# **CHAPTER 7**

# Maintaining Currency Types and Currency Pairs

In this chapter, you will be looking at how to customize local and foreign currencies for company codes. At the end of this chapter, you will be able to:

- Maintain exchange rate types.
- Define a standard quotation for exchange rates.
- Enter prefixes for direct/indirect quotation exchange rates.
- Define translation ratios for currency translation.

# Currencies

Generally, accounting transactions are measured in monetary terms. SAP S4 HANA also adopted this principle. As a result, it is important that you specify a currency for each transaction you enter in the system. In order for the system to manage the currency ledgers, during document entry users (accounting clerks responsible for data entry in the system) must specify a standard currency code during data entry. The International Organization Standardization (ISO) sets these currency codes, such as USD for United States of America Dollar, GBP for British Pound sterling, and so on. The company code currency is usually referred to in SAP S4 HANA as the local currency; other currencies are termed foreign currencies.

SAP S4 HANA is dynamic in the sense that it allows you to simultaneously maintain ledgers in parallel currencies in conjunction with the company code currency (local currency), for example, either in group currency or hard currency.

You need to maintain exchange rates in order for the system to translate amounts into appropriate currencies. It is important to maintain the relationship between currencies per currency types and currency pair applying appropriate ratios. Inflation can affect the relationship between currencies; hence it is ideal to perform the translation ratio periodically.

As part of your customizing exercise, you will define the following items:

- Standard quotation for exchange rates.
- Prefixes for direct/indirect quotation exchange rates.
- Translation ratios for currency translation.

SAP S4 HANA uses two major currency quotations for currency translation: direct and indirect quotations. In addition to translating amounts into appropriate currencies, exchange rates can also be used for valuation, conversion, transactions, and planning.

# **Exchange Rate types:**

In SAP S4 HANA, several exchange rates are defined and stored for each currency pair. Several exchange rates are held in the system. Hence the differentiation between exchange rates in the system is very important. An exchange rate type serves as the mechanism by which exchange rate are differentiated (Figure 7-1).



Figure 7-1. Available exchange types

When you are maintaining exchange rate for exchange rate type you can use one of the following tools:

- **Inversion:** Use to calculate an opposite rate from a given exchange rate. The drawback with this inversion is that the calculation based on an opposite rate is inadequate; therefore, it is recommended that you do not use for average rate (M)
- **Base currency:** The currency type (for example, USD) that you use in currency pair for foreign currency translation for a given exchange rate type. This is ideal when you have to translate between several currencies. By using a base currency, you can simplify the problem involved in maintaining several exchange rates.
- **Exchange rate spread:** The constant difference between exchange rate types. For example, the difference between the average rate and bank selling or bank buying rate.

SAP gives you the flexibility to either use direct or indirect quotations as standard quotations for exchange rates. A standard quotation is the universal quotation used for managing exchange rates in foreign currency. You have the choice of defining direct or indirect quotations for each currency pair in an exchange rate. We will be looking at this in detail in the following section.

## **Define Standard Quotation for exchange Rates**

**Problem:** Your client wants to be able to maintain exchange rates in SAP R/3 system. To meet this requirement, you have been asked to define both direct and indirect quotations for each USD/GBP currency pair.

In SAP S4 HANA, currency exchange rates are quoted as direct or indirect. In this activity we will be taking you through how to maintain direct and indirect quotation for each currency pair that we will be using for the standard quotation for our exchange rate:

• Direct quotation: When one unit of foreign currency is expressed as one unit of your company code currency. For example, one unit of the foreign currency USD 1.00 is displayed in the local currency as GBP 0.85.

• Indirect quotation: When one unit of local currency (your company code) is quoted for one unit of foreign currency. For example, one unit of the local currency GBP 1.00 is quoted as the foreign currency USD 1.18.

You can define a direct or indirect quotation in the exchange rate table, which becomes available to the users during data input. The exchange rate table contains a list of all exchange rates between various currencies for a range of dates in the system. To display the exchange table, use this menu path: *Accounting* ➤ *Financial Accounting Accounts Payable* ➤ *Environment* ➤ *Current Settings* ➤ *Enter Exchange Rate*.

Let's look at how to define standard quotation for exchange rates. To go to the screen where you will do this, follow this menu path: *IMG: SAP NetWeaver* ➤ *General Settings* ➤ *Currencies* ➤ *Define Standard Quotation for exchange Rates*. The *Change View "Maintenance View TCURN": Overview* screen is displayed to begin customizing your currency quotation, click New Entries at the top left of the screen. The New Entries: Overview of Added Entries screen is displayed (Figure 7-2). This is where you define the settings for your currency quotations.

