps for customers CEP-CU-02 to CEP-CU-04.

3.1.9 Mapping Organizational Units

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. Choose the *New Entries* pushbutton.
3. Enter the following data:

Field	Value
Logical System	`<Logical name of the connected SAP TM system>`
TM Pur. Organization	`<Purchasing organization number> CEP-PORG-1`
TM Purchasing Group	`<Purchasing group number> CEP-PGRP-1`
Settlement Type	`001`
Purchasing Org.	`3000`
Purch. Group	`P01`
Plant	`3100`
Company Code	`3000`
Document Type	`NB`
Material Group	`007`

4. Save your entries.

3.1.10 Defining Carrier Master Data

Procedure

1. On the *SAP Easy Access* screen for SAP ERP, choose ▌ *Logistics* ❯ *Logistics Execution* ❯ *Master Data* ❯ *Partner* ❯ *Service Agent* ❯ *Create* ▌ or call transaction `XK01`.

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

Field	Value
Vendor	**CEP-CR-01**
Company Code	**3000**
Purchasing Organization	**3000**
Account Group	**0005**

3. Press `ENTER`.

4. On the address screen, enter the following data:

Field	Value
Name	**ALR Express Ltd**
Search Term	**ALR Express Ltd**
Street	**1010 Main Street**
Postal Code	**60600**
City	**Chicago**
Country	**US**
Region	**IL**
Time Zone	**CST**

5. Choose the *Next Screen* pushbutton or press `F8`.

6. On the *Accounting Information Accounting* screen, enter reconciliation account **151000** and cash management group **A1**.

7. Choose the *Next Screen* pushbutton or press `F8` until the *Purchasing Data* screen appears.

8. Enter order currency **USD** and incoterm **CFR**.

9. Select the *GR-Based Inv. Verif.* checkbox.

10. Save your entries.

11. Repeat the procedure to create carrier `CEP-CR-02` – "National Trucking" with an address of Durand Ave, Trenton, NJ 08611, United States. All other data remains as stated above.

3.1.11 Defining Products

Procedure

1. On the *SAP Easy Access* screen for SAP ERP, choose ▶ *Logistics* ❯ *Materials Management* ❯ *Material Master* ❯ *Material* ❯ *Create (General)* ❯ *Immediately* ❯ or call transaction `MM01`.

2. Enter the following data:

Field	Value
Material	`CEP-PROD-01`
Industry sector	*Mechanical engineering*
Material type	*Finished product*

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

4. On the *Org. Levels* screens, enter the following organizational levels:
   - Plant `3100`
   - Sales organization `3000`
   - Distribution channel `10`

5. On the *Basic Data 1* view, enter the following data:

Field	Value
Description	`Notebook`
Base Unit of Measure	`CAR`

Field	Value
Material Group	**002**
Gross Weight	**3**
Net Weight	**2**
Weight Unit	**LB**
Volume	**1**
Volume Unit	**FT3**

6. On the *Sales Org. Data 1* tab page, enter tax data as follows:

Country		Tax Category		Tax Classification	
US	USA	**UTXJ**	Tax Jurisdict. Code	**1**	Taxable
US	USA	**UTX2**	County Sales Tax	**1**	No Tax
US	USA	**UTX3**	City Sales Tax	**1**	No Tax

7. On the *Sales Org. Data 2* view, enter the following data:

Field	Value
Material Pricing Grp	**01**
Acct Assignment Grp	**01**
Item Category Group	**NORM**

8. On the *Sales: General/Plant Data* view, enter the following data:

Field	Value
Availability Check	**KP** – no check
Trans. Grp	**0001**
Loading Grp	**0001**

9. On the *Purchasing* view, enter material group **002**.

10. On the *Accounting 1* view, enter the following data:

Field	Value
Valuation Class	**7920**
Price Control	**S**
Standard Price	**100**

11. Save your entries.

3.1.12 Defining Packing Products

Procedure

1. On the *SAP Easy Access* screen for SAP ERP, choose ▶ *Logistics* ❭ *Materials Management* ❭ *Material Master* ❭ *Material* ❭ *Create (General)* ❭ *Immediately* ❭ or call transaction `MM01`.
2. Create materials **CEP-ALR-BOX** and **CEP-UNEXP-BOX**, and specify the industry sector *Mechanical engineering* and the material type *Packaging* (`VERP`).
3. Choose *Select View(s)* and select the following views:
   - *Basic Data 1*
   - *Sales: Sales Org. Data 1*
   - *Sales: Sales Org. Data 2*
   - *Sales: General/Plant Data*
   - *Purchasing*
   - *Accounting 1*
4. On the *Org. Levels* screens, enter the following organizational levels:
   - Plant **3100**
   - Sales organization **3000**
   - Distribution channel **10**
5. On the *Basic Data 1* tab page, enter the following information:

Field	Material CEP-ALR-BOX	Material CEP-UNEXP-BOX
Description	**ALR-BOX**	**UNEXP-BOX**
Base Unit of Measure	**EA**	**EA**
Material Group	**002**	**002**

Field	Material `CEP-ALR-BOX`	Material `CEP-UNEXP-BOX`
Gross Weight	**1**	**1**
Net Weight	**1**	**1**
Weight Unit	**LB**	**LB**
Volume	**1**	**1**
Volume Unit	**FT3**	**FT3**

6. On the *Sales: Sales Org. Data 1* view, enter tax data based on the following for both materials:

Country		Tax Category		Tax Classification	
US	USA	**UTXJ**	Tax Jurisdict. Code	**1**	Taxable
US	USA	**UTX2**	County Sales Tax	**1**	No Tax
US	USA	**UTX3**	City Sales Tax	**1**	No Tax

7. On the *Sales Org. Data 2* view, enter the following information for both materials:

Field	Value
Material Pricing Grp	**01**
Acct Assignment Grp	**01**
Item Category Group	**NORM**

8. On the *Sales: General/Plant Data* view, enter the following information for both materials:

Field	Value
Availability Check	**KP** – no check
Trans. Grp	**0001**
Loading Grp	**0001**
Packaging Material Type	**Z070**

9. On the *Purchasing* view, enter material group **002** for both materials:

10. On the *Accounting 1* view, enter the following information for both materials:

Field	Value
Valuation Class	**7900**
Price Control	**S**
Standard Price	**100**

11. Save your entries.

3.1.13 Defining Conditions

Procedure

1. On the *SAP Easy Access* screen for SAP ERP, choose ▌▶ *Logistics* ❯ *Sales and Distribution* ❯ *Master Data* ❯ *Conditions* ❯ *Select Using Condition Type* ❯ *Create* ▌ or call transaction `VK11`.
2. On the *Create Condition Records* screen, enter condition type `PR00` and choose the *Key Combination* pushbutton.
3. In the *Key Combination* dialog box, select the *Customer/material with release status* radio button and press `ENTER`.
4. On the *Create Price Condition (PR00): Fast Entry* screen, enter the following data:

Field	Value
Sales Organization	**3000**
Distribution Channel	**10**
Customer	**CEP-CU-01**
Material	**CEP-PROD-01**
Amount	**850**
Unit	**USD**
per	**1**
Unit of Measure (UoM)	**CAR**
Valid from	2013–01–01

Field	Value
Valid to	9999–12–31

5. Save your entries.
6. Repeat the above steps for customers `CEP-CU-02`, `CEP-CU-03`, and `CEP-CU-04`.

3.2 Transferring Organizational & Master Data from SAP ERP to SAP TM

Use

In this procedure, you create and activate an integration model. The integration model selects the plant and receiving point data and transfers them from SAP ERP to SAP Transportation Management. Locations and business partners are then created or updated in SAP Transportation Management.

In SAP Transportation Management, locations of type 0001 (plant) are created for the plants. Business partners with role BBP000 (vendor) are created automatically for plants and shipping points. The business partner is assigned to the location.

Procedure

1. On the *SAP Easy Access* screen for SAP ERP, choose ▌ *Logistics* ❯ *Central Functions* ❯ *Supply Chain Planning Interface* ❯ *Core Interface Advanced Planner and Optimizer* ❯ *Integration Model* ❯ *Create* ▐. Alternatively, call transaction `CFM1`.
2. Enter the following data:

Field	Value
Model Name	**CEP-IM-001**
Logical System	**<Logical system ID of SAP TM target system>**, for example, `TM1CLNT1`
APO Application	**<Logical SAP TM system>**

3. In the *Material Dependent Objects* screen area, select the *Materials* and *Plants* checkboxes.
4. In the *Material Independent Objects* screen area, select the *Customers*, *Vendors*, and *Shipping Points* checkboxes.

> **i Note**
>
> When you transfer vendors to the SAP TM system, you must ensure that the *Create Loc./BP* function (create business partners in SAP TM for the location) is set to 2 on the *Vendors* and *Customers* tab pages so that business partners and locations are generated for vendors.

5. Choose the *Further Restrictions* pushbutton next to each checkbox and enter the following data:

Field	Value
Material	`CEP-PROD-01`
Plant	`3100`
Vendor (carrier)	`CEP-CR-01` to `CEP-CR-04`
Customer	`CEP-CU-01` to `CEP-CU-04`
Shipping Point	`3105`

6. Choose *Execute* to continue.
   The selected filter objects (plants, materials, and shipping points) are displayed on the result screen with the relevant number of filtered objects.
7. Choose the *Generate IM* pushbutton to create the integration model.
   The system issues the message *Integration model CEP-IM-001 generated for target system* `<logical SAP TM system>` *and application logical* `<SAP TM system>`.
8. Leave the transaction.
9. On the *SAP Easy Access* screen for SAP ERP, choose ▶ *Logistics* ❭ *Central Functions* ❭ *Supply Chain Planning Interface* ❭ *Core Interface Advanced Planner and Optimizer* ❭ *Integration Model* ❭ *Activate* ❭.
   Alternatively, call transaction `CFM2`.
10. Enter the following data:

Field	Value
Model Name	`CEP-IM-001`
Logical System	`<Logical system ID of SAP TM target system>`, for example, `TM1CLNT001`
APO Application	`<Logical SAP TM system>`

11. Choose *Execute* to continue.
    The created version of the selected integration model is listed.
12. Double-click the integration model in the tree structure on the left-hand side.
13. Click the red cross in the table (indicating that the integration model version is inactive) in the first row of the *New Status* column.
    The icon changes to a green check mark (indicating that the integration model is active).
14. Choose the *Start* pushbutton from the tool bar to start the activation and save.

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

Checking Master Data Transfer

Once you have transferred the data from SAP ERP to SAP TM, check that the business partners have been created in the SAP TM system.

1. On the *SAP Easy Access* screen for SAP Transportation Management, choose ▶ *Transportation Management* ❯ *Master Data* ❯ *Maintain Business Partner* ❯ or call transaction `BP`.
2. Check that carriers `CEP-CR-01` to `CEP-CR-04` have been created with the business partner role *Vendor* (`BBP000`).
3. Check that customers `CEP-CU-01` to `CEP-CU-04` have been created with the business partner roles *Sold-to Party* (`CRM002`) and *Ship-to Party* (`CRM000`).

> ⓘ Note
>
> To add a new business partner role, select the relevant role from the *Display in BP role* dropdown box and then save your changes.

3.3 Master Data Setup in SAP TM

3.3.1 Defining Purchasing Organizations

Procedure

1. In SAP NetWeaver Business Client, choose ▶ *Master Data* ❯ *Organization* ❯ *Create Organization and Staffing* ❯.
2. Enter validity dates in the first dialog box.
3. On the *Basic Data* tab page at the bottom of the screen, enter the following information:

Field	Description	Value
Organizational unit	Identifier	**CEP-PORG-1**
Description	General description	**CEP: Purchasing Org US**

4. On the *Org. Data* tab page, choose the *Create* pushbutton and enter the following information:

Field	Description	Value
Organization ID	Identifier for the organizational unit	**CEP-PORG-1**
Org. Unit Function	Not applicable	*2 – Purchasing*
Org. Unit Role	Role of this organizational unit	*1 – Organization*

5. On the *Address* tab page, enter the following information:

Field	Value
Subtype	**<Main Address>**
Street/House	**W Cermak Road 155**
City	**Chicago**
Postal Code	**60608**
Country	**US**
Region	**IL**

6. Save your entries.

3.3.2 Defining Purchasing Groups

Procedure

1. In SAP NetWeaver Business Client, choose ▶ *Master Data* ❯ *Organization* ❯ *Create Organization and Staffing* ◀.
2. Enter validity dates in the first dialog box.
3. On the *Basic Data* tab page at the bottom of the screen, enter the following information:

Field	Description	Value
Organizational unit	Identifier	**CEP-PGRP-1**
Description	General description	**CEP: Purchasing Group US**

4. On the *Org. Data* tab page, choose the *Create* pushbutton and enter the following information:

Field	Description	Value
Organization ID	Identifier for the organizational unit	`<Next number generated by system>`
Org. Unit Function	Not applicable	*2 – Purchasing*
Org. Unit Role	Role of this organizational unit	*3 – Group*

5. On the *Address* tab page, enter the following information:

Field	Value
Subtype	**<Main Address>**
Street/House	**W Cermak Road 155**
City	**Chicago**
Postal Code	**60608**
Country	**US**
Region	**IL**

6. Save your entries.

3.3.3 Defining Execution Organizations and Groups

Procedure

1. In SAP NetWeaver Business Client, choose ▌▶ *Master Data* ❯ *Organization* ❯ *Create Organization and Staffing* ▌.
2. Enter validity dates in the first dialog box.

