

Configuration Guide for Ocean Freight

SAP Transportation Management



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1 Configuration Guide for LCL and FCL Ocean Freight

About this Document

This configuration guide describes a scenario for LCL (less than container load) and FCL (full container load) ocean freight. Implement this scenario as described, and once you have verified the functionality, you can modify the data to suit your own environment and operating conditions.

Change History

Table 2

Version	Date	Description
1.0	August 2011	Initial release
2.0	September 2012	Master data and Customizing settings renamed to correspond to those in the air freight scenario.
2.1	February 2013	Updated calculation sheets and rate tables
3.0	December 2013	Updated for SAP Transportation Management 9.1
4.0	December 2014	Updated for SAP Transportation Management 9.2
4.1	March 2015	Updated to include information about FCL scenario

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 service.sap.com/notes .

Table 3

SAP Note Number	Description
1738013	TM: Integration with ERP Enhancement Packages

2 The Scenario

This document describes the configuration settings for the LCL (less than container load) and FLC (full container load) ocean freight scenario in SAP Transportation Management (SAP TM).

Some settings in this guide can be copied from the existing SAP ERP configuration. In particular, you can reuse SAP ERP Customizing settings 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 including G/L Accounts) and change them as necessary (such as addresses).

i Note

Business system groups, logical systems, RFC (remote function call) 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 number [458914](#)). An overview of the prefixes and suffixes used is in the following table (this document uses the system ID ERPO01 as an example. Substitute this with your own system ID):

Table 4

Business Object	Prefix	Suffix
Customer	CU-	-@ERPO01
Plant	PL-	-@ERPO01
Shipping Point	SP-	-@ERPO01
Supplier	SU-	-@ERPO01
System	None	-@ERPO01

For example:

- Shipping point name in SAP ERP: 1200
- Shipping point name in SAP TM: SP1200@ERPO01

If you have not implemented the corresponding BAdI in your system, the names of the objects are not changed. To add a prefix or suffix to the master data objects that are transferred from SAP ERP to SAP TM, implement SAP Note [458914](#) (*Consulting note: Sample code for inbound user exit locations*).

If you implement this SAP Note, locations for carriers are created with the relevant prefix and suffix (for example, a location of type 1020 = TSP). However, business partners retain the original name used in SAP ERP:

Table 5

Business Object	Prefix/Suffix for Location	Prefix/Suffix for Business Partner
Carrier	CA- / -@ERPO01	None / None

For example:

- Carrier name in SAP ERP: OAF-CR-01
- Carrier location name in SAP ERP: CAOAF-CR-01@ERP001
- Carrier name in SAP TM: OAF-CR-01

Prerequisites

Before you begin to configure the LCL or FCL ocean freight scenario, see the following guides in SAP Solution Manager under ► *SAP Transportation Management* ► *Configuration Structures* ► *Basic Settings for SAP TM <release level>* ►:

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

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

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

If you want to integrate SAP TM with SAP Environmental Health and Safety (EHS) Dangerous Goods Management (DGP), you must configure your SAP ERP system to run this process:

- EHS – DGP
 - Dangerous goods master
 - Dangerous goods checks
 - Dangerous goods documents

User Profile

Before you begin to test the LCL or FLC ocean freight scenario, you must configure the user profile `TM_INVOICE_CLERK` in your SAP ERP system for your test user. To do so, proceed as follows:

1. In SAP ERP, choose ► *System* ► *User Profile* ► *Own Data* ►.
2. Choose the *Parameters* tab page.
3. In the *Parameter ID column*, enter `TM_INVOICE_CLERK`.
4. Save your entries.

Geography

The “LCL Ocean Freight” scenario assumes an international overseas transportation network with four shippers located in Japan, ocean transport from the port in Yokohama to Los Angeles, and four customers located in the western part of the United States.

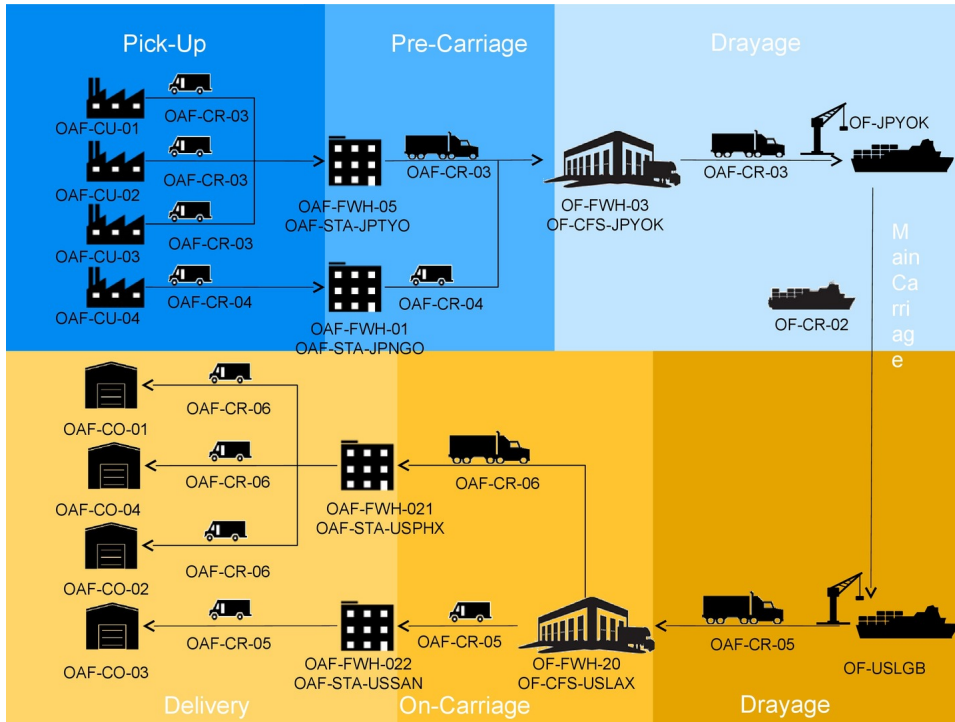


Figure 1: Stages in the “LCL Ocean Freight” Scenario

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

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

- Organizational data – Japan

Table 6

Parameter	Value
Company Code	5000 (IDES Japan)
Controlling Area	5000 (CO Japan)
Plant	5000 Tokyo
Purchasing Organization	5000 (IDES Japan)
Sales Organization	5000 (IDES Japan)
Distribution Channel	10 (Final Customer Sales)

- Organizational data – United States

Table 7

Parameter	Value
Company Code	3000 (IDES USA Inc.)
Controlling Area	3000 (CO North America)
Plant	3300 Los Angeles
Purchasing Organization	3000 (IDES USA Inc.)
Sales Organization	3000 (IDES USA Philadelphia)
Distribution Channel	10 (Final Customer Sales)

3 SAP ERP Master Data: Customers and Vendors

After defining master data for customers and vendors, you can transfer the data from SAP ERP to SAP TM.

The process involves the following tasks:

- [Defining vendor master data \[page 12\]](#)
In this scenario, vendors represent the carriers.
- [Defining customer master data \[page 14\]](#)
- [Transferring master data from SAP ERP to SAP TM \[page 16\]](#)

3.1 Defining Vendor Master Data in SAP ERP

In this procedure, you create vendor master data. The vendor master is then transferred to SAP TM through CIF. The corresponding locations with location type 1011 (Vendor) are created in SAP TM. In this case, vendors represent our carriers.

Procedure

1. On the *SAP Easy Access* screen for SAP ERP, choose **Logistics > Materials Management > Purchasing > Master Data > Vendor > Central > Create** or call transaction `XX01`.
2. Create the vendors assigned to the purchasing organizations 3000 and 5000 according to the following table:

Table 8

Vendor ID	Company Code	Purchasing Organization	Account Group
OAF-CR-01	5000	5000	0005
OAF-CR-02	3000 and 5000	3000 and 5000	0005
OAF-CR-03	5000	5000	0005
OAF-CR-04	5000	5000	0005
OAF-CR-05	3000	3000	0005
OAF-CR-06	3000	3000	0005

3. On the *Create Vendor: Address* screen, enter the following address data for each vendor:

Table 9

Vendor ID	Name	Search Term	Address
OAF-CR-01	EASC - East Asia Shipping Corp	Ocean Carrier JP	Nippon Costal Highway 101, 2300054 Yokohama, JP, Region 14 (Kanagawa)
OAF-CR-02	SOCAL Shipping Corporation	Ocean Carrier US	Main Street 25, 90745 Long Beach, United States, Region CA
OAF-CR-03	Uchida Trucking	Truck Carrier JP	Tome Nagi 7-53-12, 1020021, Ota-ku, JP, Region 13 (Tokyo)
OAF-CR-04	Ich-Ni Express	Truck Carrier JP	Hadaka-Jime 15, 4600001 Nagoya, JP Region 23 (Aichi)
OAF-CR-05	ACME Lines	Truck Carrier US	Beach Street 10, 90745-1246 Long Beach, United States, Region CA
OAF-CR-06	Desert Express Lines	Truck Carrier US	First 355, 85025-8848 Phoenix, United States, Region AZ

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

Table 10

Vendor ID	Recon. Account	Cash Management Group
OAF-CR-01	141100	A1
OAF-CR-02 (company code 3000)	196300	A1
OAF-CR-02 (company code 5000)	141100	A1
OAF-CR-03	141100	A1
OAF-CR-04	141100	A1
OAF-CR-05	196300	A1
OAF-CR-06	196300	A1

5. On the *Create Vendor: Payment Transactions Accounting* screen, enter the following data for each vendor:

Table 11

Vendor ID	Payment Terms
OAF-CR-01	0002
OAF-CR-02	0002
OAF-CR-03	0002
OAF-CR-04	0002
OAF-CR-05	0002
OAF-CR-06	0002

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

Table 12

Vendor ID	OAF-CR-01	OAF-CR-02	OAF-CR-03	OAF-CR-04	OAF-CR-05	OAF-CR-06
Order Currency	JPY	USD	JPY	JPY	USD	USD
Terms of Payment	0002	0002	0002	0002	0002	0002
Incoterms	Blank	Blank	Blank	Blank	Blank	Blank
Purchase Group	Blank	Blank	Blank	Blank	Blank	Blank
Planned Delivery Time	Blank	Blank	Blank	Blank	Blank	Blank
Conf. Control	Blank	Blank	Blank	Blank	Blank	Blank
Shipping Condition	Blank	Blank	Blank	Blank	Blank	Blank

3.2 Defining Customer Master Data in SAP ERP

Procedure

- 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 .
- On the initial screen, enter the data shown in the following table:

Table 13: Japanese Customers

Customer ID	OAF-CU-01	OAF-CU-02	OAF-CU-03	OAF-CU-04
Account Group	KUNA: General Customers	KUNA: General Customers	KUNA: General Customers	KUNA: General Customers
Company Code	5000	5000	5000	5000

<i>Sales Organization</i>	5000	5000	5000	5000
<i>Distribution Channel</i>	10	10	10	10
<i>Division</i>	00	00	00	00

- Choose *Continue* .
- Enter the following address data:

Table 14: Japanese Customers: Address Data

<i>Customer ID</i>	OAF-CU-01	OAF-CU-02	OAF-CU-03	OAF-CU-04
<i>Name</i>	KAN XINSON CLOTHING CO. LTD.	Wabei Electronics Factory	Japan Cable LTD	Samurai Fireworks LTD
<i>Street</i>	Kioi-cho	Denenchofu	Kawabe	Shirokane
<i>House Number</i>	7-1	2-53-12	3-25	1-27-6
<i>Postal Code</i>	1020094	1020021	5011198	1080072
<i>City</i>	Chiyoda-ku	Ota-ku	Gifu	Minato-ku
<i>Region</i>	13	13	23	13
<i>Country</i>	JP	JP	JP	JP
<i>Time Zone</i>	JAPAN	JAPAN	JAPAN	JAPAN

- Choose ► *Goto* ► *Sales Area Data* ► and enter the following data for all customers:

Table 15: Japanese Customers: Sales Area Data

<i>Tab Page</i>	<i>Field</i>	<i>Entry</i>
<i>Sales</i>	<i>Price Group</i>	01
	<i>Cust. pric. proc.</i>	1
<i>Shipping</i>	<i>Order combination</i>	Activate
	<i>Shipping Condition</i>	01
<i>Billing Documents</i>	<i>Tax Classification</i> for all Tax Codes	0 (Tax Exempt)
	<i>Incoterms</i>	Blank
	<i>Incoterm Locations</i>	Blank
	<i>Terms of Payment</i>	Blank

- Choose ► *Goto* ► *Company Code Data* ► and enter the following information for all customers:

Table 16: Japanese Customers: Company Code Data

<i>Tab Page</i>	<i>Field</i>	<i>Entry</i>
<i>Account Management</i>	<i>Reconciliation Account</i>	145200
<i>Payment Transactions</i>	<i>Terms of Payment</i>	0001

- Repeat the steps above to create the following U.S. customers:

Table 17: U.S. Customers

<i>Customer ID</i>	OAF-CO-01	OAF-CO-02	OAF-CO-03	OAF-CO-04
<i>Company Code</i>	3000	3000	3000	3000
<i>Sales Organization</i>	3000	3000	3000	3000
<i>Distribution Channel</i>	10	10	10	10
<i>Division</i>	00	00	00	00
<i>Name</i>	Dosena Clothing Co Factory	Ten Media Inc.	Soutwire CO.	Scottsdale Fireworks Inc.
<i>Street</i>	State Route	Stallard Pl	West Main Street	Alma School Road
<i>House Number</i>	1710 W	10940 N	575	2012 N
<i>Postal Code</i>	86336	85737	92227	85256
<i>City</i>	Sedona	Tucson	Brawley	Scottsdale
<i>Region</i>	AZ	AZ	CA	AZ
<i>Country</i>	US	US	US	US
<i>Time Zone</i>	MSTNO	MSTNO	PST	MSTNO
<i>Price Group</i>	01	01	01	01
<i>Cust. pric. proc.</i>	1	1	1	1
<i>Shipping Conditions</i>	01	01	01	01
<i>Order combination</i>	Activate	Activate	Activate	Activate
<i>Incoterm</i>	Blank	Blank	Blank	Blank
<i>Incoterm Locations</i>	Blank	Blank	Blank	Blank

8. Save your entries.

3.3 Transferring Master Data from SAP ERP to SAP TM

Procedure

Creating the Integration Models

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 ►** or call transaction CFM1 .
2. Create separate integration models for transferring materials for plant, and vendor and shipping point. Take the following information into account:
 - Model name: OAF-IM-ORG for plants

- Model name: OAF-IM-DAT for vendors, customers and shipping points
 - Use the following details for both models:
 - Use the same logical TM system name, for example, TM1CLNT001 (input help [F4] is available)
 - Use APO application TM (for example, APO)
 - Prefix your selection with the initial letters, OF* , for customers and vendors
- Make sure that only plant is highlighted for model OAF-IM-ORG and that only shipping point, customer and vendor are highlighted for model OAF-IM-DAT.
- In OAF-IM-ORG select the corresponding plants for the transfer (3300 Los Angeles and 5000 Tokyo).
- In OAF-IM-DAT select the corresponding shipping points (3300 Los Angeles and 5000 Tokyo).
- In model OAF-IM-DAT, make sure that you activate the creation of business partners in the *Vendors and Customers* section by entering **2** (create both) in the *Create Loc/BP* field.
3. Execute the model.
 4. Generate the integration model (*Generate IM*).
 5. Save the model.
 6. To activate the models, 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* ► or call transaction CFM2 .
 7. Activate the two data models. Use transaction SMQ1 in SAP ERP to verify that all data has been transported. Use transaction SMQ2 in SAP TM system to verify data transfer.

i Note

- When you transfer vendors to the SAP TM system, you must ensure that the *Create Loc./BP* function (create Business Partners in TM for the location) is set to **2** on the Vendors tab page so that business partners are generated for vendors.
- You can also create business partners for plants and shipping conditions automatically by implementing a BAdI. For more information, see SAP Note number [1410353](#) .

⚠ Caution

If the same master data is in more than one model, only one of the models must be activated at a time. Otherwise, data is not transferred properly.

Checking and Updating Transported Data in SAP TM

1. On the *SAP Easy Access* screen for SAP TM, choose ► *Master Data* ► *Transportation Network* ► *Define Location* ► or call transaction /SCMTMS/LOC3 .
2. Verify the plant, receiving point, vendors, and customers as shown in the following table:

Table 18

ERP Data	TM Data
Plant 3300 , 5000	PL3300@ERP001 ; PL5000@ERP001
Receiving Point 5000 , 3300	SP3300@ERP001 ; SP5000@ERP001
Customer OAF-CU-01 , OAF-CO-01	CUOAF-CU-01@ERP001 , CUOAF-CO-01@ERP001

- Verify the customer and vendor master data by selecting ► *Master Data* ► *Transportation Network* ► *Define Location* ►. Change the geocoordinates to the following values:

Table 19

Location Name	Longitude	Latitude
CUOAF-CU-01@ERP001	+ 139: 44: 16	+ 35: 40: 53
CUOAF-CU-02@ERP001	+ 139: 30: 00	+ 35: 45: 00
CUOAF-CU-03@ERP001	+ 137: 15: 00	+ 35: 00: 00
CUOAF-CU-04@ERP001	+ 139: 44: 16	+ 35: 40: 52
CUOAF-CO-01@ERP001	- 111: 46: 25	+ 34: 50: 38
CUOAF-CO-02@ERP001	- 110: 56: 51	+ 32: 24: 15
CUOAF-CO-03@ERP001	- 115: 33: 05	+ 32: 58: 44
CUOAF-CO-04@ERP001	- 111: 51: 23	+ 33: 28: 11

- On the *SAP Easy Access* screen for SAP TM, choose ► *Master Data* ► *General* ► *Define Business Partner* ► or call transaction *BP*.
- Verify the customers as shown in the following table:

Table 20

SAP ERP Data	SAP TM Data
Carrier OAF-CR-01	CAOAF-CR-01@ERP001

- Check that the following business partners have the business partner roles *Sold-to Party* (CRM000) and *Vendor* (BBP000):
 - OAF-CU-01
 - OAF-CU-02
 - OAF-CU-03
 - OAF-CU-04
- Check that the following business partners have the business partner roles *Sold-to Party* (CRM000) and *Ship-to Party* (CRM002):
 - OAF-CO-01
 - OAF-CO-02
 - OAF-CO-03
 - OAF-CO-04

i 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.

4 Application Administration in SAP TM

Application administration comprises defining the following settings and profiles:

- [Carrier selection settings \[page 19\]](#)
- [Optimizer settings \[page 20\]](#)
- [Capacity settings \[page 22\]](#)
Define a user-specific grouping of capacities that is taken into account during transportation planning.
- [Planning profiles \[page 25\]](#)
Define a planning profile that contains all of the relevant settings for optimizer planning and creating transportation proposals using the routing guide.
- [Selection profiles \[page 29\]](#)
Selection profiles define the selection of the freight units based on geography, pickup dates, and delivery dates.
- [Transportation cockpit layouts \[page 33\]](#)
You can create layouts for displaying capacities and requirements in your transportation cockpit.

4.1 Defining Carrier Selection Settings

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose **Application Administration > Planning > Planning Profile Settings > Carrier Selection Settings > Create Carrier Selection Settings**.
2. Create the carrier selection setting OF-CAR-SEL-TRSP and enter the following data:

Table 21

Field	Value
<i>Carrier Selection Settings</i>	OF-CAR-SEL-TRSP
<i>Description</i>	Ocean Freight LCL Truck Carrier Selection
<i>Check Incompatibilities</i>	Deselect
<i>Parallel Processing Profile</i>	Blank
<i>Type of Carrier Selection Settings</i>	General Carrier Selection
<i>Transportation Allocation Usage</i>	Do Not Use Transportation Allocations
<i>Business Share Usage</i>	Do Not Use Business Shares
<i>Strategy</i>	Costs

Field	Value
Carrier Cost Origin	Use Internal Costs

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

Table 22

Field	Value
Planning Strategy	TSPS_DEF
Optimizer Runtime	6
Action for Manual Rankings	Remove
Transportation Charge Interpretation	Accept Carrier with Charges of Zero
Action After Carrier Selection Run	Accept Carrier with Charges of Zero as C with Lowest Cost or Highest Cost
Continuous Move Type	Use Transportation Lane Settings
Continuous Move Information	Select
Check Distance and Duration	Select
CM Cost Recalculation of TCM	No Recalculation

- Save your entries.

4.2 Defining Optimizer Settings

Procedure

- In SAP NetWeaver Business Client (NWBC), choose ► *Application Administration* ► *Planning* ► *Planning Profile Settings* ► *Optimizer Settings* ► *Create Optimizer Settings* ▾.
- Create the optimizer setting OF-OPT-SET-STD and enter the following data:

Table 23

Field	Value
Optimizer Settings	OF-OPT-SET-STD
Description	Ocean Freight - Optimizer Settings
Planning Strategy	VSR_DEF
FO Building Rule	New Freight Order when Resource is Empty
Accept Transport Prop	Save Route and Freight Orders
Planning Strategy for Transport Prop	VSR_DEF
Max. Number of Trans Proposals	5
Max. No. of Parallel Processes	2

Field	Value
Maximum No of Transshipment Loc	2
Maximum Runtime (Seconds)	10
Consider Capacity During Optimization	Yes

3. Save your entries.
4. In SAP NetWeaver Business Client (NWBC), choose ► *Application Administration* ► *Planning* ► *Planning Profile Settings* ► *Optimizer Settings* ► *Create Optimizer Settings* ►.
5. Create the optimizer setting OAF-OPT-SET-CN and enter the following data:

Table 24

Field	Value
Optimizer	OAF-OPT-SET-CN
Description	Ocean Freight Optimizer Settings Container Unit
Planning Strategy	VSR_DEF FO
Building Rule	New Freight Order when Resource is Empty
Accept Transport Prop	Save Route and Freight Documents
Planning Strategy for Transport Prop	VSR_DEF
Max. Number of Trans Proposals	5
Max. No. of Parallel Processes	1
Maximum No of Transshipment Loc	6
Maximum Runtime (Seconds)	20
Rough Planning	Prefer Detailed Planning Over Rough Planning
Ignore Capacity DG ADR	Selected
Consider Capacity During Optimization	No
Max. No. of Transshipment Loc.	6
Search Depth for Trans. Loc.	6
Search Depth for Connections	5
Automatic Connection Determination	Selected
Default Routes for Freight Units	Prefer Default Routes
Default Routes for Railcar Units	Do Not Consider Default Routes
Default Routes for Container Units	Only Consider Default Routes

6. Save your entries.

4.3 Defining Capacity Settings

You can use this procedure to define a user-specific grouping of capacities that is taken into account during transportation planning.

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ► *Application Administration* ► *Planning* ► *Planning Profile Settings* ► *Capacity Selection Settings* ► *Create Capacity Selection Settings* ►.
2. Create capacity selection setting OF-CAP-SEL-PRE with the following data:

Description : **Ocean Freight – Capa. Prof. Pre-Carriage**

Table 25: Vehicle Resource

Field	Value
Veg. Res. Sel. Attr	VEHICLERES_ID
Sign	Inclusive
Option	Pattern
Lower Limit	OF-JP*

Table 26: Vehicle Resource

Field	Value
Veg. Res. Sel. Attr	VEHICLERES_ID
Sign	Inclusive
Option	=
Lower Limit	OF_JP_TRACTOR

Table 27: Vehicle Resource

Field	Value
Veg. Res. Sel. Attr	VEHICLERES_ID
Sign	Inclusive
Option	=
Lower Limit	OF_JP_TRAILER

Table 28: Vehicle Resource

Field	Value
Veg. Res. Sel. Attr	VEHICLERES_ID
Sign	Inclusive
Option	=
Lower Limit	OF_JP_TRUCK

and:

Table 29: Container Resource

Attr. for Container Res. Sel.	Sign	Option	Lower Limit	Upper Limit
TURES_ID	Inclusive	=	CNTYO_42G0	Blank
TURES_ID	Inclusive	=	CNTYO_20G0	Blank
TURES_ID	Inclusive	=	CNTYO_22R1	Blank
TURES_ID	Inclusive	=	CNNGO_42G0	Blank
TURES_ID	Inclusive	=	CNNGO_20G0	Blank
TURES_ID	Inclusive	=	CNNGO_22R1	Blank

and:

Table 30: Schedules

Field	Value
Attr. For Sched. Sel.	SCH_ID
Sign	Inclusive
Option	Equal (=)
Lower Limit	OAF-TRUCKSCHE-01

and:

Table 31: Schedules

Field	Value
Attr. For Sched. Sel.	SCH_ID
Sign	Inclusive
Option	Equal (=)
Lower Limit	OAF-TRUCKSCHE-02

3. Save your entries.
4. Create the capacity selection setting OF-CAP-SEL-ON with the following data:

Description : **Ocean Freight - Capa. Prof. On-Carriage**

Table 32: Vehicle Resource

Field	Value
Veg. Res. Sel. Attr	VEHICLERES_ID
Sign	Inclusive
Option	Pattern
Lower Limit	OF-US*

Table 33: Vehicle Resource

Field	Value
Veg. Res. Sel. Attr	VEHICLERES_ID
Sign	Inclusive
Option	=
Lower Limit	OF_US_TRAILER

Table 34: Vehicle Resource

Field	Value
Veg. Res. Sel. Attr	VEHICLERES_ID
Sign	Inclusive
Option	=
Lower Limit	OAF_US_TRACTOR

and:

Table 35: Container Resource

Attr. for Container Res. Sel.	Sign	Option	Lower Limit	Upper Limit
TURES_ID	Inclusive	=	CNTYO_42G0	Blank
TURES_ID	Inclusive	=	CNTYO_20G0	Blank
TURES_ID	Inclusive	=	CNTYO_22R1	Blank
TURES_ID	Inclusive	=	CNNGO_42G0	Blank
TURES_ID	Inclusive	=	CNNGO_20G0	Blank
TURES_ID	Inclusive	=	CNNGO_22R1	Blank

and:

Table 36: Schedules

Field	Value
Attr. For Schd. Sel.	SCH_ID
Sign	Inclusive
Option	Equal (=)
Lower Limit	OF-TRUCKSCHEM-03

Table 37: Schedules

Field	Value
Attr. For Schd. Sel.	SCH_ID
Sign	Inclusive

Field	Value
Option	Equal (=)
Lower Limit	OF-TRUCKSCHE-04

5. Save your entries.

4.4 Defining Planning Profiles

In this procedure, you define a planning profile that contains all of the relevant settings for optimizer planning and creating transportation proposals using the routing guide.

Prerequisites

You have defined the following settings:

- Freight order type OF05 (OF: Pickup/Delivery freight order)
- Freight order type OF10 (OF: Pre-carriage/On-carriage freight order)
- Freight booking type OF04 (OF: Ocean booking)

Note that these settings are described in the sections [Defining Freight Order Types \[page 43\]](#) and [Defining Freight Booking Types \[page 49\]](#). We recommend that you configure these settings and then return to this section to proceed.

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose **Application Administration > Planning > Planning Profiles > Create Planning Profile**.
2. On the *Planning Profile* tab page, create the planning profiles as described below.

OF-PLAN-PROF-PRE

1. In the *General Data* screen area, enter the planning profile **OF-PLAN-PROF-PRE** and the description **Ocean Freight Planning Prof Pre-Carriage**.
2. In the *Planning Horizon* screen area, enter the following data:

Table 38

Field	Value
<i>Duration in Days</i>	180
<i>Factory Cal. for Offs./Dur. Calc.</i>	W8
<i>Round Horizon to Full Days</i>	Select
<i>Time Zone for Rounding the Horizon</i>	CET

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

Table 39

Field	Value
<i>Capacity Selection Settings</i>	OF-CAP-SEL-PRE
<i>Optimizer Settings</i>	OF-OPT-SET-STD
<i>Carrier Selection Settings</i>	OF-CAR-SEL-TRSP

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

Table 40

Field	Value
<i>Type Determination Rule</i>	Defined per Category in Planning Profile
<i>Default Type for Road Freight Order</i>	OF10
<i>Default Type for Bookings (Ocean)</i>	OF04
<i>Default Type for Container Unit</i>	CN

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

Table 41

Field	Value
<i>Manual Planning Strategy</i>	VSRI_DEF
<i>Consider Fixing Status</i>	Error When Changing Fixed Document

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

Table 42

Field	Value
<i>Scheduling Strategy</i>	VSS_DEF
<i>Consider Freight Unit Dates</i>	Do Not Consider Freight Unit Dates
<i>Scheduling Direction</i>	Backward

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

Table 43

Field	Value
<i>Check Strategy</i>	VSR_CHECK
<i>Take Capacities into Account</i>	Warning

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

Table 44

Field	Value
<i>Dependence</i>	Freight Unit and MTr Independent
<i>Loading/Unloading Duration</i>	00:00:00

9. Save your entries.

OF-PLAN-PROF-ON

1. In the *General Data* screen area, enter the planning profile **OF-PLAN-PROF-ON** and the description **Ocean Freight Planning Prof On-Carriage**.
2. In the *Planning Horizon* screen area, enter the following data:

Table 45

Field	Value
<i>Duration in Days</i>	180
<i>Factory Cal. for Offs./Dur. Calc.</i>	W8
<i>Round Horizon to Full Days</i>	Select
<i>Time Zone for Rounding the Horizon</i>	CET

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

Table 46

Field	Value
<i>Capacity Selection Settings</i>	OF-CAP-SEL-ON
<i>Optimizer Settings</i>	OF-OPT-SET-STD
<i>Carrier Selection Settings</i>	OF-CAR-SEL-TRSP

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

Table 47

Field	Value
<i>Type Determination Rule</i>	Defined per Category in Planning Profile
<i>Default Type for Vehicle Resource</i>	OF10
<i>Default Type for Bookings (Ocean)</i>	OF04

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

Table 48

Field	Value
<i>Manual Planning Strategy</i>	VSRI_DEF
<i>Consider Fixing Status</i>	Error When Changing Fixed Document

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

Table 49

Field	Value
<i>Scheduling Strategy</i>	VSS_DEF
<i>Consider Freight Unit Dates</i>	Do Not Consider Freight Unit Dates
<i>Scheduling Direction</i>	Backward

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

Table 50

Field	Value
<i>Check Strategy</i>	VSR_CHECK
<i>Take Capacities into Account</i>	Warning

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

Table 51

Field	Value
<i>Dependence</i>	Freight Unit and MTr Independent
<i>Loading/Unloading Duration</i>	00:00:00

9. Save your entries.

OAF-PLAN-PROF-CN

- In the *General Data* screen area, enter planning profile **OAF-PLAN-PROF-CN** and the description **OF Planning Profile Container Unit**.
- In the *Planning Horizon* screen area, enter the following data:

Table 52

Field	Value
<i>Absolute or Relative Horizon</i>	Use Relative Horizon
<i>Duration in Days</i>	90
<i>Offset Direction</i>	Future
<i>Factory Cal. for Offs./Dur. Calc.</i>	Blank
<i>Round Horizon to Full Days</i>	Selected
<i>Time Zone for Rounding the Horizon</i>	CET

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

Table 53

Field	Value
<i>Capacity Selection Settings</i>	OF-CAP-SEL-PRE
<i>Optimizer Settings</i>	OAF-OPT-SET-CN

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

Table 54

Field	Value
<i>Type Determination Rule</i>	Defined per Category in Planning Profile
<i>Default Type for Road FO</i>	OF05
<i>Default Type for Container Unit</i>	CN

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

Table 55

Field	Value
<i>Manual Planning Strategy</i>	VSRI_SCH
<i>Consider Fixing Status</i>	Warning when changing fixed documents

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

Table 56

Field	Value
<i>Scheduling Strategy</i>	VSS_DEF
<i>Consider Freight Unit Dates</i>	Consider Freight Unit Dates
<i>Scheduling Direction</i>	Forward

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

Table 57

Field	Value
<i>Check Strategy</i>	VSR_CHECK
<i>Take Capacities into Account</i>	Warning

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

Table 58

Field	Value
<i>Dependence</i>	Freight Unit and MTr Independent
<i>Loading/Unloading Duration</i>	00:00:00

9. Save your entries.

4.5 Defining Selection Profiles

In this procedure, you create selection profiles, which define the selection of the freight units based on geography, pickup dates, and delivery dates. You need to create three selection profiles for each stage as the stages are planned by different execution organizations. This leads to stage level planning, so that transportation planners with regional expertise may select only those transportation requirements for which they are responsible.

Procedure

1. In the SAP NetWeaver Business Client (NWBC), choose ► *Application Administration* ► *Planning* ► *Selection Profile Attributes* ► *Geographical Selection Attributes* ► *Create Geographical Selection Attributes* ►.
2. Create the selection profile `OF-GEO-SEL-PRE` for pre-carriage as follows:
 1. In the *General Data* screen area, enter the following data:

Table 59

Field	Value
<i>Geographical Sel. Attributes</i>	OF-GEO-SEL-PRE
<i>Description</i>	Ocean Freight - Pre-Carriage
<i>Both Locations</i>	Select

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

Table 60

Sign	Option	Lower Value	Upper Value
<i>Inclusive</i>	=	OAF-STA-JPNGO	Blank
<i>Inclusive</i>	=	OAF-STA-JPTYO	Blank

3. Choose the *Destination Locations* tab page and enter the following data:

Table 61

Sign	Option	Lower Value	Upper Value
<i>Inclusive</i>	=	OF-CFS-JPYOK	Blank

4. Save your entries.

3. Create the selection profile **OF-GEO-SEL-MAIN** for main carriage as follows:

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

Table 62

Field	Value
<i>Geographical Sel. Attributes</i>	OF-GEO-SEL-MAIN
<i>Description</i>	Ocean Freight - Main Carriage
<i>Both Locations</i>	Select

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

Table 63

Sign	Option	Lower Value	Upper Value
<i>Inclusive</i>	=	OF-CFS-JPYOK	Blank
<i>Inclusive</i>	=	OF-JPYOK	Blank

3. Choose the *Destination Locations* tab page and enter the following data:

Table 64

Sign	Option	Lower Value	Upper Value
<i>Inclusive</i>	=	OF-CFS-USLAX	Blank
<i>Inclusive</i>	=	OF-USLGB	Blank

4. Save your entries.

4. Create the selection profile **OF-GEO-SEL-ON** for on-carriage as follows:

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

Table 65

Field	Value
<i>Geographical Sel. Attributes</i>	OF-GEO-SEL-ON
<i>Description</i>	Ocean Freight - on-carriage
<i>Both Locations</i>	Select

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

Table 66

Sign	Option	Lower Value	Upper Value
<i>Inclusive</i>	=	OF-CFS-USLAX	Blank
<i>Inclusive</i>	=	OF-USLGB	Blank

3. Choose the *Destination Locations* tab page and enter the following data:

Table 67

Sign	Option	Lower Value	Upper Value
<i>Inclusive</i>	=	OAF-STA-USPHX	Blank
<i>Inclusive</i>	=	OAF-STA-USSAN	Blank

4. Save your entries.
5. In SAP NetWeaver Business Client (NWBC), choose ► *Application Administration* ► *Planning* ► *Selection Profile Attributes* ► *Additional Selection Attributes* ► *Create Additional Selection Attributes* ►.
6. Create additional selection attributes for **OF-ADD-SEL-EXCLUDE-PLANNED** by entering the following data in the *General Data* screen area:

Table 68

Field	Value
<i>Additional Sel. Attributes</i>	OF-ADD-SEL-EXCLUDE-PLANNED
<i>Description</i>	Include Planned Req.
<i>Planned Requirements</i>	Exclude in Selection
<i>Blocked Documents</i>	Exclude in Selection
<i>Selection of Container Unit Stages</i>	Include Selected Stages Only

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

Table 69

Field	Value
<i>Business Object for Selection</i>	FU
<i>Field Name</i>	INCL_INIT_TIMES
<i>Sign</i>	Inclusive
<i>Option</i>	Equality
<i>Lower Limit</i>	X

8. Generate a second condition with the following values:

Table 70

Field	Value
<i>Business Object for Selection</i>	/SCMTMS/TO
<i>Field Name</i>	PLAN_STATUS_ROOT
<i>Sign</i>	Inclusive
<i>Option</i>	Equality
<i>Lower Limit</i>	03

9. Save your entries.
10. In SAP NetWeaver Business Client (NWBC), choose ► *Application Administration* ► *Planning* ► *Selection Profiles* ► *Create Selection Profile* ►.
11. Create the selection profile **OF-GEN-SEL-PRE-WO-TIME** for pre-carriage by entering the following data:

Table 71

Field	Value
<i>Selection Profile</i>	OF-GEN-SEL-PRE-WO-TIME
<i>Description</i>	Ocean Freight - Pre-Carriage
<i>Maximum Number of Selected Objects</i>	50
<i>Geographical Sel. Attributes</i>	OF-GEO-SEL-PRE
<i>Additional Sel. Attributes</i>	OF-ADD-SEL-EXCLUDE-PLANNED

12. Create the selection profile **OF-GEN-SEL-MAIN-WO-TIME** for main carriage by entering the following data:

Table 72

Field	Value
<i>Selection Profile</i>	OF-GEN-SEL-MAIN-WO-TIME
<i>Description</i>	Ocean Freight - Main Carriage
<i>Maximum Number of Selected Objects</i>	50
<i>Geographical Sel. Attributes</i>	OF-GEO-SEL-MAIN
<i>Additional Sel. Attributes</i>	OF-ADD-SEL-EXCLUDE-PLANNED

13. Create the selection profile **OF-GEN-SEL-ON-WO-TIME** for on-carriage by entering the following data:

Table 73

Field	Value
<i>Selection Profile</i>	OF-GEN-SEL-ON-WO-TIME
<i>Description</i>	Ocean Freight - on-carriage
<i>Maximum Number of Selected Objects</i>	50
<i>Geographical Sel. Attributes</i>	OF-GEO-SEL-ON

Field	Value
<i>Additional Sel. Attributes</i>	OF-ADD-SEL-EXCLUDE-PLANNED

14. Save your entries.

4.6 Defining Layouts for the Transportation Cockpit

In this procedure, you can create layouts for displaying capacities and requirements in your transportation cockpit. Layout settings are made at user level.

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ► *Planning* ► *Planning* ► *Transportation Cockpit* ► .
The *Profile and Layout Sets* screen is displayed. If, however, the system forwards you directly to the cockpit, choose ► *Change Profile Selection* ► *Profile Selection Screen* ► to return to the *Profile and Layout Sets* screen.
2. Choose *Layout Personalization* .
3. Choose *New* .
4. In the *Page Layout – General Data* section, create new layout OF-LAYO-01 .
5. In the *Page Layout – Validity* section, select field validity *All* .
6. In the *Visibility Pushbutton* area, leave the default value for the checkboxes.
7. In the *Requirements List* section:
 1. In the *Position of Screen Area* field, enter *Top Left* .
 2. In the *Width* field, enter *50%* .
 3. Choose *Sequence 1 – Freight Unit Stages* and select the *Display* checkbox.
 4. Choose *Sequence 2 – Freight Unit Hierarchy* and select the *Display* checkbox.
 5. In the *Details of Freight Unit Stages* section, ensure that all checkboxes for *Set OI Status for FUs* are selected.
8. In the *Resource Area* section:
 1. In the *Position of Screen Area* field, select *Bottom Left*
 2. In the *Width* field, select *50%* .
 3. Choose *Sequence 1 – Vehicles* and select the *Display* checkbox.
 4. Choose *Sequence 3 – Schedules* and select the *Display* checkbox.
 5. Choose *Sequence 7 – Containers* and select the *Display* checkbox.
 6. Deselect the other display checkboxes (*Vehicles* and *Trailer*).
9. In the *Order Area* section:
 1. In the *Position of Screen Area* field, select *Top Right* .
 2. In the *Width* field, enter *50%* .
 3. Choose *Sequence 1 – Freight Orders* and select the *Display* checkbox.
 4. Choose *Sequence 4 – Ocean Booking Hierarchy* and select the *Display* checkbox.
 5. Choose *Sequence 7 – Ocean Freight Bookings* and select the *Display* checkbox.