On the *New Entries: Overview of Added Entries* screen, Specify the following items: **Your currency pair:** In this exercise, we used USD (US dollar)/GBP (Great Britain Pound) as our currency pair.

**Validity date:** Enter the date you want your exchange rate quotation to start. The system will consider the date you entered in this field as the start date for your exchange rate quotation (this is the date you want your exchange rate quotation to be valid from).

**Quotation:** Enter the quotation type your company is using as an exchange rate quotation (whether you want your currency pair to be direct quotation or indirect quotation).

**Note** The currency pair we used in this activity is for illustration purposes only. You can use any currency pair of your choice. The choice of the currency pair you ultimately use will depend on your client's requirements.

**Tip** Use today's date in the valid from field as the start date of your exchange rate quotation.

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Figure 7-2. Exchange rates quotation specification

Click the Save button at the bottom right of the screen to save you exchange rate quotation customizing.

### Enter Prefixes for Direct/Indirect Quotation Exchange Rates

In SAP S4 HANA, exchange rates are either entered as direct or indirect quotation to differentiate between direct and indirect quotation by maintaining prefixes for exchange rates that can used during document entry and display. If no prefix is entered, the SAP standard setting applies. To demonstrate how to affix prefixes to exchange rate quotations, we will first look at three setting scenarios and then assign a prefix to the direct/indirect quotation exchange rates.

#### Scenario 1

In a situation where direct quotation exchange rate is frequently used, you should leave the exchange rate setting for direct exchange rates field blank and append a prefix to indirect exchange rate so that users are compelled to enter a prefix when entering indirect quotation exchange rates.

Fields	Values	Description
D (Direct)	Leave blank	This is without a prefix for direct quotation exchange rates
l (Indirect)	/ (forward slash)	For indirect quotation exchange rates

Here is the prefix used for indirect quotation exchange rate:

This setting will allow the user to enter frequently used direct quotation exchange rates without a prefix. The rarely used indirect quotation exchange rates must be entered with a prefix.

Where indirect quotation exchange rates are frequently used, and direct quotation exchange rates are rarely used. In this case, you can leave the exchange rate setting for indirect quotation exchange rates blank and assign a prefix to the rarely used direct quotation exchange rates.

Here is the prefix used for direct quotation exchange rates

Fields	Values	Description
l (Indirect)	Leave blank	This is without a prefix for indirect quotation exchange rates
D (Direct)	*Sign	For direct quotation exchange rates

This setting will allow the user to enter frequently used indirect quotation exchange rates without a prefix. The rarely used direct quotation exchange rates must be entered with a prefix.

#### Scenario 3

In a situation where both indirect and direct quotation exchange rates have equal use, then you should append a prefix to both of them individually. Here are the prefixes you can use for direct and indirect quotation exchange rates:

Fields	Values	Description
D (Direct)	*Sign	For direct quotation exchange rates
I (indirect)	/ (Forward slash)	For indirect quotation exchange rates

This means that anytime quotation for exchange rates is entered either for direct or indirect quotation exchange rates, the user must assign a prefix. This will allow the system to recognize whether the exchange rate is a direct or indirect quotation exchange rate. **Problem:** Your client uses direct quotation exchange rate frequently and seldom uses indirect quotation exchange rate.

You have been asked by your team to define indirect quotation exchange rate, which is less frequently used with a prefix. This will help users enter the correct quotation rate.

This activity assumes that indirect quotations are rarely used and that direct quotation exchange rates are frequently used. To assign a prefix to direct/indirect quotation exchange rate follow this menu path: *IMG: SAP NetWeaver* > *General Settings* > *Currencies* > *Enter Prefixes for Direct/Indirect Quotation Exchange Rate.* The Change View "Direct/Indirect Quotation Prefixes foe Exchange Rate" Overview screen appears. Click New Entries at the top left side of the screen to go to the screen where you can append a prefix to indirect/direct quotation exchange rate. The New Entries: Overview of Adding Entries screen comes up (Figure 7-3).

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Figure 7-3. The screen where you assign prefix to exchange rates quotations

Enter prefix / (forward slash) in I (indirect) field as in Figure 7-3 and save your customizing by clicking the Save button at the bottom right of the screen.

