CUSTOMER

Configuration Guide for Air Freight
SAP Transportation Management

SAP

Content

1 Configuration Guide for Air Freight

About This Document

This configuration guide describes a gateway consolidation scenario for air freight. Implement the scenario as described here and once you have verified the functions, you can modify the data to suit your own environment and operating conditions.

Change History

Table 2

Version	Date	Description
1.0	September 2012	Initial release for SAP TM 9.0
2.0	December 2013	Update for SAP TM 9.1
3.0		
4.0	September 2015	Update for SAP TM 9.3 with Transit Warehousing
5.0	December 2015	Update for SAP TM 9.3 with Transit Warehousing

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
2229144	Solution Manager Content Updates for SAP TM 9.3

2 The Scenario

This document describes the configuration settings for the *Less Than Container Load Air Freight* scenario in SAP Transportation Management (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 the country template for company codes including general ledger accounts) and change them as necessary (for example, by substituting the addresses).

Recommendation for Creation of Master Data

If you want to use invoice integration to the SAP ERP system, or the SAP EWM system for transit warehousing, you have to create master data like locations and business partners in the SAP ERP system and then transfer these to SAP TM using CIF. For this, you can use Business Add-Ins (BAdIs), which add a prefix or suffix to master data objects transferred from SAP ERP to SAP TM (see SAP Note 458914). The following table provides an overview of the prefixes and suffixes used in this document:

Table 4

Business Object	Prefix	Suffix
Customer	CU-	-@ERP001
Plant	PL-	-@ERP001
Shipping Point	SP-	-@ERP001
Supplier	SU-	-@ERP001
System	None	-@ERP001

For example:

- Shipping point name in SAP ERP: 1200
- Shipping point name in SAP TM: SP1200@ERP001

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 master data objects transferred from SAP ERP to SAP TM, apply 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- / -@ERP001	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

This document uses the system ID ERP001 as an example. Substitute this with your own system ID.

Prerequisites

> **i** Note
>
> **Technical Settings**
>
> Business system groups, logical systems, RFC (remote function call) connections, and system connections used throughout this guide are only for examples. Replace the example values with your own data.

Business Configuration

Before you begin to configure this scenario, see the following guides in SAP Solution Manager:

- Basic Settings and Integration for ERP
- Basic Settings for SAP TM
- Integration of Output Management
- Basic Settings for Visual Business
- Integration of Event Management
- Integration of SAP Event Management (optional)
- Transit Warehousing (Chapter 4 Configuration: Transit Warehousing) (optional)

In transaction *SOLAR02* in SAP Solution Manager you have to include these listed documents in your configuration structure. You can find them in Customizing for *Transportation Management* under *Basic Settings for SAP TM* .

> **i** Note
>
> As a prerequisite, create your implementation project and select the scenarios you need to configure. For more details, refer to the document *How to Create a Configuration Guide Using SAP Solution Manager* which can be found on Help Portal SAP Solution Manager 7.1 under ▌ *Best Practices and How-To Information* ❯ *How-To Guides* ❯ *SAP Support Portal* ❯ *How-To Documents* ▐ .

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

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 this scenario, you must configure 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 *Air Freight* scenario assumes an international transportation network with four shippers located in Japan, transport by air from the airport in Tokyo/Narita to Los Angeles, and four customers located in the western part of the United States.
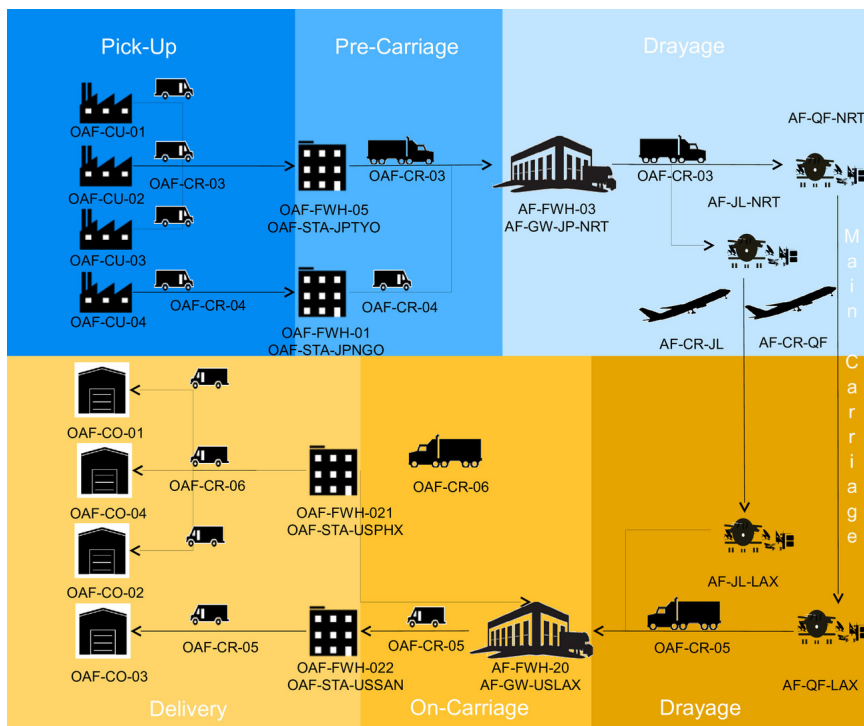
Figure 1: Stages in the "Air Freight" Scenario

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 for 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 for the 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 Overview of SAP ERP and SAP TM Master Data

The following master data is used in SAP ERP throughout this scenario. For information about how to create this data, see the following sections.

Table 8

Master Data	Type	Name	Description	Location (Country/ City)	Assigned Company Code	CIF Required (SAP ERP to SAP TM)	Comment
Vendor	Business Partner	OAF-CR-03	Uchida Trucking	JP/Ota-ku	JP	Yes	Land carrier
		OAF-CR-04	Ich-Ni Express	JP/Nagoya	JP	Yes	
		OAF-CR-05	ACME Lines	US/Long Beach	US	Yes	
		OAF-CR-06	Desert Express Lines	US/Phoenix	US	Yes	
Vendor	Business Partner	AF-CR-JL	Rising Sun Airlines Ltd.	JP/Narita Intl. Airport	JP	Yes	Global Air Carrier
		AF-CR-QF	Oceanic Airways Limited	AU/Mascot	US	Yes	
Vendor	Business Partner	AF-JL-NRT	Rising Sun Airlines Ltd.	JP/Narita Intl. Airport	JP	Yes	Local Air Carrier
		AF-QF-NRT	Oceanic Airways (Japan) KK Ltd.	JP/Narita Intl. Airport	JP	Yes	
		AF-JL-LAX	Rising Sun Airlines (US) Ltd.	US/Los Angeles Intl. Airport	US	Yes	
		AF-QF-LAX	Oceanic Airways (USA) KK Ltd.	US/Los Angeles Intl. Airport	US	Yes	
		AF-QF-SYD	Oceanic Airways (Australia) Ltd.	AU/Sydney Intl. Airport	AU	Yes	

Master Data	Type	Name	Description	Location (Country/ City)	Assigned Company Code	CIF Required (SAP ERP to SAP TM)	Comment
Customer	Business Partner	OAF-CU-01	KAN XINSON CLOTHING CO. LTD.	JP/Chiyoda-ku	JP	Yes	None
		OAF-CU-02	Wabei Electronics Factory	JP/Ota-ku	JP	Yes	
		OAF-CU-03	Japan Cable LTD	JP/Gifu	JP	Yes	
		OAF-CU-04	Samurai Fireworks LTD	JP/Minato-ku	JP	Yes	
		OAF-CO-01	Dosena Clothing Co Factory	US/Sedona	US	Yes	
		OAF-CO-02	Ten Media Inc.	US/Tucson	US	Yes	
		OAF-CO-03	Soutwire CO.	US/Brawley	US	Yes	
		OAF-CO-04	Scottsdale Fireworks Inc.	US/ Scottsdale	US	Yes	
Plant	Location	5000	Not applicable	JP/Tokyo	None	Not applicable	None
		3300	Not applicable	US/Los Angeles	None	Not applicable	
Receiving Point	Location	5000	Not applicable	JP/Tokyo	None	Not applicable	None
		3300	Not applicable	US/Los Angeles	None	Not applicable	

3.1 Schedules Used in This Scenario

This scenario uses the schedules as shown in the following graphic:
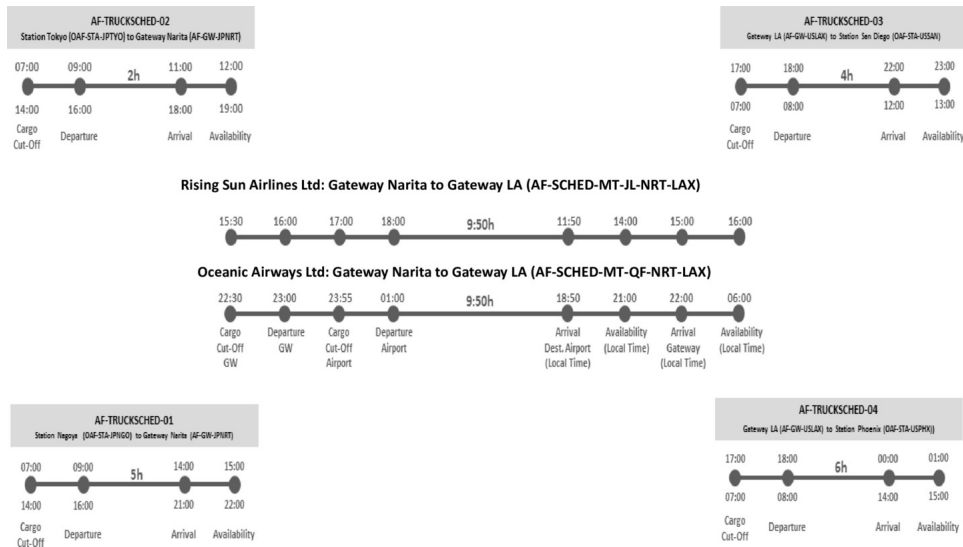
Figure 2: Schedules Used in Air Freight Gateway Consolidation

- Truck schedule from the station in Nagoya (`OAF-STA-JPNGO`) to the gateway in Narita (`AF-GW-JPNRT`):

Table 9

Time	AF-TRUCKSCHED-02	
Cargo Cut-Off	07:00	14:00
Departure	09:00	16:00
Arrival	14:00	21:00
Availability	15:00	22:00

- Truck schedule from the station in Tokyo (`OAF-STA-JPTYO`) to the gateway in Narita (`AF-GW-JPNRT`):

Table 10

Time	AF-TRUCKSCHED-02	
Cargo Cut-Off	07:00	14:00
Departure	09:00	16:00
Arrival	11:00	18:00
Availability	12:00	19:00

- Flight schedules from gateway in Narita to gateway in Los Angeles

Table 11

Time	Rising Sun Airlines Ltd. (AF-SCHED-MT-JL-NRT-LAX)	Oceanic Airways Ltd. (AF-SCHED-MT-QF-NRT-LAX)
Cargo Cut-Off (GW)	15:30	22:30
Departure (GW)	16:00	23:00
Cargo Cut-Off (Airport)	17:00	23:55
Departure (Airport)	18:00	01:00

Time	Rising Sun Airlines Ltd. (AF-SCHED-MT-JL-NRT-LAX)	Oceanic Airways Ltd. (AF-SCHED-MT-QF-NRT-LAX)
Arrival at Destination Airport (Local Time)	11:50	18:50
Availability (Local Time)	14:00	21:00
Arrival at Gateway (Local Time)	15:00	22:00
Availability (Local Time)	16:00	06:00

- Truck schedule from the gateway in Los Angeles (AF-GW-USLAX) to the station in San Diego (OAF-STA-USSAN):

Table 12

Time	AF-TRUCKSCHED-03	
Cargo Cut-Off	17:00	07:00
Departure	18:00	08:00
Arrival	22:00	12:00
Availability	23:00	13:00

- Truck schedule from the gateway in Los Angeles (AF-GW-USLAX) to the station in Phoenix (OAF-STA-USPHX):

Table 13

Time	AF-TRUCKSCHED-04	
Cargo Cut-Off	17:00	07:00
Departure	18:00	08:00
Arrival	00:00	14:00
Availability	01:00	15:00

4 SAP ERP Master Data: Customers and Vendors

Once you have defined the master data for customers and vendors, you can transfer it from SAP ERP to SAP TM. To do so, you must complete the following procedures:

- Defining Vendor Master Data in SAP ERP [page 16]

  In this scenario, vendors represent the carriers.
- Defining Customer Master Data in SAP ERP [page 21]
- Transferring Master Data from SAP ERP to SAP TM [page 24]

4.1 Defining Vendor Master Data in SAP ERP

In this procedure, you create vendor master data, which is then transferred to SAP TM via CIF. The corresponding locations with location type 1011 (vendor) are created in SAP TM. In this scenario, vendors represent 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 XK01 .

2. Create the vendors assigned to the purchasing organizations 3000 and 5000 according to the following table:

Table 14

Vendor ID	Company Code	Purchasing Organization	Account Group
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 15

Vendor ID	Name	Search Term	Address
OAF-CR-03	**Uchida Trucking**	**Truck Carrier JP**	**Tome Nagi 7-53-12, 1020021, Ota-ku, Japan, Region 13 (Tokyo)**

Vendor ID	Name	Search Term	Address
OAF-CR-04	Ich-Ni Express	Truck Carrier JP	Hadaka-Jime 15, 4600001 Nagoya, Japan, 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 16

Vendor ID	Reconciliation Account	Cash Management Group
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 17

Vendor ID	Payment Terms
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 18

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

Vendor ID	OAF-CR-03	OAF-CR-04	OAF-CR-05	OAF-CR-06
Shipping Condition	Blank	Blank	Blank	Blank

4.1.1   Defining Global Air Carriers in SAP ERP

In this procedure, you create vendor master data for global air carriers to identify the carriers' headquarters. The data is then transferred to SAP TM via CIF. The corresponding locations with location type 1011 (Vendor) are created in SAP TM. In this case, vendors represent carriers.

Procedure

1. On the *SAP Easy Access* screen for SAP ERP, choose ▶ *Logistics* ❯ *Materials Management* ❯ *Purchasing* ❯ *Master Data* ❯ *Vendor* ❯ *Central* ❯ *Create* ▌ or choose transaction XK01 .

2. Create the vendors assigned to purchasing organizations 3000 and 5000 according to the following table:

Table 19

Vendor ID	Company Code	Purchasing Organization	Account Group
AF-CR-JL	5000	5000	0005
AF-CR-QF	3000	3000	0005

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

Table 20

Vendor ID	Name	Search Term	Address
AF-CR-JL	Rising Sun Airlines Ltd.	Air Carrier JP	Higashi-shinagawa 2-chome, 4-11, 1408637, Tokyo, Japan, Region 13 (Tokyo)
AF-CR-QF	Oceanic Airways Limited	Air Carrier AU	Building A, 203 Coward Street, 815-C, 2020 Mascot, Australia, Region NSW (New South Wales)

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

Table 21

Vendor ID	Recon. Account	Cash Management Group
AF-CR-JL	141100	A1
AF-CR-QF	196300	A1

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

Table 22

Vendor ID	Payment Terms
AF-CR-JL	**0002**
AF-CR-QF	**0002**

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

Table 23

Vendor ID	AF-CR-JL	AF-CR-QF
Order Currency	**JPY**	**AUD**
Terms of Payment	**0002**	**0002**
Incoterms	Blank	Blank
Purchase Group	Blank	Blank
Planned Delivery Time	Blank	Blank
Conf. Control	Blank	Blank
Shipping Condition	Blank	Blank

4.1.2   Defining Local Air Carriers in SAP ERP

In this procedure, you create vendor master data for local air carriers to specify the main office of the carriers in Japan. The data is then transferred to SAP TM via CIF. The corresponding locations with location type 1110 (Airport) are created later (see Defining Airport Locations [page 103]). In this case, vendors represent carriers.

Procedure

1. On the *SAP Easy Access* screen for SAP ERP, choose ‖ *Logistics* ⟩ *Materials Management* ⟩ *Purchasing* ⟩ *Master Data* ⟩ *Vendor* ⟩ *Central* ⟩ *Create* ‖ or choose transaction XK01 .

2. Create the vendors assigned to purchasing organizations 3000 and 5000 according to the following table. These are the local carriers at the airport in Narita, Japan and in Los Angeles, United States:

Table 24

Vendor ID	Company Code	Purchasing Organization	Account Group
AF-JL-NRT	**5000**	**5000**	**0005**
AF-QF-NRT	**5000**	**5000**	**0005**
AF-JL-LAX	**3000**	**3000**	**0005**
AF-QF-LAX	**3000**	**3000**	**0005**

3. You must also create vendor AF-QF-SYD and assign it to purchasing organization 8520 as shown in the following table. This vendor is used as the local carrier for the stop-over at Syndey International Airport, Australia.

Table 25

Vendor ID	Company Code	Purchasing Organization	Account Group
AF-QF-SYD	**8500**	**8520**	**0005**

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

Table 26

Vendor ID	Name	Search Term	Address	Jurisdiction Code
AF-JL-NRT	**Rising Sun Airlines Ltd.**	**Air Carrier JP**	**Higashi-shinagawa 2-chome, 4-11, 1408637, Tokyo, Japan, Region 13 (Tokyo)**	N/A
AF-QF-NRT	**Oceanic Airways (Japan) KK Ltd.**	**Air Carrier JP**	**Toranomon 37th Mori Bldg 9F, 3-5-1, 1058483, Tokyo, Japan, Region 13 (Tokyo)**	N/A
AF-JL-LAX	**Rising Sun Airlines (US) Ltd.**	**Air Carrier US**	**6041 W. Imperial Hwy # D, 90245 Los Angeles, California, United States**	0503719001
AF-QF-LAX	**Oceanic Airways (US) KK Ltd.**	**Air Carrier US**	**555 North Nash Street, 90245 Los Angeles, California, United States**	0503719001
AF-QF-SYD	**Oceanic Airways (Australia) Ltd.**	**Air Carrier AU**	**23 Airport Drive, 2020 Sydney, New South Wales, Australia**	N/A

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

Table 27

Vendor ID	Recon. Account	Cash Management Group
AF-JL-NRT	**141100**	**A1**
AF-QF-NRT	**141100**	**A1**
AF-JL-LAX	**196300**	**A1**

Vendor ID	Recon. Account	Cash Management Group
AF-QF-LAX	196300	A1
AF-QF-SYD	214040	A1

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

Table 28

Vendor ID	Payment Terms
AF-JL-NRT	0002
AF-QF-NRT	0002
AF-JL-LAX	0002
AF-QF-LAX	0002
AF-QF-SYD	0002

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

Table 29

Vendor ID	AF-JL-NRT	AF-QF-NRT	AF-JL-LAX	AF-QF-LAX	AF-QF-SYD
Order Currency	JPY	JPY	USD	USD	AUD
Terms of Payment	0002	0002	0002	0002	0002
Incoterms	Blank	Blank	Blank	Blank	Blank
Purchase Group	Blank	Blank	Blank	Blank	Blank
Planned Delivery Time	Blank	Blank	Blank	Blank	Blank
Conf. Control	Blank	Blank	Blank	Blank	Blank
Shipping Condition	Blank	Blank	Blank	Blank	Blank

4.2   Defining Customer Master Data in SAP ERP

Procedure

1. On the *SAP Easy Access* screen for SAP ERP, choose ▶ *Logistics* ❯ *Sales and Distribution* ❯ *Master Data* ❯ *Business Partner* ❯ *Customer* ❯ *Create* ❯ *Complete* ▶ or choose transaction XD01 .

2. On the initial screen, enter the data for the Japanese customers as shown in the following table:

Table 30

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
Sales Organization	5000	5000	5000	5000
Distribution Channel	10	10	10	10
Division	00	00	00	00

3. Choose *Continue* .

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

Table 31

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

5. Choose ▶ *Goto* ❯ *Sales Area Data,* ❯ and enter the following information for all customers:

Table 32

Tab Page	Field	Value
Sales	*Price Group*	01
	Cust. pric. proc.	1
Shipping	*Order Combination*	Select
	Shipping Conditions	01
Billing Documents	*Tax Classification* for all Tax Codes	0 (Tax Exempt)
	Incoterms	Blank
	Incoterm Locations	Blank
	Terms of Payment	Blank

6. Choose ▶ *Goto* ❯ *Company Code Data* ❯ and enter the following information for all of the customers:

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Table 33

Tab Page	Field	Value
Account Management	*Reconciliation Account*	**145200**
Payment Transactions	*Terms of Payment*	**0001**

7. Save your entries.

8. Once you have created all of your Japanese customers, repeat the procedure to create U.S. customers. Use the following data:

Table 34

Customer ID	**OAF-CO-01**	**OAF-CO-02**	**OAF-CO-03**	**OAF-CO-04**
Company Code	**3000**	**3000**	**3000**	**3000**
Sales Organization	**3000**	**3000**	**3000**	**3000**
Distribution Channel	**10**	**10**	**10**	**10**
Division	**00**	**00**	**00**	**00**
Name	**Dosena Clothing Co Factory**	**Ten Media Inc.**	**Soutwire CO.**	**Scottsdale Fireworks Inc.**
Street	**State Route**	**Stallard Pl**	**West Main Street**	**Alma School Road**
House Number	**1710 W**	**10940 N**	**575**	**2012 N**
Postal Code	**86336**	**85737**	**92227**	**85256**
City	**Sedona**	**Tucson**	**Brawley**	**Scottsdale**
Region	**AZ**	**AZ**	**CA**	**AZ**
Country	**US**	**US**	**US**	**US**
Time Zone	**MSTNO**	**MSTNO**	**PST**	**MSTNO**
Price Group	**01**	**01**	**01**	**01**
Cust. pric. proc.	**1**	**1**	**1**	**1**
Shipping Conditions	**01**	**01**	**01**	**01**
Order Combination	Select	Select	Select	Select
Incoterm	Blank	Blank	Blank	Blank
Incoterm Locations	Blank	Blank	Blank	Blank
Terms of Payment (Sales area data)	Blank	Blank	Blank	Blank
Tax Classification for All Tax Codes	**0**	**0**	**0**	**0**
Reconciliation Account	**144003**	**144003**	**144003**	**144003**

Terms of Payment (Company Code area data)	0001	0001	0001	0001

9. Save your entries.

4.3 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 choose 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 SAP TM system name (input help is available [F4]), for example, TM1CLNT001 .
     - Use APO application TM, for example, APO.
   - Prefix your selection with OAF* and AF* 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 model OAF-IM-ORG , select the corresponding plants for the transfer (3300 Los Angeles and 5000 Tokyo).
   - In model 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.
   - In the model AF-IM-AIRC , make sure that you activate the creation of business partners in the *Vendors* section by entering **1** (create only business partner) in the *Create Loc/BP* field. Make sure that you select the business partner for all six local air carriers twice, for those located at Narita airport (for example, AF-KZ-NRT) and those located at Los Angeles airport (for example, AF-KZ-LAX), as well as for the local air carrier at Sydney airport (AF-QF-SYD).

3. Execute the model.

4. Generate the integration model (*Generate IM*).

5. Save the model.

6. To activate the models, return to the *SAP Easy Access* screen for SAP ERP and choose ▶ *Logistics* ❯ *Central Functions* ❯ *Supply Chain Planning Interface* ❯ *Core Interface Advanced Planner and Optimizer* ❯ *Integration Model* ❯ *Activate* ◀. Alternatively, call transaction CFM2 .

7. Activate the two data models. In SAP ERP, use transaction `SMQ1` to verify that all of the data has been transferred. In SAP TM, use transaction `SMQ2` to verify that all of the data has been transferred.

> **i Note**
>
> - When you transfer vendors to SAP TM, you must ensure that the *Create Loc./BP* function (create business partners in SAP TM for the location) is set to 2 on the *Vendors* tab page so that business partners are generated for vendors.
>
> - When local air carriers are transferred, only business partners have to be created in SAP TM since the location type "Airport" does not exist in SAP ERP. You must ensure that the *Create Loc./BP* function (create business partners in SAP TM but no locations) is set to 1 on the *Vendors* tab page. You must subsequently assign the local air carriers to airport locations in SAP TM. This procedure is explained later in this document.
>
> - You can also create business partners for plants and shipping conditions automatically by implementing a BAdI. For more information, see SAP Note 1410353 .

> **⚠ Caution**
>
> If the same master data is included in more than one model, you can activate only one of the models at a time. Otherwise, data is not transferred correctly.

Checking and Updating Data Transported to SAP TM

1. On the *SAP Easy Access* screen for SAP TM, choose ▶ *Transportation Management* ❯ *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 35

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

3. On the *SAP Easy Access* screen for SAP TM, choose ▶ *Transportation Management* ❯ *Master Data* ❯ *Transportation Network* ❯ *Define Location* ❙ .

4. Check the customer and vendor master data and change the geocoordinates to the following values:

Table 36

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**

Location Name	Longitude	Latitude
CUOAF-CO-03@ERP001	- 115: 33: 05	+ 32: 58: 44
CUOAF-CO-04@ERP001	- 111: 51: 23	+ 33: 28: 11

5. On the *SAP Easy Access* screen for SAP TM, choose ❯ *Transportation Management* ❯ *Master Data* ❯ *Maintain Business Partner* ❯ or call transaction BP .

6. Assign the following business partner roles:

Table 37

Business Partners	Business Partner Role
Carriers OAF-CR-03 - 06 Carriers AF-CR*	CRM010 - Carrier
US Customers OAF-CO-01 - 04	CRM002 - Ship-to Party

7. 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

8. 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.

4.4 Adding Air Cargo Security Settings to Vendors in SAP TM

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ❯ *Master Data* ❯ *General* ❯ *Define Business Partner* ❯ .

2. Enter business partner **OAF-CU-01** .

3. Switch to edit mode.

4. In the *Change in BP Role* field, select *Vendor* from the dropdown box.

5. Choose the *Vendor Data* tab page and enter the following data in the *Air Cargo Security* area:

Table 38

Field	Value
Shipper Sec. Status	`US Unknown Shipper`
Known from Date	`<today - less than 100 days>`
Expiry Date	`2020-02-28`

6. Save your entries.
7. Repeat the above steps for shippers 02, 03, and 04. Make sure that the *Known from Date* for these shippers is at least 180 days in the past (U.S. regulations), that the *Expiration Date* is in the future, and that the shipper's security status is set to *KS Known Shipper* .

> **i** Note
>
> In this demonstration scenario, only the first shipper lacks the required security status, which means that additional procedures are necessary during the execution.

5 Application Administration

Application administration comprises the following settings and profiles:

  You define a user-specific group of capacities that is taken into account during transportation planning.

  You define a planning profile that contains all of the settings that are relevant for optimizer planning and creating transportation proposals using the routing guide.

  Selection profiles define how freight units are selected based on geography, pickup dates, and delivery dates.

  You can customize the layout for displaying capacities and requirements in the transportation cockpit.

5.1 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 carrier selection setting `AF-CAR-SEL-TRSP` using the following data:

Table 39

Field	Value
Carrier Selection Settings	`AF-CAR-SEL-TRSP`
Description	`Air Freight Truck Carrier Selection`
Check Incompatibilities	Deselect
Parallel Processing Profile	Blank
Type of Carrier Selection Settings	`General Carrier Selection`
Allocation Usage	`Do Not Use Transportation Allocations`
Business Share Usage	`Do Not Use Business Shares`
Strategy	`Costs`
Carrier Cost Origin	`Use Internal Costs`

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

Table 40

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

4. Save your entries.

5.2 Defining Optimizer Settings

Procedure

Create Optimizer Setting `AF-OPT-SET-STD`

1. In the SAP NetWeaver Business Client (NWBC), choose ▶ *Application Administration* ❯ *Planning* ❯ *Planning Profile Settings* ❯ *Optimizer Settings* ❯ *Create Optimizer Settings* ◀ .
2. Create optimizer setting `AF-OPT-SET-STD` using the following data:

Table 41

Field	Value
Optimizer Settings	`AF-OPT-SET-STD`
Description	`Air Freight – Optimizer Settings`
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	`10`
Max. No. of Parallel Processes	`10`
Maximum No of Transshipment Loc	`5`
Maximum Runtime (Seconds)	`60`

Field	Value
Consider Capacity During Optimization	**Yes**
Rough Planning	Do Not Use Rough Planning

3. Save your entries.

Create Optimizer Setting `AF-OPT-SET-MAIN`

1. In the SAP NetWeaver Business Client (NWBC), choose ▶ *Application Administration* ❯ *Planning* ❯ *Planning Profile Settings* ❯ *Optimizer Settings* ❯ *Create Optimizer Settings* ◀ .

2. Create optimizer setting `AF-OPT-SET-MAIN` using the following data:

Table 42

Field	Value
Optimizer Settings	**AF-OPT-SET-MAIN**
Description	**Air Freight – Optimizer Settings**
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	**10**
Max. No. of Parallel Processes	**10**
Maximum No of Transshipment Loc	**5**
Search Depth for Transshipment Locations (under Advanced Settings)	**2**
Maximum Runtime (Seconds)	**60**
Consider Capacity During Optimization	**Yes**
Rough Planning	Use Rough Planning Where Defined
Default Routes for Freight Units	Only Consider Default Routes
Automatic Connection Determination (under Advanced Settings)	Deselect - Ignore Schedules (select) - Ignore Freight Orders (select) - Ignore Freight Bookings (select)

3. Save your entries.

5.3 Defining Capacity Settings

In this procedure, you define a user-specific group 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. In the *General Data* screen area, enter capacity selection setting `AF-CAP-SEL-PRE` with the description `Air Freight – Capa. Prof. Pre-Carriage` .

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

    Table 43

Field	Value
Attributes for Vehicle Resource Selection	`VEHICLERES_ID`
Sign	`Inclusive`
Option	`Pattern`
Lower Limit	`OAF-JP*`

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

    Table 44

Field	Value
Attribute for Schedule Selection	`SCH_ID`
Sign	`Inclusive`
Option	`Within Range`
Lower Limit	`AF-TRUCKSCHED-01`
Upper Limit	`AF-TRUCKSCHED-02`

5. Save your entries.

6. Repeat the procedure to create capacity selection setting `AF-CAP-SEL-ON` with the description `Air Freight – Capa. Prof. On-Carriage` . Use the following data:

    ○ On the *Vehicle Resources* tab page:

    Table 45

Field	Value
Attributes for Vehicle Resource Selection	`VEHICLERES_ID`
Sign	`Inclusive`
Option	`Pattern`
Lower Limit	`OAF-US*`

    ○ On the *Schedules* tab page:

    Table 46

Field	Value
Attribute for Schedule Selection	`SCH_ID`
Sign	`Inclusive`

Field	Value
Option	**Within Range**
Lower Limit	**AF-TRUCKSCHED-03**
Upper Limit	**AF-TRUCKSCHED-04**

7. Save your entries.

8. Repeat the procedure to create capacity selection setting `AF-CAP-SEL-PROP` with the description **Air Freight – Capa. Prof. Proposal**. Use the following data:

   ○ On the *Vehicle Resources* tab page:

   Table 47

Field	Value s 1	Value s 2
Attributes for Vehicle Resource Selection	**VEHICLERES_ID**	**MTRTCO062_I**
Sign	**Inclusive**	**Inclusive**
Option	**Pattern**	**Pattern**
Lower Limit	**OAF***	**OAF***

   ○ On the *Schedules* tab page:

   Table 48

Field	Value
Attribute for Schedule Selection	**SCH_ID**
Sign	**Inclusive**
Option	**Pattern**
Lower Limit	**AF***

9. Save your entries.

5.4 Defining Selection Profiles

In this procedure, you create selection profiles, which define how freight units are selected based on geography, pickup dates, and delivery dates. You need to create three selection profiles for each stage since 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

Defining Selection Profile Attributes

Time-Related Selection Attributes

1. In SAP NetWeaver Business Client (NWBC), choose ▶ *Application Administration* ❯ *Planning* ❯ *Selection Profile Attributes* ❯ *Time-Related Selection Attributes* ❯ *Create Time-Related Selection Attributes* ❯ .

2. Create selection profile `AF-TIME-SEL-PRE` for pre-carriage using the following data:

Table 49

Field	Value
Time-Rel. Sel. Attributes	`AF-TIME-SEL-PRE`
Description	`Air Freight – Pre-Carriage`
Pick-Up in Days	`20`
Delivery in Days	`20`

3. Create geographical selection profile `AF-GEO-SEL-MPU` for the main carriage stage as follows:

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

   Table 50

Field	Value
Geographical Sel. Attributes	*AF-GEO-SEL-MPU*
Description	*Air Freight – Multi Pickup*
Both Locations	*Select*

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

   Table 51

Sign	Option	Lower Value	Upper Value
Inclusive	=	`AF-JP-SHPTYO`	Blank

   3. On the *Destination Locations* tab page, enter the following data:

   Table 52

Sign	Option	Lower Value	Upper Value
Inclusive	=	`OAF-STA-JPTYO`	Blank

4. Save your entries.

Geographical Selection Attributes

1. In SAP NetWeaver Business Client (NWBC), choose ▶ *Application Administration* ❯ *Planning* ❯ *Selection Profile Attributes* ❯ *Geographical Selection Attributes* ❯ *Create Geographical Selection Attributes* ❯ .

2. Create selection profile `AF-GEO-SEL-PRE` for the pre-carriage stage as follows:

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

Table 53

Field	Value
Geographical Sel. Attributes	**AF-GEO-SEL-PRE**
Description	**Air Freight – Pre-Carriage**
Both Locations	Select

2. On the *Source Locations* tab page, enter the following data:

Table 54

Sign	Option	Lower Value	Upper Value
Inclusive	**=**	**OAF-STA-JPNGO**	Blank
Inclusive	**=**	**OAF-STA-JPTYO**	Blank

3. On the *Destination Locations* tab page, enter the following data:

Table 55

Sign	Option	Lower Value	Upper Value
Inclusive	**=**	**AF-GW-JPNRT**	Blank

4. Save your entries.

3. Create geographical selection profile `AF-GEO-SEL-MPU` for the main carriage stage as follows:

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

Table 56

Field	Value
Geographical Sel. Attributes	**AF-GEO-SEL-MPU**
Description	**Air Freight – Multi Pickup**
Both Locations	Select

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

Table 57

Sign	Option	Lower Value	Upper Value
Inclusive	**=**	**AF-JP-SHPTYO**	Blank

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

Table 58

Sign	Option	Lower Value	Upper Value
Inclusive	**=**	**OAF-STA-JPTYO**	Blank

   4. Save your entries.

4. Create geographical selection profile `AF-GEO-SEL-MAIN` for the main carriage stage as follows:

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

Table 59

Field	Value
Geographical Sel. Attributes	**AF-GEO-SEL-MAIN**

Field	Value
Description	**Air Freight – Main Carriage**
Both Locations	Select

2. On the *Source Locations* tab page, enter the following data:

Table 60

Sign	Option	Lower Value	Upper Value
Inclusive	**=**	**AF-GW-JPNRT**	Blank

3. On the *Destination Locations* tab page, enter the following data:

Table 61

Sign	Option	Lower Value	Upper Value
Inclusive	**=**	**AF-GW-USLAX**	Blank

4. Save your entries.

5. Create selection profile AF-GEO-SEL-ON for the on-carriage stage as follows:

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

   Table 62

Field	Value
Geographical Sel. Attributes	**AF-GEO-SEL-ON**
Description	**Air Freight – On-Carriage**
Both Locations	Select

   2. On the *Source Locations* tab page, enter the following data:

   Table 63

Sign	Option	Lower Value	Upper Value
Inclusive	**=**	**AF-GW-USLAX**	Blank

   3. On the *Destination Locations* tab page, enter the following data:

   Table 64

Sign	Option	Lower Value	Upper Value
Inclusive	**=**	**OAF-STA-USPHX**	Blank
Inclusive	**=**	**OAF-STA-USSAN**	Blank

   4. Save your entries.

Additional Selection Attributes

1. In SAP NetWeaver Business Client (NWBC), choose ▶ *Application Administration* ❯ *Planning* ❯ *Selection Profile Attributes* ❯ *Additional Selection Attributes* ❯ *Create Additional Selection Attributes* ❭ .

2. Create additional selection attributes for AF-ADD-SEL-INCLUDE-PLANNED by entering the following data in the *General Data* screen area:

Table 65

Field	Value
Additional Sel. Attributes	`AF-ADD-SEL-INCLUDE-PLANNED`
Description	`Include Planned Req.`
Planned Requirements	`Include in Selection`
Blocked Documents	`Exclude in Selection`

3. Save your entries.

Defining Selection Profiles

Pre-Carriage

1. In SAP NetWeaver Business Client (NWBC), choose ▌▶ *Application Administration* ❯ *Planning* ❯ *Selection Profiles* ❯ *Create Selection Profile* ❳ .

2. Create selection profile `AF-GEN-SEL-PRE-WO-TIME` for the pre-carriage stage using the following data:

Table 66

Field	Value
Selection Profile	`AF-GEN-SEL-PRE-WO-TIME`
Description	`Air Freight – Pre-Carriage`
Maximum Number of Selected Objects	`50`
Time-Related Sel. Attributes	`AF-TIME-SEL-PRE`
Geographical Sel. Attributes	`AF-GEO-SEL-PRE`
Additional Sel. Attributes	`AF-ADD-SEL-INCLUDE-PLANNED`

3. Save your entries.

Multi-Pickup

1. Create selection profile `AF-GEN-SEL-PRE-WO-TIME` for the pre-carriage stage using the following data:

Table 67

Field	Value
Selection Profile	`AF-GEN-SEL-PRE-MPU-TIME`
Description	`Air Freight – Multi Pickup`
Maximum Number of Selected Objects	`50`
Time-Related Sel. Attributes	`AF-TIME-SEL-PRE`
Geographical Sel. Attributes	`AF-GEO-SEL-MPU`
Additional Sel. Attributes	`AF-ADD-SEL-EXCLUDE-PLANNED`

2. Save your entries.

Main Carriage

1. Create selection profile `AF-GEN-SEL-MAIN-WO-TIME` for the main carriage stage using the following data:

Table 68

Field	Value
Selection Profile	**AF-GEN-SEL-MAIN-WO-TIME**
Description	**Air Freight – Main Carriage**
Maximum Number of Selected Objects	**50**
Geographical Sel. Attributes	**AF-GEO-SEL-MAIN**
Additional Sel. Attributes	**AF-ADD-SEL-INCLUDE-PLANNED**

2. Save your entries.

On-Carriage

1. Create selection profile `AF-GEN-SEL-ON-WO-TIME` for the on-carriage stage using the following data:

   Table 69

Field	Value
Selection Profile	**AF-GEN-SEL-ON-WO-TIME**
Description	**Air Freight – On-Carriage**
Maximum Number of Selected Objects	**50**
Geographical Sel. Attributes	**AF-GEO-SEL-ON**
Additional Sel. Attributes	**AF-ADD-SEL-INCLUDE-PLANNED**

2. Save your entries.

Booking

1. Create selection profile `AF-BOOK-SEL-PRO` for the booking using the following data:

   Table 70

Field	Value
Selection Profile	**AF-BOOK-SEL-PRO**
Description	**Booking Selection Profile**
Maximum Number of Selected Objects	**200**
Time-Related Sel. Attibutes	**AF-TIME-30**
Geographical Sel. Attributes	Blank
Additional Sel. Attributes	**AF-ADD**

2. Choose the *Time-Related Selection Attributes* tab page and enter the following data:

   Table 71

Field	Value
Time-Related Sel. Attributes	**AF-TIME-30**
Description	**AF-TIME-30**

Field	Value
Absolute or Relative Horizon	**Use Relative Horizon**
Factory Calendar for Offs. /Dur. Calc.	**99**
Use Index Time for Selection	**Use Index Time of Stop**
Comb. of Pick-up and Delivery Windows	**Combination with OR**
Pick-Up in Days	**4**
Offset Direction	**Future**
Delivery in Days	**10**
Offset Direction	**Future**

3. Choose the *Additional Selection Attributes* tab page and enter the following data:

Table 72

Field	Value
Additional Sel. Attributes	**AF-ADD**
Description	**AF-ADD**
Planned Requirements	**Include in Selection**
Blocked Documents	**Exclude in Selection**

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

Table 73

Field	Row 1	Row 2
Business Object of Selection	**/SCMTMS/TO**	**/SCMTMS/TO**
Field Name	**CREATION_TYPE**	**TOR_TYPE**
Sign	**Exclusive**	**Inclusive**
Option	**=**	**=**
Lower Limit	**A**	**AF04**

5. Save your entries.

5.5 Defining Condition for Planning Profile

Prerequisites

You have defined the following settings:

- Data Access Definitions (DAD) `AF_TOR_MTR` and `AF_TOR_MTR_ITEM`
- Assigned DADs to Condition Type
- Data-Crawler Profile `AF_TOR_MAIN`

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ▶ *Application Administration* ❯ *General Settings* ❯ *Conditons* ❯ *Create Condition* ▶ .