-
10. In the *Contents of Transportation Units Area* section:
 1. In the *Position of Screen Area* field, select *Bottom Right* .
 2. In the *Width* field enter **50%** .
 3. Choose *Sequence 4 – Container Unit Stages* and select the *Display* checkbox
 11. Save your profile.

5 SAP TM Customizing

You customize SAP TM to define and set up the management of freight. Customizing includes the following procedures:

- [Defining freight unit types \[page 36\]](#)
- [Creating freight unit building rules \[page 36\]](#)
Freight unit building rules define how the system should create freight units based on the forwarding order.
- [Defining package type codes \[page 39\]](#)
- [Defining item types for forwarding order management \[page 40\]](#)
Item types define specific measures, which are used later in forwarding order management.
- [Defining freight order types \[page 43\]](#)
A new freight order type contains an enhanced save strategy.
- [Defining freight booking types \[page 49\]](#)
 - [Defining freight settlement document types \[page 211\]](#)
 - [Defining forwarding settlement document types \[page 148\]](#)
 - [Defining dimensional weight profiles \[page 103\]](#)

The following document types must be customized in the SAP TM system:

- OF01 – OF: Forwarding Order Export (LCL)
- OF02 – OF: Freight Unit
- OF03 – Packages with Specific Dimensions
- OF04 – OF: Ocean Booking Export (LCL)
- OF05 – OF: Pickup/Delivery Freight Order
- OF06 – OF: Carrier Settlement Document
- OF07 – OF: Forwarding Agreement
- OF08 – OF: Freight Agreement
- OF09 – OF: Forwarding Settlement Document
- OF10 – OF: Pre/On-Carriage Freight Order
- OF11 – OF: Inland Trucking Schedule
- OF12 – OF: Ocean Carrier Schedule
- OF13 – OF: Sailing Schedule with reference
- OF14 – OF: Forwarding Order Import (LCL)
- OF15 – OF: Ocean Booking Import (LCL)
- OF16 – OF: Forwarding Order Import (FCL)
- OF17 – OF: Forwarding Order Export (FCL)
- OF18 – OF: Ocean Booking Export (FCL)
- OF19 – OF: Ocean Booking Import (FCL)

5.1 Defining Freight Unit Types

Procedure

1. In Customizing for *Transportation Management*, choose **► Planning ► Freight Unit ► Define Freight Unit Types ►**.
2. Enter the following data:

Table 74

Field	Value
<i>Freight Unit Type</i>	OF02
<i>Description</i>	OF: Freight Unit
<i>Is Default Type</i>	Deselect
Basic Settings	
<i>Freight Unit can be deleted</i>	Select
Change Controller Settings	
<i>Default Change Strategy</i>	DEF_CHACO
Execution Settings	
<i>Execution Tr. Relevance</i>	2 - Execution Tracking
<i>Immediate Processing</i>	Select
Event Management Settings	
<i>Appl. Obj. Type</i>	ODT20_FU
<i>Last Exp. Event</i>	POD
Number Range Settings	
<i>Time For Drawing</i>	Draw Number when saving document
<i>Number Range Interval</i>	FU
Freight Order Determination	
<i>Freight Order Type</i>	OF05 - OF: Pickup/Delivery Freight Order
Determination Rules	
<i>Consider Organization Unit of User</i>	Deselect

3. Save your entries.

5.2 Creating Freight Unit Building Rules

Freight unit building rules (FUBs) define how the system should create freight units based on the forwarding order. In addition, FUBs define the dimensions that are transferred from the forwarding order to the freight unit as

capacity requirements for planning. If there are more than one freight unit building rules, you can define a condition on how to determine the appropriate freight unit building rule.

For this scenario, you require the following freight unit building rules:

- OF-FUBR-CU : Freight unit consolidated in container (FCL)
- OF-FUBR-FU : Freight unit consolidated in container (LCL)

Prerequisites

You have defined a freight unit type.

Procedure

1. On the *SAP Easy Access* screen for SAP TM (or, alternatively, from NetWeaver Business Client), choose **► Application Administration ► Planning ► General Settings ► Freight Unit Building Rule ► Create Freight Unit Building Rule ►**.
2. Create a new rule by entering the following data:

General Data

Table 75

Field	Value
<i>Freight Unit Building Rule</i>	OF-FUBR-FU
<i>FUB Rule Description</i>	FU per container
<i>FU Building Strategy</i>	Consolidate per item
<i>Critical Quantity</i>	Gross Weight
<i>Item Split Allowed</i>	Select
<i>Document Type</i>	OF02 (Enter the freight unit type that you created in the section Defining Freight Unit Types [page 36] .)
<i>Incompatibility Settings</i>	Not applicable
<i>Equipment Group</i>	CN
<i>Equipment Type</i>	20G0

General Data – Planning Quantities

Table 76

Planning Qty	UoM of Split Qty	Split Qty	Rounding Qty
<i>Gross Weight</i>	TO	22	Blank

Advanced Settings

Table 77

Field	Value
<i>Process Controller Strategy</i>	FUB_AUTO
<i>Maximum Number of Pallets per FU</i>	50

3. Save your entries.
4. Create a new rule by entering the following data:

General Data

Table 78

Field	Value
<i>Freight Unit Building Rule</i>	OF-FUBR-CU
<i>FUB Rule Description</i>	CU per container
<i>FU Building Strategy</i>	Consolidate per item
<i>Critical Quantity</i>	Gross Weight
<i>Item Split Allowed</i>	Select
<i>Document Type</i>	CN (Enter the freight unit type that you created in the section Defining Item Types for Forwarding Order Management [page 40] .)
<i>Incompatibility Settings</i>	Not applicable
<i>Equipment Group</i>	CN
<i>Equipment Type</i>	20G0

General Data – Planning Quantities

Table 79

Planning Qty	UoM of Split Qty	Split Qty	Rounding Qty
<i>Gross Weight</i>	TO	22	Blank

Advanced Settings

Table 80

Field	Value
<i>Process Controller Strategy</i>	FUB_AUTO
<i>Maximum Number of Pallets per FU</i>	50

5. Save your entries.

5.3 Defining Partner Determination Profiles

Procedure

1. In Customizing for SAP TM, choose **SAP Transportation Management > Transportation Management > Master Data > Business Partner > Define Partner Determination Profiles**.
2. Enter partner determination profile **OF-D** and the description **Determination Profile for Business Partner**.
3. Save your entries.
4. Select the new row and double-click **Assign Party Roles**
5. Create an entry with the following data:

Table 81

Party Role	Party Role Desc.	Sequence	Edit Level	Srcce Type	Srcce Type	Business Partner
12	Carrier	1	Mandatory	Party Role	Blank	Blank
5	Shipper	2	Mandatory	Party Role	Blank	Blank
6	Consignee	3	Mandatory	Party Role	Blank	Blank
TM010	Executing Carrier	4	Mandatory	Party Role	Blank	Blank
101	Import Organization	5	Mandatory	Party Role	Blank	Blank

6. Save your entries.

5.4 Defining Package Type Codes

Package type codes allow for a standardization of the packages used to transport cargo. For this scenario, the following package type is required:

- Box : BOX(ES)

Procedure

1. In Customizing for SAP TM, choose **SAP Transportation Management > Transportation Management > Forwarding Order Management > Type Codes and Role Codes > Master Data-Related Type Codes and Role Codes > Define Package Type Codes**.
2. Create a new entry. Enter the following data:

Table 82

Field	Value
Package Type	Box
Description	BOX (ES)

3. Save your entries.

5.5 Defining Item Types for Forwarding Order Management

Item types define specific measures that are later used in a forwarding order. By defining item types, you specify the height, width, volume and weight of a transportable item category.

For this scenario, the following item types are required:

- OF03 : packages with specific dimensions
- CN : container with specific dimensions

Procedure

1. In Customizing for *Transportation Management* , choose **► Forwarding Order Management ► Define Item Types for Forwarding Order Management ►**.
2. Create the following two item types:

Table 83

Item Type	OF03	CN
Item Type Descr.	Packages with specific dimensions	Container
Item Category	PKG Package	TUR Container
Package Type	Box	Blank
Text Schema	Blank	FWOITM
DG UI Profile Name	Blank	Blank
Equipment Group	Blank	CN
Equipment Type	Blank	Blank
One Piece Only	Deselect	Select
Default Weight UoM	KG	KG
Default Volume UoM	M3	M3
Default Pieces UoM	EA	PC

3. Save your entries.

5.6 Defining Default Agreement Party Roles for Stages

In the standard Customizing settings for Incoterms FOB (free on board), CFR (cost and freight), and DDP (delivered duty paid), only the three main stages are defined.

Procedure

1. In Customizing for *Transportation Management*, choose **► Forwarding Order Management ► Define Default Agreement Party Roles for Stages ►**.
2. Enter the following data:

Table 84

Incoterm	Stage Type	Agmt Type
FOB	Pick-up	Prepaid Agreement
FOB	Pre-Carriage	Prepaid Agreement
FOB	Main Carriage	Collect Agreement
FOB	On-Carriage	Collect Agreement
FOB	Delivery	Collect Agreement
CFR	Pick-up	Prepaid Agreement
CFR	Pre-Carriage	Prepaid Agreement
CFR	Main Carriage	Prepaid Agreement
CFR	On-Carriage	Collect Agreement
CFR	Delivery	Collect Agreement
DDP	Pick-up	Prepaid Agreement
DDP	Pre-Carriage	Prepaid Agreement
DDP	Main Carriage	Prepaid Agreement
DDP	On-Carriage	Prepaid Agreement
DDP	Delivery	Prepaid Agreement

5.7 Assigning Business Partner Roles to Business Document Party

In the standard Customizing settings, you map business partner roles in SAP ERP to business partner roles in SAP TM.

Procedure

1. In Customizing for SAP Transportation Management, choose ► *Transportation Management* ► *Master Data* ► *Business Partners* ► *Assign BP Roles to Business Document Party* ►.
2. Enter the following data:

Table 85

Role Code	Party Role Description	BP Role	BP Role Description
9	Payee	CRM004	Bill-to Party
8	Payer	CRM004	Bill-to Party

3. Save your entries.

5.8 Defining Condition Types

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

Prerequisites

These settings are also used in the sections [Defining Freight Settlement Document Types \[page 211\]](#) and [Defining Means of Transport \[page 71\]](#). We recommend that you configure the settings in these sections and then return to this section to proceed.

i Note

If you have already completed the section [Defining Planning Profiles \[page 25\]](#), the information given in this section may already be complete.

Procedure

1. As a customer service agent in SAP NetWeaver Business Client (NWBC), choose ► *Application Administration* ► *General Settings* ► *Conditions* ► *Create Conditions* ►.
2. Create a condition using the following data:

Table 86

Field	Value
Condition	OF-MTR
Description	MTR for Pickup Freight Order
Condition Type	/SCMTMS/TOR_DEF_MTR
Origin of Condition	F

3. Choose *Continue*.
4. Go to the *Data Access Definition* tab page and choose *Delete*.

5. In the data access definition, choose *Create* .
6. In the *Business Object Based Data Access Definition* , enter following data:

Table 87

Field	Value
Name of BO Used in Condition	SCMTMS/TOR
Name of BO Node Used in Condition	ROOT
Name of the Field of the BO Node	TOR_CAT

7. In the *Data Crawler-Based Data Access Definition* , enter following data:

Table 88

Field	Value
<i>Step ID</i>	000

8. Choose *Back* (save and back) in the upper screen area.
9. Go to the decision table, insert two more rows, and choose direct value input.
10. Enter following data:

Table 89

Field	Value
<i>Business Document</i>	Def.Mtr for Doc Type
<i>TO (Transportation Order)</i>	OAF_TRUCK

11. Save your entries.

5.9 Defining Freight Order Types

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

Prerequisites

You have configured the following settings:

- You have defined freight settlement document type **OF06** *OF: Carrier Settlement Document*
- You have defined means of transport **OAF_TRUCK** and **OAF_TRUK_S**

Note that these settings are described in the sections [Defining Freight Settlement Document Types \[page 211\]](#) and [Defining Means of Transport \[page 71\]](#) . We recommend that you configure these settings and then return to this section to proceed.

If you have already completed the section [Defining Planning Profiles \[page 25\]](#) , the information given in this section may already be complete.

Procedure

1. In Customizing for *Transportation Management* , choose **Freight Order Management > Freight Order > Define Freight Order Types** .
2. Create a new freight order type as follows:
 1. Enter freight order type **OF05** and description **OF: Pickup/Delivery Freight Order** .
 2. In the *Basic Settings* screen area, choose the following settings:

Table 90

Field	Value
<i>Freight Order Can Be Subcontracted</i>	01 Relevant for Subcontracting
<i>Shipper/Consignee Determination</i>	P Determination Based on Predecessor Documents
<i>Freight Order Can Be Deleted</i>	Select
<i>Enable Settlement</i>	Select
<i>Enable Internal Settlement</i>	Select
<i>Enable Cost Distribution</i>	Select
<i>Enable Charge Calculation</i>	Select
<i>Enable Internal Charge Calculation</i>	Select

3. In the *Change Controller Settings* screen area, enter the default change strategy **DEF_CHACO** .
 4. In the *Charge Calculation and Settlement Document Settings* screen area, set the *Default FSD Type* (freight settlement document type) field to **OF06 OF: Carrier Settlement Document** .
 5. Choose **OF-CAR-SEL-TRSP** in the *Deflt Carrier Selection Settings* field.
 6. Deselect *Enable Compliance Check* .
 7. In the *Number Range Settings* screen area, set the *Time for Drawing* option to **I Draw Numbers Immediately** and enter the number range interval as **04** .
 8. In *Additional Strategies* select **CALC_CHARG** as *Save Strategy* .
 9. In the *Default MTr Determination* area enter transportation mode **01 Road** .
 10. Enter **OF-MTR** as the condition for the default means of transport.
 11. In the *Output Options* screen area, enter output profile **/SCMTMS/TOR_PRINT_ROAD** .
 12. In the *Organizational Unit Determination* screen area, deselect *Consider Organizational Unit of User* .
3. Save your entries.
 4. Create a new freight order type as follows:
 1. Enter freight order type **OF10** and description **OF: Pre/On-Carriage Freight Order** .
 2. In the *Basic Settings* screen area, choose the following settings:

Table 91

Field	Value
<i>Freight Order Can Be Subcontracted</i>	01 Relevant for Subcontracting

Field	Value
<i>Shipper/Consignee Determination</i>	P Determination Based on Predecessor Documents
<i>Freight Order Can Be Deleted</i>	Select
<i>Enable Settlement</i>	Select
<i>Enable Internal Settlement</i>	Select
<i>Enable Cost Distribution</i>	Select
<i>Enable Charge Calculation</i>	Select
<i>Enable Internal Charge Calculation</i>	Select

3. In the *Change Controller Settings* screen area, enter the default change strategy **DEF_CHACO**.
 4. In the *Charge Calculation and Settlement Document Settings* screen area, set the *Default FSD Type* field to **OF06 OF: Carrier Settlement Document**.
 5. Choose **OF-CAR-SEL-TRSP** in the *Deflt Carrier Selection Settings* field.
 6. In the *Number Range Settings* screen area, set the *Time for Drawing* option to **I Draw Numbers Immediately** and enter the number range interval as **04**.
 7. In *Additional Strategies* select **CALC_CHARG** as *Save Strategy* and deselect *Enable Compliance Check* in the *Additional Settings* area.
 8. In the default *MTr Determination* area, enter transportation mode **01 Road**.
 9. In the *Default MTr for Type* field, enter **OAF_TRUK_S**.
 10. In the *Output Options* screen area, enter the output profile **/SCMTMS/TOR_PRINT_ROAD**.
 11. In the *Organizational Unit Determination* screen area, for both the *Purchasing Organization* and the *Execution Organization* enter **OF-FWH-03** and deselect *Consider Organizational Unit of User*.
5. Save your entries.

i Note

If necessary, return to the [Defining Planning Profiles \[page 25\]](#) section to continue.

5.10 Defining Freight Booking Types for Export

Prerequisites

You have created an organizational model for the sales and purchasing organization, including the associated business partners, forwarding houses, positions, and units.

Note that this process is described in the section [Creation of Organizational Models \[page 59\]](#). We recommend that you complete this first before returning to the current section to proceed.

If you have already completed the [Defining Planning Profiles \[page 25\]](#) section, the information given in this section may already be complete.

In this section, you create the following freight booking types:

- **OF04** : Freight Booking Type for Export (LCL)

- OF18 : Freight Booking Type for Export (FCL)

Procedure

Creating OF04: Freight Booking Type for Export (LCL)

1. In Customizing for *Transportation Management* , choose ► *Freight Order Management* ► *Freight Booking* ► *Define Freight Booking Types* ►.
2. Create a freight booking type (LCL) for execution booking as follows:
 1. Enter the freight booking type **OF04** and the description **OF: Ocean Booking Export LCL** .
 2. In the *Transportation Mode* field, choose **03 Sea** .
 3. In the *Transportation Mode Category* field, choose **3 Sea** .
 4. In the *Basic Settings* screen area, enter the following data:

Table 92

Field	Value
<i>Shipper/Consignee Determination</i>	M Manual Maintenance
<i>Booking Can Be Deleted</i>	Select
<i>Enable Settlement</i>	Select
<i>Enable Cost Distribution</i>	Select
<i>Enable Charge Calculation</i>	Select

5. In the *Change Controller Settings* screen area, enter the default change strategy **DEF_CHACO** .
6. In the *Execution Settings* screen area:
 - Set the *Carrier Confirmation* to **Carrier Confirmation Not Required**
 - Set the *Exec. Track. Relevance* field to **Execution Tracking**
 - Select the *Immediate Processing* checkbox
 - Select the *Propagate Execution Info* checkbox
7. In the *Additional Setting* screen area:
 - Enter the *Default Freight Settlement Type* : **OF06 - Carrier Settlement Document** .
 - For both the *Default FO Type for Pickup* and the *Default FO Type for Delivery* , enter **OF05 - OF: Pickup/Delivery Freight Order** .
 - As the Web Dynpro Application Configuration, enter **/SCMTMS/FRE_BOOK_OCEAN** .
 - Deselect the *Enable Compliance Check* field.
 - Enter **Build HBL** or **HAWB by Forwarding Order** (**HBL_TRQID**) in the *HBL Building Strategy* field.
 - For the container item source, select *R Container Item is taken from Predecessor Documents* .
 - Select *OF-D* as the partner determination profile.
8. As the import booking type, enter **OF15 (OF: Ocean Booking Import)** .
9. In the *Number Range Settings* screen area:
 - Set the *Time for Drawing* field to **Draw Numbers when Saving Document**
 - Enter number range interval **05**

- Enter the *HLB* (House Bill of Lading) number range **05**
10. In the *Service Definition* screen area:
 - Set the *Consolidation (Source)* field to **With Consolidation**.
 - Set the *Consolidation (Dest.)* field to **With Consolidation**.
 - Select *Shipping Type 3- FCL (Full Container Load)*
 - Set the movement type to **CC** (CFS to CFS).
 - Set the traffic direction to **1 - Export**.
 11. In the *Output Options* screen area, enter the output profile **/SCMTMS/TOR** and the additional output profile **/SCMTMS/TOR_PRINT_SEA**. Deselect the *Dynamic determination of output* option.
 12. In the *Organization Unit Determination* screen area, enter the purchasing organization that you create in [Creating an Organizational Model in SAP TM \[page 59\]](#). In this scenario, the purchasing organization is **OF-FWH-03** (FH CFS Yokohama).
 13. Deselect the *Consider Organizational Unit of User* field.
 14. Save your entries.

i Note

If required, you can return to the [Defining Planning Profiles \[page 25\]](#) section to continue.

Creating OF18: Freight Booking Type for Export (FCL)

1. In Customizing for *Transportation Management*, choose **Freight Order Management > Freight Booking > Define Freight Booking Types**.
2. Create a freight booking type (FCL) for execution booking as follows:
 1. Enter the freight booking type **OF18** and the description **OF: Ocean Booking Export FCL**.
 2. In the *Transportation Mode* field, choose **03 Sea**.
 3. In the *Transportation Mode Category* field, choose **3 Sea**.
 4. In the *Basic Settings* screen area, enter the following data:

Table 93

Field	Value
<i>Shipper/Consignee Determination</i>	M Manual Maintenance
<i>Booking Can Be Deleted</i>	Select
<i>Enable Settlement</i>	Select
<i>Enable Cost Distribution</i>	Select
<i>Enable Charge Calculation</i>	Select
<i>Enter the Default Freight Settlement Type</i>	OF06 - Carrier Settlement Document

5. In the *Change Controller Settings* screen area, enter the default change strategy **DEF_CHACO**.
6. In the *Execution Settings* screen area:
 - Set the *Carrier Confirmation* to **Carrier Confirmation Not Required**
 - Set the *Exec. Track. Relevance* field to **Execution Tracking**
 - Select the *Immediate Processing* checkbox

- Select the *Propagate Execution Info* checkbox
7. In the *Additional Setting* screen area:
 - Enter the *Default Freight Settlement Type* : **OF06 - Carrier Settlement Document** .
 - For both the *Default FO Type for Pickup* and the *Default FO Type for Delivery* , enter **OF05 - OF: Pickup/Delivery Freight Order** .
 - In the *Container Item Source* field, select *Container Item is Taken from Predecessor Documents* .
 - As the Web Dynpro Application Configuration, enter **/SCMTMS/FRE_BOOK_OCEAN** .
 - Deselect the *Enable Compliance Check* field.
 - Enter **Build HBL or HAWB by Forwarding Order** (`HBL_TRQID`) in the *HBL Building Strategy* field.
 - For the container item source, select *R Container Item is taken from Predecessor Documents* .
 - Select *OF-D* as the partner determination profile.
 8. As the import booking type, enter **OF15 (OF: Ocean Booking Import)** .
 9. In the *Number Range Settings* screen area:
 - Set the *Time for Drawing* field to **Draw Numbers when Saving Document**
 - Enter number range interval **05**
 - Enter the *HBL* (House Bill of Lading) number range **05**
 10. In the *Service Definition* screen area:
 - Set the *Consolidation (Source)* field to **Without Consolidation** .
 - Set the *Consolidation (Dest.)* field to **Without Consolidation** .
 - Select *Shipping Type 3- FCL (Full Container Load)*
 - Set the movement type to **PP** (Port to Port).
 - Set the traffic direction to **1 - Export** .
 11. In the *Output Options* screen area, enter the output profile **/SCMTMS/TOR** and the additional output profile **/SCMTMS/TOR_PRINT_SEA** . If selected, deselect the *Dynamic determination of output* option.
 12. In the *Organization Unit Determination* screen area, enter the purchasing organization that you create in [Creating an Organizational Model in SAP TM \[page 59\]](#) . In this scenario, the purchasing organization is **OF-FWH-03** (FH CFS Yokohama).
 13. Deselect the *Consider Organizational Unit of User* field.
 14. Save your entries.

More Information

- [Defining freight settlement document types \[page 211\]](#)
- [Defining forwarding settlement document types \[page 148\]](#)
- [Defining dimensional weight profiles \[page 103\]](#)

5.11 Defining Freight Booking Types for Import

In this procedure, you define the following freight booking types:

- OF15 : Freight Booking Type for Import (LCL)
- OF19 : Freight Booking Type for Import (FCL)

Procedure

Creating OF15: Freight Booking Type for Import (LCL)

1. In Customizing for *Transportation Management* , choose ► *Freight Order Management* ► *Freight Booking* ► *Define Freight Booking Types* ►.
2. Create a freight booking type for execution booking as follows:
 1. Enter freight booking type **OF15** and description **OF: Ocean Booking Import LCL** .
 2. In the *Transportation Mode* field, enter **03 Sea** .
 3. In the *Transportation Mode Category* field, choose **3 Sea** .
 4. In the *Basic Settings* screen area, enter the following data:

Table 94

Field	Value
<i>Shipper/Consignee Determination</i>	P Determination Based on Predecessor Documents
<i>Booking can be deleted</i>	<i>Select</i>
<i>Enable Settlement</i>	<i>Select</i>
<i>Enable Cost Distribution</i>	<i>Select</i>
<i>Enable Charge Calculation</i>	<i>Select</i>

5. In the *Change Controller Settings* screen area, enter the default change strategy **DEF_CHACO** .
6. In the *Execution Settings* screen area:
 - Set the *Carrier Confirmation* to *Carrier Confirmation Not Required* .
 - Set the *Exec. Track. Relevance* field to *Execution Tracking* .
 - Select the *Immediate Processing* checkbox.
 - Select the *Propagate Execution Info* checkbox.
7. In the *Additional Setting* screen area:
 - Enter the default freight settlement document type (FSD type) **OF: Carrier Settlement Document** .
 - For both the *Default FO Type for Pickup* and the *Default FO Type for Delivery* , enter **OF05 - OF: Pickup/Delivery Freight Order** .
 - As the Web Dynpro Application Configuration, enter **/SCMTMS/FRE_BOOK_OCEAN** .
 - Deselect the *Enable Compliance Check* field.
 - For the container item source, select *R Container Item is taken from Predecessor Documents* .
8. In the *Number Range Settings* screen area:

- Set the *Time for Drawing* field to *I Draw Numbers when Saving Document* .
 - Enter number range interval **05** .
9. In the *Service Definition* screen area:
 - Set the *Consolidation (Source)* field to **With Consolidation** .
 - Set the *Consolidation (Dest.)* field to **With Consolidation** .
 - Select shipping type **3** (FCL – Full Container Load).
 - Set movement type **CC** (CFS to CFS).
 - Set the traffic direction to **2 – Import** .
 10. In the *Output Options* screen area, enter the output profile **/SCMTMS/TOR_PRINT_SEA** and the additional output profile **/SCMTMS/TOR** . Deselect the *Dynamic Determination of Output* option.
 11. In the *Organization Unit Determination* screen area, enter the purchasing organization that you created in the [Creation of Organizational Models \[page 59\]](#) section. In this scenario, the purchasing organization is **OF-FWH-20** (FH CFS Los Angeles). Deselect the *Consider Organization Unit of User* field.
3. Save your entries.

Creating OF19: Freight Booking Type for Import (FCL)

1. In Customizing for *Transportation Management* , choose **Freight Order Management > Freight Booking > Define Freight Booking Types** .
2. Create a freight booking type for execution booking as follows:
 1. Enter freight booking type **OF19** and description **OF: Ocean Booking Import FCL** .
 2. In the *Transportation Mode* field, enter **03 Sea** .
 3. In the *Transportation Mode Category* field, choose **3 Sea** .
 4. In the *Basic Settings* screen area, enter the following data:

Table 95

Field	Value
<i>Shipper/Consignee Determination</i>	P Determination Based on Predecessor Documents
<i>Booking can be deleted</i>	Select
<i>Enable Settlement</i>	Select
<i>Enable Cost Distribution</i>	Select
<i>Enable Charge Calculation</i>	Select

5. In the *Change Controller Settings* screen area, enter the default change strategy **DEF_CHACO** .
6. In the *Execution Settings* screen area:
 - Set the *Carrier Confirmation* to *Carrier Confirmation Not Required* .
 - Set the *Exec. Track. Relevance* field to *Execution Tracking* .
 - Select the *Immediate Processing* checkbox and specify that the life cycle is not to be set to “in process” immediately.
 - Select the *Propagate Execution Info* checkbox and enter standard propagation.
7. In the *Additional Setting* screen area:

- Enter the default freight settlement document type (FSD type) **OF: Carrier Settlement Document**.
 - For both the *Default FO Type for Pickup* and the *Default FO Type for Delivery*, enter **OF05 - OF: Pickup/Delivery Freight Order**.
 - As the Web Dynpro Application Configuration, enter **/SCMTMS/FRE_BOOK_OCEAN**.
 - Deselect the *Enable Compliance Check* field.
 - For the container item source, select *R Container Item is taken from Predecessor Documents*.
8. In the *Number Range Settings* screen area:
- Set the *Time for Drawing* field to *I Draw Numbers when Saving Document*.
 - Enter number range interval **05**.
 - Enter the *HBL* (House Bill of Lading) number range **05**.
9. In the *Service Definition* screen area:
- Set the *Consolidation (Source)* field to **With Consolidation**.
 - Set the *Consolidation (Dest.)* field to **With Consolidation**.
 - Select shipping type **3** (FCL – Full Container Load).
 - Set movement type **PP** (Port to Port).
 - Set the traffic direction to **2 - Import**.
10. In the *Output Options* screen area, enter the output profile **/SCMTMS/TOR_PRINT_SEA** and the additional output profile **/SCMTMS/TOR**. Deselect the *Dynamic Determination of Output* option.
11. In the *Organization Unit Determination* screen area, enter the purchasing organization that you created in the [Creation of Organizational Models \[page 59\]](#) section. In this scenario, the purchasing organization is **OF-FWH-20** (FH CFS Los Angeles). Deselect the *Consider Organization Unit of User* field.
3. Save your entries.

i Note

If required, you can return to the [Defining Planning Profiles \[page 25\]](#) section to proceed.

More Information

- [Defining freight settlement document types \[page 211\]](#)
- [Defining forwarding settlement document types \[page 148\]](#)
- [Defining dimensional weight profiles \[page 103\]](#)

5.12 Defining UN/LOCODES

The United Nations Code for Trade and Transport Locations (UN/LOCODE, UN Code) assigns codes to locations used in trade and transportation with functions such as seaports, rail and road terminals, airports, post offices, and border crossing points.

Procedure

1. In Customizing for Transportation Management, choose ► *Master Data* ► *Transportation Network* ► *Location* ► *Define UN/LOCODE* ►.
2. Enter the following UN/LOCODEs:
 - **AUSYD**
 - **JPHIJ**
 - **JPNGO**
 - **JPTYO**
 - **USLAX**
 - **USPHX**
 - **USSAN**

5.13 Defining Master Bill of Lading Stock Types

Procedure

1. In Customizing for Transportation Management, choose ► *Master Data* ► *Waybill Stock* ► *Define Waybill Number Stock Types* ►.
2. Create the following entry:

Table 96

Field	Value
<i>Stock Type</i>	MBL
<i>Description</i>	Master Bill of Lading (Default)
<i>TrM</i>	03
<i>Stock Category</i>	Waybill Number
<i>Org. Category</i>	2 Purchasing
<i>Prefix</i>	Deselected
<i>Prefix Length</i>	0
<i>Number Length</i>	10
<i>Chk Digits</i>	No Check Digit

3. Save your entries.

5.14 Defining House Bill of Lading Stock Types

Procedure

1. In Customizing for Transportation Management, choose ► *Master Data* ► *Waybill Stock* ► *Define Waybill Number Stock Types* ▾.
2. Create the following entry:

Table 97

Field	Value
<i>Stock Type</i>	HBL
<i>Description</i>	House Bill of Lading (Default)
<i>TrM</i>	03
<i>Stock Category</i>	Waybill Number
<i>Org. Category</i>	1 Sales
<i>Prefix</i>	Deselected
<i>Prefix Length</i>	0
<i>Number Length</i>	10
<i>Chk Digits</i>	No Check Digit

3. Save your entries.

6 Order Management

Order management concerns the definition of forwarding and freight orders and the maintenance to the supporting documentation. The following processes are involved:

- [Defining forwarding order types \[page 54\]](#)
This procedure specifies types of forwarding orders. You can use these types to define certain parameters of the forwarding order that influence how the system processes this business document.
- [Assign item types to forwarding order types \[page 56\]](#)
Assign an item type to the forwarding order type.
- [Define default freight document types for stages \[page 57\]](#)
This procedure specifies which freight document type (freight order type/freight booking type) is used for generating settlement documents through the shortcuts in the forwarding order.
- [Defining Forwarding Settlement Document Types \[page 148\]](#)

6.1 Defining Forwarding Order Types

In this procedure, you specify types of forwarding orders. You can use these types to define certain parameters of the forwarding order that influence how the system processes this business document.

For example, the forwarding order type can determine the number range interval that is used to generate a number of the forwarding order, or it can define whether freight units are created automatically when you save the forwarding order. Furthermore, you can assign profiles, for example planning profile and dangerous goods profile, that determine how follow-up steps such as planning and dangerous goods checks are performed.

You can select and assign the types that you have defined in this procedure on the user interface of the forwarding order in SAP NetWeaver Business Client. You can also specify a default forwarding order type that is used when the forwarding order is created automatically based on electronic data interchange (EDI).

Prerequisites

- You have set up the number ranges for the forwarding order types. In this case standard number ranges are used which are included in delivery customizing.
- You have defined a freight building rule, which is considered for automatic freight unit building.
- You have defined a forwarding house, for example `0AF-FWH-05`, as an organizational element in transaction `PPOME`.
- You have defined a forwarding settlement document type (OF09). For more information, see [Defining Forwarding Settlement Document Types \[page 148\]](#).

Procedure

In this procedure, you create the following forwarding order types:

- OF01 : Forwarding Order Export for LCL scenario
 - OF14 : Forwarding Order Import for LCL scenario
 - OF17 : Forwarding Order Export for FCL scenario
 - OF16 : Forwarding Order Import for FCL scenario
1. In Customizing for *Transportation Management*, choose ► *Forwarding Order Management* ► *Forwarding Order* ► *Define Forwarding Order Types* ►.
 2. Create the forwarding order types in succession using the following data:

Table 98

Field	OF01	OF14	OF16	OF17
<i>Short Description</i>	OF: Forwarding Order Export LCL	OF: Forwarding Order Import LCL	OF: Forwarding Order Import FCL	OF: Forwarding Order Export FCL
<i>Number Range Interval</i>	01	01	01	01
<i>Template No. Range Interval</i>	01	01	01	01
Process Control/Business Object Mode				
<i>BW Relevance</i>	Deselect	Deselect	Deselect	Deselect
<i>Enable Forwarding Settlement</i>	Select	Select	Select	Select
<i>Automatic Confirmation</i>	Deselect	Deselect	Deselect	Deselect
<i>EM Integrat. Active</i>	Deselect	Deselect	Deselect	Deselect
<i>Dangerous Goods Profile</i>	DG1	DG1	DG1	DG1
<i>Automatic Freight Unit Building</i>	Select	Select	Select	Select
<i>Transportation Mode</i>	03 - Sea	Blank	Blank	03 - Sea
<i>Shipping Type</i>	2 - LCL (Less than Container Load)	2 - LCL (Less than Container Load)	3 - FCL (Full Container Load)	3 - FCL (Full Container Load)
<i>Traffic Direction</i>	1	2	2	1
<i>Stage Determination</i>	P Stage Determination by Movement Type	P Stage Determination by Movement Type	P Stage Determination by Movement Type	P Stage Determination by Movement Type
<i>Stage Profile</i>	Blank	Blank	Blank	Blank

Field	OF01	OF14	OF16	OF17
Default FWSD Type	OF09	OF09	OF09	OF09
Default Conf. Type	O - Order-based Confirmation	O - Order-based Confirmation	O - Order-based Confirmation	O - Order-based Confirmation
Import FWO Type	OF14	Blank	Blank	OF16
Event Manager				
EM Web Interface Transaction	Blank	Blank	Blank	Blank
Output Profile	/SCMTMS/TRQ_FWO	/SCMTMS/TRQ_FWO	/SCMTMS/TRQ_FWO	/SCMTMS/TRQ_FWO
Additional Output Profile	/SCMTMS/TRQ_FWO_PRINT	/SCMTMS/TRQ_FWO_PRINT	/SCMTMS/TRQ_FWO_PRINT	/SCMTMS/TRQ_FWO_PRINT
Accept Transp. Prop.	Save Route only	Save Route only	Save Route only	Save Route only
Propagate Changes	B - Synchronous Propagation of changes, fallback to asynchronous	B - Synchronous Propagation of changes, fallback to asynchronous	B - Synchronous Propagation of changes, fallback to asynchronous	B - Synchronous Propagation of changes, fallback to asynchronous
Customs Handling	Manual	Manual	Manual	Manual
Default Values				
Default Weight UoM	KG	KG	KG	KG
Default Volume UoM	M3	M3	M3	M3
Default Pieces UoM	PC	PC	PC	PC
Freight Unit Building Rule	OF-FUBR-FU	Blank	OF-FUBR-CU	OF-FUBR-CU
Planning Profile	OAF-PLAN-PROF-CN	Blank	Blank	OAF-PLAN-PROF-CN
Organization Unit Determination				
Consider User Assignment	Blank	Select	Blank	Blank
Sales Organization	OAF-FWH-05	Blank	OAF-FWH-21	OAF-FWH-05

3. Save your entries.

6.2 Assigning Item Types to Forwarding Order Types

Assign an item type to the forwarding order (FWO) type. With this assignment the item type is usable in any forwarding order with type OF01.

For this scenario, the following item types are assigned:

- OF03 : packages with specific dimensions are assigned to the export forwarding order type OF01 and the import forwarding order type OF14 .
- CN : Container with specific dimensions is assigned to the export forwarding order type OF17 and the import forwarding order type OF16

Procedure

1. In Customizing for *Transportation Management* , choose ► *Forwarding Order Management* ► *Forwarding Order* ► *Define Item Types to Forwarding Order Types* ►.
2. Create the following entries:

Table 99

Field	Values			
<i>FWO Type</i>	OF01	OF14	OF17	OF16
<i>Item Type</i>	OF03	OF03	CN	CN
<i>Default Item Type</i>	Select	Select	Select	Select
<i>Item Category</i>	Package	Package	Container	Container

3. Save your entries.
4. Check the following item types:

Table 100

Item Type	Item Category
<i>CN</i>	TUR Container
<i>PKG</i>	PKG Package
<i>PRD</i>	PRD Product

6.3 Defining Default Freight Document Types for Stages

In this procedure, you specify which freight document type (freight order type or freight booking type) is used to generate settlement documents through the shortcuts in the forwarding order.

You can specify different freight order types for each stage type and transportation mode.

Prerequisites

- You have set up the required freight document type in the system or you are using the standard values.
- You have specified the required stage types and transportation modes or you are using the standard values.

Procedure

1. In Customizing for *Transportation Management*, choose **► Forwarding Order Management ► Forwarding Order ► Define Default Freight Document Types for Stages ►**.
2. Create an entry using the following data:

Table 101

Seq. No.	Shipping Type	Stage Type	Transportation Mode	Planning and Execution Organization	Document Type
8	LCL (Less than Container Load)	01	01	Blank	OF05
9	LCL (Less than Container Load)	02	01	Blank	OF10
10	LCL (Less than Container Load)	03	03	Blank	OF04
11	LCL (Less than Container Load)	04	01	Blank	OF10
12	LCL (Less than Container Load)	05	01	Blank	OF05
13	Blank	Blank	Blank	Blank	OF05

For all cases, select the following checkboxes:

- Create FD (Freight Document)
- Select FD (Freight Document)
- Sel. Schedule (Select Schedule)

7 Creation of Organizational Models

SAP Transportation Management uses functions from human resources to create and maintain organizational units. You use the organizational model to model the sales organization, purchasing organization, and transportation execution organization.

You also use the organizational model to assign the responsible organizational units to transportation documents such as a transportation request, a freight order, and so on. Assigning the order to an organizational unit is necessary to allocate the costs and profits incurred by the order to a business unit. It is also necessary for profit analysis of various groups and organizations of the logistics service provider (LSP). It helps analyze the costs that the company incurs for various carriers, routes, customers, and so on. The analysis can also lead to improved demand forecasting.

You need to maintain the organizational model in the SAP TM system since it is not transferred from the organizational units in SAP ERP. This scenario uses the organizational element *Forwarding House* (FH), which functions as a sales, purchasing, and transportation planning organization. Each forwarding house represents a station or branch office of an LSP.

Creating the organizational model includes the following operations:

- [Creating companies \[page 59\]](#)
In SAP ERP, you have two different companies representing the Japan and U.S. organizations. In SAP TM, these companies also have to be created. Forwarding houses are assigned to these companies.
- [Defining business partners for forwarding houses \[page 60\]](#)
- [Creating forwarding houses \[page 63\]](#)
Forwarding houses represent the individual stations, or business units of the LSP. Each station can sell transportation services, procure subcontracted services from chosen carriers and plan and execute the transport. Thus each forwarding house acts as a sales, purchasing, and transport planning/execution unit.
- [Assigning positions and users to forwarding houses \[page 66\]](#)
Each forwarding house has its own representative user with a one-to-one relationship with the corresponding forwarding house.