3. On the *Basic Data* tab page at the bottom of the screen, enter the following information:

Field	Description	Value
Organizational unit	Identifier	**CEP-PEORG-1**
Description	General description	**CEP: Planning and Organization**

4. On the *Org. Data* tab page, choose the *Create* pushbutton and enter the following information:

Field	Description	Value
Organization ID	Identifier for the organizational unit	`<Organizational unit defined previously>`
Org. Unit Function	Not applicable	*13 – Planning and Execution*
Org. Unit Role	Role of this organizational unit	*1 – Organization*

5. On the *Address* tab page, enter the following information:

Field	Value
Subtype	**<Main Address>**
City	**Chicago**
Country	**US**

6. Save your entries.
7. Repeat the procedure to create a purchasing execution group.
8. On the *Basic Data* tab page, enter the following data:

Field	Description	Value
Organizational Unit	Specifies the organizational unit to be created	**CEP-PEGRP-1**
Description	General description	**CEP: Planning & Execution Group**

9. On the *Org. Data* tab page, choose the *Create* pushbutton and enter the following data:

Field	Description	Value
Org. ID	Organizational unit identifier. This is an internal number.	**<Organizational unit that you previously defined>**
Org. Unit Function	Specifies the type of organizational unit	*13 – Planning and Execution*
Org. Unit Role	Specifies the role of the organizational unit	*3 – Group*

10. On the *Address* tab page, enter the following data:

Field	Description	Value
Subtype	Defines the type of address	**Main Address**
City	City	**Chicago**
Country	Country of the address	**US**

11. Save your entries.

3.3.4 Defining Packaging Type

Procedure

1. In Customizing for SAP Transportation Management, choose ▐▶ *Transportation Management* ❯ *Integration* ❯ *ERP Logistics Integration* ❯ *Delivery-Based Transportation Requirement* ❯ *Define Usage of ERP Packaging Information* ◀▌.
2. Enter the following data:

Field	Value
Logical System. (Send)	**<Sending logical system>**
Packaging Material Type	**Z070**
Item Category	**Package**
External Identifier	**Use External Identifier 1**

Field	Value
Package Type	**Z070**

3. Save your entries.

3.3.5 Defining Transportation Service Level Codes

Procedure

1. In Customizing for SAP Transportation Management, choose ▐▶ *Transportation Management* ❯ *Forwarding Order Management* ❯ *Define Transportation Service Level Codes* ▐ .
2. Enter the following data:

SC	Description
99	**CEP**

3. Save your entries.

3.3.6 Checking the Transfer of Master Data from SAP ERP

Prerequisites

You have transferred the following data from SAP ERP to SAP TM:

Plant	3100
SAP ERP and SAP TM code for customers	CEP*
SAP ERP and SAP TM code for carriers	CEP*

Context

Master data such as plants and customers can be transferred from SAP ERP to SAP Transportation Management via CIF. Other master data has to be created directly in the SAP TM system.

In this procedure, you check that the master data from SAP ERP has been transferred correctly to SAP TM (for more information, see Transferring Organizational & Master Data from SAP ERP to SAP TM [page 23]).

Procedure

1. In SAP NetWeaver Business Client, choose ▌ *Master Data* ❯ *General* ❯ *Define Product* ▐ or call transaction `/SAPAPO/MAT1`.
2. Check that the following data has been transferred successfully to SAP Transportation Management:

Attribute	Value
Product	CEP-PROD-01@ERP001
Storage location	0001
Sales organization	3000
Distribution channel	10
Material group	002
Gross weight	3
Net weight	2
Weight unit	LB
Volume	1
Volume unit	FT3
Transportation group	0001
Item category group	NORM
Price control	S
Standard price	100
Storage condition	03
Base unit of measure	CAR

Attribute	Value
Product freight group	100
Packaging material type	0002

3.3.7 Updating Business Partners

Context

Once carrier and customer business partners have been created automatically, you have to add some SAP TM-specific information to them.

Procedure

1. In SAP NetWeaver Business Client, choose ▌▶ *Master Data* ❯ *General* ❯ *Define Business Partner (BP)* ▐. Alternatively, you can start transaction `BP`.
2. On the *Business Partner* screen, enter `CEP*` in the search field on the left-hand side, choose *Start* and double click your carrier `CEP-CR-01` from the result list.
3. Switch to edit mode.
4. In the drop-down list for the *Change in BP role* field, select the role *Vendor* and then select the role *Carrier*.
5. On the *Vendor Data* tab page, create three service levels using the following attributes:

Service Level Code	Service Level Code Description
D1	ALR Overnight
D2	ALR Express (2 Day)
D3	ALR Standard

6. Save your entries.
7. Repeat the procedure to assign the new role to carrier 02 and enter the following service level codes:

Service Level Code	Service Level Code Description
F1	Union Express Overnight

Service Level Code	Service Level Code Description
F2	Union Express (2 Day)
F3	Union Express Standard

8. Save your entries.
9. On the *Business Partner* screen, enter `CEP*` in the search field on the left-hand side, choose *Start* and double click your customer `CEP-CU-01` from the result list.
10. Switch to edit mode.
11. In the drop-down list for the *Change in BP role* field, select the role *Sold-To Party* and then select the role *Ship-To Party*.
12. Repeat this procedure for all your customers.
13. Save your entries.
14. Assign the following business partner roles to your business partners `CEP-CU-01` and `CEP-CU-01`:
    o   Sold-to Party
    o   Ship-to Party

3.3.8 Defining Business Partners for Plants

Context

When data is transferred to SAP Transportation Management, the system does not create business partners for plants and shipping points automatically. You therefore need to define these manually and assign the business partner to the master data for the shipping point location.

Procedure

1. In SAP NetWeaver Business Client, choose ▶ *Master Data* ❯ *Maintain Business Partner* ❯.
2. On the *Business Partner* screen, enter `PL3100` and choose *Business Partner (Gen)*.
3. On the *Address* tab page, enter the following data in the table:

Field	Value
Name	Plant 3100
Search Term	Plant 3100

Field	Value
Street	`W Cermak Road 1955`
Postal Code	`60600 Chicago`
Country	`US`
Region	`IL`
Time Zone	`CST`

4. Save your entries.

3.3.9 Assigning Business Partner for Plant to Shipping Point Location

Context

When data is transferred to SAP Transportation Management, the system does not create business partners for plants and shipping points automatically. You therefore need to define these manually and assign the business partner to the master data for the shipping point location.

Procedure

1. In SAP NetWeaver Business Client, choose ▐▶ *Master Data* ❯ *Transportation Network* ❯ *Location* ▐.
2. On the *Location Master Data* screen, enter shipping point location `SP3105@ERP100` and choose *Change*.
3. On the *Business Partner* screen, enter `PL3100`.
4. Save your entries.

3.3.10 Defining Geocoordinates for Locations

Prerequisites

- You have defined the master data for locations in SAP ERP.
- You have transferred the location data to SAP TM.

Context

Once you have defined your locations in the SAP ERP system and transferred the data to SAP TM, you must specify geocoordinates for your locations.

Procedure

1. In SAP NetWeaver Business Client, choose ▶ *Master Data* ❯ *Transportation Network* ❯ *Locations* ❯ *Define Location* ❯.
2. As the location, enter `CUCEP-CU-01@ERP001`.
3. Choose *Change*.
4. In the *Geographical Data* screen area of the *General* tab page, enter the following geocoordinates:

CUCEP-CU-01@ERP001	Sign	Degrees	Minutes	Seconds
Longitude	−	87	39	0
Latitude	+	41	50	0

5. Save your entries.
6. Repeat the procedure for the remaining customers using the following geocoordinates:
   - Customer `CUCEP-CU-02@ERP001`:

CUCEP-CU-02@ERP001	Sign	Degrees	Minutes	Seconds
Longitude	−	87	39	0

CUCEP-CU-02@ERP001	Sign	Degrees	Minutes	Seconds
Latitude	+	41	50	0

○ Customer `CUCEP-CU-03@ERP001`:

CUCEP-CU-03@ERP001	Sign	Degrees	Minutes	Seconds
Longitude	–	87	39	0
Latitude	+	41	50	0

○ Customer `CUCEP-CU-04@ERP001`:

CUCEP-CU-04@ERP001	Sign	Degrees	Minutes	Seconds
Longitude	–	87	39	0
Latitude	+	41	50	0

3.3.11 Defining Waybill Types

Context

Along with general transportation details, the freight order contains several shipments that represent consignee-specific movements. The carrier bases logistical planning on each shipment, which results in the assignment of a unique shipment number to each delivery (this also enables cargo tracking). In the cargo item hierarchy of a freight order, every shipment aggregates one or more items at package level or product level.

From a technical point of view, waybills are used to model these shipments.

Procedure

1. In Customizing for SAP Transportation Management, choose ▶ *Transportation Management* ❯ *Master Data* ❯ *Waybill Stock* ❯ *Define Waybill Number Stock Types* ▶.

2. Create the following entry:

Field	Value
Stock Type	**CEP1**
Description	**CEP Waybill for Parcel Shipments**
TrM	**01**
Org. Category	**2 Purchasing**
Number Length	**10**
Chk Digits	**No Check Digits**
Prefix	Not selected

3. Save your entries.

3.3.12 Defining Waybill Stock

Context

Master air waybill stocks are used to control the capacities ordered for a certain flight with a certain carrier.

Procedure

1. In SAP NetWeaver Business Client, choose ▌ *Master Data* ❯ *General* ❯ *Overview Waybill Stock* ▌.
2. Create an entry with number stock type CEP1.
3. In the *Stock Data Area* screen area, choose *Insert* and enter the following data:

Field	Value
Stock ID	**CEP1**
Description	**Stock for Parcel Shipments**
Number Range from	**1**

Field	Value
Number Range to	`100000000`
Valid from	`<current year>-01-01`
Valid to	`<next year>-12-31`
Threshold	`000`

4. Choose *Insert* and add organization `CEP-PORG-1`.
5. Choose *Insert* and add carrier `CEP-CR-01`.
6. Save your entries.

3.3.13 Defining Transportation Zones

Context

Carriers calculate charges based on different transportation zones. You therefore need to define these transportation zones in the SAP Transportation Management system.

Procedure

1. In SAP NetWeaver Business Client, choose ▶ *Master Data* ❯ *Transportation Network* ❯ *Transportation Zones* ❯ *Define Transportation Zone* ❳.
2. On the *Maintain Zone* screen, choose the *Create* pushbutton.
3. Create the zone "CEP Chicago".
4. On the *Zone – Postal Code* tab page, choose the *Create* pushbutton.

   The *Maintain Zone* dialog box appears.
5. Specify the country as the United States and enter the postal code range `60600` to `60699`.
6. Save your entries.

3.3.14 Defining Means of Transport

1. In Customizing for SAP Transportation Management, choose ▶ *Transportation Management* ❯ *Master Data* ❯ *Resources* ❯ *Define Means of Transport* ❳.

2. Choose the *New Entries* pushbutton and enter the following data:

Field	Value
Means of Transport	**CEP**
MTr Description	**CEP Transport**
Transportation Mode	**01 – ROAD**
Multiresource	Select
Number of Individual Resources	
Average Speed	**30**
Distance Factor	**1.00**

Field	Value
Means of Transport	
MTr Description	
Transportation Mode	
Multiresource	Select
Number of Individual Resources	
Average Speed	
Distance Factor	

Field	Value
Means of Transport	
MTr Description	
Transportation Mode	
Schedule MTr	Select
Average Speed	
Distance Factor	

3. Save your entries.

> **i Note**
>
> Since this scenario does not make use of a geographical information system (GIS), you must enter a distance factor and an average speed. If you have a connection to a GIS provider, select the *GIS Quality* attribute and enter the three different average speeds instead.
>
> When you save, the system may issue a message stating that the IGS or GIS tool is unavailable. Ignore this message.