2. Enter the following data:

Table 74

Field	Value
Condition	`AF_FO_Determination`
Description	`FO Determination for Air Freight`
Condition Type	`/SCMTMS/TOR_TYPE`
Origin of Condition	`Condition Based on BRFplus Decision Table`

3. Choose *Continue* .

4. Choose *Data Access Definition* and create new entries with following data:

Table 75

Field	Value	Value
Column Position	`10`	`20`
Data Access Definition for Conditions	`AF_TOR_MTR`	`AF_TOR_MTR_ITEM`
Name of BO Used in Condition	`/SCMTMS/TOR`	
Name of BO Node Used in Condition	`ROOT`	
Name of the Field of the BO Node	`MTR`	
DC Profile ID		`AF_TOR_MAINITEM`
Step ID		`010`
Field Name		`MTR`

5. Choose *Back* to go back to the *Condition Definition* .

6. Insert new rows in Decision Table: `AF_FO_DETERMINATION` with following data (via option Direct Value Input):

Table 76

Field	Value	Value
TO Means of Transport	`BLANK`	`Blank`
TOR Means of Transport	`OAF_TRUCK (Truckload)`	`OAF_TRUK_S`
Document Type	`AF05`	`AF10`

7. Save your entries.

5.6 Defining Planning Profiles

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

Prerequisites

You have defined the following settings:

- Freight order type `AF05` (`AF - Pickup/Delivery Freight Order`)
- Freight order type `AF10` (`AF - PRE/on-carriage Freight Order`)
- Freight booking type `AF04` (`Air Booking`)

> **i Note**
>
> This document separates sections that involve Customizing activities from those that involve configuring profile definition settings. As such, the procedures for defining the settings mentioned above are explained later in this document. Proceed with the following sections and then return to this section to continue:
>
> - Defining Freight Order Types [page 66]
> - Defining Freight Booking Types for Export [page 72]

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.

Planning Profile AF-PLAN-PROF-PRE

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

Table 77

Field	Value
Duration in Days	**180**
Offset Direction	**Future**
Offset in Days	**0**
Factory Cal. for Offs./Dur. Calc.	**W8**
Round Horizon to Full Days	Select
Time Zone for Rounding the Horizon	**CET**

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

Table 78

Field	Value
Capacity Selection Settings	**AF-CAP-SEL-PRE**
Optimizer Settings	**AF-OPT-SET-STD**
Carrier Selection Settings	**AF-CAR-SEL-TRSP**

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

Table 79

Field	Value
Type Determination Rule	**Defined per Category in Planning Profile**
Default Type for Road FO	**AF10**
Default Type for Bookings (Air)	**AF04**

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

Table 80

Field	Value
Manual Planning Strategy	**VSRI_DEF**
Consider Fixing Status	**Error When Changing Fixed Document**

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

Table 81

Field	Value
Scheduling Strategy	**VSS_DEF**
Consider Freight Unit Dates	**Consider Freight Unit Dates as Soft Constraints Only**
Scheduling Direction	**Backward**

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

Table 82

Field	Value
Check Strategy	VSR_CHECK
Take Capacities into Account	Warning

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

Table 83

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

9. Save your entries.

Planning Profile AF-PLAN-PROF-ON

1. In the *General Data* screen area, enter planning profile **AF-PLAN-PROF-ON** and the description **Air Freight Planning Prof. On-Carriage**.

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

Table 84

Field	Value
Duration in Days	180
Offset Direction	Future
Offset in Days	0
Factory Cal. for Offs./Dur. Calc.	W8
Round Horizon to Full Days	Select
Time Zone for Rounding the Horizon	CET

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

Table 85

Field	Value
Capacity Selection Settings	AF-CAP-SEL-ON
Optimizer Settings	AF-OPT-SET-STD
Carrier Selection Settings	AF-CAR-SEL-TRSP

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

Table 86

Field	Value
Type Determination Rule	Defined per Category in Planning Profile
Default Type for Road FO	AF10
Default Type for Bookings (Air)	AF04

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

Table 87

Field	Value
Manual Planning Strategy	**VSRI_DEF**
Consider Fixing Status	**Error When Changing Fixed Document**

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

Table 88

Field	Value
Scheduling Strategy	**VSS_DEF**
Consider Freight Unit Dates	**Do Not Consider Freight Unit Dates**
Scheduling Direction	**Backward**

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

Table 89

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

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

Table 90

Field	Value
Dependence	**Freight Unit and MTr Independent**
Loading/Unloading Duration	**00:00:00**

9. Save your entries.

Planning Profile AF-PLAN-PROPOSAL

1. In the *General Data* screen area, enter planning profile **AF-PLAN-PROPOSAL** and the description **Air Freight Planning Prof. for Proposal**.

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

Table 91

Field	Value
Duration in Days	**5**
Offset Direction	**Future**
Offset in Days	**2**
Factory Cal. for Offs./Dur. Calc.	**W8**
Round Horizon to Full Days	Select
Time Zone for Rounding the Horizon	**CET**

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

Table 92

Field	Value
Selection Profile for Freight Bookings	`AF-BOOK-SEL-PRO`
Capacity Selection Settings	`AF-CAP-SEL-PROP`
Optimizer Settings	`AF-OPT-SET-MAIN`
Carrier Selection Settings	`AF-CAR-SEL-TRSP`

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

Table 93

Field	Value
Type Determination Rule	`Condition-Based`
Condition for Doc. Type Determ.:	`0AF_FO_Determination`
Default Type for Bookings (Air)	`AF04`

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

Table 94

Field	Value
Manual Planning Strategy	`VSRI_DEF`
Consider Fixing Status	`Error When Changing Fixed Document`

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

Table 95

Field	Value
Scheduling Strategy	`VSS_DEF`
Consider Freight Unit Dates	`Do Not Consider Freight Unit Dates`
Scheduling Direction	`Backward`

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

Table 96

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

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

Table 97

Field	Value
Dependence	`Freight Unit and MTr Independent`
Loading/Unloading Duration	`00:00:00`

9. Save your entries.

5.7   Defining Layouts for the Transportation Cockpit

In this procedure, you create layouts that are used to display capacities and requirements in the transportation cockpit. Layout settings are configured at user level.

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ▶ *Planning* ❯ *Planning* ❯ *Transportation Cockpit* ◀ .

    The *Profile and Layout Sets* screen appears. However, if the transportation cockpit appears directly, 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 a new page layout: `AF-LAYO-1` .

5. In the *Visibility Pushbutton* section, deselect the following options:

    o   *Transportation Proposals*

    o   *Optimizer Planning – All*

    o   *Optimizer Planning – Selected Entries with all Resources*

    o   *Optimizer Planning – Selected Entries Only*

    o   *Explanation – Optimizer Planning*

6. On the *Requirements Area* tab page:

    1. In the *Position of Screen Area* field, choose `Top Left` .

    2. In the *Width* field, enter `100%` .

    3. Choose *Sequence 1 – Freight Unit Stages* and select the *Display* checkbox.

    4. Ensure the checkbox for *Set OI Status for FUs - Confirm* is selected.

7. On the *Resources Area* tab page:

    1. In the *Position of Screen Area* field, choose `Bottom Left`

    2. In the *Width* field, enter `50%` .

    3. Choose *Sequence 3 – Schedules* and select the *Display* checkbox.

    4. Deselect the *Display* checkboxes for the other rows (*Vehicles* and *Trailers*).

8. On the *Orders Area* tab page:

    1. In the *Position of Screen Area* field, enter `Bottom Right` .

    2. In the *Width* field, enter `50%` .

    3. Choose *Sequence 1 – Freight Orders/Freight Bookings* and select the *Display* checkbox.

9. Save your profile.

6 Customizing Setup in SAP TM

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

- Defining Freight Unit Types [page 47]
- Creating Freight Unit Building Rules [page 48]

  Freight unit building rules define how the system creates freight units based on the forwarding order.

- Defining Package Type Codes [page 49]
- Defining Default Agreement Party Roles for Stages [page 65]
- Defining Freight Order Types [page 66]

  A new freight order type contains an enhanced save strategy.

- Defining Freight Booking Types for Export [page 72]
    - Defining Freight Settlement Document Types [page 76]
    - Defining Forwarding Settlement Document Types [page 77]
    - Defining Dimensional Weight Profiles [page 78]

Overview

The following document types will be customized in the system:

- `AF01` – Air Freight – Forwarding Order Export
- `AF02` – Freight Unit Type
- `AF03` – Item Types for Forwarding Order Management
- `AF04` – AF: Air Freight Booking
- `AF05` – AF – Pickup/Delivery Freight Order.
- `AF06` – Air Freight: Carrier Settlement
- `AF07` – Air Freight: Forwarding Agreements
- `AF08` – Air Freight: Freight Agreement Type
- `AF09` – Air Freight: Forwarding Settlement Document
- `AF10` – AF – Pre/On-Carriage Freight Order
- `AF11` – AF: Air Booking Import
- `AF12` – AF: Air Carrier Schedule
- `AF13` – AF: Air Master Flight Schedule with Reference
- `AF14` – Air Freight – Forwarding Order Import
- `AF15` – Air Freight – Default Route Type
- `AF16` – Air Freight – Internal Agreement Type
- `AF17` – Internal Freight Settlement Document

6.1 Defining Freight Unit Types

Procedure

1. In Customizing for SAP Transportation Management, choose ▐▶ *Transportation Management* ❭ *Planning* ❭ *Freight Unit* ❭ *Define Freight Unit Types* ❭ .

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

Table 98

Field	Value
Freight Unit Type	**AF02**
Description	**AF Freight Unit Type**
Is Default Type	Not selected

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

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

Table 99

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

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

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

Table 100

Field	Value
Execution Tracking Relevance	*2 Execution Tracking*
Immediate Processing	Select

7. In the *Event Management Settings* screen area, enter the following data:

Table 101

Field	Value
Application Object Type	**ODT20_FU**
Last Expected Event	**ARRIV_DEST**

8. In the *Freight Order Determination* screen area, enter freight order type **AF05** (AF – Pickup/Delivery Freight Order Air).

   Enter this after Defining Freight Order Types [page 66] .

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

Table 102

Field	Value
Rule for PU/DLV Window Determination	Pick-Up and Delivery as Defined in FWO, FWQ, OTR, or DTR

Field	Value
BW Relevance	Select
Track Changes	Select
Web Dynpro Application Conf.	/SCMTMS/FRE_UNIT

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

Table 103

Field	Value
Output Profile.	//SCMTMS/TOR_PRINT_AIR_FU

6.2 Creating Freight Unit Building Rules

Freight unit building rules (FUB rules) define how the system creates freight units based on the forwarding order. FUB rules also specify the dimensions that are transferred from the forwarding order to the freight unit as capacity requirements for planning. If there is more than one freight unit building rule, you can define a condition that determines the appropriate freight unit building rule.

In this scenario, you require only one freight unit building rule: AF-FUBR-01 (freight unit consolidated in ULD [AF]).

Prerequisites

You have defined a freight unit type.

Procedure

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

Table 104

Field	Value
Freight Unit Building Rule	**AF-FUBR-01**
Description	**FU per ULD**
Freight Unit Building Strategy	**Consolidate per Request**
Critical Quantity	Gross Weight
Item Split Allowed	Select
Document Type	**AF02**

Field	Value
	Enter the freight unit type that you created in Defining Freight Unit Types [page 47] .
Apply Default Route	Select

3. In the *Planning Quantifies* table, enter the following data:

Table 105

Planning Quantity for Freight Unit Building	Unit of Measure of Split Quantity	Split Quantity	Rounding Quantity
Gross Volume	**M3**	**7,2**	Blank
Gross Weight	**TO**	**4**	Blank

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

Table 106

Field	Value
Doc. Type Det. Cnd	Blank
Process Controller Strategy	**FUB_AUTO**

5. Save your entries.

6.3   Defining Package Type Codes

Package type codes enable you to standardize the packages that are used to transport cargo. In this scenario, you require package type `112` (boxes).

Procedure

1. In Customizing for *Transportation Management* , choose ▶ *Forwarding Order Management* ▶ *Define Package Type Codes* ❯ .
2. Create the following entries:

Table 107

Field	Value	Value
Package Type	**BOX**	**PAL**
Description	**Boxes**	**PALLETS**

3. Save your entries.

6.4   Defining Equipment Groups and Equipment Types

In this Customizing activity, you define universal loading devices (ULDs) for later use.

Procedure

1. In Customizing for SAP Transportation Management, choose ▶ *Transportation Management* ❭ *Master Data* ❭ *Resources* ❭ *Define Equipment Groups and Equipment Types* ❭.
2. If equipment group `ULD` does not already exist with the description *Unit Load Device* , create it by choosing the *New Entries* pushbutton.
3. Save your entries.
4. Select the row containing `ULD` and choose *Transportation Mode Assignment* from the tree structure.
5. Create an entry for `04 Air` and save your changes.
6. Return to the *Transportation Unit Groups* area, select the row containing `ULD` , and choose *Transportation Unit-Types* from the tree structure.
7. Create the following entries if they do not already exist:

> **i   Note**
> To do so, select the row containing `ULD` and choose *Transportation Unit Types* from the tree structure.

1. In the header area, enter or check the following data:

Table 108

Equipment Type	Description
AKE	**Half-Width Lower Deck Cont (61x60) (LD3)**
AAP	**Lower Deck Container (88 x 125) (LD9)**
AMA	**Main Deck Container (96x125) (M1)**
PAG6	**Pallet Q6 Contour (88x125x96)**
PGA6	**Pallet Q6 Contour (96x125x96)**
PMC6	**Pallet Q6 Contour (96x125x96)**
PAG7	**Pallet Q7 Contour (96x125x118)**
PGA7	**Pallet Q7 Contour (96x125x118)**
PMC7	**Pallet Q7 Contour (96x125x118)**

2. Select each *Transportation Unit Type* in the table and click *details* section, enter or check the following data:

3. Table 109

Equipment Type	IATA-Compliant	ULD Classification
AKE	Select	**LD3**

Equipment Type	IATA-Compliant	ULD Classification
AAP	Select	LD9
AMA	Select	M1
PAG6	Select	PAG
PGA6	Select	PGA
PMC6	Select	PMC
PAG7	Select	PAG
PGA7	Select	PGA
PMC7	Select	PMC

4. In the *Physical Properties* section, enter or check the following data:

Table 110

Equipment Type	Tare Weight	Tare Weight UoM	Tare Volume	Tare Volume UoM
AKE	100	KG	4,300	M3
AAP	222	KG	10,510	M3
AMA	360	KG	17,580	M3
PAG6	105	KG	Blank	Blank
PGA6	480	KG	Blank	Blank
PMC6	480	KG	Blank	Blank
PAG7	480	KG	Blank	Blank
PGA7	480	KG	Blank	Blank
PMC7	480	KG	Blank	Blank

5. In the *Capacity* section, enter or check the following data:

Table 111

Equipment Type	Payload Weight	Payload Weight UoM	Cubic Capacity	Cubic Capacity UoM	Interior Length	Interior Width	Interior Height	Interior Height UoM
AKE	1,488	KG	17,580	M3	170	153	162	CM
AAP	4,404	KG	10,510	M3	317	223	162	CM
AMA	6,444	KG	17,580	M3	314	220	220	CM
PAG6	4,521	KG	Blank	Blank	318	244	163	CM
PGA6	10,860	KG	Blank	Blank	606	244	244	CM
PMC6	10,860	KG	Blank	Blank	318	244	163	CM
PAG7	10,860	KG	Blank	Blank	318	244	299,720	CM

Equipment Type	Payload Weight	Payload Weight UoM	Cubic Capacity	Cubic Capacity UoM	Interior Length	Interior Width	Interior Height	Interior Height UoM
PGA7	10,860	KG	10	M3	606	244	299,720	CM
PMC7	10,860	KG	Blank	Blank	318	244	299,720	CM

6. In the *Temperature* section, enter or check the following data:

Table 112

Equipment Type	Temp. Controlled	Ventilation
AKE	Deselect	No Ventilation
AAP	Deselect	No Ventilation
AMA	Deselect	No Ventilation
PAG6	Deselect	No Ventilation
PGA6	Deselect	No Ventilation
PMC6	Deselect	No Ventilation
PAG7	Deselect	No Ventilation
PGA7	Deselect	No Ventilation
PMC7	Deselect	No Ventilation

7. Save your entries.
8. Repeat the procedure for all types of unit load device.

6.5   Defining Master Air Waybill 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 113

Field	Value
Stock Type	MAWB
Description	Master Air Waybill (Default)
TrM	05
Stock Category	0 Waybill Number
Org. Category	2 Purchasing

Field	Value
Check Digit	**X Modulus 7**
Enable Prefix	Select
Prefix Length	**10**
Number Length	**7**

3. Save your entries.

6.6 Defining House Air Waybill 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 114

Field	Value
Stock Type	**HAWB**
Description	**House Air WayBill (Default)**
TrM	**05**
Stock Category	**0 Waybill Number**
Org. Category	**1 Sales**
Check Digit	**X Modulus 7**
Prefix	Select
Prefix Length	**10**
Number Length	**10**

3. Save your entries.

6.7 Defining IATA Handling Codes

Procedure

1. In Customizing for SAP Transportation Management, choose ▶ *Transportation Management* ❯ *Basic Functions* ❯ *General Settings* ❯ *Define Handling Codes* ❯ .
2. Check whether the following entries exist and create any that are missing:

Table 115

Handling Code	Category	Description
MD	External	Main Deck Over 160 cms (62 inches)
LD	External	Lower Deck Below 160 cms (62 inches)
HVC	External	High-Value Cargo, Special Protection
PER	External	Perishable Cargo, Special Temp. Req
HEA	External	Heavy Cargo, Piece Weight Over 150 KGs
DGR	External	Dangerous Goods
CAO	External	Cargo Aircraft Only
FAK	External	Freight All Kinds, No Special Handl. Req
VAL	External	Valuable Cargo, Escort & Safe Storage Req
VUN	External	Vulnerable Cargo, Fragile
EAW	External	eFreight, No Documents Attached
RXB	External	Dangerous Goods, Explosives Class 1.4B
RXC	External	Dangerous Goods, Explosives Class 1.4C

3. Save your entries.

6.8 Defining IATA Aircraft Type Codes

Procedure

1. In Customizing for *Transportation Management* , choose ▶ *Master Data* ❭ *Resources* ❭ *Define IATA Aircraft Type Codes* ❭.

2. Create the following entry:

Table 116

Aircraft Type	Description	Category
74F	Boeing 747 (Freighter)	1 Freighter

Aircraft Type	Description	Category
388	Airbus A380-800 (Passenger)	2 Pax
773	Boeing 777-300 (Passenger)	2 Pax
744	Boeing 747-400 (Passenger)	2 Pax
RFS	Road Feeder Service	1 Freighter

3. Save your entries.

6.9   Defining IATA Traffic Conference Areas

Procedure

1. In Customizing for *Transportation Management* , choose ▶ *Master Data* ❯ *Transportation Network* ❯ *Define IATA Traffic Conference Areas* ❳.
2. Create the following entries:

Table 117

IATA Region	Description
TC1	American Conf. (NOA, CEM, SOA, CAR)
TC2	European & African Conf. (AFR, EUR, MDE)
TC3	Asian Conf. (JAK, SAS, SEA, SWP)

3. Save your entries.

6.10   Defining IATA Region Codes

Procedure

1. In Customizing for *Transportation Management* , choose ▶ *Master Data* ❯ *Transportation Network* ❯ *Define IATA Region Codes* ❳.
2. Check whether the following entries exist and create any that are missing:

Table 118

IATA Region	Description	IATA Conference Area
AFR	Africa	TC2
CAR	Caribbean Sea	TC1
CEM	Central America	TC1
EUR	Europe	TC2

IATA Region	Description	IATA Conference Area
JAK	Japan and Korea	TC3
MDE	Middle East	TC2
NOA	North America	TC1
SAS	South Asia	TC3
SEA	South-Eastern Asia	TC3
SOA	South America	TC1
SWP	South-West of Pacific	TC3

3. Save your entries.

6.11 Assigning Countries to IATA Regions

Procedure

1. In Customizing for *Transportation Management* , choose ▶ *Master Data* ❯ *Transportation Network* ❯ *Assign Countries to IATA Regions* ❯ .
2. Create the following entries:

Table 119

Country	IATA Region
AU	SWP
JP	JAK
KR	JAK
TW	SEA
US	NOA

3. Save your entries.

6.12 Defining IATA Airline Codes

Procedure

1. In Customizing for SAP Transportation Management, choose ▶ *Transportation Management* ❯ *Master Data* ❯ *Business Partners* ❯ *Define IATA Airline Codes* ❯ .
2. Create the following entries:

Table 120

Airline	Description	AWB Prefix	IATA Member	Check Digit	Enable Prefix
JL	Rising Sun Airlines Ltd.	131	Select	Select	Select
QF	Oceanic Airways Ltd.	081	Select	Select	Select

3. Save your entries.

6.13 Defining Partner Determination Profiles

Procedure

1. In Customizing for *Transportation Management* , choose ▶ *Master Data* ❭ *Business Partners* ❭ *Define Partner Determination Profiles* ❭ .

2. Create the following entry:

Table 121

Partner Determination Profile	Description
AF	Determination Profile for Air Freight

3. Choose the entry and choose *Assign Party Roles* .

4. Create following entries:

Table 122

Party Role	Party Role Description	Sequence	Edit Level	Source Type	Business Partner
12	Carrier	1		Party Role	
5	Consignee	2	Mandatory	Party Role	
6	Shipper	3	Mandatory	Party Role	
TM010	Executing Carrier	4		Party Role	
101	Import Organization	5	Mandatory	FXD Business Partner	AF-FWH-20

5. Save your entries.

6. Create another entry

Table 123

Partner Determination Profile	Description
AF01	BP Det. Profile FWO EXW

7. Choose the entry and choose *Assign Party Roles* .

8. Create following entries:

Table 124

Party Role	Party Role Description	Sequence	Edit Level	Source Type	Business Partner
1	Ordering Party	1	Mandatory	Party Role	
101	Import Organization	5	Optional	Party Role	
5	Consignee	3	Mandatory	Party Role	
6	Shipper	2	Mandatory	Party Role	
TM005	Collect Agreement Party	1		Party Role	

9. Save your entries.

6.14 Assign Partner Determination Profiles Based on Incoterms

Procedure

1. In Customizing for *SAP Transportation Management* , choose ▌▶ *Transportation Management* ▶ *Master Data* ▶ *Business Partners* ▶ *Assign Partner Determination Profiles Based On Incoterms* ▐ .

2. Create the following entry:

Table 125

FWO Type	Incoterm	Part. Det. Prof.
AF01	EXW	AF01
AF14	EXW	AF01

3. Save your entries.

6.15 Defining IATA Location Codes

Procedure

1. In Customizing for *Transportation Management* , choose ▌▶ *Master Data* ▶ *Transportation Network* ▶ *Location* ▶ *Define IATA Location Codes* ▐ .

2. Enter the following data:

Table 126

IATA Location	Description	Country	Region	IATA City	Planning and Execution Organization
HIJ	Hiroshima International Airport	JP	34	HIJ	OAF-FWH-04
ICN	Incheon International Airport	KR	13	ICN	Blank
LAX	Los Angeles International Airport	US	CA	LAX	Blank
NGO	Chūbu Centrair Intern. Airport (Nagoya)	JP	23	NGO	OAF-FWH-01
NRT	New Tokyo International Airport (Narita)	JP	12	TYO	AF-FWH-03
PHX	Phoenix Sky Harbor International Airport	US	AZ	PHX	OAF-FWH-21
SAN	San Diego International Airport	US	CA	SAN	OAF-FWH-22
SFO	San Francisco International Airport	US	CA	SFO	OAF-FWH-25
SIN	Singapore Changi Airport	SG	SG	SIN	Blank
SYD	Sydney Kingsford Smith Airport	AU	NSW	SYD	Blank

IATA Location	Description	Country	Region	IATA City	Planning and Execution Organization
TPE	Taiwan Taoyuan International Airport	TW	TPE	TPE	Blank
TYO	Tokyo International Airport (Haneda)	JP	13	TYO	OAF-FWH-05

3. Save your entries.

> **i Note**
>
> Column *IATA City* can be entered only after creating and saving the IATA Location entry.

6.16 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. The codes don't play any role for the Air Freight Scenario but are defined here to make the locations also usable for other scenarios (i.e. Ocean Freight).

Procedure

1. In Customizing for Transportation Management, choose ▐▶ *Master Data* ❯ *Transportation Network* ❯ *Location* ❯ *Define UN/LOCODES* ◀▌.
2. Enter the following data:

Table 127

UN/LOCODE
AUSYD
JPHIJ
JPNGO
JPTYO
USLAX
USPHX
USSAN

6.17 Assigning Air Cargo Security Statuses

In this procedure, you assign air cargo security statuses to country-specific security statuses.

Procedure

1. In Customizing for *Transportation Management* , choose ▶ *Basic Functions* ❯ *Security* ❯ *Define Air Cargo Security Statuses* ❯ .
2. Enter the following data:

Table 128

Country Status	Short Description	Country	Screened by LSP	Block Status	ACS Status
JP1	Known Shipper handled by Regulated Agent	JP Japan	Deselect	Deselect	SPX
JP2	X-Rayed cargo, secure	JP Japan	Select	Deselect	SPX
JP3	Unknown Shipper, 24h detention, AF Cargo	JP Japan	Deselect	Deselect	SCO
JP4	Unknown Shipper PAX, X-Ray required	JP Japan	Deselect	Select	NSC
JP5	Screened by LSP	JP Japan	Select	Deselect	SPX
US1	Known Shipper handled by Regulated Agent	US USA	Deselect	Deselect	SPX
US2	X-Rayed cargo, secure	US USA	Select	Deselect	SPX
US3	Unknown Shipper, 24h	US USA	Deselect	Deselect	SCO

Country Status	Short Description	Country	Screened by LSP	Block Status	ACS Status
	`detention, AF Cargo`				
`US4`	`Unknown Shipper PAX, X-Ray required`	`US USA`	Deselect	Select	`NSC`
`US5`	`Screened by LSP`	`US USA`	Select	Deselect	`SPX`

3. Save your entries.

6.18 Defining Offsets for Calculating Known Shipper Status

Procedure

1. In Customizing for *Transportation Management* , choose ▶ *Basic Functions* ❯ *Security* ❯ *Define Offsets for Calculating Known Shipper Status* ❯.

2. Enter the following data:

Table 129

Country	Offset in Days
`US USA`	`180`

3. Save your entries.

6.19 Defining Transportation Service Level Codes

Procedure

1. In Customizing for *Transportation Management* , choose ▶ *Forwarding Order Management* ❯ *Define Transportation Service Level Codes* ❯.

2. Enter the following data:

Table 130

Service Level Code	Description
`S1`	`Next Flight Out, no Carrier-spcl product`
`S2`	`Normal Consolidation Service`
`S3`	`Economy Consolidation Service`

Service Level Code	Description
S4	Carrier-special product

3. Save your entries.

6.20 Defining Contract Basis

Procedure

1. In Customizing for *Transportation Management* , choose ▐▶ *Freight Order Management* ❭ *Freight Booking* ❭ *Define Contract Basis* ❭ .
2. Enter the following data:

Table 131

Contract Basis	Description
AM	Allotment
BS	Blocked space
CT	Charter
SQ	Spot quote

3. Save your entries.

6.21 Defining Stage Type Sequences for Movement Types

In this procedure, you specify the stage types that are allowed for a specific movement type as well as their sequence. The system checks that the sequence of stage types is correct as determined by the corresponding stage category.

Procedure

1. In Customizing for SAP Transportation Management, choose ▐▶ *Transportation Management* ❭ *Forwarding Order Management* ❭ *Define Stage Type Sequence for Movement Types* ❭ .
2. Enter the following data:

Table 132

Mov. Type	Seq. No.	Stage Type	StageTpeOCC	StageProp.	Det. Rule	Set. Rule
CC	1	02	Stage type must occur at least once	Deselect	Not Pl - Rel. if Ex. and Sales Org. Belong to	Not Relevant for Internal Settlement

Mov. Type	Seq. No.	Stage Type	StageTpeOCC	StageProp.	Det. Rule	Set. Rule
					Diff. Comp. Orgs	
CC	2	03	Stage type must occur at least once	Select	Not Pl – Rel. if Ex. and Sales Org. Belong to Diff. Comp. Orgs	Not Relevant for Internal Settlement
CC	3	04	Stage type must occur at least once	Deselect	Not Pl – Rel. if Ex. and Sales Org. Belong to Diff. Comp. Orgs	Not Relevant for Internal Settlement
DD	1	01	Stage type must occur at least once	Deselect	Not Pl – Rel. if Ex. and Sales Org. Belong to Diff. Comp. Orgs	Not Relevant for Internal Settlement
DD	2	02	Stage type can occur at any number	Deselect	Not Pl – Rel. if Ex. and Sales Org. Belong to Diff. Comp. Orgs	02 – In Execution
DD	3	03	Stage type must occur at least once	Select	Not Pl – Rel. if Ex. and Sales Org. Belong to Diff. Comp. Orgs	02 – In Execution
DD	4	04	Stage type can occur at any number	Deselect	Not Pl – Rel. if Ex. and Sales Org. Belong to	Not Relevant for Internal Settlement

Mov. Type	Seq. No.	Stage Type	StageTpeOCC	StageProp.	Det. Rule	Set. Rule
					`Diff. Comp. Orgs`	
`DD`	`5`	`05`	`Stage type must occur at least once`	Deselect	`Not Pl – Rel. if Ex. and Sales Org. Belong to Diff. Comp. Orgs`	`Not Relevant for Internal Settlement`

3. Save your entries.

6.22 Defining Default Agreement Party Roles for Stages

In the standard Customizing settings for Incoterms `FOB` (free on board) 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 133

Incoterm	Stage Type	Agmt Role
`FOB`	`Pickup`	`Prepaid Agreement Party`
`FOB`	`Pre-Carriage`	`Prepaid Agreement Party`
`FOB`	`Main Carriage`	`Collect Agreement Party`
`FOB`	`On-Carriage`	`Collect Agreement Party`
`FOB`	`Delivery`	`Collect Agreement Party`
`DDP`	`Pickup`	`Prepaid Agreement Party`
`DDP`	`Pre-Carriage`	`Prepaid Agreement Party`
`DDP`	`Main Carriage`	`Prepaid Agreement Party`
`DDP`	`On-Carriage`	`Prepaid Agreement Party`
`DDP`	`Delivery`	`Prepaid Agreement Party`
`EXW`	`Pickup`	`Collect Agreement Party`
`EXW`	`Pre-Carriage`	`Collect Agreement Party`

Incoterm	Stage Type	Agmt Role
`EXW`	`Main Carriage`	`Collect Agreement Party`
`EXW`	`On-Carriage`	`Collect Agreement Party`
`EXW`	`Delivery`	`Collect Agreement Party`

3. Save your entries.

6.23 Define EWM Integration Profile for Transit Warehouse

Procedure

1. In Customizing for *Transportation Management* , choose ▶ *Integration* ❯ *Integration with SAP Extended Warehouse Management* ❯ *Define EWM Integration Profile* ❯ .
2. Create new entry with following data:

Table 134

Field	Value
EWM Integration Profile	AFIP
Description	EWM Integration Profile for Air Freight
Send (Un)Loading Instruction	3 Automatic and Manual Sending of (Un)Loading Instructions
Delta Handling	3 Send (Un)Loading Instuctions Multiple Times
Include Related TUs (Inbound)	2 Exclude Related TUs from (Un)Loading Instructions
Include Related TUs (Outbound)	2 Exclude Related TUs from (Un)Loading Instructions

6.24 Defining Freight Order Types

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

Prerequisites

You have defined the following settings:

- Freight settlement document type `AF06 (Air Freight: Carrier Settlement)`
- Means of transport `OAF_TRUCK` and `OAF_TRUK_S`

> **i** Note
>
> This document separates sections that involve Customizing activities from those that involve configuring profile definition settings. As such, the procedures for defining the settings mentioned above are explained later in this document. Proceed with the following sections and then return to this section to continue:
>
> - Defining Freight Settlement Document Types [page 76]
> - Defining Means of Transport [page 104]
>
> The information in this section may have already been completed automatically based on the settings you configured in Defining Planning Profiles [page 40] .

Procedure

1. In Customizing for SAP Transportation Management, choose ▌▶ *Transportation Management* ❯ *Freight Order Management* ❯ *Freight Order* ❯ *Define Freight Order Types* ❱ .

2. Create the following freight order types:

   1. In the header area, enter the following data:

      Table 135

Field	Freight Order 1	Freight Order 2
Freight Order Type	`AF05`	`AF10`
Description	`AF - Pickup/Delivery Freight Order`	`AF - Pre/On-Carriage Freight Order`

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

      Table 136

Field	AF05	AF10
Freight Order Can Be Subcontracted	`01 Relevant for Subcontracting`	`01 Relevant for Subcontracting`
Shipper/Consignee Determination	`P Determination Based on Predecessor Documents`	`P Determination Based on Predecessor Documents`
Freight Order Can Be Deleted	Select	Select
Sequence Type of Stops	`01 Defined and Linear`	`01 Defined and Linear`

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

      Table 137

Field	AF05	AF10
Default Change Strategy	`DEF_CHACO`	`DEF_CHACO`

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

Table 138

Field	AF05	AF10
Execution Track. Relev.	`Exectution Tracking with External Event Managment`	`Exectution Tracking with External Event Managment`
Display Mode for Execution Tab	`Actual Events from TM and EM, Expected Events from EM`	`Actual Events from TM and EM, Expected Events from EM`
Immediate Processing	Select	`Select`
Propagate Execution Info	Select	`Select`
Execution Progagation Mode	`Standard Propagation`	`Standard Propagation`
Discrepancy Profile	`2000 – Transit Warehousing for LSP`	`2000 – Transit Warehousing for LSP`
Application Object Type	`ODT40_TO`	`ODT40_TO`
Last Exp. Event	`ARRIV_DEST` `UNLOAD_END` (only for Transit Warehousing)	`ARRIV_DEST` `UNLOAD_END` (only for Transit Warehousing)

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

Table 139

Field	AF05	AF10
Use Default Settings	Select	Select

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

Table 140

Field	AF05	AF10
Deflt Carrier Selection Settings	`AF-CAR-SEL-TRSP`	`AF-CAR-SEL-TRSP`
Document Creation Relevance (only relevant for Transit Warehousing)	`E Transportation Activity Creation in SAP EWM`	`E Transportation Activity Creation in SAP EWM`
EWM Integration Profile (only relevant for Transit Warehousing)	`AFIP`	`AFIP`
Track Changes	Select	Select

7. In the *Charge Calculation and Settlement Document Settings* screen area, enter the following data:

Table 141

Field	AF05	AF10
Default FSD Type	`AF06 Air Freight: Carrier Settlement Document`	`AF06 Air Freight: Carrier Settlement Document`
Enable Charge Calculation	Select	Select
Enable Cost Distribution	Select	Select

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Field	AF05	AF10
Enable Internal Charge Calculation	Select	Select
Enable Internal Settlement	Select	Select
Enable Settlement	Select	Select

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

Table 142

Field	AF05	AF10
Time for Drawing	**I Draw Numbers Immediately**	**I Draw Numbers Immediately**
Number Range Interval	**04**	**04**

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

Table 143

Field	AF05	AF10
Save Strategy	**CALC_CHARG**	**CALC_CHARG**

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

Table 144

Field	AF05	AF10
Default MTr for Type	**OAF_TRUK**	**OAF_TRUK_S**
Transportation Mode	**01**	**01**

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

Table 145

Field	AF05	AF10
Output Profile	**/SCMTMS/TOR_PRINT_ROAD**	**/SCMTMS/TOR_PRINT_ROAD**
Add. Output Profile (only relevant for Transit Warehousing)	**/SCMTMS/TOR**	**/SCMTMS/TOR**

12. Save your entries.

> **i** Note
>
> If necessary, return to the section Defining Planning Profiles [page 40] to continue.

6.25 Defining Freight Booking Types for Import

Procedure

1. In Customizing for SAP Transportation Management, choose ▶ *Transportation Management* > *Freight Order Management* > *Freight Booking* > *Define Freight Booking Types* ▶ .

2. Choose the *New Entries* pushbutton.

3. In the header area, enter the following data:

Table 146

Field	Value
Booking Type	`AF11`
Short Description	`AF: Air Freight Booking (Import)`
Transportation Mode Category	`4 Air`
Transportation Mode	`05`

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

Table 147

Field	Value
Shipper/Consignee Determination	`Determination Based on Predecessor Document`
Fix Booking	`Do Not Fix`
Booking Can Be Deleted	Select
Co-Load	Deselect

5. In the *Charge Calculation and Settlement Document Settings* screen area, enter the following data:

Table 148

Field	Value
Enable Charge Calculation	Select
Enable Cost Distribution	Select
Enable Settlement	Select
Default FSD Type	`AF06`

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

Table 149

Field	Value
Time for Drawing	`S - Draw Number When Saving Document`
Number Range Interval	`05`

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

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

Table 150

Field	Value
Carrier Confirmation	`N Carrier Confirmation Not Required`
Exec. Track. Relevance	`2 Execution Tracking`

Field	Value
Display Mode for Execution Tab	**Actual Events from TM, EM, Expected Events from EM**
Immediate Processing	**X Life Cycle Is to Be Set to "In Process" Immediately**
Propagate Execution Info	Select
Severe Execution Checks	Deselect
Last Expected Event	**ARRIV_DEST**

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

Table 151

Field	Value
Consolidation (Source)	**D With Consolidation**
Consolidation (Dest.)	**D With Consolidation**
Shipping Type	**10**
Movement Type	**CC**
Traffic Direction	**2 Import**

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

Table 152

Field	Value
Output Profile	**/SCMTMS/TOR_PRINT_AIR**
Additional Output Profile	**/SCMTMS/TOR**

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

Table 153

Field	Value
Default FO Type for Pick-Up	**AF05**
Default FO Type for Delivery	**AF05**
BW Relevance	Deselect
Document Creation Relevance	E Transportation Activity Creation in SAP EWM (only for Transit Warehousing)
Track Changes	Deselect
Enable Compliance Check	Deselect
Container Item Source	**Container Item Is Defined in Booking**
Web Dynpro Application Configur.	**/SCMTMS/FRE_BOOK_CBAIR**
Partner Determination Profile	**AF Determination Profile for Air Freight**

Field	Value
EWM Integration Profile	`AFIP` (only for Transit Warehousing)

12. In the *Organizational Unit Determination* screen area, enter purchasing organization `AF-FWH-20` .

13. Save your entries.

> **i Note**
>
> If necessary, return to the section Defining Planning Profiles [page 40] to continue.

More Information

- Defining Freight Settlement Document Types [page 76]
- Defining Forwarding Settlement Document Types [page 77]
- Defining Dimensional Weight Profiles [page 78]

6.26 Defining Freight Booking Types for Export

Prerequisites

You have defined the organizational model (sales and purchasing organization) as well as the associated business partners, forwarding houses, positions, and units.

> **i Note**
>
> This document separates sections that involve Customizing activities from those that involve configuring profile definition settings. As such, the procedures for defining the settings mentioned above are explained later in this document. Proceed with the section Creation of Organizational Models [page 92] and then return to this section to continue.
>
> The information in this section may have already been completed automatically based on the settings you configured in Defining Planning Profiles [page 40] .

Procedure

1. In Customizing for SAP Transportation Management, choose ▶ *Transportation Management* ❯ *Freight Order Management* ❯ *Freight Booking* ❯ *Define Freight Booking Types* ▶ .

2. Choose the *New Entries* pushbutton.

3. In the header area, enter the following data:

Table 154

Field	Value
Booking Type	`AF04`

Field	Value
Short Description	`AF: Air Freight Booking (Export)`
Transportation Mode Category	`4 Air`
Transportation Mode	`05`

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

Table 155

Field	Value
Shipper/Consignee Determination	`Determination Based on First and Last Location`
Fix Booking	`Do Not Fix`
Booking Can Be Deleted	Select
Co-Load	Deselect

5. In the *Charge Calculation and Settlement Document Settings* screen area, enter the following data:

Table 156

Field	Value
Enable Charge Calculation	Select
Enable Cost Distribution	Select
Enable Settlement	Select
Default FSD Type	`AF06`

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

Table 157

Field	Value
Time for Drawing	`S - Draw Number When Saving Document`
Number Range Interval	`05`

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

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

Table 158

Field	Value
Carrier Confirmation	`N Carrier Confirmation Not Required`
Exec. Track. Relevance	`2 Execution Tracking`
Display Mode for Execution Tab	`Actual Events from TM, EM, Expected Events from EM`
Immediate Processing	`X Life Cycle Is to Be Set to "In Process" Immediately`
Propagate Execution Info	Select

Field	Value
Severe Execution Checks	Deselect
Last Expected Event	*ARRIV_DEST*

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

Table 159

Field	Value
Consolidation (Source)	`D With Consolidation`
Consolidation (Dest.)	`D With Consolidation`
Shipping Type	`10`
Movement Type	`CC`
Traffic Direction	`1 Export`

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

Table 160

Field	Value
Output Profile	`/SCMTMS/TOR`
Additional Output Profile	`/SCMTMS/TOR_PRINT_AIR`

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

Table 161

Field	Value
Default FO Type for Pick-Up	`AF05`
Default FO Type for Delivery	`AF05`
BW Relevance	Deselect
Document Creation Relevance	E Transportation Activity Creation in SAP EWM (only for Transit Warehousing)
Track Changes	Deselect
Enable Compliance Check	Deselect
Container Item Source	`Container Item Is Defined in Booking`
Web Dynpro Application Configur.	`/SCMTMS/FRE_BOOK_CBAIR`
Partner Determination Profile	`AF Determination Profile for Air Freight`
EWM Integration Profile	`AFIP` (only for Transit Warehousing
Import Booking Type	`AF11`
ACS Check	Select

12. In the *Organizational Unit Determination* screen area, enter purchasing organization `AF-FWH-03` .

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13. In the *Predecessor Document Handling* screen area, specify the update from predecessor as **A Asynchronous Update from Predecessor Allowed** .