7.1 Creating Companies

In SAP ERP, you have two different companies representing the Japan and U.S. organizations. In SAP TM, these companies also have to be created. Forwarding houses are assigned to these companies.

Procedure

Creating a Company

1. On the SAP Easy Access screen for SAP TM (or, alternatively, in SAP NetWeaver Business Client), choose **► Master Data ► Organization ► Create Organization and Staffing ►**.

2. In the dialog box, set the validity period from <the first day of current year> to **31.12.9999**, and press .
3. On the *Basic Data* tab page, in the *Organizational Unit* fields, enter **OAF-COMP-JP** and **Interforwarders Japan** as description.
4. On the *Org. Data* tab page, choose *Create*.
5. For *Organizational Unit Function*, enter **24**, for *Organizational Unit Role*, enter **1**, and select *Intra Comp. Settlement*.
6. Choose the *Address* tab page and enter the city **Tokyo**, **Region 13** and the country **JP**.
7. Save your entries.
8. For the U.S. company, create a new organizational unit with the validity period **01.01. <current year>** to **31.12.9999** and press .
9. On the *Basic Data* tab page, in the *Organizational Unit* fields, enter **OAF-COMP-US** and **Interforwarders Inc. United States** as description.
10. On the *Org. Data* tab page, choose *Create*.
11. For *Organizational Unit Function*, enter **24**, for *Organizational Unit Role*, enter **1**, and select *Intra Comp. Settlement*.
12. Choose the *Address* tab page and enter the city **Los Angeles**, region **CA**, and country **US**.
13. Save your entries.

7.2 Defining Business Partners for Forwarding Houses

i Note

If you have not implemented the BAdI for automatically creating business partners, you must create the business partners manually. For more information about creating business partners automatically, see SAP Note Number [1410353](#) or [1540288](#).

Procedure

Create Business Partners

1. On the *SAP Easy Access* screen for *SAP Transportation Management*, choose **SAP Transportation Management > Transportation Management > Master Data > Maintain Business Partner** or call transaction **BP**.
2. Create business partners of type *Organization* using the following data:

Table 102

Abbreviation of Organizational Unit	Address	Search Term 1	Search Term 2	Business Partner Role
OAF-FWH-01	8-3 Kanayama Cho 1, Atsuta-ku Nagoya-shi,	FH Station	JP	<ul style="list-style-type: none"> • CRM002 Ship-to Party • CRM000 Sold to Party

Abbreviation of Organizational Unit	Address	Search Term 1	Search Term 2	Business Partner Role
	4560002, JP, Region 23 (Aichi)			<ul style="list-style-type: none"> • CRM010 Carrier • FS0000 Financial Services BP • BUP004 Organizational Unit • CRM004 Bill-to Party
OAF-FWH-03	3-12-1 Shin-Yamashita, Naka-ku, Yokohama, 2318682, JP, Region 14 (Kanagawa)	FH CFS	JP	<ul style="list-style-type: none"> • CRM002 Ship-to Party • CRM000 Sold to Party • CRM010 Carrier • FS0000 Financial Services BP • BUP004 Organizational Unit • CRM004 Bill-to Party
OAF-FWH-04	3-36 Higashikojin-machi, Minam-ku, Hiroshima, 7320805, JP, Region 34 (Hiroshima)	FH Station	JP	<ul style="list-style-type: none"> • CRM002 Ship-to Party • CRM000 Sold to Party • CRM010 Carrier • FS0000 Financial Services BP • BUP004 Organizational Unit • CRM004 Bill-to Party
OAF-FWH-05	6-23-15 Shiba, Minato-ku, Tokyo, 1080014, JP, Region 13 (Tokyo)	FH Station	JP	<ul style="list-style-type: none"> • CRM002 Ship-to Party • CRM000 Sold to Party • CRM010 Carrier

Abbreviation of Organizational Unit	Address	Search Term 1	Search Term 2	Business Partner Role
				<ul style="list-style-type: none"> • FS0000 Financial Services BP • BUP004 Organizational Unit • CRM004 Bill-to Party
OAF-FWH-20	180 South Pico Avenue, Long Beach, 90802-6247, United States, Region CA (California)	FH CFS	US	<ul style="list-style-type: none"> • CRM002 Ship-to Party • CRM000 Sold to Party • CRM010 Carrier • FS0000 Financial Services BP • BUP004 Organizational Unit • CRM004 Bill-to Party
OAF-FWH-21	8123 South Hardy Drive, Tempe, 85284-1106, US, Region AZ (Arizona)	FH Station	US	<ul style="list-style-type: none"> • CRM002 Ship-to Party • CRM000 Sold to Party • CRM010 Carrier • FS0000 Financial Services BP • BUP004 Organizational Unit • CRM004 Bill-to Party
OAF-FWH-22	2296 Niels Bohr Court, San Diego, 92154, US, Region CA (California)	FH Station	US	<ul style="list-style-type: none"> • CRM002 Ship-to Party • CRM000 Sold to Party • CRM010 Carrier • FS0000 Financial Services BP

Abbreviation of Organizational Unit	Address	Search Term 1	Search Term 2	Business Partner Role
				<ul style="list-style-type: none"> • BUP004 Organizational Unit • CRM004 Bill-to Party
OAF-FWH-25	213 El Camino Real, Milbrae, 94030-2607, US, Region CA (California)	FH Station	US	<ul style="list-style-type: none"> • CRM002 Ship-to Party • CRM000 Sold to Party • CRM010 Carrier • FS0000 Financial Services BP • BUP004 Organizational Unit • CRM004 Bill-to Party

Assign Business Partner Roles

1. On the *SAP Easy Access* screen for *SAP Transportation Management*, choose **SAP Transportation Management > Transportation Management > Master Data > Maintain Business Partner** or call transaction **BP**.
2. In the *Business Partner* field, enter **OF-FWH-20** and press . The details of the business partner appear.
3. Switch to change mode and choose the following options from the *Change in BP role* dropdown box:
 - CRM010 Carrier (New)
 - CRM000 Sold-to-Party
 - CRM002 Ship-to Party
 - FS0000 Financial Service BP
 - BUP004 Organizational Unit
4. Save your entries.

7.3 Creating Forwarding Houses

Forwarding houses represent the individual stations, or business units of the LSP. Each station can sell transportation services, procure subcontracted services from chosen carriers, and plan and execute the transport. Thus each forwarding house acts as a sales, purchasing, and transport planning/execution unit.

All of the following organizational units are created as line supervisors of (lower level) units of the corresponding company code.

The following forwarding houses are created within the company OAF-COMP-JP:

Table 103

Abbreviation of Organizational Unit	OAF-FWH-01	OF-FWH-03	OAF-FWH-04	OAF-FWH-05
Name of Organizational Unit	FH Station Nagoya	FH CFS Yokohama	FH Station Hiroshima	FH Station Tokyo
Supervisor Of	None	None	None	None
Organizational Unit Function	89 (Forwarding House)	89 (Forwarding House)	89 (Forwarding House)	89 (Forwarding House)
Organizational Unit Role	1 (Organization)	1 (Organization)	1 (Organization)	1 (Organization)
Address	8-3 Kanayama Cho 1, Atsuta-ku, Nagoya-shi, 4560002, JP, Region 23 (Aichi)	3-12-1 Shin-Yamashita, Naka-ku, Yokohama, 2318682, JP, Region 14 (Kanagawa)	3-36 Higashikojin-machi, Minami-ku, Hiroshima, 7320805, JP, Region 34 (Hiroshima)	6-23-1 Shiba, Minato-ku, 1080014, JP, Region 13 (Tokyo)
Business Partner	OAF-FWH-01	OAF-FWH-03	OAF-FWH-04	OAF-FWH-05
Charges Profile ID	OF-CP-FWH-01	OF-CP-FWH-03	OF-CP-FWH-04	OF-CP-FWH-05

The following forwarding houses are created within company OAF-COMP-US:

Table 104

Abbreviation of Organizational Unit	OF-FWH-20	OAF-FWH-21	OAF-FWH-22	OAF-FWH-25
Name of Organizational Unit	FH CFS Los Angeles	FH Station Phoenix	FH Station San Diego	FH Station San Francisco
Supervisor Of	None	None	None	None
Organizational Unit Function	89 (Forwarding House)	89 (Forwarding House)	89 (Forwarding House)	89 (Forwarding House)
Organizational Unit Role	1 (Organization)	1 (Organization)	1 (Organization)	1 (Organization)
Address	180 South Pico Avenue, Long Beach, 90802-6247, United States, Region CA (California)	8123 South Hardy Drive, Tempe, 85284-1106, United States, Region AZ (Arizona)	2296 Niels Bohr Court, San Diego, 92154, United States, Region CA (California)	213 El Camino Real, Milbrae, 94030-2607, United States, Region CA (California)
Business Partner	OF-FWH-20	OF-FWH-21	OF-FWH-22	OF-FWH-25
Charges Profile ID	OF-CP-FWH-20	OF-CP-FWH-21	OF-CP-FWH-22	OF-CP-FWH-25

Procedure

Create Organizational Units

1. In SAP NetWeaver Business Client (NWBC), choose ► *Master Data* ► *Organization* ► *Create Organization and Staffing* .
2. Enter a valid period for your organizational unit.
3. Select (double-click) the appropriate company (*OAF-COMP-JP* or *OAF-COMP-US*).
4. Choose *Create* .
5. Choose *is line supervisor of Organizational Unit* . The new entry is created and is visible in the structure of the company.
6. On the *Basic Data* tab page, in the *Organizational Unit* fields, enter the abbreviation and name of the organization unit in the above tables.
7. On the *Org. Data* tab page, choose *Create* and define the *Organizational Unit Function* and *Organizational Unit Role* according to the above tables.
8. On the *Address* tab page, define the main address of the organization according to the above tables.
9. Save your entries.
An organizational unit number is generated along with the corresponding business partner number, which is visible on the *Org. Data* tab page of the organizational unit.
10. Create the remaining forwarding houses with the data in the above tables.

Rename Organizational Units

When you create organizational units, the system allocates organization unit IDs to the units. You can rename these IDs to be the same as the abbreviation from the tables above. Make a note of the system numbers as they are required for later reference.

1. In SAP NetWeaver Business Client (NWBC), choose ► *Master Data* ► *Organization* ► *Edit Organization and Staffing* .
2. Choose *Organizational unit* and enter a search term of **OAF-FWH*** . Choose *Find* .
3. Double-click *FH Station Nagoya* in the *Hit list* panel.
4. Choose the *Org. data* tab page and note the *Org-ID* in the table below.
5. Rename the *Org. ID* to **OAF-FWH-01** .
6. Choose *Save* .
7. Repeat steps 1-6 for all the organizational units listed in the following table:

Table 105

Company	Forwarding Houses			Old Org. ID (Generated Automatically)	New Org. ID (To Be Entered Manually)
OAF-COMP-JP	OAF-FWH-01	FH Station	Nagoya	<8 digit number>	OAF-FWH-01
	OF-FWH-03	FH CFS	Yokohama	<8 digit number>	OF-FWH-03
	OAF-FWH-04	FH Station	Hiroshima	<8 digit number>	OAF-FWH-04
	OAF-FWH-05	FH Station	Tokyo	<8 digit number>	OAF-FWH-05
OAF-COMP-US	OF-FWH-20	FH CFS	Los Angeles	<8 digit number>	OF-FWH-20

Company	Forwarding Houses			Old Org. ID (Generated Automatically)	New Org. ID (To Be Entered Manually)
	OAF-FWH-21	FH Station	Phoenix	<8 digit number>	OAF-FWH-21
	OAF-FWH-22	FH Station	San Diego	<8 digit number>	OAF-FWH-22
	OAF-FWH-25	FH Station	San Francisco	<8 digit number>	OAF-FWH-25

7.4 Assigning Positions and Users to Forwarding Houses

Forwarding houses represent different organizational units in the Ocean Freight scenario, and there is an automatic determination that considers user-specific organizations. This means that each forwarding house has its own representative user with a one-to-one relationship with the corresponding forwarding house. Therefore, you must maintain one user for each organizational unit (Forwarding House). Later in this process, each process step is then executed by a different user.

Prerequisites

Copy Roles to your Namespace

For this scenario, copy the following Standard roles to your namespace:

- /SCMTMS/PLANNER
- /SCMTMS/BOOKING_AGENT
- /SCMTMS/CUSTOMER_SERVICE_AGENT

Create and Generate Authorization Profiles

For each role, maintain authorization profiles and generate them. For detailed information about authorization levels, see [Creation of Organizational Models \[page 59\]](#) to check the organizational units used in this scenario.

Procedure

Create User Profiles

1. On the *SAP Easy Access* screen for SAP TM, choose ► *Application Administration* ► *General Settings* ► *User Maintenance* ►.
2. Create the following users :

Table 106

User ID	Name	First Name	Assigned Roles
JONES	Jones	Brian	/YOUR_NAMESPACE/ PLANNER / YOUR_NAMESPACE/ BOOKING_AGENT

User ID	Name	First Name	Assigned Roles
BARKLEY	Barkley	Charles	/YOUR_NAMESPACE/ CUSTOMER_SERVICE_AGENT
JIME	JIME	Hadaka	SAP_QAP_TESTER_NEW ZTEST_CUSTOMER_SERVICE_AGENT
GARI	Gari	Osoto	/YOUR_NAMESPACE/ PLANNER / YOUR_NAMESPACE/ BOOKING_AGENT

Assign Users to Forwarding Houses

1. On the *SAP Easy Access* screen for SAP TM, choose ► *Master Data* ► *Organization* ► *Edit Organization and Staffing* .
2. Choose one of the forwarding houses (for example: *OF-FWH-20*).
3. In the *Task Assignment* field highlight the forwarding house and choose *New* .
4. In the pop-up for new relationships choose *Incorporates Position* .
5. Name the new position either *Transportation Planner* or *Customer Service Agent* . For the correct naming convention, see the table below.
6. Highlight the new position and choose *Assign Holder-User* .
7. Assign the users as indicated in the following table:

Table 107

Abbreviation of Organizational Unit	Name of the Organizational Unit	Position ID	Position Description	Assigned User
OF-FWH-20	FH CFS Los Angeles	CustServA_US	Customer Service Agent US	Brian Jones
OAF-FWH-21	FH Station Phoenix	TransPlan_US	Transportation Planner US	Charles Barkley
OAF-FWH-22	FH Station San Diego	None	None	None
OAF-FWH-25	FH Station San Francisco	None	None	None
OAF-FWH-01	FH Station Nagoya	None	None	None
OAF-FWH-05	FH Station Tokyo	CustServA_JP	Customer Service Agent JP	JIME

Abbreviation of Organizational Unit	Name of the Organizational Unit	Position ID	Position Description	Assigned User
OF-FWH-03	FH CFS Yokohama	TransPlan_JP	Transportation Planner JP	OSOTOGARI
OAF-FWH-04	FH Station Hiroshima	None	None	None

i Note

If required, you can return to the [Defining Freight Booking Types for Export \[page 45\]](#) section to continue.

8 Transportation Network Setup in SAP TM

Setting up the transportation network requires the following definition procedures:

- [Locations \[page 69\]](#)
- [Means of transport \[page 71\]](#)
- [Transportation zones \[page 72\]](#)
- [Transportation lanes \[page 74\]](#)
- [Default routing \[page 95\]](#)

8.1 Defining Locations

Procedure

1. On the *SAP Easy Access* screen for SAP TM, choose **Master Data > Transportation Network > Define Location**.
2. Create locations with the following data:

Japanese locations

Table 108: Japanese Locations

Location	OF-JPYOK	OAF-STA-JPNGO	OAF-STA-JPTYO	OAF-STA-JPHIJ	OF-CFS-JPYOK
Description	Yokohama Port	FH Station Nagoya	FH Station Tokyo	FH Station Hiroshima	Container Freight Station Yokohama
Location Type	1100	1002	1002	1002	1130
Time Zone	JAPAN	JAPAN	JAPAN	JAPAN	JAPAN
Search Term	Ocean Port	FH Station	FH Station	FH Station	Container Station
Address	Sakuragicho, Yokohama, 2310005	8-3 Kanayama Cho 1, Atsuta-ku Nagoya-shi, 4560002	6-23-15 Shiba, Minato-ku, Tokyo, 1080014	3-36 Higashikojin -machi, Minamiku, Hiroshima, 7320805	3-12-1 Shin-Yamashita, Naka-ku, 2318682
Country	JP	JP	JP	JP	JP

Region	14 (Kanagawa)	23 (Aichi)	13 (Tokyo)	34 (Hiroshima)	14 (Kanagawa)
UN/LOCODE	JPYOK	JPNGO	JPTYO	JPHIJ	JPYOK
Business Partner	None	OAF-FWH-01	OAF-FWH-05	None	OF-FWH-03

U.S. locations

Table 109: U.S. Locations

Location	OF-USLGB	OAF-STA- USSAN	OAF-STA- USSFO	OAF-STA- USPHX	OF-CFS-USLAX
Description	Long Beach Port	FH Station San Diego	FH Station San Francisco	FH Station Phoenix	Container Freight Station Los Angeles
Location Type	1100	1002	1002	1002	1130
Time Zone	UTC-8	UTC-8	UTC-8	MSTNO	UTC-8
Search Term	Ocean Port	FH Station	FH Station	FH Station	Container Station
Address	Long Beach	2296 Niels Bohr Court, San Diego, 92154	213 El Camon Real, Milbrae, 94030-2607	8123 South Hardy Drive, Tempe, 85284-1106	180 South Pico Avenue, Long Beach, 90802-6247
Country	US	US	US	US	US
Region	CA (California)	CA (California)	CA (California)	AZ (Arizona)	CA (California)
UN/LOCODE	USLGB	USSAN	USSFO	USPHX	USLAX
Business Partner	None	OAF-FWH-22	None	OAF-FWH-21	OAF-FWH-20

3. For each location, enter the geocoordinates as follows:

Table 110: Geocoordinates

Location	Longitude	Latitude
OF-JPYOK	+ 139: 41: 00	+ 35: 24: 00
OAF-STA-JPTYO	+ 139: 30: 00	+ 35: 45: 00
OAF-STA-JPHIJ	+ 132: 28: 00	+ 34: 23: 00
OF-USLGB	- 119: 30: 00	+ 33: 46: 00
OAF-STA-JPNGO	+ 137: 15: 00	+ 35: 00: 00
OAF-STA-USSAN	- 119: 30: 00	+ 37: 30: 00
OAF-STA-USPHX	- 112: 05: 44	+ 33: 33: 31

Location	Longitude	Latitude
OF-CFS-JPYOK	+ 139: 30: 00	+ 35: 30: 00
OF-CFS-USLAX	- 119: 30: 00	+ 37: 30: 00
OAF-STA-USSFO	- 122: 23: 00	+ 37: 34: 00

4. Save your entries.

8.2 Defining Means of Transport

If you have already completed the [Defining Freight Order Types \[page 43\]](#) section, the information given in this section may already be complete.

Procedure

1. In Customizing for *Transportation Management*, choose **► Master Data ► Resources ► Define Means of Transport ►**.
2. Define the following means of transport if they do not yet exist in the system:

Table 111

Description		Value				
Means of Transport		OF_VESSEL	OAF_TRUCK	OAF_TRUK_S	OF_TRA	OF_TR
MTr Description		Scheduled Vessel JP - US	Truckload	Truckload Schedule (Feeder Trucks)	Tractor	Trailer
Transp. Mode		03 SEA	01 ROAD	01 ROAD	01 ROAD	01 ROAD
Resource Class		Blank	Blank	Blank	Truck	Trailer
Speed	Low	20	35	35	Blank	Blank
	Med	30	45	45	Blank	Blank
	High	40	55	55	Blank	Blank
	Avg	20	45	45	100	100
Distance Factor		1	Blank	Blank	Blank	Blank
Multires		Select	Blank	Blank	Blank	Select
No. of Individual Res		15	Blank	Blank	Blank	Blank
Schedule MTr		Select	Blank	Select	Blank	Blank
GIS Quality		Deselect	Deselect	Deselect	Deselect	Blank

Description	Value				
No Capacity	Blank	Blank	Blank	Select	Blank
Passive	Blank	Blank	Blank	Blank	Select

i Note

If required, you can return to the [Defining Freight Order Types \[page 43\]](#) section to continue.

8.3 Defining Transportation Zones

A transportation zone is a business object that groups a number of locations. The system can partly transfer the properties that you assign to a transportation zone to all its locations. This function reduces the volume of master data that is stored in the system.

For the LCL ocean freight scenario, four transportation zones are used: OAF-JP-SHPNGO , OAF-JP-SHPTYO , OAF-US-SHPPHX , and OAF-US-SHPSAN . If these zones do not exist in your system, you can use this procedure to define them.

For the FCL ocean freight scenario, two transportation zones are used: OF-JP-SHPALL and OF-US-SHPALL . If these zones do not exist in your system, you can use this procedure to define them.

Procedure

1. On the *SAP Easy Access* screen for SAP TM, choose **Master Data > Transportation Network > Define Transportation Zones**.
2. Choose *Create* and create the zone OAF-JP-SHPNGO as follows:

Table 112

Zone	Description
OAF-JP-SHPNGO	OAF: Shippers for Station Nagoya

3. On the *Zone – Location* tab page, create the following locations:
 - o CUAOAF-CU-03@ERP001
 - o OAF-STA-JPNGO
4. Create the zone OAF-JP-SHPTYO as follows:

Table 113

Zone	Description
OAF-JP-SHPTYO	OAF: Shippers for Station Tokyo

5. On the *Zone – Location* tab page, create the following locations:
 - o CUAOAF-CU-01@ERP001
 - o CUAOAF-CU-02@ERP001
 - o CUAOAF-CU-04@ERP001
 - o OAF-STA-JPTYO

6. Create the zone OAF-US-SHPSAN as follows:

Table 114

Zone	Description
OAF-US-SHPSAN	OAF: Shippers for Station San Diego

7. On the *Zone – Location* tab page, create the following locations:

- **CUOAF-CO-03@ERP001**
- **OAF-STA-USSAN**

8. Create the zone OAF-US-SHPPHX as follows:

Table 115

Zone	Description
OAF-US-SHPPHX	OAF: Shippers for Station Phoenix

9. On the *Zone – Location* tab page, create the following locations:

- **CUOAF-CO-01@ERP001**
- **CUOAF-CO-02@ERP001**
- **CUOAF-CO-04@ERP001**
- **OAF-STA-USPHX**

10. Create the zone OF-JP-SHPALL as follows:

Table 116

Zone	Description
OF-JP-SHPALL	Ocean freight zone JP SHP-PORT

11. On the *Zone – Location* tab page, create the following locations:

- **CUOAF-CU-01@ERP001**
- **CUOAF-CU-02@ERP001**
- **CUOAF-CU-03@ERP001**
- **CUOAF-CU-04@ERP001**
- **OF-JPYOK**

12. Create the zone OF-US-SHPALL as follows:

Table 117

Zone	Description
OF-US-SHPALL	Ocean freight zone US SHP-PORT

13. On the *Zone – Location* tab page, create the following locations:

- **CUOAF-CO-01@ERP001**
- **CUOAF-CO-02@ERP001**
- **CUOAF-CO-03@ERP001**
- **CUOAF-CO-04@ERP001**
- **OF-USLGB**

8.4 Defining Transshipment Location Assignments

Procedure

1. On the *SAP Easy Access* screen for SAP TM, choose ► *Master Data* ► *Transportation Network* ► *Define Transshipment Location Assignments* ►.
2. Select *Transportation Zones*.
3. In the *Transportation Zone* field, enter **OAF-JP-SHPTYO** and in the *Transshipment Location* field, enter **OAF-STA-JPTYO**.
4. In the *Rough Planning Duration* field, enter **2:00**.
5. Choose the *Create/Update Assignments* pushbutton.
6. Save your entries.
7. Repeat the procedure using the following data:

Table 118

Transportation Zone	Transportation Location	Duration
OAF-US-SHPPHX	OAF-STA-USPHX	2:30
OAF-US-SHPSAN	OAF-STA-USSAN	2:40
OAF-JP-SHPNGO	OAF-STA-JPNGO	2:15
OF-JP-SHPALL	OF-JPYOK	Blank
OF-US-SHPALL	OF-USLGB	Blank

8.5 Defining Transportation Lanes

Procedure

Define Transportation Lane for Zone OAF-JP-SHPNGO

1. On the *SAP Easy Access* screen for SAP TM, choose ► *Master Data* ► *Transportation Network* ► *Define Transportation Lane* ►.
2. Choose the *Intra-Zone/Loc. Transp. Lane* tab page, enter transportation zone **OAF-JP-SHPNGO**, and choose *Create*.
3. In the *Means of Transport* area, create an entry with the following data:

Table 119

Means of Transport	Start Date	End Date
OAF_TRUCK	2011-01-01	9999-12-31

Table 120

Strategy	Value
<i>Relevant to Carrier Selection</i>	Select

Strategy	Value
Priority / Costs	X Neither Costs Nor Priority
Cost Origin	Internal Cost
Continuous Move Type	No Continuous Move

4. Press *Copy and Close* .
5. When asked to create a transportation proposal, choose *No* .
6. In the *Carrier for Means of Transport* area, create an entry with the following data:

Table 121

Business Partner	Transportation Costs per KM	Priority
OAF-CR-04	500	1

7. Press *Copy and Close* .
8. Save your entries.

Define Transportation Lane for Zone OAF-JP-SHPTYO

1. On the *SAP Easy Access* screen for SAP TM, choose ► *Master Data* ► *Transportation Network* ► *Define Transportation Lane* ►.
2. Choose the *Intra-Zone/Loc. Transp. Lane* tab page, enter transportation zone **OAF-JP-SHPTYO** , and choose *Create* .
3. In the *Means of Transport* area, create an entry with the following data:

Table 122

Means of Transport	Start Date	End Date
OAF_TRUCK	2011-01-01	9999-12-31

Table 123

Strategy	Value
Relevant to Carrier Selection	Select
Priority / Costs	X Neither Costs Nor Priority
Cost Origin	Internal Cost
Continuous Move Type	No Continuous Move

4. Press *Copy and Close* .
5. When asked to create a transportation proposal, choose *No* .
6. In the *Carrier for Means of Transport* area, create an entry with the following data:

Table 124

BP Number	Transportation Costs per KM	Priority
OAF-CR-03	1000	1

7. Press *Copy and Close* .
8. Save your entries.

Define Transportation Lane for Zone OAF-US-SHPSAN

1. On the *SAP Easy Access* screen for SAP TM, choose ► *Master Data* ► *Transportation Network* ► *Define Transportation Lane* ►.
2. Choose the *Intra-Zone/Loc. Transp. Lane* tab page, enter transportation zone **OAF-US-SHPSAN**, and choose *Create*.
3. In the *Means of Transport* area, create an entry with the following data:

Table 125

Means of Transport	Start Date	End Date
OAF_TRUCK	2011-01-01	9999-12-31

Table 126

Strategy	Value
<i>Relevant to Carrier Selection</i>	Select
<i>Priority / Costs</i>	X Neither Costs Nor Priority
<i>Cost Origin</i>	Internal Cost
<i>Continuous Move Type</i>	No Continuous Move

4. Press *Copy and Close*.
5. When asked to create a transportation proposal, choose *No*.
6. In the *Carrier for Means of Transport* area, create an entry with the following data:

Table 127

BP Number	Transportation Costs per KM	Priority
OAF-CR-05	1000	1

7. Press *Copy and Close*.
8. Save your entries.

Define Transportation Lane for Zone OAF-US-SHPPHX

1. On the *SAP Easy Access* screen for SAP TM, choose ► *Master Data* ► *Transportation Network* ► *Define Transportation Lane* ►.
2. Choose the *Intra-Zone/Loc. Transp. Lane* tab page, enter transportation zone **OAF-US-SHPPHX**, and choose *Create*.
3. In the *Means of Transport* area, create an entry with the following data:

Table 128

Means of Transport	Start Date	End Date
OAF_TRUCK	2011-01-01	9999-12-31

Table 129

Strategy	Value
<i>Relevant to Carrier Selection</i>	Select
<i>Priority / Costs</i>	X Neither Costs Nor Priority

Strategy	Value
<i>Cost Origin</i>	Internal Cost
<i>Continuous Move Type</i>	No Continuous Move

4. Press *Copy and Close* .
5. When asked to create a transportation proposal, choose *No* .
6. In the *Carrier for Means of Transport* area, create an entry with the following data:

Table 130

BP Number	Transportation Costs per KM	Priority
OAF-CR-06	1000	1

7. Press *Copy and Close* .
8. Save your entries.

Define Transportation Lane for Zone OF-JP-SHPALL

1. On the *SAP Easy Access* screen for SAP TM, choose ► *Master Data* ► *Transportation Network* ► *Define Transportation Lane* ►.
2. Choose the *Intra-Zone/Loc. Transp. Lane* tab page, enter transportation zone **OF-JP-SHPALL** , and choose *Create* .
3. In the *Means of Transport* area, create an entry with the following data:

Table 131

Means of Transport	Start Date	End Date
OAF_TRA	2011-01-01	9999-12-31

Table 132

Strategy	Value
<i>Relevant to Carrier Selection</i>	Select
<i>Priority / Costs</i>	X Neither Costs Nor Priority
<i>Cost Origin</i>	Internal Cost
<i>Continuous Move Type</i>	No Continuous Move

4. Press *Copy and Close* .
5. When asked to create a transportation proposal, choose *No* .
6. In the *Carrier for Means of Transport* area, create an entry with the following data:

Table 133

BP Number	Transportation Costs per KM	Priority
OAF-CR-03	1000	1

7. Press *Copy and Close* .
8. Save your entries.

Define Transportation Lane for Zone OF-US-SHPALL

1. On the *SAP Easy Access* screen for SAP TM, choose ► *Master Data* ► *Transportation Network* ► *Define Transportation Lane* ►.
2. Choose the *Intra-Zone/Loc. Transp. Lane* tab page, enter transportation zone **OF-US-SHPALL**, and choose *Create*.
3. In the *Means of Transport* area, create an entry with the following data:

Table 134

Means of Transport	Start Date	End Date
OAF_TRA	2011-01-01	9999-12-31

Table 135

Strategy	Value
<i>Relevant to Carrier Selection</i>	Select
<i>Priority / Costs</i>	X Neither Costs Nor Priority
<i>Cost Origin</i>	Internal Cost
<i>Continuous Move Type</i>	No Continuous Move

4. Press *Copy and Close*.
5. When asked to create a transportation proposal, choose *No*.
6. In the *Carrier for Means of Transport* area, create an entry with the following data:

Table 136

BP Number	Transportation Costs per KM	Priority
OAF-CR-06	1000	1

7. Press *Copy and Close*.
8. Save your entries.

8.6 Defining Means of Transport Combination

Procedure

1. In Customizing for Transportation Management, choose ► *Master Data* ► *Resources* ► *Define Means of Transport Combination* ►.
2. Choose the *New Entries* pushbutton and enter the following data:

Table 137

MTr Comb.	MTr	Number of Resources with this Means of Trans.	Pass.
OF_TT	OF_TR	1	Select
OF_TT	OF_TRA	2	Deselect

3. Save your entries.

9 Resources

For SAP TM, defining resources includes defining the vehicle and carrier resources and the appropriate scheduling. This is achieved with the following procedures:

- [Defining Vehicle Resources \[page 79\]](#)
- [Defining Container Resources \[page 84\]](#)
- [Defining Ocean Resources \[page 85\]](#)
- [Defining Inland Trucking Schedule Types \[page 86\]](#)
- [Defining Ocean Carrier Schedules \[page 88\]](#)
- [Defining Sailing Schedules \[page 89\]](#)
- [Defining Truck Schedules \[page 91\]](#)
- [Defining Default Routes \[page 95\]](#)
- [Defining House Bill of Lading Stock \[page 100\]](#)

9.1 Defining Vehicle Resources

Procedure

On the *SAP Easy Access* screen for SAP TM, choose ► *Master Data* ► *Resources* ► *Define Resource* ►.

Resource: OAF-JP-TRUCK1

1. On the initial screen, create the following transportation unit resources:

Table 138

Field	Value
<i>Resource</i>	OAF-JP-TRUCK1
<i>Resource Type</i>	09 (Vehicle Resource)
<i>Resource Category</i>	T (Transportation)

2. In the table below *O Vehicle*, enter the following information:

Table 139

Field	Value
<i>Resource</i>	OAF-JP-TRUCK1
<i>Location</i>	Blank
<i>Means of Transport</i>	OAF_TRUK_S
<i>Time Zone</i>	JAPAN

Field	Value
<i>Continuous Dimension</i>	Mass
<i>Factory Calendar</i>	JP
<i>Capacity</i>	40
<i>Unit</i>	TO

3. On the *General Data* tab page, configure the following settings:

Table 140

Field	Value
<i>Passive Means of Transport</i>	Deselect
<i>Number of Individual Resources</i>	Blank (0)
<i>Multiresource</i>	Deselect

4. Save your entries.

Resource: OF-JP-TRACTOR

1. On the initial screen, create the following transportation unit resources:

Table 141

Field	Value
<i>Resource</i>	OF-JP-TRACTOR
<i>Resource Type</i>	09 (Vehicle Resource)
<i>Resource Class</i>	1 (Truck)

2. In the table below *0 Vehicle* , enter the following information:

Table 142

Field	Value
<i>Resource</i>	OF-JP-TRACTOR
<i>Location</i>	Blank
<i>Means of Transport</i>	OF_TRA
<i>Time Zone</i>	JAPAN
<i>Continuous Dimension</i>	Mass
<i>Factory Calendar</i>	JP
<i>Capacity</i>	30
<i>Unit</i>	TO

3. On the *General Data* tab page, configure the following settings:

Table 143

Field	Value
<i>Passive Means of Transport</i>	Deselect
<i>Number of Individual Resources</i>	Blank (0)
<i>Multiresource</i>	Select
<i>Unlimited No. of Indiv. Res</i>	Select

4. Save your entries.

Resource: OF-JP-TRAILER

1. On the initial screen, create the following transportation unit resources:

Table 144

Field	Value
<i>Resource</i>	OF-JP-TRAILER
<i>Resource Type</i>	09 (Vehicle Resource)
<i>Resource Class</i>	2 (Trailer)

2. In the table below *0 Vehicle*, enter the following information:

Table 145

Field	Value
<i>Resource</i>	OF-JP-TRAILER
<i>Location</i>	Blank
<i>Means of Transport</i>	OF_TR
<i>Time Zone</i>	JAPAN
<i>Continuous Dimension</i>	Mass
<i>Factory Calendar</i>	JP
<i>Capacity</i>	30
<i>Unit</i>	TO

3. On the *General Data* tab page, configure the following settings:

Table 146

Field	Value
<i>Passive Means of Transport</i>	Select
<i>Number of Individual Resources</i>	Blank (0)
<i>Multiresource</i>	Select
<i>Unlimited No. of Indiv. Res</i>	Select

4. Save your entries.

Resource: OAF-US-TRUCK1

1. On the initial screen, create the following transportation unit resources:

Table 147

Field	Value
<i>Resource</i>	OAF-US-TRUCK1
<i>Resource Type</i>	09 (Vehicle Resource)
<i>Resource Category</i>	T (Transportation)

2. In the table below *O Vehicle* , enter the following information:

Table 148

Field	Value
<i>Resource</i>	OAF-US-TRUCK1
<i>Location</i>	Blank
<i>Means of Transport</i>	OAF_TRUK_S
<i>Time Zone</i>	UTC-8
<i>Continuous Dimension</i>	Mass
<i>Factory Calendar</i>	US
<i>Capacity</i>	40
<i>Unit</i>	TO

3. On the *General Data* tab page, configure the following settings:

Table 149

Field	Value
<i>Passive Means of Transport</i>	Deselect
<i>Number of Individual Resources</i>	Blank (0)
<i>Multiresource</i>	Deselect

4. Save your entries.

Resource: OF-US-TRACTOR

1. On the initial screen, create the following transportation unit resources:

Table 150

Field	Value
<i>Resource</i>	OF-US-TRACTOR
<i>Resource Type</i>	09 (Vehicle Resource)
<i>Resource Class</i>	1 (Truck)

2. In the table below *O Vehicle* , enter the following information:

Table 151

Field	Value
<i>Resource</i>	OF-US-TRACTOR
<i>Location</i>	Blank
<i>Means of Transport</i>	OF_TRA
<i>Time Zone</i>	PST
<i>Continuous Dimension</i>	Mass
<i>Factory Calendar</i>	US
<i>Capacity</i>	36
<i>Unit</i>	TO

- On the *General Data* tab page, configure the following settings:

Table 152

Field	Value
<i>Passive Means of Transport</i>	Deselect
<i>Number of Individual Resources</i>	Blank (0)
<i>Multiresource</i>	Select
<i>Unlimited No. of Indiv. Res</i>	Select

- Save your entries.

Resource: OF-US-TRAILER

- On the initial screen, create the following transportation unit resources:

Table 153

Field	Value
<i>Resource</i>	OF-US-TRAILER
<i>Resource Type</i>	09 (Vehicle Resource)
<i>Resource Class</i>	2 (Trailer)

- In the table below *0 Vehicle*, enter the following information:

Table 154

Field	Value
<i>Resource</i>	OF-US-TRAILER
<i>Location</i>	Blank
<i>Means of Transport</i>	OF_TR
<i>Time Zone</i>	PST
<i>Continuous Dimension</i>	Mass

Field	Value
<i>Factory Calendar</i>	JP
<i>Capacity</i>	36
<i>Unit</i>	TO

- On the *General Data* tab page, configure the following settings:

Table 155

Field	Value
<i>Passive Means of Transport</i>	Select
<i>Number of Individual Resources</i>	Blank (0)
<i>Multiresource</i>	Select
<i>Unlimited No. of Indiv. Res</i>	Select

- Save your entries.

9.2 Defining Container Resources

To provide the required container equipment to be loaded at the shipper's facilities in the event of an FCL movement, you must specify the transportation unit resources. These are available for operation in the empty container depots at the exporting station.

Procedure

On the *SAP Easy Access* screen for SAP TM, choose **► Master Data ► Resources ► Define Resource ►**.

Resources for Station OAF-STA-JPTYO

- On the *Transportation Resource Master* screen, create new resources.
- In the header area, go to the *Transportation Unit* tab page and create the following resources in turn:

Table 156

Field	Resource 1	Resource 2	Resource 3
<i>Resource</i>	CNTYO_20G0	CNTYO_42G0	CNTYO_22R1
Short Description	20 ft, Station Tokyo	40 ft, Station Tokyo	20 ft Reefer, Station Tokyo
Equipment Group	CN	CN	CN
Equipment Type	20G0	42G0	22R1
Location	OAF-STA-JPTYO	OAF-STA-JPTYO	OAF-STA-JPTYO
Factory Calendar	JP	JP	JP
Continuous Dim.	MASS	MASS	MASS

Field	Resource 1	Resource 2	Resource 3
Capacity	29,930 KG	39,930 KG	29,930 KG
Active Variant	0	0	0

Resources for Station OAF-STA-JPNGO

1. On the *Transportation Resource Master* screen, create new resources.
2. In the header area, go to the *Transportation Unit* tab page and create the following resources in turn:

Table 157

Field	Resource 1	Resource 2	Resource 3
<i>Resource</i>	CNNGO_22R1	CNNGO_20G0	CNNGO_42G0
Short Description	20 ft Reefer, Station Nagoya	20 ft, Station Nagoya	40 ft, Station Nagoya
Equipment Group	CN	CN	CN
Equipment Type	22R1	20G0	42G0
Location	OAF-STA-JPNGO	OAF-STA-JPNGO	OAF-STA-JPNGO
Factory Calendar	JP	JP	JP
Continuous Dim.	MASS	MASS	MASS
Capacity	29,930 KG	29,930 KG	39,930 KG
Active Variant	0	0	0

9.3 Defining Ocean Resources

Procedure

On the *SAP Easy Access* screen for SAP TM, choose ► *Master Data* ► *Resources* ► *Define Resource* ►.