3.3.15 Defining Intrazone Lane

Use

Intrazone lanes are used to model the transportation network. A lane represents a direct route that can be used to transport products from the source to the destination. Transportation lanes may be defined between locations (direct lanes), between transportation zones and locations, within transportation zones (intrazone lanes), and between transportation zones.

You can use intrazone lanes if all locations within a zone can be reached from all other locations within the same zone using certain means of transport, for example, trucking for the precarriage stage within a certain region.

The lane defines which means of transport you can use for transportation in which geographic region.

Procedure

1. In SAP NetWeaver Business Client, choose ▌▶ *Master Data* ❯ *Transportation Network* ❯ *Transportation Lanes* ❯ *Define Transportation Lane* ❯.
2. On the *Intrazone Lane/ Loc. Transp.* tab page, enter `CEP_CHICAGO` and choose the *Create* pushbutton.
3. Create a transportation lane with the following data by clicking *Creation of a New Entry* in the *Means of Transport* screen area:

Field	Value
Means of transport	`CEP`
Start Date	`<current year>-01-01`
End Date	`2099-12-31`
Relevant to Carrier Selection	Select
Priority/Costs	*X Neither Costs Not Priority*

Field	Value
Cost Origin	I Internal Costs
Contin. Move Type	No Continuous Move

4. Choose *Copy and Close*. If a message appears prompting you to create a proposal, choose *Yes*.
5. Save your entries.

Assigning Carriers to Transportation Lanes

Once you have created the transportation lane, you must assign the carriers to it as follows:

1. In the screen area for the carrier, choose the *Creation of a New Entry* pushbutton.
2. Enter the following data:

Field	Value
Business Partner	`CEP-CR-01`
Consider Carrier for P2P Tendering	Select

3. Choose the *Copy and Close* pushbutton.
4. Save your entries.
5. Repeat the procedure for business partner `CEP-CR-02`.

3.3.16 Defining Vehicle Resources

Context

Vehicle resources model the trucks that deliver goods from the shipper to the consignee. The trucks are part of the carrier's own fleet. You define trucks as means of transport, to which you assign the vehicle resource. In this scenario, we assume that the shipper does not have its own fleet.

Procedure

1. In SAP NetWeaver Business Client, choose ▶ *Master Data* ❯ *Resources* ❯ *Define Resource* ▶.
2. On the *Transportation Master Resource* screen, enter resource **CEP-TRUCK-01** and choose the *Create Resources* pushbutton.
3. On the *Vehicle* tab page, enter the following data in the table:

Field	Value
Means of Transport	**CEP**
Time Zone	**CST**
Continuous Dimension	*Mass*
Factory Calendar	**US**
Capacity	**16500**
Unit	**LB**

4. On the *Capacity* tab page, enter the following data for each resource:

CEP-TRUCK-XX

Continuous Dimension	Capacity	Unit	Comment
Volume	**1236**	*FT3*	The maximum volume of the truck

5. Save your entries.

6. Repeat the procedure to create resources CEP-TRUCK-02 to CEP-TRUCK-10.

4   Order Management

4.1   Defining Allocation Structures (CO-PA)

Procedure

1. In Customizing for SAP ERP, choose ❘▶ *Controlling* ❭ *Product Cost Controlling* ❭ *Cost Object Controlling* ❭ *Product Cost by Sales Order* ❭ *Period-End Closing* ❭ *Settlement* ❭ *Create Allocation Structure* ❭.

2. If it does not already exist, create allocation structure `TM` with the description **`TM Settlement Sales Orders`**.

3. Choose the `TM` entry.

4. Double-click *Assignments* in the navigation tree and choose the *New Entries* pushbutton to create an assignment with the following data:

Assignment	Text
11	Total Costs
21	Revenues

5. Press `Enter` to confirm your entries.

6. Select the assignment *11 Total Costs* and double-click *Settlement Cost Elements*.

   The *Set Controlling Area* dialog box appears.

7. Enter controlling area **2000**.

8. Choose the *New Entries* pushbutton and enter the following data:

Receiver Cat.	By Cost Element	Settlement Cost Elem
PSG	Not selected	656000
SDI	Not selected	656000

9. Press `Enter` to confirm your entries.

10. Double-click *Assignments* in the navigation tree, select *21 Revenues*, and double-click *Settlement Cost Elements*.

11. Choose the *New Entries* pushbutton and enter the following data:

Receiver Cat.	By Cost Element	Settlement Cost Elem
PSG	Not selected	666000
SDI	Not selected	666000

12. Press `Enter` to confirm your entries.

13. Save your entries.

14. If the system issues a warning message, press `Enter` to confirm.

4.2 Defining Settlement Profiles (CO-PA)

Procedure

1. In Customizing for SAP ERP, choose ▶ *Controlling* ❯ *Product Cost Controlling* ❯ *Cost Object Controlling* ❯ *Product Cost by Sales Order* ❯ *Period-End Closing* ❯ *Settlement* ❯ *Create Settlement Profile* ❯ or call transaction OKO7.

2. If it does not already exist, create settlement profile `TM0001` with the description **TM Settlement Sales Orders** and the following settings:

In the *Actual Costs/Cost of Sales* screen area:

Field	Value
To Be Settled in Full	Selected
Can Be Settled	Not selected
Not for Settlement	Not selected

In the *Default Values* screen area:

Field	Value
Allocation Structure	**TM**
PA Transfer str,	**30**
Default object type	**PSG**

In the *Indicators* screen area:

Field	Value
100% validation	Selected
%-Settlement	Selected
Equivalence numbers	Not selected
Amount Settlement	Not selected
Var. to costing based PA	Selected

In the *Valid Receivers* screen area:

Field	Value
G/L account	*Settlement Optional*
Cost Center	*Settlement Optional*
Order	*Settlement Optional*
WBS element	*Settlement Optional*
Fixed Asset	*Settlement Optional*

Field	Value
Material	*Settlement Optional*
Network	*Settlement Not Allowed*
Profit. Segment	*Settlement Optional*
Sales order	*Settlement Optional*
Cost objects	*Settlement Optional*
Order item	*Settlement Optional*
Business proc.	*Settlement Not Allowed*
Real Est.Object	*Settlement Not Allowed*

In the *Other Parameters* screen area:

Field	Value
Document type	**SA**
Max.no.dist. rls	**10**
Residence time	**3**

3. Save your entries.
4. If the system issues a warning message, press ENTER to confirm.

4.3 Defining Delivery Document Types

Procedure

1. In Customizing for SAP ERP, choose ▶ *Logistics Execution* ❭ *Shipping* ❭ *Deliveries* ❭ *Define Delivery Types* ❭.
2. Copy default delivery type `LF` to `CEPL` and make sure that the attributes are set as follows:

Field	Value
Delivery Type	**CEPL**
Description	**CEP Delivery**
Document Cat.	**J**
Nr. Int. assgt.	**17**
ItemNoIncrement	**10**
No. range ext.	**18**
Order required	**X** Sales order required
Defalt ord. ty.	**OCEP**
ItemRequirement	**202**
Stor.loc.rule	**MARE**
TextDetermPRoc.	**02**
OutputDet.Proc.	**V10000**
Output Type	**TRD0**
Application	**V2**
Route determination	*A new route determination without check*
Delivry Split – WhNo	Select
Delivery Split Part.	Select
PartnDet.Proc.	**ODCD**
Screen seq. grp	**LF**
Display Range	**UALL** – All Items

3. Save your entries.

4.4 Defining and Identifying Sales Document Type

Context

An existing sales order type can be used for this integration, or you can create a new sales order type. Common scenarios include a normal sales order type in the standard system (order type: OR) or a rush order (order type: RO).

Procedure

1. In Customizing for SAP ERP, choose ▶ *Sales and Distribution* ❯ *Sales* ❯ *Sales Documents* ❯ *Sales Document Header* ❯ *Define Sales Document Types* ❯ or call transaction VOV8.
2. If required, copy order types to a unique order type. Use the standard order type (OR) to create an OCEP entry.
3. Press ENTER and confirm the *Dependent Entries for Copy Control* dialog box.
4. In the *Shipping* area, change the following attributes:

Field	Value
Delivery Type	CEPL
Shipping Conditions	99

5. Save your entries.

Results

You have created order type OCEP.

4.5 Assigning Sales Areas to Sales Document Types

Procedure

1. In Customizing for SAP ERP , choose ▌▶ *Sales and Distribution* ❯ *Sales* ❯ *Sales Documents* ❯ *Sales Document Header* ❯ *Assign Sales Area to Sales Document Types* ▐ .
2. Choose the *Assign Sales Order Types Permitted for Sales Area* activity.
3. On the following screen, ensure that the following entry exists in the table. If the entry does not exist, create it using the data below:

Field	Description	Value
Ref S	Sales organization	3000
RefD	Distribution channel	10
Div	Divisions	00
SaTy	Sales document type	OCEP

Results

You have assigned order type `OCEP` to a sales area.

4.6 Defining Sales Document Item Categories

Context

In this procedure, you can either use an existing sales document item category or you can create a new one. Common scenarios use a standard sales document item category of type `TAN`.

Procedure

1. In Customizing for SAP ERP, choose ▶ *Sales and Distribution* ❯ *Sales* ❯ *Sales Documents* ❯ *Sales Document Item* ❯ *Define Item Categories* ❳.

2. If required, copy sales document item category `TAN` and create sales document item category `TMAN` with the following data (retain all other existing settings):

Field	Value
Description	`TM Item w/ CO-PA`
Completion Rule	`B`
Pricing	`X`
Business Item	Select
Sched.Line Allowed	Select
Determine Cost	Select
Screen Seq.Grp	`N`
Billing Form	Blank
DIP Prof.	Blank
Usage	Blank

3. Save your entries.

4.7   Assigning Item Categories

Context

In this procedure, you assign the new `TMAN` item category so that it can be used.

Procedure

1. In Customizing for SAP ERP, choose ▶ *Sales and Distribution* ❯ *Sales* ❯ *Sales Documents* ❯ *Sales Document Item* ❯ *Assign Item Categories* ❳.

2. Create the following entry or copy a standard entry and add the following data:

Field	Value
Sales Document Type	**OCEP**
Item Category Group	**NORM**
Default Item Category	**TMAN**

3. Save your entries.

4.8 Creating Requirements Classes

Context

In this procedure, you create requirements class `TM1`.

Procedure

1. In Customizing for SAP ERP, choose ▐▶ *Sales and Distribution* ❯ *Basic Functions* ❯ *Availability Check and Transfer of Requirements* ❯ *Transfer of Requirements* ❯ *Define Requirement Classes* ▐ or call transaction `OVZG`.

2. Create the following entry:

Field	Value
Reqmts class	**TM1**
Description	**TM: Sales Order w/ CO-PA**
Acct Assign. Category	**E**

3. Save your entries.

4.9 Defining Requirements Classes

Context

In this procedure, you define requirements class TM1.

Procedure

1. In Customizing for SAP ERP, choose ▐▶ *Sales and Distribution* ❯ *Basic Functions* ❯ *Account Assignment/ Costing* ❯ *Maintain Requirements Classes For Costing/Account Assignment* ◀▌.
2. Select requirements class TM1 and choose the *Details* pushbutton.
3. Open the details view for requirement class TM1 and enter the following data:

Field	Value
Costing Variant	**PCO4**
Account assignment category	**E**
Settlement profile	**TM0001**
Results Analysis Key	**000004**

4. Save your entries.

4.10 Defining Requirements Types

Procedure

1. In Customizing for SAP ERP, choose ▐▶ *Sales and Distribution* ❯ *Basic Functions* ❯ *Availability Check and Transfer of Requirements* ❯ *Transfer of Requirements* ❯ *Define Requirements Types* ◀▌.
2. Create an entry using the following data:

Requirements Type	Requirements Type – Short Description	Requirements Class	Requirements Class – Short Description
TM1	TM: Sales Order w/ CO-PA	TM1	TM: Sales Order w/ C

3. Save your entries.

4.11   Assigning Requirements Types

Procedure

1. In Customizing for SAP ERP, choose ▌▶ *Sales and Distribution* ❯ *Basic Functions* ❯ *Availability Check and Transfer of Requirements* ❯ *Transfer of Requirements* ❯ *Determination of Requirement Types Using Transaction* ▐ or call transaction OVZI.