14. Save your entries.

> **i Note**
>
> If necessary, return to the section Defining Planning Profiles [page 40] to continue.

More Information

- Defining Freight Settlement Document Types [page 76]
- Defining Forwarding Settlement Document Types [page 77]
- Defining Dimensional Weight Profiles [page 78]

6.26.1 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 when you use the shortcuts in the forwarding order. You can specify different freight order types for each stage type and transportation mode.

Prerequisites

- You have defined document types in the system or you are using the standard set up with the required freight 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. Enter the following data:

Table 162

Seq. No.	FWO Type	Shpg Type	Stage Type	Transportation Mode	Sales Organization	Document Type
1	AF01	Loose	01	01	Blank	AF05
2	AF01	Loose	02	01	Blank	AF10
3	AF01	Loose	03	05	Blank	AF04
4	AF14	Loose	04	01	Blank	AF10

Seq. No.	FWO Type	Shpg Type	Stage Type	Transportation Mode	Sales Organization	Document Type
5	AF14	Loose	05	01	Blank	AF05

3. For each entry, select the following checkboxes:

   ○ Create Freight Document

   ○ Select Freight Document

   ○ Select Schedule

6.26.2 Defining Freight Settlement Document Types

The information in this section may have already been completed automatically based on the settings you configured in Defining Freight Order Types [page 66] .

Procedure

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

2. Enter the following data:

   Table 163

Field	Value
FSD Type	AF06
Description	Air Freight: Carrier Settlement Document
FSD Category	10
Number Range Interval	01
Output Profile	/SCMTMS/TOR_INV_PREP
Add. Output Profile	/SCMTMS/SFIR_PRINT
Dynamic Determination of Output Profile	Deselect

3. Save your entries.

> ℹ **Note**
>
> If necessary, return to the section Defining Freight Order Types [page 66] to continue.

6.26.3 Defining Forwarding Settlement Document Types

Procedure

1. In Customizing for *Transportation Management* , choose ▶ *Settlement* ⟩ *Forwarding Settlement* ⟩ *Define Forwarding Settlement Document Types* ❯ .
2. Enter the following data:

Table 164

Field	Value
FWSD Type	**AF09**
Description	**Air Freight: Forwarding Settlement Document**
Number Range Interval	**01**
BW Relevance	Select
Output Profile	**/SCMTMS/CFIR**
Add. Output Profile	**/SCMTMS/CFIR_PRINT**
Dynamic Determination of Output Profile	Deselect

3. Save your entries.

6.26.4 Defining Internal Settlement Document Types

Procedure

1. In Customizing for SAP Transportation Management, choose ▶ *Transportation Management* ⟩ *Settlement* ⟩ *Forwarding Settlement* ⟩ *Define Forwarding Settlement Document Types* ❯ .
2. Enter the following data:

Table 165

Field	Value
FWSD Type	**AF17**
Description	**Air Freight: Internal Settlement Document**
FWSD Category	**30 Internal Settlement Document**
Number Range Interval	**01**
BW Relevance	Select
Track Changes	Select
Output Profile	**/SCMTMS/CFIR**

Field	Value
Add. Output Profile	`/SCMTMS/CFIR_PRINT`

3. Save your entries.

6.26.5 Defining Dimensional Weight Profiles

Different chargeable weight calculations are implemented depending on factors such as the transportation mode. Land transport uses a factor of 1:3, and air transport uses a factor of 1:6.

Procedure

1. In Customizing for *Transportation Management* , choose ▌▶ *Basic Functions* ❭ *Charge Calculation* ❭ *Data Source Binding* ❭ *Define Dimensional Weight Profiles* ❭ .
2. Create the following entry for land transport:

Table 166

Field	Value
Dimensional Weight Profile	`ZOAF_LAND3`
Profile Description	`Chargeable Weight Land Freight 333 kg = 1 cbm`
Dimal Weight Factor	`3,000`
Volume UoM	`CCM`
Weight UoM	`KG`
Calc. Base	`GROSS_VOLUME`
Rounding Profile	`0000`

3. Save your entries.
4. Create another entry using the following data:

Table 167

Field	Value
Dimensional Weight Profile	`ZAF_01`
Profile Description	`Chargeable Weight Land Freight 167 kg = 1 cbm`
Dimal Weight Factor	`6,000`
Volume UoM	`M3`
Weight UoM	`KG`
Calc. Base	`GROSS_VOLUME`

Field	Value
Rounding Profile	**0000**

5. Save your entries.

7 Conditions

In this procedure you do the following configurations you need to create the condition to be used in the planning proposal *AF-PLAN-PLAN-PROPOSAL* :

Procedure

7.1 Create Data Access Definitions

Procedure

1. In Customizing for *Transportation Management* , choose ▶ *Basic Functions* ❯ *Conditions* ❯ *Data Access Definition* ❯ .

2. Create *New Entries* with following data:

Table 168

Field	Value	Value
Data Access Definition	AF_TOR_MTR	AF_TOR_MTR_ITEM
Description	TOR Means of Transport for Air Freight	TOR Means of Transport Item for Air Freight
Data Element for F4 Helps	/SCMTMS/TRANSMEANSTYPECODE	/SCMTMS/TRANSMEANSTYPECODE
Name of BO	/SCMTMS/TOR	/SCMTMS/TOR
Data Element for F4 Helps	ROOT	ITEM_TR
Data Element for F4 Helps	MTR	MTR

7.2 Assign Condition Type to Data Access Definition

Procedure

1. In Customizing for *Transportation Management* , choose ▶ ❯ *Basic Functions* ❯ *Conditions* ❯ *Assign Condition Type to Data Access Definition* ❯ .

2. Create *New Entries* with following data:

Table 169

Field	Value	Value
Condition Type	`/SCMTMS/TOR_TYPE`	`/SCMTMS/TOR_TYPE`
Data Access Definiton	`AF_TOR_MTR`	`AF_TOR_MTR_ITEM`
Data Access Definiton	`X Data Access Definition is Default for Condition Type`	`X Data Access Definition is Default for Condition Type`

7.3 Define Data-Crawler Profile

Procedure

1. In Customizing for *Transportation Management* , choose ▮▶ *Basic Functions* ❯ *Conditions* ❯ *Define Data-Crawler Profile* ❯ .
2. Create *New Entries* with following data:

Table 170

Field	Value
DC Profile ID	`AF_TOR_MAINITEM`
Business Object Name	`/SCMTMS/TOR`
BO Node Name	`ROOT`
Fill Data	`Select`

3. Press Enter
4. Select Path Steps from the left Menu path and create new entry with following data:

Table 171

Field	Value
Step ID	`10`
Business Object Name	`/SCMTMS/TOR`
Source Node	`ROOT`
Association Name	`ITEM_TR_MAIN`
Target Node	`ITEM_TR`

8 Define Commodity Codes

Procedure

1. In Customizing for *SAP Transportation Management* , choose ▐▶ *Transportation Management* ❯ *Master Data* ❯ *Classification of Goods* ❯ *Define Commodity Codes* ◗ .

2. Enter the following data for *Commodity Code Type IN* :

   Table 172

Commodity Code	Description
2200	Clothing
4200	Parts of Automobiles
4323	Electronic Components
4326	Computer Hardware
6002	Chemicals/Paints

3. Save your entries.

9   Define ULD Rate Types

Procedure

1. In Customizing for *SAP Transportation Management* , choose ▌▶ *Transportation Management* ❯ *Basic Functions* ❯ *Charge Calculation* ❯ *Air Freight Settings* ❯ *Define ULD Rate Types* ❱ .
2. Enter the following data:

Table 173

Field	Value
ULD Rate Type	02
Minimal Chargeable Weight	2860
Minimum Weight UoM	Electronic Components
Description	Main Deck Pallet with Net PMC (ANS)

3. Save your entries.

10 Map ULD Types to ULD Rate Types

Procedure

1. In Customizing for *SAP Transportation Management* , choose ▶ ▷ *Transportation Management* ▷ *Basic Functions* ▷ *Charge Calculation* ▷ *Air Freight Settings* ▷ *Map ULD Types to ULD Rate Types* ◢ .

2. Enter the following data:

   Table 174

Field	Value
Equipment Group	ULD
Equipment Type	PMC6
ULD Rate Type	02
Minimum Chargeable Weight	2860
UoM	KG

3. Save your entries.

11 Order Management

Order management involves defining forwarding and freight orders and completing any supporting documentation. The following processes are involved:

- Defining Forwarding Order Types [page 88]

  This procedure specifies types of forwarding orders. Forwarding order types define certain parameters for the forwarding order that affect how the system processes the business document.

- Assigning Item Types to Forwarding Order Types [page 90]

  You use this procedure to assign an item type to a forwarding order type.

- Defining Default Freight Document Types for Stages [page 75]

  This procedure specifies which freight document type (freight order type or freight booking type) is used to generate settlement documents when you use the shortcuts in the forwarding order.

11.1 Define Hierarchical Views for Freight Documents

Procedure

1. In Customizing for *Transportation Management* , choose ▶ *Freight Order Management* ❭ *Define Hierarchical Views for Freight Documents* ❭ .
2. Select *Hierarchical View CRGAC – Cargo Management for Air* and press *Hierarchy Levels* in the menu path on the left.
3. Press *New Entries* and enter following data:

   Table 175

Object Type	F Container
Show Hier. Level	Select

4. Save your entries.

11.2 Defining Package Type Codes

Package type codes enable you to standardize the packages that are used to transport cargo. In this scenario, you require package type 112 (boxes).

Procedure

1. In Customizing for *Transportation Management* , choose ▶ *Forwarding Order Management* ❭ *Define Package Type Codes* ❭ .

2. Create the following entries:

Table 176

Field	Value	Value
Package Type	**BOX**	**PAL**
Description	**Boxes**	**Pallets**

3. Save your entries.

11.3 Defining Item Types for Forwarding Order Management

Item types define specific measures that are subsequently used in a forwarding order. When you define an item type, you specify the height, width, volume, and weight of a transportable item category.

In this scenario, you require item type `AF03` (packages with specific dimensions).

Procedure

1. In Customizing for SAP Transportation Management, choose ▶ *Transportation Management* ❯ *Forwarding Order Management* ❯ *Define Item Types for Forwarding Order Management* ❯ .
2. Enter the following data:

Table 177

Field	Value	Value
Item Type	**AF03**	**AF04**
Item Type Descr.	**Packages with specific dimensions**	**Product**
Item Category	**PKG Package**	**PRD Product**
Package Type	**PAL**	**–**
Text Schema	Blank	**FWOITM**
DG UI Profile Name	Blank	**Blank**
Equipment Group	Blank	**Blank**
Equipment Type	Blank	**Blank**
One Piece Only	Deselect	**Deselect**
Default Weight UoM	**KG**	**KG**
Default Volume UoM	**M3**	**M3**
Default Quantity UoM	**EA**	**PC**

3. Save your entries.

11.4   Defining Stage Profiles

Procedure

1. In Customizing for SAP Transportation Management, choose ▶ *Transportation Management* ❭ *Forwarding Order Management* ❭ *Define Stage Profiles* ❭ .
2. Enter the following data:

Table 178

Field	Value
Stage Profile	AFIM
Description	Air freight import stage profile

3. Save your entries.
4. Select the new entry and choose *Define Stage Type Sequence for Stage Profile* from the tree structure.
5. Enter the following data:

Table 179

Seq No.	Stage Type	Stage Type Occ	Stage Prop	Det. Rule	Set Rule
10	01	Stage type must occur at least once	Select	Never relevant for planning	Not Relevant for Internal Settlement
20	02	Stage type must occur at least once	Select	Never relevant for planning	Not Relevant for Internal Settlement
30	03	Stage type must occur at least once	Select	Never relevant for planning	Not Relevant for Internal Settlement
40	04	Stage type must occur at least once	Select	Always relevant for planning	In Execution
50	05	Stage type must occur at least once	Select	Always relevant for planning	In Execution

6. Save your entries.

11.5   Defining Forwarding Order Types

In this procedure, you specify types of forwarding orders. Forwarding order types define parameters for the forwarding order that affect how the system processes the business document. For example, the forwarding order type can determine the number range interval that is used to generate the number of the forwarding order, or it can define whether freight units are created automatically when you save the forwarding order.

You can also assign profiles (such as a planning profile or 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. This scenario uses standard number ranges that are included in standard SAP Customizing.

- You have defined a freight building rule, which is considered for automatic freight unit building.

- You have defined a forwarding house, for example `OAF-FWH-05` , as an organizational element in transaction `PPOME` .

Procedure

1. In Customizing for SAP Transportation Management, choose ▎▶ *Transportation Management* ❯ *Forwarding Order Management* ❯ *Forwarding Order* ❯ *Define Forwarding Order Types* ❳ .
2. Choose the *New Entries* pushbutton and create the following entries:
    - In the header area, enter the following data:

      Table 180

Field	Forwarding Order Type 1	Forwarding Order Type 2
Forwarding Order Type	`AF14`	`AF01`
Short Description	`Air Freight — Forwarding Order Import`	`Air Freight - Forwarding Order Export`

    - In the *Number Range Settings* area, enter the following data:

      Table 181

Field	Forwarding Order Type 1	Forwarding Order Type 2
Number Range Interval	`01`	`01`
Template No. Range Interval	`01`	`01`

    - In the *Process Control / Business Object Mode* area, enter the following data:

Table 182

Field	Forwarding Order Type 1	Forwarding Order Type 2
Same Locations and BPs	Deselect	Deselect
BW Relevance	Deselect	Deselect
Enable Approval Workflow	Select	Select
Track Document Changes	Select	Select
Automatic Freight Unit Building	Select	Select
Transportation Mode	`05 – Air`	`05 – Air`
Shipping Type	`10 – Loose`	`10 – Loose`
Traffic Direction	`2`	`1`
Stage Determination	`Stage Determination by Stage Profile`	*Stage Determination by Movement Type*

- In the *Air Cargo Settings* area, enter the following data:

Table 183

Field	Forwarding Order Type 1	Forwarding Order Type 2
AWB Type	`04 – Normal Consolidation`	`04 – Normal Consolidation`
Enable Air Cargo Security Check	Select	Select
Copy Air Cargo Security Data	Select	Select

- In the *Charge Calculation and Settlement Document Settings* area, enter the following data:

Table 184

Field	Forwarding Order Type 1	Forwarding Order Type 2
Enable Charge Calculation	Select	Select
Enable Internal Charge Calculation	Select	Select
Automatic Confirmation	Deselect	Deselect
EM Integration Active	Deselect	Deselect
Dangerous Goods Profile	`DG1`	`DG1`
Text Schema	`FWOAIRHDR`	`FWOAIRHDR`
Stage Profile	`AFIM`	Blank
Default FWSD Type	`AF09`	`AF09`
Enable Forwarding Settlement	Select	Select
Enable Internal Settlement	Select	Select
Default ISD Type	`AF17`	`AF17`
Enable Waybill Stock	Select	Select

Field	Forwarding Order Type 1	Forwarding Order Type 2
Default Conf. Type	`O – Order-Based Confirmation`	`O – Order-Based Confirmation`
Import FWO Type	Blank	`AF14`

○ Enter the following event manager values:

Table 185

Field	Forwarding Order Type 1	Forwarding Order Type 2
EM Web Interface Transaction	Blank	Blank
Output Profile	`/SCMTMS/TRQ_FWO`	`/SCMTMS/TRQ_FWO`
Additional Output Profile	`/SCMTMS/TRQ_FWO_PRINT`	`/SCMTMS/TRQ_FWO_PRINT`
Accept Transp. Prop.	`Save Route Only`	`Save Route Only`
Propagate Changes	`B – Synchronous Propagation of Changes, Fallback to Asynchronous`	`B – Synchronous Propagation of Changes, Fallback to Asynchronous`
Customs Handling	`Automatic`	`Manual`

○ In the *Default Values* area, enter the following data:

Table 186

Field	Forwarding Order Type 1	Forwarding Order Type 2
Default Weight UoM	`KG`	`KG`
Default Volume UoM	`M3`	`M3`
Default Pieces UoM	`PC`	`PC`
Freight Unit Building Rule	`AF-FUBR-01`	`AF-FUBR-01`
Planning Profile	Blank	`AF-PLAN-PROPOSAL`

○ In the *Organizational Unit Determination* area, enter the following data:

Table 187

Field	Forwarding Order Type 1	Forwarding Order Type 2
Consider User Assignment	Deselect	Select
Sales Organization	Blank	Blank

3. Save your entries.

11.6 Assigning Item Types to Forwarding Order Types

In this procedure, you assign an item type to forwarding order (FWO) types. Once the assignment has been made, the item type can be used in any forwarding order of type `AF01` or `AF14` .

In this scenario, the following item types are assigned:

- `AF03` (packages with specific dimensions) is assigned to forwarding order type `AF01` (AF Air Export).
- `PRD` (products) is assigned to forwarding order type `AF01` (AF Air Export).
- `AF03` (packages with specific dimensions) is assigned to forwarding order type `AF14` (AF Air Import).

Procedure

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

   Table 188

FWO Type	Item Type	Default Item Type	Item Category
AF01	AF03	Select	Package
AF01	AF04	Deselect	Product
AF14	AF03	Select	Package
AF14	AF04	Deselect	Product

3. Save your entries.

12 Creation of Organizational Models

SAP Transportation Management uses HR functions from the organizational model to create and maintain organizational units. The organizational model can be used to model your sales organization, purchasing organization, and transportation execution organization.

You use the organizational model to assign the responsible organizational units to transportation documents such as a freight request, freight order, and so on. Each order must be assigned to an organizational unit so that the costs and profits generated by the order can be allocated to a business unit. This is also necessary for profit analysis of the various groups and organizations associated with the logistics service provider (LSP). The organizational model supports you when analyzing the costs that your company incurs for various LSPs, routes, customers, and so on, and therefore enables you to improve your demand forecasting.

You have to maintain the organizational model in SAP TM 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 involves the following operations:

- Creating Companies [page 92]

  SAP ERP contains two companies representing the Japanese 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 93]

- Creating Forwarding Houses [page 95]

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

- Assigning Positions and Users to Forwarding Houses [page 97]

  Each forwarding house has its own representative user with a one-to-one relationship with the corresponding forwarding house.

12.1 Creating Companies

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

Procedure

Creating the Japanese Company

1. In SAP NetWeaver Business Client, choose ❯ *Master Data* ❯ *Organization* ❯ *Create Organization and Staffing* ❯.

2. In the dialog box, set the validity period from `<current year> -01-01` to `9999-12-31` and choose *Continue* .

3. On the *Basic Data* tab page, in the *Organizational Unit* fields, enter **OAF-COMP-JP** and the description **Interforwarders Japan** .

4. On the *Org. Data* tab page, choose *Create* .

5. As the *Organizational Unit Function* , enter **24 Company** and as the *Organizational Unit Role* , enter **1 Organization** , press Enter , and select *Intra Comp. Settlement* .

6. Choose the *Address* tab page and enter the city **Tokyo** , region **13** , and country **JP** .

7. Save your entries.

Creating the U.S. Company

1. In SAP NetWeaver Business Client, choose ▶ *Master Data* ❯ *Organization* ❯ *Create Organization and Staffing* ◀ .

2. In the dialog box, set the validity period from `<current year> -01-01` to `9999-12-31` and choose *Continue* .

3. On the *Basic Data* tab page, in the *Organizational Unit* fields, enter **OAF-COMP-US** and the description **Interforwarders Inc. United States** .

4. On the *Org. Data* tab page, choose *Create* .

5. As the *Organizational Unit Function* , enter **24 Company** and as the *Organizational Unit Role* , enter **1 Organization** , press Enter and select *Intra Comp. Settlement* .

6. Choose the *Address* tab page and enter the city **Los Angeles** , region **CA** , and country **US** .

7. Save your entries.

12.2   Defining Business Partners for Forwarding Houses

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 Notes 1410353 📎 and 1540288 📎 .

Procedure

1. On the *SAP Easy Access* screen for SAP TM, choose ▶ *Transportation Management* ❯ *Master Data* ❯ *Maintain Business Partner* ◀ or call transaction `BP` .

2. Create business partners of type *Organization* using the following data:

Table 189

Business Partner	Address	Search Term 1	Search Term 2
OAF-FWH-01	8-3 Kanayama Cho 1, Atsuta-ku Nagoya-shi, 4560002, JP, Region 23 (Aichi)	FWH Station	JP

Business Partner	Address	Search Term 1	Search Term 2
`OAF-FWH-05`	`6-23-15 Shiba, Minato-ku, Tokyo, 1080014, JP, Region 13 (Tokyo)`	`FWH Station`	`JP`
`AF-FWH-03`	`Building 725-5, 1080398 Narita, JP`	`FWH Gateway`	`JP`
`AF-FWH-20`	`Spectrum Drive, Building 1755, 92602 Irvine, CA (California)`	`FWH Gateway`	`US`
`OAF-FWH-21`	`8123 South Hardy Drive, Tempe, 85284-1106, US, Region AZ (Arizona)`	`FWH Station`	`US`
`OAF-FWH-22`	`2296 Niels Bohr Court, San Diego, 92154, US, Region CA (California)`	`FWH Station`	`US`
`OAF-FWH-25`	`213 El Camino Real, Milbrae, 94030-2607, US, Region CA (California)`	`FWH Station`	`US`

3. Save your entries.
4. Assign business partner role `CRM002 – Ship-to Party` to all these business partners.
5. For BPs *AF-FWH-03* and *AF-FWH-05* assign also business partner role *BUP004 – Organizational Unit* .
6. For BPs *AF-FWH-03* create following additional data in business partner role BUP004 – Organizational Unit in tab Identification:.

Table 190

Field	Value
Related Org. Unit	`AF-FWH-03`
Regulated Agent	`JP/RA/00123-0219`
IATA Agent Code	`23-4-6034`
ETD Offset	`0`
CASS Account	`9876`

12.3 Creating Forwarding Houses

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

The organizational units listed below are created as line supervisors (lower level units) of the corresponding company codes.

The following forwarding houses are created in company `OAF-COMP-JP`:

Table 191

Abbreviation of Organizational Unit	OAF-FWH-01	OAF-FWH-05	AF-FWH-03
Name of the Organizational Unit	FH Station Nagoya	FH Station Tokyo	FH Gateway Narita
Supervisor Of	None	None	None
Organizational Unit Function	89 (Forwarding House)	89 (Forwarding House)	89 (Forwarding House)
Organizational Unit Role	1 (Organization)	1 (Organization)	1 (Organization)
Business Partner	`OAF-FWH-01`	`OAF-FWH-05`	`AF-FWH-03`
Address	8-3 Kanayama Cho 1, Atsuta-ku, Nagoya-shi, 4560002, JP, Region 23 (Aichi)	6-23-1 Shiba, Minato-ku, 1080014, JP, Region 13 (Tokyo)	Building 700, Narita, 1080398, JP, Region 12 (Chiba)

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

Table 192

Abbreviation of Organizational Unit	AF-FWH-20	OAF-FWH-21	OAF-FWH-22
Name of the Organizational Unit	FH Gateway Los Angeles	FH Station Phoenix	FH Station San Diego
Supervisor Of	None	None	None
Organizational Unit Function	89 (Forwarding House)	89 (Forwarding House)	89 (Forwarding House)
Organizational Unit Role	1 (Organization)	1 (Organization)	1 (Organization)
Business Partner	`AF-FWH-20`	`OAF-FWH-21`	`OAF-FWH-22`
Address	85 World Way, Los Angeles, 90045, 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)

Procedure

Creating 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 as shown in the table above.

7. On the *Org. Data* tab page, choose *Create* and define the organizational unit function and role according to the above tables.

8. On the *Address* tab page, enter the main address of the organization as shown in the tables above.

9. Save your entries.

   An organizational unit number is generated along with the corresponding business partner number and displayed on the *Org. Data* tab page of the organizational unit.

10. Create the remaining forwarding houses with the data given in the above tables.

Renaming Organizational Units

When you create organizational units, the system allocates organizational unit IDs to the units. You can rename these IDs so that they are the same as the abbreviations in the tables above. Make a note of the system numbers since these 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 the search term **OAF-FWH*** or **AF-FWH*** .

3. Choose *Find* .

4. In the *Hit list* panel, double-click `FH Station Nagoya` .

5. Choose the *Org. data* tab page and note the organizational unit ID in the table below.

6. In the *Org.ID* field, change the entry to **OAF-FWH-01** .

7. Choose *Save* .

8. Rename the remaining organizational units listed in the following table:

Table 193

Company	Forwarding Houses			Organizational ID Generated by System	New Organizational ID
OAF-COMP-JP	OAF-FWH-01	FH Station	Nagoya	`<8-digit number>`	OAF-FWH-01
	AF-FWH-03	FH Gateway	Narita	`<8-digit number>`	AF-FWH-03

Company	Forwarding Houses			Organizational ID Generated by System	New Organizational ID
	OAF-FWH-05	FH Station	Tokyo	<8-digit number>	OAF-FWH-05
OAF-COMP-US	AF-FWH-20	FH Gateway	Los Angeles	<8-digit number>	AF-FWH-20
	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

12.4 Assigning Positions and Users to Forwarding Houses

Forwarding houses represent the different organizational units used in this scenario. Automatic determination also takes into account any 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 create a user for each organizational unit (forwarding house). Later in this process, each process step is then executed by a different user.

Prerequisites

- You have copied the following standard roles to your namespace:
    - /SCMTMS/PLANNER
    - /SCMTMS/BOOKING_AGENT
    - /SCMTMS/CUSTOMER_SERVICE_AGENT
- You have created and generated authorization profiles.

    For each role, you must create authorization profiles and generate them. For more information about authorization levels and the organizational units used in this scenario, see Creation of Organizational Models [page 92] .

Procedure

Creating User Profiles

1. In SAP NetWeaver Business Client, choose ▌▶ *Application Administration* ❯ *General Settings* ❯ *User Maintenance* ❩ .
2. Create the following users:

Table 194

User ID	Name	First Name	Assigned Roles
JONES	**Jones**	**Brian**	• /<YOUR_NAMESPACE> /PLANNER • /<YOUR_NAMESPACE> /BOOKING_AGENT
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

Assigning Users to Forwarding Houses

1. In SAP NetWeaver Business Warehouse, 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, select the forwarding house and choose *New* .

4. In the dialog box 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 195

Abbreviation of Organizational Unit	Name of the Organizational Unit	Position ID	Position Description	Assigned User
AF-FWH-20	FH Gateway Los Angeles	CustServA_US	Customer Service Agent US	JONES
OAF-FWH-21	FH Station Phoenix	TransPlan_US	Transportation Planner US	Barkley

Abbreviation of Organizational Unit	Name of the Organizational Unit	Position ID	Position Description	Assigned User
OAF-FWH-22	FH Station San Diego	Blank	Blank	Blank
OAF-FWH-01	FH Station Nagoya	Blank	Blank	Blank
OAF-FWH-05	FH Station Tokyo	CustServA_JP	Customer Service Agent JP	JIME
AF-FWH-03	FH Gateway Narita	TransPlan_JP	Transportation Planner JP	GARI

> **i** **Note**
>
> If necessary, return to the section Defining Freight Booking Types for Export [page 72] to continue.

12.5 Defining Identification Types for Airlines

Procedure

1. In Customizing for *Cross-Application Components* , choose ▐ *SAP Business Partner* ❯ *Business Partner* ❯ *Basic Settings* ❯ *Identification Numbers* ❯ *Define Identification Types* ▐ .
2. Enter the following data:

Table 196

Field	Value
ID Type	**TM0001**
Description	**Airline Code**
ID Category	**TM0001**
Persons	Select
Organizations	Select
Groups	Select

3. Save your entries.

12.6 Defining Business Partners for Local Air Carriers

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 Notes 1410353 ➦ and 1540288 ➦ .

In this scenario, business partners have been created automatically by transferring the vendors (representing local air carriers) from SAP ERP to SAP TM. Therefore, you do not have to create the business partners manually in SAP TM. However, you must add additional information that is relevant for SAP TM.

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ▌ *Master Data* ❯ *General* ❯ *Define Business Partner* ❭ .

2. Open business partners `AF-CR-JL` and `AF-CR-QF` of type *Business Partner* .

3. Change the role of the business partner to *Carrier* .

4. Choose the *Identification* tab page.

5. In the *Identification Numbers* table, add a new row and enter **TM0001** as the *ID Type* and **JL (QF for BP AF-CR-QF)** as the *Identification number* .

6. In the *Vendor Data* tab page, define the carrier category as *Carrier* .

7. Go to *Relationships* and select *Relationship Category* of *Has Subsidaries/Agents* .

8. Create new Relationships for BP `AF-JL-LAX` and `AF-JL-NRT` (BP `AF-QF-LAX` and `AF-QF-NRT` , `AF-QF-SYD` for `AF-CR-QF`).

9. Move back to *General Data* and choose the *Vendor Company Org. Data* tab page for *Business Partner Role* **CRM010 Carrier.**

10. Enter company organization **OAF-COMP-JP** .

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

12. Enter purchasing organization **AF-FWH-03** .

13. Choose the *Vendor Partner Determination* tab page.

14. Enter purchasing organization **AF-FWH-03** and role code **12** (carrier).

15. Save your entries.

16. For the business partners shown in the following table add BP Role Carrier and make the following settings:

Table 197

Business Partner	Vendor Data	Vendor Company Org. Data	Vendor Org. Data	Vendor Partner Determination	
Business Partner ID	Carrier Category	Company Org	Purchasing Org.	Purchasing Org.	Role Code
AF-JL-NRT	Subsidiary	OAF-COMP-JP	AF-FWH-03	AF-FWH-03	12
AF-QF-NRT	Subsidiary	OAF-COMP-JP	AF-FWH-03	AF-FWH-03	12
AF-JL-LAX	Subsidiary	OAF-COMP-JP	AF-FWH-03	AF-FWH-03	12
AF-QF-LAX	Subsidiary	OAF-COMP-JP	AF-FWH-03	AF-FWH-03	12
AF-QF-SYD	Subsidiary	OAF-COMP-JP	AF-FWH-03	AF-FWH-03	12

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Creation of Organizational Models

13 Transportation Network Setup in SAP TM

Setting up the transportation network involves the following procedures:

- Defining Forwarding House Locations [page 101] and Defining Airport Locations [page 103]
- Defining Means of Transport [page 104]
- Defining Transportation Zones [page 105]
- Defining Transshipment Locations [page 106]
- Defining Transportation Lanes [page 107]

13.1 Defining Forwarding House Locations

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ▶ *Master Data* ❯ *Transportation Network* ❯ *Locations* ❯ *Define Location* ❯ .
2. Create locations in Japan using the following data:

Table 198

Location	OAF-STA-JPNGO	OAF-STA-JPTYO	AF-GW-JPNRT
Description	FH Station Nagoya	FH Station Tokyo	Gateway Airport Narita
Location Type	1002	1002	1150
Time Zone	JAPAN	JAPAN	JAPAN
Search Term	FH Station	FH Station	Gateway Narita
Address	8-3 Kanayama Cho 1, Atsuta-ku Nagoya-shi, 4560002	6-23-15 Shiba, Minato-ku, Tokyo, 1080014	Building 727-5, Narita Airport, 1080398
Country	JP	JP	JP
Region	23 (Aichi)	13 (Tokyo)	12 (Chiba)
IATA Code	NGO	TYO	NRT
UN/LOCODE	JPNGO	JPTYO	JPTYO
Business Partner	OAF-FWH-01	OAF-FWH-05	AF-FWH-03
SAP EWM Target System (Connected EWM System)	e.g. B6VCLNT702 (only for Transit Warehousing)	e.g. B6VCLNT702 (only for Transit Warehousing)	e.g. B6VCLNT702 (only for Transit Warehousing)

Location	OAF-STA-JPNGO	OAF-STA-JPTYO	AF-GW-JPNRT
SAP EWM Warehouse Number	**JPNG (only for Transit Warehousing)**	**JPTY (only for Transit Warehousing)**	**JPNR (only for Transit Warehousing)**

3. Create locations in the United States using the following data:

Table 199

Location	OAF-STA-USSAN	OAF-STA-USPHX	AF-GW-USLAX
Description	**FH Station San Diego**	**FH Station Phoenix**	**Gateway Airport Los Angeles**
Location Type	**1002**	**1002**	**1150**
Time Zone	**UTC-8**	**MSTNO**	**UTC-8**
Search Term	**FH Station**	**FH Station**	**Gateway LAX**
Address	**2296 Niels Bohr Court, San Diego, 92154**	**8123 South Hardy Drive, Tempe, 85284-1106**	**Spectrum Drive, Building 1755, Irvine, 92602**
Country	**US**	**US**	**US**
Region	**CA** (California)	**AZ** (Arizona)	**CA** (California)
IATA Code	**SAN**	**PHX**	**LAX**
UN/LOCODE	**USSAN**	**USPHX**	**USLAX**
Business Partner	**OAF-FWH-22**	**OAF-FWH-21**	**AF-FWH-20**
SAP EWM Target System (Connected EWM System)			**e.g. B6VCLNT702 (only for Transit Warehousing)**
SAP EWM Warehouse Number			**USLA (only for Transit Warehousing)**

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

Table 200

Location	Longitude	Latitude
OAF-STA-JPTYO	**+ 139: 30: 00**	**+ 35: 45: 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**
AF-GW-JPNRT	**+ 140: 23: 11**	**+ 35: 45: 53**
AF-GW-USLAX	**− 118: 24: 29**	**+ 33: 45: 53**

5. Save your entries.

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13.2 Defining Airport Locations

Procedure

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

2. Create Narita airport in Japan using the following data:

Table 201

Location	AF-NRT	AF-JL-NRT	AF-QF-NRT
Description	Tokyo Narita International Airport	Rising Sun Airlines Ltd. - NRT Cargo Bldg.	Oceanic Airways Ltd. - NRT Cargo Bldg.
Location Type	1110	1110	1110
Time Zone	JAPAN	JAPAN	JAPAN
IATA Code	NRT	NRT	NRT
UN/LOCODE	JPTYO	JPTYO	JPTYO
Business Partner		AF-JL-NRT	AF-QF-NRT
Search Term 1		Air Carrier	Air Carrier
Search Term 2		Narita	Narita
Address	Narita-shi, 2828601 Chiba	JAL Cargo Bldg - Export Receiving, 3543, Tensai Atamo, 2820007	c/o Swissport (Japan) KK, Building 731, 1622, Tennami Aza Tokko, 2820006
Country	JP	JP	JP
Region	12 (Chiba)	12 (Chiba)	12 (Chiba)

3. Create Los Angeles airport in the United States using the following data:

Table 202

Location	AF-LAX	AF-JL-LAX	AF-QF-LAX
Description	Los Angeles International Airport	Rising Sun Airlines Cargo - LAX Cargo Bldg.	Oceanic Airways Cargo - LAX Cargo Bldg.
Location Type	1110	1110	1110
Time Zone	UTC-8	UTC-8	UTC-8
IATA Code	LAX	LAX	LAX
UN/LOCODE	USLAX	USLAX	USLAX

Location	AF-LAX	AF-JL-LAX	AF-QF-LAX
Business Partner		**AF-JL-LAX**	**AF-QF-LAX**
Search Term 1		**Air Carrier**	**Air Carrier**
Search Term 2		**LAX**	**LAX**
Address	**World Way 1, 90045 Los Angeles**	**Cargo Bldg. 5, Block A, W. Imperial Hwy , 6101 , Los Angeles, 90045**	**Cargo Bldg. 12, W. Imperial Hwy , 6501, Los Angeles, 90045**
Country	**US**	**US**	**US**
Region	**CA** (California)	**CA** (California)	**CA** (California)

4. Create Sydney International Airport in Australia using the following data:

Table 203

Location	AF-QF-SYD
Description	**Oceanic Airways Cargo – SYD Cargo Bldg.**
Location Type	**1110**
Time Zone	**AUSACT**
IATA Code	**SYD**
UN/LOCODE	**AUSYD**
Business Partner	**AF-QF-SYD**
Search Term 1	**Air Carrier**
Search Term 2	**Sydney**
Address	**Airport Drive, 23, Sydney, 2020**
Country	**AU**
Region	**NSW** (New South Wales)

5. Save your entries.

13.3 Defining Means of Transport

The information in this section may have already been completed automatically based on the settings you configured in Defining Freight Order Types [page 66] .

Procedure

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

2. Check that the following means of transport exist in the system and create any that are missing:

Table 204

Field		Value		
Means of Transport		`AF_AIRPLAN`	`OAF_TRUCK`	`OAF_TRUK_S`
MTr Description		`Scheduled Airplane`	`Truckload`	`Truckload Schedule (Feeder Trucks)`
Transp. Mode		`05 AIR`	`01 ROAD`	`01 ROAD`
Speed	*Low*	700	35	35
	Medium	850	45	45
	High	920	55	55
	Average	850	45	45
Distance Factor		1	Blank	Blank
Multiresource		Select	Select	Deselect
No. of Individual Resources		Blank	Blank	0
Schedule MTr		Select	Deselect	Select
GIS Quality		Select	Select	Select

> **ℹ Note**
>
> You must have established a connection to a GIS provider before you can select the *GIS Quality* checkbox.

13.4 Defining Transportation Zones

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

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ▶ *Master Data* ❯ *Transportation Network* ❯ *Transportation Zones* ❯ *Define Transportation Zone* ❯ .

2. Choose *Create* and create zone `AF-US-SHPPHX` with the description **AF: Shippers for Station Phoenix** .

3. On the *Zone – Location* tab page, assign the following locations:

   - `OAF-CO-01@ERP001`
   - `OAF-CO-02@ERP001`
   - `OAF-CO-04@ERP001`
   - `OAF-STA-USPHX`

4. Choose *Create* and create zone `AF-US-SHPSAN` with the description **AF: Shippers for Station San Diego** .

5. On the *Zone – Location* tab page, assign locations `CUOAF-CO-03@ERP001` and `OAF-STA-USSAN` .

6. Choose *Create* and create zone `AF-JP-SHPTYO` with the description **AF: Shippers for Station Tokyo** .

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

   - `OAF-CU-01@ERP001`
   - `OAF-CU-02@ERP001`
   - `OAF-CU-04@ERP001`
   - `OAF-STA-JPTYO`

8. Choose *Create* and create zone `AF-JP-SHPNGO` with the description **AF: Shippers for Station Nagoya** .

9. On the *Zone – Location* tab page, assign location `CUOAF-CU-03@ERP001` and `OAF-STA-JPNGO` .

13.5 Defining Transshipment Locations

At a transshipment location, goods are unloaded from a vehicle resource and loaded onto another vehicle resource. Transshipment locations are used when different means of transport or different carriers have to be used in the transportation process. Transshipment locations are required when goods to be transported are consolidated or deconsolidated.

This scenario uses the stations as transshipment locations.

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ▶ *Master Data* ❯ *Transportation Network* ❯ *Locations* ❯ *Assign Transshipment Location* ❯ .

2. Select the *Transportation Zones* radio button.

3. In the *Transportation Zone* field, enter **AF-JP-SHPTYO** .

4. In the *Location* field, enter **OAF-STA-JPTYO** .

5. In the Duration field, enter **2:00** .

6. Choose *Create/Update Assignments* to apply the assignment.

7. Also assign the following locations:

Table 205

Transportation Zone	Location	Duration
AF-US-SHPPHX	OAF-STA-USPHX	**2:00**

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Transportation Zone	Location	Duration
AF-US-SHPSAN	OAF-STA-USSAN	**2:00**
AF-JP-SHPNGO	OAF-STA-JPNGO	**2:00**

13.6 Defining Transportation Lanes

Procedure

Transportation Lanes for United States

1. In SAP NetWeaver Business Client (NWBC), choose ▌ *Master Data* ❯ *Transportation Network* ❯ *Transportation Lanes* ❯ *Define Transportation Lane* ❳ .

2. Choose the *Intra-Zone Lane/Loc. Transp. Lane* tab page, enter **AF-US-SHPSAN** , and choose *Create* .

3. In the *Means of Transport* area, create the following entry:

Table 206

Field	Value
Means of Transport	**OAF_TRUCK**
Start Date	**<Current year> -01-01**
End Date	**9999-12-31**
Relevant to Carrier Selection	Select
Priority/Costs	**X Neither Costs Nor Priority**
Cost Origin	**Internal Cost**
Continuous Movement Type	**No Continuous Move**

4. Choose *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 207

Business Partner	Transportation Costs per KM	Priority
OAF-CR-05	**1000**	**1**

7. Choose *Copy and Close* .

8. Choose the *Intra-Zone Lane/Loc. Transp. Lane* tab page, enter **AF-US-SHPPHX** , and choose *Create* .

9. In the *Means of Transport* area, create the following entry:

Table 208

Field	Value
Means of Transport	**OAF_TRUCK**
Start Date	**<Current year> -01-01**

Field	Value
End Date	`9999-12-31`
Relevant to Carrier Selection	Select
Priority/Costs	`X Neither Costs Nor Priority`
Cost Origin	`Internal Cost`
Continuous Movement Type	`No Continuous Move`

10. Choose *Copy and Close* .

11. When asked to create a transportation proposal, choose *No* .

12. In the *Carrier for Means of Transport* area, create an entry with the following data:

Table 209

Business Partner	Transportation Costs per KM	Priority
`OAF-CR-06`	`1000`	`1`

13. Choose *Copy and Close* .

14. Save your entries.

Transportation Lanes for Japan

1. In SAP NetWeaver Business Client (NWBC), choose ▶ *Master Data* ❯ *Transportation Network* ❯ *Transportation Lanes* ❯ *Define Transportation Lane* ❯ .

