Foreign Exchange

Release 4.6C

SAP™

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Foreign Exchange

Purpose

The Foreign Exchange component of the SAP Treasury System covers the entire business process involved in traditional foreign exchange dealing in addition to trading with OTC currency options. The functions offered support you throughout the whole trading process, starting from concluding the transaction in the front office, through processing in the back office to transferring data to Financial Accounting. SAP also offers various evaluation options for reporting purposes.

Integration

TR-TM allows you to analyze the effects of forex trading on the liquidity situation of your company as well as the resulting currency risks. You receive the current market data via realtime datafeed.

In the Foreign Exchange area, you have access to the functions for period-based accrual/deferral, key date valuation and foreign currency valuation, as well as to the profit and loss statement function.

Features

Forex trading incorporates the following product types.

- **Spot exchange and forward exchange transactions**

- **Forex swap transactions**

- **OTC currency options**

Currency options are handled in derivative financial transactions.

The following diagram illustrates the transaction and position management process using a foreign exchange transaction as an example:

Foreign Exchange

Release

Trading	→	Back office	→	Accounting

- **New investment**

- **Order/contract**

- **Exercise/Expiration**

- **Rollovers**

- **Reversals**

- **Transaction history**

- **Exercise of rights**

- **Settlement/control**

- **Interest rate adjustment**

- **Netting**

- **Confirmation letters**

- **Reversals**

- **Transaction history**

- **Postings**

- **Reversals**

- **Foreign currency valuation**

- **Key date valuation**
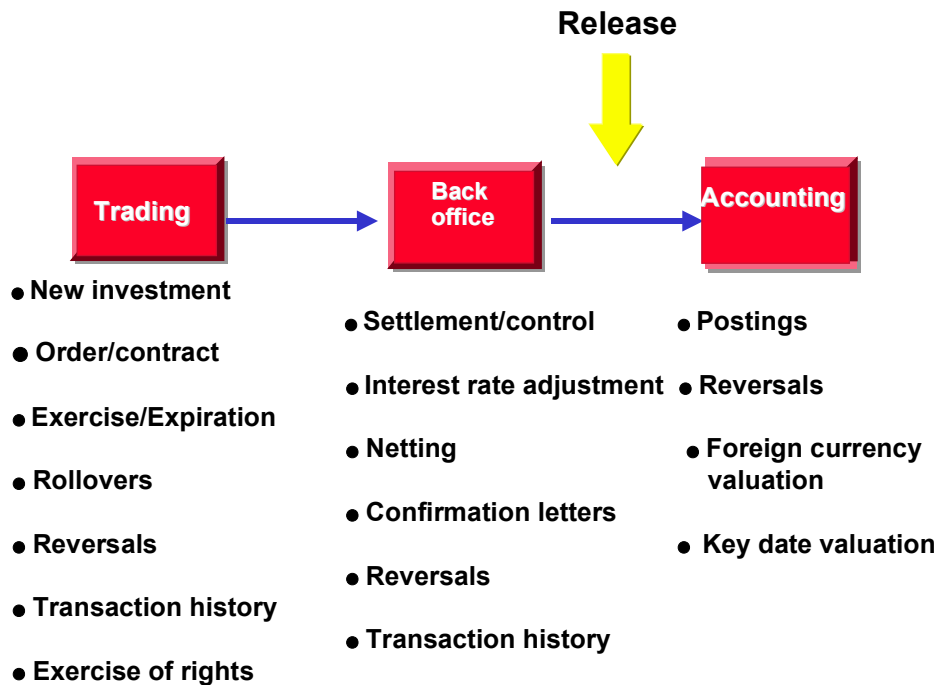
To enter the Foreign Exchange module:

Choose *Accounting → Treasury → Treasury Management → Foreign Exchange*.

The following sections give you an overview of the functions in the Foreign Exchange area.

Trading

Use

The trading area contains the main functions for entering financial transactions. You can enter transactions, call up information on existing transactions, or make changes to transactions at a later date.

In the Money Market, Foreign Exchange, and Derivatives areas, you can also give notice on and roll over transactions.

Prerequisites

You have to enter the master data before you can create a financial transaction in the trading area.

In the Money Market, Foreign Exchange, and Derivatives areas, this means entering master data for the respective business partner in the role of Treasury partner.

Before you create a securities order, you must enter the issuer, the depository bank, and the securities class data in the Securities area.