2. Choose item category TMAN and configure the following settings:

Item Category	Type	Requirement Type	Origin Requirement Type
TMAN	ND	TM1	Blank

3. Save your entries.

4.12 Assigning General Ledger Accounts

Procedure

1. In Customizing for SAP ERP, choose ▌▶ *Sales and Distribution* ❯ *Basic Functions* ❯ *Account Assignment/ Costing* ❯ *Revenue Account Determination* ❯ *Assign G/L Accounts* ▐ or call transaction VKOA.

2. On the *Assign G/L Account* screen, select table 1 (*Cust.Grp/MaterialGrp/AcctKey*) and click the magnifying glass icon (*Choose*).

3. On the *Change View "Cust.Grp/MaterialGrp/AcctKey": Overview* screen, enter the following data:

App	CndTy.	ChAc	SOrg.	AAG	AAG	ActKy	G/L Account
V	KOFK	CAUS	3000	01	01	ERF	809000
V	KOFK	CAUS	3000	01	01	ERL	888000

4. Save your entries.

4.13 Mapping Charge Types to Condition Types

Context

In this procedure, you map charge types in SAP Transportation Management to condition types in SAP ERP.

Procedure

1. In Customizing for SAP ERP, choose ▶ *Integration with Other SAP Components* ❯ *Transportation Management* ❯ *Invoice Integration* ❯ *Mapping for Cost Distribution* ❯ *Assign Transportation Charge Elements to Condition Types* ◀.
2. On the *Change View "Map TM Charge Type to ERP Conditions Types": Overview* screen, enter the following data:

Cat.Code	Subcat.Cd.	Charge Type	Sales Cnd Type.	Purchase Cnd Type
004	100000	FB00	Blank	FB00
002	103009	SRVC	Blank	FB01

3. Save your entries.

4.14 Assigning Transportation Charge Types

Procedure

1. In Customizing for SAP ERP, choose ▶ *Integration with Other SAP Components* ❯ *Transportation Management* ❯ *Invoice Integration* ❯ *Invoicing* ❯ *Assignment of Transportation Charge Elements* ❯ *Assign Service Master Record and Account Assignment Category* ◀.
2. On the *Change View "Map Transportation Charge Item to Service Master Record":* screen, choose the *New Entries* pushbutton.
3. On the *New Entries: Overview of Added Entries* screen, enter the following data:

Cat.Code	Subcat.Cd	Charge Type	Activity Number	A	Service Short Text
004	100000	FB00	1000020	F	Base Freight
002	103009	SRVC	1000020	F	Base Freight

4. Save your entries.

4.15 Assigning Organizational Units for Purchasing

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. On the *Change View "Map Transportation Charge Item to Service Master Record":* screen, choose the *New Entries* pushbutton.
3. On the *New Entries: Overview of Added Entries* screen, enter the following data:

Field	Value
Logical System	**<Your logical system ID>** (for example, TM1CLNT001)
TM Purchasing Organization	**<Your TM purchasing organization>**
TM Purchasing Group	Blank
Settlement Type	**CEP6**
Purchasing Org.	**3000**
Purch. Group	Blank
Plant	**3100**
Company Code	**3000**
Document Type	**NB**

4. Save your entries.

4.16 Defining Application and Posting Type

Procedure

1. In Customizing for SAP ERP, choose ▐▶ *Integration with Other SAP Components* ❯ *Transportation Management* ❯ *Invoice Integration* ❯ *Mapping for Cost Distribution* ❯ *Posting via Agency Business* ❯ *Define Application and Posting Type* ▐ .
2. On the *Change View "Application": Details* screen, choose *New Entries*.
3. On the *New Entries: Overview of Added Entries* screen, enter the following data:

Field	Value
Application	**1**
Description	**Transportation Management**
Application	

Field	Value
Document Flow Reference	`REF_NUMBER`
Container Structure	Blank
Condition Structure	`WZRE_S_EXT_COND_DESCR_TM`

4. Save your entries.

4.17 Activating Transfer of Outbound Deliveries

Prerequisites

You have defined the required control keys in the Customizing activity *Define Control Keys for Document Transfer*.

Context

In this procedure, you activate the transfer of outbound deliveries to SAP Transportation Management by assigning a control key to the required document types.

Procedure

1. In Customizing for SAP ERP, choose ▶ *Integration with Other SAP Components* ❯ *Transportation Management* ❯ *Order Integration* ❯ *Activate Transfer of Delivery Documents* ❯.
2. On the *Delivery Document Transfer* screen, add a new entry for the following combinations:

Field	Description	Value
Shipping Point	Applicable shipping point	`3100`
Delivery Type	Delivery type assigned to your order type	`CEPL`
Shipping Condition	Shipping condition	Blank

Field	Description	Value
Control Key	Control key for document transfer	**0005**
TM *Number*	Technical SAP TM number. This is relevant only if you have more than one SAP ERP system connected to your SAP TM system.	**<XXXX>**

3. Save your entries.

Results

The delivery type is activated for integration with SAP Transportation Management.

4.18 Defining Conditions for Automatic Determination of Output Types

Prerequisites

You have configured the output type (TRD0).

Context

> i Note
>
> This procedure is optional.

If you complete this procedure, users do not have to enter the output types in the outbound delivery each time the delivery is created. The system determines the relevant output types automatically if a condition type as been specified.

Procedure

1. On the *SAP Easy Access* screen in SAP ERP, choose ▶ *Logistics* ❯ *Materials Management* ❯ *Purchasing* ❯ *Master Data* ❯ *Subsequent Settlement* ❯ *Customer Rebate Agreements* ❯ *Environment* ❯ *Customer* ❯ *Messages* ❯ *Shipping* ❯ *Create* ❯ or call transaction `VV21`.
2. Enter output type `TRD0` to define the condition and press `ENTER`.
3. Define the condition type using the following data:

Field	Description	Value
Del. Type	Delivery type	`CEPL`
Name	Defaulted by previous entry	`Delivery`
Funct.	Function	Blank
Partner	Partner	Blank
Medium	Medium	`8`
Date/Time	Date and time	`4`
Lang.	Language	`<Your language>`

4. Save your entries.

4.19 Defining TOR Incompatibility with Consignee Condition

Context

You can use this procedure to create a condition to enable the incompatibility of a carrier with a customer.

Procedure

1. In SAP NetWeaver Business Client, choose ▶ *Application Administration* ❯ *General Settings* ❯ *Conditions* ❯ *Create Condition* ❯.
2. On the *New Condition Definition* screen, enter the following values:

Field	Description	Value
Condition	Condition	**CEP-INCOMP-TOR-INCOM**
Description	Description of the condition type	**TOR Incompatibility**
Condition Type	Condition type (this is a system-sup-plied condition type)	**/SCMTMS/INC_TO**
Origin of Condition	From where the condition information is derived	**Direct Business Object Access**

3. Choose the *Continue* pushbutton.

> **i Note**
>
> If the system issues a message stating that the condition already exists, continue this process using the edit condition entry.

4. In the *Data Access Definition* table, choose the *Create* pushbutton and enter the following data:

Column Position in BRFplus Decision Table	Data Access Definition for Conditions	Data Object Description	Data Element Used for In-put Help
10	**/SCMTMS/ TOR_CONSIGNE**	**Consignee ID**	**/SCMTMS/ PTY_CONSIGNEE**

5. Save your entries.

4.20 Defining Conditions for Pick-Up Delivery Time Windows

Procedure

1. In SAP NetWeaver Business Client, choose ▌▶ *Application Administration* ❯ *General Settings* ❯ *Conditions* ❯ *Create Condition* ◀▐.
2. On the New Condition Definition screen, enter the following data:

Field	Value
Condition Name	**CEP-PUDL-001**

Field	Value
Description	NON_DLV_COST
Condition Type	/SCMTMS/TOR_TIMEWIND
Origin of Condition	Condition Based on BRFplus Decision Table

3. Choose the *Data Access Definition* pushbutton followed by the *Create* pushbutton, and enter the following data in the table:

Field	Value
Column	10
Data Access Definition for Conditions	/SCMTMS/TOR_TYPE
Data Element Used for Input Help	/SCMTMS/TOR_TYPE

4. Choose the *Back* pushbutton.
5. Choose the *Insert New Row* pushbutton in the *Decision Table* area.
6. Enter the following data:

Field	Value	Comment
TO Type	CEP3	Freight unit type
EarlstStay	48:00	Converts to 480,000
Prem. Stay	24:00	Converts to 240,000
Earliness	1	None
Lateness	1	None
Del. Stay	24:00	Converts to 240,000
Lat. Stay	72:00	Converts to 720,000

7. Save your entries.

5 Planning

5.1 Creating Incompatibilities

Context

You use this procedure to configure settings in SAP Transportation Management based on the conditions for the incompatibility.

Procedure

1. In SAP NetWeaver Business Client, choose ▶ *Application Administration* ❯ *Planning* ❯ *General Settings* ❯ *Incompatibility Definitions* ❯ *Create Incompatibility* ❯.
2. In the *Incompatibility Definition* screen area, enter the following values:

Field	Description	Value
Incompatibility	Incompatibility	`CEP-INCOMP-CARRIER-CUSTOMER`

Field	Description	Value
Description	Description	**Carrier Cust. Incompatibility**
Determination Method	Determination Method	*Condition-Based Incompatibility*
External Determination Strategy	External Determination Strategy	Blank
Identical Values Only:	Identical Values Only:	Not selected
Incompatibility Area	Incompatibility Area	**05** (Carrier Selection)
Incompatibility Type	Incompatibility Type	**81** (Carrier – Transportation Order)
Manual Violation	Manual Violation	*Warning If Incompatibility Is Violated*
Automatic Violation	Automatic Violation	*Incompatibility Must Not Be Violated*

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

Field	Description	Value
First Condition	Incompatibility condition that is to be used. The condition can be created directly from the link in this field. The details of this condition are specified below.	**CEP-INCOMP-COND-CARR-CUST**
Relevant Condition Result	Incompatibility setting outcome	**CEP-CR-02**
Second Condition	Incompatibility condition that is to be used. The condition can be created directly from the link in this field. The details of this condition are specified below.	**CEP-INCOMP-TOR-INCOM**
Relevant Condition Result	Incompatibility setting outcome	**CEP-CU-04**

4. Save your entries.

5.2 Creating Incompatibility Settings

Context

You can use incompatibilities to define the compatibility of planning data that the system is to take into account during transportation planning. For example:

- Refrigerated goods must only be transported in an appropriate means of transport (refrigerated trucks).
- A particular means of transport cannot be unloaded at a location, as the location does not have a suitable loading ramp.
- Customers do not want specific carriers to load or unload at their locations.

In this way, you can control the assignment of freight units to transportation plans (in other words, planned transportation activities) and transportation plans to means of transport, for example.