2. Choose the *Intra-Zone Lane/Loc. Transp. Lane* tab page, enter `AF-JP-SHPTYO` , and choose *Create* .

3. In the *Means of Transport* area, create the following entry:

Table 210

Field	Value
Means of Transport	`OAF_TRUCK`
Start Date	`<Current year> -01-01`
End Date	`9999-12-31`
Relevant to Carrier Selection	Select
Priority/Costs	`X Neither Costs Nor Priority`
Cost Origin	`Internal Cost`
Continuous Movement Type	`No Continuous Move`

4. Choose *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 211

Business Partner	Transportation Costs per KM	Priority
`OAF-CR-03`	`1000`	`1`

7. Choose *Copy and Close* .

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8. Choose the *Intra-Zone Lane/Loc. Transp. Lane* tab page, enter `AF-JP-SHPNGO` , and choose *Create* .

9. In the *Means of Transport* area, create the following entry:

Table 212

Field	Value
Means of Transport	`OAF_TRUCK`
Start Date	`<Current year> –01–01`
End Date	`9999–12–31`
Relevant to Carrier Selection	Select
Priority/Costs	`X Neither Costs Nor Priority`
Cost Origin	`Internal Cost`
Continuous Movement Type	`No Continuous Move`

10. Choose *Copy and Close* .

11. When the system prompts you to create a transportation proposal, choose *No* .

12. In the *Carrier for Means of Transport* area, create an entry with the following data:

Table 213

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

13. Choose *Copy and Close* .

14. Save your entries.

Creating Transportation Lane for Customer 03 to Nagoya Station

1. In SAP NetWeaver Business Client (NWBC), choose ▌ *Master Data* ❯ *Transportation Network* ❯ *Transportation Lanes* ❯ *Define Transportation Lane* ▐ .

2. Choose the *Tr. Lane* tab page.

3. In the *Start Location/Zone* field, enter `CUOAF-CU-03@ERP001` and in the *Des. Loc./Zone* field, enter `OAF-STA-JPNGO` . Choose *Create* .

4. In the *Means of Transport* area, create the following entry:

Table 214

Field	Value
Means of Transport	`OAF_TRUCK`
Start Date	`<Current year> –01–01`
End Date	`9999–12–31`
Relevant to Carrier Selection	Select
Priority/Costs	`X Neither Costs Nor Priority`
Cost Origin	`Internal Cost`
Continuous Movement Type	`No Continuous Move`

5. Choose *Copy and Close* .

6. When asked to create a transportation proposal, choose *No* .

7. In the *Carrier for Means of Transport* area, create an entry with the following data:

Table 215

Business Partner	Transportation Costs per KM	Priority
OAF-CR-04	1000	1

8. Choose *Copy and Close* .

Creating Transportation Lane for San Diego Station to Consignee 03

1. In SAP NetWeaver Business Client (NWBC), choose ▌ *Master Data* ❯ *Transportation Network* ❯ *Transportation Lanes* ❯ *Define Transportation Lane* ❯ .

2. Choose the *Tr. Lane* tab page.

3. In the *Start Location/Zone* field, enter **OAF-STA-USSAN** and in the *Des. Loc./Zone* field, enter **CUOAF-CO-03@ERP001** . Choose *Create* .

4. In the *Means of Transport* area, create the following entry:

Table 216

Field	Value
Means of Transport	OAF_TRUCK
Start Date	<Current year> -01-01
End Date	9999-12-31
Relevant to Carrier Selection	Select
Priority/Costs	X Neither Costs Nor Priority
Cost Origin	Internal Cost
Continuous Movement Type	No Continuous Move

5. Choose *Copy and Close* .

6. When asked to create a transportation proposal, choose *No* .

7. In the *Carrier for Means of Transport* area, create an entry with the following data:

Table 217

Business Partner	Transportation Costs per KM	Priority
OAF-CR-05	1000	1

8. Choose *Copy and Close* .

9. Save your entries.

13.7 Defining Default Routes

Procedure

Creating Default Root AF-ROUTE-01

1. In SAP NetWeaver Business Client (NWBC), choose ▶ *Master Data* ❭ *Transportation Network* ❭ *Default Route* ❭ *Create Default Route* ❭

2. Choose *Default Route Type* `3000` . We recommend that you select a *Transportation Mode* of `05 Air` in Customizing for the default route type 3000,

3. In the *General Data* screen area, enter Default Route `AF-ROUTE-01` and the description AF ROUTE JPTYO-USSAN. Also enter *Valid From* field with current date and *Valid To* field with *31.12.2099* .

4. In the Transportation Stops table, enter the following data:

Table 218

Sequence	Location	Transportation Mode	Stage Type	Schedule	Carrier	Planning and Exec. Org.
10	`AF-JP-SHPTYO`	Road	Pick-Up		OAF-CR-03	OAF-FWH-05
20	`OAF-STA-JPTYO`	Road	Pre-Carriage	AF-TRUCKSCHED-02	OAF-CR-03	OAF-FWH-05
30	`AF-GW-JPNRT`	Air	Main Carriage			AF-FWH-03
40	`AF-GW-USLAX`	Road	On-Carriage	AF-TRUCKSCHED-03	OAF-CR-05	OAF-FWH-22
50	`OAF-STA-USSAN`	Road	Delivery		OAF-CR-05	OAF-FWH-22
60	`AF-US-SHPSAN`					

Creating Default Root AF-ROUTE-02

1. In SAP NetWeaver Business Client (NWBC), choose ▶ *Master Data* ❭ *Transportation Network* ❭ *Default Route* ❭ *Create Default Route* ❭

2. Choose *Default Route Type* `3000` .

3. In the *General Data* screen area, enter Default Route `AF-ROUTE-02` and the description AF ROUTE JPTYO-USPHX. Also enter *Valid From* field with current date and *Valid To* field with *31.12.2099* .

4. In the Transportation Stops table, enter the following data:

Table 219

Sequence	Location	Transportation Mode	Stage Type	Schedule	Carrier	Planning and Exec. Org.
10	AF-JP-SHPTYO	Road	Pick-Up		OAF-CR-03	OAF-FWH-05
20	OAF-STA-JPTYO	Road	Pre-Carriage	AF-TRUCKSCHED-02	OAF-CR-03	OAF-FWH-05
30	AF-GW-JPNRT	Air	Main Carriage			AF-FWH-03
40	AF-GW-USLAX	Road	On-Carriage	AF-TRUCKSCHED-04	OAF-CR-06	OAF-FWH-21
50	OAF-STA-USPHX	Road	Delivery		OAF-CR-06	OAF-FWH-21
60	AF-US-SHPPHX					

Creating Default Root AF-ROUTE-03

1. In SAP NetWeaver Business Client (NWBC), choose ▌▶ *Master Data* ❯ *Transportation Network* ❯ *Default Route* ❯ *Create Default Route* ▐

2. Choose *Default Route Type* `3000` .

3. In the *General Data* screen area, enter Default Route `AF-ROUTE-03` and the description AF ROUTE JPNGO-USPHX. Also enter *Valid From* field with current date and *Valid To* field with *31.12.2099* .

4. In the Transportation Stops table, enter the following data:

Table 220

Sequence	Location	Transportation Mode	Stage Type	Schedule	Carrier	Planning and Exec. Org.
10	AF-JP-SHPNGO	Road	Pick-Up		OAF-CR-04	OAF-FWH-01
20	OAF-STA-JPNGO	Road	Pre-Carriage	AF-TRUCKSCHED-01	OAF-CR-04	OAF-FWH-01
30	AF-GW-JPNRT	Air	Main Carriage			AF-FWH-03
40	AF-GW-USLAX	Road	On-Carriage	AF-TRUCKSCHED-04	OAF-CR-06	OAF-FWH-21
50	OAF-STA-USPHX	Road	Delivery		OAF-CR-06	OAF-FWH-21

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Sequence	Location	Transportation Mode	Stage Type	Schedule	Carrier	Planning and Exec. Org.
60	AF-US-SHPPHX					

Creating Default Root AF-ROUTE-04

1. In SAP NetWeaver Business Client (NWBC), choose ▮ *Master Data* ❯ *Transportation Network* ❯ *Default Route* ❯ *Create Default Route* ❱

2. Choose *Default Route Type* **3000** .

3. In the *General Data* screen area, enter Default Route **AF-ROUTE-04** and the description AF ROUTE JPNGO-USSAN. Also enter *Valid From* field with current date and *Valid To* field with *31.12.2099* .

4. In the Transportation Stops table, enter the following data:

Table 221

Sequence	Location	Transportation Mode	Stage Type	Schedule	Carrier	Planning and Exec. Org.
10	AF-JP-SHPNGO	Road	Pick-Up		OAF-CR-04	OAF-FWH-01
20	OAF-STA-JPNGO	Road	Pre-Carriage	AF-TRUCKSCHED-01	OAF-CR-04	OAF-FWH-01
30	AF-GW-JPNRT	Air	Main Carriage			AF-FWH-03
40	AF-GW-USLAX	Road	On-Carriage	AF-TRUCKSCHED-03	OAF-CR-05	OAF-FWH-22
50	OAF-STA-USSAN	Road	Delivery		OAF-CR-05	OAF-FWH-22
60	AF-US-SHPSAN					

14 Resources

In SAP Transportation Management, you must define resources including the vehicle and carrier resources, and the appropriate schedules. This involves the following procedures:

14.1 Defining Vehicle Resources

Procedure

In SAP NetWeaver Business Client (NWBC), choose ▌▶ *Master Data* ❯ *Resources* ❯ *Define Resource* ❩ .

Resource: OAF-JP-TRUCK1 for Pre-Carriage

1. On the initial screen, enter **OAF-JP-TRUCK1** in the *Resource* field and specify the resource type as **09** (vehicle resource).
2. Choose *Create* .
3. On the *0 Vehicle* tab page, enter the following data in the table:

Table 222

Field	Value
Resource	**OAF-JP-TRUCK1**
Location	Blank
Means of Transport	**OAF_TRUK_S**
Time Zone	**JAPAN**
Continuous Dimension	**Mass**
Factory Calendar	**JP**
Capacity	**40**
Unit	**TO**

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

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Table 223

Field	Value
Passive Means of Transport	Deselect
Number of Individual Resources	0
Multiresource	Deselect

5. Save your entries.

Resource: OAF-JP-TRUCK for Pick-Up

1. On the initial screen, enter **OAF-JP-TRUCK** in the *Resource* field and specify the resource type as **09** (vehicle resource).

2. Choose *Create* .

3. On the *0 Vehicle* tab page, enter the following data in the table:

Table 224

Field	Value
Resource	**OAF-JP-TRUCK**
Location	Blank
Means of Transport	**OAF_TRUCK**
Time Zone	**JAPAN**
Continuous Dimension	**Mass**
Factory Calendar	**JP**
Capacity	**40**
Unit	**TO**

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

Table 225

Field	Value
Passive Means of Transport	Deselect
Number of Individual Resources	0
Multiresource	Select

5. Save your entries.

Resource:OAF-US-TRUCK1 for On-Carriage

1. On the initial screen, enter **OAF-US-TRUCK1** in the *Resource* field and specify the resource type as **09** (vehicle resource).

2. Choose *Create* .

3. On the *0 Vehicle* tab page, enter the following data in the table:

Table 226

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

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

Table 227

Field	Value
Passive Means of Transport	Deselect
Number of Individual Resources	0
Multiresource	Deselect

5. Save your entries.

Resource:OAF-US-TRUCK for Delivery

1. On the initial screen, enter **OAF-US-TRUCK** in the *Resource* field and specify the resource type as **09** (vehicle resource).

2. Choose *Create* .

3. On the *0 Vehicle* tab page, enter the following data in the table:

Table 228

Field	Value
Resource	OAF-US-TRUCK
Location	Blank
Means of Transport	OAF_TRUCK
Time Zone	UTC-8
Continuous Dimension	Mass
Factory Calendar	US
Capacity	40
Unit	TO

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

Table 229

Field	Value
Passive Means of Transport	Deselect
Number of Individual Resources	**0**
Multiresource	Select

5. Save your entries.

14.2 Defining Schedule Types

Procedure

1. In Customizing for *Transportation Management* , choose ▶ *Master Data* ❭ *Transportation Network* ❭ *Schedule* ❭ *Define Schedule Types* ❭ .

2. Copy standard schedule type 2200 ("Road Gateway Schedule") and create a new schedule using the following data:

Table 230

Field	Value
Schedule Type	**AF11**
Description	**AF: Inland Trucking Schedule**
Default Type	Deselect
Transp. Mode	**01**
Header Number Range	**07**
Voyage Number Range	**01**
Offset Time Type	**Relative**
Gateway	Select
Direct	Select
Document Type	**AF10**
One Order	Deselect
Use Capacities	Deselect
Use Transp. Costs	Deselect
WD Appl. Config.	**/SCMTMS/SCHEDULE_GG**

3. Save your entries.

4. Copy standard schedule type 1100 ("Carrier Flight Schedule") and create a new schedule using the following data:

Table 231

Field	Value
Schedule Type	AF12
Description	Air Carrier Schedule
Default Type	Deselect
Transp. Mode	05
Header Number Range	07
Voyage Number Range	01
Gateway	Deselect
Direct	Deselect
Document Type	AF04
Offset Time Type	A Absolute
One Order	Deselect
Use Capacities	Deselect
Use Transp. Costs	Deselect
WD Appl. Config.	/SCMTMS/SCHEDULE_AC

5. Save your entries.
6. Copy standard schedule type 2600 ("Master Flight Schedule with Reference") and create a new schedule using the following data:

Table 232

Field	Value
Schedule Type	AF13
Description	AF: Air Master Flight Schedule with Reference
Default Type	Deselect
Transp. Mode	05
Header Number Range	07
Voyage Number Range	01
Gateway	Select
Reference	Select
Direct	Deselect
Document Type	AF04
Offset Time Type	Relative
One Order	Deselect

Field	Value
Use Capacities	Select
Use Transp. Costs	Select
WD Appl. Config.	`/SCMTMS/SCHEDULE_AG`

7. Save your entries.

14.3 Defining Carrier Flight Schedules Without Stop Sequences

For an overview of the following carrier flight schedules and master flight schedules without a stop sequence, see Schedules Used in This Scenario [page 13] .

Procedure

Schedule AF-SCHED-JL-01

1. In SAP NetWeaver Business Client (NWBC), choose ▶ *Master Data* ▶ *Transportation Network* ▶ *Schedule* ▶ *Create Schedule* ▶ .
2. Enter schedule type `AF12` and choose *Continue* .
3. Enter the following data:

Table 233

Field	Value
Schedule	`AF-SCHED-JL-01`
Description	`AF-SCHED-JL-01 NRT-LAX`
Valid From	`<Current year> -01-01`
Valid To	`<Next Year> -12-31`
Transportation Mode	`05 - Air`
Carrier	`AF-JL-NRT`
Airline Code	`JL`
Flight Number	`062`
Aircraft Type	`773`

4. Create a standard airport sequence by adding the following locations (choose the *Create* pushbutton to add line to the table):

Table 234

Field	Value	Value
Sequence	10	20

Field	Value	Value
Location	`AF-JL-NRT`	`AF-JL-LAX`
Cargo Cut Off (Offset in Days)	`0`	Blank
Cargo Cut-Off Time	`17:00:00`	Blank
Transit Duration (Hours)	`9`	Blank
Transit Duration (Minutes)	`50`	Blank
Days to Availability	Blank	`0`
Availability Time	Blank	`16:00:00`

5. Create flights by adding the following departure rule in the *Flights* screen area (choose the *Create* pushbutton to add an entry):

Table 235

Field	Value
First Day of Validity	`<Current Year> - <Current Month> -01`
Last Day of Validity	`<Next Year> -12-31`
Departure Frequency	`Daily`
Aircraft Type	`773`
Departure Time	`18:00:00`
Time Zone	`JAPAN`

6. Select the departure rule and choose ▌▶ *Generate Flights* ❯ *For Validity Period* ❭. The flights are automatically added to the *Flights* tab page.

7. Save your entries.

Schedule AF-SCHED-QF-01

1. In SAP NetWeaver Business Client (NWBC), choose ▌▶ *Master Data* ❯ *Transportation Network* ❯ *Schedule* ❯ *Create Schedule* ❭.

2. Enter schedule type `AF12` and choose *Continue* .

3. Enter the following data:

Table 236

Field	Value
Schedule	`AF-SCHED-QF-01`
Schedule Description	`AF-SCHED-QF-01 NRT-LAX`
Valid From	`<Current Year> -01-01`
Valid To	`<Next Year> -12-31`
Transportation Mode	`05 - Air`
Carrier	`AF-QF-NRT`

Field	Value
Airline Code	**QF**
Flight Number	**030**
Aircraft Type	**773**

4. Create a standard airport sequence by adding the following locations (choose the *Create* pushbutton to add line to the table):

Table 237

Field	Value	Value
Sequence	10	20
Location	**AF-QF-NRT**	**AF-QF-LAX**
Cargo Cut Off (Offset in Days)	**1**	Blank
Cargo Cut-Off Time	**23:55:00**	Blank
Transit Duration (Hours)	**9**	Blank
Transit Duration (Minutes)	**50**	Blank
Days to Availability	Blank	**0**
Availability Time	Blank	**21:00:00**

5. Create flights by adding the following departure rule in the *Flights* screen area (choose the *Create* pushbutton to add an entry):

Table 238

Field	Value
First Day of Validity	**<Current Year> - <Current Month> -01**
Last Day of Validity	**<Next Year> -12-31**
Departure Frequency	**Daily**
Aircraft Type	**773**
Departure Time	**01:00:00**
Time Zone	**JAPAN**

6. Select the departure rule and choose ▮ *Generate Flights* ❯ *For Validity Period* ❰. The flights are automatically added to the *Flights* tab page.

7. Save your entries.

14.4 Defining Master Flight Schedules Without Stop Sequences

Procedure

Schedule AF-FLIGHTSCHED-JL

1. In SAP NetWeaver Business Client (NWBC), choose ▶ *Master Data* ❯ *Transportation Network* ❯ *Schedule* ❯ *Create Schedule* ❭ .

2. Enter schedule type `AF13` and choose *Continue* .

3. Enter the following data:

    Table 239

Field	Value
Schedule	`AF-FLIGHTSCHED-JL`
Schedule Description	`AF-SCHED-MT-JL-NRT-LAX`
Valid From	`<Current Year> -01-01`
Valid To	`<Next Year> -12-31`
Schedule Type	`AF13`
Transportation Mode	`05 - Air`
Carrier	`AF-JL-NRT`
Weight	`7000 KG`
Volume	`20 M3`
Quantity Costs	`50 per KG`
Fixed Costs	`1000`

    > **i Note**
    >
    > - Quantity costs defined for schedules can be used in transportation proposal. The optimizer will consider these costs when proposing new bookings. For example, to control transportation proposal creation through costs, ensure you have proposals with existing bookings instead of creating new ones, you also need to also define fix costs of 0 for existing bookings. This ensures the use of already confirmed transportation orders which are cheaper than creating new ones which are more expensive.
    >
    > - Implement BAdI with SAP Note 1739036 ➘

4. Create gateways using the following data:

    Table 240

Field	Source Gateway	Destination Gateway
Location	`AF-GW-JPNRT`	`AF-GW-USLAX`
Transit Duration (Days)	0	0

Field	Source Gateway	Destination Gateway
Transit Duration (Hours)	1	1
Distance (KM)	5.00	10.00
Cargo Cut-Off (Offset in Days)	0	Not applicable
Cargo Cut-Off Time	15:30:00	Not applicable
Days to Availability	Not applicable	0
Availability Time	Not applicable	17:00:00
Time Zone	Japan	UTC-8

5. Enter the corresponding airports using the input help (F4):

Table 241

Field	Value
Airport of Departure	AF-JL-NRT
Airport of Destination	AF-JL-LAX

6. Select line 10 and assign schedule `AF-SCHED-JL-01` to the airport of destination by choosing ▶ *Schedule* ❯ *Assign* ❯ .

7. For the airport of departure, check the following data:

Table 242

Field	Value
Sequence	10
IATA Location	NRT
Time Zone	JAPAN
Transit Duration (Days)	0
Transit Duration (Hours)	9
Transit Duration (Minutes)	50

8. For the airport of destination, check the following data:

Table 243

Field	Value
Sequence	20
IATA Location	LAX
Availability Time	17:00:00
Time Zone	UTC-8

➡ Recommendation

If these fields are not displayed, check the Customizing settings for schedule type `AF13` and make sure that the *Direct* checkbox is not selected. 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 `AF13` and display the details.

9. Copy flights from the carrier flight schedule on the *Flights* tab page by choosing ▶ *Flights* ❯ *Copy Data from Carrier Flight Schedule* ❯ .

   Check that the data has been copied correctly to the *Flights* tab page in the *Flights* screen area.

10. Save your entries.

Schedule AF-FLIGHTSCHED-QF

1. In SAP NetWeaver Business Client (NWBC), choose ▶ *Master Data* ❯ *Transportation Network* ❯ *Schedule* ❯ *Create Schedule* ❯ .

2. Enter schedule type **AF13** and choose *Continue* .

3. Enter the following data:

Table 244

Field	Value
Schedule	`AF-FLIGHTSCHED-QF`
Schedule Description	`AF-SCHED-MT-QF-NRT-LAX`
Valid From	`<Current year>-01-01`
Valid To	`<Next-Year>-12-31`
Schedule Type	`AF13`
Transportation Mode	`05 - Air`
Carrier	`AF-QF-NRT`
Weight	`7000 KG`
Volume	`20 M3`
Quantity Costs	`50 per KG`
Fixed Costs	`1000`

ℹ Note

○ Quantity costs defined for schedules can be used in transportation proposal. The optimizer will consider these costs when proposing new bookings. For example, to control transportation proposal creation through costs, ensure you have proposals with existing bookings instead of creating new ones, you also need to also define fix costs of 0 for existing bookings. This ensures the use of already confirmed transportation orders which are cheaper than creating new ones which are more expensive.

○ Implement BAdI with SAP Note 1739036 📝

4. Create gateways using the following data:

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Table 245

Field	Source Gateway	Destination Gateway
Location	`AF-GW-JPNRT`	`AF-GW-USLAX`
Transit Duration (Days)	`0`	`0`
Transit Duration (Hours)	`1`	`1`
Distance (KM)	`5.00`	`10.00`
Cargo Cut-Off (Offset in Days)	`0`	Not applicable
Cargo Cut-Off Time	`22:30:00`	Not applicable
Days to Availability	Not applicable	`0`
Availability Time	Not applicable	`22:00:00`

5. Enter the corresponding airports using the input help (`F4`):

Table 246

Field	Value
Airport of Departure	`AF-QF-NRT`
Airport of Destination	`AF-QF-LAX`

6. Select line 10 and assign schedule `AF-SCHED-QF-01` to the airport of destination by choosing ▶ *Schedule* ▶ *Assign* ❯.

7. For the airport of departure, check the following data:

Table 247

Field	Value
Sequence	`10`
IATA Location	`NRT`
Time Zone	`JAPAN`
Transit Duration (Days)	`0`
Transit Duration (Hours)	`9`
Transit Duration (Minutes)	`50`

8. For the airport of destination, check the following data:

Table 248

Field	Value
Sequence	`20`
IATA Location	`LAX`
Availability Time	`21:00:00`
Time Zone	`UTC-8`

9. If these fields are not displayed, check the Customizing settings for schedule type `AF13` and make sure that the *Direct* checkbox is not selected. 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 `AF13` and display the details.

10. Copy flights from the carrier flight schedule on the *Flights* tab page by choosing ▶ *Flights* ❭ *Copy Data from Carrier Flight Schedule* ❭

11. Check that the data has been copied correctly to the *Flights* tab page in the *Flights* screen area.

12. Save your entries.

14.5 Defining Carrier Flight Schedules with Stop Sequences

This procedure is optional and so the schedules mentioned here are not listed in the section Schedules Used in This Scenario [page 13] .

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ▶ *Master Data* ❭ *Transportation Network* ❭ *Schedule* ❭ *Create Schedule* ❭ .

2. Enter schedule type **AF12** and choose *Continue* .

3. Enter the following data:

Table 249

Field	Value
Schedule	**AF-SCHED-QF-01-SYD**
Schedule Description	**AF-SCHED-QF-01 NRT-SYD-LAX**
Valid From	**<Current Year> -01-01**
Valid To	**<Next Year> -12-31**
Transportation Mode	**05 - Air**
Airline Code	**QF**
Flight Number	**022**
Aircraft Type	**744**
Carrier	**AF-QF-NRT**

4. Create a standard airport sequence by adding the following locations (choose the *Create* pushbutton to add line to the table):

Table 250

Field	Value	Value	Value
Sequence	10	20	30
Location	**AF-QF-NRT**	**AF-QF-SYD**	**AF-QF-LAX**

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Field	Value	Value	Value
Cargo Cut Off (Offset in Days)	**0**	**0**	Blank
Cargo Cut-Off Time	**11:40:00**	**00:00:00**	Blank
Document Cut-Off (Offset in Days)	**0**	**0**	Blank
Document Cut-Off Time	**16:00:00**	**00:00:00**	Blank
DG Document Cut-Off (Offset in Days)	**0**	**0**	Blank
DG Document Cut-Off Time	**16:00:00**	**00:00:00**	Blank
Transit Duration (Days)	**0**	**0**	Blank
Transit Duration (Hours)	**9**	**13**	Blank
Transit Duration (Minutes)	**40**	**50**	Blank
Length of Stay (Days)	Blank	**2**	Blank
Length of Stay (Hours)	Blank	**10**	Blank
Length of Stay (Minutes)	Blank	**0**	Blank
Days to Availability	Blank	**0**	**0**
Availability Time	Blank	**00:00:00**	**11:00:00**

5. Create flights by adding the following departure rule in the *Flights* screen area (choose the *Create* pushbutton to add an entry):

Table 251

Field	Value	Value
Stage	**AF-QF-NRT-AF-QF-SYD**	**AF-QF-SYD-AF-QF-LAX**
First Day of Validity	**<Current Year> – <Current Month> –01**	**<Current Year> – <Current Month> –01**
Last Day of Validity	**<Current Year> –12–31**	**<Current Year> –12–31**
Aircraft Type	**744**	**744**
Departure Days	Select the checkboxes for every day	Select the checkboxes for every day
Departure Offset in Days		3
Departure Time	**17:05:00**	**14:45**
Time Zone	**JAPAN**	**AUSACT**

6. Select the departure rule and choose ▶ *Generate Flights* ❯ ☐ *For Validity Period* ❯. The flights are automatically added to the *Flights* tab page with the correct aircraft type.

7. Save your entries.

14.6 Defining Master Flight Schedules with Stop Sequences

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ▶ *Master Data* ▶ *Transportation Network* ▶ *Schedule* ▶ *Create Schedule* ❯ .

2. Enter schedule type **AF13** and choose *Continue* .

3. Enter the following data:

Table 252

Field	Value
Schedule	`AF-SCHED-MT-QF-NRT-SYD-LAX`
Schedule Description	`AF-SCHED-MT-QF-NRT-SYD-LAX`
Valid From	`<Current Year> -01-01`
Valid To	`<Next Year> -12-31`
Schedule Type	`AF13`
Transportation Mode	`05 — Air`
Carrier	`AF-QF-NRT`
Weight	`1500 KG`
Volume	`6 M3`

4. Create gateways using the following data:

Table 253

Field	Source Gateway	Destination Gateway
Location	`AF-GW-JPNRT`	`AF-GW-USLAX`
Transit Duration (Days)	`0`	`0`
Transit Duration (Hours)	`1`	`1`
Distance (KM)	`5`	`10`
Cargo Cut-Off (Offset in Days)	`0`	`0`
Cargo Cut-Off Time	`07:00:00`	`00:00:00`
Document Cut-Off (Offset in Days)	`0`	Blank
Document Cut-Off Time	`07:00:00`	Blank
DG Cut-Off (Offset in Days)	`0`	Blank
DG Cut-Off Time	`07:00:00`	Blank
Days to Availability	Not applicable	`0`
Availability Time	Not applicable	`12:00:00`

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Field	Source Gateway	Destination Gateway
Time Zone	**JAPAN**	**UTC-8**

5. Enter the corresponding airports using the input help (F4):

Table 254

Field	Airport of Departure	Airport of Destination
Sequence	**10**	**30**
Airport	**AF-QF-NRT**	**AF-QF-LAX**
IATA Location	**NRT**	**LAX**

6. Select line 10 and assign Schedule *AF-SCHED-QF-01-SYD* to Airport of Destination by choosing ▶ *Schedule* ❭ *Assign* ❭ .

7. For the airport of departure, check the following data:

Table 255

Field	Value
Sequence	**10 IATA**
Location	**NRT**
Time Zone	**JAPAN**
Transit Duration (Days)	**3**
Transit Duration (Hours)	**9**
Transit Duration (Minutes)	**30**

8. For the airport of destination, check the following data:

Table 256

Field	Value
Sequence	**20**
Location	**LAX**
Time Zone	**UTC-8**
Availability Time	**11:00:00**

9. If these fields are not displayed, check the Customizing settings for schedule type **AF13** and make sure that the *Direct* checkbox is not selected. 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 **AF13** and display the details.

10. Copy flights from the carrier flight schedule at the Flights tab page by choosing ▶ *Flights* ❭ *Copy Data from Carrier Flight Schedule* ❭ .

11. Check that the data has been copied correctly to the *Flights* tab page in the Flights screen area.

12. Save your entries.

14.7 Defining Truck Schedules

For the daily feeder trucks from the station to the gateway (export) and from the gateway to the station (import), you require schedule so that you can plan the pre-carriage and on-carriage stages. In SAP TM, these schedules are based on schedule type `AF11` "Inland Trucking Schedule" .

Procedure

Schedule for OAF-STA-JPNGO to AF-GW-JPNRT (Export Station to Export Gateway)

Figure 3: Schedule for OAF-STA-JPNGO to AF-GW-JPNRT

1. In SAP NetWeaver Business Client (NWBC), choose ▌▶ *Master Data* ❭ *Transportation Network* ❭ *Schedule* ❭ *Create Schedule* ❭ .
2. Enter schedule type `AF11` and choose *Continue* .
3. Enter the following data:

Table 257

Field	Value
Schedule	`AF-TRUCKSCHED-01`
Description	`Schedule Trucking STA-JPNGO to GW-JPNRT`
Valid From	`<Current Year> -01-01`
Valid To	`<Next Year> -12-31`
Schedule Type	`AF11`
Transportation mode	`01 — Road`

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Field	Value
Carrier	`OAF-CR-04`
Means of transport	`OAF_TRUK_S`

4. Create gateways by entering the following data:

Table 258

Field	Source Gateway	Destination Gateway
Location	`OAF-STA-JPNGO`	`AF-GW-JPNRT`
Transit Duration (Hours)	5	Not applicable
Cargo Cut-Off Hours	2	Not applicable
Availability Time (Hours)	Not applicable	1

5. Create the following departure rule by selecting *Create* on the *Departure Rules* tab page of the *Departures* screen area.

Table 259

Field	Value
First Day of Validity	`<Current Year> - <Current Month> -01`
Last Day of Validity	`<Current Year> -12-31`
Departure Frequency	`Daily`
Departure Time	`09:00:00`
Time Zone	`JAPAN`

6. Select your departure rule and choose ▶ *Generate Departures* ▶ *For Validity Period.* ❭.

7. Switch to the *Departures* tab page and check that the departures have been added automatically.

8. Create the following departure rule by selecting *Create* on the *Departure Rules* tab page of the *Departures* screen area.

Table 260

Field	Value
First Day of Validity	`<Current Year> - <Current Month> -01`
Last Day of Validity	`<Current Year> -12-31`
Departure Frequency	`Daily`
Departure Time	`16:00:00`
Time Zone	`JAPAN`

9. Select your departure rule and choose ▶ *Generate Departures* ▶ ▢ *For Validity Period* ❭.

10. Switch to the *Departures* tab page and check that the departures have been added automatically.

11. Save your entries.

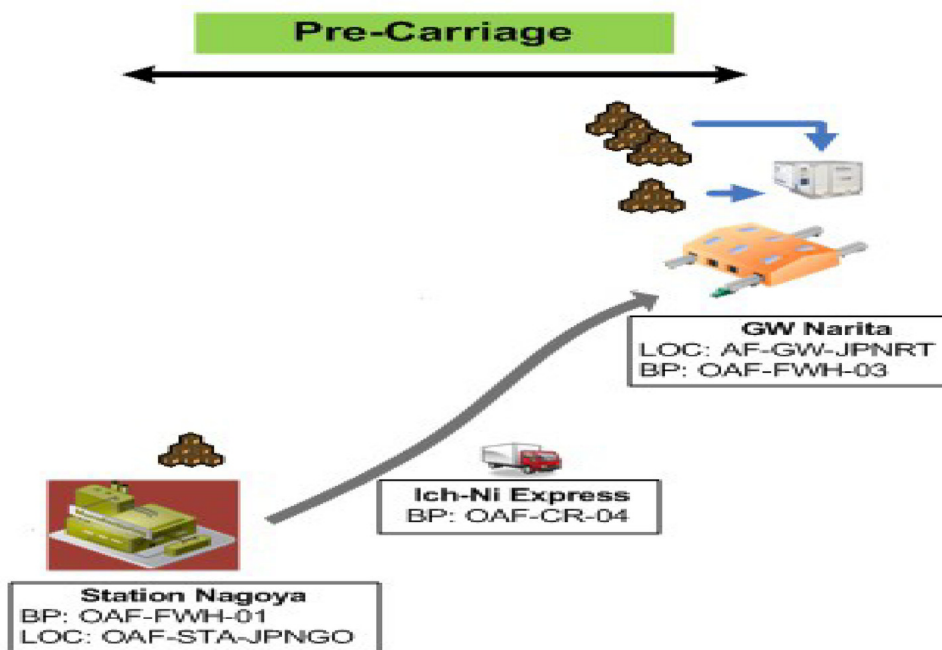**Schedule for OAF-STA-JPTYO to AF-GW-JPNRT (Export Station to Export Gateway)**

Figure 4: Schedule for OAF-STA-JPTYO to AF-GW-JPNRT

1. In SAP NetWeaver Business Client (NWBC), choose ▶ *Master Data* ▶ *Transportation Network* ▶ *Schedule* ▶ *Create Schedule* ▶ .

2. Enter schedule type `AF11` and choose *Continue* .

3. Enter the following data:

Table 261

Field	Value
Schedule	`AF-TRUCKSCHED-02`
Description	`Schedule Trucking STA-JPTYO to GW-JPNRT`
Valid From	`<Current Year> -01-01`
Valid To	`<Next Year> -12-31`
Schedule Type	`AF11`
Transportation mode	`01 — Road`
Carrier	`OAF-CR-03`
Means of transport	`OAF_TRUK_S`

4. Create gateways by entering the following data:

Table 262

Field	Source Gateway	Destination Gateway
Location	`OAF-STA-JPTYO`	`AF-GW-JPNRT`

Field	Source Gateway	Destination Gateway
Transit Duration (Hours)	**2**	Not Applicable
Cargo Cut-Off Hours	**2**	Not Applicable
Availability Time (Hours)	Not Applicable	**1**

5. Create the following departure rule by selecting *Create* on the *Departure Rules* tab page of the *Departures* screen area.

Table 263

Field	Value
First Day of Validity	`<Current Year> - <Current Month> -01`
Last Day of Validity	`<Current Year> -12-31`
Departure Frequency	`Daily`
Departure Time	`09:00:00`
Time Zone	`JAPAN`

6. Select your departure rule and choose ▌▶ *Generate Departures* ❯ *For Validity Period* ▌.

7. Switch to the *Departures* tab page and check that the departures have been added automatically.

8. Create the following departure rule by selecting *Create* on the *Departure Rules* tab page of the *Departures* screen area.

Table 264

Field	Value
First Day of Validity	`<Current Year> - <Current Month> -01`
Last Day of Validity	`<Current Year> -12-31`
Departure Frequency	`Daily`
Departure Time	`16:00:00`
Time Zone	`JAPAN`

9. Select your departure rule and choose ▌▶ *Generate Departures* ❯ *For Validity Period* ▌.

10. Switch to the *Departures* tab page and check that the departures have been added automatically.

11. Save your entries.

Schedule for AF-GW-USLAX to OAF-STA-USSAN (Import Gateway to Import Station)
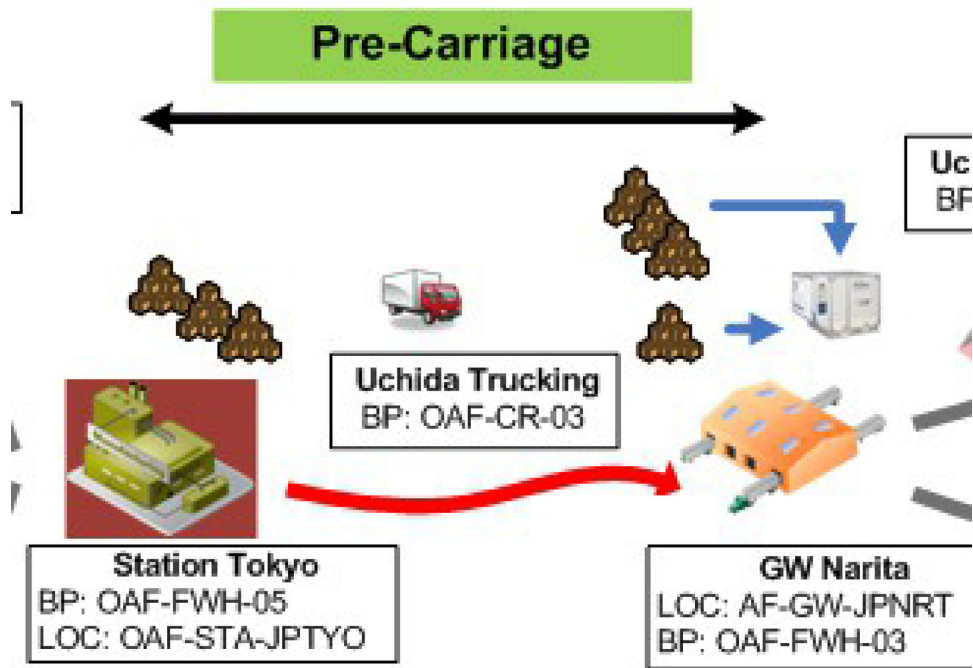

Figure 5: Schedule for AF-GW-USLAX to OAF-STA-USSAN

1. In SAP NetWeaver Business Client (NWBC), choose ▶ *Master Data* ❯ *Transportation Network* ❯ *Schedule* ❯ *Create Schedule* ❯ .

2. Enter schedule type **AF11** and choose *Continue* .

3. Enter the following data:

Table 265

Field	Value
Schedule	`AF-TRUCKSCHED-03`
Description	`Schedule Trucking GW-USLAX to STA-USSAN`
Valid From	`<Current Year> -01-01`
Valid To	`<Next Year> -12-31`
Schedule Type	`AF11`
Transportation mode	`01 — Road`
Carrier	`OAF-CR-05`
Means of Transport	`OAF_TRUK_S`

4. Create gateways by entering the following data:

Table 266

Field	Source Gateway	Destination Gateway
Location	`AF-GW-USLAX`	`OAF-STA-USSAN`

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Field	Source Gateway	Destination Gateway
Transit Duration (Hours)	**4**	Not Applicable
Cargo Cut-Off Hours	**1**	Not Applicable
Availability Time (Hours)	Not Applicable	**1**

5. Create the following departure rule by selecting *Create* on the *Departure Rules* tab page of the *Departures* screen area.

Table 267

Field	Value
First Day of Validity	`<Current Year> - <Current Month> -01`
Last Day of Validity	`<Current Year> -12-31`
Departure Frequency	`Daily`
Departure Time	`08:00:00`
Time Zone	`UTC-8`

6. Select your departure rule and choose ▌▶ *Generate Departures* ❭ *For Validity Period* ❭.

7. Switch to the *Departures* tab page and check that the departures have been added automatically.

8. Create the following departure rule by selecting *Create* on the *Departure Rules* tab page of the *Departures* screen area.