Resource: OF-MS1

1. On the initial screen, create the following transportation resources:

Table 158

Field	Value
<i>Resource</i>	OF-MS1
<i>Resource Type</i>	09 (Vehicle Resource)
<i>Resource Category</i>	T (Transportation)

2. In the table below *O Vehicle*, enter the following information:

Table 159

Field	Value
Resource	OF-MS1
Location	Blank
Means of Transport	OF_VESSEL
Time Zone	JAPAN
Continuous Dimension	AAAADL (no dimensions)
Factory Calendar	JP
Capacity	14000
Unit	TEU
Resource / Description	OF-MS1 / OF-JP-US

- On the *General Data* tab page, configure the following settings:

Table 160

Field	Value
Passive Means of Transport	Deselect
Number of Individual Resources	15
Multiresource	Select

- Save your entries.

9.4 Defining Inland Trucking Schedule Types

Procedure

- In Customizing for *Transportation Management*, choose **► Master Data ► Transportation Network ► Schedule ► Define Schedule Type ►**.
- Copy the standard “2200 Road Gateway Schedule” schedule type to create schedule type “OF11 – OF: Inland Trucking Schedule”.
- Enter the following data:

Table 161

Field	Value
Schedule Type	OF11
Description	OF: Inland Trucking Schedule
Default Type	Deselect
Transp. Mode	01 - ROAD
Header Number Range	07

Field	Value
<i>Voyage Number Range</i>	01
<i>Offset Time Type</i>	A Absolute
<i>Gateway</i>	Select
<i>Direct</i>	Select
<i>Document Type</i>	OF10

4. Save your entries.
5. Copy the standard "1000 — Ocean Carrier Schedule" schedule type to create schedule type "OF12 OF: Ocean Carrier Schedule" .
6. Enter the following data:

Table 162

Field	Value	Comment
<i>Schedule Type</i>	OF12	None
<i>Description</i>	OF: Ocean Carrier Schedule	None
<i>Default Type</i>	Select	None
<i>Transp. Mode</i>	03 - SEA	None
<i>Header Number Range</i>	07	Changed from standard entry
<i>Voyage Number Range</i>	01	None
<i>Offset Time Type</i>	A Absolute	Changed from standard entry
<i>Gateway</i>	Deselect	None
<i>Direct</i>	Deselect	None
<i>Document Type</i>	OF04	Changed from standard entry

7. Save your entries.
8. Copy the standard "2100 Sailing Schedule with Reference" schedule type to create schedule type "OF13 OF: Sailing Schedule with Reference" .
9. Enter the following data:

Table 163

Field	Value	Comment
<i>Schedule Type</i>	OF13	None
<i>Description</i>	OF: Sailing Schedule with Reference	None
<i>Default Type</i>	Deselect	None
<i>Transp. Mode</i>	03 - SEA	None
<i>Header Number Range</i>	07	Changed from standard entry

Field	Value	Comment
Voyage Number Range	01	None
Offset Time Type	A Absolute	Changed from standard entry
Gateway	Select	None
Reference	Select	None
Direct	Deselect	None
Document Type	OF04	Changed from standard entry

10. Save your entries.

9.5 Defining Ocean Carrier Schedules

Procedure

1. In SAP NetWeaver Business Client for SAP TM, choose ► *Master Data* ► *Transportation Network* ► *Schedules* ► *Create Schedule* ►.
2. Create new schedule OF-SCHED-CR-02 using type OF12 – OF: Ocean Carrier Schedule.
3. Enter the following data:

Table 164

Field	Value
Schedule	OF-SCHED-CR-02
Description	JPYOK – USLGB SOCIAL
Valid From	2011-01-01
Valid To	2099-12-31
Schedule Type	OF12
Transportation Mode	03 – Sea
Transportation Group	Blank
Carrier	OAF-CR-02
Standard Carrier Alpha Code	Blank
Loop	Blank

4. Create a standard port sequence by adding the following locations:

Table 165

Field	Value	Value
Sequence	10	20
Location	OF-JPYOK	OF-USLGB

Field	Value	Value
<i>Cargo Cut Off (Offset in Days)</i>	1	Blank
<i>Cargo Cut-Off Time</i>	12:00:00	Blank
<i>Transit Duration in Days</i>	12	Blank
<i>Days to Availability</i>	Blank	1
<i>Availability Time</i>	Blank	20:00:00

5. Create voyages by adding the following departure rule (in the *Voyages* screen area, choose *Departure Rules*):

Table 166

Field	Value
<i>First Day of Validity</i>	<first day of the current month>
<i>Last Day of Validity</i>	<last day of the next year>
<i>Day</i>	Friday
<i>Vessel</i>	Blank (see below)
<i>Departure Time</i>	14:00:00
<i>Time Zone</i>	JAPAN

6. Select the departure rule and choose *Generate Voyages*. The voyages are automatically added to the *Voyages* tab page.
7. After creating the voyages, you need to enter the vessel names manually for each voyage. Select the *Voyages* tab page, and then enter the following vessel names (one vessel name to one voyage):
- Astoria
 - Dagmar
 - La Jolla
 - SOCAL Princess
- Use each vessel in turn so, after four voyages, you start with vessel Astoria again.
8. Save your entries.

9.6 Defining Sailing Schedules

Procedure

1. On the SAP NetWeaver Business Client screen for SAP TM, choose **► Master Data ► Transportation Network ► Schedules ► Create Schedule** .
2. Create schedule OF-SAILSCHED-CR-02 using type OF13 (OF: Sailing Schedule with Reference).
3. Enter the following data:

Table 167

Field	Value
<i>Schedule</i>	OF-SAILSCHED-CR-02
<i>Description</i>	CFS_JPYOK - CFS_USLAX SOCIAL
<i>Valid From</i>	<today>
<i>Valid To</i>	<one year in the future>
<i>Schedule Type</i>	OF13
<i>Transportation Mode</i>	03 - Sea
<i>Carrier</i>	OAF-CR-02

4. Create a pair of standard container freight stations (CFS) by adding the following locations:

Table 168

Field	Value	Value
<i>Source CFS</i>	OF-CFS-JPYOK	Not applicable
<i>Destination CFS</i>	Not applicable	OF-CFS-USLAX
<i>Transit Duration (Days)</i>	1	Not applicable
<i>Transit Duration (Hours)</i>	5	Not applicable
<i>Cargo Cut-Off (Offset in Days)</i>	1	Not applicable
<i>Cargo Cut-Off Time</i>	10:00:00	Not applicable
<i>Days to Availability</i>	Not applicable	1
<i>Availability Time</i>	Not applicable	22:00:00

5. Enter the corresponding ports using the input help (). Also see the recommendation below.

Table 169

<i>Port of Loading Sequence</i>	OF-JPYOK
<i>Port of Discharge Sequence</i>	OF-USLGB

6. Create departure rules by copying them from the ocean carrier schedule. To do so, choose ► *Copy Data from Ocean Carrier Schedule* ► *Departure Rules* ►.
7. Check the data copied from the ocean carrier schedule by choosing *Departure Rules* on the *Voyages* tab page.
8. Create voyages by copying them from the ocean carrier schedules. To do so, choose ► *Copy Data Ocean from Carrier Schedule* ► *Voyages* ►. Check the data copied from the ocean carrier schedule by choosing *Voyages* on the *Voyages* tab page.
9. Save your entries.

➔ Recommendation

If the fields for the port of loading and the port of discharge are not displayed, check the Customizing settings for default schedule type 2100 and make sure that the *Direct* checkbox is not set. To do so, proceed as follows:

1. In Customizing for *Transportation Management* , choose **Master Data > Transportation Network > Schedule > Define Schedule Types** .
2. Choose schedule type 2100 and display details

9.7 Defining Truck Schedules

For the daily feeder trucks from the station to the CFS and from the CFS to the station, a schedule is required to plan the pre-carriage and on-carriage stages. The schedule uses schedule type OF03 (*Inland Trucking Schedule*) in the SAP TM system.

Procedure

Schedule for OAF-STA-JPNGO to OF-CFS-JPYOK

1. On the SAP NetWeaver Business Client, choose **Master Data > Transportation Network > Schedule > Create Schedule** .
2. Choose the standard schedule type OF11 and then choose *Continue* .
3. Create new schedule OAF-TRUCKSCHED-01 :

Table 170

Field	Value
<i>Schedule</i>	OAF-TRUCKSCHED-01
<i>Description</i>	Schedule Trucking STA-JPNGO to CFS-JPYOK
<i>Valid From</i>	<today>
<i>Valid To</i>	<one year in the future>
<i>Carrier</i>	OAF-CR-04
<i>Carrier Schedule</i>	Blank

4. Create a standard CFS by adding the following locations

Table 171

Field	Value	Value
<i>Source CFS</i>	OAF-STA-JPNGO	Not applicable
<i>Destination CFS</i>	Not applicable	OF-CFS-JPYOK
<i>Transit Duration (Hours)</i>	5	Not applicable
<i>Cargo Cut-Off Time</i>	07:00:00	Not applicable
<i>Document Cut-Off Time</i>	08:00:00	Not applicable
<i>Availability Time</i>	Not applicable	14:00:00
<i>Time Zone</i>	Japan	Japan

5. Create voyages by adding the following departure rule in the *Departures* area. On the *Departure Rules* tab page, choose *Create* .
6. Add the following entry:

Table 172

Field	Value
<i>First Day of Validity</i>	<first day of the actual month>
<i>Last Day of Validity</i>	<last day of this year>
<i>Departure Frequency</i>	Daily (select the checkbox for each weekday)
<i>Departure Time</i>	09:00:00
<i>Time Zone</i>	JAPAN

7. Select the new line and choose *Generate Departures* . On the *Departures* tab page, check that the departures have been automatically added.
8. Save your entries.

Schedule for OAF-STA-JPTYO to OF-CFS-JPYOK

1. On the SAP NetWeaver Business Client, choose **Master Data** > *Transportation Network* > *Schedule* > *Create Schedule* .
2. Choose the standard schedule type OF11 and then choose *Continue* .
3. Create schedule OAF-TRUCKSCHED-02 :

Table 173

Field	Value
<i>Schedule</i>	OAF-TRUCKSCHED-02
<i>Description</i>	Schedule Trucking STA-JPTYO to CFS-JPYOK
<i>Valid From</i>	<today>
<i>Valid To</i>	<one year in the future>
<i>Carrier</i>	OAF-CR-03
<i>Carrier Schedule</i>	Blank

4. Create a standard CFS by adding the following locations

Table 174

Field	Value	Value
<i>Source CFS</i>	OAF-STA-JPTYO	
<i>Destination CFS</i>		OF-CFS-JPYOK
<i>Transit Duration (Hours)</i>	2	
<i>Cargo Cut-Off Time</i>	07:00:00	
<i>Document Cut-Off Time</i>	08:00:00	
<i>Availability time</i>		11:00:00

Field	Value	Value
<i>Time Zone</i>	Japan	Japan

5. Create voyages by adding the following departure rule in the *Departures* area. On the *Departure Rules* tab page, choose *Create* .
6. Add the following entry:

Table 175

Field	Value
<i>First Day of Validity</i>	<first day of the actual month>
<i>Last Day of Validity</i>	<last day of this year>
<i>Departure Frequency</i>	Daily (select the checkboxes for each weekday)
<i>Departure Time</i>	09:00:00
<i>Time Zone</i>	JAPAN

7. Select the new line and choose *Generate Departures* . On the *Departures* tab page, check that the departures have been automatically added.
8. Save your entries.

Schedule for OF-CFS-USLAX to OAF-STA-USSAN

1. On the *SAP Easy Access* screen for SAP TM, choose **Master Data > Transportation Network > Schedule > Create Schedule** .
2. Choose the standard schedule type **OF11** and then choose *Continue* .
3. Create schedule **OAF-TRUCKSCHE-03** :

Table 176

Field	Value
<i>Schedule</i>	OAF-TRUCKSCHE-03
<i>Description</i>	Schedule Trucking CFS-USLAX to STA-USSAN
<i>Valid From</i>	<today>
<i>Valid To</i>	<one year in the future>
<i>Carrier</i>	OAF-CR-05
<i>Carrier Schedule</i>	Blank

4. Create a standard CFS by adding the following locations

Table 177

Field	Value	Value
<i>Source CFS</i>	OF-CFS-USLAX	
<i>Destination CFS</i>		OAF-STA-USSAN
<i>Transit Duration (Hours)</i>	4	
<i>Cargo Cut-Off Time</i>	08:00:00	

Field	Value	Value
Document Cut-Off Time	08:00:00	
Availability time		14:00:00
Time Zone	PST	PST

5. Create voyages by adding the following departure rule in the *Departures* area. On the *Departure Rules* tab page, choose *Create* .
6. Add the following entry:

Table 178

Field	Value
First Day of Validity	<first day of the actual month>
Last Day of Validity	<last day of this year>
Departure Frequency	Daily (select the checkboxes for each weekday)
Departure Time	10:00:00
Time Zone	PST

7. Select the new line and choose *Generate Departures* . On the *Departures* tab page, check that the departures have been automatically added.
8. Save your entries.

Schedule for OF-CFS-USLAX to OAF-STA-USPHX

1. On the SAP NetWeaver Business Client, choose **Master Data > Transportation Network > Schedule > Create Schedule** .
2. Choose the standard schedule type OF11 and then choose *Continue* .
3. Create new schedule OF-TRUCKSCHED-04 :

Table 179

Field	Value
Schedule	OF-TRUCKSCHED-04
Description	Schedule Trucking CFS-USLAX to STA-USPHX
Valid From	<today>
Valid To	<one year in the future>
Schedule Type	OF11
Transportation mode	01 - Road
Carrier	OAF-CR-06
Carrier Schedule	Blank

4. Create a standard CFS by adding the following locations

Table 180

Field	Value	Value
Source CFS	OF-CFS-USLAX	
Destination CFS		OAF-STA-USPHX
Transit Duration (Hours)	6	
Cargo Cut-Off Time	06:00:00	
Document Cut-Off Time	06:00:00	
Availability time		15:00:00
Time Zone	PST	PST

5. Create voyages by adding the following departure rule in the *Departures* area. On the *Departure Rules* tab page, choose *Create* .
6. Add the following entry:

Table 181

Field	Value
First Day of Validity	<first day of the actual month>
Last Day of Validity	<last day of this year>
Departure Frequency	Daily (select the checkboxes for each weekday)
Departure Time	08:00:00
Time Zone	PST

7. Select the new line and choose *Generate Departures* . On the *Departures* tab page, check that the voyages are automatically added.
8. Save your entries.

9.8 Defining Default Routes

i Note

If you are not able to enter the route name specified below, change the default route type in Customizing. In Customizing for SAP TM, choose **► SAP Transportation Management ► Master Data ► Transportation Network ► Define Default Route Types ►**.

- Change the number range used for type 3000 to **07** .
- Enter transportation mode **03** .

Procedure

Route 1 – Nagoya to Phoenix (OAF-JP-SHPNGO to OAF-US-SHPPHX)

1. In SAP NetWeaver Business Client (NWBC), choose ► *Master Data* ► *Transportation Network* ► *Default Route* ► *Create Default Route* ►.
2. Select default route type 3000 and choose *Continue* .
3. On the *General Data* tab page, create an entry with the following data:

Table 182

Field	Value
<i>Default Route</i>	OF-ROUTE-01
<i>Description</i>	OF ROUTE JPNGO-USPHX
<i>Valid From</i>	2011-01-01
<i>Valid To</i>	2099-12-31
<i>Transportation Mode</i>	03
<i>Dangerous Goods</i>	Deselect
<i>Shipping Type</i>	2

4. In the *Transportation Stop* area, enter the following stages:

Table 183

Sequence	10	20	30	40	50	60
<i>Location</i>	OAF-JP-SHPNGO	OAF-STA-JPNGO	OF-CFS-JPYOK	OF-CFS-USLAX	OAF-STA-USPHX	OAF-US-SHPPHX
<i>Transportation Mode</i>	01 Road	01 Road	03 Sea	01 Road	01 Road	Not relevant
<i>Stage Type</i>	01 - Pick-Up	02 - Pre-Carriage	03 - Main Carriage	4 - On-Carriage	05 - Delivery	Not relevant
<i>Schedule</i>	Not relevant	OAF-TRUCKSCHED-01	OF-SAILSCHED-CR-02	OF-TRUCKSCHED-04	Not relevant	Not relevant
<i>Carrier</i>	OAF-CR-04	OAF-CR-04	OAF-CR-02	OAF-CR-06	OAF-CR-06	Not relevant
<i>Planning and Execution Org.</i>	OAF-FWH-01	OF-FWH-03	OF-FWH-03	OF-FWH-20	OAF-FWH-21	Not relevant
<i>To Be Checked</i>	Deselect	Deselect	Deselect	Deselect	Deselect	Not relevant

5. Save your entries.

Route 2 – Nagoya to San Diego (OAF-JP-SHPNGO to OAF-US-SHPSAN)

1. In SAP NetWeaver Business Client (NWBC), choose ► *Master Data* ► *Transportation Network* ► *Default Route* ► *Create Default Route* ►.
2. Select default route type 3000 and choose *Continue* .

- On the *General Data* tab page, create an entry with the following data:

Table 184

Field	Value
Default Route	OF-ROUTE-02
Description	OF ROUTE JPNGO-USSAN
Valid From	2011-01-01
Valid To	2099-12-31
Transportation Mode	03
Dangerous Goods	Deselect
Shipping Type	02

- In the *Transportation Stop* area, enter the following stages:

Table 185

Sequence	10	20	30	40	50	60
Location	OAF-JP-SHPNGO	OAF-STA-JPNGO	OF-CFS-JPYOK	OF-CFS-USLAX	OAF-STA-USSAN	OAF-US-SHPSAN
Transportation Mode	01 Road	01 Road	03 Sea	01 Road	01 Road	Not relevant
Stage Type	01 - Pick-Up	02 - Pre-Carriage	03 - Main Carriage	4 - On-Carriage	05 - Delivery	Not relevant
Schedule	Not relevant	OAF-TRUCKSCHED-01	OF-SAILSCHED-CR-02	OAF-TRUCKSCHED-03	Not relevant	Not relevant
Carrier	OAF-CR-04	OAF-CR-03	OAF-CR-02	OAF-CR-05	OAF-CR-05	Not relevant
Planning and Execution Org.	OAF-FWH-01	OF-FWH-03	OF-FWH-03	OF-FWH-20	OAF-FWH-22	Not relevant
To Be Checked	Deselect	Deselect	Deselect	Deselect	Deselect	Deselect

- Save your entries.

Route 3 – Tokyo to Phoenix (OAF-JP-SHPTYO to OAF-US-SHPPHX)

- In SAP NetWeaver Business Client (NWBC), choose **Master Data > Transportation Network > Default Route > Create Default Route**.
- Select default route type 3000 and choose *Continue*.
- On the *General Data* tab page, create an entry with the following data:

Table 186

Field	Value
Default Route	OF-ROUTE-03
Description	OF ROUTE JPTYO-USPHX

Field	Value
Valid From	2011-01-01
Valid To	2099-12-31
Transportation Mode	03
Dangerous Goods	Deselect
Shipping Type	2

4. In the *Transportation Stop* area, enter the following stages:

Table 187

Sequence	10	20	30	40	50	60
Location	OAF-JP-SHPTYO	OAF-STA-JPTYO	OF-CFS-JPYOK	OF-CFS-USLAX	OAF-STA-USPHX	OAF-US-SHPPHX
Transportation Mode	01 Road	01 Road	03 Sea	01 Road	01 Road	Not relevant
Stage Type	01 - Pick-Up	02 - Pre-Carriage	03 - Main Carriage	4 - On-Carriage	05 - Delivery	Not relevant
Schedule	Not relevant	OF-TRUCKSCHE-02	OF-SAILSCHED-CR-02	OF-TRUCKSCHE-04	Not relevant	Not relevant
Carrier	OAF-CR-03	OAF-CR-03	OAF-CR-02	OAF-CR-06	OAF-CR-06	Not relevant
Planning and Execution Org.	OAF-FWH-05	OF-FWH-03	OF-FWH-03	OF-FWH-20	OAF-FWH-21	Not relevant
To Be Checked	Deselect	Deselect	Deselect	Deselect	Deselect	Deselect

5. Save your entries.

Route 4 – Tokyo to San Diego (OAF-JP-SHPTYO to OAF-US-SHPSAN)

- In SAP NetWeaver Business Client (NWBC), choose ► *Master Data* ► *Transportation Network* ► *Default Route* ► *Create Default Route* ►.
- Select default route type 3000 and choose *Continue*.
- On the *General Data* tab page, create an entry with the following data:

Table 188

Field	Value
Default Route	OF-ROUTE-04
Description	OF ROUTE JPTYO-USSAN
Valid From	2011-01-01
Valid To	2099-12-31
Transportation Mode	03

Field	Value
<i>Dangerous Goods</i>	Deselect
<i>Shipping Type</i>	2

4. In the *Transportation Stop* area, enter the following stages:

Table 189

Sequence	10	20	30	40	50	60
<i>Location</i>	OAF-JP-SHPTYO	OAF-STA-JPTYO	OF-CFS-JPYOK	OF-CFS-USLAX	OAF-FWH-22	OAF-US-SHPSAN
<i>Transportation Mode</i>	01 Road	01 Road	03 Sea	01 Road	01 Road	Not relevant
<i>Stage Type</i>	01 - Pick-Up	02 - Pre-Carriage	03 - Main Carriage	4 - On-Carriage	05 - Delivery	Not relevant
<i>Schedule</i>	Not relevant	OF-TRUCKSCHED-02	OF-SAILSCHED-CR-02	OAF-TRUCKSCHED-03	Not relevant	Not relevant
<i>Carrier</i>	OAF-CR-03	OAF-CR-04	OAF-CR-02	OAF-CR-05	OAF-CR-05	Not relevant
<i>Planning and Execution Org.</i>	OAF-FWH-05	OF-FWH-03	OF-FWH-03	OF-FWH-20	OAF-FWH-22	Not relevant
<i>To Be Checked</i>	Deselect	Deselect	Deselect	Deselect	Deselect	Deselect

5. Save your entries.

Route 5 – Zone Japan All to USA ALL (OF-JP-SHPALL to OF-US-SHPALL)

- In SAP NetWeaver Business Client (NWBC), choose **Master Data > Transportation Network > Default Route > Create Default Route**.
- Select default route type 3000 and choose *Continue*.
- On the *General Data* tab page, create an entry with the following data:

Table 190

Field	Value
<i>Default Route</i>	OF-ROUTE-05
<i>Description</i>	OF ROUTE JP-US
<i>Valid From</i>	2011-01-01
<i>Valid To</i>	2099-12-31
<i>Transportation Mode</i>	03
<i>Dangerous Goods</i>	Deselect
<i>Shipping Type</i>	3

4. In the *Transportation Stop* area, enter the following stages:

Table 191

Sequence	10	20	30	40
Location	OF-JP-SHPALL	OF-JPYOK	OF-USLGB	OF-US-SHPALL
Transportation Mode	01 Road	03 Sea	01 Road	Not relevant
Stage Type	01 - Pick-Up	03 - Main Carriage	05 - Delivery	Not relevant
Schedule	Not relevant	OF-SCHED-CR-02	Not relevant	Not relevant
Carrier	OAF-CR-03	OAF-CR-02	OAF-CR-06	Not relevant
Planning and Execution Org.	OAF-FWH-05	OAF-FWH-03	OAF-FWH-21	Not relevant
To Be Checked	Deselect	Deselect	Deselect	Deselect

5. Save your entries.

9.9 Defining House Bill of Lading Stock

House bill of lading stocks are used to control the capacities ordered from a customer for a certain sales organization.

Procedure

1. In SAP NetWeaver Business Client, choose ► *Master Data* ► *General* ► *Overview* ► *Waybill Stock* ►
2. Select *All House Waybill Stocks* and choose *New* in the table below.
3. Enter number stock type **HBL** and choose *Continue*.
4. On the *General Data* tab page enter the following data:

Table 192

Field	Value
Stock ID Number	OF
Stock Type	HBL
Number Range From	6000000000
Number Range To	6999999999
Description	HBL Stock for Ocean Freight
Valid From	<Yesterday>
Valid To	<Next Year> -12-31

5. Add the following organizations:

- **OAF-FWH-01**

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-
- **OAF-FWH-05**
 - **OF-FWH-03**
6. Save your entries.

10 Charge Management: Basic Settings

To configure charge management, you need to define basic setting parameters. The settings are described in the *Basic Settings for SAP TM* document:

- Define category codes
- Define subcategory codes
- Define charge type codes

10.1 Charge Management: Forwarding Order

To configure charge management, you need to complete the following steps:

- [Defining scales \[page 104\]](#)
- [Defining rate tables \[page 108\]](#)
- [Defining calculation sheets \[page 128\]](#)
- [Freight order charge management \[page 152\]](#)
- [Defining freight agreement types \[page 201\]](#)
- [Defining forwarding agreement types \[page 142\]](#)
- [Defining settlement profiles \[page 148\]](#)
- [Configuring organizational settings for charge elements \[page 149\]](#)

Prerequisites

Complete the settings described in the document *Basic Settings for SAP TM*. Charge type codes and subcategory codes for Transportation Charge Management (TCM) have to be maintained before TCM can be set up.

Features

The charge elements used in this scenario are:

- Through rate for pickup and pre-carriage stages:
 - Land pre-carriage
 - Fuel surcharge
 - Toll fee fixed
- Main carriage stage
 - Ocean freight
 - B/L fix fee (Bill of Lading Fix Fee)
 - CAF (Currency Adjustment Factor)

- BAF (Bunker Adjustment Factor)
- Piracy Risk Surcharge
- EBAF (Emergency Bunker Adjustment Factor)
- IPSD (International Port Security)
- THCD (Terminal Handling Charge – Destination)
- AMS fee (Automated Manifest Submission)
- Through rate for on-carriage and delivery stages
 - Land on-carriage
 - Fuel surcharge

10.1.1 Defining Dimensional Weight Profiles

Depending upon factors, such as mode of transport, different chargeable weight calculations are implemented. Land transport uses a factor of 1:3, and ocean transport uses a factor of 1:1.

Procedure

1. In Customizing for *Transportation Management*, choose **Basic Functions > Charge Calculation > Data Source Binding for Charge Calculation > Define Dimensional Weight Profile**.
2. Choose *New Entries*.
3. Enter the following data for land transport:

Table 193

Field	Value
<i>Dimensional Weight Profile</i>	ZOAF_LAND3
<i>Profile Description</i>	Chargeable Weight Land Freight 333 kg = 1 cbm
<i>Dimal Weight Factor</i>	3
<i>Volume UoM</i>	CCM
<i>Weight UoM</i>	KG
<i>Calc. Base</i>	GROSS_VOLUME
<i>Rounding Profile</i>	0000

4. Save your entries.
5. Choose *New Entries*.
6. Enter the following data for ocean transport:

Table 194

Field	Value
<i>Dimensional Weight Profile</i>	ZOF_SEA
<i>Profile Description</i>	Chargeable Weight Sea Freight 1000 kg = 1 cbm
<i>Dimal Weight Factor</i>	1
<i>Volume UoM</i>	CCM
<i>Weight UoM</i>	KG
<i>Calc. Base</i>	GROSS_VOLUME
<i>Rounding Profile</i>	0000

7. Save your entries.

10.1.2 Defining Scales

Scales are parameters that you can use to specify freight rates when they are assigned to freight conditions.

Procedure


1. In SAP NetWeaver Business Client, choose ► *Master Data* ► *Charge Management and Service Product Catalogs* ► *Scales* ► *Create Scale* .
2. Choose *Continue* without selecting a template.
3. Create a scale for the destination location. Enter the following data:

Table 195

Field	Description	Value
<i>Scale</i>	Scale ID	OAF-SCALE-DEST-LOC
<i>Description</i>	Description of the scale	OAF Destination Location
<i>Scale Base</i>	Defines the basis of scale, for example, location, distance, duration, and so on.	LOC - Location

4. In line one of the *Item* tab page, enter the following information:

Table 196

Field	Description	Value
<i>Location</i>	Specifies the locations for which the rates are determined	Line 1: OF-JPYOK Line 2: OF-USLGB Line 3: OF-CFS-JPYOK Line 4: OF-CFS-USLAX

Field	Description	Value
		Line 5: OAF-STA-JPTYO Line 6: OAF-STA-JPNGO Line 7: OAF-STA-USSAN Line 8: OAF-STA-USPHX Line 9: OAF-STA-JPHIJ Line 10: CUOAF-CO-01@ERP001 Line 11: CUOAF-CO-02@ERP001 Line 12: CUOAF-CO-03@ERP001 Line 13: CUOAF-CO-04@ERP001 Line 14: CUOAF-CU-01@ERP001 Line 15: CUOAF-CU-02@ERP001 Line 16: CUOAF-CU-03@ERP001 Line 17: CUOAF-CU-04@ERP001 Line 18: OAF-STA-USSFO
<i>Calculation Type</i>	Defines how the scale values are read	For all lines: <i>Absolute</i> (values are read directly)

- Save your entries.
- Create a scale for the source location. Enter the following data:

Table 197

Field	Description	Value
<i>Scale</i>	Scale ID	OAF-SCALE-SOURCE-LOC
<i>Description</i>	Description of the scale	OAF - Source Truck Locations
<i>Scale Base</i>	Defines the basis of scale, for example, location, distance, duration, and so on.	LOC - Location

- In line one of the *Item* tab page, enter the following information:

Table 198

Field	Description	Value
<i>Location</i>	Specifies the locations for which the rates are determined	Line 1: OF-JPYOK Line 2: OF-USLGB Line 3: OF-CFS-JPYOK Line 4: OF-CFS-USLAX Line 5: OAF-STA-JPTYO Line 6: OAF-STA-JPNGO Line 7: OAF-STA-USSAN Line 8: OAF-STA-USPHX

Field	Description	Value
		Line 9: OAF-STA-JPHIJ Line 10: CUOAF-CO-01@ERP001 Line 11: CUOAF-CO-02@ERP001 Line 12: CUOAF-CO-03@ERP001 Line 13: CUOAF-CO-04@ERP001 Line 14: CUOAF-CU-01@ERP001 Line 15: CUOAF-CU-02@ERP001 Line 16: CUOAF-CU-03@ERP001 Line 17: CUOAF-CU-04@ERP001 Line 18: OAF-STA-USSFO
<i>Calculation Type</i>	Defines how the scale values are read	For all lines: Absolute (values are read directly)

8. Save your entries.
9. Create a weight scale for the chargeable weights. Enter the following data:

Table 199

Field	Description	Value
<i>Scale</i>	Scale ID	OAF-WEIGHT
<i>Description</i>	Description of the scale	Chargeable Weight
<i>Scale Base</i>	Defines the basis of scale, for example, location, distance, duration, and so on.	WEIGHT
<i>Scale Type</i>		Base Scale (>=)
<i>Scale Unit of Measure</i>		TO

10. In line one of the *Item* tab page, enter the following information:

Table 200

Field	Description	Value
<i>Weight</i>	Specifies the weight values for which the rates are determined	Line 1: 0.1 Line 2: 0.2 Line 3: 0.3 Line 4: 0.4
<i>Calculation Type</i>	Defines how the scale values are read	For all lines: Relative

11. Save your entries.
12. Create an equipment scale for equipment types. Enter the following data:

Table 201

Field	Description	Value
<i>Scale</i>	Scale ID	OF-SCALE-EQU
<i>Description</i>	Description of the scale	Equipment Scale

Field	Description	Value
<i>Scale Base</i>	Defines the basis of scale, for example, location, distance, duration, and so on.	EQPTYP

13. In line one of the *Item* tab page, enter the following information:

Table 202

Field	Description	Value
<i>Equipment Type</i>	Specifies the equipment types for which the rates are determined	Line 1: 20G0 Line 2: 22G0 Line 3: 22R1 Line 4: 42G0
<i>Calculation Type</i>	Defines how the scale values are read	For all lines: Absolute

14. Save your entries.
15. Create a distance scale for the distances using the following data:

Table 203

Field	Description	Value
<i>Scale</i>	Scale ID	OAF-SCALE-ACT-DIST
<i>Description</i>	Description of the scale	Scale for Actual Distance
<i>Scale Base</i>	Defines the basis of scale, for example, location, distance, duration, and so on.	DIST
<i>Scale Type</i>		To Scale (<=)
<i>Scale Unit of Measure</i>		KM
<i>Rounding Profile</i>	Rounding profile number	0005

16. In line one of the *Item* tab page, enter the following information:

Table 204

Field	Description	Value
<i>Distance</i>	Specifies the distance values for which the rates are determined	Line 1: 50 Line 2: 100 Line 3: 250 Line 4: 500 Line 5: 1000
<i>Calculation Type</i>	Defines how the scale values are read	Relative for all lines

17. Save your entries.

10.1.3 Rate Tables

Rates are maintained in rate tables, which use the scales specified in [Defining Scales \[page 104\]](#) .

In this scenario, the following scales are assigned to the rate tables:

Table 205

Rate Table	Used Scales	Charge Type Assigned	Procedure
OAF-RATE-569	<ul style="list-style-type: none"> OAF-SCALE-SOURCE-LOC OAF-SCALE-DEST-LOC OAF-WEIGHT 	PRE – Land Pre-Carriage	Defining Rate Table: Pre Carriage [page 109]
OF-RATE-574	<ul style="list-style-type: none"> OAF-SCALE-SOURCE-LOC OAF-SCALE-DEST-LOC OAF-WEIGHT 	BSF – Base Sea Freight	Defining Rate Table: Main Carriage [page 112]
OAF-RATE-574-1	<ul style="list-style-type: none"> OAF-SCALE-DEST-LOC OAF-WEIGHT 	THCD – Terminal Handling Charge – Destination	Defining Rates for Terminal Handling Charge for Destination [page 115]
OF-RATE-575	<ul style="list-style-type: none"> OAF-SCALE-SOURCE-LOC OAF-SCALE-DEST-LOC OAF-WEIGHT 	BAF – Bunker Adjustment Factor	Defining Rates for Bunker Adjustment Factor [page 117]
OF-RATE-576	<ul style="list-style-type: none"> OAF-SCALE-SOURCE-LOC OAF-SCALE-DEST-LOC OAF-WEIGHT 	PRS – Piracy Risk Surcharge	Defining Rates for Piracy Risk Surcharge [page 120]
OF-RATE-577	<ul style="list-style-type: none"> OAF-SCALE-SOURCE-LOC OAF-SCALE-DEST-LOC OAF-WEIGHT 	EBAF – Emergency Bunker Adj. Factor	Defining Rates for Emergency Bunker Adjustment Factor [page 122]
OAF-RATE-584	<ul style="list-style-type: none"> OAF-SCALE-SOURCE-LOC OAF-SCALE-DEST-LOC OAF-WEIGHT 	ON – On-Carriage	Defining Rate Table: On Carriage [page 125]

10.1.3.1 Defining Rate Table: Pre-Carriage

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ► *Master Data* ► *Charge Management and Service Product Catalogs* ► *Rate Tables* ► *Create Rate Table Definition* ►.
2. On the *Create Rate Table* screen, create the following entry:

Table 206

Field	Description	Value
General Data		
<i>Rate Table</i>	Unique identifier for the rate table	OAF-RATE-569
<i>Description</i>	Description of the table	Rate Table for OAF 569
<i>Charge Usage</i>	This indicator identifies in which situation this rate table can be used. It can be used for Customer Billing integration and/or Supplier Invoice integration, or neither.	Customer
<i>Charge Type</i>	This is where the charge type is linked for integration with SAP ERP.	PRE
<i>Charge Category</i>	This defaults from the charge type definition above.	014
<i>Charge Subcategory</i>	This defaults from the charge type definition above.	100000 - Freight Charges
<i>Positive/Negative</i>	This defaults from the charge type definition above.	Positive or Negative Value
<i>Value</i>	This defaults from the charge type definition above.	Absolute value
Scales		
Note that you add a line for an additional dimension by choosing <i>Insert</i> .		
<i>Dimension</i>	On the rate table, this defines a row (x-axis) or a column (y-axis). You can have multiple scales (up to 9) in a rate table.	1 for the first scale (Region based)
<i>Reference Scale</i>	Assign the scales here for all carriers, which were defined above. This enables the entries in the rate table as in the sequence.	1. OAF-SCALE-SOURCE-LOC 2. OAF-SCALE-DEST-LOC 3. OAF-WEIGHT
<i>Calculation Base</i>	This determines how the values are stored and determined for this dimension. There are predefined	1. SOURCELOC 2. DESTLOC 3. CHRГ_WEIGHT

Field	Description	Value
	sources of information based on the object.	
<i>Scale Type</i>	Manually defined or defaults from the reference scale definition above.	1. Same Scale (=) 2. Same Scale (=) 3. Base Scale (>=)
<i>Scale Unit of Measure</i>	Manually defined or defaults from the reference scale definition above.	1. Blank 2. Blank 3. TO
<i>Minimum Value</i>	Minimum value	Deselect
<i>Maximum Value</i>	Maximum value	Deselect
<i>Rel. Calc. Method</i>	Relative Calculation method	Deselect
<i>Rounding Profile</i>	Rounding profile	Blank
<p>i Note After maintaining the lines in the <i>Create Rate Table</i> , highlight each line and choose <i>Add Scale</i> . Save your entries.</p>		
<p>Dates and Values Note that you can add a line for each new entry by choosing <i>Insert</i> .</p>		
<i>Valid From</i>	The valid-from date for the rate table	2011-01-01
<i>Valid To</i>	The valid-to date for the rate table	2099-12-31
<i>Aggreg. Rate Description</i>	Aggregated rate description	Pre-Carriage
<i>Currency</i>	A currency that is applicable for this rate table	JPY

- On the *Dates and Values* tab page, highlight the newly created line. A new table appears below, where you can enter the specific rates.
- On the *Rates* tab page, choose *Insert* and enter the following rates:

Table 207

Source Location	Destination Location	Value
CUOAF-CU-01@ERP001	OF-CFS-JPYOK	Depending on the relative interval, enter different values. >= 0.1 : 3237.00 >= 0.2 : 3400.00 >= 0.3 : 3677.00 >= 0.4 : 4451.00
CUOAF-CU-02@ERP001	OF-CFS-JPYOK	Depending on the relative interval, enter different values.

Source Location	Destination Location	Value
		>= 0.1: 3237.00 >= 0.2: 3400.00 >= 0.3: 3677.00 >= 0.4: 4451.00
CUOAF-CU-03@ERP001	OF-CFS-JPYOK	Depending on the relative interval, enter different values. >= 0.1: 3237.00 >= 0.2: 3400.00 >= 0.3: 3677.00 >= 0.4: 4451.00
CUOAF-CU-04@ERP001	OF-CFS-JPYOK	Depending on the relative interval, enter different values. >= 0.1: 3237.00 >= 0.2: 3400.00 >= 0.3: 3677.00 >= 0.4: 4451.00
CUOAF-CU-01@ERP001	OF-JPYOK	Depending on the relative interval, enter different values. >= 0.1: 3500.00 >= 0.2: 3700.00 >= 0.3: 3800.00 >= 0.4: 4700.00
CUOAF-CU-02@ERP001	OF-JPYOK	Depending on the relative interval, enter different values. >= 0.1: 3500.00 >= 0.2: 3700.00 >= 0.3: 3800.00 >= 0.4: 4700.00
CUOAF-CU-03@ERP001	OF-JPYOK	Depending on the relative interval, enter different values. >= 0.1: 3500.00 >= 0.2: 3700.00 >= 0.3: 3800.00 >= 0.4: 4700.00
CUOAF-CU-04@ERP001	OF-JPYOK	Depending on the relative interval, enter different values. >= 0.1: 3500.00 >= 0.2: 3700.00

Source Location	Destination Location	Value
		>= 0.3: 3800.00
		>= 0.4: 4700.00

5. On the *Calculation Rules* tab page, enter the following data:

Table 208

Field	Description	Value
<i>Calculation Base</i>	Provides the calculation base for this rate. In our rate table, the rates are specified as per/mile from source to destination locations. However, the calculation base must be determined to apply these rates. In this case, the calculation base is distance. There are various bases such as business partner role, weight, destination location, and so on.	CHRG_WEIGHT
<i>Application Level of Calc. Rule</i>	Defines on which level the rates are calculated	Rate table
<i>Price Unit</i>	Defines the multiplier for the calculation base. For example, the applicable rate could be <i>per mile</i> or <i>per 100 miles</i> .	1000
<i>Unit of Measure</i>	The unit of measure specifies the unit to which the multiplier is applied.	KG

6. Once you have entered your data, release the rate table by choosing ► *Set Status* ► *Released* ►.
7. Save your entries.