Procedure

1. In SAP NetWeaver Business Client, choose ▌▶ *Application Administration* ❯ *Planning* ❯ *General Settings* ❯ *Incompatibility Settings* ❯ *Create Incompatibility Settings* ▌.
2. In the *General Data* screen area, enter the following data:

Field	Description	Value
Incompatibility	Incompatibility	**CEP-INCOMP-SET-001**
Description	Description of the incompatibility	**Customer Carrier Incompatibility**
Incompatibility Area	Applicable TM area	*Carrier Selection*
Default Incompatibility Settings	Default Incompatibility Settings	Not selected

3. In the *Incompatibility Selection* table, choose the *Insert* pushbutton and enter the following data:

Incompatibility	Violation in Manual Planning	Violation in Automatic Planning
CEP-INCOMP-CARRIER-CUSTOMER	*According to Incompatibility Definition*	*According to Incompatibility Definition*

4. Save your entries.

5.3   Defining Freight Unit Types

Procedure

1. In Customizing for SAP Transportation Management, choose ▶ *Transportation Management* ❯ *Planning* ❯ *Freight Unit* ❯ *Define Freight Unit Types* ▮.
2. Select an existing freight unit type and copy it to create your own freight unit type.
3. Enter the following data:

Freight Unit Types

Freight Unit Type	**CEP1**
Description	**CEP: Freight Unit Type**
Basic Settings	
Freight Unit Can Be Deleted	Select
Number Range Settings	
Time for Drawing	*S Draw Number When Saving Documents*
Number Range Interval	**04**
Change Controller Settings	
Default Change Strategy	**DEF_CHACO**
Change Strategy Determination Condition	Blank
Quantity Tolerance Condition	Blank
Date Tolerance Condition	Blank
Additional Strategies	
Creation Strategy	Blank
Save Strategy	Blank
Deletion Strategy	Blank
Execution Settings	

Freight Unit Types

Execution Track Relevance	*2 Execution Tracking*
Immediate Processing	Not selected

Direct Shipment Options

Direct Shipment Option Type	*Automatic Determination of Direct Shipment*
Carrier Selection Settings	**CEP-CS**
Carrier Selection Condition	Blank
Direct Shipment Strategy	**DSO_RESULT**
DSO Result Rule	**Assign to Freight Order**

Freight Order Determination

Freight Order Type	**CEP3**

Default MTr Definition

Default MTr for Type	Blank
Condition for Default MTr	Blank

Default Units of Measure

Weight	*LB US pound*
Volume	*FT3 Cubic foot*

Additional Settings

Dangerous Goods Profile	Blank
Rule for PU/DLV Window	*Pick-Up and Delivery as Defined in FWO, FWQ, OTR, or DTR*
Condition for PU/DLV Window Determ.	Blank
BW Relevance	Not selected
Track Changes	Not selected
Archiving Retention Period in Days	Blank
Web Dynpro Application Conf.	Blank

Organizational Unit Determination

Purchasing Organization	**CEP-PORG-1**

Freight Unit Types

Determination Rules	
Consider Organization of User	Not selected
Condition	Blank

4. Press ENTER .
5. Save your entries.

5.4 Defining Freight Unit Building Rules

Context

A freight unit building rule (FUB rule) is used by and assigned to a DTR type. The freight unit building rule specifies how freight units are built when a delivery-based transportation requirement is created.

Procedure

1. In SAP NetWeaver Business Client, choose ▶ *Application Administration* ❯ *Planning* ❯ *General Settings* ❯ *Freight Unit Building Rule* ❯ *Create Freight Unit Building Rule* ◀.
2. On the *New Freight Unit Building Rule* screen, enter the following values on the *General Data* tab page:

Field	Description	Value
Freight Unit Building Rule	Identification of the FUBR	**CEP-FUBR-STANDARD**
Description	Description of this FUBR	**CEP FUBR - Standard**
Document Type	Freight unit type to be used for the freight unit	**CEP1**
Incompatibility Setting	Not used	Blank
Freight Unit Building Strategy	This strategy defines how to consolidate	*Consolidate per Request*

Field	Description	Value
Critical Quantity	Defines the weight/volume limits for the freight unit	*Gross Weight*
Item Split Allowed	Indicator to define if the item quantities could be split across different freight units	Select

3. Choose the *Advanced Settings* tab page and enter process controller strategy **FUB_AUTO**.

4. Choose the *General Data* tab page again and enter the following data In the *Planning Quantities* table:

Planning Quantity for Freight Unit Building	Unit of Measure of Split Quantity	Split Quantity	Rounding Quantity
Gross Weight	**LB**	**16500**	**1**

5. Save your entries.

5.5 Defining Delivery-Based Transportation Requirement Types

Prerequisites

You have defined a freight unit building rule.

Context

This document type is used to map the delivery-based transportation requirement (DTR) that is received from SAP ERP. This document type is used in the step where this mapping is carried out.

Procedure

1. In Customizing for SAP Transportation Management, choose ▐▶ *Transportation Management* ❯ *Integration* ❯ *ERP Logistics Integration* ❯ *Delivery-Based Transportation Requirement* ❯ *Define Delivery-Based Transportation Requirement Types* ❯.

2. On the *Create View Delivery-Based Transportation Requirement Types: Details of Selected Set* screen, enter the following values:

Field	Description	Value
DTR Type	ID for our DTR document type.	`CEP2`
Description	Description of the DTR type being defined.	`Delivery`
Default Type	Select this value if this is the only DTR type defined in the system.	Deselect
Number Range Interval	Number range that is used to assign numbers to the DTR types.	`02`
BW Relevance	Indicates if this document type is relevant for BW.	Select
Automatic FU Building	Indicates if the freight units are to be built automatically. If this is selected, a FU building rule must be defined.	Select
Output Profile	Print profile for document type.	`/SCMTMS/TRQ_FWO_PRINT`
Propagate Changes	Indicates how the changes to a document's information (such as quantities) are transferred.	*Synchronous Propagation of Changes, Fallback to Asynchronous*
Default Weight UoM	Default UoM for gross weight for this document type.	`LB`
Default Volume UoM	Default UoM for gross Volume for this document type.	`FT3`
Freight Unit Building Rule	Rule that is used when building freight units (when the *Automatic Freight Unit Building* indicator is selected)	`CEP-FUBR-STANDARD`

3. Save your entries.

5.6 Defining Freight Order Types

Procedure

1. In Customizing for SAP Transportation Management, choose ▶ *Transportation Management* ❯ *Freight Order Management* ❯ *Freight Order* ❯ *Define Freight Order Types* ❯ or call transaction /SCMTMS/C_FOR.
2. On the *Freight Order Types: Overview* screen, choose the *New Entries* pushbutton.
3. On the *New Entries: Details of Added Entries* screen, enter the following data in the header area:

Field	Description	Value
Freight Order Type	Unique 4-character ID of the freight order type that you want to define	**CEP3**
Description	Description of the freight order type that you want to define	**CEP: Freight Order**

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

Field	Description	Value
Freight Order Can Be Subcontracted	Specifies whether the freight order type can use subcontracting processes	*01 Relevant for Subcontracting*
Shipper/Consignee Determination	Defines how the shipper and consignee are identified for this freight unit type	*P Determination Based on Predecessor Documents*
Fix Document When Saving	None	Not selected
Freight Order Can Be Deleted	Specifies whether the freight order with this type can be deleted	Select
Sequence type of Stops		Star-shaped based on freight unit stages

5. In the *Charge Calculation and Settlement Document Settings*, set the default FSD type to **CEP6**.
6. In the *Execution Settings* screen area, enter the following data:

Field	Description	Value
Execution Track. Relev.	Controls document tracking.	*1 No Execution Tracking*
	If you want to track certain types of documents, choose 2 (execution tracking) or 3 (execution tracking with external event management). The system then sets the initial document execution status to *Not Started*.	
	If you do not want to track documents, choose 1 (no execution tracking). The system then sets the initial document execution status to *Not Relevant*.	
Check Condition "Ready for Exec."	Not used.	Blank
Immediate Processing	Determines whether the status *In Process* is set as soon as the document is created and saved.	Select
Propagate Execution Info	Indicates whether an event that is reported at the document level for the freight order is to be propagated to the predecessor documents.	Not selected
Application Object	Type of application object to be tracked in the application system (necessary for determining event management-relevance for an application object). The event manager processes only event messages for these objects.	`ODT30_TO`
Last Exp. Event	Last expected event for a document	`POD`

7. In the *Tendering Settings* screen area, select the *Use Type-Specific Settings* radio button and enter the following data:

Field	Description	Value
Process Setting	Controls the tendering process settings	Blank
Communication Setting	Specifies the strategy for tendering communication.	Blank

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

Field	Value
Dangerous Goods Profile	Blank
Customs Profile	Blank
Deflt Carrier Selection Settings	Blank

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

Field	Description	Value
Time for Drawing	Specifies when a number is assigned to the freight order	*S Draw Number When Saving Document*
Number Range Interval	Number range that is to be used for this document type	**FO**

10. In the *Default Units of Measure* screen area, enter the weight as `LB US Pound` and the volume as `FT3 Cubic Foot`.

11. In the *Change Controller Settings* screen area, enter the following data:

Field	Description	Value
Default Change Strategy	Specifies the default strategy that is used for tendering if any changes are made to the key fields in the freight order (for example, partners and quantities)	**NO_ACTION**
Change Strategy Det. Cond.	Specifies the condition that the system is to use to determine a change controller strategy at runtime. If you have defined several change controller strategies, you can use a condition to determine the correct strategy. The condition type of this condition is `/SCMTMS/CC_TOR_STRAT`.	Blank
Quantity Tolerance Cond.	Specifies the tolerances when a quantity is changed in the freight order.	Blank
Date Tolerance Condition	Specifies the tolerances when a date is changed in the freight order.	Blank

12. In the *Default MTr Determination* screen area, enter the following data:

Field	Value
Default MTr for Type	Blank
Condition for Def MTr	Blank
Transportation Mode	**06**

13. In the *Output Options* screen area, enter the following data:

Field	Value
Output Profile	**/SCMTMS/TOR_PRINT_ROAD**
Add. Output Profile	Blank
Text Schema	Blank
Dynamic Determination of Output	Not selected

14. In the *Organizational Unit Determination* screen area, enter the following information:

Field	Description	Value
Execution Organization	ID of the organizational unit that is defined: ○ As unit function 13 – Planning and Execution ○ As unit role 1 – Organization	**<Organizational unit number for CEP-PEORG-1>**
Purchasing Organization	ID of the organizational unit that is defined: ○ As unit function 2 – Purchasing ○ As unit role 1 – Organization	**<Organizational unit number for CEP-PORG-1>**
Execution Group	ID of the organizational unit that is defined: ○ As unit function 13 – Planning and Execution ○ As unit role 3 – Group	**<Organizational unit number for CEP-PEGRP-1>**
Purchasing Group	ID of the organizational unit that is defined: ○ As unit function 2 – Purchasing ○ As unit role 3 – Group	**<Organizational unit number for CEP-PGRP-1>**
Consider Organization Unit of User	ID of the organizational unit that is defined	Not selected

Field	Description	Value
Condition	ID of the organizational unit that is defined	Blank

15. Save your entries.

Next Steps

Once you have defined the freight order type, you have to enter it in the planning profile. For more information, see Creating Planning Profiles [page 86].

6 Conditions and Selection Profiles

6.1 Defining Conditions for DTR Type Determination

Context

When the SAP Transportation Management system receives a delivery, it creates a delivery-based transportation requirement (DTR). This must be mapped to a document in the SAP Transportation Management system to determine the subsequent workflow process.

In this configuration step, the DTR type is determined when a delivery is transferred from SAP ERP to SAP Transportation Management.

Procedure

1. In SAP NetWeaver Business Client, choose ▌▶ *Application Administration* ❯ *General Settings* ❯ *Conditions* ❯ *Create Condition* ▌.
2. On the *New Condition Definition* screen, enter the following data:

Field	Value
Condition	`ZDTR_TYPE`
Description	`DTR Type Determination Condition`
Condition Type	`/SCMTMS/DTR_TYPE`
Origin of Condition	*Condition Based on BRFplus Decision Table*

3. Choose *Continue*.

> **i Note**
>
> If the system issues a message stating that the condition already exists, continue this process using the edit condition entry from the point at which you maintain values on the *Decision Table* tab page.

4. Choose the *Data Access Definition* pushbutton and enter the following data:

Row	Data Access Definition
10	`/SCMTMS/TRQ_DLV_CAT`
20	`/SCMTMS/TRQ_DLV_TYPE`

5. Choose *Back* and add the following rows to the decision table:

Field	Description	Value
TR: ERP Delivery Typ	Incoming base document type	Parameter: *Is Equal To* `CEPL`
DTR Type	Specify the data for integration here – the document type that is identified and used in SAP TM for DTR.	`CEP2`

> **i** Note
>
> To enter values on the *Decision Table* tab page, you may have to switch to edit mode and choose *Insert New Row*.

6. Save your entries.

Results

You have configured the integration settings between the incoming sales document and the DTR document type.

6.2 Creating Selection Profiles for Freight Units

Procedure

1. In SAP NetWeaver Business Client, choose ▶ *Application Administration* ❯ *Planning* ❯ *Selection Profiles* ❯ *Create Selection Profile* ▶.
2. On the *New Selection Profile* screen, choose the *Selection Profile* tab page and enter the following values:

Field	Value
Selection Profile	**CEP-SEL-PRO-01**
Description	**CEP-SEL-PRO-01**
Maximum Number of Selected Objects	**200**

3. Choose the *New* pushbutton beside the *Geographical Sel. Attributes* field.

   A dialog box appears.

