



## SAP Transportation Management Integration of SAP TM and SAP CRM

CUSTOMER  
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## Icons in Body Text

Icon	Meaning
	Caution
	Example
	Note
	Recommendation
	Syntax

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

## Typographic Conventions

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

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## Integration of SAP TM and SAP CRM

You can use service products from the SAP Transportation Management (SAP TM) system in opportunities in SAP Customer Relationship Management (SAP CRM). Subsequently, you can create forwarding agreement quotations from the opportunities. This enables sales agents from carriers or logistics service providers (LSPs) to sell service products to prospective customers such as shippers or other LSPs. The sales agent can process a request from a customer in an opportunity in SAP CRM and then send the price quotation to the customer in the forwarding agreement quotation in SAP TM.

### Activities

In the SAP CRM system, you can use the *Start CRM WebClient* transaction (*CRMUI*), to perform the following activities:

- Create, edit, and display the following SAP TM documents under *Sales Cycle*:
  - Forwarding agreements
  - Forwarding agreement quotations
  - Forwarding quotations
  - Service products or service product catalogs
  - Estimate forwarding charges
- Create, edit, and display the following SAP TM documents of a corporate account under *Account Management > Corporate Account*
- Forwarding agreements
- Forwarding agreement quotations
- Forwarding quotations
- Forwarding orders
- Forwarding settlement documents

### More Information

- For more information about integration of SAP CRM with SAP TM, see SAP Library on SAP Help Portal at <http://help.sap.com/crm>. Choose a release and under *Application Help*, choose *SAP Customer Relationship Management > Sales > Opportunity Management > Integration with SAP Transportation Management*
- For more information about SAP CRM opportunities, see SAP Library on SAP Help Portal at <http://help.sap.com/crm>. Choose a release and under *Application Help*, choose *SAP Customer Relationship Management > Sales > Opportunity Management*
- See SAP Library for SAP TM on SAP Help Portal at <http://help.sap.com/tm>. In SAP Library, choose the following:
  - *SAP Transportation Management (SAP TM)*

- ▶ *Integration* ▶ *Integration with SAP Customer Relationship Management* ▾
- ▶ *Agreement Management* ▶ *Forwarding Agreement Quotation* ▾
- ▶ *Master Data* ▶ *Charge Management and Service Product Catalogs* ▶ *Setup of MD for Charge Management and SP Catalogs* ▶ *Service Product Catalogs* ▾
- ▶ *Agreement Management* ▾
- ▶ *Forwarding Order Management* ▶ *Forwarding Order* ▾
- ▶ *Forwarding Order Management* ▶ *Forwarding Quotation* ▾



## 1 Settings in SAP TM

This section describes the configuration settings you need to make to integrate the SAP TM system with the SAP CRM system.



## 1.1 Defining RFC Connection to SAP CRM System

The remote function call (RFC) connection to SAP CRM and the definition of the logical system serve as base definitions for connecting all systems to the SAP Transportation Management (SAP TM) system.

You can use this procedure to define which of the connected systems is a SAP CRM system.

### Procedure

1. Go to the transaction SM59(RFC Destinations (Display/Maintain) )
2. Choose *Create*, and enter the following data:
  - RFC destination (for example, CRMCLNT001)
  - Connection type: 3 (*Connection to ABAP System*)
  - Description for your RFC connection
3. On the *Technical Settings* tab page, enter the following data:
  - *Target Host*  
This is the host name of your SAP CRM system (for example, ldcicrm.wdf.sap.corp).
  - *System Number*  
This is the SAP system number of your SAP CRM system (for example, 29).
4. On the Logon & Security tab page, select the check box *Current User*. Do not specify a User
5. Save the RFC connection.



You must use the role `SAP_S RFCACL` in both the SAP TM and SAP CRM systems. In SAP TM, you must use the role `customer settlement specialist /SCMTMS/CUSTOMER_SETTLEMENT_SP`.





## 1.2 Defining Logical System for SAP CRM System

### Procedure

1. Go to the transaction BD54 (Maintaining Logical Systems).
2. Choose *New Entries*, and enter the following data:
  - *Logical System*  
Enter your logical system (for example, CRMCLNT001).
  - *Name*  
Enter the name of your logical system.
  - Save your entries.



## 1.3 Assigning RFC Destination to Logical Systems

### Procedure

1. Go to the `BD97` transaction (Assign RFC Destination to Logical Systems).
2. Choose the logical system (for example, `CRMCLNT001`).
3. Choose *Standard BAPI Destination*.
4. Enter the RFC destination for BAPI calls.
5. Save your entries.