10.1.3.2 Defining Rate Table: Main Carriage

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ► *Master Data* ► *Charge Management and Service Product Catalogs* ► *Rate Tables* ► *Create Rate Table Definition* ►.
2. On the *Create Rate Table* screen, create a new entry. Enter the following data:

Table 209

Field	Description	Value
General Data		
<i>Rate Table</i>	Unique identifier for the rate table	OF-RATE-574
<i>Description</i>	Description of the table	Rate Table for OF 574

Field	Description	Value
<i>Charge Usage</i>	This indicator identifies in which situation this rate table can be used. It can be used for Customer Billing integration and/or Supplier Invoice integration, or neither.	Customer
<i>Charge Type</i>	This is where the charge type is linked for integration with SAP ERP.	BSF
<i>Charge Category</i>	This defaults from the charge type definition above.	003
<i>Charge Subcategory</i>	This defaults from the charge type definition above.	101021
<i>Positive/Negative</i>	This defaults from the charge type definition above.	Positive Value
<i>Value</i>	This defaults from the charge type definition above.	Absolute value
Scales		
<i>Dimension</i>	On the rate table, this defines a row (x-axis) or a column (y-axis). You can have multiple scales (up to 9) in a rate table.	1 for the first scale (Region based)
<i>Reference Scale</i>	Assign the scales here for all carriers, which were defined above. This enables the entries in the rate table according to the sequence.	1. OAF-SCALE-SOURCE-LOC 2. OAF-SCALE-DEST-LOC 3. OAF-WEIGHT
<i>Scale Type</i>	Manually defined or defaults from the reference scale definition above.	1. Same Scale (=) 2. Same Scale (=) 3. Base Scale (>=)
<i>Scale Unit of Measure</i>	Manually defined or defaults from the reference scale definition above.	1. Blank 2. Blank 3. TO
<i>Calculation Base</i>	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	1. SOURCELOC 2. DESTLOC 3. CHRG_WEIGHT
<i>Minimum Value</i>	Minimum value	Deselect
<i>Maximum Value</i>	Maximum value	Deselect
<i>Rel. Calc. Method</i>	Relative Calculation method	Deselect
<i>Rounding Profile</i>	Rounding profile	Blank

Field	Description	Value
<p>i Note After maintaining the lines in the <i>Create Rate Table</i> , highlight each line and choose <i>Add Scale</i> . Save your entries.</p>		
Dates and Values		
<i>Valid From</i>	The valid-from date for the rate table	2011-01-01
<i>Valid To</i>	The valid-to date for the rate table	2099-12-31
<i>Aggreg. Rate Description</i>	Aggregated rate description	Main Carriage
<i>Currency</i>	A currency that is applicable for this rate table	USD

- On the *Dates and Values* tab page, highlight the newly created line. A new table appears below, where you can enter the specific rates.
- Choose *Insert* , and maintain the following rates:

Table 210

Source Location (=)	Destination Location (=)	Value
OF-CFS-JPYOK	OF-CFS-USLAX	<p>>= 0.1: 90.00</p> <p>>= 0.2: 110.00</p> <p>>= 0.3: 130.00</p> <p>>= 0.4: 150.00</p>
OF-JPYOK	OF-USLGB	<p>>= 0.1: 90.00</p> <p>>= 0.2: 110.00</p> <p>>= 0.3: 130.00</p> <p>>= 0.4: 150.00</p>

- On the *Calculation Rules* tab page, enter the following data:

Table 211

Field	Description	Value
<i>Calculation Base</i>	Provides the calculation base for this rate. In our rate table, the rates are specified as per mile from source to destination locations. However, the calculation base must be determined to apply these rates. In this case, the calculation base is distance. There are various bases such as business partner role, weight, destination location, and so on.	CHRG_WEIGHT
<i>Application Level of Calc. Rule</i>	Defines on which level the rates are calculated	Rate table

Field	Description	Value
<i>Price Unit</i>	Defines the multiplier for the calculation base. For example, the applicable rate could be <i>per mile</i> or <i>per 100 miles</i> .	1
<i>Unit of Measure</i>	The unit of measure specifies the unit to which the multiplier is applied.	TO

- Once you have entered your data, release the rate table by choosing **► Set Status ► Released ►**.
- Save your entries.

10.1.3.2.1 Defining Rates for Terminal Handling Charge for Destination

Procedure

- In SAP NetWeaver Business Client (NWBC), choose **► Master Data ► Charge Management and Service Product Catalogs ► Rate Tables ► Create Rate Table Definition ►**.
- On the *Create Rate Table* screen, create a new entry. Enter the following data:

Table 212

Field	Description	Value
General Data		
<i>Rate Table</i>	Unique identifier for the rate table	OAF-RATE-574-1
<i>Description</i>	Description of the table	Rate Table for OAF 574-1
<i>Charge Usage</i>	This indicator identifies in which situation this rate table can be used. It can be used for Customer Billing integration and/or Supplier Invoice integration, or neither.	Customer
<i>Charge Type</i>	This is where the charge type is linked for integration with SAP ERP.	THCD
<i>Charge Category</i>	This defaults from the charge type definition above.	007
<i>Charge Subcategory</i>	This defaults from the charge type definition above.	104007
<i>Positive/Negative</i>	This defaults from the charge type definition above.	Positive Value
<i>Value</i>	This defaults from the charge type definition above.	Absolute value

Field	Description	Value
Scales		
<i>Dimension</i>	On the rate table, this defines a row (x-axis) or a column (y-axis). You can have multiple scales (up to 9) in a rate table.	1 for the first scale (Region based)
<i>Reference Scale</i>	Assign the scales here for all carriers, which were defined above. This enables the entries in the rate table as in the sequence.	1. OAF-SCALE-DEST-LOC 2. OAF-WEIGHT
<i>Calculation Base</i>	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	1. DESTLOC 2. CHRG_WEIGHT
<i>Scale Type</i>	Manually defined or defaults from the reference scale definition above.	1. Same Scale (=) 2. Base Scale (>=)
<i>Scale Unit of Measure</i>	Manually defined or defaults from the reference scale definition above.	1. Blank 2. TO
<i>Minimum Value</i>	Minimum value	Deselect
<i>Maximum Value</i>	Maximum value	Deselect
<i>Rel. Calc. Method</i>	Relative Calculation method	Deselect
<i>Rounding Profile</i>	Rounding profile	Blank
<p>i Note</p> <p>After maintaining the lines in the <i>Create Rate Table</i> , highlight each line and choose <i>Create Scale</i> . Save your entries.</p>		
Dates and Values		
<i>Valid From</i>	The valid-from date for the rate table	2011-01-01
<i>Valid To</i>	The valid-to date for the rate table	2099-12-31
<i>Aggreg. Rate Description</i>	Aggregated rate description	THCD Main Carriage
<i>Currency</i>	A currency that is applicable for this rate table	USD

- On the *Dates and Values* tab page, highlight the newly created line. A new table appears below, where you can enter the specific rates.
- Choose *Insert* , and maintain the following rates:

Table 213

Source Loc. Transp. Zone	Destination Loc.	Value
Not applicable	OF-CFS-USLAX	> 0.1: 17.00 > 0.2: 22.00 > 0.3: 25.00 > 0.4: 27.00

5. On the *Calculation Rules* tab page, enter the following data:

Table 214

Field	Description	Value
<i>Calculation Base</i>	Provides the calculation base for this rate. In our rate table, the rates are specified as per/mile from source to destination locations. However, the calculation base must be determined to apply these rates. In this case, the calculation base is distance. There are various bases such as business partner role, weight, destination location, and so on.	CHRG_WEIGHT
<i>Application Level of Calc. Rule</i>	Defines on which level the rates are calculated	Rate table
<i>Price Unit</i>	Defines the multiplier for the calculation base. For example, the applicable rate could be <i>per mile</i> or <i>per 100 miles</i> .	1000
<i>Unit of Measure</i>	The unit of measure specifies the unit to which the multiplier is applied.	KG

6. Once you have entered your data, release the rate table by choosing the *Release* pushbutton.
7. Save your entries.

10.1.3.2.2 Defining Rates for Bunker Adjustment Factor

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose **Master Data** > *Charge Management and Service Product Catalogs* > *Rate Tables* > *Create Rate Table Definition*.
2. On the *Create Rate Table* screen, create the following entry:

Table 215

Field	Description	Value
General Data		

Field	Description	Value
<i>Rate Table</i>	Unique identifier for the rate table	OF-RATE-575
<i>Description</i>	Description of the table	Rate Table for OF 575
<i>Charge Usage</i>	This indicator identifies in which situation this rate table can be used. It can be used for Customer Billing integration and/or Supplier Invoice integration, or neither.	Customer
<i>Charge Type</i>	This is where the charge type is linked for integration with SAP ERP.	BAF
<i>Charge Category</i>	This defaults from the charge type definition above.	012
<i>Charge Subcategory</i>	This defaults from the charge type definition above.	103001
<i>Positive/Negative</i>	This defaults from the charge type definition above.	Positive Value
<i>Value</i>	This defaults from the charge type definition above.	Absolute value
Scales		
<i>Dimension</i>	On the rate table, this defines a row (x-axis) or a column (y-axis). You can have multiple scales (up to 9) in a rate table.	1 for the first scale (Region based)
<i>Reference Scale</i>	Assign the scales here for all carriers, which were defined above. This enables the entries in the rate table according to the sequence.	1. OAF-SCALE-SOURCE-LOC 2. OAF-SCALE-DEST-LOC 3. OAF-WEIGHT
<i>Calculation Base</i>	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	1. SOURCELOC 2. DESTLOC 3. CHRG_WEIGHT
<i>Scale Type</i>	Manually defined or defaults from the reference scale definition above.	1. Same Scale (=) 2. Same Scale (=) 3. Base Scale (>=)
<i>Scale Unit of Measure</i>	Manually defined or defaults from the reference scale definition above.	1. Blank 2. Blank 3. TO
<i>Minimum Value</i>	Minimum value	Deselect
<i>Maximum Value</i>	Maximum value	Deselect

Field	Description	Value
<i>Rel. Calc. Method</i>	Relative Calculation method	Deselect
<i>Rounding Profile</i>	Rounding profile	Blank

i Note

After maintaining the lines in the *Create Rate Table* , highlight each line and choose *Add Scale* .
Save your entries.

Dates and Values		
<i>Valid From</i>	The valid-from date for the rate table	2011-01-01
<i>Valid To</i>	The valid-to date for the rate table	2099-12-31
<i>Aggreg. Rate Description</i>	Aggregated rate description	BAF
<i>Currency</i>	A currency that is applicable for this rate table	USD

- On the *Dates and Values* tab page, highlight the newly created line. A new table appears below, where you can enter the specific rates.
- Choose *Insert* , and maintain the following rates:

Table 216

Source Loc.	Destination Loc.	Value
OF-CFS-JPYOK	OF-CFS-USLAX	> 0.1: 30 > 0.2: 60 > 0.3: 90 > 0.4: 120

- On the *Calculation Rules* tab page, enter the following data:

Table 217

Field	Description	Value
<i>Calculation Base</i>	Provides the calculation base for this rate. In our rate table, the rates are specified as per mile from source to destination locations. However, the calculation base must be determined to apply these rates. In this case, the calculation base is distance. There are various bases such as business partner role, weight, destination location, and so on.	CHRG_WEIGHT
<i>Application Level of Calc. Rule</i>	Defines on which level the rates are calculated	Rate table
<i>Price Unit</i>	Defines the multiplier for the calculation base. For example, the	1000

Field	Description	Value
	applicable rate could be <i>per mile</i> or <i>per 100 miles</i> .	
<i>Unit of Measure</i>	The unit of measure specifies the unit to which the multiplier is applied.	KG

- Once you have entered your data, release the rate table by choosing **► Set Status ► Released ►**.
- Save your entries.

10.1.3.2.3 Defining Rates for Piracy Risk Surcharge

Procedure

- In SAP NetWeaver Business Client (NWBC), choose **► Master Data ► Charge Management and Service Product Catalogs ► Rate Tables ► Create Rate Table Definition ►**.
- On the *Create Rate Table* screen, create the following entry:

Table 218

Field	Description	Value
General Data		
<i>Rate Table</i>	Unique identifier for the rate table	OF-RATE-576
<i>Description</i>	Description of the table	Rate Table for OF 576
<i>Charge Usage</i>	This indicator identifies in which situation this rate table can be used. It can be used for Customer Billing integration and/or Supplier Invoice integration, or neither.	Customer
<i>Charge Type</i>	This is where the charge type is linked for integration with SAP ERP.	PRS
<i>Charge Category</i>	This defaults from the charge type definition above.	012
<i>Charge Subcategory</i>	This defaults from the charge type definition above.	103009
<i>Positive/Negative</i>	This defaults from the charge type definition above.	Positive Value
<i>Value</i>	This defaults from the charge type definition above.	Absolute value
Scales		
<i>Dimension</i>	On the rate table, this defines a row (x-axis) or a column (y-axis). You can	1 for the first scale (Region based)

Field	Description	Value
	have multiple scales (up to 9) in a rate table.	
<i>Reference Scale</i>	Assign the scales here for all carriers, which were defined above. This enables the entries in the rate table according to the sequence.	1. OAF-SCALE-SOURCE-LOC 2. OAF-SCALE-DEST-LOC 3. OAF-WEIGHT
<i>Calculation Base</i>	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	1. SOURCELOC 2. DESTLOC 3. CHRG_WEIGHT
<i>Scale Type</i>	Manually defined or defaults from the reference scale definition above.	1. Same Scale (=) 2. Same Scale (=) 3. Base Scale (>=)
<i>Scale Unit of Measure</i>	Manually defined or defaults from the reference scale definition above.	1. Blank 2. Blank 3. TO
<i>Minimum Value</i>	Minimum value	Deselect
<i>Maximum Value</i>	Maximum value	Deselect
<i>Rel. Calc. Method</i>	Relative Calculation method	Deselect
<i>Rounding Profile</i>	Rounding profile	Blank
<p>i Note After maintaining the lines in the <i>Create Rate Table</i> , highlight each line and choose <i>Create Scale</i> . Save your entries.</p>		
Dates and Values		
<i>Valid From</i>	The valid-from date for the rate table	2011-01-01
<i>Valid To</i>	The valid-to date for the rate table	2099-12-31
<i>Aggreg. Rate Description</i>	Aggregated rate description	PRS
<i>Currency</i>	A currency that is applicable for this rate table	USD

- On the *Dates and Values* tab page, highlight the newly created line. A new table appears below, where you can enter the specific rates.
- Choose *Insert* , and maintain the following rates:

Table 219

Source Loc.	Destination Loc.	Value
OF-CFS-JPYOK	OF-CFS-USLAX	> 0.1: 1

Source Loc.	Destination Loc.	Value
		> 0.2: 2 > 0.3: 3 > 0.4: 4

- On the *Calculation Rules* tab page, enter the following data:

Table 220

Field	Description	Value
<i>Calculation Base</i>	Provides the calculation base for this rate. In our rate table, the rates are specified as per mile from source to destination locations. However, the calculation base must be determined to apply these rates. In this case, the calculation base is distance. There are various bases such as business partner role, weight, destination location, and so on.	CHRG_WEIGHT
<i>Application Level of Calc. Rule</i>	Defines on which level the rates are calculated	Rate table
<i>Price Unit</i>	Defines the multiplier for the calculation base. For example, the applicable rate could be <i>per mile</i> or <i>per 100 miles</i> .	1000
<i>Unit of Measure</i>	The unit of measure specifies the unit to which the multiplier is applied.	KG

- Once you have entered your data, release the rate table by choosing **► Set Status ► Released ►**.
- Save your entries.

10.1.3.2.4 Defining Rates for Emergency Bunker Adjustment Factor

Procedure

- In SAP NetWeaver Business Client (NWBC), choose **► Master Data ► Charge Management and Service Product Catalogs ► Rate Tables ► Create Rate Table Definition ►**.
- On the *Create Rate Table* screen, create the following entry:

Table 221

Field	Description	Value
General Data		

Field	Description	Value
<i>Rate Table</i>	Unique identifier for the rate table	OF-RATE-577
<i>Description</i>	Description of the table	Rate Table for OF 577
<i>Charge Usage</i>	This indicator identifies in which situation this rate table can be used. It can be used for Customer Billing integration and/or Supplier Invoice integration, or neither.	Customer
<i>Charge Type</i>	This is where the charge type is linked for integration with SAP ERP.	EBAF
<i>Charge Category</i>	This defaults from the charge type definition above.	002
<i>Charge Subcategory</i>	This defaults from the charge type definition above.	103001
<i>Positive/Negative</i>	This defaults from the charge type definition above.	Positive Value
<i>Value</i>	This defaults from the charge type definition above.	Absolute value
Scales		
<i>Dimension</i>	On the rate table, this defines a row (x-axis) or a column (y-axis). You can have multiple scales (up to 9) in a rate table.	1 for the first scale (Region based)
<i>Reference Scale</i>	Assign the scales here for all carriers, which were defined above. This enables the entries in the rate table according to the sequence.	1. OAF-SCALE-SOURCE-LOC 2. OAF-SCALE-DEST-LOC 3. OAF-WEIGHT
<i>Calculation Base</i>	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	1. SOURCELOC 2. DESTLOC 3. CHRГ_WEIGHT
<i>Scale Type</i>	Manually defined or defaults from the reference scale definition above.	1. Same Scale (=) 2. Same Scale (=) 3. Base Scale (>=)
<i>Scale Unit of Measure</i>	Manually defined or defaults from the reference scale definition above.	1. Blank 2. Blank 3. TO
<i>Minimum Value</i>	Minimum value	Deselect
<i>Maximum Value</i>	Maximum value	Deselect

Field	Description	Value
<i>Rel. Calc. Method</i>	Relative Calculation method	Deselect
<i>Rounding Profile</i>	Rounding profile	Blank

i Note

After maintaining the lines in the *Create Rate Table* , highlight each line and choose *Create Scale* .
Save your entries.

Dates and Values

<i>Valid From</i>	The valid-from date for the rate table	2011-01-01
<i>Valid To</i>	The valid-to date for the rate table	2099-12-31
<i>Aggreg. Rate Description</i>	Aggregated rate description	EBAF
<i>Currency</i>	A currency that is applicable for this rate table	USD

- On the *Dates and Values* tab page, highlight the newly created line. A new table appears below, where you can enter the specific rates.
- Choose *Insert* , and maintain the following rates:

Table 222

Source Loc.	Destination Loc.	Value
OF-CFS-JPYOK	OF-CFS-USLAX	> 0.1: 12 > 0.2: 24 > 0.3: 36 > 0.4: 48

- On the *Calculation Rules* tab page, enter the following data:

Table 223

Field	Description	Value
<i>Calculation Base</i>	Provides the calculation base for this rate. In our rate table, the rates are specified as per mile from source to destination locations. However, the calculation base must be determined to apply these rates. In this case, the calculation base is distance. There are various bases such as business partner role, weight, destination location, and so on.	CHRG_WEIGHT
<i>Application Level of Calc. Rule</i>	Defines on which level the rates are calculated	Rate table
<i>Price Unit</i>	Defines the multiplier for the calculation base. For example, the	1000

Field	Description	Value
	applicable rate could be <i>per mile</i> or <i>per 100 miles</i> .	
<i>Unit of Measure</i>	The unit of measure specifies the unit to which the multiplier is applied.	KG

- Once you have entered your data, release the rate table by choosing ► *Set Status* ► *Released* ►.
- Save your entries.

10.1.3.3 Defining Rate Table: On-Carriage

Procedure

- In SAP NetWeaver Business Client (NWBC), choose ► *Master Data* ► *Charge Management and Service Product Catalogs* ► *Rate Tables* ► *Create Rate Table Definition* ►.
- On the *Create Rate Table* screen, create the following entry:

Table 224

Field	Description	Value
General Data		
<i>Rate Table</i>	Unique identifier for the rate table	OAF-RATE-584
<i>Description</i>	Description of the table	Rate Table for OAF 584
<i>Charge Usage</i>	This indicator identifies in which situation this rate table can be used. It can be used for Customer Billing integration and/or Supplier Invoice integration, or neither.	Customer
<i>Charge Type</i>	This is where the charge type is linked for integration with SAP ERP.	ON
<i>Charge Category</i>	This is defaulted from the charge type definition above.	014
<i>Charge Subcategory</i>	This defaults from the charge type definition above.	100000
<i>Positive/Negative</i>	This defaults from the charge type definition above.	Positive or Negative Value
<i>Value</i>	This defaults from the charge type definition above.	Absolute value
Scales		
<i>Dimension</i>	On the rate table, this defines a row (x-axis) or a column (y-axis). You can	1 for the first scale (Region based)

Field	Description	Value
	have multiple scales (up to 9) in a rate table.	
<i>Reference Scale</i>	Assign the scales here for all carriers, which were defined above. This enables the entries in the rate table as in the sequence.	1. OAF-SCALE-SOURCE-LOC 2. OAF-SCALE-DEST-LOC 3. OAF-WEIGHT
<i>Calculation Base</i>	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	1. SOURCELOC 2. DESTLOC 3. CHRG_WEIGHT
<i>Scale Type</i>	Manually defined or defaults from the reference scale definition above.	1. Same Scale (=) 2. Same Scale (=) 3. Base Scale (>=)
<i>Scale Unit of Measure</i>	Manually defined or defaults from the reference scale definition above.	1. Blank 2. Blank 3. TO
<i>Minimum Value</i>	Minimum value	Deselect
<i>Maximum Value</i>	Maximum value	Deselect
<i>Rel. Calc. Method</i>	Relative Calculation method	Deselect
<i>Rounding Profile</i>	Rounding profile	Blank
<p>i Note After maintaining the lines in the <i>Create Rate Table</i> , highlight each line and choose <i>Create Scale</i> . Save your entries.</p>		
Dates and Values		
<i>Valid From</i>	The valid-from date for the rate table	2011-01-01
<i>Valid To</i>	The valid-to date for the rate table	2099-12-31
<i>Aggreg. Rate Description</i>	Aggregated rate description	On-Carriage
<i>Currency</i>	A currency that is applicable for this rate table	USD

- On the *Dates and Values* tab page, highlight the newly created line. A new table appears below, where you can enter the specific rates.
- Choose *Insert* , and maintain the following rates:

Table 225

Source Loc. Transp. Zone	Destination Loc.	Value
OF-CFS-USLAX	CUOAF-CO-01@ERP001	> 0.1: 14.00

Source Loc. Transp. Zone	Destination Loc.	Value
		> 0.2: 15.00 > 0.3: 16.00 > 0.4: 18.00
OF-CFS-USLAX	CUOAF-CO-02@ERP001	> 0.1: 14.00 > 0.2: 15.00 > 0.3: 16.00 > 0.4: 18.00
OF-CFS-USLAX	CUOAF-CO-03@ERP001	> 0.1: 11.00 > 0.2: 12.00 > 0.3: 13.00 > 0.4: 14.00
OF-CFS-USLAX	CUOAF-CO-04@ERP001	> 0.1: 11.00 > 0.2: 12.00 > 0.3: 13.00 > 0.4: 14.00

5. On the *Calculation Rules* tab page, enter the following data:

Table 226

Field	Description	Value
<i>Calculation Base</i>	Provides the calculation base for this rate. In our rate table, the rates are specified as per mile from source to destination locations. However, the calculation base must be determined to apply these rates. In this case, the calculation base is distance. There are various bases such as business partner role, weight, destination location, and so on.	CHRG_WEIGHT
<i>Application Level of Calc. Rule</i>	Defines on which level the rates are calculated	Rate table
<i>Price Unit</i>	Defines the multiplier for the calculation base. For example, the applicable rate could be <i>per mile</i> or <i>per 100 miles</i> .	1000
<i>Unit of Measure</i>	The unit of measure specifies the unit to which the multiplier is applied.	KG

6. Once you have entered your data, release the rate table by choosing **► Set Status ► Released ►**.
7. Save your entries.

10.1.4 Defining Calculation Sheets (LCL Scenario)

Within a freight order or forwarding order, the applicable charges are calculated on the basis of the calculation sheet.

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ► *Master Data* ► *Charge Management and Service Product Catalogs* ► *Calculation Sheets* ► *Create Calculation Sheet* ►
2. Choose *Continue* .
3. On the *New Calculation Sheet* screen, enter your data based on the following tables.

i Note

For this scenario, we create four calculation sheets (one for each carrier)

Pre-Carriage

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

Table 227

Field	Description	Value
<i>Calculation Sheet</i>	Unique identifier for the calculation sheet to be defined	OAF-TCCS-PRE
<i>Description</i>	Description of the calculation sheet	Calculation sheet pre-carriage
<i>Charge Usage</i>	Indicates whether the calculation sheet is used for customers, vendors (carriers), both, or neither. Furthermore, indicates whether the calculation sheet is used only for decision making during tendering, and so on.	Customer

2. In the *Items* screen area, choose ► *Insert* ► *Single Item* ► to add a new line item.
3. Select the line for 20 .
Enter data in the area at the bottom of the screen.
4. On the *Basic Data* tab page, enter the following data:

Table 228

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Land Pre-Carriage

Field	Description	Value
<i>Charge Type</i>	Assigned charge type	PRE
<i>Line No</i>	Line number of the item	20
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the header level for the whole freight order or at a particular stage only	Blank
<i>Leading Charge Type</i>	Identifies leading charge type	Select
<i>Calculation Method Type</i>	Calculation method type	Standard

5. On the *Rate* tab page, enter the following data:

Table 229

Field	Description	Value
<i>Currency</i>	Unit of measure for the quantitative rate amount	JPY
<i>Rate Table</i>	Assigned rate table	OAF-RATE-569

6. Select the line for **30**.

Enter data in the area at the bottom of the screen.

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

Table 230

Description	Value
Rule to indicate how the charge item is applied for the calculation	Standard
Description of the charge item in the calculation sheet	Fuel Surcharge
Assigned charge type	FUEL
Line number of the item	30
Reference line number to	20
Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the header level for the whole freight order or at a particular stage only	Blank
Calculation method type	Standard

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

Table 231

Field	Description	Value
<i>Amount</i>	Quantitative rate amount	3
<i>Currency</i>	Unit of measure for the quantitative rate amount. Note that this value is	%

Field	Description	Value
	not available from the input help (<input type="text" value="F4"/>): you must enter it manually.	
Ref-From Line No.	Reference from line number	20
Ref-To Line Number	Reference to line number	20

9. Select the line for 40 .

Enter data in the area at the bottom of the screen.

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

Table 232

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Toll Fee Fix
<i>Charge Type</i>	Assigned charge type	TOLL
<i>Line No</i>	Line number of the item	40
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the header level for the whole freight order or at a particular stage only	Blank
<i>Calculation Method Type</i>	Calculation method type	Standard

11. On the *Rate* tab page, enter the following data:

Table 233

Field	Description	Value
<i>Amount</i>	Rate amount	2023
<i>Currency</i>	Unit of measure for quantitative rate amount	JPY

12. Save your entries.

Main Carriage

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

Table 234

Field	Description	Value
<i>Calculation Sheet</i>	Unique identifier for the calculation sheet to be defined	OF-TCCS-MAIN
<i>Description</i>	Description of the calculation sheet	Calculation sheet main carriage

Field	Description	Value
<i>Charge Usage</i>	Indicates whether the calculation sheet is used for customers, vendors (carriers), both, or neither. Furthermore, indicates whether the calculation sheet is used only for decision making during tendering, and so on.	Customer

- In the *Items* screen area, choose ► *Insert* ► *Single Item* ▾ to add a new line item.
- Select the line for *20* .
Enter data in the area at the bottom of the screen.
- On the *Basic Data* tab page, enter the following data:

Table 235

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Base Sea Freight
<i>Charge Type</i>	Assigned charge type	BSF
<i>Line No</i>	Line number of the item	20
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the header level for the whole freight order or at a particular stage only	Blank
<i>Leading Charge Type</i>	Identifies leading charge type	Select
<i>Calculation Method Type</i>	Calculation method type	Standard
<i>Stage Category</i>	Stage category	M - Main carriage
<i>Shipping Type</i>	Shipping type	2 (LCL)

- On the *Rate* tab page, enter the following data:

Table 236

Field	Description	Value
<i>Rate Table</i>	Assigned rate table	OF-RATE-574
<i>Currency</i>	Unit of measure for quantitative amount	USD

- Select the line for *30* .
Enter data in the area at the bottom of the screen.
- On the *Basic Data* tab page, enter the following data:

Table 237

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	B/L Fee Fix
<i>Charge Type</i>	Assigned charge type	BLAD
<i>Line No</i>	Line number of the item	30
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the header level for the whole freight order or at a particular stage only	Blank
<i>Calculation Method Type</i>	Calculation method type	Standard
<i>Stage Category</i>	Stage category	M - Main carriage
<i>Shipping Type</i>	Shipping type	2 (LCL)

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

Table 238

Field	Description	Value
<i>Amount</i>	Rate amount	100
<i>Currency</i>	Unit of measure for quantitative measure	USD

9. Select the line for **40**.

Enter data in the area at the bottom of the screen.

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

Table 239

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Currency Adjustment Factor
<i>Charge Type</i>	Assigned charge type	CAF
<i>Line No</i>	Line number of the item	40
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the header level for the whole freight order or at a particular stage only	Blank

Field	Description	Value
<i>Calculation Method Type</i>	Calculation method type	Standard
<i>Stage Category</i>	Stage category	M - Main carriage
<i>Shipping Type</i>	Shipping type	2 (LCL)

11. On the *Rate* tab page, enter the following data:

Table 240

Field	Description	Value
<i>Amount</i>	Rate amount	14.60
<i>Currency</i>	Unit of measure for the quantitative rate amount. Note that this value is not available from the input help (<input type="text" value="F4"/>); you must enter it manually.	%
Ref.-From Line No.	Reference from line number	20
Ref.-To Line Number	Reference to line number	20

12. Select the line for *50*.

Enter data in the area at the bottom of the screen.

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

Table 241

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Bunker Adjustment Factor
<i>Charge Type</i>	Assigned charge type	BAF
<i>Line No</i>	Line number of the item	50
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the header level for the whole freight order or at a particular stage only	Blank
<i>Calculation Method Type</i>	Calculation method type	Break Weight
<i>Stage Category</i>	Stage category	M - Main carriage
<i>Shipping Type</i>	Shipping type	2 (LCL)

14. On the *Rate* tab page, enter the following data:

Table 242

Field	Description	Value
<i>Rate Table</i>	Assigned rate table	OF-RATE-575

Field	Description	Value
<i>Currency</i>	Unit of measure for quantitative amount	USD

15. Select the line for **60** .

Enter data in the area at the bottom of the screen.

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

Table 243

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Piracy Risk Surcharge
<i>Charge Type</i>	Assigned charge type	PRS
<i>Line No</i>	Line number of the item	60
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the header level for the whole freight order or at a particular stage only	Blank
<i>Calculation Method Type</i>	Calculation method type	Standard
<i>Stage Category</i>	Stage category	M - Main carriage
<i>Shipping Type</i>	Shipping type	2 (LCL)

17. On the *Rate* tab page, enter the following data:

Table 244

Field	Description	Value
<i>Rate Table</i>	Assigned rate table	OF-RATE-576
<i>Currency</i>	Unit of measure for quantitative amount	USD

18. Select the line for **70** .

Enter data in the area at the bottom of the screen.

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

Table 245

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Emergency Bunker Adjustment Factor

Field	Description	Value
<i>Charge Type</i>	Assigned charge type	EBAF
<i>Line No</i>	Line number of the item	70
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the header level for the whole freight order or at a particular stage only	Blank
<i>Calculation Method Type</i>	Calculation method type	Standard
<i>Stage Category</i>	Stage category	M - Main carriage
<i>Shipping Type</i>	Shipping type	2 (LCL)

20. On the *Rate* tab page, enter the following data:

Table 246

Field	Description	Value
<i>Rate Table</i>	Assigned rate table	OF-RATE-577
<i>Currency</i>	Unit of measure for quantitative amount	USD

21. Select the line for *80* .

Enter data in the area at the bottom of the screen.

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

Table 247

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	International Port Security Destination
<i>Charge Type</i>	Assigned charge type	ISPD
<i>Line No</i>	Line number of the item	80
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the header level for the whole freight order or at a particular stage only	Blank
<i>Calculation Method Type</i>	Calculation method type	Standard
<i>Stage Category</i>	Stage category	M - Main carriage
<i>Shipping Type</i>	Shipping type	2 (LCL)

23. On the *Rate* tab page, enter the following data:

Table 248

Field	Description	Value
<i>Amount</i>	Rate amount	3
<i>Currency</i>	Unit of measure for quantitative amount	USD

24. Select the line for **90**.

Enter data in the area at the bottom of the screen.

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

Table 249

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Terminal Handling Charge Destination
<i>Charge Type</i>	Assigned charge type	THCD
<i>Line No</i>	Line number of the item	90
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the header level for the whole freight order or at a particular stage only	Blank
<i>Calculation Method Type</i>	Calculation method type	Standard
<i>Stage Category</i>	Stage category	M - Main carriage
<i>Shipping Type</i>	Shipping type	2 (LCL)

26. On the *Rate* tab page, enter the following data:

Table 250

Field	Description	Value
<i>Rate</i>	Rate	OAF-RATE-574-1
<i>Currency</i>	Unit of measure for quantitative amount	USD

27. Select the line for **100**.

Enter data in the area at the bottom of the screen.

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

Table 251

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard

Field	Description	Value
<i>Description</i>	Description of the charge item in the calculation sheet	AMS Fee
<i>Charge Type</i>	Assigned charge type	Automated Manifest Submission Fee
<i>Line No</i>	Line number of the item	100
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the header level for the whole freight order or at a particular stage only	Blank
<i>Calculation Method Type</i>	Calculation method type	Standard
<i>Stage Category</i>	Stage category	M - Main carriage
<i>Shipping Type</i>	Shipping type	2 (LCL)

29. On the *Rate* tab page, enter the following data:

Table 252

Field	Description	Value
<i>Amount</i>	Rate amount	25
<i>Currency</i>	Unit of measure for quantitative amount	USD

30. Save your entries.

On-Carriage

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

Table 253

Field	Description	Value
<i>Calculation Sheet</i>	Unique identifier for the calculation sheet to be defined	OAF-TCCS-ON
<i>Description</i>	Description of the calculation sheet	Calculation sheet on-carriage
<i>Charge Usage</i>	Indicates whether the calculation sheet is used for customers, vendors (carriers), both, or neither. Furthermore, indicates whether the calculation sheet is used only for decision making during tendering, and so on.	Customer

2. In the *Items* screen area, choose ► *Insert* ► *Single Item* ► to add a new line item.

3. Select the line for *20*.

Enter data in the area at the bottom of the screen.

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

Table 254

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	On-Carriage
<i>Charge Type</i>	Assigned charge type	ON
<i>Line No</i>	Line number of the item	20
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the header level for the whole freight order or at a particular stage only	Blank
<i>Leading Charge Type</i>	Identifies leading charge type	Select
<i>Calculation Method Type</i>	Calculation method type	Standard
<i>Stage Category</i>	Stage category	0 - On-Carriage
<i>Shipping Type</i>	Shipping type	2 (LCL)

5. On the *Rate* tab page, enter the following data:

Table 255

Field	Description	Value
<i>Rate Table</i>	Assigned rate table	OAF-RATE-584
<i>Currency</i>	Unit of measure for quantitative amount	USD

6. Select the line for **30**.

Enter data in the area at the bottom of the screen.

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

Table 256

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Fuel Surcharge
<i>Charge Type</i>	Assigned charge type	FUEL
<i>Shipping Type</i>	Shipping type	2 (LCL)
<i>Line No</i>	Line number of the item	30
<i>Reference from</i>	Reference from line number	20

Field	Description	Value
Reference to	Reference to line number	20
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the header level for the whole freight order or at a particular stage only	Blank
<i>Calculation Method Type</i>	Calculation method type	Standard
<i>Stage Category</i>	Stage category	0 - On-Carriage

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

Table 257

Field	Description	Value
<i>Amount</i>	Rate amount	10
<i>Currency</i>	Unit of measure for the quantitative rate amount. Note that this value is not available from the input help (F4); you must enter it manually.	%
Ref.-From Line No.	Reference from line number	20
Ref.-To Line Number	Reference to line number	20

9. Select the line for **40**.

Enter data in the area at the bottom of the screen.

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

Table 258

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Automated Manifest Submission Fee
<i>Charge Type</i>	Assigned charge type	AMS
<i>Line No</i>	Line number of the item	40
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the header level for the whole freight order or at a particular stage only	Blank
<i>Calculation Method Type</i>	Calculation method type	Standard
<i>Stage Category</i>	Stage category	0 - On-Carriage
<i>Shipping Type</i>	Shipping type	2 (LCL)

- On the *Rate* tab page, enter the following data:

Table 259

Field	Description	Value
<i>Amount</i>	Rate amount	25
<i>Currency</i>	Unit of measure for quantitative amount	USD

- Save your entries.

10.1.5 Defining Calculation Sheets (FCL Scenario)

Within a freight order or forwarding order, the applicable charges are calculated on the basis of the calculation sheet.

Procedure

Calculation Sheet for Forwarding Agreement Japan (FCL Scenario)

- In SAP NetWeaver Business Client (NWBC), choose ► *Master Data* ► *Charge Management and Service Product Catalogs* ► *Calculation Sheets* ► *Create Calculation Sheet* ►.
- Choose *Continue*.
- On the *New Calculation Sheet* screen, enter your data based on the following tables.
- On the *General Data* tab page, enter the following data in the *Basic Data* screen area:

Table 260

Field	Description	Value
<i>Calculation Sheet</i>	Unique identifier for the calculation sheet	OF-TCCS-FWA-JP-FCL
<i>Description</i>	Description of the calculation sheet	Calculation Sheet for FWA JP FCL
<i>Charge Usage</i>	Indicates whether the calculation sheet is used for customers, vendors (carriers), both, or neither. Furthermore, indicates whether the calculation sheet is used only for decision making during tendering, and so on.	Customer

- In the *Items* screen area, choose ► *Insert* ► *Single Item* ► to add a new line item.
- Select the line for 20.
Enter data in the area at the bottom of the screen.
- On the *Basic Data* tab page, enter the following data:

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Table 261

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Cost
<i>Description</i>	Description of the charge item in the calculation sheet	Blank
<i>Charge Type</i>	Assigned charge type	Blank
<i>Line No</i>	Line number of the item	20
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the header level for the whole freight order or at a particular stage only	Blank
<i>Cost Pull Strategy</i>	Cost pull strategy	Active Copy
<i>Calculation Method Type</i>	Calculation method type	COST_PULL

8. Save your entries.

Calculation Sheet for Forwarding Agreement USA (FCL Scenario)

1. In SAP NetWeaver Business Client (NWBC), choose ► *Master Data* ► *Charge Management and Service Product Catalogs* ► *Calculation Sheets* ► *Create Calculation Sheet* ►.
2. Choose *Continue*.
3. On the *New Calculation Sheet* screen, enter your data based on the following tables.
4. On the *General Data* tab page, enter the following data in the *Basic Data* screen area:

Table 262

Field	Description	Value
<i>Calculation Sheet</i>	Unique identifier for the calculation sheet	OF-TCCS-FWA-US-FCL
<i>Description</i>	Description of the calculation sheet	Calculation Sheet for FWA US FCL
<i>Charge Usage</i>	Indicates whether the calculation sheet is used for customers, vendors (carriers), both, or neither. Furthermore, indicates whether the calculation sheet is used only for decision making during tendering, and so on.	Customer

5. In the *Items* screen area, choose ► *Insert* ► *Single Item* ► to add a new line item.
6. Select the line for 20.
Enter data in the area at the bottom of the screen.
7. On the *Basic Data* tab page, enter the following data:

Table 263

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Cost
<i>Description</i>	Description of the charge item in the calculation sheet	Blank
<i>Charge Type</i>	Assigned charge type	Blank
<i>Line No</i>	Line number of the item	20
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the header level for the whole freight order or at a particular stage only	Blank
<i>Cost Pull Strategy</i>	Cost pull strategy	Active Copy
<i>Calculation Method Type</i>	Calculation method type	COST_PULL

8. Save your entries.

10.1.6 Defining Forwarding Agreement Types

You use the forwarding agreement type to define the shipper/consignee-relevant pricing structure. The forwarding agreement type is determined in the charge calculation process in the forwarding order

Procedure

1. In Customizing for *Transportation Management*, choose **► Master Data ► Agreements and Service Products ► Define FWA and Service Product Catalog Types ►**
2. Enter the following data:

Table 264

Field	Value
<i>Forw. Ord Type</i>	OF07
<i>Short Description</i>	OF: Forwarding Agreement
<i>Default Agr.Type</i>	Deselect
<i>Track Changes</i>	Select
<i>Multiple Parties</i>	Select
<i>Agr. No. Range</i>	01

3. Save your entries and ignore any warning messages.
4. Highlight the line of the forwarding agreement **OF07** and choose *Specify Preconditions*.