Table 268

Field	Value
First Day of Validity	`<Current Year> - <Current Month> -01`
Last Day of Validity	`<Current Year> -12-31`
Departure Frequency	`Daily`
Departure Time	`16:00:00`
Time Zone	`UTC-8`

9. Select your departure rule and choose ▌▶ *Generate Departures* ❭ *For Validity Period* ❭.

10. Switch to the *Departures* tab page and check that the departures have been added automatically.

11. Save your entries.

Schedule for AF-GW-USLAX to OAF-STA-USPHX (Import Gateway to Import Station)
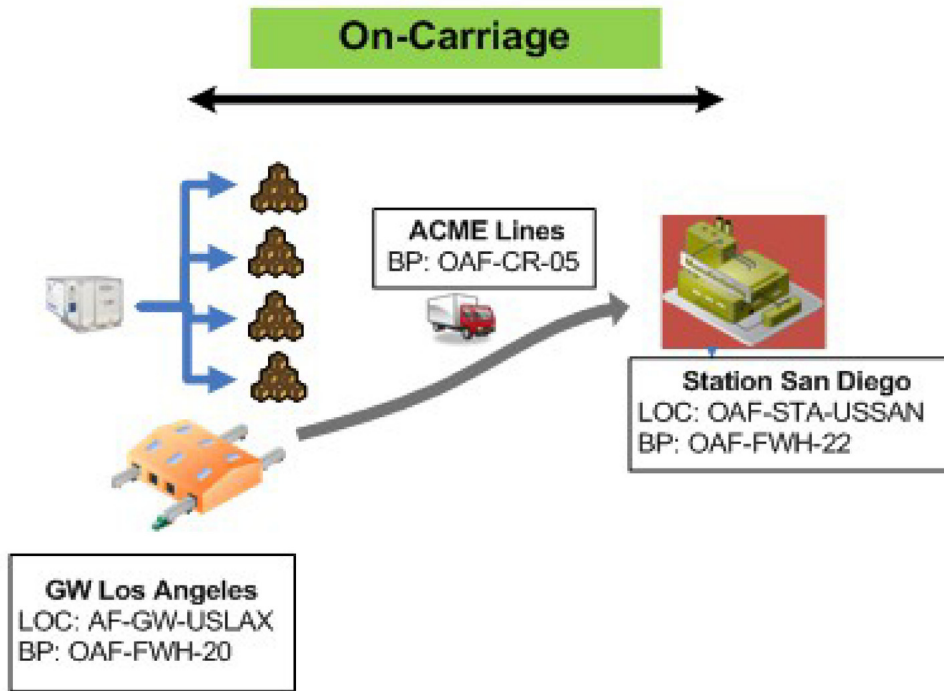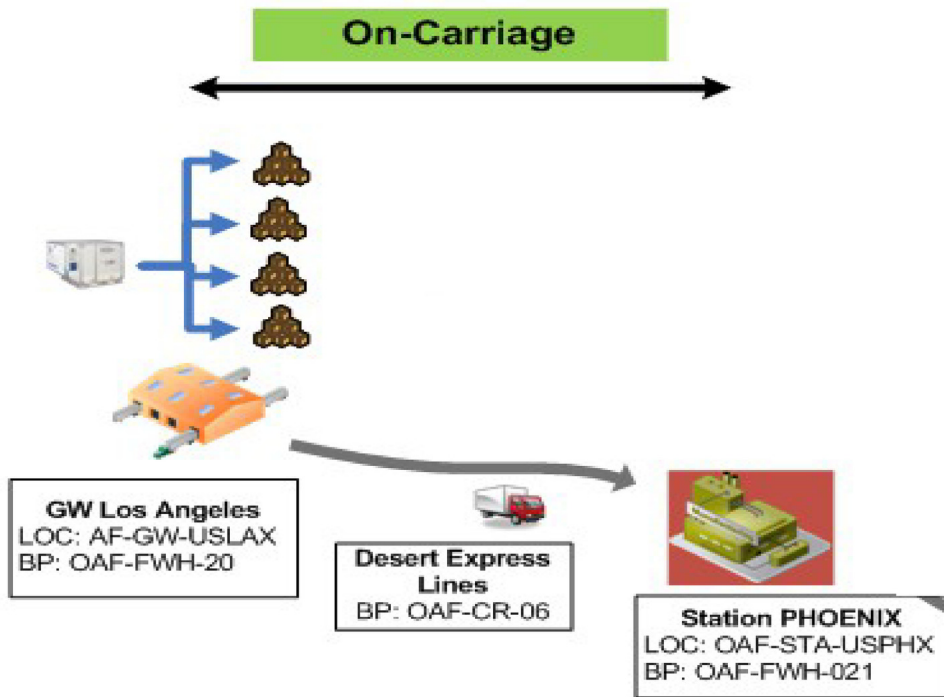

Figure 6: Schedule for AF-GW-USLAX to OAF-STA-USPHX

1. In SAP NetWeaver Business Client (NWBC), choose ▌▶ *Master Data* ❯ *Transportation Network* ❯ *Schedule* ❯ *Create Schedule* ❩ .

2. Enter schedule type **AF11** and choose *Continue* .

3. Enter the following data:

Table 269

Field	Value
Schedule	**AF-TRUCKSCHED-04**
Description	**Schedule Trucking GW-USLAX to STA-USPHX**
Valid From	**<Current Year> -01-01**
Valid To	**<Next Year> -12-31**
Schedule Type	**AF11**
Transportation mode	**01 — Road**
Carrier	**OAF-CR-06**
Means of Transport	**OAF_TRUK_S**

4. Create gateways by entering the following data:

Table 270

Field	Source Gateway	Destination Gateway
Location	**AF-GW-USLAX**	**OAF-STA-USPHX**

Field	Source Gateway	Destination Gateway
Transit Duration (Hours)	**6**	Not applicable
Cargo Cut-Off Hours	**1**	Not applicable
Availability Time (Hours)	Not applicable	**1**

5. Create the following departure rule by selecting *Create* on the *Departure Rules* tab page of the *Departures* screen area.

Table 271

Field	Value
First Day of Validity	**<Current Year> - <Current Month> -01**
Last Day of Validity	**<Current Year> -12-31**
Departure Frequency	**Daily**
Departure Time	**08:00:00**
Time Zone	**UTC-8**

6. Select your departure rule and choose ▶ *Generate Departures* ❯ *For Validity Period* ❯.

7. Switch to the *Departures* tab page and check that the departures have been added automatically.

8. Create the following departure rule by selecting *Create* on the *Departure Rules* tab page of the *Departures* screen area.

Table 272

Field	Value
First Day of Validity	**<Current Year> - <Current Month> -01**
Last Day of Validity	**<Current Year> -12-31**
Departure Frequency	**Daily**
Departure Time	**18:00:00**
Time Zone	**UTC-8**

9. Select your departure rule and choose ▶ *Generate Departures* ❯ *For Validity Period* ❯.

10. Switch to the *Departures* tab page and check that the departures have been added automatically.

11. Save your entries.

14.8 Maintaining Master Air Waybill Stock

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

Procedure

1. In SAP NetWeaver Business Client, choose ▶ *Master Data* ❯ *General* ❯ *Overview Waybill Stock* ❯.

2. Select all of the master waybill stocks and choose *New* in the table below.

3. Enter number stock type **MAWB** and choose *Continue* .

4. Enter the following data:

Table 273

Field	Value
Transportation Mode	05
Purchasing Organization	AF-FWH-03
Airline Code	JL

5. Choose *Continue* .

6. In the *Number Stock* screen area choose *Insert* and enter the following data:

Table 274

Field	Value
Stock ID	MJL
Number Stock Type	MAWB
Number Range from	0000000001
Number Range to	0000000999
Description	MAWB Stock AF-FWH-03
Valid from	<Today>
Valid to	<Next Year> -12-31
Threshold	000

7. Repeat the procedure for the master air waybill stock for Oceanic Airways using the following data:

Table 275

Field	Value
Transportation Mode	05
Organization Category	Purchasing
Purchasing Org.	AF-FWH-03
Airline Code	QF

8. Choose *Continue* .

9. In the *Number Stock* screen area choose *Insert* and enter the following data:

Table 276

Field	Value
Stock ID	MQF
Number Stock Type	MAWB
Number Range from	0000001000

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Field	Value
Number Range to	0000001999
Description	MAWB-Stock AF-FWH-03 QF
Valid from	<Today>
Valid to	<Next Year> -12-31
Threshold	000

10. Save your entries.

14.9 Maintaining House Air Waybill Stock

House air waybill 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 of the master waybill stocks and choose *New* in the table below.
3. Enter number stock type `HAWB` and choose *Continue* .
4. Enter the following data:

   Table 277

Field	Value
Transportation Mode	05
Organization Category	Sales
Sales Organization	OAF-FWH-05

5. Choose *Continue* .
6. In the *Number Stock* screen area choose *Insert* and enter the following data:

   Table 278

Field	Value
Stock ID	HTY
Number Stock Type	HAWB
Number Range from	0000000001
Number Range to	0000000999
Description	HAWB Stock OAF-FWH-05
Valid from	<Yesterday>

Field	Value
Valid to	`<Next Year> -12-31`
Threshold	`000`

7. Repeat the procedure using the following data:

Table 279

Field	Value
Transportation Mode	`05`
Organization Category	`Sales`
Sales Org.	`OAF-FWH-01`

8. Choose *Continue* .

9. In the *Number Stock* screen area choose *Insert* and enter the following data:

Table 280

Field	Value
Stock ID	`HNG`
Number Stock Type	`HAWB`
Number Range from	`0000001000`
Number Range to	`0000001999`
Description	`HAWB-Stock OAF-FWH-01`
Valid from	`<Yesterday>`
Valid to	`<Next Year> -12-31`
Threshold	`000`

10. Save your entries.

15 Charge Management

Prerequisites

You have configured the settings described in the configuration guide *Basic Settings for SAP TM* .

Structure

The following data is used in this section of the scenario configuration guide:

Table 281

Charge Type	Charge Category	Description	Charge Subcategory	Description
BASE_AF	004	Basic Freight	100000	Based Air Freight
COO_AF	004	Basic Freight	100000	Certificate of Origin per Shipment
ECC_AF	004	Basic Freight	100000	Export Customs Clearance per Shipment
GIF_AF	004	Basic Freight	100000	Goods Inspection Fee per Shipment
HD_AF	014	Transport Costs	104007	Handling and Documentation Fee
PU_AF	004	Basic Freight	100000	Pick-up Fee
SF_AF	004	Basic Freight	100000	Security Fee
TRP_AF	004	Basic Freight	100000	Transportation (Marine) Insurance and CPT Value

15.1 General Settings

Configuration of Charge Management involves configuring settings for the following documents:

- Freight Order [page 154]
- Freight Agreement [page 236]
- Forwarding Agreement [page 251]

It also involves configuring organizational settings for Charge Management (see Configuration of Organizational Settings for Charge Management [page 262]

15.1.1 TACT Rate Upload

Uploading TACT rates to database tables in SAP Transportation Management (SAP TM) allows SAP TM to use TACT rates when it calculates air freight transportation charges. You upload TACT rates each time the International Air Transport Association (IATA) publishes the rates.

Procedure

Implement SAP Note 2187536 .

15.1.2 Defining Classifications for Transportation Modes

Procedure

1. In Customizing for *Transportation Management* , choose ❯ *Basic Functions* ❯ *Charge Calculation* ❯ *Basic Settings* ❯ *Freight Term Settings for Transportation Modes* ❯ *Define Classifications for Transportation Modes* ❯.
2. Create following entries:

Table 282

Transportation Mode Category	Classification	Description
4 Air	*A*	*Weight Charge*
4 Air	*B*	*Other Charges*
4 Air	*C*	*Commission*
4 Air	*D*	*Additional Charge*
4 Air	*E*	*Valuation Charge*

3. Save your entries

15.1.3 Maintain IATA Other Charge Codes

Procedure

1. In Customizing for *Transportation Management* , choose ❯ *Basic Functions* ❯ *Charge Calculation* ❯ *Basic Settings* ❯ *Maintain IATA Other Charge Codes* ❯.
2. Create following entries:

Table 283

Transportation Mode Category	Description

AW	Air Waybill Fee
MY	Fuel Charge
PU	Pickup Charge
RA	Dangerous Good Fee
SC	Security Charge

3. Save your entries

15.1.4 Defining Charge Types

In this procedure, you define additional charge types that you can assign to calculation sheets and rate tables that are specific to this scenario.

Procedure

1. In Customizing for *Transportation Management* , choose ▶ *Basic Functions* ❭ *Charge Calculation* ❭ *Basic Settings* ❭ *Define Charge Types* ❭ .
2. Create following entries:

Table 284

Charge Type	Charge Cat	Ch Subcat	Description	TrM Cat.	Chrge Due	Chrge Ty. Class	Chrge Ty. Grping	Other Chrge Code
BASE_AF	004	100000	Base Air Freight	4 Air	DC Due Carrier	A Weight Charge	select	
FUEL_AF	003	103008	Fuel Charge	4 Air	DC Due Carrier	B Other Charges		MY Fuel Surcharge
COO_AF	004	100000	Certificate of Origin per Shipment					
ECC_AF	004	100000	Export Customs Clearance per Shipment					
GIF_AF	004	100000	Goods Inspection Fee per Shipment					

Charge Type	Charge Cat	Ch Subcat	Description	TrM Cat.	Chrge Due	Chrge Ty. Class	Chrge Ty. Grping	Other Chrge Code
HD_AF	014	104007	Handling and Documentation Fee					
PU_AF	004	100000	Pick-up Fee					
SF_AF	004	100000	Security Fee	4 Air	DC Due Carrier	B Other Charges		SC Security Charge
AWB_AF	004	100000	Air Waybill Fee	4 Air	DC Due Carrier	B Other Charges		AW Air Waybill Fee
TRP_AF	004	100000	Transportation (Marine) Insurance and CPT Value					

15.1.5   Defining Scales: Weight

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

Procedure

Define a weight scale to be used to calculate the costs for customer pickup:

1. In SAP NetWeaver Business Client (NWBC), choose ▌▶ *Master Data* ❯ *Charge Management and Service Product Catalogs* ❯ *Scales* ❯ *Create Scale* ◖.
2. Choose *Continue* without entering a scale template.
3. Create a scale for the weight using the following data:

Table 285

Field	Description	Value
Scale	Scale ID	AF-CU-PU
Description	Description of the scale	AF Pickup Scale for Customer

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Field	Description	Value
Scale Base	Defines the basis of scale, for example, location, distance, duration, and so on.	Weight
Scale Type	None	Same Scale (=)
Scale UoM	Unit of measure for the scale	KG
Rate Category	Rate Category	GCR – M, N, & Q

4. Choose the *Items* tab page and enter the following information in line 1:

Table 286

Field	Description	Value
Scale Value: Weight	Specifies the weight rates for which the rates are determined	• 500 • 2000 • 5000 • 500000
Calculation Type	Defines how the scale values are read	Relative (for all lines – values are read directly)

5. Save your entries.

6. Repeat the procedure to create a weight scale for calculating the costs of the main carriage stage. Use the following data:

Table 287

Field	Description	Value
Scale	Scale ID	AF-MS-CHAR-WEIGHT
Description	Description of the scale	AF Weight Scale for Main Stage
Scale Base	Defines the basis of scale, for example, location, distance, duration, and so on.	Weight
Scale Type	None	Base Scale (>=)
Scale UoM	Unit of measure for the scale	KG
Rate Category		GCR – M, N, & Q

7. Choose the *Items* tab page and enter the following information in line 1:

Table 288

Scale Value: Weight	Calculation Type	Rate Class
0.5	Relative	N
45	Relative	Q
100	Relative	Q

Scale Value: Weight	Calculation Type	Rate Class
300	**Relative**	Q
500	**Relative**	Q
1000	**Relative**	Q

8. Save your entries.

9. Repeat the procedure to create another using the following data:

Table 289

Field	Description	Value
Scale	Scale ID	**AF-MS-WEIGHT**
Description	Description of the scale	**AF Weight Scale for Main Stage**
Scale Base	Defines the basis of scale, for example, location, distance, duration, and so on.	**Weight**
Scale Type	None	**Base Scale (>=)**
Scale UoM	Unit of measure for the scale	**KG**
Rate Category	Rate Category	**GCR – M, N, & Q**

10. Choose the *Items* tab page and enter the following information in line 1:

Table 290

Field	Description	Value
Scale Value: Weight	Specifies the weight rates for which the rates are	**45** **100** **500** **2000** **5000**
Calculation Type	Defines how the scale values are read	**Relative** (for all lines – values are read directly)

11. Save your entries.

15.1.6   Defining Scales: Business Partner

Procedure

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

2. Enter Scale *AF-MS-WEIGHT* and choose *Continue* .

3. Press *Copy* and enter following data:

Table 291

Field	Description	Value
Scale	Scale ID	`AF-MS-CR`
Description	Description of the scale	`AF Scale for Main Stage Carrier`
Scale Base	Defines the basis of scale, for example, location, distance, duration, and so on.	`BP (Business Partner)`

4. Choose the *Items* tab page and enter the following data in line 1:

Table 292

Field	Description	Value
Business Partner	Specifies the business partners for which the rates are determined	• `AF-JL-NRT` • `AF-QF-NRT`
Calculation Type	Defines how the scale values are read	Absolute (For all lines – values are read directly)

5. Save your entries.

15.1.7 Defining Scales: City Code

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 using the following data:

Table 293

Field	Description	Value
Scale	Scale ID	`AF-MS-AIRPORT-ORIGIN`
Description	Description of the scale	`AF Origin Airport for Mainstage`
Scale Base	Defines the basis of scale, for example, location, distance, duration, and so on.	`CTY_CD (City Code)`

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

Table 294

Field	Description	Value
Calculation Type	Defines how the scale values are read	**Absolute**
IATA: City		**NRT**

5. Save your entries

6. Create another scale using the following data:

Table 295

Field	Description	Value
Scale	Scale ID	**AF-MS-AIRPORT-DEST**
Description	Description of the scale	**AF Origin Airport for Mainstage**
Scale Base	Defines the basis of scale, for example, location, distance, duration, and so on.	**CTY_CD (City Code)**

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

Table 296

Field	Description	Value
Calculation Type	Defines how the scale values are read	**Absolute**
IATA: City		**LAX**

8. Save your entries

15.1.8 Defining Data Crawler

This scenario requires a special data crawler to obtain IATA information for the rate table determination rule.

Procedure

1. In Customizing for SAP Transportation Management, choose ▐▶ *Transportation Management* ❯ *Basic Functions* ❯ *Conditions* ❯ *Define Data-Crawler Profile* ◀▌.

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

Table 297

Field	Value
Profile ID	**ZTRQ_PU_DEST_IATA**
BO Name	**/SCMTMS/TRQ**
Node Name	**ROOT**

3. In the tree structure, choose *Path Steps* and enter the following data:

Table 298

Field	Value
Profile ID	**ZTRQ_PU_DEST_IATA**
Prev. Step ID	Blank
BO Name	**/SCMTMS/TRQ**
Source Node	**ROOT**
Association Name	**TOR_ROOT**
Target Node	**TOR_BO**
Fill Data	Deselect

4. Save your entries.

5. Choose *Path Steps* and enter the following data:

Table 299

Field	Value
Profile ID	**ZTRQ_PU_DEST_IATA**
Step ID	Blank
Prev. Step ID	**10**
BO Name	**/SCMTMS/TOR**
Source Node	**ROOT**
Association Name	**STOP_FIRST**
Target Node	**STOP**
Fill Data	Deselect

6. Save your entries.

7. Choose *Path Steps* and enter the following data:

Table 300

Field	Value
Profile ID	**ZTRQ_PU_DEST_IATA**
Prev. Step ID	**20**
BO Name	**/SCMTMS/TOR**
Source Node	**STOP**
Association Name	**STOP_NEXTSTOP**
Target Node	**STOP**
Fill Data	Select

8. Save your entries.

9. Return to the initial screen of transaction `SM34` , enter view cluster **/SCMTMS/VC_DCPRF** and choose the *Maintain* pushbutton.

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

Table 301

Field	Value
Profile ID	ZTRQ_DLV_SRC_IATA
BO Name	/SCMTMS/TRQ
Node Name	ROOT

11. In the tree structure, choose *Path Steps* and enter the following data:

Table 302

Field	Value
Profile ID	ZTRQ_DLV_SRC_IATA
Prev. Step ID	Blank
BO Name	/SCMTMS/TRQ
Source Node	ROOT
Association Name	TOR_ROOT
Target Node	TOR_BO
Fill Data	Deselect

12. Save your entries.

13. Choose *Path Steps* and enter the following data:

Table 303

Field	Value
Profile ID	ZTRQ_DLV_SRC_IATA
Prev. Step ID	10
BO Name	/SCMTMS/TOR
Source Node	ROOT
Association Name	STOP_LAST
Target Node	STOP
Fill Data	Deselect

14. Save your entries.

15. Choose *Path Steps* and enter the following data:

Table 304

Field	Value
Profile ID	ZTRQ_DLV_SRC_IATA
Step ID	Blank
Prev. Step ID	20

Field	Value
BO Name	`/SCMTMS/TOR`
Source Node	`STOP`
Association Name	`STOP_PREVSTOP`
Target Node	`STOP`
Fill Data	Select

16. Save your entries.

15.1.9   Defining Conditions for Rate Table Determination

This scenario requires a special data crawler to obtain IATA information for the rate table determination rule.

Procedure

1. In SAP NetWeaver Business Client, choose ▶ *Application Administration* ❯ *General Settings* ❯ *Conditions* ❯ *Create Condition* ◗ .
2. Enter the following data:

   Table 305

Field	Value
Condition	`AF-CU-01`
Description	`AF: Rate table determination for CU-01`
Condition Type	`TCM_RATE`
Origin of Condition	`Condition Based on BRFplus Decision Table`

3. Choose *Data Access Definition* and then *Create* .
4. In the *Data Crawler-Based Data Access Definition* screen area, enter the following data:

   Table 306

Field	Value
DC Profile ID	`ZTRQ_PU_DEST_IATA`
DC Step ID	`030`
Field Name	`LOG_LOCIATA`

   > **i   Note**
   >
   > This is the data access definition for the IATA code of the export station.

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

Table 307

Field	Value
DC Profile ID	`ZTRQ_DLV_SRC_IATA`
DC Step ID	`030`
Field Name	`LOG_LOCIATA`

> **i Note**
>
> This is the data access definition for the IATA code of the import station.

6. Choose *Back* .

7. Enter the following data in the BRFplus table:

Table 308

IATA: LOC	IATA: LOC	Rate Table
`TYO`	`PHX`	`AF-CU-01-TYO-PHX`
`TYO`	`SAN`	`AF-CU-01-TYO-SAN`

8. Save your entries.

15.1.10 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 to be used in Truck Rates by entering the following data:

Table 309

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

4. On the *Item* tab page, enter the following information:

Table 310

Internal Location	Calculation Type
AF-QF-NRT	Absolute
AF-JL-NRT	Absolute
AF-QF-LAX	Absolute
AF-JL-LAX	Absolute
AF-GW-JPNRT	Absolute
AF-GW-USLAX	Absolute
OAF-STA-JPTYO	Absolute
OAF-STA-JPNGO	Absolute
OAF-STA-USSAN	Absolute
OAF-STA-USPHX	Absolute
OAF-CO-01	Absolute
OAF-CO-02	Absolute
OAF-CO-03	Absolute
OAF-CO-04	Absolute
OAF-CU-01	Absolute
OAF-CU-02	Absolute
OAF-CU-03	Absolute
OAF-CU-04	Absolute

5. Save your entries.

6. Create a scale for the source location to be used in Truck Rates by entering the following data:

Table 311

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

7. On the *Item* tab page, enter the following information:

Table 312

Internal Location	Calculation Type
AF-QF-NRT	Absolute
AF-JL-NRT	Absolute

Internal Location	Calculation Type
AF-QF-LAX	Absolute
AF-JL-LAX	Absolute
AF-GW-JPNRT	Absolute
AF-GW-USLAX	Absolute
OAF-STA-JPTYO	Absolute
OAF-STA-JPNGO	Absolute
OAF-STA-USSAN	Absolute
OAF-STA-USPHX	Absolute
OAF-CO-01	Absolute
OAF-CO-02	Absolute
OAF-CO-03	Absolute
OAF-CO-04	Absolute
OAF-CU-01	Absolute
OAF-CU-02	Absolute
OAF-CU-03	Absolute
OAF-CU-04	Absolute

8. Save your entries.

15.2 Freight Order

You must create the following objects for freight orders:

- Rate Tables for Customers [page 154]
- Rate Tables for Stages [page 168]
- Calculation Sheets for Stages [page 202]

15.2.1 Rate Tables for Customers

Rates are defined in rate tables, which use the scales that you created in Defining Scales: Weight [page 144] .

Following rate tables are created in this section:

Table 313

Rate Table	Reference Scale
AF-CU-01-TYO-PHX	AF-CU-01-TYO-PHX
AF-CU-02-TYO-PHX	AF-CU-02-TYO-PHX
AF-CU-03-NGO-SAN	AF-CU-03-NGO-SAN
AF-CU-04-TYO-PHX	AF-CU-04-TYO-PHX
AF-RT-PICK	AF Rate Table for Pickup

15.2.1.1 Defining Rate Table for Customer 01 (TYO-PHX)

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ▶ *Master Data* ❯ *Charge Management and Service Product Catalogs* ❯ *Rate Tables* ❯ *Create Rate Table Definition* ❯ .
2. Choose *Continue* without entering a rate table template.
3. On the *General Data* tab page, enter the following data:

Table 314

Field	Description	Value
Rate Table	Unique identifier for the rate table	**AF-CU-01-TYO-PHX**
Description	Description of the table	**AF-CU-01-TYO-PHX**
Charge Usage	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**
Charge Type	This is where the charge type is linked for integration with SAP ERP.	**BASE_AF**
Charge Category	This defaults from the charge type definition above.	**004**
Charge Subcategory	This defaults from the charge type definition above.	**100000 - Freight Charges**
Positive/Negative	This defaults from the charge type definition above.	**Positive or Negative Value**
Rate Category		**GCR - M, N, & Q**
Value Type	This defaults from the charge type definition above.	**Absolute Value**

4. In the table for the scales, choose *Insert* and enter the following data:

Table 315

Field	Description	Value
Dimension	**In 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)**
Reference Scale	**Assign the scales for all carriers defined above. This enables the entries in the rate table as in the sequence.**	**Blank**
Calculation Base	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	`CHRG_WEIGHT`
Scale Type	Manually defined or defaults from the reference scale definition above.	`Base Scale (>=)`
Scale Unit of Measure	Manually defined or defaults from the reference scale definition above.	`KG`
Minimum Value	Minimum value	Select
Maximum Value	Maximum value	Deselect
Relevant for Calculation Method	Relative for calculation method	Deselect
Rounding Profile	Rounding profile	Blank

5. Save your entries.

6. Choose the *Dates and Values* tab page and then the *Insert* pushbutton. Select option *With .Scale Items* .

7. Enter the following data:

Table 316

Field	Description	Value
Valid From	Date from which the rate table is valid	`<Current Year> -01-01`
Valid To	Date to which the rate table is value	`<Current Year> -12-31`
Aggreg. Rate Description	Aggregated rate description	Blank
Currency	A currency that is applicable for this rate table	`JPY`

8. Select the new row. A table appears in which you can enter the rates.

9. On the *Rates* tab page, choose *Insert* and enter the following data:

Table 317

Weight	Value
`Minimum`	`7000`
`45`	`700`

Weight	Value
100	650
500	330
1000	275

10. Choose the *Calculation Rules* tab page and enter the following data:

Table 318

Field	Description	Value
Calculation Base	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`
Application Level of Calc. Rule	Defines on which level the rates are calculated	`Rate table`
Quantity	Defines the multiplier for the calculation base. For example, the applicable rate could be *per 1 KG* .	`1`
Unit of Measure	The unit of measure specifies the unit to which the multiplier is applied.	`KG`

11. Choose the *Scale Items* tab page, select your Scale and press *Maintain Scale Items* .

12. Edit the existing Scale Items, as Calculation Type choose *Absolute* .

13. Once you have entered your data, release the rate table by choosing ▶ *Set Status* ❯ *Released* ❯ pushbutton.

14. Save your entries.

15.2.1.2   Defining Rate Table for Customer 02 (TYO-PHX)

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ▶ *Master Data* ❯ *Charge Management and Service Product Catalogs* ❯ *Rate Tables* ❯ *Create Rate Table Definition* ❯ .

2. Choose *Continue* without entering a rate table template.

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

Table 319

Field	Description	Value
Rate Table	Unique identifier for the rate table	`AF-CU-02-TYO-PHX`
Description	Description of the table	`AF-CU-02-TYO-PHX`
Charge Usage	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`
Charge Type	This is where the charge type is linked for integration with SAP ERP.	`BASE_AF`
Charge Category	This defaults from the charge type definition above.	`004`
Charge Subcategory	This defaults from the charge type definition above.	`100000 - Freight Charges`
Positive/Negative	This defaults from the charge type definition above.	`Positive or Negative Value`
Rate Category		`GCR - M, N, & Q`
Value Type	This defaults from the charge type definition above.	`Absolute Value`

4. In the table for the scales, choose *Insert* and enter the following data:

Table 320

Field	Description	Value
Dimension	In 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)
Reference Scale	Assign the scales for all carriers defined above. This enables the entries in the rate table as in the sequence.	Blank
Calculation Base	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	`CHRG_WEIGHT`
Scale Type	Manually defined or defaults from the reference scale definition above.	`Base Scale (>=)`
Scale Unit of Measure	Manually defined or defaults from the reference scale definition above.	`KG`

Field	Description	Value
Minimum Value	Minimum value	Select
Maximum Value	Maximum value	Deselect
Relevant for Calculation Method	Relative for calculation method	Deselect
Rounding Profile	Rounding profile	Blank

5. Save your entries.

6. Choose the *Dates and Values* tab page and then the *Insert* pushbutton. Select option *With Scale Items* .

7. Enter the following data:

Table 321

Field	Description	Value
Valid From	Date from which the rate table is valid	**\<Current Year\> -01-01**
Valid To	Date to which the rate table is value	**\<Current Year\> -12-31**
Aggreg. Rate Description	Aggregated rate description	Blank
Currency	A currency that is applicable for this rate table	**JPY**

8. Move to Tab Scale Items and press on Maintain Scale Items Button.

9. In the new window click on *Create Scale Items* and enter the following data:

Table 322

Scale Value: Weight	Calculation Type	Rate Class
45	Relative	N
100	Relative	Q
500	Relative	Q
1000	Relative	Q

10. Move back to *Tab Rates* , highlight the validity line above and enter the following data:

Table 323

Weight	Value
Minimum	5000
>=45	4000
>=100	3000
>=500	2000
>=1000	1000

11. Choose the *Calculation Rules* tab page and enter the following data:

Table 324

Field	Description	Value
Calculation Base	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`
Application Level of Calc. Rule	Defines on which level the rates are calculated	`Rate table`
Quantity	Defines the multiplier for the calculation base. For example, the applicable rate could be *per 1 KG* .	`100`
Unit of Measure	The unit of measure specifies the unit to which the multiplier is applied.	`KG`

12. Choose the Scale Items tab page, select your Scale and press *Maintain Scale Items* .

13. Edit the existing Scale Items, as Calculation Type choose *Absolute* .

14. Save your entries.

15.2.1.3   Defining Rate Table for Customer 03 (NGO-SAN)

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ▐▶ *Master Data* ❯ *Charge Management and Service Product Catalogs* ❯ *Rate Tables* ❯ *Create Rate Table Definition* ◀▌ .

2. Choose *Continue* without entering a rate table template.

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

Table 325

Field	Description	Value
Rate Table	Unique identifier for the rate table	`AF-CU-03-NGO-SAN`
Description	Description of the table	`AF-CU-03-NGO-SAN`
Charge Usage	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`

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Field	Description	Value
Charge Type	This is where the charge type is linked for integration with SAP ERP.	**BASE_AF**
Charge Category	This defaults from the charge type definition above.	**004**
Charge Subcategory	This defaults from the charge type definition above.	**100000 – Freight Charges**
Positive/Negative	This defaults from the charge type definition above.	**Positive or Negative Value**
Rate Category		**GCR – M, N, & Q**
Value Type	This defaults from the charge type definition above.	**Absolute Value**

4. In the table for the scales, choose *Insert* and enter the following data:

Table 326

Field	Description	Value
Dimension	In 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)
Reference Scale	Assign the scales for all carriers defined above. This enables the entries in the rate table as in the sequence.	Blank
Calculation Base	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	**CHRG_WEIGHT**
Scale Type	Manually defined or defaults from the reference scale definition above.	**Base Scale (>=)**
Scale Unit of Measure	Manually defined or defaults from the reference scale definition above.	**KG**
Minimum Value	Minimum value	Select
Maximum Value	Maximum value	Deselect
Relevant for Calculation Method	Relative for calculation method	Deselect
Rounding Profile	Rounding profile	Blank

5. Save your entries.

6. Choose the *Dates and Values* tab page and then the *Insert* pushbutton. Select option *With Scale Items* .

7. Enter the following data:

Table 327

Field	Description	Value
Valid From	Date from which the rate table is valid	**<Current Year> -01-01**
Valid To	Date to which the rate table is value	**<Current Year> -12-31**
Aggreg. Rate Description	Aggregated rate description	Blank
Currency	A currency that is applicable for this rate table	**JPY**

8. Select the new row. A table appears in which you can enter the rates.

9. On the *Rates* tab page, choose *Insert* and enter the following data:

Table 328

Weight	Value
Minimum	**7000**
45	**700**
100	**650**
500	**330**
1000	**275**

10. Choose the *Calculation Rules* tab page and enter the following data:

Table 329

Field	Description	Value
Calculation Base	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**
Application Level of Calc. Rule	Defines on which level the rates are calculated	**Rate table**
Quantity	Defines the multiplier for the calculation base. For example, the applicable rate could be *per 1 KG* .	**1**
Unit of Measure	The unit of measure specifies the unit to which the multiplier is applied.	**KG**

11. Choose the Scale Items tab page, select your Scale and press *Maintain Scale Items* .

12. Edit the existing Scale Items, as Calculation Type choose *Absolute* .

13. Once you have entered your data, release the rate table by choosing ▶ *Set Status* ❯ *Released* ❯.

14. Save your entries.

15.2.1.4 Defining Rate Table for Customer 04 (TYO-PHX)

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ▶ *Master Data* ❯ *Charge Management and Service Product Catalogs* ❯ *Rate Tables* ❯ *Create Rate Table Definition* ❯ .

2. Choose *Continue* without entering a rate table template.

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

Table 330

Field	Description	Value
Rate Table	Unique identifier for the rate table	`AF-CU-04-TYO-PHX`
Description	Description of the table	`AF-CU-04-TYO-PHX`
Charge Usage	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`
Charge Type	This is where the charge type is linked for integration with SAP ERP.	`BASE_AF`
Charge Category	This defaults from the charge type definition above.	`004`
Charge Subcategory	This defaults from the charge type definition above.	`100000 - Freight Charges`
Positive/Negative	This defaults from the charge type definition above.	`Positive or Negative Value`
Rate Category		`GCR - M, N, & Q`
Value Type	This defaults from the charge type definition above.	`Absolute Value`

4. In the table for the scales, choose *Insert* and enter the following data:

Table 331

Field	Description	Value
Dimension	In 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)
Description	Description of scale	`Weight`

Field	Description	Value
Reference Scale	Assign the scales for all carriers defined above. This enables the entries in the rate table as in the sequence.	`AF-CU-PU`
Calculation Base	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	`CHRG_WEIGHT`
Scale Type	Manually defined or defaults from the reference scale definition above.	`Base Scale (>=)`
Scale Unit of Measure	Manually defined or defaults from the reference scale definition above.	`KG`
Minimum Value	Minimum value	Select
Maximum Value	Maximum value	Deselect
Relevant for Calculation Method	Relative for calculation method	Deselect
Rounding Profile	Rounding profile	Blank

5. Save your entries.

6. Choose the *Dates and Values* tab page and then the *Insert* pushbutton. Select option `With Scale Items`.

7. Enter the following data:

Table 332

Field	Description	Value
Valid From	Date from which the rate table is valid	`<Current Year> -01-01`
Valid To	Date to which the rate table is value	`<Current Year> -12-31`
Aggreg. Rate Description	Aggregated rate description	Blank
Currency	A currency that is applicable for this rate table	`JPY`

8. Move to tab *Scale Items* and press on *Maintain Scale Items* push button.

9. In the new window choose *Create Scale Items* and enter the following data:

Table 333

Scale Value: Weight	Calculation Type	Rate Class
45	Relative	N
100	Relative	Q
500	Relative	Q
1000	Relative	Q

10. Select the new row. A table appears in which you can enter the rates.

11. On the *Rates* tab page, choose Insert and enter the following data:

Table 334

Weight	Value
Minimum	6000
45	660
100	520
500	280
1000	230

12. Choose the *Calculation Rules* tab page and enter the following data:

Table 335

Field	Description	Value
Calculation Base	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`
Application Level of Calc. Rule	Defines on which level the rates are calculated	`Rate table`
Quantity	Defines the multiplier for the calculation base. For example, the applicable rate could be *per 1 KG* .	`100`
Unit of Measure	The unit of measure specifies the unit to which the multiplier is applied.	`KG`

13. Choose the Scale Items tab page, select your Scale and press *Maintain Scale Items* .
14. Edit the existing Scale Items, as Calculation Type choose *Absolute* .
15. Once you have entered your data, release the rate table by choosing ▶ *Set Status* ❭ *Released* ❭ .
16. Save your entries.

15.2.1.5 Defining Rate Table for Pickup

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ▶ *Master Data* ❭ *Charge Management and Service Product Catalogs* ❭ *Rate Tables* ❭ *Create Rate Table Definition* ❭ .
2. Choose *Continue* without entering a rate table template.
3. On the *General Data* tab page, enter the following data:

Table 336

Field	Description	Value
Rate Table	Unique identifier for the rate table	**AF-RT-PICK**
Description	Description of the table	**AF Rate Table for Pickup**
Charge Usage	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**
Charge Type	This is where the charge type is linked for integration with SAP ERP.	**PU_AF**
Charge Category	This defaults from the charge type definition above.	**004**
Charge Subcategory	This defaults from the charge type definition above.	**100000 - Freight Charges**
Positive/Negative	This defaults from the charge type definition above.	**Positive or Negative Value**
Value Type	This defaults from the charge type definition above.	**Absolute Value**

4. In the table for the scales, choose *Insert* and enter the following data:

Table 337

Field	Description	Value
Dimension	In 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)
Description	Description of scale	**Weight**
Reference Scale	Assign the scales for all carriers defined above. This enables the entries in the rate table as in the sequence.	**AF-CU-PU**
Calculation Base	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	**CHRG_WEIGHT**
Scale Type	Manually defined or defaults from the reference scale definition above.	**To Scale (<=)**
Scale Unit of Measure	Manually defined or defaults from the reference scale definition above.	**KG**

Field	Description	Value
Minimum Value	Minimum value	Select
Maximum Value	Maximum value	Deselect
Relevant for Calculation Method	Relative for calculation method	Deselect
Rounding Profile	Rounding profile	Blank

5. Save your entries.

6. Choose the *Dates and Values* tab page and then the *Insert* pushbutton. Select option *With Scale Items* .

7. Enter the following data:

Table 338

Field	Description	Value
Valid From	Date from which the rate table is valid	**\<Current Year\> -01-01**
Valid To	Date to which the rate table is value	**\<Current Year\> -12-31**
Aggreg. Rate Description	Aggregated rate description	Blank
Currency	A currency that is applicable for this rate table	**JPY**

8. Select the new row. A table appears in which you can enter the rates.

9. On the *Rates* tab page, choose *Insert* and enter the following data:

Table 339

Weight	Value
Minimum	**3000**
45	**2100**
100	**1750**
500	**1500**
1000	**1250**

10. Choose the *Calculation Rules* tab page and enter the following data:

Table 340

Field	Description	Value
Calculation Base	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**

Field	Description	Value
Application Level of Calc. Rule	Defines on which level the rates are calculated	`Rate table`
Quantity	Defines the multiplier for the calculation base. For example, the applicable rate could be *per 1 KG* .	`10`
Unit of Measure	The unit of measure specifies the unit to which the multiplier is applied.	`KG`

11. Choose the Scale Items tab page, select your Scale and press *Maintain Scale Items* .

12. Edit the existing Scale Items, as Calculation Type choose *Absolute* .

13. Save your entries.

15.2.2 Rate Tables for Stages

Rates are defined in rate tables, which use the scales that you created in .

Following rate tables are created in this section::

Table 341

Rate Table	Description
`OAF-RATE-800`	Truck Rate for Pickup (LTL)
`OAF-RATE-801`	Truck Rate for Pre-Carriage (FTL)
`OAF-RATE-802-INT`	Internal Rate Table - Drayage Charges - Export
`OAF-RATE-802`	Rate Table - Drayage Charges - Station to Station
`AF-GW-STA-INT-EXP`	Internal Rate Table - Main Charges - Export
`AF-NRT-LAX-1`	Rate Table - Main Carriage
`AF-NRT-LAX-CUST1`	Rate Table Air Freight NRT-LAX Customer
`AF-RATE-852-INT`	Internal Rate Table - Drayage Charges - Import
`AF-GW-STA-INT-IMP`	Rate Table Internal Import
`OAF-RATE-850`	Truck Rate for On-Carriage (FTL)
`OAF-RATE-851`	Truck Rate for Delivery (LTL)

15.2.2.1 Defining Truck Rates 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. Choose *Continue* without entering a rate table template.
3. On the *General Data* tab page, enter the following data:

Table 342

Field	Description	Value
Rate Table	Unique identifier for the rate table	`OAF-RATE-800`
Description	Description of the table	`Truck Rate for Pickup (LTL)`
Charge Usage	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`
Charge Type	This is where the charge type is linked for integration with SAP ERP.	`FB00`
Charge Category	This defaults from the charge type definition above.	`004`
Charge Subcategory	This defaults from the charge type definition above.	`100000 - Freight Charges`
Positive/Negative	This defaults from the charge type definition above.	`Positive Value`
Value Type	This defaults from the charge type definition above.	`Absolute Value`

4. In the table for the scales, choose *Insert* and enter the following data:

Table 343

Field	Description	Value
Dimension	In 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)
Reference Scale	Assign the scales for all carriers defined above. This enables the entries in the rate table as in the sequence.	• `OAF-SCALE-SOURCE-LOC` • `OAF-SCALE-DEST-LOC`
Calculation Base	This determines how the values are stored and determined for this	• `SOURCELOC` • `DESTLOC`

Field	Description	Value
	dimension. There are predefined sources of information based on the object.	
Scale Type	Manually defined or defaults from the reference scale definition above.	**Same Scale (=)**
Minimum Value	Minimum value	Deselect
Maximum Value	Maximum value	Deselect
Relevant for Calculation Method	Relative for calculation method	Deselect
Rounding Profile	Rounding profile	Blank

5. Save your entries.

6. Choose the *Dates and Values* tab page and then the *Insert* pushbutton.

7. Enter the following data:

Table 344

Field	Description	Value
Valid From	Date from which the rate table is valid	**<Current Year> -01-01**
Valid To	Date to which the rate table is valid	**2099-12-31**
Description	Aggregated rate description	**Pre-Carriage**
Currency	A currency that is applicable for this rate table	**JPY**

8. Select the new row. A table appears in which you can enter the rates.

9. On the *Rates* tab page, choose *Insert* and enter the following data:

Table 345

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**
OAF-STA-JPNGO	AF-GW-JPNRT	**1000**
OAF-STA-JPTYO	AF-GW-JPNRT	**1010**

10. Choose the *Calculation Rules* tab page and enter the following data:

Table 346

Field	Description	Value
Calculation Base	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`
Application Level of Calc. Rule	Defines on which level the rates are calculated	`Rate table`
Price Unit	Defines the multiplier for the calculation base. For example, the applicable rate could be per 1 KG.	`100000`
Unit of Measure	The unit of measure specifies the unit to which the multiplier is applied.	`KG`

11. Once you have entered your data, release the rate table by choosing ▶ *Set Status* ❯ *Release* ❯.
12. Save your entries.