4. Enter the following information in the dialog box:
   ○ *Profile Name*: **CEP-GEO**
   ○ *Description*: **CEP: Geographical Sel. Attr.**

5. Choose the *OK* pushbutton.

6. Choose the *Geographical Selection Attributes* tab page and select the *Both Locations* checkbox.

7. On the *Source Zones* tab page, enter the following data:

Sign	Option	Lower Value	Upper Value
Inclusive	*Pattern*	**CEP CHICAGO**	Blank

8. On the *Destination Zones* tab page, enter the following data:

Sign	Option	Lower Value	Upper Value
Inclusive	*Pattern*	**CEP CHICAGO**	Blank

9. Save your entries.

10. Return to the *Selection Profile* tab page and choose *New* next to the *Time-Related Sel. Attributes* field.

11. Enter the following information in the dialog box:
    ○ *Profile Name*: **CEP-TIME**
    ○ *Description*: **CEP: Time-Related Sel. Attr.**

12. Choose the *OK* pushbutton.

13. Choose the *Time-Related Selection Attributes* tab page.

14. In the *Pick-Up* and *Delivery* screen areas, enter the following data:

Field	Value
Pick-Up in Days	180
Delivery in Days	180

15. Save your entries.

16. Return to the *Selection Profile* tab page and choose *New* next to the *Additional Sel. Attributes* field.

17. Enter the following information in the dialog box:
    - *Profile Name*: `CEP-ADD`
    - *Description*: `CEP: Additional Sel. Attr.`
18. Choose the *OK* pushbutton.
19. Choose the *Additional Selection Attributes* tab page.
20. On the *Selection Values* tab page, enter the following data:

Field	Value
Business Object for Selection	`/SCMTMS/TO`
Field Name	`TOR_TYPE`
Sign	*Inclusive*
Option	*Within Range*
Lower Limit	`CEP1`
Upper Limit	`CEP2`

21. Save your entries.

6.3 Creating Selection Profiles for Freight Orders

Procedure

1. In SAP NetWeaver Business Client, choose ▶ *Application Administration* ❯ *Planning* ❯ *Selection Profiles* ❯ *Create Selection Profile* ◀.
2. On the *New Selection Profile* screen, choose the *Selection Profile* tab page and enter the following values:

Field	Value
Selection Profile	`CEP-FO-SEL-01`
Description	`CEP-FO-SEL-01`
Maximum Number of Selected Objects	`200`

3. Choose the *New* pushbutton next to the *Geographical Sel. Attributes* field.

   A dialog box appears.

4. Enter the following information in the dialog box:
   ○ *Profile Name*: `CEP-GEO`
   ○ *Description*: `CEP: Geographical Sel. Attr.`

5. Choose the *OK* pushbutton.

6. Choose the *Geographical Selection Attributes* tab page and select the *Both Locations* checkbox.

7. On the *Source Zones* tab page, enter the following data:

Sign	Option	Lower Value	Upper Value
Inclusive	*Pattern*	`CEP CHICAGO`	Blank

8. On the *Destination Zones* tab page, enter the following data:

Sign	Option	Lower Value	Upper Value
Inclusive	*Pattern*	`CEP CHICAGO`	Blank

9. Save your entries.

10. Return to the *Selection Profile* tab page and choose the *New* pushbutton next to the *Time-Related Sel. Attributes* field.

11. Enter the following information in the dialog box:
    ○ *Profile Name*: `CEP-TIME`
    ○ *Description*: `CEP: Time-Related Sel. Attr.`

12. Choose the *Time-Related Selection Attributes* tab page.

13. In the *Pick-Up* and *Delivery* screen areas, enter the following data:

Field	Value
Pick-Up in Days	180
Delivery in Days	180

14. Save your entries.

15. Return to the *Selection Profile* tab page and choose the *New* pushbutton next to the *Additional Sel. Attributes* field.

16. Enter the following information in the dialog box:
    ○ *Profile Name*: `CEP-ADD`
    ○ *Description*: `CEP: Additional Sel. Attr.`

17. Choose the *Additional Selection Attributes* tab page.

18. On the *Selection Values* tab page, enter the following data:

Field	Value
Business Object for Selection	`/SCMTMS/TO`
Field Name	`TOR_TYPE`
Sign	*Inclusive*
Option	*Within Range*
Lower Limit	`CEP3`
Upper Limit	

19. Save your entries.

6.4 Defining Capacity Settings

Context

You use this procedure to define the resource capacity used during optimization.

Procedure

1. In SAP NetWeaver Business Client, choose ▌▶ *Application Administration* ❯ *Planning* ❯ *Planning Profile Settings* ❯ *Capacity Selection Settings* ❯ *Create Capacity Selection Settings* ▐ .
2. In the *General Data* screen area, enter the following values:

Field	Value
Capacity Selection Settings	`CEP-CAPA`
Description	`CEP: Capacity Selection Settings`

3. On the *Vehicle Resources* tab page, enter the following values:

Field	Value
Attributes for Vehicle Resource Selection	**MTRTCO062_I** or **VEHICLERES_ID**
Sign	*Inclusive*
Option	*Pattern*
Lower Limit	***CEP***
Upper Limit	Blank

4. Save your entries.

6.5 Defining Optimizer Settings

Procedure

1. In SAP NetWeaver Business Client, choose ❚▶ *Application Administration* ❯ *Planning* ❯ *Planning Profile Settings* ❯ *Optimizer Settings* ❯ *Create Optimizer Settings* ❚.
2. On the *New Optimizer Settings* screen, enter the following values:

Field	Description	Value
Optimizer Settings	Self-defined name for optimizer	**CEP-OPT-SET-01**
Description	Description	**CEP: Optimizer Settings**
Planning Strategy	Planning strategy	**VSR_1STEP**
FO Building Rule	FO building rule	*New Freight Order When Resource Is Empty*
Accept Transp. Prop.	Accept transportation proposal	*Save Route and Freight Documents*
Planning Strategy for Transp. Prop.	Planning strategy for transportation proposal	**VSR_DEF**
Max. Number of Trans Proposals	Maximum number of transportation proposals	**6**

Field	Description	Value
Max. No. of Parallel Processes	Maximum number of parallel processes	**1**
Max. Runtime (Seconds)	VSR optimizer runtime (seconds)	**30**
Max. Time w/o Improvement	Maximum time without improvement	**5**
Consider Capacities During Optimization	Consider capacities during optimization	*Yes*
Maximum No. of Transshipment Loc.	Maximum number of transshipment locations	**2**

3. Save your entries.

6.6 Defining Freight Settlement Document Types

Procedure

1. In Customizing for SAP Transportation Management, choose ▌ *Transportation Management* ❯ *Settlement* ❯ *Freight Settlement* ❯ *Define Freight Settlement Document Types* ▐ .
2. Choose the *New Entries* pushbutton.
3. Enter the following data:

Field	Value
FSD Type	**CEP6**
Description	**CEP: Carrier Settlement Document**
FSD Category	*10 Freight Settlement Document*
Track Changes	Select
Bus. Warehouse	Select
Cost Distribution	Select
No. Range Interval	**01**

Field	Value
Output Profile	`/SCMTMS/TOR_INV_PREP`
Add. Output Profile	`/SCMTMS/SFIR_PRINT`
Dynamic Determination of Output Profile	Not selected

4. Save your entries.

6.7 Creating Carrier Selection Settings

Context

You use this procedure to create the carrier selection settings, which direct the carrier selection optimizer to make the proper rules-based decision.

Procedure

1. In SAP NetWeaver Business Client, choose ▶ *Application Administration* ❯ *Planning* ❯ *Planning Profile Settings* ❯ *Carrier Selection Settings* ❯ *Create Carrier Selection Settings* ▶.
2. Create the carrier selection settings using the following data:
   ○ In the *General Data* screen area, enter the following data:

Field	Value
Carrier Selection Settings	`CEP_CS`
Description	`CEP: Carrier Selection Setting`
Check Incompatibilities	Not selected
Type of Carrier Selection Settings	*Carrier Selection for Direct Shipment*

○ In the *Advanced Settings* screen area, enter the following data:

Field	Value
Planning Strategy	`TSPS_DEF`
Overall Carrier Availability	Not selected
Transportation Charge Interpretation	*Do Not Accept Carriers with Charges of Zero*
Consider Hierarchy	Blank

3. Save your entries.

6.8 Creating Planning Cost Settings

Context

The planning costs settings help to direct the optimizer's decisions about penalty and transit costs.

Procedure

1. In SAP NetWeaver Business Client, choose ▎▶ *Application Administration* ❭ *Planning* ❭ *Planning Profile Settings* ❭ *Planning Costs Settings* ❭ *Create Planning Costs Settings* ▎.
2. Create a planning costs profile with the following values:

General Data	Value
Planning Cost Settings	`CEP-PLAN-COST-SET-01`
Description	`CEP: Planning Costs Settings`
Currency	`USD`
Earliness/Delay Cost Basis	*Earliness/Delay Costs Defined in Planning Costs*
Costs for Non-Delivery	`999,999,999.000000000000`
Costs for Earliness per Day	`1.00000000000`

General Data	Value
Costs for Lateness per Day	**1.00000000000**

Means-of-Transport Costs

Means of Transport	**OCEP**
Calculation Basis for Costs per Distance: Planning Costs	Do Not Take into Account Costs per Distance
Calculation Basis for Costs per Distance: Lane	Take into Account Costs per Distance and Distance Unit from Lane
Fixed Means-of Transport Specific Costs	100
Repeat for each MTr	…
Means of Transport	**CEP_LTL**
Calculation Basis for Costs per Distance: Planning Costs	Do not take into Account Costs per Distance
Calculation Basis for Costs per Distance: Lane	Do not take into Account Costs per Distance
Fixed Means-of Transport Specific Costs	0
(Means-of-Transport Specific) Cost per Distance Unit	0.000 Taken from lane based on setting above
Unit of Measure	…
(Means-of-Transport Specific) Maximum Distance	0.000 Taken from lane based on setting above

3. Select the row in the table and enter the following values on the *Means-of-Transport Setting Details* tab page:

Field	Value
Means of Transport	**OCEP**
Dist. Costs from Planning Costs Settings	*No*
Dist. Costs from Transportation Lane	*Yes*
Basis for Quantity Costs	*Transportation Lane/Schedule: Distance-Independent*
Premature Pick-Up	**1.000**
Delayed Pick-Up	**1.000**

Field	Value
Premature Delivery	**1.000**
Delayed Delivery	**1.000**
Costs per Additional Intermed. Stop	**150.0000000000000**
Maximum Number of Stops	**4.000000000000000**

4. Save your entries.

6.9 Creating Planning Profiles

Context

In this procedure, you create a planning profile to determine how freight units are selected based on geography, pick-up dates, and delivery dates.

Procedure

1. In SAP NetWeaver Business Client, choose ▮ *Application Administration* ❯ *Planning* ❯ *Planning Profiles* ❯ *Create Planning Profile* ▮.
2. On the *New Planning Profile* screen, enter the following data in the *General Data* screen area of the *Planning Profile* tab page:

Field	Value
Planning Profile	**CEP-PLAN-PROF-01**
Description	**CEP: Planning Profile**

3. In the *Business Document Type* screen area, set the type determination rule to *Defined per Category in Planning Profile*.

    The screen changes to display a number of additional fields.
4. Choose any entry as the default type for the road freight order.

> **i Note**
>
> Once you have created the freight order type for the road freight order used in this scenario, you must change this entry to the correct freight order type. For more information, see Defining Freight Order Types [page 70].

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

Field	Value
Duration in Days	**180**
Additional Duration (hh:mm)	Blank
Offset in Days	Blank
Additional Offset (hh:mm)	Blank
Factory Cal. for Offs./Dur. Calc.	Blank
Round Horizon to Full Days	Select
Time Zone for Rounding the Horizon	**CST**

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

Field	Value
Selection Profile for Freight Orders	Blank
Selection Profile for Freight Bookings	Blank
Capacity Selection Settings	**CEP-CAPA**
Optimizer Settings	**CEP-OPT-SET-01**
Planning Costs Settings	**CEP-PLAN-COST-SET-01**
Incompatibility Settings	Blank
Carrier Selection Settings	**CEP-CS**

7. 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*

8. In the *Scheduling* area, enter the following data:

Field	Value
Scheduling Strategy	**VSS_DEF**
Consider Freight Unit Dates	*Consider Freight Unit Dates*
Scheduling Direction	*Backward*

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

Field	Value
Check Strategy	**VSR_CHECK**
Take Capacities into Account	*Warning*

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

Field	Value
Service Time Definition	*Freight Unit and MTr Independent*
Loading/Unloading Duration	**00:30:00**

11. Save your entries.

7 Charge Management

Use

The charge elements used in this scenario are:

Object Type	Object	Description
Rate Table	• CEP-RT-CR-01 • CEP-RT-CR-02	One rate table per carrier to calculate charges depending on the weight of the shipment .
Calculation Sheet	• CEP-TCCS-CR01-SL1 • CEP-TCCS-CR01-SL2 • CEP-TCCS-CR01-SL3 • CEP-TCCS-CR02-SL1 • CEP-TCCS-CR02-SL2 • CEP-TCCS-CR02-SL3	One calculation sheet per service level offered by each carrier. Both carriers offer 3 service levels with different delivery times.
Freight Agreement	• CEP-FA-CR-01 • CEP-FA-CR-02	One Freight Agreement per Carrier.