5. Create two new entries for preconditions:
 - SHIPMENT (shipment type)
 - STAGE_CAT (stage category)
6. Save your entries.

More Information

[Defining Forwarding Agreements \[page 143\]](#)

10.1.6.1 Defining Forwarding Agreements

Procedure

Creating a Forwarding Agreement for a Consignee (Main and On-Carriage)

1. In SAP NetWeaver Business Client (NWBC), choose ► *Forwarding Agreement Management* ► *Forwarding Agreements* ► *Create Forwarding Agreement* ►.
2. Select agreement type `OF07`, and choose *Continue*.
3. Enter the following data:

Table 265

Field	Value
<i>Agreement</i>	OF-FWA-CO
<i>Agreement Desc :</i>	FWA for OF-CO
<i>Valid From</i>	2011-01-01
<i>Valid To</i>	2012-12-31
<i>Document Currency</i>	USD
<i>Shipping Type</i>	2 (LCL)
<i>Organizational Unit</i>	OF-FWH-21 OF-FWH-22
<i>Business Partner</i>	OAF-CO-01 OAF-CO-02 OAF-CO-03 OAF-CO-04

4. Navigate to the *Item* tab page. Enter the following data by choosing ► *Insert* ► *Item* ►:

Table 266

Field	Value
<i>Item Number</i>	100

Field	Value
Calculation Sheet	OF-TCCS-MAIN
Stage Category	Main Carriage
Item Number	200
Calculation Sheet	OAF-TCCS-ON
Stage Category	On-Carriage

- Once you have entered your data, release the agreement by choosing ► *Set Status* ► *Released* ►.
- Save your entries.

Creating a Forwarding Agreement for a Customer (Shipper)

- In SAP NetWeaver Business Client (NWBC), choose ► *Forwarding Agreement Management* ► *Forwarding Agreements* ► *Create Forwarding Agreement* ►.
- Select forwarding agreement type OF07 and choose *Continue*.
- Enter the following data:

Table 267

Field	Value
Agreement	OF-FWA-CU-01
Agreement Desc :	FWA for CU-01
Valid From	2011-01-01
Valid To	2012-12-31
Document Currency	JPY
Shipping Type	2
Organizational Unit	OF-FWH-01 OF-FWH-05
BP Number	OAF-CU-01

- Navigate to the *Item* tab page and enter the following data by choosing ► *Insert* ► *Insert Item* ►:

Table 268

Field	Value
Item Number	100
Calculation Sheet	OAF-TCCS-PRE
Stage Category	Pre-Carriage
Dimensional Weight Profile	ZOAF_LAND3
Item Number	200
Calculation Sheet	OF-TCCS-MAIN

Field	Value
Stage Category	Main Carriage
Dimensional Weight Profile	ZOF_SEA
Item Number	300
Calculation Sheet	OAF-TCCS-ON
Stage Category	On-Carriage
Dimensional Weight Profile	ZOAF_LAND3

- Once you have entered your data, release the agreement by choosing ► *Set Status* ► *Released* ►.
- Save your entries.
- In SAP NetWeaver Business Client (NWBC), choose ► *Forwarding Agreement Management* ► *Forwarding Agreements* ► *Create Forwarding Agreement* ►.
- Select agreement type OF07 and choose *Continue*.
- Enter the following data:

Table 269

Field	Value
Agreement	OF-FWA-CU-02
Agreement Desc :	FWA for CU-02
Valid From	2011-01-01
Valid To	2012-12-31
Document Currency	JPY
Shipping Type	2
Organizational Unit	OF-FWH-01 OF-FWH-05
BP Number	OAF-CU-02

- Navigate to the *Item* tab page. Enter the following data:

Table 270

Field	Value
Item Number	100
Calculation Sheet	OAF-TCCS-PRE
Stage Category	Pre-Carriage
Dimensional Weight Profile	ZOAF_LAND3
Item Number	200
Calculation Sheet	OF-TCCS-MAIN
Stage Category	Main Carriage

Field	Value
<i>Dimensional Weight Profile</i>	ZOF_SEA
<i>Item Number</i>	300
<i>Calculation Sheet</i>	OAF-TCCS-ON
<i>Stage Category</i>	On-Carriage
<i>Dimensional Weight Profile</i>	ZOAF_LAND3

11. Once you have entered your data, release the agreement by choosing ► *Set Status* ► *Released* ►.
12. Save your entries.
13. In SAP NetWeaver Business Client (NWBC), choose ► *Forwarding Agreement Management* ► *Forwarding Agreements* ► *Create Forwarding Agreement* ►.
14. Select agreement type OF07 and choose *Continue*.
15. Enter the following data:

Table 271

Field	Value
<i>Agreement</i>	OF-FWA-CU-03
<i>Agreement Desc :</i>	FWA for CU-03
<i>Valid From</i>	2011-01-01
<i>Valid To</i>	2012-12-31
<i>Document Currency</i>	JPY
<i>Shipping Type</i>	2
<i>Organizational Unit</i>	OF-FWH-01 OF-FWH-05
<i>BP Number</i>	OAF-CU-03

16. Navigate to the *Item* tab page. Enter the following data:

Table 272

Field	Value
<i>Item Number</i>	100
<i>Calculation Sheet</i>	OAF-TCCS-PRE
<i>Stage Category</i>	Pre-Carriage
<i>Dimensional Weight Profile</i>	ZOAF_LAND3
<i>Item Number</i>	200
<i>Calculation Sheet</i>	OF-TCCS-MAIN
<i>Stage Category</i>	Main Carriage
<i>Dimensional Weight Profile</i>	ZOF_SEA

Field	Value
<i>Item Number</i>	300
<i>Calculation Sheet</i>	OAF-TCCS-ON
<i>Stage Category</i>	On-Carriage
<i>Dimensional Weight Profile</i>	ZOAF_LAND3

17. Once you have entered your data, release the agreement by choosing **► Set Status ► Released ►**.
18. Save your entries.
19. In SAP NetWeaver Business Client (NWBC), choose **► Forwarding Agreement Management ► Forwarding Agreements ► Create Forwarding Agreement ►**.
20. Select agreement type **OF07** and choose *Continue*.
21. Enter the following data:

Table 273

Field	Value
<i>Agreement</i>	OF-FWA-CU-04
<i>Agreement Desc :</i>	FWA for CU-04
<i>Valid From</i>	2011-01-01
<i>Valid To</i>	2012-12-31
<i>Document Currency</i>	JPY
<i>Shipping Type</i>	2
<i>Organizational Unit</i>	OF-FWH-01 OF-FWH-05
<i>BP Number</i>	OAF-CU-04

22. Navigate to the *Item* tab page. Enter the following data:

Table 274

Field	Value
<i>Item Number</i>	100
<i>Calculation Sheet</i>	OAF-TCCS-PRE
<i>Stage Category</i>	Pre-Carriage
<i>Dimensional Weight Profile</i>	ZOAF_LAND3
<i>Item Number</i>	200
<i>Calculation Sheet</i>	OF-TCCS-MAIN
<i>Stage Category</i>	Main Carriage
<i>Dimensional Weight Profile</i>	ZOF_SEA
<i>Item Number</i>	300

Field	Value
Calculation Sheet	OAF-TCCS-ON
Stage Category	On-Carriage
Dimensional Weight Profile	ZOAF_LAND3

- Once you have entered your data, release the agreement by choosing ► *Set Status* ► *Released* ►.
- Save your entries.

10.1.7 Defining Forwarding Settlement Document Types

Procedure

- In Customizing for *Transportation Management*, choose ► *Settlement* ► *Forwarding Settlement* ► *Define Forwarding Settlement Document Types* ►.
- Choose *New Entries*.
- Enter the following data:

Table 275

Field	Value
<i>FWSD Type</i>	OF09
<i>Description</i>	OF: Forwarding Settlement Document
<i>FSD Category</i>	10 Forwarding Settlement Document
<i>BW Relevance</i>	Select
<i>No. Range Interval</i>	01
<i>BW Relevance</i>	Select
<i>Output Profile</i>	/SCMTMS/CFIR
<i>Add. Output Profile</i>	/SCMTMS/CFIR_PRINT
<i>Dynamic Determination of Output Profile</i>	Deselect

- Save your entries.
- Return to Customizing for the forwarding order document type and add this settlement document type to FWO types OF01, OF15, OF16, and OF17.

10.1.8 Defining Settlement Profiles

Use this procedure to define the profile for creating invoices. The settlement profile comprises a set of parameters that you can use to control how the system creates invoices.

You can assign the specified settlement profile to an organizational unit in transaction /SCMTMS/TCM_FASET.

If you do not specify a settlement profile, the system uses standard default settings to create settlement documents.

Procedure

1. In Customizing for *Transportation Management* , choose ► *Settlement* ► *Define Settlement Profile* ►.
2. Choose *New Entries* .
3. Enter the following data:

Table 276

Field	Description	Value
<i>Settlement Prof</i>	Settlement profile	OAF_SP_01
<i>Description</i> .	Description	OAF Settlement Profile
<i>Profile Category</i>	Determines whether profile is valid for freight or forwarding settlement or both	Forwarding and Freight Settlement
<i>Data Source</i>	Identifies the data source to be used when creating settlement documents	Planned Data
<i>Split/Cons</i>	Defines the split and consolidation criteria for generating settlement documents	Blank
<i>Calculation Option</i>	Specifies how the values are calculated when the invoice is created. You can copy fixed charges and recalculate others, or copy all charges.	B – Copy All Charges
<i>Collective Invoice</i>	Collective invoice	Blank
<i>Stage Split</i>	Stage split	Blank

4. Save your entries.

10.1.9 Configuring Organizational Settings for Charge Elements

Procedure

Define Calculation Profile

1. In Customizing for *Transportation Management* , choose ► *Basic Functions* ► *Charge Calculation* ► *Basic Settings for Charge Calculation* ► *Define Calculation Profile* ►.
2. Choose *New Entries* .
3. Enter the following data:

Table 277

Field	Description	Value
<i>Calculation Profile</i>	Calculation profile	OAF-CP-01
<i>Description</i>	Description of profile	OAF Calculation Profile 1
<i>Calc. Date Type</i>	Calculation date type	<Expected start date of main carriage>
<i>Calculation Level</i>	Calculation level	Calculation at stage level
<i>Agr. Det. Rules</i>	Agreement Determination Rule	Blank
<i>Through Rates</i>	Through rates	Select
<i>Dim. WT Profile</i>	Dimensional weight profile	I166
<i>Dim Wt. Cond.</i>	Condition for dimensional weight profile determination	Blank
<i>Exch. Rate Type</i>	Exchange rate type	Blank
<i>Data Source</i>	Data source	Actual Route

4. Save your entries.
5. Chose *Copy as...* to copy the calculation sheet you have just created and change the following settings:

Table 278

Field	Description	Value
<i>Calculation Profile</i>	Calculation profile	OAF-CP-02
<i>Description</i>	Description of profile	OAF Calculation Profile 2
<i>Calculation Level</i>	Calculation level	Calculation at stage level
<i>Agr. Det. Rules</i>	Agreement Determination Rule	Blank
<i>Through Rates</i>	Through rates	Select
<i>Dim. WT Profile</i>	Dimensional weight profile	I166
<i>Dim Wt. Cond.</i>	Condition for dimensional weight profile determination	Blank
<i>Exch. Rate Type</i>	Exchange rate type	Blank
<i>Data Source</i>	Data source	Actual Route

6. Save your entries.

Define Cost Distribution Profile

1. In Customizing for *Transportation Management* , choose ► *Basic Functions* ► *Cost Distribution* ► *Define Cost Distribution Profiles* .
2. Choose *New Entries* .
3. Enter the following data:

Table 279

Field	Value
<i>Distr. Profile</i>	DIR_FWO_NW
<i>Description</i>	Direct Forwarding Order Item - Net Weight
<i>Distr. Method</i>	Direct
<i>Distribution Rule</i>	03 Net Weight
<i>Distr. Level</i>	1 Forwarding Order

4. Save your entries.

Define General Settings

1. In Customizing for *Transportation Management*, choose **Basic Functions > Charge Calculation > Basic Settings for Charge Calculation > Define General Settings**.
2. Choose *New Entries*.
3. Enter the following data:

Table 280

Field	Description	Value
<i>Org. Unit</i>	Forwarding house	Select the <code>Org-ID</code> number that belongs to <code>OAF-FWH-01</code> (FH Station Nagoya). You noted this number in Creating Forwarding Houses [page 63] .
<i>Default Purch. Org.</i>	Default purchasing organization	Select the <code>Org-ID</code> number that belongs to <code>OAF-FWH-01</code> (FH Station Nagoya). You noted this number in Creating Forwarding Houses [page 63] .
<i>Default Carrier</i>	Carrier	Blank
<i>Settlement Prof</i>	Settlement profile	OAF_SP_01
<i>Settlement Prof. Det. Cond.</i>	Determination condition	Blank
<i>Calculation Profile</i>	Calculation profile	OAF-CP-01
<i>Purchasing Calculation Profile</i>	Calculation profile	OAF-CP-02
<i>Local Currency</i>	Local currency	USD for U.S. forwarding houses JPY for Japanese forwarding houses
<i>Default Charges View</i>	Default charges	Blank
<i>Dist. Prf.</i>	Distribution Profile	DIR_FWO_NW

4. Save your entries.
5. Repeat the above steps to create a separate entry for the following forwarding houses:

Table 281

Company	Forwarding Houses		
OAF-COMP-JP	OAF-FWH-01	FH Station	Nagoya
	OF-FWH-03	FH CFS	Yokohama
	OAF-FWH-04	FH Station	Hiroshima
	OAF-FWH-05	FH Station	Tokyo
OAF-COMP-US	OF-FWH-20	FH CFS	Los Angeles
	OAF-FWH-21	FH Station	Phoenix
	OAF-FWH-22	FH Station	San Diego
	OAF-FWH-25	FH Station	San Francisco

More Information

[Creating Companies \[page 59\]](#)

[Creating Forwarding Houses \[page 63\]](#)

10.2 Charge Management: Freight Order

Defining Rate Tables – Main Carriage

Rates are maintained in rate tables, which use the scales specified in [Defining Scales \[page 104\]](#). In this scenario, the following scales are assigned to the rate tables:

Table 282

Rate Table	Used Scales	Charge Type Assigned
OF-RATE-600	<ul style="list-style-type: none"> • OAF-SCALE-SOURCE-LOC • OF-SCALE-LOC • OF-SCALE-EQU 	FB00
OF-RATE-601	<ul style="list-style-type: none"> • OAF-SCALE-SOURCE-LOC • OF-SCALE-LOC • OF-SCALE-EQU 	BAF
OF-RATE-602	<ul style="list-style-type: none"> • OAF-SCALE-SOURCE-LOC • OF-SCALE-LOC • OF-SCALE-EQU 	THCO
OF-RATE-603	<ul style="list-style-type: none"> • OAF-SCALE-SOURCE-LOC • OF-SCALE-LOC • OF-SCALE-EQU 	THCD

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Configuration Guide for LCL and FCL Ocean Freight

Charge Management: Basic Settings

Rate Table	Used Scales	Charge Type Assigned
OF-RATE-604	<ul style="list-style-type: none"> • OAF-SCALE-SOURCE-LOC • OF-SCALE-LOC • OF-SCALE-EQU 	PEAK
OF-RATE-605	<ul style="list-style-type: none"> • OAF-SCALE-SOURCE-LOC • OF-SCALE-LOC • OF-SCALE-EQU 	LSFS

For the relevant procedure, see [Defining Rate Table - Main Carriage \[page 153\]](#) .

Defining Rate Tables – Trucking Rates

Rates are maintained in rate tables, which use the scales specified in [Defining Scales \[page 104\]](#) . In this scenario, the following rate tables are defined for trucking:

- [Pickup LTL \[page 164\]](#) (less than a truck load)
- [Pre-Carriage FTL \[page 169\]](#) (full truck load)
- [On-Carriage FTL \[page 171\]](#)
- [Delivery LTL \[page 173\]](#)

Calculation Sheets

Within a freight order or forwarding order, the applicable charges are calculated on the basis of a calculation sheet.

The following calculation sheets are defined:

- [Pickup \[page 188\]](#)
- [Pre-carriage \[page 191\]](#)
- [Main carriage \[page 177\]](#)

10.2.1 Defining Rate Table: Main Carriage (LCL)

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose **► Master Data ► Charge Management and Service Product Catalogs ► Rate Tables ► Create Rate Table Definition** .
2. On the *Create Rate Table* screen, create the following entry:

Table 283

Field	Description	Value
General Data		
<i>Rate Table</i>	Unique identifier for the rate table	OF-RATE-600
<i>Description</i>	Description of the table	Carrier Rate Ocean Freight

Field	Description	Value
<i>Charge Usage</i>	This indicator identifies in which situation this rate table can be used. It can be used for Customer Billing integration and/or Supplier Invoice integration, or neither.	Service Provider
<i>Charge Type</i>	This is where the charge type is linked for integration with SAP ERP.	FB00
<i>Charge Category</i>	This defaults from the charge type definition above.	004
<i>Charge Subcategory</i>	This defaults from the charge type definition above.	100000
<i>Positive/Negative</i>	This defaults from the charge type definition above.	Positive Value
<i>Value</i>	This defaults from the charge type definition above.	Absolute Value
Scales		
<i>Scale Dimension Number</i>	On the rate table, this defines a row (x-axis) or a column (y-axis). You can have multiple scales (up to 9) in a rate table.	1 for the first scale (Region based)
<i>Reference Scale</i>	Assign the scales here for all carriers, which were defined above. This enables the entries in the rate table as in the sequence.	1. OAF-SCALE-SOURCE-LOC 2. OAF-SCALE-DEST-LOC 3. OF-SCALE-EQU
<i>Calculation Base</i>	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	1. SOURCELOC 2. DESTLOC 3. EQUIP_TYPE
<i>Minimum Value</i>	Minimum value	Deselect
<i>Maximum Value</i>	Maximum value	Deselect
<i>Rel. Calc. Method</i>	Relative Calculation method	Deselect
Dates and Values		
<i>Valid-From Date</i>	The valid-from date for the rate table	2011-01-01
<i>Valid-To Date</i>	The valid-to date for the rate table	2099-12-31
<i>Aggreg. Rate Description</i>	Aggregated rate description	Main Carriage
<i>Currency</i>	A currency that is applicable for this rate table	USD

3. On the *Dates and Values* tab page, highlight the newly created line. A new table appears below, where you can enter the specific rates.
4. Choose *Insert* , and maintain the following rates:

Table 284

Source Location	Destination Location	Equipment Type	Value
OF-JPYOK	OF-USLGB	22G0	1200
OF-JPYOK	OF-USLGB	44G0	1900
OF-JPYOK	OF-USLGB	20G0	1100
OF-JPYOK	OF-USLGB	22R1	2000

5. Once you have entered your data, release the rate table by choosing **► Set Status ► Released ►**.
6. Save your entries.
7. On the *Create Rate Table* screen, create a new entry for BAF. Enter the following data:

Table 285

Field	Description	Value
General Data		
<i>Rate Table</i>	Unique identifier for the rate table	OF-RATE-601
<i>Description</i>	Description of the table	Carrier Rate Ocean Freight - BAF
<i>Charge Usage</i>	This indicator identifies in which situation this rate table can be used. It can be used for Customer Billing integration and/or Supplier Invoice integration, or neither.	Service Provider
<i>Charge Type</i>	This is where the charge type is linked for integration with SAP ERP.	BAF
<i>Charge Category</i>	This defaults from the charge type definition above.	012
<i>Charge Subcategory</i>	This defaults from the charge type definition above.	103001
<i>Positive/Negative</i>	This defaults from the charge type definition above.	Positive Value
<i>Value</i>	This defaults from the charge type definition above.	Absolute Value
Scales		
<i>Scale Dimension Number</i>	On the rate table, this defines a row (x-axis) or a column (y-axis). You can have multiple scales (up to 9) in a rate table.	1 for the first scale (Region based)

Field	Description	Value
<i>Reference Scale</i>	Assign the scales here for all carriers, which were defined above. This enables the entries in the rate table as in the sequence.	1. OAF-SCALE-SOURCE-LOC 2. OAF-SCALE-DEST-LOC 3. OF-SCALE-EQU
<i>Calculation Base</i>	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	1. SOURCELOC 2. DESTLOC 3. EQUIP_TYPE
<i>Minimum Value</i>	Minimum value	Deselect
<i>Maximum Value</i>	Maximum value	Deselect
<i>Rel. Calc. Method</i>	Relative Calculation method	Deselect
Dates and Values		
<i>Valid-From Date</i>	The valid-from date for the rate table	2011-01-01
<i>Valid-To Date</i>	The valid-to date for the rate table	2099-12-31
<i>Aggreg. Rate Description</i>	Aggregated rate description	Main Carriage
<i>Currency</i>	A currency that is applicable for this rate table	USD

8. On the *Dates and Values* tab page, highlight the newly created line. A new table appears below, where you can enter the specific rates.
9. Choose *Insert* and maintain the following rates:

Table 286

Source Location	Destination Location	Equipment Type	Value
OF-JPYOK	OF-USLGB	22G0	400
OF-JPYOK	OF-USLGB	42G0	1700
OF-JPYOK	OF-USLGB	20G0	350
OF-JPYOK	OF-USLGB	22R1	1800

10. Once you have entered your data, release the rate table by choosing **► Set Status ► Released ►**.
11. Save your entries.
12. On the *Create Rate Table* screen, create a new entry for THC POL. Enter the following data:

Table 287

Field	Description	Value
General Data		
<i>Rate Table</i>	Unique identifier for the rate table	OF-RATE-602
<i>Description</i>	Description of the table	Carrier Rate Ocean Freight - THC (POL)

Field	Description	Value
<i>Charge Usage</i>	This indicator identifies in which situation this rate table can be used. It can be used for Customer Billing integration and/or Supplier Invoice integration, or neither.	Service Provider
<i>Charge Type</i>	This is where the charge type is linked for integration with SAP ERP.	THCO
<i>Charge Category</i>	This defaults from the charge type definition above.	010
<i>Charge Subcategory</i>	This defaults from the charge type definition above.	104007
<i>Positive/Negative</i>	This defaults from the charge type definition above.	Positive or Negative Value
<i>Value</i>	This defaults from the charge type definition above.	Absolute Value
Scales		
<i>Scale Dimension Number</i>	On the rate table, this defines a row (x-axis) or a column (y-axis). You can have multiple scales (up to 9) in a rate table.	1 for the first scale (Region based)
<i>Reference Scale</i>	Assign the scales here for all carriers, which were defined above. This enables the entries in the rate table as in the sequence.	1. OAF-SCALE-SOURCE-LOC 2. OAF-SCALE-DEST-LOC 3. OF-SCALE-EQU
<i>Calculation Base</i>	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	1. SOURCELOC 2. DESTLOC 3. EQUIP_TYPE
<i>Minimum Value</i>	Minimum value	Deselect
<i>Maximum Value</i>	Maximum value	Deselect
<i>Rel. Calc. Method</i>	Relative Calculation method	Deselect
Dates and Values		
<i>Valid-From Date</i>	The valid-from date for the rate table	2011-01-01
<i>Valid-To Date</i>	The valid-to date for the rate table	2099-12-31
<i>Aggreg. Rate Description</i>	Aggregated rate description	Main Carriage
<i>Currency</i>	A currency that is applicable for this rate table	USD

13. On the *Dates and Values* tab page, highlight the newly created line. A new table appears below, where you can enter the specific rates.
14. Choose *Insert* and maintain the following rates:

Table 288

Source Location	Destination Location	Equipment Type	Value
OF-JPYOK	OF-USLGB	22GP	240
OF-JPYOK	OF-USLGB	42G0	240
OF-JPYOK	OF-USLGB	20G0	200
OF-JPYOK	OF-USLGB	22R1	300

15. Once you have entered your data, release the rate table by choosing **► Set Status ► Released ►**.
16. Save your entries.
17. On the *Create Rate Table* screen, create a new entry for THCD (PoD). Enter the following data:

Table 289

Field	Description	Value
General Data		
<i>Rate Table</i>	Unique identifier for the rate table	OF-RATE-603
<i>Description</i>	Description of the table	Carrier Rate Ocean Freight - THC (POD)
<i>Charge Usage</i>	This indicator identifies in which situation this rate table can be used. It can be used for Customer Billing integration and/or Supplier Invoice integration, or neither.	Service Provider
<i>Charge Type</i>	This is where the charge type is linked for integration with SAP ERP.	THCD
<i>Charge Category</i>	This defaults from the charge type definition above.	007
<i>Charge Subcategory</i>	This defaults from the charge type definition above.	104007
<i>Positive/Negative</i>	This defaults from the charge type definition above.	Positive Value
<i>Value</i>	This defaults from the charge type definition above.	Absolute Value
Scales		
<i>Scale Dimension Number</i>	On the rate table, this defines a row (x-axis) or a column (y-axis). You can have multiple scales (up to 9) in a rate table.	1 for the first scale (Region based)

Field	Description	Value
<i>Reference Scale</i>	Assign the scales here for all carriers, which were defined above. This enables the entries in the rate table as in the sequence.	1. OAF-SCALE-SOURCE-LOC 2. OAF-SCALE-DEST-LOC 3. OF-SCALE-EQU
<i>Calculation Base</i>	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	1. SOURCELOC 2. DESTLOC 3. EQUIP_TYPE
<i>Minimum Value</i>	Minimum value	Deselect
<i>Maximum Value</i>	Maximum value	Deselect
<i>Rel. Calc. Method</i>	Relative Calculation method	Deselect
Dates and Values		
<i>Valid-From Date</i>	The valid-from date for the rate table	2011-01-01
<i>Valid-To Date</i>	The valid-to date for the rate table	2099-12-31
<i>Aggreg. Rate Description</i>	Aggregated rate description	Main Carriage
<i>Currency</i>	A currency that is applicable for this rate table	USD

18. On the *Dates and Values* tab page, highlight the newly created line. A new table appears below, where you can enter the specific rates.
19. Choose *Insert* and maintain the following rates:

Table 290

Source Location	Destination Location	Equipment Type	Value
OF-JPYOK	OF-USLGB	22GP	450
OF-JPYOK	OF-USLGB	42G0	550
OF-JPYOK	OF-USLGB	20G0	400
OF-JPYOK	OF-USLGB	22R1	600
OF-CFS-JPYOK	OF-JPYOK	22G0	250
OF-CFS-JPYOK	OF-JPYOK	42G0	350
OF-CFS-JPYOK	OF-JPYOK	20G0	200
OF-CFS-JPYOK	OF-JPYOK	22R1	400
OF-USLGB	OF-CFS-USLAX	22G0	250
OF-USLGB	OF-CFS-USLAX	42G0	350
OF-USLGB	OF-CFS-USLAX	20G0	200
OF-USLGB	OF-CFS-USLAX	22R1	400

20. Once you have entered your data, release the rate table by choosing ► **Set Status** ► **Released** ►.
21. Save your entries.
22. On the **Create Rate Table** screen, create a new entry for PSS. Enter the following data:

Table 291

Field	Description	Value
General Data		
<i>Rate Table</i>	Unique identifier for the rate table	OF-RATE-604
<i>Description</i>	Description of the table	Carrier Rate Ocean Freight- PEAK
<i>Charge Usage</i>	This indicator identifies in which situation this rate table can be used. It can be used for Customer Billing integration and/or Supplier Invoice integration, or neither.	Service Provider
<i>Charge Type</i>	This is where the charge type is linked for integration with SAP ERP.	PEAK
<i>Charge Category</i>	This defaults from the charge type definition above.	008
<i>Charge Subcategory</i>	This defaults from the charge type definition above.	103009
<i>Positive/Negative</i>	This defaults from the charge type definition above.	Positive Value
<i>Value</i>	This defaults from the charge type definition above.	Percentage Value (default)
Scales		
<i>Scale Dimension Number</i>	On the rate table, this defines a row (x-axis) or a column (y-axis). You can have multiple scales (up to 9) in a rate table.	1 for the first scale (Region based)
<i>Reference Scale</i>	Assign the scales here for all carriers, which were defined above. This enables the entries in the rate table as in the sequence.	1. OAF-SCALE-SOURCE-LOC 2. OAF-SCALE-DEST-LOC 3. OF-SCALE-EQU
<i>Calculation Base</i>	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	1. SOURCELOC 2. DESTLOC 3. EQUIP_TYPE
<i>Minimum Value</i>	Minimum value	Deselect
<i>Maximum Value</i>	Maximum value	Deselect

Field	Description	Value
<i>Rel. Calc. Method</i>	Relative Calculation method	Deselect
Dates and Values		
<i>Valid-From Date</i>	The valid-from date for the rate table	2011-01-01
<i>Valid-To Date</i>	The valid-to date for the rate table	2099-12-31
<i>Aggreg. Rate Description</i>	Aggregated rate description	Main Carriage
<i>Currency</i>	A currency that is applicable for this rate table	%

23. On the *Dates and Values* tab page, highlight the newly created line. A new table appears below, where you can enter the specific rates.

24. Choose *Insert* and maintain the following rates:

Table 292

Source Location	Destination Location	Equipment Type	Value
OF-JPYOK	OF-USLGB	22G0	15
OF-JPYOK	OF-USLGB	42G0	30
OF-JPYOK	OF-USLGB	20G0	10
OF-JPYOK	OF-USLGB	22R1	40

25. Once you have entered your data, release the rate table by choosing **► Set Status ► Released ►**.

26. Save your entries.

27. On the *Create Rate Table Definition* screen, create a new entry for LSFS. Enter the following data:

Table 293

Field	Description	Value
General Data		
<i>Rate Table</i>	Unique identifier for the rate table	OF-RATE-605
<i>Description</i>	Description of the table	Carrier Rate Ocean Freight - LSFS
<i>Charge Usage</i>	This indicator identifies in which situation this rate table can be used. It can be used for Customer Billing integration and/or Supplier Invoice integration, or neither.	Service Provider
<i>Charge Type</i>	This is where the charge type is linked for integration with SAP ERP.	LSFS
<i>Charge Category</i>	This defaults from the charge type definition above.	008
<i>Charge Subcategory</i>	This defaults from the charge type definition above.	103009

Field	Description	Value
<i>Positive/Negative</i>	This defaults from the charge type definition above.	Positive Value
<i>Value</i>	This defaults from the charge type definition above.	Absolute Value
Scales		
<i>Scale Dimension Number</i>	On the rate table, this defines a row (x-axis) or a column (y-axis). You can have multiple scales (up to 9) in a rate table.	1 for the first scale (Region based)
<i>Reference Scale</i>	Assign the scales here for all carriers, which were defined above. This enables the entries in the rate table as in the sequence.	1. OAF-SCALE-SOURCE-LOC 2. OAF-SCALE-DEST-LOC 3. OF-SCALE-EQU
<i>Calculation Base</i>	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	1. SOURCELOC 2. DESTLOC 3. EQUIP_TYPE
<i>Minimum Value</i>	Minimum value	Deselect
<i>Maximum Value</i>	Maximum value	Deselect
<i>Rel. Calc. Method</i>	Relative Calculation method	Deselect
Dates and Values		
<i>Valid-From Date</i>	The valid-from date for the rate table	2011-01-01
<i>Valid-To Date</i>	The valid-to date for the rate table	2099-12-31
<i>Aggreg. Rate Description</i>	Aggregated rate description	Main Carriage
<i>Currency</i>	A currency that is applicable for this rate table	USD

28. On the *Dates and Values* tab page, highlight the newly created line. A new table appears below, where you can enter the specific rates.

29. Choose *Insert* and maintain the following rates:

Table 294

Source Location	Destination Location	Equipment Group	Value
OF-JPYOK	OF-USLGB	22G0	20
OF-JPYOK	OF-USLGB	42G0	20
OF-JPYOK	OF-USLGB	20G0	10
OF-JPYOK	OF-USLGB	22R1	35

30. Once you have entered your data, release the rate table by choosing **Set Status > Released**.

31. Save your entries.

10.2.2 Defining Rate Table: Main Carriage (FCL)

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose **► Master Data ► Charge Management and Service Product Catalogs ► Rate Tables ► Create Rate Table Definition** .
2. On the *Create Rate Table Definition* screen, create a new entry for the container unit.
3. On the *General Data* tab page, enter the following data:

Table 295

Field	Description	Value
<i>Rate Table</i>	Unique identifier for the rate table	OAF-RT-CN-TYPE
<i>Description</i>	Description of the table	Rate Table for Container Type
<i>Charge Usage</i>	This indicator identifies in which situation this rate table can be used. It can be used for Customer Billing integration and/or Supplier Invoice integration, or neither.	Customer and Service Provider
<i>Charge Type</i>	This is where the charge type is linked for integration with SAP ERP.	ULF
<i>Charge Category</i>	This defaults from the charge type definition above.	012
<i>Charge Subcategory</i>	This defaults from the charge type definition above.	101021
<i>Positive/Negative</i>	This defaults from the charge type definition above.	Positive Value
<i>Value</i>	This defaults from the charge type definition above.	Absolute Value

4. On the *Scales* tab page, enter the following data:

Table 296

Field	Description	Value
<i>Scale Dimension Number</i>	On the rate table, this defines a row (x-axis) or a column (y-axis). You can have multiple scales (up to 9) in a rate table.	1 for the first scale (Region based)
<i>Reference Scale</i>	Assign the scales here for all carriers, which were defined above. This	1. OF-SCALE-EQU

Field	Description	Value
	enables the entries in the rate table as in the sequence.	
<i>Calculation Base</i>	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	1. EQUIP_TYPE
<i>Minimum Value</i>	Minimum value	Deselect
<i>Maximum Value</i>	Maximum value	Deselect
<i>Rel. Calc. Method</i>	Relative Calculation method	Deselect

5. On the *Dates and Values* tab page, enter the following data:

Table 297

Field	Description	Value
<i>Valid-From Date</i>	The date from which the rate table is valid	2011-01-01
<i>Valid-To Date</i>	The date to which the rate table is valid	2099-12-31
<i>Aggreg. Rate Description</i>	Aggregated rate description	Main Carriage
<i>Currency</i>	A currency that is applicable for this rate table	JPY

6. On the *Dates and Values* tab page, highlight the new row.
A new table appears in which you can enter the specific rates.
7. Choose *Insert* and enter the following rates:

Table 298

Source Location	Destination Location	Equipment Group	Value
OF-JPYOK	OF-USLGB	42G0	30000
OF-JPYOK	OF-USLGB	20G0	20000
OF-JPYOK	OF-USLGB	22R1	35000

8. Release the rate table by choosing ► *Set Status* ► *Released* ▾.
9. Save your entries.

10.2.3 Defining Rate Table: Truck Rate for Pickup (LTL)

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ► *Master Data* ► *Charge Management and Service Product Catalogs* ► *Rate Tables* ► *Create Rate Table Definition* ▾.

2. On the *Create Rate Table* screen, create the following entry:

Table 299

Field	Description	Value
General Data		
<i>Rate Table</i>	Unique identifier for the rate table	OAF-RATE-800
<i>Description</i>	Description of the table	Truck Rate for Pickup (LTL)
<i>Charge Usage</i>	This indicator identifies in which situation this rate table can be used. It can be used for Customer Billing integration and/or Supplier Invoice integration, or neither.	Service Provider
<i>Charge Type</i>	This is where the charge type is linked for integration with SAP ERP.	FB00
<i>Charge Category</i>	This defaults from the charge type definition above.	004
<i>Charge Subcategory</i>	This defaults from the charge type definition above.	100000
<i>Positive/Negative</i>	This defaults from the charge type definition above.	Positive Value
<i>Value</i>	This defaults from the charge type definition above.	Absolute Value
Scales		
<i>Scale Dimension Number</i>	On the rate table, this defines a row (x-axis) or a column (y-axis). You can have multiple scales (up to 9) in a rate table.	1 for the first scale (Region based)
<i>Reference Scale</i>	Assign the scales here for all carriers, which were defined above. This enables the entries in the rate table as in the sequence.	1. OAF-SCALE-SOURCE-LOC 2. OAF-SCALE-DEST-LOC
<i>Calculation Base</i>	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	1. SOURCELOC 2. DESTLOC
<i>Minimum Value</i>	Minimum value	Deselect
<i>Maximum Value</i>	Maximum value	Deselect
<i>Rel. Calc. Method</i>	Relative Calculation method	Deselect
Dates and Values		

Field	Description	Value
<i>Valid-From Date</i>	The valid-from date for the rate table	2011-01-01
<i>Valid-To Date</i>	The valid-to date for the rate table	2099-12-31
<i>Aggreg. Rate Description</i>	Aggregated rate description	Pre-Carriage
<i>Currency</i>	A currency that is applicable for this rate table	JPY

- On the *Dates and Values* tab page, highlight the newly created line. A new table appears below, where you can enter the specific rates.
- Choose *Insert* , and maintain the following rates:

Table 300

Source Location	Destination Location	Value
CUOAF-CU-01@ERP001	OAF-STA-JPTYO	5500
CUOAF-CU-02@ERP001	OAF-STA-JPTYO	5500
CUOAF-CU-03@ERP001	OAF-STA-JPTYO	5500
CUOAF-CU-04@ERP001	OAF-STA-JPTYO	5500
CUOAF-CU-01@ERP001	OAF-STA-JPNGO	5000
CUOAF-CU-02@ERP001	OAF-STA-JPNGO	5000
CUOAF-CU-03@ERP001	OAF-STA-JPNGO	5000
CUOAF-CU-04@ERP001	OAF-STA-JPNGO	5000

- On the *Calculation Rules* tab page, select the following values:

Table 301

Field	Value
<i>Calculation base</i>	CHRG_WEIGHT
<i>Application Level of Calculation Rule</i>	Rate Table
<i>Price Unit</i>	100
<i>Unit of Measure</i>	KG

- Release your rate table.
- Save your entries.

10.2.4 Defining Rate Table: Truck Rate for Pickup (FTL)

Procedure

- In SAP NetWeaver Business Client (NWBC), choose **Master Data > Charge Management and Service Product Catalogs > Rate Tables > Create Rate Table Definition** .