15.2.2.2 Defining Truck Rates for Pre-Carriage Stages (FTL)

If you have already implemented the *LCL Ocean Freight* scenario, you only have to enter the rates in this procedure.

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ▶ *Master Data* ❯ *Charge Management and Service Product Catalogs* ❯ *Rate Tables* ❯ *Create Rate Table Definition* ❯.
2. Choose *Continue* without entering a rate table template.
3. On the *General Data* tab page, enter the following data:

Table 347

Field	Description	Value
Rate Table	Unique identifier for the rate table	`OAF-RATE-801`
Description	Description of the table	`Truck Rate for Pre-Carriage (FTL)`
Charge Usage	This indicator identifies in which situation this rate table can be used. It	`Customer and Service Provider`

Field	Description	Value
	can be used for Customer Billing integration and/or Supplier Invoice integration, or neither.	
Charge Type	This is where the charge type is linked for integration with SAP ERP.	**FB00**
Charge Category	This defaults from the charge type definition above.	**004**
Charge Subcategory	This defaults from the charge type definition above.	**100000 - Freight Charges**
Positive/Negative	This defaults from the charge type definition above.	**Positive Value**
Value Type	This defaults from the charge type definition above.	**Absolute Value**

4. In the table for the scales, choose *Insert* and enter the following data:

Table 348

Field	Description	Value
Dimension	In 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)
Reference Scale	Assign the scales for all carriers defined above. This enables the entries in the rate table as in the sequence.	• **OAF-SCALE-SOURCE-LOC** • **OAF-SCALE-DEST-LOC**
Calculation Base	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	• **SOURCELOC** • **DESTLOC**
Scale Type	Manually defined or defaults from the reference scale definition above.	**Same Scale (=)**
Minimum Value	Minimum value	Deselect
Maximum Value	Maximum value	Deselect
Relevant for Calculation Method	Relative for calculation method	Deselect
Rounding Profile	Rounding profile	Blank

5. Save your entries.

6. Choose the *Dates and Values* tab page and then the *Insert* pushbutton.

7. Enter the following data:

Table 349

Field	Description	Value
Valid From	Date from which the rate table is valid	`<Current Year> -01-01`
Valid To	Date to which the rate table is value	`2099-12-31`
Aggreg. Rate Description	Aggregated rate description	`Pre-Carriage`
Currency	A currency that is applicable for this rate table	`JPY`

8. Select the new row. A table appears in which you can enter the rates.

9. On the *Rates* tab page, choose *Insert* and enter the following data:

Table 350

Source Location	Destination Location	Value
OAF-STA-JPTYO	AF-GW-JPNRT	`200`
OAF-STA-JPNGO	AF-GW-JPNRT	`180`

10. Choose the *Calculation Rules* tab page and enter the following data:

Table 351

Field	Description	Value
Calculation Base	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.	`ACTUAL_DIST`
Application Level of Calc. Rule	Defines on which level the rates are calculated	`Rate table`
Price Unit	Defines the multiplier for the calculation base. For example, the applicable rate could be *per 1 KG* .	`1`
Unit of Measure	The unit of measure specifies the unit to which the multiplier is applied.	`MI`

11. Once you have entered your data, release the rate table by choosing the *Release* pushbutton.

12. Save your entries.

15.2.2.3   Defining Drayage Charges on the Export Side

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ▶ *Master Data* ❯ *Charge Management and Service Product Catalogs* ❯ *Rate Tables* ❯ *Create Rate Table Definition* ❯ .
2. Choose *Continue* without entering a rate table template.
3. On the *General Data* tab page, enter the following data:

Table 352

Field	Description	Value
Rate Table	Unique identifier for the rate table	`AF-RATE-802-INT`
Description	Description of the table	`Internal Rate Table -` `Drayage Charges - Export`
Charge Usage	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.	`Internal`
Charge Type	This is where the charge type is linked for integration with SAP ERP.	`FB00`
Charge Category	This defaults from the charge type definition above.	`004`
Charge Subcategory	This defaults from the charge type definition above.	`100000 - Freight Charges`
Positive/Negative	This defaults from the charge type definition above.	`Positive Value`
Value Type	This defaults from the charge type definition above.	`Absolute Value`

4. In the table for the scales, choose *Insert* and enter the following data:

Table 353

Field	Description	Value
Dimension	In 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 (weight-based)
Reference Scale	Assign the scales for all carriers defined above. This enables the entries in the rate table as in the sequence.	`AF-MS-WEIGHT`
Calculation Base	This determines how the values are stored and determined for this	`CHRG_WEIGHT`

Field	Description	Value
	dimension. There are predefined sources of information based on the object.	
Scale Type	Manually defined or defaults from the reference scale definition above.	**Same Scale (=)**
Scale Base	Manually defined or defaults from the reference scale definition above.	**WEIGHT**
Scale Base Description	Manually defined or defaults from the reference scale definition above.	**Weight**
Calculation Type	Manually defined or defaults from the reference scale definition above.	**Relative**
Minimum Value	Minimum value	Select
Maximum Value	Maximum value	Deselect
Relevant for Calculation Method	Relative for calculation method	Deselect
Rounding Profile	Rounding profile	Blank

5. Save your entries.

6. Choose the *Dates and Values* tab page and then the *Insert* pushbutton.

7. Enter the following data:

Table 354

Field	Description	Value
Valid From	Date from which the rate table is valid	**<Current Year> -01-01**
Valid To	Date to which the rate table is value	**2099-12-31**
Aggreg. Rate Description	Aggregated rate description	**GW-STA Export**
Currency	A currency that is applicable for this rate table	**USD**

8. Select the new row. A table appears in which you can enter the rates.

9. On the *Rates* tab page, choose *Insert* and enter the following data:

> **i** Note
>
> If the table does not contain the required scale items (for example, 500000), open the *Scale Items* tab page and select *Maintain Scale Items* . Choose *Insert* to add the missing scale items or edit the existing scale items. As the calculation type, choose *Absolute* .

Table 355

Minimum Value	150
>= 0 KG	22
>= 45 KG	18
>= 100 KG	14

>= 300 KG	12
>= 500 KG	10
>= 1000 KG	9
>= 2000 KG	8
>= 5000 KG	7

10. Choose the *Calculation Rules* tab page and enter the following data:

Table 356

Field	Description	Value
Calculation Base	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`
Application Level of Calc. Rule	Defines on which level the rates are calculated	`Rate table`
Quantity	Defines the multiplier for the calculation base. For example, the applicable rate could be *per 1 KG* .	`1`
Unit of Measure	The unit of measure specifies the unit to which the multiplier is applied.	`KG`

11. Once you have entered your data, release the rate table by choosing the *Release* pushbutton.

12. Save your entries.

15.2.2.4 Defining Drayage Charges from Station to Station

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ▷ *Master Data* ❯ *Charge Management and Service Product Catalogs* ❯ *Rate Tables* ❯ *Create Rate Table Definition* ❯ .

2. Choose *Continue* without entering a rate table template.

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

Table 357

Field	Description	Value
Rate Table	Unique identifier for the rate table	`AF-RATE-802`

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Field	Description	Value
Description	Description of the table	**Rate Table - Drayage Charges - Station to Station**
Charge Usage	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**
Charge Type	This is where the charge type is linked for integration with SAP ERP.	**FB00**
Charge Category	This defaults from the charge type definition above.	**004**
Charge Subcategory	This defaults from the charge type definition above.	**100000 - Freight Charges**
Positive/Negative	This defaults from the charge type definition above.	**Positive or Negative Value**
Value Type	This defaults from the charge type definition above.	**Absolute Value**

4. In the table for the scales, choose *Insert* and enter the following data:

Table 358

Field	Description	Value
Dimension	In 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 (weight-based)
Reference Scale	Assign the scales for all carriers defined above. This enables the entries in the rate table as in the sequence.	**AF-MS-WEIGHT**
Calculation Base	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	**CHRG_WEIGHT**
Scale Type	Manually defined or defaults from the reference scale definition above.	**Same Scale (=)**
Scale Base	Manually defined or defaults from the reference scale definition above.	**WEIGHT**
Scale Base Description	Manually defined or defaults from the reference scale definition above.	**Weight**

Field	Description	Value
Calculation Type	Manually defined or defaults from the reference scale definition above.	`Relative`
Minimum Value	Minimum value	Deselect
Maximum Value	Maximum value	Deselect
Relevant for Calculation Method	Relative for calculation method	Deselect
Rounding Profile	Rounding profile	Blank

5. Save your entries.

6. Choose the *Dates and Values* tab page and then the *Insert* pushbutton.

7. Enter the following data:

Table 359

Field	Description	Value
Valid From	Date from which the rate table is valid	`<Current Year> -01-01`
Valid To	Date to which the rate table is value	`2099-12-31`
Aggreg. Rate Description	Aggregated rate description	`STA-STA`
Currency	A currency that is applicable for this rate table	`JPY`

8. Move to Tab Scale Items and press on Maintain Scale Items Button.

9. In the new window click on *Create Scale Items* and enter the following data:

Table 360

Scale Value: Weight	Calculation Type
45 KG	Relative
100 KG	Relative
300 KG	Relative
500 KG	Relative
1000 KG	Relative
2000 KG	Relative
5000 KG	Relative

10. Select the new row. A table appears in which you can enter the rates.

11. On the *Rates* tab page, choose *Insert* and enter the following data:

Table 361

Minimum Value	150
>= 0 KG	22
>= 45 KG	18
>= 100 KG	14

>= 300 KG	12
>= 500 KG	10
>= 1000 KG	9
>= 2000 KG	8
>= 5000 KG	7

12. Choose the *Calculation Rules* tab page and enter the following data:

Table 362

Field	Description	Value
Calculation Base	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`
Application Level of Calc. Rule	Defines on which level the rates are calculated	`Rate table`
Quantity	Defines the multiplier for the calculation base. For example, the applicable rate could be *per 1 KG* .	`1`
Unit of Measure	The unit of measure specifies the unit to which the multiplier is applied.	`KG`

13. Once you have entered your data, release the rate table by choosing the ▌▶ *Set Status* ▶ *Release* ▐ pushbutton.

14. Save your entries.

15.2.2.5 Defining Main Charges on the Export Side

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ▌▶ *Master Data* ▶ *Charge Management and Service Product Catalogs* ▶ *Rate Tables* ▶ *Create Rate Table Definition* ▐ .

2. Choose *Continue* without entering a rate table template.

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

Table 363

Field	Description	Value
Rate Table	Unique identifier for the rate table	`AF-GW-STA-INT-EXP`
Description	Description of the table	`Internal Rate Table - Main Charges - Export`
Charge Usage	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.	`Internal`
Charge Type	This is where the charge type is linked for integration with SAP ERP.	`BASE_AF`
Charge Category	This defaults from the charge type definition above.	`004 - Basic Freight`
Charge Subcategory	This defaults from the charge type definition above.	`100000 - Freight Charges`
Positive/Negative	This defaults from the charge type definition above.	`Positive or Negative Value`
Rate Category		`GCR - M, N, & Q`
Value Type	This defaults from the charge type definition above.	`Absolute Value`
Leading Charge Type	This defaults from the charge type definition above.	`Not a Leading Charge Type`

4. In the table for the scales, choose *Insert* and enter the following data:

Table 364

Field	Description	Value
Dimension	In 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)
Reference Scale	Assign the scales for all carriers defined above. This enables the entries in the rate table as in the sequence.	`AF-MS-CR`
Calculation Base	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	`TSP`
Scale Type	Manually defined or defaults from the reference scale definition above.	`Same Scale (=)`

Field	Description	Value
Scale Base	Base of the scale	**BP**
Scale Base Description	Description of the scale base	**Business Partner**
Calculation Type	Type of calculation	**Absolute**
Minimum Value	Minimum value	Deselect
Maximum Value	Maximum value	Deselect
Relevant for Calculation Method	Relative for calculation method	Deselect
Rounding Profile	Rounding profile	Blank

5. Add another scale by choosing *Insert* and entering the following data:

Table 365

Field	Description	Value
Dimension	In 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.	2 for the second scale
Reference Scale	Assign the scales for all carriers defined above. This enables the entries in the rate table as in the sequence.	**AF-MS-WEIGHT**
Calculation Base	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	**CHRG_WEIGHT**
Scale Type	Manually defined or defaults from the reference scale definition above.	**Base Scale (>=)**
Scale Unit of Measure	Unit of measure for the scale	**KG**
Scale Base	Base of the scale	**WEIGHT**
Scale Base Description	Description of the scale base	**Weight**
Calculation Type	Type of calculation	**Relative**
Minimum Value	Minimum value	Select
Maximum Value	Maximum value	Deselect
Relevant for Calculation Method	Relative for calculation method	Deselect
Rounding Profile	Rounding profile	Blank

6. Save your entries.
7. Choose the *Dates and Values* tab page and then the *Insert* pushbutton.
8. Enter the following data:

Table 366

Field	Description	Value
Valid From	Date from which the rate table is valid	**\<Current Year\> -01-01**
Valid To	Date to which the rate table is value	**2099-12-31**
Description	Aggregated rate description	**Station to Station Export**
Currency	A currency that is applicable for this rate table	**JPY**

9. Select the new row. A table appears in which you can enter the rates.

10. On the *Rates* tab page, choose *Insert* and enter the following data:

Table 367

Carrier (=)	Minimum Value	>= 0 KG	>=45 KG	>=100 KG	>=300 KG	>= 500 KG	>= 1000 KG	>=2000 KG	>= 5000 KG
AF-JL-NRT	**8000**	**750**	**370**	**250**	**320**	**235**	**185**	**185**	**185**
AF-QF-NRT	**7000**	**650**	**350**	**230**	**290**	**215**	**165**	**165**	**165**

11. Choose the *Calculation Rules* tab page and enter the following data:

Table 368

Field	Description	Value
Calculation Base	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**
Application Level of Calc. Rule	Defines on which level the rates are calculated	**Rate table**
Quantity	Defines the multiplier for the calculation base. For example, the applicable rate could be *per 1 KG* .	**1**
Unit of Measure	The unit of measure specifies the unit to which the multiplier is applied.	**KG**

12. Once you have entered your data, release the rate table by choosing the ▌ *Set Status* ❯ *Release* ❱ pushbutton.

13. Save your entries.

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15.2.2.6 Defining Rates for Main Carriage Stage

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ▶ *Master Data* ❯ *Charge Management and Service Product Catalogs* ❯ *Rate Tables* ❯ *Create Rate Table Definition* ◀.
2. Enter value *1000* for Rate Table Type and choose *Continue* without entering a rate table template.
3. On the *General Data* tab page, enter the following data:

Table 369

Field	Description	Value
Rate Table	Unique identifier for the rate table	`AF-NRT-LAX-1`
Description	Description of the table	`Rate Table Air Freight NRT-LAX Carrier`
Charge Usage	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`
Charge Type	This is where the charge type is linked for integration with SAP ERP.	`BASE_AF`
Charge Category	This defaults from the charge type definition above.	`004 - Basic Freight`
Charge Subcategory	This defaults from the charge type definition above.	`100000 - Freight Charges`
Positive/Negative	This defaults from the charge type definition above.	`Positive or Negative Value`
Value Type	This defaults from the charge type definition above.	`Absolute Value`
Rate Category		`GCR - M, N, & Q`

4. In the table for the scales, choose *Insert* and enter the following data:

Table 370

Field	Description	Value
Dimension	In 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
Reference Scale	Assign the scales for all carriers defined above. This enables the entries in the rate table as in the sequence.	`AF-MS-CR`

Field	Description	Value
Calculation Base	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	**TSP**
Scale Type	Manually defined or defaults from the reference scale definition above.	**Same Scale (=)**
Scale Base	Base of the scale	**BP**
Scale Base Description	Description of the scale base	**Business Partner**
Scale Relevant for Crcy Maint.		**Select**
Calculation Type	Type of calculation	**Absolute**
Minimum Value	Minimum value	Deselect
Maximum Value	Maximum value	Deselect
Relevant for Calculation Method	Relative for calculation method	Deselect
Rounding Profile	Rounding profile	Blank

5. Add another scale by choosing *Insert* and entering the following data:

Table 371

Field	Description	Value
Dimension	In 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.	2 for the second scale
Reference Scale	Assign the scales for all carriers defined above. This enables the entries in the rate table as in the sequence.	**AF-MS-CHAR-WEIGHT**
Calculation Base	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	**CHRG_WEIGHT**
Scale Type	Manually defined or defaults from the reference scale definition above.	**Base Scale (>=)**
Scale Unit of Measure	Unit of measure for the scale	**KG**
Scale Base	Base of the scale	**WEIGHT**
Scale Base Description	Description of the scale base	**Weight**
Calculation Type	Type of calculation	**Relative**

Field	Description	Value
Minimum Value	Minimum value	Select
Maximum Value	Maximum value	Deselect
Relevant for Calculation Method	Relative for calculation method	Deselect
Rounding Profile	Rounding profile	Blank

6. Add another scale by choosing *Insert* and entering the following data:

Table 372

Field	Description	Value
Dimension	In 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.	3 for the third scale
Reference Scale	Assign the scales for all carriers defined above. This enables the entries in the rate table as in the sequence.	**AF-MS-AIRPORT-ORIGIN**
Calculation Base	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	**SOURCE_CITY**
Scale Type	Manually defined or defaults from the reference scale definition above.	**Same Scale (=)**
Scale Base	Base of the scale	**CTY_CD**
Scale Base Description	Description of the scale base	**City Code**
Calculation Type	Type of calculation	**Absolute**
Minimum Value	Minimum value	Deselect
Maximum Value	Maximum value	Deselect
Relevant for Calculation Method	Relative for calculation method	Deselect
Rounding Profile	Rounding profile	Blank

7. Add another scale by choosing Insert and entering the following data:

Table 373

Field	Description	Value
Dimension	In 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.	4 for the third scale
Reference Scale	Assign the scales for all carriers defined above. This enables the	**AF-MS-AIRPORT-DEST**

Field	Description	Value
	entries in the rate table as in the sequence.	
Calculation Base	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	`DESTINATION_CTY`
Scale Type	Manually defined or defaults from the reference scale definition above.	`Same Scale (=)`
Scale Base	Base of the scale	`CTY_CD`
Scale Base Description	Description of the scale base	`City Code`
Calculation Type	Type of calculation	`Absolute`
Minimum Value	Minimum value	Deselect
Maximum Value	Maximum value	Deselect
Relevant for Calculation Method	Relative for calculation method	Deselect
Rounding Profile	Rounding profile	Blank

8. Save your entries.
9. Choose the *Dates and Values* tab page and then the insert a new entry by pressing *With Scale Items* pushbutton.
10. Enter the following data:

Table 374

Field	Description	Value
Valid From	Date from which the rate table is valid	`<Current Year> -01-01`
Valid To	Date to which the rate table is value	`2099-12-31`
Description	Aggregated rate description	`Main-Carriage`
Currency	A currency that is applicable for this rate table	`JPY`

11. On the *Rates* tab page, choose *Insert* and ▶| *Display Rates* ▶ *Display all Rate Combinations* ▶| enter the following data:

Table 375

Carrier (=)	Minimum Value	>= 0,5 KG	>=45 KG	>=100 KG	>=300 KG	>= 500 KG	>= 1000 KG
`AF-JL-NRT`	8000	750	370	250	240	235	185
`AF-QF-NRT`	7000	650	365	245	235	230	175

12. Choose the *Calculation Rules* tab page and check that the following data is entered:

Table 376

Field	Description	Value
Calculation Base	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`
Application Level of Calc. Rule	Defines on which level the rates are calculated	`Rate table`
Quantity	Defines the multiplier for the calculation base. For example, the applicable rate could be *per 1 KG* .	`1`
Unit of Measure	The unit of measure specifies the unit to which the multiplier is applied.	`KG`

13. Once you have entered your data, release the rate table by choosing the ▐▶ *Set Status* ❯ *Release* ❩ pushbutton.

14. Save your entries.

Perform the following steps:

1. In SAP NetWeaver Business Client (NWBC), choose ▐▶ *Master Data* ❯ *Charge Management and Service Product Catalogs* ❯ *Rate Tables* ❯ *Create Rate Table Definition* ❩ .

2. Enter value *1000* for Rate Table Type and choose *Continue* without entering a rate table template.

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

Table 377

Field	Description	Value
Rate Table	Unique identifier for the rate table	`AF-NRT-LAX-CUST1`
Description	Description of the table	`Rate Table Air Freight NRT-LAX Customer`
Charge Usage	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`
Charge Type	This is where the charge type is linked for integration with SAP ERP.	`BASE_AF`
Charge Category	This defaults from the charge type definition above.	`004 - Basic Freight`

Field	Description	Value
Charge Subcategory	This defaults from the charge type definition above.	**100000 - Freight Charges**
Positive/Negative	This defaults from the charge type definition above.	**Positive or Negative Value**
Value Type	This defaults from the charge type definition above.	**Absolute Value**
Rate Category		**GCR - M, N, & Q**

4. In the table for the scales, choose *Insert* and enter the following data:

Table 378

Field	Description	Value
Dimension	In 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
Reference Scale	Assign the scales for all carriers defined above. This enables the entries in the rate table as in the sequence.	**AF-MS-CHAR-WEIGHT**
Calculation Base	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	**CHRG_WEIGHT**
Scale Type	Manually defined or defaults from the reference scale definition above.	**Base Scale (>=)**
Scale Unit of Measure	Unit of measure for the scale	*KG*
Scale Base	Base of the scale	**WEIGHT**
Scale Base Description	Description of the scale base	**weight**
Calculation Type	Type of calculation	**Relative**
Minimum Value	Minimum value	Deselect
Maximum Value	Maximum value	Deselect
Relevant for Calculation Method	Relative for calculation method	Deselect
Rounding Profile	Rounding profile	Blank

5. Add another scale by choosing *Insert* and entering the following data:

Table 379

Field	Description	Value
Dimension	In 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.	2 for the second scale
Reference Scale	Assign the scales for all carriers defined above. This enables the entries in the rate table as in the sequence.	`AF-MS-AIRPORT-ORIGIN`
Calculation Base	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	`SOURCE_CITY`
Scale Type	Manually defined or defaults from the reference scale definition above.	`Same Scale (=)`
Scale Unit of Measure	Unit of measure for the scale	`KG`
Scale Base	Base of the scale	`CTY_CD`
Scale Base Description	Description of the scale base	`City Code`
Calculation Type	Type of calculation	`Absolute`
Minimum Value	Minimum value	Deselect
Maximum Value	Maximum value	Deselect
Relevant for Calculation Method	Relative for calculation method	Deselect
Rounding Profile	Rounding profile	Blank

6. Add another scale by choosing *Insert* and entering the following data:

Table 380

Field	Description	Value
Dimension	In 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.	3 for the third scale
Reference Scale	Assign the scales for all carriers defined above. This enables the entries in the rate table as in the sequence.	`AF-MS-AIRPORT-DEST`

Field	Description	Value
Calculation Base	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	DESTINATION_CITY
Scale Type	Manually defined or defaults from the reference scale definition above.	Same Scale (=)
Scale Base	Base of the scale	CTY_CD
Scale Base Description	Description of the scale base	City Code
Calculation Type	Type of calculation	Absolute
Minimum Value	Minimum value	Deselect
Maximum Value	Maximum value	Deselect
Relevant for Calculation Method	Relative for calculation method	Deselect
Rounding Profile	Rounding profile	Blank

7. Save your entries.

8. Choose the *Dates and Values* tab page and then the insert a new entry by pressing *With Scale Items* pushbutton.

9. Enter the following data:

Table 381

Field	Description	Value
Valid From	Date from which the rate table is valid	<Current Year> -01-01
Valid To	Date to which the rate table is value	2099-12-31
Description	Aggregated rate description	Main-Carriage
Currency	A currency that is applicable for this rate table	JPY

10. On the *Rates* tab page, choose *Insert* and ▶ *Display Rates* ❯ *Display all Rate Combinations* ❯ enter the following data:

Table 382

Source City Code	Destination City	Minimum Value	>= 0,5KG	>=45 KG	>=100 KG	>=300 KG	>= 500 KG	>= 1000 KG
NRT	LAX	8800	825	407	275	264	260	210

11. Choose the *Calculation Rules* tab page and check that the following data is entered:

Table 383

Field	Description	Value
Calculation Base	Provides the calculation base for this rate. In our rate table, the rates are specified as per/mile from source to	CHRG_WEIGHT

Field	Description	Value
	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.	
Application Level of Calc. Rule	Defines on which level the rates are calculated	**Rate table**
Quantity	Defines the multiplier for the calculation base. For example, the applicable rate could be *per 1 KG* .	**1**
Unit of Measure	The unit of measure specifies the unit to which the multiplier is applied.	**KG**

12. Once you have entered your data, release the rate table by choosing the ▶ *Set Status* ❭ *Release* ❭ pushbutton.

13. Save your entries.

15.2.2.7   Defining Drayage Charges on the Import Side

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ▶ *Master Data* ❭ *Charge Management and Service Product Catalogs* ❭ *Rate Tables* ❭ *Create Rate Table Definition* ❭ .

2. Choose *Continue* without entering a rate table template.

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

Table 384
Field	Description	Value
Rate Table	Unique identifier for the rate table	**AF-RATE-852-INT**
Description	Description of the table	**Internal Rate Table – Drayage Charges - Import**
Charge Usage	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.	**Internal**
Charge Type	This is where the charge type is linked for integration with SAP ERP.	**FB00**

Field	Description	Value
Charge Category	This defaults from the charge type definition above.	**004**
Charge Subcategory	This defaults from the charge type definition above.	**100000 – Freight Charges**
Positive/Negative	This defaults from the charge type definition above.	**Positive or Negative Value**
Rate Category		**GCR – M, N, & Q**
Value Type	This defaults from the charge type definition above.	**Absolute Value**

4. In the table for the scales, choose *Insert* and enter the following data:

Table 385

Field	Description	Value
Dimension	In 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 (weight-based)
Reference Scale	Assign the scales for all carriers defined above. This enables the entries in the rate table as in the sequence.	**AF-MS-WEIGHT**
Calculation Base	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	**CHRG_WEIGHT**
Scale Type	Manually defined or defaults from the reference scale definition above.	**Base Scale (>=)**
Scale Unit of Measure	Manually defined or defaults from the reference scale definition above.	**KG**
Scale Base	Manually defined or defaults from the reference scale definition above.	**WEIGHT**
Scale Base Description	Manually defined or defaults from the reference scale definition above.	**Weight**
Calculation Type	Manually defined or defaults from the reference scale definition above.	**Relative**
Minimum Value	Minimum value	Select
Maximum Value	Maximum value	Deselect
Relevant for Calculation Method	Relative for calculation method	Deselect

Field	Description	Value
Rounding Profile	Rounding profile	Blank

5. Once you have entered the data, select each new row in the table and choose the *Add Scale* pushbutton.

6. Save your entries.

7. Choose the *Dates and Values* tab page and then the *Insert* pushbutton.

8. Enter the following data:

Table 386

Field	Description	Value
Valid From	Date from which the rate table is valid	`<Current Year> -01-01`
Valid To	Date to which the rate table is value	`2099-12-31`
Description	Aggregated rate description	`GW-STA Import`
Currency	A currency that is applicable for this rate table	`USD`

9. Select the new row. A table appears in which you can enter the rates.

10. On the *Rates* tab page, choose *Insert* and enter the following data:

Table 387

Minimum Value	150
>= 0 KG	22
>= 45 KG	18
>= 100 KG	14
>= 300 KG	12
>= 500 KG	10
>= 1000 KG	9
>= 2000 KG	8
>= 5000 KG	7

11. Choose the *Calculation Rules* tab page and enter the following data:

Table 388

Field	Description	Value
Calculation Base	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`

Field	Description	Value
Application Level of Calc. Rule	Defines on which level the rates are calculated	**Rate table**
Quantity	Defines the multiplier for the calculation base. For example, the applicable rate could be *per 1 KG* .	**1**
Unit of Measure	The unit of measure specifies the unit to which the multiplier is applied.	**KG**

12. Once you have entered your data, release the rate table by choosing the ▐▶ *Set Status* ▶ *Release* ▐ pushbutton.

13. Save your entries.

15.2.2.8 Defining Rates for Import (Internal)

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ▐▶ *Master Data* ▶ *Charge Management and Service Product Catalogs* ▶ *Rate Tables* ▶ *Create Rate Table Definition* ▐ .

2. Choose *Continue* without entering a rate table template.

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

Table 389

Field	Description	Value
Rate Table	Unique identifier for the rate table	**AF-GW-STA-INT-IMP**
Description	Description of the table	**Rate Table Internal Import**
Charge Usage	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.	**Internal**
Charge Type	This is where the charge type is linked for integration with SAP ERP.	**FB00**
Charge Category	This defaults from the charge type definition above.	**004 - Basic Freight**
Charge Subcategory	This defaults from the charge type definition above.	**100000 - Freight Charges**
Positive/Negative	This defaults from the charge type definition above.	**Positive or Negative Value**
Rate Category		**GCR - M, N, & Q**

Field	Description	Value
Value Type	This defaults from the charge type definition above.	**Absolute Value**
Leading Charge Type	This defaults from the charge type definition above.	**Not a Leading Charge Type**

4. In the table for the scales, choose *Insert* and enter the following data:

Table 390

Field	Description	Value
Dimension	In 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
Reference Scale	Assign the scales for all carriers defined above. This enables the entries in the rate table as in the sequence.	**OAF-SCALE-SOURCE-LOC**
Calculation Base	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	**SOURCELOC**
Scale Type	Manually defined or defaults from the reference scale definition above.	**Same Scale (=)**
Scale Base	Base of the scale	**LOC**
Scale Base Description	Description of the scale base	**Location**
Calculation Type	Type of calculation	**Absolute**
Minimum Value	Minimum value	Deselect
Maximum Value	Maximum value	Deselect
Relevant for Calculation Method	Relative for calculation method	Deselect
Rounding Profile	Rounding profile	Blank

5. Add another scale by choosing *Insert* and entering the following data:

Table 391

Field	Description	Value
Dimension	In 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.	2 for the second scale
Reference Scale	Assign the scales for all carriers defined above. This enables the	**OAF-SCALE-DEST-LOC**

Field	Description	Value
	entries in the rate table as in the sequence.	
Calculation Base	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	`DESTLOC`
Scale Type	Manually defined or defaults from the reference scale definition above.	`Same Scale (=)`
Scale Base	Base of the scale	`LOC`
Scale Base Description	Description of the scale base	`Location`
Calculation Type	Type of calculation	`Absolute`
Minimum Value	Minimum value	Deselect
Maximum Value	Maximum value	Deselect
Relevant for Calculation Method	Relative for calculation method	Deselect
Rounding Profile	Rounding profile	Blank

6. Save your entries.
7. Choose the *Dates and Values* tab page and then the *Insert* pushbutton.
8. Enter the following data:

Table 392

Field	Description	Value
Valid From	Date from which the rate table is valid	`<Current Year> -01-01`
Valid To	Date to which the rate table is value	`2099-12-31`
Description	Aggregated rate description	`Intern. On-Carriage`
Currency	A currency that is applicable for this rate table	`USD`

9. Select the new row. A table appears in which you can enter the rates.
10. On the *Rates* tab page, choose *Insert* and enter the following data:

Table 393

Source Location (=)	Destination Location (=)	Value
`AF-GW-USLAX`	`OAF-STA-USPHX`	`1.95`
`AF-GW-USLAX`	`OAF-STA-USSAN`	`1.95`

11. Choose the *Calculation Rules* tab page and enter the following data:

Table 394

Field	Description	Value
Calculation Base	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.	`ACTUAL_DIST`
Application Level of Calc. Rule	Defines on which level the rates are calculated	`Rate table`
Quantity	Defines the multiplier for the calculation base. For example, the applicable rate could be *per 1 KG* .	`1`
Unit of Measure	The unit of measure specifies the unit to which the multiplier is applied.	`MI`

12. Once you have entered your data, release the rate table by choosing the ▌▶ *Set Status* ❯ *Release* ▐ pushbutton.

13. Save your entries.

15.2.2.9 Defining Truck Rates for On-Carriage Stages (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. Choose *Continue* without entering a rate table template.
3. On the *General Data* tab page, enter the following data:

Table 395

Field	Description	Value
Rate Table	Unique identifier for the rate table	`OAF-RATE-850`
Description	Description of the table	`Truck Rate for On-Carriage (FTL)`
Charge Usage	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`

Field	Description	Value
Charge Type	This is where the charge type is linked for integration with SAP ERP.	**FB00**
Charge Category	This defaults from the charge type definition above.	**004**
Charge Subcategory	This defaults from the charge type definition above.	**100000**
Positive/Negative	This defaults from the charge type definition above.	**Positive Value**
Rate Category		**GCR - M, N, & Q**
Value Type	This defaults from the charge type definition above.	**Absolute Value**

4. In the table for the scales, choose *Insert* and enter the following data:

Table 396

Field	Description	Value
Dimension	In 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)
Reference Scale	Assign the scales for all carriers defined above. This enables the entries in the rate table as in the sequence.	• **OAF-SCALE-SOURCE-LOC** • **OAF-SCALE-DEST-LOC**
Calculation Base	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	• **SOURCELOC** • **DESTLOC**
Minimum Value	Minimum value	Deselect
Maximum Value	Maximum value	Deselect
Relevant for Calculation Method	Relative for calculation method	Deselect
Rounding Profile	Rounding profile	Blank

5. Save your entries.

6. Choose the *Dates and Values* tab page and then the *Insert* pushbutton.

7. Enter the following data:

Table 397

Field	Description	Value
Valid From	Date from which the rate table is valid	**<Current Year> -01-01**
Valid To	Date to which the rate table is value	**2099-12-31**

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Field	Description	Value
Description	Aggregated rate description	`On-Carriage`
Currency	A currency that is applicable for this rate table	`USD`

8. Select the new row. A table appears in which you can enter the rates.

9. On the *Rates* tab page, choose *Insert* and enter the following data:

Table 398

Source Location (=)	Destination Location (=)	Value
`AF-GW-USLAX`	`OAF-STA-USPHX`	`1.95`
`AF-GW-USLAX`	`OAF-STA-USSAN`	`1.95`

10. Choose the *Calculation Rules* tab page and enter the following data:

Table 399

Field	Description	Value
Calculation Base	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.	`ACTUAL_DIST`
Application Level of Calc. Rule	Defines on which level the rates are calculated	`Rate table`
Quantity	Defines the multiplier for the calculation base. For example, the applicable rate could be *per 1 KG* .	`1`
Unit of Measure	The unit of measure specifies the unit to which the multiplier is applied.	`MI`

11. Once you have entered your data, release the rate table by choosing the ▶ *Set Status* ❯ *Release* ❯ pushbutton.

12. Save your entries.

15.2.2.10 Defining Truck Rates for Deliveries (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. Choose *Continue* without entering a rate table template.
3. On the *General Data* tab page, enter the following data:

Table 400

Field	Description	Value
Rate Table	Unique identifier for the rate table	**OAF-RATE-851**
Description	Description of the table	**Truck Rate for Delivery (LTL)**
Charge Usage	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**
Charge Type	This is where the charge type is linked for integration with SAP ERP.	**FB00**
Charge Category	This defaults from the charge type definition above.	**004**
Charge Subcategory	This defaults from the charge type definition above.	**100000**
Positive/Negative	This defaults from the charge type definition above.	**Positive Value**
Rate Category		**GCR - M, N, & Q**
Value Type	This defaults from the charge type definition above.	**Absolute Value**

4. In the table for the scales, choose *Insert* and enter the following data:

Table 401

Field	Description	Value
Dimension	In 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)
Reference Scale	Assign the scales for all carriers defined above. This enables the entries in the rate table as in the sequence.	**OAF-SCALE-SOURCE-LOC** **OAF-SCALE-DEST-LOC**
Calculation Base	This determines how the values are stored and determined for this dimension. There are predefined sources of information based on the object.	**SOURCELOC** **DESTLOC**
Minimum Value	Minimum value	Deselect

Field	Description	Value
Maximum Value	Maximum value	Deselect
Relevant for Calculation Method	Relative for calculation method	Deselect
Rounding Profile	Rounding profile	Blank

5. Save your entries.

6. Choose the *Dates and Values* tab page and then the *Insert* pushbutton.

7. Enter the following data:

Table 402

Field	Description	Value
Valid From	Date from which the rate table is valid	`<Current Year> -01-01`
Valid To	Date to which the rate table is value	`2099-12-31`
Description	Aggregated rate description	`On-Carriage`
Currency	A currency that is applicable for this rate table	`USD`

8. Select the new row. A table appears in which you can enter the rates.

9. On the *Rates* tab page, choose *Insert* and enter the following data:

Table 403

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

10. Choose the *Calculation Rules* tab page and enter the following data:

Table 404

Field	Description	Value
Calculation Base	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`
Application Level of Calc. Rule	Defines on which level the rates are calculated	`Rate table`

Field	Description	Value
Quantity	Defines the multiplier for the calculation base. For example, the applicable rate could be *per 1 KG* .	100
Unit of Measure	The unit of measure specifies the unit to which the multiplier is applied.	KG

11. Once you have entered your data, release the rate table by choosing the ▐▶ *Set Status* ❯ *Release* ❯ pushbutton.

12. Save your entries.

15.2.3   Calculation Sheets

Rates are defined in rate tables, which use the scales that you created in the section Defining Scales: Weight [page 144] .

This scenario uses the following scales and rate tables:

Table 405

Rate Table	Reference Scale	Charge Type Assigned
AF-CU-01-TYO-PHX	AF-CU-PU	BASE_AF
AF-CU-02-TYO-PHX	AF-CU-PU	BASE_AF
AF-CU-03-NGO-SAN	AF-CU-PU	BASE_AF
AF-CU-04-TYO-PHX	AF-CU-PU	BASE_AF

15.2.3.1   Defining Calculation Sheets for Pickup (LTL): Japan

You use calculation sheets to calculate the charges that are incurred for a freight order or forwarding order.

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* without entering a calculation sheet template.

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 406

Field	Description	Value
Calculation Sheet	Unique identifier for the calculation sheet to be defined	**OAF-TCCS-CR-LTL-JP**
Description	Description of the calculation sheet	**Calculation sheet pickup**
Charge Usage	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 and Service Provider**

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

Table 407

Field	Description	Value
Line No	Line number of the item	**20**
Instruction Type	Rule to indicate how the charge item is applied for the calculation	**Standard**
Description	Description of the charge item in the calculation sheet	**Basic Freight**
Charge Type	Assigned charge type	**FB00**
Shipping Type	Shipping type	**2 (LCL)**
Calculation Resolution Base	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
Stage Category	Stage category	**P - Pre-Carriage**
Calculation Method Type	Calculation method type	**Standard**

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

Table 408

Field	Description	Value
Rate Table	Assigned rate table	**OAF-RATE-800**
Currency	Quantitative rate amount Unit of Measure	**JPY**

9. Save your entries.

15.2.3.2 Defining Calculation Sheets for Pre-Carriage Stages (FTL): Japan

You use calculation sheets to calculate the charges that are incurred for a freight order or forwarding order.