## 1.4 Definitions for RFC Connections

You use this procedure to specify the parameters to indicate the RFC destinations which receive data. The required parameters include, for example, consumer, client, object name, and download type.

### Procedure

1. Go to transaction SM30 (Call View Maintenance).
2. In the *Table/View* field, enter the table name `CRMRFPCPAR`.
3. Choose *Maintain, New Entries*, and enter the following data:
  - For initial download:
    - *User*: CRM
    - *Object Name*: `TM_SERVICE_PROD`
    - *Destination*: RFC destination (for example, CRMCLNT001)
    - *Load Type*: Initial Download
  - For delta download:
    - *User*: CRM
    - *Object Name*: `TM_SERVICE_PROD`
    - *Destination*: RFC destination (for example, CRMCLNT001)
    - *Load Type*: Delta Download
  - For document reference:
    - *User*: CRM
    - *Object Name*: `RESPONSE_TM`
    - *Destination*: RFC destination (for example, CRMCLNT001)
    - *Load Type*: Delta Download
4. Save your entries.



## 1.5 Assigning Logical System to System Name

### Procedure

1. In Customizing for *Transportation Management*, choose ► *Integration* ► *Assign Logical System to System Names* ⌵.
2. Choose *New Entries*.
3. Assign a name to a CRM logical system:
  - *Name* (for example, CRMTEST)
  - *Logical system* (for example, CRMCLNT001)



You can connect only one SAP CRM system to the SAP TM system.

4. Save your entries.



## 1.6 Selecting Item Types

### Procedure

1. In Customizing for *Transportation Management*, choose ► *Master Data* ► *Agreements and Service Products* ► *Define FWA and Service Product Item Types* ▾.
2. Choose an *Item Type* that you want to use in the CRM system.
3. Select the *Enable CRM* checkbox and enter a name in the *System Name* field.
4. Save your entries.



## 2 Assigning Item Types to Service Products

You use this procedure to enter the service products that you want to use in the SAP Customer Relationship Management (SAP CRM) system in a service product catalog.

### Procedure

1. In *SAP NetWeaver Business Client*, under ► *Master Data* ► *Charge Management and Service Product Catalogs* ► *Service Product Catalogs* ▾, create or edit an existing catalog.
2. At item level, choose ► *Insert* ► *Service Product* ▾.
3. Enter the item type for which you have enabled CRM in Customizing. For more information, see [Selecting Item Types](#) [Page 13]
4. Save your entries.



### **3 Prerequisites for SAP CRM**

You have imported business partners and sales organizations from the SAP ERP system to both the SAP Customer Relationship Management system and the SAP Transportation Management system



## 4 Settings in SAP CRM

This section describes the configuration settings that you need to make in the SAP Customer Relationship Management system to integrate with the SAP Transportation Management system.





## 4.1 Activating the Business Function

You activate the business function to enable the user to convert opportunities in SAP Customer Relationship Management to forwarding agreement quotations in SAP Transportation Management.

### Procedure

1. Goto transaction *SFW5*.
2. Under `ENTERPRISE_BUSINESS_FUNCTIONS`, choose `CRM_TM_O2A`.
3. Select the *Planned State* checkbox for the business function you want to activate.
4. The system informs you about any missing software components or support packages.
5. Choose *Activate Changes*.
6. Save your entries.



## 4.2 Defining the RFC Connection to SAP TM

The RFC connection to the SAP Transportation Management (SAP TM) system and the definition of the logical system serve as base definitions for connecting all systems to the SAP Customer Relationship Management system (SAP CRM) system.

You use this procedure to define which of the connected systems is an SAP TM system.

### Procedure

1. Go to the transaction `SM59` (*RFC Destinations (Display/Maintain)*)
2. Choose *Create*.
3. Enter the following data:
  - RFC destination (for example, `TM1CLNT001`)
  - Connection type: 3
  - Description for your RFC connection
4. On the *Technical Settings* tab page, enter the following data:
  - Target host  

This is the host name of your SAP TM system (for example, `ldcitm1.wdf.sap.corp`).
  - System number  

This is the host SAP system number of your SAP TM system (for example, 29).
5. Save your entries.



You must have relevant authorization to both the SAP TM and the SAP CRM systems.



## 4.3 Defining the Logical System for SAP TM

You use this procedure to define the logical system in which SAP Transportation Management (SAP TM) is found.