# **Define Translation Ratios for Currency Translation**

In this activity, we will specify the ratios for each currency pair and for each exchange rate type. For example, we specify 01/08/2022 the exchange rate for USD is calculated as a 1:1 ration. This translation ratio will apply during currency translation and will be displayed during exchange rate translation. To go to the screen to define your currency translation ratio use this menu path: *IMG: SAP NetWeaver* > *General Settings* > *Currencies* > *Define Translation Ratios for Currency Transaction*.

A warning screen is displayed with a message that changes to the table of translation factor may cause unwanted inconsistencies in the system (Figure 7-4).

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*Figure 7-4.* Warning of possible inconsistencies because of changes to the table of translation factor

Click the Yes button at the bottom left of the Warning screen to confirm your action. The **Change View "Currencies: Translation Ratios": Overview** screen is displayed. This is the screen where you maintain the translation ratio for your currency translation. Click the New Entries at the top left of the screen to go to the **New Entries: Overview of Added Entries** screen where you will define your translation ratio.

## Update the following fields

**ExRt**: This field allows you to specify an exchange rate for your currency pair. For example, M is the standard translation at average rate. Enter the exchange rate that you want to use in this field. In this activity, we used M (average rate). When you use exchange rate type M, you can easily determine the bank selling or bank buying exchange rate by adding or subtracting the exchange rate from the average rate.

There is no hard rule about the exchange rate type you use here. You can use any of the three exchange rate types, (G-bank buying rate, B-bank selling rate, and M-average rate), but we advise that you stick to your company's standard exchange rate type.

**From/To:** Enter your currency pair. In this activity, we used USD/GBP as our currency pair.

**Valid From**: This is the date you want your exchange rate translation to be valid from. It is recommended that you use the current date.

**Ratio (From)**: Enter the ratio you want to use for your currency translation in this field. In this activity, we used a ratio of 1:1.

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Figure 7-5. Definition of translation ratio for currency pair

Save your translation ration by clicking the Save button at the bottom right of the screen.

### **Enter Exchange Rates**

Exchange rates are used to translate one currency to another and are defined on a period basis (valid from) and this plays an important role:

- During posting and clearing, because they are used to translate foreign amounts posted and cleared to company code code's currency (local currency).
- Determine the gain or loss arising from exchange rate differences.
- Valuate open item and balance sheet accounts in foreign currency during closing process.

Exchange rate setting is applicable to all company codes. Exchange rate type *M* is supplied by SAP. It is advisable to use it for foreign currency translation during documents posting or clearing in Exchange rate – *ExRt*. It is compulsory that exchange rate type must exist in the system, and this exchange rate is applicable to all company codes.

Specify the following conversion objects for:

- Exchange Rate type.
- Valid from.
- Currency codes.

To enter your exchange rate, use this menu path: *IMG: SAP NetWeaver* ➤ *General Settings* ➤ *Currencies* ➤ *Enter Exchange Rates*.

The **Change View "Currency Exchange Rates": Overview** screen is displayed. Click New Entries at the top left side of the screen to go the screen where you will specify your exchange rate. The **New Entries: Overview of added Entries** screen is displayed (Figure 7-6).

Update the following fields:

**ExRt:** Enter the exchange rate that you want to use in this field. We recommend that you use M (average) rate as your exchange rate type.

**Valid from:** This is the date you want the system to recognize as the date your exchange rate will be valid from. We recommend that you use the current date (today's date).

**From/To**: Enter your currency pair in this field. In this activity, we used USD/GBP as our currency pair.

**Dir.quot.**: Since we are using direct quotation for our exchange rate, enter the exchange rate for USD and GBP in this field.

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Figure 7-6. General settings for exchange rate

Save your exchange rate customizing.

# Summary

This chapter explained how to maintain currency types and currency pairs in SAP ERP. We looked at why it is necessary to specify a currency for each transaction entered in the system. This must be done so that the system can manage the currency ledgers properly. We also looked at various exchange rate types represented by SAP and learned the various steps involved in maintaining exchange rate for each exchange rate type.

We explore how to maintain direct and indirect quotations and how to append prefixes to exchange rate quotations. We also walked through the steps involved in setting prefixes in SAP ERP using three scenarios. We learned how to define translation ratios for currency translation and how to specify translation ratios necessary for currency translations.

Finally, we explained the importance of the exchange rate and the role exchange rate plays when posting or clearing transactions in foreign currencies. We also went through the steps involved in customizing exchange rates and exchange rate ratios.

Chapter 8 looks at how to maintain goods receipt/invoice receipt (GR/IR) clearing and looks at how to maintain accounts for automatic postings during GR/IR clearing.