Activities

7.1 Defining Product Group Codes

Procedure

1. In Customizing for SAP Transportation Management, choose ▐▶ *SCM Basis* ❭ *Master Data* ❭ *Transportation Lane* ❭ *Transportation Service Provider Profile* ❭ *Define Product Freight Groups* ❭.

2. Enter the following data:

PrdFrtGp	Description	Tr.Grp
70, 77.5, 100, 125	NMFC freight class 70	0001 (on pallets)

3. Save your entries.

4. In Customizing for SAP Transportation Management, choose ▐▶ *SCM Basis* ❭ *Master Data* ❭ *Product* ❭ *Maintain Transportation Groups* ❭.

5. Check that transportation group *0001 On Pallets* is defined.

7.2 Defining Source Location Scales

Context

Rates are based on source and destination locations. The source location in this scenario is the shipping point.

Procedure

1. In SAP NetWeaver Business Client, choose ▐▶ *Master Data* ❭ *Charge Management and Service Products Catalogs* ❭ *Scales* ❭ *Create Scale* ❭.

2. On the *Create Scale* screen, choose the *Continue* pushbutton without entering a scale template.

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

Field	Description	Value
Scale	Scale identifier	**CEP-SCALE-ORIGIN_LOC**
Description	Description of the scale	**Source Location**
Scale Base	Defines the basis of the scale, such as location, distance, or duration.	**LOC**
Scale Type	Specifies how the scales are to be maintained	*Same Scale (=)*
Scale Unit of Measure	Specifies the unit of measure for the scale base. For example, if the scale base is distance, the unit of measure could be kilometers or miles.	Blank
Rounding Profile	Rule to round up or down	Blank

4. On the *Items* tab page, enter the following data in the table:

Internal Location	Calculation Type
SP3100@ERP001	*Absolute*

5. Save your entries.

7.3 Defining Destination Region Scales

Use

Truckload rates are represented by origin to state rates. In SAP Transportation Management, no distinction is made between region and state.

In this step, you create the scale to represent the states in the scenario. The scenario uses two scales to calculate charges: carriers 01 and 02 are region-based and so a destination-region scale has to be created; carriers 03 and 04 are postal-code-based and so a destination-zone scale has to be created.

Procedure

1. In SAP NetWeaver Business Client, choose ▶ *Master Data* ❯ *Charge Management and Service Products Catalogs* ❯ *Scales* ❯ *Create Scale* ❱.
2. On the *Create Scale* screen, choose the *Continue* pushbutton without entering a scale template.

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

Field	Description	Value
Scale	Scale identifier	`CEP-SCALE-DEST-REGIO`
Description	Description of the scale	`Region-Based Scale`
Scale Base	Defines the basis of the scale, such as location, distance, or duration.	`REGION`
Scale Type	Specifies how the scales are to be maintained	*Same Scale (=)*
Scale Unit of Measure	Specifies the unit of measure for the scale base. For example, if the scale base is distance, the unit of measure could be kilometers or miles.	Blank
Rounding Profile	Rule to round up or down	Blank

4. On the *Items* tab page, enter the following data in the table:

Region	Calculation Type
`IN`	*Absolute*
`UT`	*Absolute*
`ND`	*Absolute*
`CA`	*Absolute*
`KY`	*Absolute*

5. Save your entries.

> i Note
>
> You can add further rows to define more region values, but remember to also add the respective rates.

7.4 Defining Destination Zone Scales

Use

New scales are defined for a less-than-truck-load scenario based on zones. The following zones have been defined for this scenario:

- `ZN_606`: For postal code 60654 – the Chicago plant/shipping point
- `CEP-ZIP-303`: For postal codes 30300 to 40199
- `ZN_477`: For postal codes 47000 to 59999
- `ZN_402`: For postal codes 40200 to 40299
- `ZN_410`: For postal codes 41000 to 41099
- `ZN_701`: For postal codes 70100 to 99999

Procedure

1. In SAP NetWeaver Business Client, choose ▌ *Master Data* ❭ *Charge Management and Service Products Catalogs* ❭ *Scales* ❭ *Create Scale* ▌.
2. On the *Create Scale* screen, choose the *Continue* pushbutton without entering a scale template.
3. On the *General Data* tab page, enter the following data:

Field	Description	Value
Scale	Scale identifier	`CEP-SCALE-DEST-ZONE`
Description	Description of the scale	`3-Digit Zones`
Scale Base	Defines the basis of the scale, such as location, distance, or duration.	`TRZONE`
Scale Type	Specifies how the scales are to be maintained	*Same Scale (=)*
Scale Unit of Measure	Specifies the unit of measure for the scale base. For example, if the scale base is distance, the unit of measure could be kilometers or miles.	Blank
Rounding Profile	Rule to round up or down	Blank

4. On the *Items* tab page, enter the following data in the table:

Transportation Zone	Calculation Type
`CEP-ZIP-303`	*Absolute*
`CEP-ZIP-477`	*Absolute*
`CEP-ZIP-410`	*Absolute*
`CEP-ZIP-402`	*Absolute*
`CEP-ZIP-606`	*Absolute*
`CEP-ZIP-701`	*Absolute*

5. Save your entries.

> **i Note**
>
> You can add further rows to define more zone values. Remember to add the respective rate values.

7.5 Defining Less-Than-Truckload Break-Weight Scales

Context

Less-than-truck load (LTL) rates are based on break-weights (that is, scales). These must be defined directly in the SAP system. Standard business practice would represent these break-weights in terms of CWT (hundredweight). This practice can be modeled in the SAP system by creating a unit of measure for CWT. However, in this document, the following pound break-weights are created:

- 0
- 500
- 1000
- 2000
- 5000
- 10000
- 20000

Procedure

1. In SAP NetWeaver Business Client, choose ▌▶ *Master Data* ❯ *Charge Management and Service Products Catalogs* ❯ *Scales* ❯ *Create Scale* ❯.
2. On the *Create Scale* screen, choose the *Continue* pushbutton without entering a scale template.
3. On the *General Data* tab page, enter the following data:

Field	Description	Value
Scale	Scale identifier	CEP-SCALE-LTL_WT_BRK
Description	Description of the scale	LTL Break-Weight Scale
Scale Base	Defines the basis of the scale, such as location, distance, or duration.	WEIGHT
Scale Type	Specifies how the scales are to be maintained	*Base Scale (>=)*
Scale Unit of Measure	Specifies the unit of measure for the scale base. For example, if the scale base is distance, the unit of measure could be kilometers or miles.	LB
Rounding Profile	Rule to round up or down	Blank

4. On the *Items* tab page, enter the following data in the table:

Scale Value: Weight	Calculation Type
0.1	*Relative*
500	*Relative*
1,000	*Relative*
2,000	*Relative*
5,000	*Relative*
1,0000	*Relative*
2,0000	*Relative*

5. Save your entries.

7.6   Defining Product Group Scales

Context

SAP represents product classes using the product group in the material master. This value is configured as part of the material master in SAP ERP. There are several product classes, but this scenario uses only a few materials. In this procedure, you create four product classes (groups):

- 70
- 70.5
- 100
- 125

Procedure

1. In SAP NetWeaver Business Client, choose ▶ *Master Data* ▶ *Charge Management and Service Products Catalogs* ▶ *Scales* ▶ *Create Scale* ▶.
2. On the *Create Scale* screen, choose the *Continue* pushbutton without entering a scale template.
3. On the *General Data* tab page, enter the following data:

Field	Description	Value
Scale	Scale identifier	**CEP-SCALE-PRD_GROUP**
Description	Description of the scale	**Product Group Class Scale**
Scale Base	Defines the basis of the scale, such as location, distance, or duration.	**PRDGRP**
Scale Type	Specifies how the scales are to be maintained	*Same Scale (=)*
Scale Unit of Measure	Specifies the unit of measure for the scale base. For example, if the scale base is distance, the unit of measure could be kilometers or miles.	Blank
Rounding Profile	Rule to round up or down	Blank

4. On the *Items* tab page, enter the following data in the table:

Charge Product Freight Grp	Calculation Type
70	*Absolute*
77.5	*Absolute*
100	*Absolute*
125	*Absolute*

5. Save your entries.

7.7 Defining Stop-Off Scales

Context

Stop-off charges can be either flat rates per stop or increasing charges for each stop. This scenario uses a scale to represent the increase in costs for each additional stop. If you use flat rates per stop, this procedure is not required. A flat charge per stop can be represented directly in the calculation sheet.

Procedure

1. In SAP NetWeaver Business Client, choose ▶ *Master Data* ❯ *Charge Management and Service Products Catalogs* ❯ *Scales* ❯ *Create Scale* ◀.
2. On the *Create Scale* screen, choose the *Continue* pushbutton without entering a scale template.
3. On the *General Data* tab page, enter the following data:

Field	Description	Value
Scale	Scale identifier	**CEP-SCALE-STOPOFF**
Description	Description of the scale	**Stop-Off Scale**
Scale Base	Defines the basis of the scale, such as location, distance, or duration.	**NUMBER**
Scale Type	Specifies how the scales are to be maintained	*Base Scale (>=)*

Field	Description	Value
Scale Unit of Measure	Specifies the unit of measure for the scale base. For example, if the scale base is distance, the unit of measure could be kilometers or miles.	Blank
Rounding Profile	Rule to round up or down	Blank

4. On the *Items* tab page, enter the following data in the table:

Number of Units	Calculation Type
0.00	*Absolute*
50.00	*Absolute*
75.00	*Absolute*
100.00	*Absolute*
125.00	*Absolute*
150.00	*Absolute*

5. Save your entries.

7.8 Defining Carrier Rates

Context

In this procedure, you create two rate tables for the parcel carriers.

Procedure

1. In SAP NetWeaver Business Client, choose ▶ *Master Data* ❯ *Charge Management and Service Product Catalogs* ❯ *Rate Tables* ❯ *Create Rate Table Definition* ▶ .
2. On the *New Rate Table Definition* screen, choose the *Continue* pushbutton without entering a rate table template or type.

3. On the *General Data* tab page, enter the following information for each rate table definition:

Field	CEP-RT-CR-01	CEP-RT-CR-02
Description	**Rate Table for CEP-CR-01**	**Rate Table for CEP-CR-02**
Charge Usage	*Service Provider*	*Service Provider*
Time Zone	**CET**	**CET**
Charge Type	**FB00** (Basic Rate)	**FB00** (Basic Rate)
Charge Category	**004** (Basic Freight)	**004** (Basic Freight)
Charge Subcategory	**100000** (Freight Charges)	**100000** (Freight Charges)
Positive/Negative	*Positive Value*	*Positive Value*
Value Type	*Absolute Value*	*Absolute Value*

4. Choose the *Insert Scale* pushbutton and enter the following values in the details area of the table (the values are the same for both carriers):

Field	Value
Description	**Weight Scale**
Calculation Base	**GROSS_WEIGHT**
Scale Type	*To Scale (<=)*
Scale Unit of Measure	**LB**
Rounding Profile	Blank
Minimum Value	Not selected
Maximum Value	Not selected
Rel. Calc. Method	Not selected

5. Save your entries.

6. Choose the *Dates and Values* tab page and enter the following data (same for each carrier):

Valid From	Valid To	Currency
<current year>-01-01	**2099-12-31**	**USD**

7. Select the row that you just inserted and choose the *Calculation Rules* tab page.

8. Enter the following values in the rate table:

Gross Weight (in LB)	Carrier 1	Carrier 2
11	10.5	12.00
22	8.00	10.00
55	7.50	8.10
110	6.75	6.50
220	6.00	5.50
1100	5.75	5.00

9. On the *Calculation Rules* tab page, add a new line with the following attributes (same for each carrier):

Field	Value
Calculation Base	GROSS_WEIGHT
Appl. Level of Calc. Rule	Rate Table
Price Unit	1
Unit of Measure	LB

10. Save your entries.

11. On the *Dates and Values* tab page, choose ▶ *Set Status* ❯ *Released* ❯ to release the rate table for use.

7.9 Defining Calculation Sheets

Context

In this step, you create three calculation sheets for each carrier that differ only in the amount of the service charge, which in turn corresponds to the service level required for the shipment. Service level 1 is always the most expensive (for example, overnight delivery).