### Procedure

1. In Customizing for *SAP Customer Relationship Management*, choose **CRM** *Middleware and Related Components* **Communication Setup** *Set Up Logical Systems* **Define Logical System**.
2. Choose *New Entries* and enter the logical system for SAP TM, (for example, TM1CLNT001) and the name of the logical system.
3. Save your entries.



## 4.4 Assigning an RFC Destination to Logical Systems

You use this procedure to assign an SAP Transportation Management (SAP TM) RFC destination to an SAP TM logical system in SAP Customer Relationship Management (SAP CRM).

### Procedure

1. Go to the transaction *BD97 (Assign RFC destination to Logical Systems)*.
2. Choose the logical system (example `TM1CLNT001`).
3. Choose *Standard BAPI destination*.
4. Enter the RFC destination for Business Application Programming Interface (BAPI) calls.
5. Save your entries.



## 4.5 Creating Sites

You use this procedure to create a site required for initially downloading all the service products from SAP Transportation Management (SAP TM).

### Procedure

1. In Customizing for SAP Customer Relationship Management, choose **CRM Middleware and Related Components** > **Communication Setup** > **Create Sites and Subscriptions**.
2. Choose the object type *Sites* and create a site, for example:
  - *Name:* TM\_TM1\_001
  - *Description:* As appropriate
  - *Type:* R/3
3. Choose the *Site Attributes* pushbutton and select an existing RFC destination (for example, TM1CLNT001)
4. Save your entries.



## 4.6 Defining Transaction Launcher Logical Systems and URLs

You use this procedure to enable the system to display SAP Transportation Management (SAP TM) user interfaces and access SAP TM data.

### Procedure

1. Go to transaction SM30 (Call View Maintenance).
2. In the *Table/View* field, enter the table name CRMV\_IC\_BORADM.
3. Assign the logical system name (for example, TM1CLNT001) to the *Mapping* field with the entry as TM.
4. Save your entries.



## 4.7 Maintaining Categories and Hierarchies

### Procedure

1. Go to transaction `Maintain Categories and Hierarchies` (transaction `COMM_HIERARCHY`).
2. Choose *New Hierarchy* or edit an existing hierarchy.
3. Enter a hierarchy ID (for example, `TM01`).
4. Choose *New Category* or edit an existing category.
5. Enter `Root Category` as the category ID and add description in the short text field.
6. Enter `Service` as the product type.
7. Choose *ROOT*
8. Choose *New Category*
9. Enter `SRV_` as category ID and add a description in the short text field.
10. Enter `Service` as product type.
11. Save your entries.



## 4.8 Assigning Hierarchies to Applications

### Procedure

1. Go to transaction `Assign Hierachies to Applications (COMM_PRAPPLCAT)`.
2. Choose *New Entries*.
3. In the *Application* field, enter `Product` and the hierarchy ID you specified earlier (for example, `TM01`).
4. Go to the *Assgmt per Product Type for Application 'Product'* screen.
5. In the *Product Type* field, enter `Service` and the hierarchy ID you have specified earlier (for example, `TM01`).
6. Save your entries.





## 4.9 Assigning Product Categories for the Service Product Download

### Procedure

1. In Customizing for SAP Customer Relationship Management, choose ► *Transactions* ► *Settings for Opportunities* ► *Integration with SAP Transportation Management* ► *Assign Product Category for Service Product Download* ⌵.
2. Choose *New Entries*.
3. Enter the hierarchy ID you have specified earlier (for example, TM01).
4. Enter the category ID you have specified earlier (for example, SRV\_).
5. Save your entries.



## 5 Starting the Initial Download to the SAP CRM System

You can use this procedure to download all the service products that you selected for download in the SAP Transportation Management (SAP TM) system.

### Procedure

1. Go to transaction `Start Initial Load` (transaction `R3AS`).
2. Specify the following data:
  - `TM_SERVICE_PROD` in the *Load Object* field.
  - Enter *Source Site (Sender)* as specified in the chapter [Creating Sites](#) [Page 21] (for example, `TM_TM1_001`).
3. Enter `CRM` as the destination site.
4. Choose *Execute*.

The system downloads all the service products to SAP Customer Relationship Management (SAP CRM) master data.



The system automatically performs a delta download (downloads the service products after the initial download), when you enter a service product in a service product catalog. For more information, see [Entering a Service Product in a Service Product Catalog](#) [Page 14].

If you delete a service product in the SAP TM system, the SAP CRM system automatically gives the service product the status of `To Archive`. The service product cannot be used in an opportunity.

After downloading the service products, you can use the products in opportunities and subsequently create forwarding agreement quotations.