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* without entering a calculation sheet template.
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 409

Field	Description	Value
Calculation Sheet	Unique identifier for the calculation sheet to be defined	`OAF-TCCS-CR-FTL-JP`
Description	Description of the calculation sheet	`Calculation sheet pre-carriage`
Charge Usage	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* and enter the following data in the bottom of the screen.
7. On the *Basic Data* tab page, enter the following data:

Table 410

Field	Description	Value
Line No	Line number of the item	`20`
Instruction Type	Rule to indicate how the charge item is applied for the calculation	`Standard`
Description	Description of the charge item in the calculation sheet	`Basic Freight`
Charge Type	Assigned charge type	`FB00`
Shipping Type	Shipping type	`2 (LCL)`
Calculation Resolution Base	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the	Blank

Field	Description	Value
	header level for the whole freight order or at a particular stage only	
Stage Category	Stage category	**P - Pre-Carriage**
Calculation Method Type	Calculation method type	**Standard**

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

Table 411

Field	Description	Value
Rate Table	Assigned rate table	**OAF-RATE-801**
Currency	Quantitative rate amount Unit of Measure	**JPY**

9. On the *Preconditions* tab page under *Trade Lanes* , choose *Insert* and enter the following data:

Table 412

Orientation	Destination Type	Destination Location
To	Location	**AF-GW-JPNRT**

10. In the *Items* screen area, choose ▶ *Insert* ▶ *Single Item* ▮ to add a new line item.

11. Select the line for *30* and enter the following data in the bottom of the screen.

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

Table 413

Field	Description	Value
Line No	Line number of the item	**30**
Instruction Type	Rule to indicate how the charge item is applied for the calculation	**Standard**
Description	Description of the charge item in the calculation sheet	**Drayage**
Charge Type	Assigned charge type	**FB00**
Shipping Type	Shipping type	**2 (LCL)**
Calculation Resolution Base	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
Stage Category	Stage category	**P - Pre-Carriage**
Calculation Method Type	Calculation method type	**Standard**

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

Table 414

Field	Description	Value
Amount	Fixed amount for this charge item	**118500**
Currency	Unit of measure for the quantitative rate amount	**JPY**

14. On the *Preconditions* tab page under *Trade Lanes* , choose *Insert* and enter the following data:

Table 415

Orientation	SourceType	DestinationType	Source Location	Destination Location
To	Blank	**Location**	Blank	**AF-JL-NRT**
To	Blank	**Location**	Blank	**AF-QF-NRT**
From	**Location**	Blank	**AF-GW-JPNRT**	Blank

15. Save your entries.

15.2.3.3 Defining Calculation Sheets for Export: Internal

You use calculation sheets to calculate the charges that are incurred for a freight order, freight booking, or forwarding order.

Procedure

Calculation Sheet for Drayage Charges on the Export Side

1. In SAP NetWeaver Business Client (NWBC), choose ▌▶ *Master Data* ❯ *Charge Management and Service Product Catalogs* ❯ *Calculation Sheets* ❯ *Create Calculation Sheet* ◀.
2. Choose *Continue* without entering a calculation sheet template.
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 416

Field	Description	Value
Calculation Sheet	Unique identifier for the calculation sheet to be defined	**AF-TCCS-JP-DR-INT**
Description	Description of the calculation sheet	**Internal TTCS for Export - Drayage Charges**
Charge Usage	Indicates whether the calculation sheet is used for customers, vendors (carriers), both, or neither. Furthermore, indicates whether the calculation sheet is used only for	**Internal**

Field	Description	Value
	decision making during tendering, and so on.	

5. In the *Items* screen area, choose ▶ *Insert* ❯ *Single Item* ❩ to add a new line item.

6. Select the line for *20* and enter the following data in the bottom of the screen.

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

Table 417

Field	Description	Value
Line No	Line number of the item	**20**
Instruction Type	Rule to indicate how the charge item is applied for the calculation	**Standard**
Description	Description of the charge item in the calculation sheet	**Basic Freight**
Charge Type	Assigned charge type	**FB00**
Shipping Type	Shipping type	Blank
Calculation Resolution Base	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	Calculation method type	**Standard**

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

Table 418

Field	Description	Value
Rate Table	Assigned rate table	**AF-RATE-802-INT**

9. Save your entries.

Calculation Sheet for Main Charges on the Export Side

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

2. Choose *Continue* without entering a calculation sheet template.

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 419

Field	Description	Value
Calculation Sheet	Unique identifier for the calculation sheet to be defined	**AF-LOOSE-INT-EXP**
Description	Description of the calculation sheet	**Calculation sheet for export (internal)**

Field	Description	Value
Charge Usage	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.	`Internal`

5. In the *Items* screen area, choose ▶ *Insert* ❯ *Single Item* ◀ to add a new line item.

6. Select the line for *20* and enter the following data in the bottom of the screen.

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

Table 420

Field	Description	Value
Line No	Line number of the item	`20`
Instruction Type	Rule to indicate how the charge item is applied for the calculation	`Standard`
Description	Description of the charge item in the calculation sheet	`AF Loose Cargo`
Charge Type	Assigned charge type	`BASE_AF`
Shipping Type	Shipping type	`10 (Loose)`
Calculation Resolution Base	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	Calculation method type	`Standard`

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

Table 421

Field	Description	Value
Rate Table	Assigned rate table	`AF-GW-STA-INT-EXP`

9. On the *Classification* tab page, enter the following data:

Table 422

Mandatory	Mandatory line item in calculation sheet	No

10. In the *Items* screen area, choose ▶ *Insert* ❯ *Single Item* ◀ to add a new line item.

11. Select the line for *30* and enter the following data in the bottom of the screen.

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

Table 423

Field	Description	Value
Line No	Line number of the item	`30`
Instruction Type	Rule to indicate how the charge item is applied for the calculation	`Standard`
Description	Description of the charge item in the calculation sheet	`Fuel surcharge`
Charge Type	Assigned charge type	`FUEL`
Shipping Type	Shipping type	Blank
Calculation Resolution Base	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	Calculation method type	`Standard`

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

Table 424

Field	Description	Value
Amount	Fixed amount for this charge item	`10.00`
Currency	Unit of measure for the quantitative rate amount	`%`
Ref.-From Line No.	Reference from line number	`20`
Ref.-To Line No.	Reference to line number	`0`

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

Table 425

Mandatory	Mandatory line item in calculation sheet	No

15. In the *Items* screen area, choose ▶ *Insert* ▶ *Single Item* ▌ to add a new line item.

16. Select the line for *40* and enter the following data in the bottom of the screen.

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

Table 426

Field	Description	Value
Line No	Line number of the item	`40`
Instruction Type	Rule to indicate how the charge item is applied for the calculation	`Standard`
Description	Description of the charge item in the calculation sheet	`Security fee`
Charge Type	Assigned charge type	`SF_AF`

Field	Description	Value
Shipping Type	Shipping type	Blank
Calculation Resolution Base	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	Calculation method type	`Standard`

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

Table 427

Field	Description	Value
Amount	Fixed amount for this charge item	`5.00`
Currency	Unit of measure for the quantitative rate amount	`%`
Ref.-From Line No.	Reference from line number	`20`
Ref.-To Line No.	Reference to line number	`0`

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

Table 428

Mandatory	Mandatory line item in calculation sheet	No

20. Save your entries.

21. Create another calculation sheet as follows.

22. In SAP NetWeaver Business Client (NWBC), choose ▌ *Master Data* ❯ *Charge Management and Service Product Catalogs* ❯ *Calculation Sheets* ❯ *Create Calculation Sheet* ❳ .

23. Choose *Continue* without entering a calculation sheet template.

24. On the *New Calculation Sheet* screen, enter your data based on the following tables.

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

Table 429

Field	Description	Value
Calculation Sheet	Unique identifier for the calculation sheet to be defined	`AF-TCCS-JL-ULD-INT`
Description	Description of the calculation sheet	`CS for JL for ULD`
Charge Usage	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.	`Internal`

26. In the *Items* screen area, choose ▌ *Insert* ❯ *Single Item* ❳ to add a new line item.

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27. Select the line for *20* and enter the following data in the bottom of the screen.
28. On the *Basic Data* tab page, enter the following data:

Table 430

Field	Description	Value
Line No	Line number of the item	**20**
Instruction Type	Rule to indicate how the charge item is applied for the calculation	**Standard**
Description	Description of the charge item in the calculation sheet	**Base Air Freight**
Charge Type	Assigned charge type	**BASE_AF**
Shipping Type	Shipping type	Blank
Calculation Resolution Base	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**
Calculation Method Type	Calculation method type	**2 (Clipping)**

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

Table 431

Field	Description	Value
Fixed Amount	Fixed amount	**15000**
Currency	Unit of measure for quantitative rate amount	**JPY**

30. On the *Classification* tab page, enter the following data:

Table 432

Mandatory	Mandatory line item in calculation sheet	No

31. Save your entries.

15.2.3.4   Defining Calculation Sheets from Station to Station

You use calculation sheets to calculate the charges that are incurred for a freight order, freight booking, or forwarding order.

Procedure

Calculation Sheet for Drayage from Station to Station

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

2. Choose *Continue* without entering a calculation sheet template.

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 433

Field	Description	Value
Calculation Sheet	Unique identifier for the calculation sheet to be defined	`AF-TCCS-JP-DR`
Description	Description of the calculation sheet	`TTCS Drayage Charges Station to Station`
Charge Usage	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* and enter the following data in the bottom of the screen.

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

Table 434

Field	Description	Value
Line No	Line number of the item	`20`
Instruction Type	Rule to indicate how the charge item is applied for the calculation	`Standard`
Description	Description of the charge item in the calculation sheet	`Basic Freight`
Charge Type	Assigned charge type	`FB00`
Shipping Type	Shipping type	Blank
Calculation Resolution Base	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	Calculation method type	`Standard`

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

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Table 435

Field	Description	Value
Rate Table	Assigned rate table	**AF-RATE-802**

9. Save your entries.

Calculation Sheet for Main Carriage from Station to Station

1. In SAP NetWeaver Business Client (NWBC), choose ▶ *Master Data* ❭ *Charge Management and Service Product Catalogs* ❭ *Calculation Sheets* ❭ *Create Calculation Sheet* ❭ .

2. Choose *Continue* without entering a calculation sheet template.

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 436

Field	Description	Value
Calculation Sheet	Unique identifier for the calculation sheet to be defined	**AF-TCCS-LOOSE**
Description	Description of the calculation sheet	**Calculation sheet for Loose Cargo**
Charge Usage	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 and Service Provider**

5. In the *Items* screen area, choose ▶ *Insert* ❭ *Single Item* ❭ to add a new line item.

6. Select the line for *20* and enter the following data in the bottom of the screen.

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

Table 437

Field	Description	Value
Line No	Line number of the item	**20**
Instruction Type	Rule to indicate how the charge item is applied for the calculation	**Standard**
Description	Description of the charge item in the calculation sheet	**AF Loose Cargo**
Charge Type	Assigned charge type	**BASE_AF**
Shipping Type	Shipping type	**10 (Loose)**

Field	Description	Value
Calculation Resolution Base	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	MAIN_ITEM
Calculation Method Type	Calculation method type	**B Air Freight: Break-Weight Rating**

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

Table 438

Field	Description	Value
Rate Table	Assigned rate table	**AF-NRT-LAX-1**

9. On the *Classification* tab page, enter the following data:

Table 439

Mandatory	Mandatory line item in calculation sheet	No

10. In the *Items* screen area, choose ▶ *Insert* ❯ *Single Item* ▮ to add a new line item.

11. Select the line for *30* and enter the following data in the bottom of the screen.

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

Table 440

Field	Description	Value
Line No	Line number of the item	**30**
Instruction Type	Rule to indicate how the charge item is applied for the calculation	**Standard**
Description	Description of the charge item in the calculation sheet	**Fuel surcharge**
Charge Type	Assigned charge type	**FUEL_AF**
Shipping Type	Shipping type	Blank
Calculation Resolution Base	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	MAIN_ITEM
Calculation Method Type	Calculation method type	**Standard**

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

Table 441

Field	Description	Value
Amount	Fixed amount for this charge item	**10.00**

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Field	Description	Value
Currency	Unit of measure for the quantitative rate amount	**%**
Ref.-From Line No.	Reference from line number	**20**
Ref.-To Line No.	Reference to line number	**0**

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

Table 442

Mandatory	Mandatory line item in calculation sheet	No

15. In the *Items* screen area, choose ▶ *Insert* ❭ *Single Item* ❭ to add a new line item.

16. Select the line for *40* and enter the following data in the bottom of the screen.

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

Table 443

Field	Description	Value
Line No	Line number of the item	**40**
Instruction Type	Rule to indicate how the charge item is applied for the calculation	**Standard**
Description	Description of the charge item in the calculation sheet	**Security fee**
Charge Type	Assigned charge type	**SF_AF**
Shipping Type	Shipping type	Blank
Calculation Resolution Base	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	MAIN_ITEM
Calculation Method Type	Calculation method type	**Standard**

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

Table 444

Field	Description	Value
Amount	Fixed amount for this charge item	**5.00**
Currency	Unit of measure for the quantitative rate amount	**%**
Ref.-From Line No.	Reference from line number	**20**
Ref.-To Line No.	Reference to line number	**0**

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

Table 445

Mandatory	Mandatory line item in calculation sheet	No

20. Save your entries.

21. Create another calculation sheet as follows.

22. In SAP NetWeaver Business Client (NWBC), choose ▶ *Master Data* ❯ *Charge Management and Service Product Catalogs* ❯ *Calculation Sheets* ❯ *Create Calculation Sheet* ❙ .

23. Choose *Continue* without entering a calculation sheet template.

24. On the *New Calculation Sheet* screen, enter your data based on the following tables.

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

Table 446

Field	Description	Value
Calculation Sheet	Unique identifier for the calculation sheet to be defined	`AF-TCCS-JL-ULD`
Description	Description of the calculation sheet	`CS for JL for ULD`
Charge Usage	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 and Service Provider`

26. In the *Items* screen area, choose ▶ *Insert* ❯ *Single Item* ❙ to add a new line item.

27. Select the line for *20* , change *Rate Type* to *TACT Rate* and enter the following data in the bottom of the screen.

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

Table 447

Field	Description	Value
Line No	Line number of the item	`20`
Instruction Type	Rule to indicate how the charge item is applied for the calculation	`Standard`
Description	Description of the charge item in the calculation sheet	`Base Air Freight`
Charge Type	Assigned charge type	`BASE_AF`
Shipping Type	Shipping type	Blank
Calculation Resolution Base	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	`MAIN ITEM`

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Field	Description	Value
Calculation Method Type	Calculation method type	**B Air Freight: Break-Weight Rating (SCR/GCR)**

29. In the *Items* screen area, choose ▶ *Insert* ❭ *Single Item* ❭ to add a new line item.

30. Select the line for **30** and change *Rate Type* to *TACT Rate* and enter the following data in the bottom of the screen

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

Table 448

Field	Description	Value
Line No	Line number of the item	**30**
Instruction Type	Rule to indicate how the charge item is applied for the calculation	**Standard**
Description	Description of the charge item in the calculation sheet	**Base Air Freight**
Charge Type	Assigned charge type	**BASE_AF**
Shipping Type	Shipping type	Blank
Calculation Resolution Base	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	**MAIN ITEM**
Calculation Method Type	Calculation method type	**B Air Freight: Break-Weight Rating (SCR/GCR)**

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

Table 449

Field	Description	Value
Rate Table	Rate table	**AF-NRT-LAX-1**
Currency	Unit of measure for quantitative rate amount	Blank

33. On the *Classification* tab page, enter the following data:

Table 450

Mandatory	Mandatory line item in calculation sheet	No

34. In the Items screen area, choose ▶ *Insert* ❭ *Single Item* ❭ to add a new line item.

35. Select the line for **40** and change *Rate Type* to *TACT Rate* and enter the following data in the bottom of the screen

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

Table 451

Field	Description	Value
Line No	Line number of the item	**40**
Instruction Type	Rule to indicate how the charge item is applied for the calculation	**Standard**
Description	Description of the charge item in the calculation sheet	**Fuel Surcharge**
Charge Type	Assigned charge type	**FUEL_AF**
Shipping Type	Shipping type	Blank
Calculation Resolution Base	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	**MAIN ITEM**

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

Table 452

Field	Description	Value
Amount	Amount	**100**
Currency	Unit of measure for quantitative rate amount	JPY

38. In the Items screen area, choose ▶ *Insert* ❯ *Single Item* ❘ to add a new line item.

39. Select the line for **50** and change *Rate Type* to *TACT Rate* and enter the following data in the bottom of the screen

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

Table 453

Field	Description	Value
Line No	Line number of the item	**50**
Instruction Type	Rule to indicate how the charge item is applied for the calculation	**Standard**
Description	Description of the charge item in the calculation sheet	**Security Fee**
Charge Type	Assigned charge type	**SF_AF**
Shipping Type	Shipping type	Blank
Calculation Resolution Base	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	**MAIN ITEM**

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

Table 454

Field	Description	Value
Amount	Amount	**50**
Currency	Unit of measure for quantitative rate amount	JPY

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

43. Select the line for **50** and change *Rate Type* to *TACT Rate* and enter the following data in the bottom of the screen

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

Table 455

Field	Description	Value
Line No	Line number of the item	**60**
Instruction Type	Rule to indicate how the charge item is applied for the calculation	**Standard**
Description	Description of the charge item in the calculation sheet	**Air Waybill Fee**
Charge Type	Assigned charge type	**AWB_FEE**
Shipping Type	Shipping type	Blank
Calculation Resolution Base	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	**MAIN ITEM**

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

Table 456

Field	Description	Value
Amount	Amount	**50**
Currency	Unit of measure for quantitative rate amount	JPY

46. Save your entries.

15.2.3.5 Defining Calculation Sheets for Import: Internal

You use calculation sheets to calculate the charges that are incurred for a freight order, freight booking, or forwarding order.

Procedure

Calculation Sheet for Drayage Charges on the Import Side

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

2. Choose *Continue* without entering a calculation sheet template.

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 457

Field	Description	Value
Calculation Sheet	Unique identifier for the calculation sheet to be defined	`AF-TCCS-US-DR-INT`
Description	Description of the calculation sheet	`Internal TTCS for Import - Drayage Charges`
Charge Usage	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.	`Internal`

5. In the *Items* screen area, choose ▶ *Insert* ❯ *Single Item* ◗ to add a new line item.

6. Select the line for *20* and enter the following data in the bottom of the screen.

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

Table 458

Field	Description	Value
Line No	Line number of the item	`20`
Instruction Type	Rule to indicate how the charge item is applied for the calculation	`Standard`
Description	Description of the charge item in the calculation sheet	`Basic Freight`
Charge Type	Assigned charge type	`FB00`
Shipping Type	Shipping type	Blank
Calculation Resolution Base	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	Calculation method type	`Standard`

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

Table 459

Field	Description	Value
Rate Table	Assigned rate table	`AF-RATE-852-INT`

9. Save your entries.

Calculation Sheet for On-Carriage Charges on the Import Side

1. In SAP NetWeaver Business Client (NWBC), choose ▷ *Master Data* 〉 *Charge Management and Service Product Catalogs* 〉 *Calculation Sheets* 〉 *Create Calculation Sheet* ◁ .

2. Choose *Continue* without entering a calculation sheet template.

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 460

Field	Description	Value
Calculation Sheet	Unique identifier for the calculation sheet to be defined	`AF-LOOSE-INT-IMP`
Description	Description of the calculation sheet	`Calculation sheet for import (internal)`
Charge Usage	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.	`Internal`

5. In the *Items* screen area, choose ▷ *Insert* 〉 *Single Item* ◁ to add a new line item.

6. Select the line for *20* and enter the following data in the bottom of the screen.

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

Table 461

Field	Description	Value
Line No	Line number of the item	`20`
Instruction Type	Rule to indicate how the charge item is applied for the calculation	`Standard`
Description	Description of the charge item in the calculation sheet	`AF Loose Cargo`
Charge Type	Assigned charge type	`FB00`
Shipping Type	Shipping type	`10 (Loose)`

Field	Description	Value
Calculation Resolution Base	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
Mandatory	Mandatory line item in calculation sheet	**No**
Calculation Method Type	Calculation method type	**Standard**

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

Table 462

Field	Description	Value
Rate Table	Assigned rate table	**AF-GW-STA-INT-IMP**

9. In the *Items* screen area, choose ▌ *Insert* ▶ *Single Item* ▐ to add a new line item.
10. Select the line for *30* and enter the following data in the bottom of the screen.
11. On the *Basic Data* tab page, enter the following data:

Table 463

Field	Description	Value
Line No	Line number of the item	**30**
Instruction Type	Rule to indicate how the charge item is applied for the calculation	**Standard**
Description	Description of the charge item in the calculation sheet	**Fuel surcharge**
Charge Type	Assigned charge type	**FUEL**
Shipping Type	Shipping type	Blank
Calculation Resolution Base	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
Mandatory	Mandatory line item in calculation sheet	**No**
Calculation Method Type	Calculation method type	**Standard**

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

Table 464

Field	Description	Value
Amount	Fixed amount for this charge item	**3.00**

Field	Description	Value
Currency	Unit of measure for the quantitative rate amount	`%`
Ref.-From Line No.	Reference from line number	`20`
Ref.-To Line No.	Reference to line number	`0`

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

14. Select the line for *40* and enter the following data in the bottom of the screen.

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

Table 465

Field	Description	Value
Line No	Line number of the item	`40`
Instruction Type	Rule to indicate how the charge item is applied for the calculation	`Standard`
Description	Description of the charge item in the calculation sheet	`Security fee`
Charge Type	Assigned charge type	`SF_AF`
Shipping Type	Shipping type	Blank
Calculation Resolution Base	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
Mandatory	Mandatory line item in calculation sheet	`No`
Calculation Method Type	Calculation method type	`Standard`

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

Table 466

Field	Description	Value
Amount	Fixed amount for this charge item	`5.00`
Currency	Unit of measure for the quantitative rate amount	`%`
Ref.-From Line No.	Reference from line number	`20`
Ref.-To Line No.	Reference to line number	`0`

17. Select the line for *50* and enter the following data in the bottom of the screen.

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

Table 467

Field	Description	Value
Line No	Line number of the item	**50**
Instruction Type	Rule to indicate how the charge item is applied for the calculation	**Standard**
Charge Type	Assigned charge type	**FB00**
Shipping Type	Shipping type	Blank
Calculation Resolution Base	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
Mandatory	Mandatory line item in calculation sheet	**No**
Calculation Method Type	Calculation method type	**Standard**

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

Table 468

Field	Description	Value
Amount	Amount	**25.00**
Currency	Unit of measure for quantitative rate amount	**USD**
Ref.-From Line No.	Reference from line number	**0**
Ref.-To Line No.	Reference to line number	**0**

20. Save your entries.

15.2.3.6 Defining Calculation Sheets for On-Carriage Stages (FTL): USA

You use calculation sheets to calculate the charges that are incurred for a freight order or forwarding order.

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* without entering a calculation sheet template.
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 469

Field	Description	Value
Calculation Sheet	Unique identifier for the calculation sheet to be defined	`OAF-TCCS-CR-FTL-US`
Description	Description of the calculation sheet	`Calculation sheet for on-carriage`
Charge Usage	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* and enter the following data in the bottom of the screen.

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

Table 470

Field	Description	Value
Line No	Line number of the item	`20`
Instruction Type	Rule to indicate how the charge item is applied for the calculation	`Standard`
Description	Description of the charge item in the calculation sheet	`Drayage`
Charge Type	Assigned charge type	`FB00`
Shipping Type	Shipping type	`Blank`
Calculation Resolution Base	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
Stage Category	Stage category	`Blank`
Calculation Method Type	Calculation method type	`Standard`

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

Table 471

Field	Description	Value
Amount	Amount	`2000`
Currency	Unit of measure for quantitative amount	`USD`

9.   On the *Preconditions* tab page under *Trade Lanes* , choose *Insert* and enter the following data:

Table 472

Orientation	Source Type	Source	Destination Type	Source Location
From	Location	**AF-JL-LAX**		
To			**Location**	**AF-GW-USLAX**
From	Location	**AF-QF-LAX**		
To			**Location**	**AF-GW-USLAX**

10. In the *Items* screen area, choose ▶ *Insert* ❭ *Single Item* ❬ to add a new line item.

11. Select the line for *30* and enter the following data in the bottom of the screen.

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

Table 473

Field	Description	Value
Line No	Line number of the item	**30**
Instruction Type	Rule to indicate how the charge item is applied for the calculation	**Standard**
Description	Description of the charge item in the calculation sheet	**On-Carriage**
Charge Type	Assigned charge type	**FB00**
Shipping Type	Shipping type	**Blank**
Calculation Resolution Base	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
Stage Category	Stage category	**O - On-Carriage**
Calculation Method Type	Calculation method type	**Standard**

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

Table 474

Field	Description	Value
Rate Table	Assigned rate table	**OAF-RATE-850**
Currency	Unit of measure for the quantitative rate amount	**USD**

14. On the *Preconditions* tab page under *Trade Lanes* , choose *Insert* and enter the following data:

Table 475

Orientation	Destination Type	Source Location
From	**Location**	AF-GW-USLAX

15. Save your entries.

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15.2.3.7 Defining Calculation Sheets for Delivery (LTL): United States

You use calculation sheets to calculate the charges that are incurred for a freight order or forwarding order.

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* without entering a calculation sheet template.
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 476

Field	Description	Value
Calculation Sheet	Unique identifier for the calculation sheet to be defined	`OAF-TCCS-CR-LTL-US`
Description	Description of the calculation sheet	`Calculation sheet for delivery`
Charge Usage	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 and Service Provider`

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

Table 477

Field	Description	Value
Line No	Line number of the item	`20`
Instruction Type	Rule to indicate how the charge item is applied for the calculation	`Standard`
Description	Description of the charge item in the calculation sheet	`Delivery`
Charge Type	Assigned charge type	`FB00`
Shipping Type	Shipping type	`2 (LCL)`
Calculation Resolution Base	Indicates the level at which the calculation sheet is to be applied. For example, it can be applied at the	Blank

Field	Description	Value
	header level for the whole freight order or at a particular stage only	
Stage Category	Stage category	**0-On-Carriage**
Calculation Method Type	Calculation method type	**Standard**

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

Table 478

Field	Description	Value
Rate Table	Assigned rate table	**OAF-RATE-851**

9. Save your entries.

15.2.3.8 Defining Calculation Sheets for Forwarding Order Customers

You use calculation sheets to calculate the charges that are incurred for a forwarding order.

In this scenario, you create four calculation sheets, that is, one for each customer.

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* without entering a calculation sheet template.
3. On the *General Data* tab page, enter the following data in *Basic Data* screen area:

Table 479

Field	Description	Value
Calculation Sheet	Unique identifier for the calculation sheet to be defined	**AF-TCCS-MAIN**
Description	Description of the calculation sheet	**Calculation sheet AF for Main Carriage**
Charge Usage	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**

4. In the *Items* screen area, choose ▌ *Insert* ❭ *Single Item* ▐ to add a new line item.
5. Select the line for *20* and enter the following data in the bottom of the screen.

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

Table 480

Field	Description	Value
Line No	Line number of the item	**20**
Instruction Type	Rule to indicate how the charge item is applied for the calculation	**SUM**
Description	Description of the charge item in the calculation sheet	**Sum**
Calculation Method Type	Calculation method type	**Standard**

7. In the *Items* screen area, choose ▌ *Insert* ❯ *Single Item* ▐ to add a new line item.

8. Select the line for *30* and enter the following data on the *Basic Data* tab page:

Table 481

Field	Description	Value
Line No	Line number of the item	**30**
Instruction Type	Rule to indicate how the charge item is applied for the calculation	**Standard**
Description	Description of the charge item in the calculation sheet	**Base Air Freight**
Charge Type	Assigned charge type	**BASE_AF**

9. On the *Rate* tab page, enter rate table determination rule **AF-CU-01** .

10. In the *Items* screen area, choose ▌ *Insert* ❯ *Single Item* ▐ and add the following line items in turn:

Table 482

Line No	Instruction Type	Description	Charge Type	Operation
40	**Standard**	**Base Freight**	**PU_AF**	Not relevant
45	**Standard**	**Terminal Handling Charges**	**HD_AF**	Not relevant
50	**Standard**	**Base Freight**	**COO_AF**	Not relevant
53	**Standard**	**Base Freight**	**GIF_AF**	Not relevant
55	**Standard**	**Base Freight**	**ECC_AF**	Not relevant
60	**Standard**	**Base Freight**	**SF_AF**	Not relevant
70	**Standard**	**Fuel Surcharge**	**FUEL**	Not relevant
80	**Sum**	**Freight Cost & Goods Value**	Not relevant	Not relevant
90	**Standard**	**Goods Value**	**BASE_AF**	Not relevant
100	**Standard**	**Freight**	**BASE_AF**	Not relevant

Line No	Instruction Type	Description	Charge Type	Operation
105	Subtotal	Freight Costs & Goods Value	Not relevant	Not relevant
110	Line Item Selection	Transportation Insurance and CPT Value	Not relevant	H
120	Standard	120% * 0.3% of CPT Value	TRP_AF	Not relevant
130	Standard	Minimum Charge	TRP_AF	Not relevant

11. Select each line item in turn and on the *Rates* tab page, enter the following data:

Table 483

Line No	Rate Table	Amount	Currency/ Percentage	Calculation Base	Ref.-From Line No.	Ref.-To Line No.
40	AF-RT-PICK	Blank	Blank	Blank	0	0
45	Blank	6000	JPY	Blank	0	0
50	Blank	3400	JPY	Blank	0	0
53	Blank	2000	JPY	Blank	0	0
55	Blank	3200	JPY	Blank	0	0
60	Blank	4200	JPY	Blank	0	0
70	Blank	80	JPY	Blank	0	0
80	Not relevant	Not relevant	Not relevant	Not relevant	Not relevant	Not relevant
90	Blank	100	%	GOODS_VALUE	0	0
100	Blank	100	%	Blank	30	70
105	Blank	Not relevant	Not relevant	Blank	90	100
110	Not relevant	Not relevant	Not relevant	Blank	Not relevant	Not relevant
120	Blank	36	%	Blank	105	0
130	Blank	2000	JPY	Blank	0	0

12. Save your entries.

Perform the following steps:

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

2. Choose *Continue* without entering a calculation sheet template.

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:

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Table 484

Field	Description	Value
Calculation Sheet	Unique identifier for the calculation sheet to be defined	**AF-TCCS-LOOSE-CUST**
Description	Description of the calculation sheet	**Calculation sheet for Loose Cargo Customer**
Charge Usage	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 and Service Provider**

5. In the *Items* screen area, choose ▶ *Insert* ❯ *Single Item* ❳ to add a new line item.

6. Select the line for *20* and enter the following data in the bottom of the screen.

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

Table 485

Field	Description	Value
Line No	Line number of the item	**20**
Instruction Type	Rule to indicate how the charge item is applied for the calculation	**Standard**
Description	Description of the charge item in the calculation sheet	**AF Loose Cargo**
Charge Type	Assigned charge type	**BASE_AF**
Shipping Type	Shipping type	**10 (Loose)**
Calculation Resolution Base	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	**MAIN_ITEM**
Mandatory	Mandatory line item in calculation sheet	**No**
Calculation Method Type	Calculation method type	**B Air Freight: Break-Weight Rating**

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

Table 486

Field	Description	Value
Rate Table	Assigned rate table	**AF-NRT-LAX-CUST1**

9. In the *Items* screen area, choose ▶ *Insert* ❯ *Single Item* ❳ to add a new line item.

10. Select the line for *30* and enter the following data on the *Basic Data* tab page:

Table 487

Field	Description	Value
Line No	Line number of the item	**30**
Instruction Type	Rule to indicate how the charge item is applied for the calculation	**Standard**
Description	Description of the charge item in the calculation sheet	**Fuel surcharge**
Charge Type	Assigned charge type	**FUEL_AF**
Shipping Type	Shipping type	Blank
Calculation Resolution Base	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	**MAIN_ITEM**
Mandatory	Mandatory line item in calculation sheet	**No**
Calculation Method Type	Calculation method type	**Standard**

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

Table 488

Field	Description	Value
Amount	Fixed amount for this charge item	**10**
Currency	Unit of measure for the quantitative rate amount	**%**
Ref.-From Line No.	Reference from line number	**20**
Ref.-To Line No..	Reference to line number	**0**

12. In the *Items* screen area, choose ▶ *Insert* ❯ *Single Item* ◗ and add a new line item:
13. Select the line for 40 and enter the following data in the bottom of the screen.
14. On the *Basic Data* tab page, enter the following data:

Table 489

Field	Description	Value
Line No	Line number of the item	**40**
Instruction Type	Rule to indicate how the charge item is applied for the calculation	**Standard**
Description	Description of the charge item in the calculation sheet	**Security fee**
Charge Type	Assigned charge type	**SF_AF**
Shipping Type	Shipping type	Blank

Field	Description	Value
Calculation Resolution Base	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	`MAIN_ITEM`
Mandatory	Mandatory line item in calculation sheet	`No`
Calculation Method Type	Calculation method type	`Standard`

15. On the *Rate* tab page, enter the following details:

Table 490

Field	Description	Value
Amount	Fixed amount for this charge item	`5.00`
Currency	Unit of measure for the quantitative rate amount	`%`
Ref.-From Line No.	Reference from line number	`20`
Ref.-To Line No..	Reference to line number	`0`

16. Save your entries.

15.2.3.9 Defining Calculation Sheets for Forwarding Order Consignees

You use calculation sheets to calculate the charges that are incurred for a freight order or forwarding order. In the "Air Freight" scenario, you create three calculation sheets.

Procedure

Calculation Sheet AF-TCCS-MAIN-02

1. In SAP NetWeaver Business Client (NWBC), choose ▷ *Master Data* ▷ *Charge Management and Service Product Catalogs* ▷ *Calculation Sheets* ▷ *Create Calculation Sheet* ▷ .

2. Choose *Continue* without entering a calculation sheet template.

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

Table 491

Field	Description	Value
Calculation Sheet	Unique identifier for the calculation sheet to be defined	`AF-TCCS-MAIN-02`

Field	Description	Value
Description	Description of the calculation sheet	`Calc. Sheet - Main-Carriage for Consignees`
Charge Usage	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`

4. In the *Items* screen area, choose ▌ *Insert* ❯ *Single Item* ▌ to add a new line item.

5. Select line item *20* and enter the following data on the *Basic Data* tab page at the bottom of the screen.

Table 492

Field	Description	Value
Line No	Line number of the item	`20`
Instruction Type	Rule to indicate how the charge item is applied for the calculation	`Standard`
Description	Description of the charge item in the calculation sheet	`Base Air Freight`
Charge Type	Assigned charge type	`BASE_AF`

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

Table 493

Field	Description	Value
Amount	Fixed rate amount	`20000`
Currency/Percentage	Unit of measure for quantitative rate amount	`USD`

7. In the *Items* screen area, choose ▌ *Insert* ❯ *Single Item* ▌ to add the following line items in turn (note that the system automatically numbers the line items in increments of 10, although you can overwrite this figure):

Table 494

Line Number	Instruction Type	Description	Charge Type
`40`	`Standard`	`Charge for Pickup`	`PU_AF`
`45`	`Standard`	`Certificate of Origin per Shipment`	`HD_AF`
`50`	`Standard`	`Certificate of Origin per Shipment`	`COO_AF`

8. Select each row in turn and on the *Rates* tab page, complete the following data:

Table 495

Line Number	Rate Table	Amount	Currency
30	**AF-RT-PICK**	Blank	Blank
45	Blank	**6000**	**USD**
50	Blank	**3400**	**USD**

9. Save your entries.

Calculation Sheet AF-TCCS-01

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

2. Choose *Continue* without entering a calculation sheet template.

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

Table 496

Field	Description	Value
Calculation Sheet	Unique identifier for the calculation sheet to be defined	**AF-TCCS-01**
Description	Description of the calculation sheet	**Calculation Sheet for Consignees**
Charge Usage	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**

4. In the *Items* screen area, choose ▶ *Insert* ❯ *Single Item* ❯ to add a new line item.

5. Select line item *20* and enter the following data on the *Basic Data* tab page at the bottom of the screen.

Table 497

Field	Description	Value
Line No	Line number of the item	**20**
Instruction Type	Rule to indicate how the charge item is applied for the calculation	**Standard**
Description	Description of the charge item in the calculation sheet	**Pickup Charge**
Charge Type	Assigned charge type	**PU_AF**

6. On the *Rate* tab page, enter rate table **AF-RT-PICK** .

7. Save your entries.

Calculation Sheet AF-TCCS-04

1. In SAP NetWeaver Business Client (NWBC), choose ▐ *Master Data* ❭ *Charge Management and Service Product Catalogs* ❭ *Calculation Sheets* ❭ *Create Calculation Sheet* ❭ .

2. Choose *Continue* without entering a calculation sheet template.

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

Table 498

Field	Description	Value
Calculation Sheet	Unique identifier for the calculation sheet to be defined	`AF-TCCS-04`
Description	Description of the calculation sheet	`Calculation Sheet for Consignees`
Charge Usage	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`

4. In the *Items* screen area, choose ▐ *Insert* ❭ *Single Item* ❭ to add a new line item.

5. Select line item *20* and enter the following data on the *Basic Data* tab page at the bottom of the screen.

Table 499

Field	Description	Value
Line No	Line number of the item	`20`
Instruction Type	Rule to indicate how the charge item is applied for the calculation	`Standard`
Description	Description of the charge item in the calculation sheet	`AF Base Freight Delivery`
Charge Type	Assigned charge type	`COO_AF`

6. On the *Rate* tab page, enter the amount `120` and the currency `USD` .

7. Save your entries.

15.3 Freight Agreement

Freight Agreements Used with Forwarding Orders

Table 500

	Pickup	Pickup
Freight Agreement	`OAF-FA-CR-03-PU`	`OAF-FA-CR-04-PU`

	Pickup	Pickup
Calculation Sheet	`OAF-TCCS-CR-LTL-JP` and `AF-TCCS-JL-ULD`	`OAF-TCCS-CR-LTL-JP` and `AF-TCCS-JL-ULD`
Rate Table	`AF-NRT-LAX-1` (each scale has different values depending on the carrier)	`AF-NRT-LAX-1` (each scale has different values depending on the carrier)

Table 501

	Pre-Carriage	Pre-Carriage
Freight Agreement	`AF-FA-CR-03-PRE`	`AF-FA-CR-04-PRE`
Calculation Sheet	`OAF-TCCS-CR-FTL-JP`	`OAF-TCCS-CR-FTL-JP`
Rate Table	`OAF-RATE-801` + fixed price for drayage	`OAF-RATE-801` + fixed price for drayage

Table 502

	On-Carriage	On-Carriage
Freight Agreement	`AF-FA-CR-05-ON`	`AF-FA-CR-06-ON`
Calculation Sheet	`OAF-TCCS-CR-FTL-US`	`OAF-TCCS-CR-FTL-US`
Rate Table	`OAF-RATE-850` + fixed price for drayage	`OAF-RATE-850` + fixed price for drayage

Table 503

	Delivery	Delivery
Freight Agreement	`AF-FA-CR-05-DL`	`AF-FA-CR-06-DL`
Calculation Sheet	`OAF-TCCS-CR-LTL-US`	`OAF-TCCS-CR-LTL-US`
Rate Table	`OAF-RATE-851`	`OAF-RATE-851`

Freight Agreements Used with Air Freight Bookings

Table 504

	Drayage (Export)	Drayage (Import)
Freight Agreement	`AF-FA-CR-03-DR` (new)	`AF-FA-CR-05-DR`
Calculation Sheet	`OAF-TCCS-CR-FTL-JP`	`OAF-TCCS-CR-FTL-US`
Rate Table	`OAF-RATE-801` + 118500 JPY (fixed)	`OAF-RATE-850` + 2000 USD (fixed)

Table 505

	Main Carriage	Main Carriage
Freight Agreement	`AF-FA-JL-NRT`	`AF-FA-QF-NRT`
Calculation Sheet	`AF-TCCS-LOOSE` `AF-TCCS-JL-ULD`	`AF-TCCS-LOOSE` `AF-TCCS-JL-ULD`

	Main Carriage	Main Carriage
Rate Table	AF-NRT-LAX-1 (each scale has different values depending on the carrier)	AF-NRT-LAX-1 (each scale has different values depending on the carrier)

15.3.1 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 506

Field	Description	Value
Agr. Type	Freight agreement type	AF08
Description .	Short description (free text)	Air Freight: Freight Agreement Type
Agr. No. Range	Agreement number range interval	03

4. Save your entry and ignore warnings.
5. Select the row containing freight agreement AF08 and choose *Specify Preconditions* in the tree structure.
6. Create a new entry and specify the following preconditions:
   - Transportation Mode
   - Movement Type
   - Shipping Type
   - Stage Category
7. Save your entries.

More Information

- Defining Freight Agreements for Air Carriers [page 238]
- Defining Freight Agreements for Trucking [page 241]

15.3.2 Defining Freight Agreements for Air Carriers

Freight agreements contain all of the information required to calculate freight charges.

Prerequisites

You have defined a freight agreement type.

Procedure

Creating a Freight Agreement for Rising Sun Airlines

1. In SAP NetWeaver Business Client, choose ▌ *Freight Agreement Management* ❯ *Freight Agreements* ❯ *Create Freight Agreement* ❭ .