Procedure

1. In SAP NetWeaver Business Client, choose ▌▶ *Master Data* ❯ *Charge Management and Service Product Catalogs* ❯ *Calculation Sheets* ❯ *Create Calculation Sheet* ▌.

2. Choose the *Continue* pushbutton without specifying a calculation sheet template.

3. On the *New Calculation Sheet* screen, create the following calculation sheets in turn:

Field	Value
Calculation Sheet	**CEP-TCCS-CR01-SL1**
Description	**TCCS Carrier 01 SL1**
Charge Usage	*Service Provider*
Time Zone	**CST**

4. In the *Items* table, choose ▌▶ *Insert* ❯ *Single Item* ▌. to create a row for each item listed in the table below.

5. Enter the following data:

Field	Value
Instruction Type	*Standard*
Charge Type	**FB00**
Rate Table	**CEP-RT-CR-01**

6. Insert a second item with the following attributes:

Field	Value
Instruction Type	*Standard*
Charge Type	**SRVC**
Amount	**15.00**
Currency	**USD**

7. Save your entries.

8. Create two more calculation sheets for carrier 1, changing only the description and the amount for the service charge as follows:

Calculation Sheet Name	Description	Amount
CEP-TCCS-CR01-SL2	TCCS Carrier 01 SL2	15 USD
CEP-TCCS-CR01-SL3	TCCS Carrier 01 SL3	12 USD

9. Repeat the procedure to create calculation sheets for carrier 2, changing only the name, description, and amount for the service charge. Use the following data:

Calculation Sheet Name	Description	Amount
CEP-TCCS-CR02-SL1	TCCS Carrier 02 SL1	15 USD
CEP-TCCS-CR02-SL2	TCCS Carrier 02 SL2	14 USD
CEP-TCCS-CR02-SL3	TCCS Carrier 02 SL3	13 USD

7.10 Defining Freight Agreement Types

Procedure

1. In Customizing for SAP Transportation Management, choose ▌▶ *Transportation Management* ❯ *Master Data* ❯ *Agreements and Service Products* ❯ *Define Freight Agreement Types* ❯ .
2. Choose the *New Entries* pushbutton and enter the following values, which apply to all your freight agreements:

Field	Value
Agr. Type	CEP5
Description	CEP Freight Agreement Type
Dflt Agr. Type	Deselect
Track Changes	Deselect
Multiple Parties	Deselect
Agr. No. Range	02

Field	Value
Txt Schema	**Default**
Calc Sheet Tmpl	Blank
Time Determ. Type	**1 Transit Duration Plus Calendar**
Desp. Time Det. Ty.	**2 Editable**
Departure Cal.	**US**
Transit Cal.	**US**
Arrival Cal.	**US**

3. Save your entries.

7.11 Defining Freight Agreements

Prerequisites

You have defined freight agreement CEP5.

Procedure

Create Freight Agreement for Carrier 1

1. In SAP NetWeaver Business Client, choose ▶ *Freight Agreement Management* ▶ *Freight Agreements* ▶ *Create Freight Agreement* ▶.
2. On the *New Freight Agreement* screen, enter agreement type **CEP5** and choose the *Continue* pushbutton (leave the *Mutual Agreement* checkbox deselected):
3. On the *General Data* tab page, create the following freight agreements in turn:

Field	Value
Agreement	**CEP-FA-CR-01**
Description	**Freight Agreement Carrier 01**
Purchasing Organization	**CEP-PORG-1**

Field	Value
Carrier	`CEP-CR-01`
Controlled	Select
Time Zone	`CET`
Valid-From Date	`<current year>-01-01`
Valid-To Date	`2099-12-31`
Agreement Priority	`1`
Document Currency	`USD`

4. In the *Items* screen area, choose the *Insert* pushbutton and select *Item*.
5. Create each of the following items in turn

Field	Item 1	Item 2	Item 3
Carrier Service Product	`Overnight`	`2 Day Delivery`	`Standard`
Calculation Sheet	`CEP-TCCS-CR01-SL1`	`CEP-TCCS-CR01-SL2`	`CEP-TCCS-CR01-SL3`
Duration	`12:00`	`24:00`	`36:00`
Service Level	`D1`	`D2`	`D3`

6. From the toolbar, choose ▶ *Set Status* ❯ *Released* ❯.
7. Save your entries.

Create Freight Agreement for Carrier 2

1. In SAP NetWeaver Business Client, choose ▶ *Freight Agreement Management* ❯ *Freight Agreements* ❯ *Create Freight Agreement* ❯.
2. On the *New Freight Agreement* screen, enter agreement type `CEP5` and choose the *Continue* pushbutton (leave the *Mutual Agreement* checkbox deselected):
3. On the *General Data* tab page, create the following freight agreements in turn:

Field	Value
Agreement	`CEP-FA-CR-02`
Description	`Freight Agreement Carrier 02`
Purchasing Organization	`CEP-PORG-1`
Carrier	`CEP-CR-02`

Field	Value
Controlled	Select
Time Zone	`CST`
Valid-From Date	`<current year>-01-01`
Valid-To Date	`2099-12-31`
Agreement Priority	`1`
Document Currency	`USD`

4. In the *Items* screen area, choose the *Insert* pushbutton and select *Item*.
5. Create each of the following items in turn

Field	Item 1	Item 2	Item 3
Carrier Service Product	`Express`	`2 Day Delivery`	`Standard`
Calculation Sheet	`CEP-TCCS-CR02-SL2`	`CEP-TCCS-CR02-SL2`	`CEP-TCCS-CR02-SL3`
Duration	`12:00`	`36:00`	`72:00`
Service Level	`F1`	`F2`	`F3`

6. From the toolbar, choose ▌▶ *Set Status* ❯ *Released* ▌.
7. Save your entries.

7.12 Defining Settlement Profile

Context

You use this procedure to define the profile for creating invoices. The settlement profile consists of a set of parameters with which you control how the system creates invoices. You can assign the defined settlement profile to an organizational unit using transaction `/SCMTMS/TCM_FASET`. If you do not specify a settlement profile, the system uses default settings to create settlement documents.

Procedure

1. In Customizing for SAP Transportation Management, choose ▌▶ *Transportation Management* ❯ *Settlement* ❯ *Define Settlement Profile* ▐ .

2. Choose the *New Entries* pushbutton and enter the following data:

Field	Description	Value
Settlement Profile	Name of settlement profile	**CEP_SP_01**
Description	Description	**CEP Settlement Profile**
Profile Category	Profile category	*Forwarding and Freight Settlement*
Data Source	Specifies the data source to be used when settlement documents are created.	*01 Planned Data*
Calculation Option	Specifies how charges are to be calculated when the invoice is created. You can copy fixed charges and redetermine others, or copy all charges.	*A Copy Fixed Charges and Redetermine Others*

3. Save your entries.

7.13 Defining Calculation Profile

Procedure

1. In Customizing for SAP Transportation Management, choose ▌▶ *Transportation Management* ❯ *Basic Functions* ❯ *Charge Calculation* ❯ *Basic Settings* ❯ *Define Calculation Profiles* ▐ .

2. Choose the *New Entries* pushbutton and enter the following data:

Field	Value
Calculation Profile	**CEP**
Description	**CEP: Charge Calculation Profile**
Calc. Date Ty	**System Date**

Field	Value
Calculation Level	**2 Calculation at Item Level**
Agr. Det. Rule	Blank
Calc Sheet Det. Rule	Blank
Through Rate	Blank
Dim Wt Profile	Deselect
Dimal Wt Cond	Blank
Exch. Rate Type	Blank
Data Source	**Actual Route**

3. Save your entries.

7.14 Defining Charges Profile

Procedure

1. In Customizing for SAP Transportation Management, choose ▶ *Transportation Management* ❯ *Basic Functions* ❯ *Charge Calculation* ❯ *Basic Settings* ❯ *Define Charges Profiles* ❯.
2. Enter the following data:

Field	Value
Charges Profile	**CEP_CPROF**
Default Purch. Org	**<Internal ID of purchasing organization CEP-PORG-01>**
Settlement Profile	**CEP_SP_01**
Calculation Profile	**CEP**
Local Currancy	**USD**

3. Save your entries.

4. Update purchasing organization `CEP-PORG-01` in transaction `PPOME`, navigate to the *Org. Data* tab page, and enter **CEP_CPROF** as the charges profile ID.

8 Tracking Parcel Shipments in SAP Event Management

8.1 Configuring Settings for Tracking Parcel Shipments in SAP TM

Procedure

1. In SAP Note 2083997, enter business configuration set `Z_PARCEL_TM_SIDE.bcs`
2. In transaction **SCPR3**, upload business configuration set `Z_PARCEL_TM_SIDE.bcs`.
3. In transaction **SCPR20**, activate business configuration set `Z_PARCEL_TM_SIDE.bcs`.
4. In SAP NetWeaver Business Client, choose ▶ *Application Administration* ❯ *General Settings* ❯ *Conditions* ❯ *Create Condition* ◢.
5. Create a condition with the following data:

Field	Value
Condition	`Z_PARCEL_FIX_TOR`
Description	`Fix Freight Order Chaco`
Condition Type	`/SCMTMS/CC_TOR_STRAT`
Origin of Condition	*Condition Based on BRFplus Decision Table*

6. Choose the *Data Access Definition* pushbutton.
7. Choose the *Create* pushbutton and enter the following data:

Field	Value
Column	`10`

Field	Value
Data Element Used for Input Help	`/SCMTMS/TOR_EVENT`
Name of BO Used	`/SCMTMS/TOR`
Name of BO Node Used	`EXECUTIONINFORMATION`
Name of the Field	`EVENT_CODE`

8. Choose the *Back* pushbutton.

9. In the *Decision Table* screen area, choose the *Insert New Row* pushbutton and enter the following data:

Field	Value
Event Occuring for a	*Is not initial*
Chaco Strategy	`FIX_TOR`

10. Save your entries.

11. In Customizing for Transportation Management under ❙▶ *Freight Order Management* ❭ *Freight Order* ❭ *Define Freight Order Types* ❭, enter condition `Z_PARCEL_FIX_TOR` in the *Change Strategy Det. Cond.* field of freight order type `CEP3`.

12. Make all further settings that are required for the integration of SAP Transportation Management with SAP Event Management as described in the *Integration of SAP TM with SAP Event Management* guide. These settings include the following:
    ○ Defining an RFC connection to SAP Event Management
    ○ Creating a logical system in SAP Event Management
    ○ Defining SAP Event Management
    ○ Adding the *Event Manager* to the application object type which was created by the activation of the business configuration set

8.2 Configuring Settings for Parcel Shipment Tracking in SAP Event Management

Procedure

1. Create function modules as described in SAP Note 2083997🔗 (Implementation Content for Parcel Scenario).

2. In transaction `SCPR3`, upload business configuration set `Z_PARCEL_EM_SIDE.bcs`.

3. In transaction **SCPR20**, activate business configuration set `Z_PARCEL_EM_SIDE.bcs`.

4. Make all further settings that are required for the integration of SAP Transportation Management with SAP Event Management as described in the *Integration of SAP TM with SAP Event Management* guide. These settings include the following:

   ○ Assigning your user to web transactions (see Assigning User to Web Transactions [page 111])
   ○ Assigning the mapping profile to a mapping area

8.2.1 Assigning User to Web Transactions

Use

You assign a user to a web interface transaction and to an existing user profile so that the appropriate web layout for sending event messages and querying event handler information is available. Therefore, you need to assign a web interface and a transaction to your user that have been uploaded as part of your business configuration set.

Procedure

1. In Customizing for SAP Event Management, choose ▌ *Event Management* ❯ *Event Messages, Status Queries, and Web Interface* ❯ *Web Interface* ❯ *Assign User Profiles and Web Interface Transactions to Users* ❯

2. Enter your user name in the *Determine Work Area: Entry* dialog box.

3. Choose *New Entries*, and enter the following data:

Web Interface	Transaction
Z_PS_01	**Z_PS**

4. Save your settings.

. 3.

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