2. On the *Create Rate Table* screen, enter the following data on the *General Data* tab page:

Table 302

Field	Description	Value
<i>Rate Table</i>	Unique identifier for the rate table	OAF-RT-JP-TRUCKING
<i>Description</i>	Description of the table	Rate Table for Trucking JP
<i>Charge Usage</i>	This indicator identifies in which situation this rate table can be used. It can be used for Customer Billing integration and/or Supplier Invoice integration, or neither.	Customer and Service Provider
<i>Charge Type</i>	This is where the charge type is linked for integration with SAP ERP.	PIO
<i>Charge Category</i>	This defaults from the charge type definition above.	014
<i>Charge Subcategory</i>	This defaults from the charge type definition above.	101000
<i>Positive/Negative</i>	This defaults from the charge type definition above.	Positive Value
<i>Value</i>	This defaults from the charge type definition above.	Absolute Value

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

Table 303

Field	Description	Value
<i>Scale Dimension Number</i>	On the rate table, this defines a row (x-axis) or a column (y-axis). You can have multiple scales (up to 9) in a rate table.	1 for the first scale
<i>Reference Scale</i>	Assign the scales here for all carriers, which were defined above. This enables the entries in the rate table as in the sequence.	1. OAF-SCALE-ACT-DIST 2. OAF-WEIGHT
<i>Calculation Base</i>	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	1. ACTUAL_DIST 2. CHRG_WEIGHT
<i>Minimum Value</i>	Minimum value	1. Deselect 2. Select
<i>Maximum Value</i>	Maximum value	Deselect
<i>Rel. Calc. Method</i>	Relative calculation method	Deselect

4. On the *Dates and Values* tab page, highlight the new row.

A new table appears in which you can enter the specific rates.

5. Enter the following data:

Table 304

Field	Description	Value
<i>Valid-From Date</i>	The date from which the rate table is valid	2011-01-01
<i>Valid-To Date</i>	The date to which the rate table is valid	2099-12-31
<i>Currency</i>	A currency that is applicable for this rate table	JPY

6. In the *Rate* field, choose *Insert* and add the following rates:

Table 305

Actual Distance	Minimum Value	>= 0,1 TO (R)	>= 0,5 TO (R)	>= 1 TO (R)	>= 5 TO (R)
50	50	80	70	60	50
100	40	70	60	50	40
250	30	60	50	40	30
500	20	50	40	30	20
1000	10	40	30	20	10

7. On the *Calculation Rules* tab page, insert the following values:

Table 306

Field	Value
<i>Calculation Base</i>	ACTUAL_DIST
<i>Application Level of Calculation Rule</i>	Rate Table
<i>Price Unit</i>	1
<i>Unit of Measure</i>	KM
<i>Rounding Profile</i>	0005

8. On the *Calculation Rules* tab page, insert the following values:

Table 307

Field	Value
<i>Calculation Base</i>	CHRG_WEIGHT
<i>Application Level of Calculation Rule</i>	Rate Table
<i>Price Unit</i>	1
<i>Unit of Measure</i>	TO
<i>Rounding Profile</i>	0005

9. Release and save your rate table.

10.2.5 Defining Rate Table: Truck Rate for Pre-Carriage (FTL)

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ► *Master Data* ► *Charge Management and Service Product Catalogs* ► *Rate Tables* ► *Create Rate Table Definition* ►.
2. On the *Create Rate Table* screen, create a new entry. Enter the following data:

Table 308

Field	Description	Value
General Data		
<i>Rate Table</i>	Unique identifier for the rate table	OAF-RATE-801
<i>Description</i>	Description of the table	Truck Rate for Pre-Carriage (FTL)
<i>Charge Usage</i>	This indicator identifies in which situation this rate table can be used. It can be used for Customer Billing integration and/or Supplier Invoice integration, or neither.	Service Provider
<i>Charge Type</i>	This is where the charge type is linked for integration with SAP ERP.	FB00
<i>Charge Category</i>	This defaults from the charge type definition above.	004
<i>Charge Subcategory</i>	This defaults from the charge type definition above.	100000
<i>Positive/Negative</i>	This defaults from the charge type definition above.	Positive Value
<i>Value</i>	This defaults from the charge type definition above.	Absolute Value
Scales		
<i>Scale Dimension Number</i>	On the rate table, this defines a row (x-axis) or a column (y-axis). You can have multiple scales (up to 9) in a rate table.	1 for the first scale (Region based)
<i>Reference Scale</i>	Assign the scales here for all carriers, which were defined above. This enables the entries in the rate table as in the sequence.	1. OAF-SCALE-SOURCE-LOC 2. OAF-SCALE-DEST-LOC
<i>Calculation Base</i>	This determines how the values are stored and determined for this dimension. There are predefined	1. SOURCELOC 2. DESTLOC

Field	Description	Value
	sources of information based on the object.	
<i>Minimum Value</i>	Minimum value	Deselect
<i>Maximum Value</i>	Maximum value	Deselect
<i>Rel. Calc. Method</i>	Relative Calculation method	Deselect
Dates and Values		
<i>Valid-From Date</i>	The valid-from date for the rate table	2011-01-01
<i>Valid-To Date</i>	The valid-to date for the rate table	2099-12-31
<i>Aggreg. Rate Description</i>	Aggregated rate description	Pre-Carriage
<i>Currency</i>	A currency that is applicable for this rate table	JPY

- On the *Dates and Values* tab page, highlight the newly created line. A new table appears below, where you can enter the specific rates.
- Choose *Insert* , and maintain the following rates:

Table 309

Source Location	Destination Location	Value
OAF-STA-JPTYO	OF-CFS-JPYOK	200
OAF-STA-JPNGO	OF-CFS-JPYOK	180
CUOAF-CU-01@ERP001	OF-CFS-JPYOK	4000
CUOAF-CU-02@ERP001	OF-CFS-JPYOK	4150
CUOAF-CU-03@ERP001	OF-CFS-JPYOK	4400
CUOAF-CU-04@ERP001	OF-CFS-JPYOK	4250

- On the *Calculation Rules* tab page, select the following values:

Table 310

Field	Value
<i>Calculation base</i>	ACTUAL_DIST
<i>Application Level of Calculation Rule</i>	Rate Table
<i>Price Unit</i>	1
<i>Unit of Measure</i>	MI

- Once you have entered your data, release the rate table by choosing **► Set Status ► Released ►**.
- Save your entries.

10.2.6 Defining Rate Table: Truck Rate for On-Carriage (FTL)

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ► *Master Data* ► *Charge Management and Service Product Catalogs* ► *Rate Tables* ► *Create Rate Table Definition* ►.
2. On the *Create Rate Table* screen, create the following entry:

Table 311

Field	Description	Value
General Data		
<i>Rate Table</i>	Unique identifier for the rate table	OAF-RATE-850
<i>Description</i>	Description of the table	Truck Rate for On-Carriage (FTL)
<i>Charge Usage</i>	This indicator identifies in which situation this rate table can be used. It can be used for Customer Billing integration and/or Supplier Invoice integration, or neither.	Service Provider
<i>Charge Type</i>	This is where the charge type is linked for integration with SAP ERP.	FB00
<i>Charge Category</i>	This defaults from the charge type definition above.	004
<i>Charge Subcategory</i>	This defaults from the charge type definition above.	100000
<i>Positive/Negative</i>	This defaults from the charge type definition above.	Positive Value
<i>Value</i>	This defaults from the charge type definition above.	Absolute Value
Scales		
<i>Scale Dimension Number</i>	On the rate table, this defines a row (x-axis) or a column (y-axis). You can have multiple scales (up to 9) in a rate table.	1 for the first scale (Region based)
<i>Reference Scale</i>	Assign the scales here for all carriers, which were defined above. This enables the entries in the rate table as in the sequence.	1. OAF-SCALE-SOURCE-LOC 2. OAF-SCALE-DEST-LOC
<i>Calculation Base</i>	This determines how the values are stored and determined for this dimension. There are predefined	1. SOURCELOC 2. DESTLOC

Field	Description	Value
	sources of information based on the object.	
<i>Scale Type</i>	None	For both scales, enter Same Scale (=) .
<i>Minimum Value</i>	Minimum value	Deselect
<i>Maximum Value</i>	Maximum value	Deselect
<i>Rel. Calc. Method</i>	Relative Calculation method	Deselect
Dates and Values		
<i>Valid-From Date</i>	The valid-from date for the rate table	2011-01-01
<i>Valid-To Date</i>	The valid-to date for the rate table	2099-12-31
<i>Aggreg. Rate Description</i>	Aggregated rate description	On-Carriage
<i>Currency</i>	A currency that is applicable for this rate table	USD

- On the *Dates and Values* tab page, highlight the newly created line. A new table appears below, where you can enter the specific rates.
- Choose *Insert*, and maintain the following rates:

Table 312

Source Location	Destination Location	Value
OF-CFS-USLAX	OAF-STA-USPHX	1.95
OF-CFS-USLAX	OAF-STA-USSAN	1.95
OF-CFS-USLAX	OAF-STA-USSFO	1.95

- On the *Calculation Rules* tab page, select the following values:

Table 313

Field	Value
<i>Calculation base</i>	ACTUAL_DIST
<i>Application Level of Calculation Rule</i>	Rate Table
<i>Price Unit</i>	1
<i>Unit of Measure</i>	MI

- Once you have entered your data, release the rate table by choosing **► Set Status ► Released ►**.
- Save your entries.

10.2.7 Defining Rate Table: Truck Rate for Delivery (LTL)

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ► *Master Data* ► *Charge Management and Service Product Catalogs* ► *Rate Tables* ► *Create Rate Table Definition* ►.
2. On the *Create Rate Table* screen, create the following entry:

Table 314

Field	Description	Value
General Data		
<i>Rate Table</i>	Unique identifier for the rate table	OAF-RATE-851
<i>Description</i>	Description of the table	Truck Rate for Delivery (LTL)
<i>Charge Usage</i>	This indicator identifies in which situation this rate table can be used. It can be used for Customer Billing integration and/or Supplier Invoice integration, or neither.	Service Provider
<i>Charge Type</i>	This is where the charge type is linked for integration with SAP ERP.	FB00
<i>Charge Category</i>	This defaults from the charge type definition above.	004
<i>Charge Subcategory</i>	This defaults from the charge type definition above.	100000
<i>Positive/Negative</i>	This defaults from the charge type definition above.	Positive Value
<i>Value</i>	This defaults from the charge type definition above.	Absolute Value
Scales		
<i>Scale Dimension Number</i>	On the rate table, this defines a row (x-axis) or a column (y-axis). You can have multiple scales (up to 9) in a rate table.	1 for the first scale (Region based)
<i>Reference Scale</i>	Assign the scales here for all carriers, which were defined above. This enables the entries in the rate table as in the sequence.	1. OAF-SCALE-SOURCE-LOC 2. OAF-SCALE-DEST-LOC
<i>Calculation Base</i>	This determines how the values are stored and determined for this dimension. There are predefined	1. SOURCELOC 2. DESTLOC

Field	Description	Value
	sources of information based on the object.	
<i>Scale Type</i>	None	For both scales, enter Same Scale (=) .
<i>Minimum Value</i>	Minimum value	Deselect
<i>Maximum Value</i>	Maximum value	Deselect
<i>Rel. Calc. Method</i>	Relative Calculation method	Deselect
Dates and Values		
<i>Valid-From Date</i>	The valid-from date for the rate table	2011-01-01
<i>Valid-To Date</i>	The valid-to date for the rate table	2099-12-31
<i>Aggreg. Rate Description</i>	Aggregated rate description	On-Carriage
<i>Currency</i>	A currency that is applicable for this rate table	USD

- On the *Dates and Values* tab page, highlight the newly created line. A new table appears below, where you can enter the specific rates.
- Choose *Insert*, and maintain the following rates:

Table 315

Source Location	Destination Location	Value
OAF-STA-USPHX	CUOAF-CO-01@ERP001	70
OAF-STA-USPHX	CUOAF-CO-02@ERP001	36
OAF-STA-USSAN	CUOAF-CO-03@ERP001	25
OAF-STA-USPHX	CUOAF-CO-04@ERP001	10

- On the *Calculation Rules* tab page, select the following values:

Table 316

Field	Value
<i>Calculation base</i>	CHRG_WEIGHT
<i>Application Level of Calculation Rule</i>	Rate Table
<i>Price Unit</i>	100
<i>Unit of Measure</i>	KG

- Once you have entered your data, release the rate table by choosing **► Set Status ► Released ►**.
- Save your entries.

10.2.8 Defining Rate Table: Truck Rate for Delivery (FTL)

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ► *Master Data* ► *Charge Management and Service Product Catalogs* ► *Rate Tables* ► *Create Rate Table Definition* ►.
2. On the *Create Rate Table* screen, enter the following data on the *General Data* tab page:

Table 317

Field	Description	Value
<i>Rate Table</i>	Unique identifier for the rate table	OAF-RT-US-TRUCKING
<i>Description</i>	Description of the table	Rate Table for Trucking US
<i>Charge Usage</i>	This indicator identifies in which situation this rate table can be used. It can be used for Customer Billing integration and/or Supplier Invoice integration, or neither.	Customer and Service Provider
<i>Charge Type</i>	This is where the charge type is linked for integration with SAP ERP.	PIO
<i>Charge Category</i>	This defaults from the charge type definition above.	014
<i>Charge Subcategory</i>	This defaults from the charge type definition above.	101000
<i>Positive/Negative</i>	This defaults from the charge type definition above.	Positive Value
<i>Value</i>	This defaults from the charge type definition above.	Absolute Value

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

Table 318

Field	Description	Value
<i>Scale Dimension Number</i>	On the rate table, this defines a row (x-axis) or a column (y-axis). You can have multiple scales (up to 9) in a rate table.	1 for the first scale
<i>Reference Scale</i>	Assign the scales here for all carriers, which were defined above. This enables the entries in the rate table as in the sequence.	1. OAF-SCALE-ACT-DIST 2. OAF-WEIGHT
<i>Calculation Base</i>	This determines how the values are stored and determined for this dimension. There are predefined	1. ACTUAL_DIST 2. CHRG_WEIGHT

Field	Description	Value
	sources of information based on the object.	
<i>Minimum Value</i>	Minimum value	1. Deselect 2. Select
<i>Maximum Value</i>	Maximum value	Deselect
<i>Rel. Calc. Method</i>	Relative calculation method	Deselect

- On the *Dates and Values* tab page, highlight the new row.
A new table appears in which you can enter the specific rates.
- Enter the following data:

Table 319

Field	Description	Value
<i>Valid-From Date</i>	The date from which the rate table is valid	2011-01-01
<i>Valid-To Date</i>	The date to which the rate table is valid	2099-12-31
<i>Currency</i>	A currency that is applicable for this rate table	USD

- In the *Rate* field, choose *Insert* and add the following rates:

Table 320

Actual Distance	Minimum Value	>= 0.1 TO (R)	>= 0.5 TO (R)	>= 1 TO (R)	>= 5 TO (R)
50	0.55	0.8	0.65	0.6	0.55
100	0.45	0.7	0.55	0.5	0.45
250	0.35	0.6	0.45	0.4	0.35
500	0.25	0.4	0.35	0.3	0.25
1000	0.15	0.3	0.25	0.2	0.15

- On the *Calculation Rules* tab page, insert the following values:

Table 321

Field	Value
<i>Calculation Base</i>	ACTUAL_DIST
<i>Application Level of Calculation Rule</i>	Rate Table
<i>Price Unit</i>	1
<i>Unit of Measure</i>	KM
<i>Rounding Profile</i>	0005

- On the *Calculation Rules* tab page, insert the following values:

Table 322

Field	Value
<i>Calculation Base</i>	CHRG_WEIGHT
<i>Application Level of Calculation Rule</i>	Rate Table
<i>Price Unit</i>	1
<i>Unit of Measure</i>	TO
<i>Rounding Profile</i>	0005

9. Release and save your rate table.

10.2.9 Defining Calculation Sheets: Main Carriage (LCL)

Within a freight order or forwarding order, the applicable charges are calculated on the basis of the calculation sheet.

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ► *Master Data* ► *Charge Management and Service Product Catalogs* ► *Calculation Sheets* ► *Create Calculation Sheet* ►
2. Choose *Continue* .
3. On the *New Calculation Sheet* screen, enter your data based on the following tables.
4. On the *General Data* tab page, enter the following data in the *Basic Data* screen area:

Table 323

Field	Description	Value
<i>Calculation Sheet</i>	Unique identifier for the calculation sheet to be defined	OF-TCCS-CR-MAIN
<i>Description</i>	Description of the calculation sheet	Calculation sheet main carriage
<i>Charge Usage</i>	Indicates whether the calculation sheet is used for customers, vendors (carriers), both, or neither. Furthermore, indicates whether the calculation sheet is used only for decision making during tendering, and so on.	Service Provider

5. In the *Items* screen area, choose ► *Insert* ► *Single Item* ► to add a new line item.
6. Select the line for *20* .
Enter data in the area at the bottom of the screen.
7. On the *Basic Data* tab page, enter the following data:

Table 324

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Basic Freight
<i>Charge Type</i>	Assigned charge type	FB00
<i>Line No</i>	Line number of the item	20
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the header level for the whole freight order or at a particular stage only	CONTAINER
<i>Calculation Method Type</i>	Calculation method type	Standard
<i>Stage Category</i>	Stage category	M - Main Carriage
<i>Shipping Type</i>	Shipping type	2 LCL

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

Table 325

Field	Description	Value
<i>Rate Table</i>	Assigned rate table	OF-RATE-600
<i>Currency</i>	Unit of measure for quantitative rate amount	USD

9. In the *Items* screen area, choose ► *Insert* ► *Single Item* ▾ to add a new line item.
10. Select the line for **30**.
Enter data in the area at the bottom of the screen.
11. On the *Basic Data* tab page, enter the following data:

Table 326

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Bunker Adjustment Factor
<i>Charge Type</i>	Assigned charge type	BAF
<i>Line No</i>	Line number of the item	30

Field	Description	Value
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the header level for the whole freight order or at a particular stage only	CONTAINER
<i>Calculation Method Type</i>	Calculation method type	Standard
<i>Stage Category</i>	Stage category	M - Main Carriage
<i>Shipping Type</i>	Shipping type	Blank

12. On the *Rate* tab page, enter the following data:

Table 327

Field	Description	Value
<i>Rate Table</i>	Assigned rate table	OF-RATE-601
<i>Currency</i>	Unit of measure for quantitative amount	USD

13. In the *Items* screen area, choose ► *Insert* ► *Single Item* ▾ to add a new line item.

14. Select the line for *40* .

Enter data in the area at the bottom of the screen.

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

Table 328

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Terminal Handling Charge Origin
<i>Charge Type</i>	Assigned charge type	THCO
<i>Line No</i>	Line number of the item	40
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the header level for the whole freight order or at a particular stage only	CONTAINER
<i>Calculation Method Type</i>	Calculation method type	Standard
<i>Stage Category</i>	Stage category	M - Main Carriage
<i>Shipping Type</i>	Shipping type	Blank

16. On the *Rate* tab page, enter the following data:

Table 329

Field	Description	Value
<i>Rate Table</i>	Assigned rate table	OF-RATE-602
<i>Currency</i>	Unit of measure for quantitative amount	USD

17. In the *Items* screen area, choose ► *Insert* ► *Single Item* ► to add a new line item.
18. Select the line for *50* .
Enter data in the area at the bottom of the screen.
19. On the *Basic Data* tab page, enter the following data:

Table 330

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Terminal Handling Charge Destination
<i>Charge Type</i>	Assigned charge type	THCD
<i>Line No</i>	Line number of the item	50
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the header level for the whole freight order or at a particular stage only	CONTAINER
<i>Calculation Method Type</i>	Calculation method type	Standard
<i>Stage Category</i>	Stage category	M - Main Carriage
<i>Shipping Type</i>	Shipping type	Blank

20. On the *Rate* tab page, enter the following data:

Table 331

Field	Description	Value
<i>Rate Table</i>	Assigned rate table	OF-RATE-603
<i>Currency</i>	Unit of measure for quantitative amount	USD

21. In the *Items* screen area, choose ► *Insert* ► *Single Item* ► to add a new line item.
22. Select the line for *60* .
Enter data in the area at the bottom of the screen.
23. On the *Basic Data* tab page, enter the following data:

Table 332

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Peak Season Charge
<i>Charge Type</i>	Assigned charge type	PEAK
<i>Line No</i>	Line number of the item	60
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the header level for the whole freight order or at a particular stage only	CONTAINER
<i>Calculation Method Type</i>	Calculation method type	Standard
<i>Stage Category</i>	Stage category	M - Main Carriage
<i>Shipping Type</i>	Shipping type	Blank

24. On the *Rate* tab page, enter the following data:

Table 333

Field	Description	Value
<i>Rate Table</i>	Assigned rate table	OF-RATE-604
<i>Currency</i>	Unit of measure for quantitative rate amount. Note that this value is not available from the input help (<input type="text" value="F4"/>); you must enter it manually.	%
<i>Ref.-From Line No.</i>	Reference from line number	20
<i>Ref.-To Line Number</i>	Reference to line number	20

25. In the *Items* screen area, choose ► *Insert* ► *Single Item* ► to add a new line item.

26. Select the line for *70*.

Enter data in the area at the bottom of the screen.

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

Table 334

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Low Sulfur Surcharge
<i>Charge Type</i>	Assigned charge type	LSFS

Field	Description	Value
<i>Line No</i>	Line number of the item	70
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the header level for the whole freight order or at a particular stage only	CONTAINER
<i>Calculation Method Type</i>	Calculation method type	Standard
<i>Stage Category</i>	Stage category	M - Main Carriage
<i>Shipping Type</i>	Shipping type	Blank

28. On the *Rate* tab page, enter the following data:

Table 335

Field	Description	Value
<i>Rate Table</i>	Assigned rate table	OF-RATE-605
<i>Currency</i>	Unit of measure of quantitative amount	USD

29. Save your entries.

10.2.10 Defining Calculation Sheets: Main Carriage (FCL)

Within a freight order or forwarding order, the applicable charges are calculated on the basis of the calculation sheet.

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ► *Master Data* ► *Charge Management and Service Product Catalogs* ► *Calculation Sheets* ► *Create Calculation Sheet* ►
2. Choose *Continue* .
3. On the *New Calculation Sheet* screen, enter your data based on the following tables.
4. On the *General Data* tab page, enter the following data in the *Basic Data* screen area:

Table 336

Field	Description	Value
<i>Calculation Sheet</i>	Unique identifier for the calculation sheet to be defined	OF-TCCS-CR-MAIN-FCL
<i>Description</i>	Description of the calculation sheet	Calculation sheet main carriage FCL

Field	Description	Value
<i>Charge Usage</i>	Indicates whether the calculation sheet is used for customers, vendors (carriers), both, or neither. Furthermore, indicates whether the calculation sheet is used only for decision making during tendering, and so on.	Service Provider

5. In the *Items* screen area, choose ► *Insert* ► *Single Item* ▾ to add a new line item.
6. Select the line for *20* .
Enter data in the area at the bottom of the screen.
7. On the *Basic Data* tab page, enter the following data:

Table 337

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Basic Freight
<i>Charge Type</i>	Assigned charge type	FB00
<i>Line No</i>	Line number of the item	20
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the header level for the whole freight order or at a particular stage only	CONTAINER
<i>Calculation Method Type</i>	Calculation method type	Standard
<i>Shipping Type</i>	Shipping type	Blank

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

Table 338

Field	Description	Value
<i>Rate Table</i>	Assigned rate table	OF-RATE-600
<i>Currency</i>	Unit of measure for quantitative rate amount	USD

9. In the *Items* screen area, choose ► *Insert* ► *Single Item* ▾ to add a new line item.
10. Select the line for *30* .
Enter data in the area at the bottom of the screen.
11. On the *Basic Data* tab page, enter the following data:

Table 339

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Bunker Adjustment Factor
<i>Charge Type</i>	Assigned charge type	BAF
<i>Line No</i>	Line number of the item	30
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the header level for the whole freight order or at a particular stage only	CONTAINER
<i>Calculation Method Type</i>	Calculation method type	Standard
<i>Stage Category</i>	Stage category	M - Main Carriage
<i>Shipping Type</i>	Shipping type	Blank

12. On the *Rate* tab page, enter the following data:

Table 340

Field	Description	Value
<i>Rate Table</i>	Assigned rate table	OF-RATE-601
<i>Currency</i>	Unit of measure for quantitative amount	USD

13. In the *Items* screen area, choose ► *Insert* ► *Single Item* ▾ to add a new line item.

14. Select the line for *40*.

Enter data in the area at the bottom of the screen.

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

Table 341

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Terminal Handling Charge Origin
<i>Charge Type</i>	Assigned charge type	THCO
<i>Line No</i>	Line number of the item	40

Field	Description	Value
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the header level for the whole freight order or at a particular stage only	CONTAINER
<i>Calculation Method Type</i>	Calculation method type	Standard
<i>Stage Category</i>	Stage category	M - Main Carriage
<i>Shipping Type</i>	Shipping type	Blank

16. On the *Rate* tab page, enter the following data:

Table 342

Field	Description	Value
<i>Rate Table</i>	Assigned rate table	OF-RATE-602
<i>Currency</i>	Unit of measure for quantitative amount	USD

17. In the *Items* screen area, choose ► *Insert* ► *Single Item* ▾ to add a new line item.

18. Select the line for *50* .

Enter data in the area at the bottom of the screen.

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

Table 343

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Terminal Handling Charge Destination
<i>Charge Type</i>	Assigned charge type	THCD
<i>Line No</i>	Line number of the item	50
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the header level for the whole freight order or at a particular stage only	CONTAINER
<i>Calculation Method Type</i>	Calculation method type	Standard
<i>Stage Category</i>	Stage category	M - Main Carriage
<i>Shipping Type</i>	Shipping type	Blank

20. On the *Rate* tab page, enter the following data:

Table 344

Field	Description	Value
<i>Rate Table</i>	Assigned rate table	OF-RATE-603
<i>Currency</i>	Unit of measure for quantitative amount	USD

21. In the *Items* screen area, choose ► *Insert* ► *Single Item* ► to add a new line item.

22. Select the line for *60* .

Enter data in the area at the bottom of the screen.

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

Table 345

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Peak Season Charge
<i>Charge Type</i>	Assigned charge type	PEAK
<i>Line No</i>	Line number of the item	60
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the header level for the whole freight order or at a particular stage only	CONTAINER
<i>Calculation Method Type</i>	Calculation method type	Standard
<i>Stage Category</i>	Stage category	M - Main Carriage
<i>Shipping Type</i>	Shipping type	Blank

24. On the *Rate* tab page, enter the following data:

Table 346

Field	Description	Value
<i>Rate Table</i>	Assigned rate table	OF-RATE-604
<i>Currency</i>	Unit of measure for quantitative rate amount. Note that this value is not available from the input help (<input type="text" value="F4"/>); you must enter it manually.	%
<i>Ref.-From Line No.</i>	Reference from line number	20
<i>Ref.-To Line Number</i>	Reference to line number	20

25. In the *Items* screen area, choose ► *Insert* ► *Single Item* ► to add a new line item.

26. Select the line for *70* .

Enter data in the area at the bottom of the screen.

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

Table 347

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Low Sulfur Surcharge
<i>Charge Type</i>	Assigned charge type	LSFS
<i>Line No</i>	Line number of the item	70
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the header level for the whole freight order or at a particular stage only	CONTAINER
<i>Calculation Method Type</i>	Calculation method type	Standard
<i>Stage Category</i>	Stage category	M - Main Carriage
<i>Shipping Type</i>	Shipping type	Blank

28. On the *Rate* tab page, enter the following data:

Table 348

Field	Description	Value
<i>Rate Table</i>	Assigned rate table	OF-RATE-605
<i>Currency</i>	Unit of measure of quantitative amount	USD

29. Select the line for **80**.

Enter data in the area at the bottom of the screen.

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

Table 349

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Charge for Container Unit
<i>Charge Type</i>	Assigned charge type	ULF
<i>Line No</i>	Line number of the item	80
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the	CONTAINER

Field	Description	Value
	header level for the whole freight order or at a particular stage only	
<i>Calculation Method Type</i>	Calculation method type	Standard
<i>Stage Category</i>	Stage category	M - Main Carriage
<i>Shipping Type</i>	Shipping type	Blank

31. On the *Rate* tab page, enter the following data:

Table 350

Field	Description	Value
<i>Rate Table</i>	Assigned rate table	OAF-RT-CN-TYPE
<i>Currency</i>	Unit of measure of quantitative amount	USD

32. Save your entries.

10.2.11 Defining Calculation Sheets: Pickup (LTL)

Within a freight order or forwarding order, the applicable charges are calculated on the basis of the calculation sheet.

Procedure

1. In SAP NetWeaver Business Client, choose ► *Master Data* ► *Charge Management and Service Product Catalogs* ► *Calculation Sheets* ► *Create Calculation Sheet* ►
2. Choose *Continue* .
3. On the *New Calculation Sheet* screen, enter your data based on the following tables.
4. On the *General Data* tab page, enter the following data in the *Basic Data* screen area:

Table 351

Field	Description	Value
<i>Calculation Sheet</i>	Unique identifier for the calculation sheet to be defined	OAF-TCCS-CR-LTL-JP
<i>Description</i>	Description of the calculation sheet	Calculation sheet pickup
<i>Charge Usage</i>	Indicates whether the calculation sheet is used for customers, vendors (carriers), both, or neither. Furthermore, indicates whether the calculation sheet is used only for decision making during tendering, and so on.	Service Provider

5. In the *Items* screen area, choose ► *Insert* ► *Single Item* ► to add a new line item.
6. Select the line for *20* .
Enter data in the area at the bottom of the screen.
7. On the *Basic Data* tab page, enter the following data:

Table 352

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Basic Freight
<i>Charge Type</i>	Assigned charge type	FB00
<i>Line No</i>	Line number of the item	20
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the header level for the whole freight order or at a particular stage only	Blank
<i>Calculation Method Type</i>	Calculation method type	Standard
<i>Dimensional Weight Profile</i>	Dimensional weight profile	ZOAF_LAND3

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

Table 353

Field	Description	Value
<i>Rate Table</i>	Assigned rate table	OAF-RATE-800
<i>Currency</i>	Unit of measure for quantitative amount	USD

9. Save your entries.

10.2.12 Defining Calculation Sheets: Pickup (FCL)

Within a freight order or forwarding order, the applicable charges are calculated on the basis of the calculation sheet.

Procedure

1. In SAP NetWeaver Business Client, choose ► *Master Data* ► *Charge Management and Service Product Catalogs* ► *Calculation Sheets* ► *Create Calculation Sheet* ►
2. Choose *Continue* .
3. On the *New Calculation Sheet* screen, enter your data based on the following tables.

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

Table 354

Field	Description	Value
<i>Calculation Sheet</i>	Unique identifier for the calculation sheet to be defined	OAF-TCCS-CR-FCL-JP
<i>Description</i>	Description of the calculation sheet	Calculation sheet pickup
<i>Charge Usage</i>	Indicates whether the calculation sheet is used for customers, vendors (carriers), both, or neither. Furthermore, indicates whether the calculation sheet is used only for decision making during tendering, and so on.	Service Provider

5. In the *Items* screen area, choose ► *Insert* ► *Single Item* ▾ to add a new line item.

6. Select the line for **20**.

Enter data in the area at the bottom of the screen.

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

Table 355

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Basic Freight
<i>Charge Type</i>	Assigned charge type	PIO
<i>Line No</i>	Line number of the item	20
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the header level for the whole freight order or at a particular stage only	Blank
<i>Calculation Method Type</i>	Calculation method type	Standard
<i>Dimensional Weight Profile</i>	Dimensional weight profile	ZOAF_LAND3

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

Table 356

Field	Description	Value
<i>Rate Table</i>	Assigned rate table	OAF-RT-JP-TRUCKING
<i>Currency</i>	Unit of measure for quantitative amount	USD

9. Select the line for **30**.

Enter data in the area at the bottom of the screen.

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

Table 357

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Provisioning Basic Rate
<i>Charge Type</i>	Assigned charge type	BASIC
<i>Line No</i>	Line number of the item	30
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the header level for the whole freight order or at a particular stage only	Blank
<i>Calculation Method Type</i>	Calculation method type	Standard
<i>Stage Category</i>	Stage category	P - Pre-Carriage
<i>Dimensional Weight Profile</i>	Dimensional weight profile	ZOAF_LAND3

11. On the *Rate* tab page, enter the following data:

Table 358

Field	Description	Value
<i>Rate Table</i>	Assigned rate table	Blank
<i>Currency</i>	Unit of measure for quantitative amount	JPY
<i>Amount</i>	Amount	100000

12. Save your entries.

10.2.13 Defining Calculation Sheets: Pre-Carriage (FTL)

Within a freight order or forwarding order, the applicable charges are calculated on the basis of the calculation sheet.

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ► *Master Data* ► *Charge Management and Service Product Catalogs* ► *Calculation Sheets* ► *Create Calculation Sheet* ►
2. Choose *Continue* .
3. On the *New Calculation Sheet* screen, enter your data based on the following tables.

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

Table 359

Field	Description	Value
<i>Calculation Sheet</i>	Unique identifier for the calculation sheet to be defined	OAF-TCCS-CR-FTL-JP
<i>Description</i>	Description of the calculation sheet	Calculation sheet pre-carriage
<i>Charge Usage</i>	Indicates whether the calculation sheet is used for customers, vendors (carriers), both, or neither. Furthermore, indicates whether the calculation sheet is used only for decision making during tendering, and so on.	Service Provider

5. In the *Items* screen area, choose ► *Insert* ► *Single Item* ▾ to add a new line item.
 6. Select the line for *20*.
 Enter data in the area at the bottom of the screen.
 7. On the *Basic Data* tab page, enter the following data:

Table 360

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Basic Freight
<i>Charge Type</i>	Assigned charge type	FB00
<i>Line No</i>	Line number of the item	20
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the header level for the whole freight order or at a particular stage only	Blank
<i>Calculation Method Type</i>	Calculation method type	Standard
<i>Stage Category</i>	Stage category	P - Pre-Carriage
<i>Shipping Type</i>	Shipping type	2 (LCL)

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

Table 361

Field	Description	Value
<i>Rate Table</i>	Assigned rate table	OAF-RATE-801

Field	Description	Value
<i>Currency</i>	Unit of measure for quantitative amount	USD

9. On the *Preconditions* tab page under *Trade Lanes* , choose *Insert* and enter the following data:

Table 362

Orientation	Destination Type	Destination Location
To	Location	OF-CFS-JPYOK

10. In the *Items* screen area, choose ► *Insert* ► *Single Item* ▾ to add a new line item.
 11. Select the line for *30* .

Enter data in the area at the bottom of the screen.

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

Table 363

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Drayage
<i>Charge Type</i>	Assigned charge type	FB00
<i>Line No</i>	Line number of the item	30
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the header level for the whole freight order or at a particular stage only	Blank
<i>Calculation Method Type</i>	Calculation method type	Standard
<i>Stage Category</i>	Stage category	P - Pre-Carriage
<i>Shipping Type</i>	Shipping type	2 (LCL)

13. On the *Rate* tab page, enter the following data:

Table 364

Field	Description	Value
<i>Amount</i>	Fixed Amount for this charge item	20000
<i>Currency</i>	Unit of measure for quantitative amount	JPY

14. On the *Preconditions* tab page under *Trade Lanes* , choose *Insert* and enter the following data:

Table 365

Orientation	Source Type	Destination Type	Source Location	Destination Location
To		Location		OF-JPYOK

Orientation	Source Type	Destination Type	Source Location	Destination Location
From	Location		OF-CFS-JPYOK	

15. Save your entries.

10.2.14 Defining Calculation Sheets: Delivery (LTL)

Within a freight order or forwarding order, the applicable charges are calculated on the basis of the calculation sheet.

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ► *Master Data* ► *Charge Management and Service Product Catalogs* ► *Calculation Sheets* ► *Create Calculation Sheet* ►.
2. Choose *Continue* .
3. On the *New Calculation Sheet* screen, enter your data based on the following tables.
4. On the *General Data* tab page, enter the following data in *Basic Data* screen area:

Table 366

Field	Description	Value
<i>Calculation Sheet</i>	Unique identifier for the calculation sheet that is to be defined	OAF-TCCS-CR-LTL-US
<i>Description</i>	Description of the calculation sheet	Calculation sheet delivery
<i>Charge Usage</i>	Indicates whether the calculation sheet is used for customers, vendors (carriers), both, or neither. Also indicates whether the calculation sheet is used only for decision making during tendering, and so on.	Service Provider

5. In *Items* screen area, choose ► *Insert* ► *Single Item* ► to add a new line item.
6. Select the line for *20* .
Enter data in the area at the bottom of the screen.
7. On the *Basic Data* tab page, enter the following data:

Table 367

Field	Description	Value
<i>Line No</i>	Line number of the item	20
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Basic Freight

Field	Description	Value
<i>Charge Type</i>	Assigned charge type	FB00
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at header level for the whole freight order or at the level of a particular stage only.	Blank
<i>Stage Category</i>	Stage category	O - On Carriage
<i>Calculation Method Type</i>	Calculation method type	Standard

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

Table 368

Field	Description	Value
<i>Rate Table</i>	Assigned rate table	OAF-RATE-851
<i>Currency</i>	Unit of measure for the quantitative rate amount	USD

9. Save your entries.
10. In the *Items* screen area, choose ► *Insert* ► *Single Item* ▾ to add a new line item.
11. Select the line for 30.
Enter data in the area at the bottom of the screen.
12. On the *Basic Data* tab page, enter the following data:

Table 369

Field	Description	Value
<i>Line No</i>	Line number of the item	30
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Fuel Surcharge
<i>Charge Type</i>	Assigned charge type	FUEL
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at header level for the whole freight order or at the level of a particular stage only.	Blank
<i>Stage Category</i>	Stage category	O - On-Carriage
<i>Calculation Method Type</i>	Calculation method type	Standard

13. On the *Rate* tab page, enter the following data:

Table 370

Field	Description	Value
<i>Amount</i>	Fixed amount for this charge item	10
<i>Currency</i>	Unit of measure for quantitative rate amount	%
<i>Ref.-From / -To Line No.</i>	Reference to a base rate	20

14. Save your entries.

10.2.15 Defining Calculation Sheets: Delivery (FCL)

Within a freight order or forwarding order, the applicable charges are calculated on the basis of the calculation sheet.

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ► *Master Data* ► *Charge Management and Service Product Catalogs* ► *Calculation Sheets* ► *Create Calculation Sheet* ►.
2. Choose *Continue* .
3. On the *New Calculation Sheet* screen, enter your data based on the following tables.
4. On the *General Data* tab page, enter the following data in *Basic Data* screen area:

Table 371

Field	Description	Value
<i>Calculation Sheet</i>	Unique identifier for the calculation sheet that is to be defined	OAF-TCCS-CR-FCL-US
<i>Description</i>	Description of the calculation sheet	Calculation sheet delivery FCL
<i>Charge Usage</i>	Indicates whether the calculation sheet is used for customers, vendors (carriers), both, or neither. Also indicates whether the calculation sheet is used only for decision making during tendering, and so on.	Service Provider

5. In *Items* screen area, choose ► *Insert* ► *Single Item* ► to add a new line item.
6. Select the line for *20* .
Enter data in the area at the bottom of the screen.
7. On the *Basic Data* tab page, enter the following data:

Table 372

Field	Description	Value
<i>Line No</i>	Line number of the item	20
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Basic Freight
<i>Charge Type</i>	Assigned charge type	PIO
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at header level for the whole freight order or at the level of a particular stage only.	Blank
<i>Stage Category</i>	Stage category	O - On Carriage
<i>Calculation Method Type</i>	Calculation method type	Standard

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

Table 373

Field	Description	Value
<i>Rate Table</i>	Assigned rate table	OAF-RT-US-TRUCKING
<i>Currency</i>	Unit of measure for the quantitative rate amount	USD

9. Save your entries.
10. In the *Items* screen area, choose ► *Insert* ► *Single Item* ▾ to add a new line item.
11. Select the line for 30.

Enter data in the area at the bottom of the screen.

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

Table 374

Field	Description	Value
<i>Line No</i>	Line number of the item	30
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Fuel Surcharge
<i>Charge Type</i>	Assigned charge type	FUEL
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at header level for the whole freight order or at the level of a particular stage only.	Blank

Field	Description	Value
<i>Stage Category</i>	Stage category	O - On-Carriage
<i>Calculation Method Type</i>	Calculation method type	Standard

13. On the *Rate* tab page, enter the following data:

Table 375

Field	Description	Value
<i>Amount</i>	Fixed amount for this charge item	10
<i>Currency</i>	Unit of measure for quantitative rate amount	%
<i>Ref.-From / -To Line No.</i>	Reference to a base rate	20

14. Save your entries.

10.2.16 Defining Calculation Sheets: On-Carriage (FTL)

Within a freight order or forwarding order, the applicable charges are calculated on the basis of the calculation sheet.