2. On the *New Freight Agreement* screen, enter the relevant freight agreement type, for example, `AF08` .

3. Choose *Continue* .

4. Create an agreement for the carrier `AF-JL-NRT` by entering the following data:

Table 507

Field	Description	Value
Agreement	Agreement ID	`AF-FA-JL-NRT`
Description	Description of the freight agreement	`Freight Agreement for JL-NRT`
Purchasing Organization	Default purchasing organization	`AF-FWH-03`
Carrier	Carrier for which this freight agreement is to be defined	`AF-JL-NRT`
Valid From	Validity date range	`<Current Year> -01-01`
Valid To	Validity date range	`2099-12-31`
Agreement Priority	Priority of the agreement	`1`
Document Currency	Agreement currency	`JPY`

5. In the *Items* screen area, enter the following data by choosing the *Insert* pushbutton.

Table 508

Field	Description	Value
Item Number	Item number	`100`
Calculation Sheet	Assign the calculation sheet once only. The details from this sheet are copied for each item.	`AF-TCCS-LOOSE`
Shipping Type		`10 - Loose`
Header-Level Charge	Header level charge	Deselect
Dimensional Weight Profile	Dimensional weight profile	Blank

6. In the *Items* screen area, choose the *Insert* pushbutton again to add the following item:

Table 509

Field	Description	Value
Item Number	Item number	**200**
Calculation Sheet	Assign the calculation sheet once only. The details from this sheet are copied for each item.	**AF-TCCS-JL-ULD**
Shipping Type		12 – ULD and Loose
Header-Level Charge	Header level charge	Select
Dimensional Weight Profile	Dimensional weight profile	Blank

7. Once you have entered your data, release the freight agreement by choosing ▌ *Set Status* ❯ *Released* ❯ .

8. Save your entries.

Creating a Freight Agreement for Airways

1. In SAP NetWeaver Business Client, choose ▌ *Freight Agreement Management* ❯ *Freight Agreements* ❯ *Create Freight Agreement* ❯ .

2. On the *New Freight Agreement* screen, enter the relevant freight agreement type, for example, **AF08** .

3. Choose *Continue* .

4. Create an agreement for the carrier `AF-QF-NRT` by entering the following data:

Table 510

Field	Description	Value
Agreement	Agreement ID	**AF-FA-QF-NRT**
Description	Description of the freight agreement	**Freight Agreement for QF-NRT**
Purchasing Organization	Default purchasing organization	**AF-FWH-03**
Carrier	Carrier for which this freight agreement is to be defined	**AF-QF-NRT**
Valid From	Validity date range	**<Current Year> -01-01**
Valid To	Validity date range	**2099-12-31**
Agreement Priority	Priority of the agreement	**1**
Document Currency	Agreement currency	**JPY**

5. In the *Items* screen area, enter the following data by choosing the *Insert* pushbutton.

Table 511

Field	Description	Value
Item Number	Item number	**100**
Calculation Sheet	Assign the calculation sheet once only. The details from this sheet are copied for each item.	**AF-TCCS-LOOSE**

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Field	Description	Value
Shipping Type		**10 - Loose**
Header-Level Charge	Header level charge	Deselect
Dimensional Weight Profile	Dimensional weight profile	Deselect

6. In the *Items* screen area, choose the *Insert* pushbutton again to add the following item:

Table 512

Field	Description	Value
Item Number	Item number	**200**
Calculation Sheet	Assign the calculation sheet once only. The details from this sheet are copied for each item.	**AF-TCCS-JL-ULD**
Shipping Type		12 – ULD and Loose
Header-Level Charge	Header level charge	Select
Dimensional Weight Profile	Dimensional weight profile	Deselect

7. Once you have entered your data, release the freight agreement by choosing ▶ *Set Status* ❭ *Released* ❭ .

8. Save your entries.

15.3.3 Defining Freight Agreements for Trucking

Freight agreements contain all of the information required to calculate freight charges.

You must create freight agreements for all of your carriers (truckers) and for both stage types LTL and FTL. This procedure defines freight agreements for the carriers in Japan and in the United States.

Prerequisites

You have defined a freight agreement type.

Procedure

Freight Agreements for Pickup

1. In SAP NetWeaver Business Client, choose ▶ *Freight Agreement Management* ❭ *Freight Agreements* ❭ *Create Freight Agreement* ❭ .

2. On the *New Freight Agreement* screen, enter **AF08** as the freight agreement type.

3. Choose *Continue* .

4. Create an LTL agreement using the following data:

Table 513

Field	Description	Value
Agreement	Agreement ID	`OAF-FA-CR-03-PU`
Description	Description of the freight agreement	`LTL Japan (Carrier 03 Pick up)`
Purchasing Organization	Default purchasing organization	`OAF-FWH-05`
Carrier	Carrier for which this freight agreement is to be defined	`OAF-CR-03`
Controlled	Controlled Transportation	Select
Valid From	Validity date range	`<Current Year> -01-01`
Valid To		`2099-12-31`
Agreement Priority	Priority of the agreement	`5`
Document currency	Agreement currency	`JPY`

5. In the *Items* screen area, choose ▶ *Insert* ❯ *Insert Item* ❩ and enter the following data:

Table 514

Field	Description	Value
Item Number	Item number	`100`
Calculation Sheet	Assign the calculation sheet once only. The details from this sheet are copied for each item.	`OAF-TCCS-CR-LTL-JP`
Dimensional Weight Profile	Dimensional weight profile	`ZOAF_LAND3`

6. On the *Precondition* tab page, choose *Insert* and enter the following data:

Table 515

Field	Value
Orientation	`To`
Destination Type	`Location`
Destination	`OAF-STA-JPTYO`

7. On the *Precondition* tab page, again choose *Insert* and enter the following data:

Table 516

Field	Value
Orientation	`To`
Destination Type	`Location`
Destination	`OAF-STA-JPNGO`

8. Once you have entered your data, release the freight agreement by choosing ▶ *Set Status* ❯ *Released* ❩.

9. Choose *Save* .

10. Create another freight agreement for the LTL stage type using the following data:

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Table 517

Field	Description	Value
Agreement	Agreement ID	`OAF-FA-CR-04-PU`
Description	Description of the freight agreement	`LTL Japan (Carrier 04 Pick up)`
Purchasing Organization	Default purchasing organization	`OAF-FWH-01`
Carrier	Carrier for which this freight agreement is to be defined	`OAF-CR-04`
Controlled	Controlled Transportation	Select
Valid From	Validity date range	`<Current Year> -01-01`
Valid To		`2099-12-31`
Agreement Priority	Priority of the agreement	`5`
Document currency	Agreement currency	`JPY`

11. In the *Items* screen area, choose ▶ *Insert* ❭ *Insert Item* ❭ and enter the following data:

Table 518

Field	Description	Value
Item Number	Item number	`100`
Calculation Sheet	Assign the calculation sheet once only. The details from this sheet are copied for each item.	`OAF-TCCS-CR-LTL-JP`
Dimensional Weight Profile	Dimensional weight profile	`ZOAF_LAND3`

12. On the *Precondition* tab page, choose *Insert* and enter the following data:

Table 519

Field	Value
Orientation	`To`
Destination Type	`Location`
Destination	`OAF-STA-JPTYO`

13. On the *Precondition* tab page, again choose *Insert* and enter the following data:

Table 520

Field	Value
Orientation	`To`
Destination Type	`Location`
Destination	`OAF-STA-JPNGO`

14. Once you have entered your data, release the freight agreement by choosing ▶ *Set Status* ❭ *Released* ❭ .

15. Choose *Save* .

Freight Agreements for Pre-Carriage

1. In SAP NetWeaver Business Client, choose ▶ *Freight Agreement Management* ❭ *Freight Agreements* ❭ *Create Freight Agreement* ❭ .

2. On the *New Freight Agreement* screen, enter `AF08` as the freight agreement type.

   If the freight agreement is applicable to both carriers and customers, you need to select the checkbox *Multiple Parties* for AF08 in the customizing activity *Define Freight Agreement Types* .

3. If the freight agreement is applicable to both carriers and customers, select the *Mutual Agreement* checkbox.

4. Choose *Continue* .

5. Create an FTL agreement using the following data:

   Table 521

Field	Description	Value
Agreement	Agreement ID	`AF-FA-CR-03-PRE`
Description	Description of the freight agreement	`AF FTL Japan (Carrier 03 Pre-Carriage)`
Purchasing Organization	Default purchasing organization	`OAF-FWH-05`
Carrier	Carrier for which this freight agreement is to be defined	`OAF-CR-03`
Valid From	Validity date range	`<Current Year> -01-01`
Valid To		`2099-12-31`
Agreement Priority	Priority of the agreement	`5`
Document currency	Agreement currency	`JPY`

6. In the *Items* screen area, choose *Insert* and enter the following data:

   Table 522

Field	Description	Value
Item Number	Item number	`100`
Calculation Sheet	Assign the calculation sheet once only. The details from this sheet are copied for each item.	`OAF-TCCS-CR-FTL-JP`
Dimensional Weight Profile	Dimensional weight profile	`ZOAF_LAND3`

7. On the *Precondition* tab page, choose *Insert* and enter the following data:

   Table 523

Field	Value
Orientation	`To`
Destination Type	`Location`
Destination	`AF-GW-JPNRT`

8. Once you have entered your data, release the freight agreement by choosing ▶ *Set Status* ❭ *Released* ❭ .

9. Choose *Save* .

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10. Create another freight agreement for the FTL stage type using the following data:

Table 524

Field	Description	Value
Agreement	Agreement ID	`AF-FA-CR-04-PRE`
Description	Description of the freight agreement	`AF FTL Japan (Carrier 04 Pre-Carriage)`
Purchasing Organization	Default purchasing organization	`OAF-FWH-01`
Carrier	Carrier for which this freight agreement is to be defined	`OAF-CR-04`
Valid From	Validity date range	`<Current Year> -01-01`
Valid To		`2099-12-31`
Agreement Priority	Priority of the agreement	`5`
Document currency	Agreement currency	`JPY`

11. In the *Items* screen area, choose ▶ *Insert* ❯ *Insert Item* ❳ and enter the following data:

Table 525

Field	Description	Value
Item Number	Item number	`100`
Calculation Sheet	Assign the calculation sheet once only. The details from this sheet are copied for each item.	`OAF-TCCS-CR-FTL-JP`
Dimensional Weight Profile	Dimensional weight profile	`ZOAF_LAND3`

12. On the *Precondition* tab page, choose *Insert* and enter the following data:

Table 526

Field	Value
Orientation	`To`
Destination Type	`Location`
Destination	`AF-GW-JPNRT`

13. Once you have entered your data, release the freight agreement by choosing ▶ *Set Status* ❯ *Released* ❳.

14. Choose *Save* .

Freight Agreements for Drayage

1. In SAP NetWeaver Business Client, choose ▶ *Freight Agreement Management* ❯ *Freight Agreements* ❯ *Create Freight Agreement* ❳.

2. On the *New Freight Agreement* screen, enter `AF08` as the freight agreement type.

3. If the freight agreement is applicable to both carriers and customers, select the *Mutual Agreement* checkbox.

4. Choose *Continue* .

5. Create an FTL agreement using the following data:

Table 527

Field	Description	Value
Agreement	Agreement ID	`AF-FA-CR-03-DR`
Description	Description of the freight agreement	`AF FTL Japan (Carrier 03 Drayage Export)`
Purchasing Organization	Default purchasing organization	`AF-FWH-03`
Carrier	Carrier for which this freight agreement is to be defined	`OAF-CR-03`
Valid From	Validity date range	`<Current Year> -01-01`
Valid To		`2099-12-31`
Agreement Priority	Priority of the agreement	`5`
Document currency	Agreement currency	`JPY`

6. In the *Items* screen area, choose *Insert* and enter the following data:

Table 528

Field	Description	Value
Item Number	Item number	`100`
Calculation Sheet	Assign the calculation sheet once only. The details from this sheet are copied for each item.	`OAF-TCCS-CR-FTL-JP`
Dimensional Weight Profile	Dimensional weight profile	`ZOAF_LAND3`

7. On the *Precondition* tab page, choose *Insert* and enter the following data:

Table 529

Field	Value
Orientation	`From`
Destination Type	`Location`
Destination	`AF-GW-JPNRT`

8. Once you have entered your data, release the freight agreement by choosing ▌ *Set Status* ❯ *Released* ▐ .

9. Choose *Save* .

10. Create another freight agreement for the FTL stage type using the following data:

Table 530

Field	Description	Value
Agreement	Agreement ID	`AF-FA-CR-05-DR`
Description	Description of the freight agreement	`AF FTL USA (Carrier 05 Drayage Import)`
Purchasing Organization	Default purchasing organization	`AF-FWH-20`

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Field	Description	Value
Carrier	Carrier for which this freight agreement is to be defined	`OAF-CR-05`
Valid From	Validity date range	`<Current Year> -01-01`
Valid To	Validity date range	`2099-12-31`
Agreement Priority	Priority of the agreement	`5`
Document currency	Agreement currency	`USD`

11. In the *Items* screen area, choose ▶ *Insert* ❯ *Insert Item* ▮ and enter the following data:

Table 531

Field	Description	Value
Item Number	Item number	`100`
Calculation Sheet	Assign the calculation sheet once only. The details from this sheet are copied for each item.	`OAF-TCCS-CR-FTL-US`
Dimensional Weight Profile	Dimensional weight profile	`ZOAF_LAND3`

12. On the *Precondition* tab page, choose *Insert* and enter the following data:

Table 532

Field	Value
Orientation	`To`
Destination Type	`Location`
Destination	`AF-GW-USLAX`

13. Once you have entered your data, release the freight agreement by choosing ▶ *Set Status* ❯ *Released* ▮ .

14. Choose *Save* .

Freight Agreements for On-Carriage

1. In SAP NetWeaver Business Client, choose ▶ *Freight Agreement Management* ❯ *Freight Agreements* ❯ *Create Freight Agreement* ▮ .

2. On the *New Freight Agreement* screen, enter `AF08` as the freight agreement type.

3. If the freight agreement is applicable to both carriers and customers, select the *Mutual Agreement* checkbox.

4. Choose *Continue* .

5. Create an FTL agreement using the following data:

Table 533

Field	Description	Value
Agreement	Agreement ID	`AF-FA-CR-05-ON`
Description	Description of the freight agreement	`AF FTL US (Carrier 05 On-Carriage)`
Purchasing Organization	Default purchasing organization	`AF-FWH-20`

Field	Description	Value
Carrier	Carrier for which this freight agreement is to be defined	`OAF-CR-05`
Valid From	Validity date range	`<Current Year> -01-01`
Valid To		`2099-12-31`
Agreement Priority	Priority of the agreement	`1`
Document currency	Agreement currency	`USD`

6. In the *Items* screen area, choose *Insert* and enter the following data:

   Table 534

Field	Description	Value
Item Number	Item number	`100`
Calculation Sheet	Assign the calculation sheet once only. The details from this sheet are copied for each item.	`OAF-TCCS-CR-FTL-US`
Dimensional Weight Profile	Dimensional weight profile	`ZOAF_LAND3`

7. On the *Precondition* tab page, choose *Insert* and enter the following data:

   Table 535

Field	Value
Orientation	`From`
Destination Type	`Location`
Destination	`AF-GW-USLAX`

8. Once you have entered your data, release the freight agreement by choosing ▶ *Set Status* ❯ *Released* ❯.

9. Choose *Save* .

10. Create another freight agreement for the LTL stage type using the following data:

    Table 536

Field	Description	Value
Agreement	Agreement ID	`AF-FA-CR-06-ON`
Description	Description of the freight agreement	`AF FTL US (Carrier 06 On-Carriage)`
Purchasing Organization	Default purchasing organization	`AF-FWH-20`
Carrier	Carrier for which this freight agreement is to be defined	`OAF-CR-06`
Controlled	Controlled Transportation	Select
Valid From	Validity date range	`<Current Year> -01-01`
Valid To		`2099-12-31`

Field	Description	Value
Agreement Priority	Priority of the agreement	`1`
Document currency	Agreement currency	`USD`

11. In the *Items* screen area, choose ▶ *Insert* ❯ *Insert Item* ❯ and enter the following data:

Table 537

Field	Description	Value
Item Number	Item number	`100`
Calculation Sheet	Assign the calculation sheet once only. The details from this sheet are copied for each item.	`OAF-TCCS-CR-FTL-US`
Dimensional Weight Profile	Dimensional weight profile	`ZOAF_LAND3`

12. On the *Precondition* tab page, choose *Insert* and enter the following data:

Table 538

Field	Value
Orientation	`From`
Destination Type	`Location`
Destination	`AF-GW-USLAX`

13. Once you have entered your data, release the freight agreement by choosing ▶ *Set Status* ❯ *Released* ❯.

14. Choose *Save* .

Freight Agreements for Delivery

1. In SAP NetWeaver Business Client, choose ▶ *Freight Agreement Management* ❯ *Freight Agreements* ❯ *Create Freight Agreement* ❯.

2. On the *New Freight Agreement* screen, enter `AF08` as the freight agreement type.

3. If the freight agreement is applicable to both carriers and customers, select the *Mutual Agreement* checkbox.

4. Choose *Continue* .

5. Create an LTL agreement using the following data:

Table 539

Field	Description	Value
Agreement	Agreement ID	`AF-FA-CR-05-DL`
Description	Description of the freight agreement	`AF LTL US (Carrier 05 Delivery)`
Purchasing Organization	Default purchasing organization	`OAF-FWH-22`
Carrier	Carrier for which this freight agreement is to be defined	`OAF-CR-05`
Valid From	Validity date range	`<Current Year> -01-01`
Valid To		`2099-12-31`

Field	Description	Value
Agreement Priority	Priority of the agreement	**1**
Document currency	Agreement currency	**USD**

6. In the *Items* screen area, choose *Insert* and enter the following data:

Table 540

Field	Description	Value
Item Number	Item number	**100**
Calculation Sheet	Assign the calculation sheet once only. The details from this sheet are copied for each item.	**OAF-TCCS-CR-LTL-US**
Dimensional Weight Profile	Dimensional weight profile	**ZOAF_LAND3**

7. Once you have entered your data, release the freight agreement by choosing ▶ *Set Status* ❯ *Released* ❳.

8. Choose *Save* .

9. Create another freight agreement for the LTL stage type using the following data:

Table 541

Field	Description	Value
Agreement	Agreement ID	**AF-FA-CR-06-DL**
Description	Description of the freight agreement	**AF LTL US (Carrier 06 Delivery)**
Purchasing Organization	Default purchasing organization	**OAF-FWH-21**
Carrier	Carrier for which this freight agreement is to be defined	**OAF-CR-06**
Controlled	Controlled Transportation	Select
Valid From	Validity date range	**<Current Year> -01-01**
Valid To		**2099-12-31**
Agreement Priority	Priority of the agreement	**1**
Document currency	Agreement currency	**USD**

10. In the *Items* screen area, choose ▶ *Insert* ❯ *Insert Item* ❳ and enter the following data:

Table 542

Field	Description	Value
Item Number	Item number	**100**
Calculation Sheet	Assign the calculation sheet once only. The details from this sheet are copied for each item.	**OAF-TCCS-CR-LTL-US**
Dimensional Weight Profile	Dimensional weight profile	**ZOAF_LAND3**

11. Once you have entered your data, release the freight agreement by choosing ▶ *Set Status* ❯ *Released* ❳.

12. Choose *Save* .

15.4 Forwarding and Internal Agreement

You use forwarding agreements to define pricing structures that are relevant for shippers and consignees. The forwarding agreement type is determined in the forwarding order during the charge calculation process.

Overview of Forwarding Agreements

Table 543

IncoTerm ExW	STA Shipper	STA (Exp) -> STA (Imp)	STA -> Consignee
Forwarding Agreement	Not applicable	`AF-FWA-STATIONS`	`AF-FWA-CO`
Calculation Sheet		`OAF-TCCS-CR-LTL-JP` `AF-TCCS-LOOSE-CUST` `AF-TCCS-JP-DR`	`AF-TCCS-MAIN-02` `AF-TCCS-01` `AF-TCCS-04`
Rate Table		`OAF-RATE-800` `AF-NRT-LAX-CUST1` + Surcharge `AF-RATE-802`	

Overview of Internal Agreements

Table 544

IncoTerm ExW	GW (Exp) -> STA (Exp)	GW (Imp) -> STA (Imp)
Internal Agreement	`AF-GW-STA-EXP`	`AF-GW-STA-IMP`
Calculation Sheet	`AF-TCCS-JP-DR-INT` `AF-LOOSE-INT-EXP`	`AF-TCCS-US-DR-INT` `AF-LOOSE-INT-IMP`
Rate Table	`AF-RATE-802-INT` (weight-dependent rate `AF-GW-STA-INT-EXP` (specified for each carrier main leg)	`AF-RATE-852-INT` (weight-dependent rate `AF-GW-STA-INT-IMP`

15.4.1 Defining Internal Agreement Types

Procedure

1. In Customizing for *Transportation Management* , choose ▶ *Master Data* ❯ *Agreements and Service Products* ❯ *Define Internal Agreement Types* ❳ .

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

Table 545

Field	Description	Value
Type	Freight agreement type	**AF16**
Short Desc .	Short description (free text)	**Air Freight: Internal Agreement Type**
Track Changes	Indicator for logging changes to the document	Select
Agr. No. Range	Number range interval	**01**

3. Save your entry and ignore any warning messages.

15.4.2 Defining Forwarding Agreement Item Types

Procedure

1. In Customizing for *Transportation Management* , choose ▶ *Master Data* ❯ *Agreements and Service Products* ❯ *Define FWA and Service Product Item Types* ❳ .

2. Enter the following data:

Table 546

Field	Value
Item Type	**OAF**
Description	**Default Service Type**
Calc. Sheet	**Allowed**
Add Services	Select
FWO Type	Deselect
FWQ Type	Deselect

3. Save your entry and ignore warnings.

4. Select the row containing forwarding agreement OAF and choose *Specify Preconditions* from the tree structure

5. Enter the following preconditions:

   ○ Transportation Mode

       ○   Stage Category

6.   Save your entries.

15.4.3   Defining Forwarding Agreement Types

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 547

Item Type	Description	Track Changes	Multiple Parties	Agr. No. Range
AF07	**Air Freight: Customer Agreements**	Select	Select	**01**

3.   Go to *Specify Preconditions* .

4.   Create new entry with following data:

Table 548

Precondition	Value
Shipment	10

5.   Save your entries and ignore any warnings that appear.

15.4.4   Defining Forwarding Agreements for Customers

Procedure

Creating a Forwarding Agreement for Customer 01

1.   In SAP NetWeaver Business Client (NWBC), choose ▶ *Forwarding Agreement Management* ❯ *Forwarding Agreements* ❯ *Create Forwarding Agreement* ❳ .

2.   Enter agreement type **AF07** and choose *Continue* .

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

Table 549

Field	Value
Agreement	**AF-FWA-CU-01**
Agreement Desc :	**FWA for OAF-CU-01**
Valid From	**<Current year> -01-01**

Field	Value
Valid To	`<Next year> -12-31`
Document Currency	`JPY`
Shipping Type	`10 (Loose)`
Organizational Unit	• `OAF-FWH-05` • `OAF-FWH-01`
Business Partner	`OAF-CU-01`

4. In the *Items* screen area, choose ▌▶ *Insert* ❭ *Item* ❭ and enter the following data:

Table 550

Field	Value
Item Number	`100`
Description	`AF Main Transportation Charges`
Calculation Sheet	`AF-TCCS-MAIN`
Item Type	`OAF`
Stage Category	`Pre-carriage`

5. Once you have entered your data, release the agreement by choosing ▌▶ *Set Status* ❭ *Released* ❭ .

6. Save your entries.

Creating a Forwarding Agreement for Customer 02

1. In SAP NetWeaver Business Client (NWBC), choose ▌▶ *Forwarding Agreement Management* ❭ *Forwarding Agreements* ❭ *Create Forwarding Agreement* ❭ .

2. Enter agreement type `AF07` and choose *Continue* .

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

Table 551

Field	Value
Agreement	`AF-FWA-CU-02`
Agreement Desc :	`FWA for OAF-CU-02`
Valid From	`<Current year> -01-01`
Valid To	`<Next year> -12-31`
Document Currency	`JPY`
Shipping Type	`10 (Loose)`
Organizational Unit	• `OAF-FWH-05` • `OAF-FWH-01`
Business Partner	`OAF-CU-02`

4. In the *Items* screen area, choose ▌▶ *Insert* ❭ *Item* ❭ and enter the following data:

Table 552

Field	Value
Item Number	100
Calculation Sheet	AF-TCCS-MAIN
Item Type	OAF
Stage Category	Pre-carriage

5. Once you have entered your data, release the agreement by choosing ▶ *Set Status* ❯ *Released* ❰.

6. Save your entries.

Creating a Forwarding Agreement for Customer 03

1. In SAP NetWeaver Business Client (NWBC), choose ▶ *Forwarding Agreement Management* ❯ *Forwarding Agreements* ❯ *Create Forwarding Agreement* ❰.

2. Enter agreement type **AF07** and choose *Continue* .

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

Table 553

Field	Value
Agreement	AF-FWA-CU-03
Agreement Desc :	FWA for OAF-CU-03
Valid From	<Current year> -01-01
Valid To	<Next year> -12-31
Document Currency	JPY
Shipping Type	10 (Loose)
Organizational Unit	• OAF-FWH-05 • OAF-FWH-01
Business Partner	OAF-CU-03

4. In the *Items* screen area, choose ▶ *Insert* ❯ *Item* ❰ and enter the following data:

Table 554

Field	Value
Item Number	100
Calculation Sheet	AF-TCCS-MAIN
Item Type	OAF
Stage Category	Pre-carriage

5. Once you have entered your data, release the agreement by choosing ▶ *Set Status* ❯ *Released* ❰.

6. Save your entries.

Creating a Forwarding Agreement for Customer 04

1. In SAP NetWeaver Business Client (NWBC), choose ▐▶ *Forwarding Agreement Management* ❯ *Forwarding Agreements* ❯ *Create Forwarding Agreement* ❳ .

2. Enter agreement type `AF07` and choose *Continue* .

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

Table 555

Field	Value
Agreement	`AF-FWA-CU-04`
Agreement Desc :	`FWA for OAF-CU-04`
Valid From	`<Current year> -01-01`
Valid To	`<Next year> -12-31`
Document Currency	`JPY`
Shipping Type	`10 (Loose)`
Organizational Unit	• `OAF-FWH-05` • `OAF-FWH-01`
Business Partner	`OAF-CU-04`

4. In the *Items* screen area, choose ▐▶ *Insert* ❯ *Item* ❳ and enter the following data:

Table 556

Field	Value
Item Number	`100`
Calculation Sheet	`AF-TCCS-MAIN`
Item Type	`OAF`
Stage Category	`Pre-carriage`

5. Once you have entered your data, release the agreement by choosing ▐▶ *Set Status* ❯ *Released* ❳ .

6. Save your entries.

15.4.5 Defining Forwarding Agreements for Consignees

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ▐▶ *Forwarding Agreement Management* ❯ *Forwarding Agreements* ❯ *Create Forwarding Agreement* ❳ .

2. Enter agreement type `AF07` and choose *Continue* .

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

Table 557

Field	Value
Agreement	`AF-FWA-CO`
Agreement Desc :	`Forwarding Agreement for All Consignees`
Valid From	`<Today>`
Valid To	`2020-12-31`
Document Currency	`USD`
Shipping Type	`10 (Loose)`
Organizational Unit	• `OAF-FWH-21` • `OAF-FWH-22`
Business Partner	• `OAF-CO-01` • `OAF-CO-02` • `OAF-CO-03` • `OAF-CO-04`

4. In the *Items* screen area, choose ▶ *Insert* ▶ *Item* ▶ and enter the following item numbers in turn:

Table 558

Item Number	100	200	300
Item Type	`OAF`	`OAF`	`OAF`
Valid From	`<Today>`	`<Today>`	`<Today>`
Valid To	`2020-12-31`	`2020-12-31`	`2020-12-31`
Calculation Sheet	`AF-TCCS-MAIN-02`	`AF-TCCS-01`	`AF-TCCS-04`
Stage Category	`Main Carriage`	`Pre-Carriage`	`On-Carriage`
Controlled	Select	Select	Select

5. Once you have entered your data, release the agreement by choosing ▶ *Set Status* ▶ *Released* ▶ .
6. Save your entries.

15.4.6 Defining Forwarding Agreements for Stations

These forwarding agreements are used for settlements between export and import stations so that freight charges can be forwarded from the stages to the station that has an agreement with the paying party (either the shipper or the consignee).

Procedure

1. In SAP NetWeaver Business Client (NWBC), choose ▮ *Forwarding Agreement Management* ❯ *Forwarding Agreements* ❯ *Create Forwarding Agreement* ▮ .

2. Enter agreement type **AF07** and choose *Continue* .

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

Table 559

Field	Value
Agreement	**AF-FWA-STATION**
Agreement Desc :	**Forwarding Agreement for Stations**
Time Zone :	**JAPAN**
Valid From	**<Current Year> -01-01**
Valid To	**<Next Year> -12-31**
Document Currency	**JPY**
Dimensional Weight Profile	**ZAF_01**
Organizational Unit	• **OAF-FWH-01** • **OAF-FWH-05**
Business Partner	• **OAF-FWH-21** • **OAF-FWH-22**

4. In the *Items* screen area, choose ▮ *Insert* ❯ *Item* ▮ and enter the following data:

Table 560

Field	Value
Item Number	**100**
Item Type	**OAF**
Valid From	**<Current Year> -01-01**
Valid To	**<Next Year> -12-31**
Calculation Sheet	**OAF-TCCS-CR-LTL-JP**
Stage Category	**Pre-Carriage**
Controlled	Select

5. In the *Precondition* screen area, choose the *Trade Lanes* tab page and insert the following locations:

Table 561

Orientation	Source/Destination Type	Value
From	Location	**OAF-CU-01@ERP001**
From	Location	**OAF-CU-02@ERP001**
From	Location	**OAF-CU-03@ERP001**

Orientation	Source/Destination Type	Value
From	Location	`OAF-CU-04@ERP001`
To	Location	`OAF-STA-JPTYO`
To	Location	`OAF-STA-JPNGO`
From	Location	`OAF-STA-JPTYO`
From	Location	`OAF-STA-JPNGO`
To	Location	`AF-GW-JPNRT`

6. In the *Items* screen area, choose ▌ *Insert* ❯ *Item* ▐ again and enter the following item numbers in turn:

Table 562

Item Number	200	300
Item Type	`OAF`	`OAF`
Valid From	`<Current Year> -01-01`	`<Current Year> -01-01`
Valid To	`<Next Year> -12-31`	`<Next Year> -12-31`
Calculation Sheet	`AF-TCCS-JP-DR`	`AF-TCCS-LOOSE-CUST`
Stage Category	`Pre-Carriage`	`Main Carriage`
Controlled	Select	Select

7. Once you have entered your data, release the agreement by choosing ▌ *Set Status* ❯ *Released* ▐ .
8. Save your entries.

15.4.7 Defining Internal Agreements: Export Gateway to Export Station

In this procedure, you define an internal agreement that is used to distribute costs from the export gateway to the export station, including the charges agreed for export drayage (from the gateway to the airport) and the main carriage (booking between the export and import airports).

Prerequisites

You have defined an internal agreement type.

Procedure

1. In SAP NetWeaver Business Client, choose ▌ *Forwarding Agreement Management* ❯ *Internal Agreements* ❯ *Create Internal Agreement* ▐ .
2. On the *New Internal Agreement* screen, enter the relevant freight agreement type, for example, `AF16` .

3. Choose *Continue* .

4. Create an agreement for business partners `AF-FWH-03` to `OAF-FWH-01` and `OAF-FWH-05` using the following data:

Table 563

Field	Description	Value
Agreement	Agreement ID	**AF-GW-STA-EXP**
Description	Description of the freight agreement	**AF GW -> STA (Export)**
Organizational Unit	Default organization	**AF-FWH-03**
Business Partner	Receiving Business Partner	**OAF-FWH-01** and **OAF-FWH-05**
Valid From	Validity date range	**<Current year> -01-01**
Valid To		**2099-12-31**
Agreement Priority	Priority of the agreement	**1**
Document currency	Agreement currency	**JPY**
Dimensional Weight Profile	Dimensional weight profile	**ZAF_01**

5. In the *Items* screen area, choose *Insert* and enter the following items in turn:

Table 564

Item Number	100	200
Calculation Sheet Assign the calculation sheet once only. The details from this sheet are copied for each item.	**AF-TCCS-JP-DR-INT**	**AF-LOOSE-INT-EXP**
Shipping Type (10 – Loose or 11 – ULD)	**10 - Loose**	**10 - Loose**
Dimensional Weight Profile	Blank	Blank

6. Once you have entered your data, release the freight agreement by choosing ▐▶ *Set Status* ❭ *Released* ❭ .

7. Save your entries.

15.4.8 Defining Internal Agreements: Import Gateway to Import Station

In this procedure, you define an internal agreement for distributing costs from the import gateway to the import station, including the charges agreed for import drayage (from the airport to the gateway).

Prerequisites

You have defined an internal agreement type.

Procedure

1. In SAP NetWeaver Business Client, choose ▶ *Forwarding Agreement Management* ⟩ *Internal Agreements* ⟩ *Create Internal Agreement* ❭ .

2. On the *New Internal Agreement* screen, enter the relevant freight agreement type, for example, **AF16** .

3. Choose *Continue* .

4. Create an agreement for business partners `AF-FWH-20` to `OAF-FWH-21` and `OAF-FWH-22` using the following data:

Table 565

Field	Description	Value
Agreement	Agreement ID	**AF-GW-STA-IMP**
Description	Description of the freight agreement	**AF GW -> STA (Import)**
Organizational Unit	Default organization	**AF-FWH-20**
Business Partner	Receiving Business Partner	**OAF-FWH-21** and **OAF-FWH-22**
Valid From	Validity date range	**<Current year> -01-01**
Valid To		**2099-12-31**
Agreement Priority	Priority of the agreement	**1**
Document currency	Agreement currency	**USD**
Dimensional Weight Profile	Dimensional weight profile	**ZAF_01**

5. In the *Items* screen area, choose *Insert* and enter the following items in turn:

Table 566

Item Number	100	200
Calculation Sheet Assign the calculation sheet once only. The details from this sheet are copied for each item.	**AF-TCCS-US-DR-INT**	**AF-LOOSE-INT-IMP**
Shipping Type	**10 - Loose**	**10 - Loose**
Dimensional Weight Profile	Deselect	Deselect

6. Once you have entered your data, release the freight agreement by choosing ▶ *Set Status* ⟩ *Released* ❭ .

7. Save your entries.

15.5 Configuration of Organizational Settings for Charge Management

15.5.1 Defining Cost Distribution Profiles

In this procedure, you define how internal costs are to be distributed. Distribution can be, for example, either direct or hierarchical based on forwarding order or SAP ERP items, or based on factors such as the net weight, gross weight, volume, or distance.

Procedure

1. In Customizing for *Transportation Management* , choose ▌▶ *Basic Functions* ❭ *Cost Distribution* ❭ *Define Cost Distribution Profiles* ❭ .
2. Create cost distribution profile `DIR_FWO_GW` using the following data:

Table 567

Field	Description	Value
Distr. Profile	Distribution profile ID	**DIR_FWO_GW**
Description	Description of the profile	**AF Direct Forwarding Order Item: Gross Weight**
Distr. Method	Type of Distribution Method	**DIRECT**
Distribution Rule	Distribution based on parameter	**Gross Weight**
Distr. Level	Level of distribution	**Forwarding Order**

3. Save your entries.

15.5.2 Defining Calculation Profiles

Procedure

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

Table 568

Field	Description	Value
Calculation Profile	Calculation profile	**OAF-CP-01**
Description	Description of profile	**OAF Calculation Profile 1**
Calc. Date Type	Calculation date type	**Expected Start Date of Main Carriage**

Field	Description	Value
Calculation Level	Calculation level	**Calculation at Stage Level**
Agr. Det. Rules	Agreement Determination Rule	Blank
Through Rates	Through rates	Deselect
Dim. WT Profile	Dimensional weight profile	**I166**
Dim Wt. Cond.	Condition for dimensional weight profile determination	Blank
Exch. Rate Type	Exchange rate type	Blank
Data Source	Data source	**Actual Route**

3. Save your entries.

4. Choose *Copy As...* to copy the calculation sheet you have just created and change the following settings:

Table 569

Field	Description	Value
Calculation Profile	Calculation profile	**AF-CP-FB1**
Description	Description of profile	**AF Calculation Profile Freight Booking**
Calculation Level	Calculation level	**Calculation at Header Level**
Agr. Det. Rules	Agreement Determination Rule	Blank
Through Rates	Through rates	Deselect
Dim. WT Profile	Dimensional weight profile	**M5000**
Dim Wt. Cond.	Condition for dimensional weight profile determination	Blank
Exch. Rate Type	Exchange rate type	Blank
Data Source	Data source	**Actual Route**
Air Waybill Printing	Air Waybill Printing	**C Contract Rate**
Agreement Det. Type	Agreement Determination Type	**C Contract Rate**

5. Save your entries.

15.5.3 Defining Settlement Profiles

In this procedure, you define a 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 settlement profile to an organizational unit in transaction /SCMTMS/TCM_FASET .

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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. Enter the following data:

Table 570

Field	Description	Value
Settlement Prof.	Settlement profile	**OAF_SP_01**
Description .	Description	**OAF Settlement Profile**
Profile Category	Determines whether the profile is valid for freight settlement, forwarding settlement, or both	**Forwarding and Freight Settlement**
Data Source	Identifies the data source to be used when creating settlement documents	**Planned Data**
Split/Cons	Defines the split and consolidation criteria for generating settlement documents	Blank
Calculation Option	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**
Collective Settlement	Collective invoice	Deselect
Stage Split	Stage split	Deselect

3. Save your entries.

15.5.4 Defining Charges Profiles

Procedure

1. In Customizing for SAP Transportation Management, choose ▶ *Transportation Management* ▶ *Basic Functions* ▶ *Charge Calculation* ▶ *Basic Settings* ▶ *Define Charges Profiles* ◀ .
2. Create a new charges profile by entering the following data:

Table 571

Field	Value
Charges Profile	**AF-JP-CPROF**

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Field	Value
Default Purchasing Organization	Select the organizational ID for `OAF-FWH-01` (FH Station Nagoya). You noted this number in Creating Forwarding Houses [page 95] .
Default Carrier	Blank
Freight Settlement Profile	**OAF_SP_01**
Profile Determination Condition	Blank
Calculation Profile	**OAF-CP-01**
Purchasing Calculation Profile	**AF-CP-FB1**
Local Currency	• **USD** for U.S. forwarding houses • **JPY** for Japanese forwarding houses
Default Charges View	Blank
Distribution Profile	**DIR_FWO_GW**

3. Save your entries.
4. Copy this profile to `AF_US_CPROF` and change the currency to **USD** and Default Purchasing Organization to `OAF-FWH-20` .

More Information

- Creating Companies [page 92]
- Creating Forwarding Houses [page 95]

15.5.5 Assigning Charges Profiles to Forwarding Houses

Procedure

1. In SAP NetWeaver Business Client for SAP Transportation Management, choose ▶ *Master Data* ▶ *Organization* ▶ *Edit Organization and Staffing* ▶ .
2. For each forwarding house, choose the *Organizational Data* tab page and assign the respective charges profile ID as shown in the table below:

Table 572

Charges Profile	Forwarding Houses		
`AF_JP_CPROF`	`OAF-FWH-01`	FH Station	Nagoya
	`AF-FWH-03`	FH Gateway	Narita
	`OAF-FWH-05`	FH Station	Tokyo
`AF_US_CPROF`	`AF-FWH-20`	FH Gateway	Los Angeles

Charges Profile	Forwarding Houses		
	`OAF-FWH-21`	FH Station	Phoenix
	`OAF-FWH-22`	FH Station	San Diego

3. Save your entries.

16 Troubleshooting

- **I cannot create purchase orders in SAP ERP because the posting period is not open for company code 5000. What do I do?**

  The standard procedure is to open the current period for posting by using transaction `MMPV` . However, in rare cases the last open period may be several years ago and closing all of the intermediate periods is time consuming. In this case, reset the posting period as described in SAP Note 487381 (*RMMMINIT: Protection against unintentional execution*).

  > ⚠️ Caution
  >
  > Do not implement this SAP Note in a productive system.

  You may also have to specify the time intervals for the posting periods. Call transaction `OB52` and make sure that all entries with company codes 3000 and 5000 contain the current year as the *To Period* .

- **When I monitor invoice verification for company code 3000 in transaction MIRO, the system issues the error message "In Company code 3000, the number range 51 is missing for the year 2011".**

  Use transaction `FBN1` to define a number range for interval range 51 and company code 3000 for the current year.

- **When the system sends the forwarding settlement document to SAP ERP, the inbound processing fails with the error messages "According to status, sales order item xxxxxxx cannot be invoiced" and "Assign condition type xxxx in CO-PA".**

  Proceed as follows:

  1. Deactivate CO-PA.
  2. Call transaction `OKEV` .
  3. Select controlling area 1000.
  4. Deselect *Actual* for the CO-PA plan version.

- **The system issues an error message stating that the number range for goods receipt documents is missing.**

  Call transaction `OMBT` and add an interval for the current year for the groups *Material documents for goods movements and inventory diffs.* and *Material documents for goods receipts* .

- **I receive an error message stating that number ranges for accounting documents are not valid for the current year.**

  Proceed as follows:

  1. Call 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.

- **The system does not deliver results for certain stages in charge calculation.**

To identify the source of the problem, proceed as follows:

1. In Customizing for SAP Transportation Management, choose ▶ *Transportation Management* ❯ *Basic Functions* ❯ *User Interface* ❯ *Define Message Settings* ◀ .

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

Table 573

Field	Value
Msg. Type	`Both`
Msg. Severity	`All Messages`
Msg. Detail Level	`9 Level of detail 9`
ProblClass Filter	`Other`
Msg. Max No.	`50`

3. On the *Charges* tab page in your document, you will get a detailed error message.

Typographic Conventions

Table 574

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🔗
Example	• 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`	• 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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