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ► *Master Data* ► *Charge Management and Service Product Catalogs* ► *Calculation Sheets* ► *Create Calculation Sheet* ►.
2. Choose *Continue* .
3. On the *New Calculation Sheet* screen, enter your data based on the following tables.
4. On the *General Data* tab page, enter the following data in *Basic Data* screen area:

Table 376

Field	Description	Value
<i>Calculation Sheet</i>	Unique identifier for the calculation sheet to be defined	OAF-TCCS-CR-FTL-US
<i>Description</i>	Description of the calculation sheet	Calculation Sheet On-Carriage
<i>Charge Usage</i>	Indicates whether the calculation sheet is used for customers, vendors (carriers), both, or neither. Furthermore, indicates whether the calculation sheet is used only for decision making during tendering, and so on.	Service Provider

5. In the *Items* screen area, choose ► *Insert* ► *Single Item* ► to add a new line item.

6. Select the line for *20*.

Enter data in the area at the bottom of the screen.

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

Table 377

Field	Description	Value
<i>Line No</i>	Line number of the item	20
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Basic Freight
<i>Charge Type</i>	Assigned charge type	FB00
<i>Shipping Type</i>	Shipping type	2 (LCL)
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at header level for the whole freight order or at the level of a particular stage only.	Blank
<i>Stage Category</i>	Stage category	O - On-Carriage
<i>Calculation Method Type</i>	Calculation method type	Standard

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

Table 378

Field	Description	Value
<i>Rate Table</i>	Assigned rate table	OAF-RATE-850
<i>Currency</i>	Quantitative rate amount Unit of Measure	USD

9. On the *Preconditions* tab page under *Trade Lanes*, choose *Insert* and enter the following data:

Table 379

Orientation	Source Type	Source Location
From	Location	OF-CFS-USLAX

10. Save your entries.

11. In the *Items* screen area, choose **▶ Insert ▶ Single Item ▶** to add a new line item.

12. Select the line for *30*.

Enter data in the area at the bottom of the screen.

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

Table 380

Field	Description	Value
<i>Line No</i>	Line number of the item	30

Field	Description	Value
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Fuel Surcharge
<i>Charge Type</i>	Assigned charge type	FUEL
<i>Shipping Type</i>	Shipping type	2 (LCL)
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at header level for the whole freight order or at the level of a particular stage only.	Blank
<i>Stage Category</i>	Stage category	O - On-Carriage
<i>Calculation Method Type</i>	Calculation method type	Standard

14. On the *Rate* tab page, enter the following data:

Table 381

Field	Description	Value
<i>Amount</i>	Fixed amount for this charge item	40
<i>Currency</i>	Unit of measure for quantitative rate amount	%
<i>Ref.-From / -To Line No.</i>	Reference to a base rate	20

15. On the *Preconditions* tab page under *Trade Lanes*, choose *Insert* and enter the following data:

Table 382

Orientation	Source Type	Destination Type	Source Location	Destination Location
From	Location	Blank	OF-CFS-USLAX	Blank

16. Save your entries.
17. In the *Items* screen area, choose ► *Insert* ► *Single Item* ▢ to add a new line item.
18. Select the line for 40.

Enter your data in the area at the bottom of the screen.

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

Table 383

Field	Description	Value
<i>Line No</i>	Line number of the item	40
<i>Instruction Type</i>	Rule to indicate how the charge item is applied for the calculation	Standard
<i>Description</i>	Description of the charge item in the calculation sheet	Drayage

Field	Description	Value
<i>Charge Type</i>	Assigned charge type	FB00
<i>Shipping Type</i>	Shipping type	2 (LCL)
<i>Calculation Resolution Base</i>	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at header level for the whole freight order or at the level of a particular stage only.	Blank
<i>Stage Category</i>	Stage category	O - On-Carriage
<i>Calculation Method Type</i>	Calculation method type	Standard

20. On the *Rate* tab page, enter the following data:

Table 384

Field	Description	Value
<i>Amount</i>	Fixed amount for this charge item	2000
<i>Currency</i>	Unit of measure for quantitative rate amount	USD

21. On the *Preconditions* tab page under *Trade Lanes* , choose *Insert* and enter the following data:

Table 385

Orientation	Source Type	Destination Type	Source Location	Destination Location
From	Location	Blank	OF-USLGB	Blank
To	Blank	Location	Blank	OF-CFS-USLAX

22. Save your entries.

10.2.17 Defining Freight Agreement Types

Procedure

1. In Customizing for *Transportation Management* , choose **Master Data** > *Agreements and Service Products* > *Define Freight Agreement Types* .
2. Choose *New Entries* .
3. Enter the following data:

Table 386

Field	Description	Value
<i>Type</i>	Freight agreement type	OF08
<i>Short Desc .</i>	Short description (free text)	OF: Freight Agreement
<i>FA No. Range</i>	Number range interval	03

4. Save your entries and ignore any warning messages.
5. Select freight agreement **OF08** and choose *Specify Preconditions* .
6. Create new entry for precondition:
 - MOT
 - MOVEM_TYPE
 - SHIPMENT
 - STAGE_CAT
7. Save your entries.

More Information

[Defining Freight Agreements: Ocean Carrier \[page 202\]](#)

[Defining Freight Agreements: Trucking \[page 204\]](#)

10.2.17.1 Defining Freight Agreements: Ocean Carrier

Freight agreements contain all of the information that you require to calculate freight charges.

Prerequisites

You have defined a freight agreement type.

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ► *Master Data* ► *Charge Management and Service Product Catalogs* ► *Freight Agreements* ► *Create Freight Agreement* ►
2. On the *New Freight Agreement* screen, enter the relevant freight agreement type in the *Agreement Type* field. For example, **OF08** .
3. Choose *Continue* .
4. Create an agreement for ocean carrier **OF-CR-02** . Enter the following data:

Table 387

Field	Description	Value
<i>Agreement</i>	Agreement ID	OF-FA-CR-02
<i>Description</i>	Description of the freight agreement	OF Main CR-02
<i>Purchasing Organization</i>	Default purchasing organization	OF-FWH-03
<i>Carrier</i>	Carrier for which this freight agreement is to be defined	OAF-CR-02

Field	Description	Value
<i>Valid From</i>	Validity date range	2011-01-01
<i>Valid To</i>		2099-12-31
<i>Agreement Priority</i>	Priority of the agreement	5
<i>Document currency</i>	Agreement currency	USD

5. In the *Items* screen area, enter the following data by choosing ► *Insert* ► *Insert Product* ► :

Table 388

Field	Description	Value
<i>Item Hierarchy</i>	Item hierarchy	Product
<i>Item Number</i>	Item number	100
<i>Dimensional Weight Profile</i>	Dimensional weight profile	Blank
<i>Movement Type</i>	Movement type	CFS to CFS
<i>Calculation Sheet</i>	Assign the calculation sheet once only. The details from this sheet are copied for each item.	OF-TCCS-CR-MAIN

6. On the *Precondition* tab page, select *Item Precondition* and enter the following data:

Table 389

Precondition	Description	Movement Type
MOVEM_TYPE	Movement type	CC

7. In the *Items* screen area, enter the following data by choosing ► *Insert* ► *Insert Product* ► :

Table 390

Field	Description	Value
<i>Item Number</i>	Item number	200
<i>Calculation Sheet</i>	Assign the calculation sheet once only. The details from this sheet are copied for each item.	OF-TCCS-CR-MAIN-FCL
<i>Dimensional Weight Profile</i>	Dimensional weight profile	Blank
<i>Movement Type</i>	Movement type	Port to Port

8. On the *Precondition* tab page, select *Item Precondition* and enter the following data:

Table 391

Precondition	Description	Movement Type
MOVEM_TYPE	Movement type	PP

9. Once you have entered your data, release the freight agreement by choosing ► *Set Status* ► *Released* ► .
10. Choose *Save* .
11. Create another freight agreement for ocean carrier **OF-CR-01** . Enter the following data:

Table 392

Field	Description	Value
<i>Agreement</i>	Agreement ID	OF-FA-CR-01
<i>Description</i>	Description of the freight agreement	OF Main CR-01
<i>Purchasing Organization</i>	Default purchasing organization	OF-FWH-03
<i>Carrier</i>	Carrier for which this freight agreement is to be defined	OAF-CR-01
<i>Valid From</i>	Validity date range	2011-01-01
<i>Valid To</i>		2099-12-31
<i>Agreement Priority</i>	Priority of the agreement	5
<i>Document currency</i>	Agreement currency	USD

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

Table 393

Field	Description	Value
<i>Item Number</i>	Item number	100
<i>Dimensional Weight Profile</i>	Dimensional weight profile	
<i>Stage Category</i>	Stage category type P: pre-carriage M: Main carriage O: On-carriage	Main Carriage
<i>Calculation Sheet</i>	Assign the calculation sheet once only. The details from this sheet are copied for each item.	OF-TCCS-CR-MAIN

13. Once you have entered your data, release the freight agreement by choosing **► Set Status ► Released** .
 14. Choose **Save** .

10.2.17.2 Defining Freight Agreements: Trucking

Freight agreements contain all of the information that you require to calculate freight charges.

You need to maintain the freight agreements for all your carriers (truckers) and for both stage types LTL and FTL. This procedure defines freight agreements for the carriers in Japan and the United States.

The procedure maintains the following forwarding house (purchasing organization) and carrier combinations:

Table 394

Purchasing Org.	Carrier	Type	Agreement ID
OAF-FWH-05	OAF-CR-03	LTL/FTL Pickup	OF-FA-CR-03-01
OAF-FWH-01	OAF-CR-04	LTL Pickup	OF-FA-CR-04-01

Purchasing Org.	Carrier	Type	Agreement ID
OF-FWH-03	OAF-CR-03	FTL Pre-carriage	OF-FA-CR-03
OF-FWH-03	OAF-CR-04	FTL Pre-carriage	OF-FA-CR-04
OF-FWH-20	OAF-CR-05	FTL On-carriage	OF-FA-CR-05
OF-FWH-20	OAF-CR-06	FTL On-carriage	OF-FA-CR-06
OAF-FWH-22	OAF-CR-05	LTL Delivery	OF-FA-CR-05-01
OAF-FWH-21	OAF-CR-06	LTL/FTL Delivery	OF-FA-CR-06-01

Prerequisites

You have defined a freight agreement type.

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ► *Freight Agreement Management* ► *Freight Agreements* ► *Create Freight Agreement* ►
2. On the *New Freight Agreement* screen, enter the relevant freight agreement type in the *Agreement Type* field. For example, **OF08**.
3. Choose *Continue*.
4. Create an FTL agreement. Enter the following data:

Table 395

Field	Description	Value
<i>Agreement</i>	Agreement ID	OF-FA-CR-03
<i>Description</i>	Description of the freight agreement	OF FTL Japan
<i>Purchasing Organization</i>	Default purchasing organization	OF-FWH-03
<i>Carrier</i>	Carrier for which this freight agreement is to be defined	OAF-CR-03
<i>Valid From</i>	Validity date range	2011-01-01
<i>Valid To</i>		2099-12-31
<i>Agreement Priority</i>	Priority of the agreement	5
<i>Document currency</i>	Agreement currency	JPY

5. In the *Items* screen area, enter the following data by choosing ► *Insert* ► *Insert Product* ►:

Table 396

Field	Description	Value
<i>Item Number</i>	Item number	100

Field	Description	Value
<i>Dimensional Weight Profile</i>	Dimensional weight profile	ZOAF_LAND3
<i>Calculation Sheet</i>	Assign the calculation sheet once only. The details from this sheet are copied for each item.	OAF-TCCS-CR-FTL-JP

6. Once you have entered your data, release the freight agreement by choosing ► **Set Status** ► **Released** ►.
7. Choose **Save** .
8. Create another freight agreement for the FTL stage type. Enter the following data:

Table 397

Field	Description	Value
<i>Agreement</i>	Agreement ID	OF-FA-CR-04
<i>Description</i>	Description of the freight agreement	OF FTL Japan
<i>Purchasing Organization</i>	Default purchasing organization	OF-FWH-03
<i>Carrier</i>	Carrier for which this freight agreement is to be defined	OAF-CR-04
<i>Valid From</i>	Validity date range	2011-01-01
<i>Valid To</i>		2099-12-31
<i>Agreement Priority</i>	Priority of the agreement	5
<i>Document currency</i>	Agreement currency	JPY

9. In the *Items* screen area, enter the following data by choosing ► **Insert** ► **Insert Product** ►:

Table 398

Field	Description	Value
<i>Item Number</i>	Item number	100
<i>Calculation Sheet</i>	Assign the calculation sheet once only. The details from this sheet are copied for each item.	OAF-TCCS-CR-FTL-JP
<i>Dimensional Weight Profile</i>	Dimensional weight profile	ZOAF_LAND3

10. Once you have entered your data, release the freight agreement by choosing ► **Set Status** ► **Released** ►.
11. Choose **Save** .
12. Create another freight agreement for the FTL stage type. Enter the following data:

Table 399

Field	Description	Value
<i>Agreement</i>	Agreement ID	OF-FA-CR-05
<i>Description</i>	Description of the freight agreement	OF FTL USA
<i>Purchasing Organization</i>	Default purchasing organization	OF-FWH-20

Field	Description	Value
<i>Carrier</i>	Carrier for which this freight agreement is to be defined	OAF-CR-05
<i>Valid From</i>	Validity date range	2011-01-01
<i>Valid To</i>		2099-12-31
<i>Agreement Priority</i>	Priority of the agreement	5
<i>Document currency</i>	Agreement currency	USD

13. In the *Items* screen area, enter the following data by choosing ► *Insert* ► *Insert Product* ► :

Table 400

Field	Description	Value
<i>Item Number</i>	Item number	100
<i>Calculation Sheet</i>	Assign the calculation sheet once only. The details from this sheet are copied for each item.	OAF-TCCS-CR-FTL-US
<i>Dimensional Weight Profile</i>	Dimensional weight profile	ZOAF_LAND3

14. Once you have entered your data, release the freight agreement by choosing ► *Set Status* ► *Released* ► .
15. Choose *Save* .
16. Create another freight agreement for the FTL stage type. Enter the following data:

Table 401

Field	Description	Value
<i>Agreement</i>	Agreement ID	OF-FA-CR-06
<i>Description</i>	Description of the freight agreement	OF FTL USA
<i>Purchasing Organization</i>	Default purchasing organization	OF-FWH-20
<i>Carrier</i>	Carrier for which this freight agreement is to be defined	OAF-CR-06
<i>Valid From</i>	Validity date range	2011-01-01
<i>Valid To</i>		2099-12-31
<i>Agreement Priority</i>	Priority of the agreement	5
<i>Document currency</i>	Agreement currency	USD

17. In the *Items* screen area, enter the following data by choosing ► *Insert* ► *Insert Product* ► :

Table 402

Field	Description	Value
<i>Item Number</i>	Item number	100
<i>Calculation Sheet</i>	Assign the calculation sheet once only. The details from this sheet are copied for each item.	OAF-TCCS-CR-FTL-US

Field	Description	Value
<i>Dimensional Weight Profile</i>	Dimensional weight profile	ZOAF_LAND3

18. Once you have entered your data, release the freight agreement by choosing **► Set Status ► Released ►**.
19. Choose **Save**.
20. Create another freight agreement for the LTL stage type. Enter the following data:

Table 403

Field	Description	Value
<i>Agreement</i>	Agreement ID	OF-FA-CR-03-01
<i>Description</i>	Description of the freight agreement	OF LTL/FTL Japan
<i>Purchasing Organization</i>	Default purchasing organization	OAF-FWH-05
<i>Carrier</i>	Carrier for which this freight agreement is to be defined	OAF-CR-03
<i>Valid From</i>	Validity date range	2011-01-01
<i>Valid To</i>		2099-12-31
<i>Agreement Priority</i>	Priority of the agreement	5
<i>Document currency</i>	Agreement currency	JPY

21. In the *Items* screen area, enter the following data by choosing **► Insert ► Insert Product ►**:

Table 404

Field	Description	Value
<i>Item Number</i>	Item number	100
<i>Calculation Sheet</i>	Assign the calculation sheet once only. The details from this sheet are copied for each item.	OAF-TCCS-CR-LTL-JP
<i>Dimensional Weight Profile</i>	Dimensional weight profile	ZOAF_LAND3

22. On the *Precondition* tab page, select *Item Precondition* and enter the following data:

Table 405

Precondition	Description	Shipping Type
SHIPMENT	Shipping Type	LTL (Less Than Truck Load)

23. In the *Items* screen area, enter the following data by choosing **► Insert ► Insert Product ►**:

Table 406

Field	Description	Value
<i>Item Number</i>	Item number	200
<i>Calculation Sheet</i>	Assign the calculation sheet once only. The details from this sheet are copied for each item.	OAF-TCCS-CR-FCL-JP
<i>Dimensional Weight Profile</i>	Dimensional weight profile	ZOAF_LAND3

24. On the *Precondition* tab page, select *Item Precondition* and enter the following data:

Table 407

Precondition	Description	Shipping Type
SHIPMENT	Shipping Type	FTL (Full Truck Load)

25. Once you have entered your data, release the freight agreement by choosing **► Set Status ► Released ►**.
 26. Choose *Save* .
 27. Create another freight agreement for the LTL stage type. Enter the following data:

Table 408

Field	Description	Value
<i>Agreement</i>	Agreement ID	OF-FA-CR-04-01
<i>Description</i>	Description of the freight agreement	OF LTL Japan
<i>Purchasing Organization</i>	Default purchasing organization	OAF-FWH-01
<i>Carrier</i>	Carrier for which this freight agreement is to be defined	OAF-CR-04
<i>Valid From</i>	Validity date range	2011-01-01
<i>Valid To</i>		2099-12-31
<i>Agreement Priority</i>	Priority of the agreement	5
<i>Document currency</i>	Agreement currency	JPY

28. In the *Items* screen area, enter the following data by choosing **► Insert ► Insert Product ►**:

Table 409

Field	Description	Value
<i>Item Number</i>	Item number	100
<i>Calculation Sheet</i>	Assign the calculation sheet once only. The details from this sheet are copied for each item.	OAF-TCCS-CR-LTL-JP
<i>Dimensional Weight Profile</i>	Dimensional weight profile	ZOAF_LAND3

29. Once you have entered your data, release the freight agreement by choosing **► Set Status ► Released ►**.
 30. Choose *Save* .
 31. Create another freight agreement for the LTL/FTL stage types using the following data:

Table 410

Field	Description	Value
<i>Agreement</i>	Agreement ID	OF-FA-CR-05-01
<i>Description</i>	Description of the freight agreement	OF LTL USA
<i>Purchasing Organization</i>	Default purchasing organization	OAF-FWH-22
<i>Carrier</i>	Carrier for which this freight agreement is to be defined	OAF-CR-05

Field	Description	Value
<i>Valid From</i>	Validity date range	2011-01-01
<i>Valid To</i>		2099-12-31
<i>Agreement Priority</i>	Priority of the agreement	5
<i>Document currency</i>	Agreement currency	USD

32. In the *Items* screen area, enter the following data by choosing ► *Insert* ► *Insert Product* ►:

Table 411

Field	Description	Value
<i>Item Number</i>	Item number	100
<i>Calculation Sheet</i>	Assign the calculation sheet once only. The details from this sheet are copied for each item.	OAF-TCCS-CR-LTL-US
<i>Dimensional Weight Profile</i>	Dimensional weight profile	ZOAF_LAND3

Note that you can either insert an item or item service product.

33. Once you have entered your data, release the freight agreement by choosing ► *Set Status* ► *Released* ►.

34. Choose *Save* .

35. Create another freight agreement for the LTL/FTL stage types using the following data:

Table 412

Field	Description	Value
<i>Agreement</i>	Agreement ID	OF-FA-CR-06-01
<i>Description</i>	Description of the freight agreement	OF LTL/FTL USA
<i>Purchasing Organization</i>	Default purchasing organization	OAF-FWH-21
<i>Carrier</i>	Carrier for which this freight agreement is to be defined	OAF-CR-06
<i>Valid From</i>	Validity date range	2011-01-01
<i>Valid To</i>		2099-12-31
<i>Agreement Priority</i>	Priority of the agreement	5
<i>Document currency</i>	Agreement currency	USD

36. In the *Items* screen area, enter the following data by choosing ► *Insert* ► *Insert Product* ►:

Table 413

Field	Description	Value
<i>Item Number</i>	Item number	100
<i>Calculation Sheet</i>	Assign the calculation sheet once only. The details from this sheet are copied for each item.	OAF-TCCS-CR-LTL-US

Field	Description	Value
<i>Dimensional Weight Profile</i>	Dimensional weight profile	ZOAF_LAND3

Note that you can either insert a an item or item service product.

37. On the *Precondition* tab page, select *Item Precondition* and enter the following data:

Table 414

Precondition	Description	Shipping Type
SHIPMENT	Shipping Type	LTL (Less Than Truck Load)

38. In the *Items* screen area, enter the following data by choosing **Insert > Insert Product** :

Table 415

Field	Description	Value
<i>Item Number</i>	Item number	200
<i>Calculation Sheet</i>	Assign the calculation sheet once only. The details from this sheet are copied for each item.	OAF-TCCS-CR-FCL-US
<i>Dimensional Weight Profile</i>	Dimensional weight profile	ZOAF_LAND3

39. On the *Precondition* tab page, select *Item Precondition* and enter the following data:

Table 416

Precondition	Description	Shipping Type
SHIPMENT	Shipping Type	FTL (Full Truck Load)

40. Once you have entered your data, release the freight agreement by choosing **Set Status > Released** .

41. Choose *Save* .

10.2.18 Defining Freight Settlement Document Types

If you have already completed the [Defining Freight Order Types \[page 43\]](#) section, the information given in this section may already be complete.

Procedure

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

Table 417

Field	Value
<i>FSD Type</i>	OF06

Field	Value
Description	OF: Carrier Settlement Document
FSD Category	10
Bus. Warehouse	Select
No. Range Interval	01
Output Profile	/SCMTMS/TOR_INV_PREP
Add. Output Profile	/SCMTMS/SFIR_PRINT
Dynamic Determination of Output Profile	Deselect

4. Save your entries.

i Note

If required, you can return to the [Defining Freight Order Types \[page 43\]](#) section to continue.

11 Configuration Settings for Invoice Integration

Use this process to make configuration settings in SAP ERP that enable you to integrate invoice processing in SAP ERP with SAP Transportation Management (SAP TM).

The process requires the following procedures:

- [Invoice integration \[page 213\]](#)
- [Defining default account assignment of cost element \[page 215\]](#)
- [Assigning organizational units for purchasing \[page 217\]](#)

11.1 Invoice Integration

The following documents can be transferred to SAP ERP: *Freight settlement document (FSD)* , and *Forwarding settlement document (FWSD)* .

Message Flow Invoice Integration

Forwarding Settlement Requests and Customer Invoices

Table 418

Message	Description
Customer Freight Invoice Request SUITE Request_Out_V1	Send create/change requests for forwarding settlements from TM
Customer Freight Invoice Request SUITE Request_In_V1	Receive create/change requests for customer invoices in ERP
Customer Freight Invoice Request SUITE Confirmation_Out_V1	Send confirmations for customer invoices from ERP
Customer Freight Invoice Request SUITE Confirmation_In_V1	Receive confirmations for forwarding settlements in TM
Customer Freight Invoice Request SUITE Cancellation Request_Out_V1	Send cancel requests for forwarding settlements from TM
Customer Freight Invoice Request SUITE Cancellation Request_In_V1	Receive cancel requests for customer invoices in ERP

Freight Settlement Requests and Supplier Invoices

Table 419

Message	Description
TransportationOrderSUITE InvoicingPreparationRequest_Out	Send create/change requests for freight settlements from TM
TransportationOrderSUITE InvoicingPreparationRequest_In	Receive create/change requests for supplier invoices in ERP
TransportationOrderSUITE InvoicingPreparationConfirmation_Out	Send confirmations for supplier invoices from ERP
TransportationOrderSUITE InvoicingPreparationConfirmation_In	Receive confirmations for freight settlements in TM
TransportationOrderSUITE InvoicingPreparationCancellationRequest_Out	Send cancel requests for freight settlements from TM
TransportationOrderSUITE InvoicingPreparationCancellationRequest_In	Receive cancel requests for supplier invoices in ERP

Invoice Notifications

Table 420

Message	Description
InvoiceNotification_Out	Send invoice notification from ERP
InvoiceNotification_In	Receive invoice notifications in TM

Activities

In SAP ERP, you maintain the customizing entries for Invoice Integration under [Integration with Other SAP.com Components](#) > [Transportation Management](#) > [Invoice Integration](#) .

Billing

To integrate FWSD – SD billing document, maintain the following entries:

- The definition of charge elements from SAP TM with the necessary category codes, subcategory codes, and charge types (*Definition for Transportation Charge Elements*)
- There are role codes to be maintained for TM currency and amount (*Definition of Transportation Management Role Codes*)
- Mapping TM charge elements to condition types in SAP ERP (*Assignment of Transportation Charge Elements*)
- Mapping the TM sales organization/sales group to ERP sales organization, type, and document type (*Mapping of Organizational Units*)

Invoicing

To integrate FSD – Service PO/SES documents, maintain the following entries:

- The definition of charge elements from TM with the necessary category codes, subcategory codes, and charge types (*Definition for Transportation Charge Elements*).
- There are role codes to be maintained for TM currency and amount (*Definition of Transportation Management Role Codes*)
- Mapping TM charge elements and types to services and account assignment category in SAP ERP (▶ *Assignment of Transportation Charge Elements* ▶ *Assign Service Master Record and Account Assignment Category* ▶)
- Mapping the TM purchasing organization/group to ERP purchasing organization, group, plant, company code, and purchase order document type (*Mapping of Organizational Units*)

11.2 Defining Default Account Assignment of Cost Element

Procedure

1. In the SAP ERP system, in *Customizing for Controlling* , choose ▶ *Cost Center Accounting* ▶ *Actual Postings* ▶ *Manual Actual Postings* ▶ *Edit Automatic Account Assignment* ▶ .
2. Create a new entry with the following data:

Table 421

Field	Value
<i>Company Code</i>	3000
<i>Cost Element</i>	417000
<i>Cost Center</i>	9010

i Note

Check that the cost element is created in ERP for the assigned Controlling Area (in this scenario, this is CO Area 2000).

If the cost element is not created in the Controlling Area, you need to create the cost element in the SAP ERP system using transaction KA01 .

Basic settings for invoice integration in the SAP ERP System are described in the *ERP Basic Settings Configuration Guide* .

11.3 Configuring Automatic Posting for Account Determination

Procedure

1. In the SAP ERP system, in *Customizing for Materials Management*, choose ▶ *Valuation and Account Assignment* ▶ *Account Determination* ▶ *Account Determination Without Wizard* ▶ *Configure Automatic Postings* ▶ .

2. Choose *Cancel* , and then *Account Assignment* .
3. Double-click the line *Offsetting entry for inventory posting GBB* , enter **CAJP** for *Chart of Accounts* . Choose *OK* .
4. Choose *New entry* and enter the following data:

Table 422

Valuation modification	General modification	Valuation class	Debit	Credit
0001	VBR	3200	823510	823510

5. Save your entries.

11.4 Deactivating Profitability Analysis for Controlling Area 5000

Procedure

1. In the SAP ERP system, in *Customizing for Controlling* , choose ► *Controlling* ► *Profitability Analysis* ► *Flows of Actual Values* ► *Activate Profitability Analysis* ► .
2. Change the *Active Status* for controlling area 5000 to blank.
3. Save your entries.

11.5 Unlocking Revenues for Cost Center

Procedure

1. In the SAP ERP system, in *Customizing for Enterprise Structure* , choose ► *Definition* ► *Controlling* ► *Create Cost Centers* ► .
2. Select *Change Cost Center* .
3. Select cost center 5100 in controlling area 5000 .
4. Navigate to the *Control* tab page.
5. Deselect *Actual revenues* and *Plan revenues* .
6. Save your entries.

11.6 Assigning Cost Center to Cost Element

Procedure

1. In the SAP ERP system in the user menu, choose ► *Accounting* ► *Controlling* ► *Cost Element Accounting* ► *Master Data* ► *Cost Element* ► *Individual Processing* ► *KA02 - Change* ► .

2. Select cost element 811100 .
3. Navigate to the *Default Acct. Assignment* tab page.
4. Enter Cost Center **5100** .
5. Save your entries.

11.7 Assigning Organizational Units for Purchasing

Procedure

1. In the SAP ERP system, navigate to Customizing and choose **Integration with Other SAP Components > Transportation Management > Invoice Integration > Invoicing > Mapping of Organizational Units > Assign Organization Units for Purchasing** .
2. Check that mapping has been set up between SAP ERP and the organizational units in SAP TM. If not, create the entries below. Make sure that you use the 8-digit organizational ID that was generated in the sections above for each purchasing organization in SAP TM.
3. Enter the data in the table below for the following SAP TM purchasing organizations:
 - OAF-COMP-JP
 - OAF-FWH-01
 - OF-FWH-03
 - OAF-FWH-04
 - OAF-FWH-05

Table 423

Field	Value
<i>Logical System</i>	<logical system name of your TM system>
<i>TM Purchasing Org.</i>	<Automatically generated 8-digit organizational ID>
<i>TM Purchasing group</i>	Blank
<i>Settlement Type</i>	OF06
<i>Purchasing Org.</i>	5000
<i>Purchasing Group</i>	003
<i>Plant</i>	5000
<i>Company Code</i>	5000
<i>Doc. Type</i>	NB
<i>Material Group</i>	24000000

4. Enter the data in the table below for the following purchasing organizations:
 - OAF-COMP-US
 - OF-FWH-20

- OAF-FWH-21
- OAF-FWH-22
- OAF-FWH-25

Table 424

Field	Value
<i>Logical System</i>	<logical system name of your TM system>
<i>TM Purchasing Org.</i>	<Automatically generated 8-digit organizational ID>
<i>TM Purchasing group</i>	Blank
<i>Settlement Type</i>	OF06
<i>Purchasing Org.</i>	3000
<i>Purchasing Group</i>	003
<i>Plant</i>	3000
<i>Company Code</i>	3000
<i>Doc. Type</i>	NB
<i>Material Group</i>	24000000

5. Save your entries.
6. Repeat the above steps for settlement document type **OF09** .

12 Defining Configuration Settings for Billing Integration

Procedure

Defining Condition Types

1. In Customizing for SAP ERP, choose ► *Sales and Distribution* ► *Basic Functions* ► *Pricing* ► *Pricing Control* ► *Define Condition Types* ►.
2. Choose *Maintain Condition Types* .
3. Check that the following condition types exist and have the following values:

Table 425

Cond. Type	Description	Cond. Class	Calculat. Type	Plus / Minus	Item condition	Delete	Value
Z010	OF: Ocean Freight	A	B	Positive	X	X	X
Z011	OF: B/L Fix Fee	A	B	Positive	X	X	X
Z012	OF: CAF	A	B	Positive	X	X	X
Z013	OF: BAF	A	B	Positive	X	X	X
Z014	OF: Piracy Risk Sur	A	B	Positive	X	X	X
Z015	OF: EBAF	A	B	Positive	X	X	X
Z016	OF: IPSD	A	B	Positive	X	X	X
Z017	OF: THCD	A	B	Positive	X	X	X
Z018	OF: Land Pre-Carriage	A	B	Positive	X	X	X
Z019	OF: Fuel Surcharge	A	B	Positive	X	X	X
Z020	OF: Toll Fee Fix	A	B	Positive	X	X	X
Z021	OF: Land On-Carriage	A	B	Positive	X	X	X
Z022	OF: AMS Fee	A	B	Positive	X	X	X
Z023	OF: THCO	A	B	Positive	X	X	X

Defining Pricing

1. In Customizing for SAP ERP, choose ► *Sales and Distribution* ► *Basic Functions* ► *Pricing* ► *Pricing Control* ► *Define And Assign Pricing Procedures* ►.
2. Choose *Maintain Pricing Procedures* .
3. Create a new entry with the code **ZVA001** and description **OF: Standard** .
4. Select the newly created entry **ZVA001** and choose *Control Data* in the navigation tree.
5. Create new entries with the following data:

Table 426

Step	Condition Type	Account Key
1	Z010	ERL
2	Z011	ERL
3	Z012	ERL
4	Z013	ERL
5	Z014	ERL
6	Z015	ERL
7	Z016	ERL
8	Z017	ERL
9	Z018	ERL
10	Z019	ERL
11	Z020	ERL
12	Z021	ERL
13	Z022	ERL
900	PR00 Price	Not relevant

Assign Pricing

1. In Customizing for SAP ERP, choose ► *Sales and Distribution* ► *Basic Functions* ► *Pricing* ► *Pricing Control* ► *Define And Assign Pricing Procedures* ►.
2. Choose *Define Pricing Procedure Determination* .
3. Check the existing entries in the SAP ERP system and refer to the *Basic ERP Configuration Guide* . If the following entries do not exist, create new entries with the following data:

Table 427

Field	Entry
<i>Sales Organization</i>	3000
<i>Distribution Channel</i>	01
<i>Division</i>	00 and 01
<i>Document Procedure (DoPr)</i>	A

Field	Entry
<i>Pricing Procedure</i>	ZVA001

Table 428

Field	Entry
<i>Sales Organization</i>	5000
<i>Distribution Channel</i>	10
<i>Division</i>	00
<i>Document Procedure (DoPr)</i>	A
<i>Pricing Procedure</i>	ZVA001

13 Setting Up Mapping Rules Between SAP TM and SAP ERP

Procedure

Assign Condition Types

1. In Customizing for SAP ERP, choose [Integration with Other SAP Components](#) > [Transportation Management](#) > [Invoice Integration](#) > [Billing](#) > [Assignment of Transportation Charge Elements](#) > [Assign Condition Types](#) .
2. Enter the following data:

Table 429

Category Code	Subcategory Code	Charge Type	Condition Type
003	101021	BSF	Z010
002	104000	BLAD	Z011
012	103009	CAF	Z012
012	103001	BAF	Z013
012	103009	PRS	Z014
002	103001	EBAF	Z015
002	104012	IPSD	Z016
007	104007	THCD	Z017
010	104007	THCO	Z023
014	100000	PRE	Z018
003	103008	FUEL	Z019
002	104000	AMS	Z022
002	104000	TOLL	Z020
014	100000	ON	Z021

Assign Organizational Units

1. In Customizing for SAP ERP, choose [Integration with Other SAP Components](#) > [Transportation Management](#) > [Invoice Integration](#) > [Billing](#) > [Mapping of Organizational Units](#) > [Assign Organizational Units for Sales and Distribution](#) .
2. Enter the following data:

Table 430

Logical System	<TM1CLNT001>	<TM1CLNT001>	<TM1CLNT001>	<TM1CLNT001>
----------------	--------------	--------------	--------------	--------------

See Note 1.				
TM Sales Org See Note 2.	<Org ID for OAF-FWH-01>	<Org ID for OAF-FWH-05>	<Org ID for OAF-FWH-03>	<Org ID for OAF-FWH-04>
Sales Org	5000	5000	5000	5000
Distr. Channel	10	10	10	10
Division	00	00	00	00
Procedure	ZVA001	ZVA001	ZVA001	ZVA001
Billing Type	FX	FX	FX	FX
Sales Doc. Type	AA	AA	AA	AA
Item Cat	DLN	DLN	DLN	DLN
Nr. Int. Ass.	01	01	01	01

Table 431

Logical System See Note 1.	<TM1CLNT001>	<TM1CLNT001>	<TM1CLNT001>	<TM1CLNT001>
TM Sales Org See Note 2.	<Org ID for OAF-FWH-20>	<Org ID for OAF-FWH-21>	<Org ID for OAF-FWH-22>	<Org ID for OAF-FWH-25>
Sales Org	3000	3000	3000	3000
Distr. Channel	10	10	10	10
Division	00	00	00	00
Procedure	ZVA001	ZVA001	ZVA001	ZVA001
Billing Type See Note 3.	FX	FX	FX	FX
Sales Doc. Type	AA	AA	AA	AA
Item Cat	DLN	DLN	DLN	DLN
Nr. Int. Ass.	01	01	01	01

i Note

1. Replace the logical system name given here with the logical system name of your SAP TM system.
2. Enter the internal organizational ID numbers for the stations and gateways that were defined in SAP TM (that is, not organizational names such as OAF-FWH-05). For more information, see [Creating Forwarding Houses \[page 63\]](#).
3. Call transaction `FBN1` and check whether the validity of number range 01 (for company code 5000) has been extended to include the current year. Otherwise, create a new entry.
4. You can block billing documents from being automatically transferred to accounting within SAP ERP systems by selecting the *Posting Block* checkbox in Customizing for billing types. We recommend that

you deselect this checkbox according to your business process so that you do not have to transfer and process the documents manually.

14 Troubleshooting

Problem

What can I do if I cannot create purchase orders in ERP because the posting period is not open for company code 5000 ?

Solution

The standard procedure to open the current period for posting is by using transaction `MMPV`. In rare cases it can happen that the last open period was a number years ago, and closing all intermediate periods is time consuming. In this case, you can reset the posting period with the instructions provided in SAP Note [487381](#) – RMMMINT: Protection against unintentional execution.



Caution

This is absolutely not recommended in a productive system.

You may also have to specify the time intervals for posting periods. Run transaction `OB52` and make sure that for all entries for company codes 3000 and 5000 the “to period” year is set to the current year.

Problem

There is an error message in transaction `MIRO` when monitoring invoice verification for company code 3000:
In Company code 3000, the number range 51 is missing for the year 2011.

Solution

You should maintain a number range in transaction `FBN1` for interval range **51** and company code 3000 for the current year.

Problem

When sending the *Forwarding Settlement Document* to ERP, the inbound processing fails with the error messages:
According to status, sales order item xxxxxxxx cannot be invoiced
and
Assign condition type xxxx in CO-PA

Solution

1. Deactivate CO-PA..
2. Run transaction `OKEV`.
3. Select *controlling area 1000*.
4. Deselect *Actual* for the CO-PA plan version.

Problem

What needs to be done if an error message occurs saying that the number range for goods receipts documents is missing?

Solution

Run transaction `OMBT` and add an interval for the current year for groups *Material documents for goods movements and inventory diffs.* and *Material documents for goods receipts* .

Problem

I get an error message saying that number ranges for accounting documents are not valid for the current year.

Solution

1. Run transaction `SNRO` .
2. Select `RF_BELEG` .
3. Choose *Change* .
4. Choose *Number ranges* .
5. Enter company code `5000` .
6. Choose *Change intervals* and add intervals for numbers 50 and 51 for the current year.

Problem




When the system sends a forwarding settlement document to SAP ERP, XML message processing fails on the SAP ERP side and you receive the error message `For object , number range interval does not exist` .

Solution

The validity of number range 01 must be extended to include the current year. Use transaction `FBN1` to create an entry for company code 5000 and number range 01.

Typographic Conventions

Table 432

Example	Description
<Example>	Angle brackets indicate that you replace these words or characters with appropriate entries to make entries in the system, for example, "Enter your <User Name>".
▶ Example ▶ Example ▶	Arrows separating the parts of a navigation path, for example, menu options
Example	Emphasized words or expressions
Example	Words or characters that you enter in the system exactly as they appear in the documentation
www.sap.com 	Textual cross-references to an internet address
/example	Quicklinks added to the internet address of a homepage to enable quick access to specific content on the Web
123456 	Hyperlink to an SAP Note, for example, SAP Note 123456 
<i>Example</i>	<ul style="list-style-type: none"> Words or characters quoted from the screen. These include field labels, screen titles, pushbutton labels, menu names, and menu options. Cross-references to other documentation or published works
Example	<ul style="list-style-type: none"> Output on the screen following a user action, for example, messages Source code or syntax quoted directly from a program File and directory names and their paths, names of variables and parameters, and names of installation, upgrade, and database tools
EXAMPLE	Technical names of system objects. These include report names, program names, transaction codes, database table names, and key concepts of a programming language when they are surrounded by body text, for example, SELECT and INCLUDE
EXAMPLE	Keys on the keyboard



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