Features

The collective processing function simplifies the transaction management process by displaying a list of all the transactions with common selection criteria. From here, you simply click a button to branch to the various processing options.

To speed up processing, there is a **Fast entry** function in the Money Market and Foreign Exchange areas for the most common transactions. The Money Market area also has a **Fast processing** function.

The trading area also includes some **Utilities**:

- **Date check** (to determine whether the requested due date falls on a workday).

- **Option price calculator**, which you use to compare the option prices requested with your own calculations based on market data (only in the Foreign Exchange and Derivatives areas).

- **Securities account cash flow** in the Securities area, which displays all the flows for a security in a particular securities account.

The specific characteristics of certain products call for other activities, which you can carry out in the trading area.

These are order execution and order expiration as well as knock-in/knock-out activities for OTC transactions. In the Securities area, you can exercise different rights (conversion rights, subscription rights, exercise warrants, and detach warrants).

Spot/Forward Transaction

Use

With spot transactions, internationally traded currencies are bought and sold on the value date at spot prices. With forward transactions, the currencies are traded at a certain time in the future and the relevant markups/markdowns for calculating the forward rate are specified.

Prerequisites

Prior to using transaction management, you must maintain master data. You must

- Create your Business partners [Ext.], assign the corresponding roles to them and maintain the transaction authorizations. Processing of forex transactions requires that the banks have been defined in the system as authorized business partners with the relevant payment details.

- Set up Standing Instructions [Ext.] (correspondence, payment details) and release the business partner.

You must also make the following settings in Customizing:

- Definition of the product type (as long as you would not like to use standard product types, you can define them individually). Based on the product types, financial transactions are created and managed, and positions are managed. Example of a product type: *Forex.*

- Definition of the transaction type. The financial transaction type determines what types of transactions can be carried out with a certain product type and controls the transaction and position management process. Example: *Spot transaction.*

- Definition of the flow type. Flow types describe different changes to the payment flows. Example: *Sale of currencies.*

- Assignment of the flow type to the transaction type.

For more inofrmation, refer to the relevant unit in the Implementation Guide (IMG).

You can then define forex trading transactions in the system.

Features

You will find detailed information in the units entitled Edit spot/forward transaction [Page 11] and Create spot/forward transaction. [Page 14]

Edit Spot/Forward Transaction

Prerequisites

Refer to the unit entitled Spot/forward transaction [Page 10]

Procedure

Choose *Treasury → Treasury management → Foreign exchange → Trading → Spot/Forward transaction.* This takes you to the initial screen. From here, you can carry out all trading functions for foreign currency transactions. These include:

Function	Entries	Comment
Spot fast entry	1. Choose *Fast entry* 2. You reach a Fast entry screen where you enter only the most important data such as company code, product type, transaction type, partner and structure (purchase, sale, currency).	• The entry of the most common spot exchange transactions is speeded up via fast entry which contains the most important data on an entry screen. • Via the 🖻 *Details entry* function, you reach the detail screen for the transaction created. • Via the 🖩 *Cross rate calculator* function, you can convert currencies. • Via the *Rate proposal* function, you have access to the current rates (datafeed).
Create	You will find information on creating a transaction under Create spot/forward transaction. [Page 14]	

Edit Spot/Forward Transaction

Change	1. Choose *Change.* 2. This takes you to the screen where you can change basic data. 3. Make the necessary changes and save the forex transaction.	• You can now overwrite the active entry fields or you can enter data in the empty fields. • You can branch to the screens for general transaction management to make changes there via the Tab pages [Page 42]. • Changes to the *Rate - Spot - Swap* fields: The value you manually entered when creating the transaction is taken to be a fixed value by the SAP R/3 System. When subsequent changes are made, the values determined by the system are changed and not the manual ones. • The activity can be changed via this function as long as it is not a posting-relevant activity. The last activity in the activity chain is posting-relevant. When you save the posting-relevant activity, the transaction is fixed (the flows are Treasury actual records in the sub-ledger) and the flows are *'flagged for posting'.*
Display	4. Choose *Display.* 5. This takes you to the screen where you can display the basic data.	• The entry fields are not active. • Via the tab pages, you can branch to further screens to get information on the transaction. • Via 🖼️, you can branch to the master data of the business partner.
Forex swap	You will find the necessary entries under Forex swap [Page 16].	
Rollover/Premature Settlement	You can find more information under Object links. [Ext.]	
Reversal	You will find information on the reversal function under Reversal [Ext.].	

History	1. Choose *History*. 2. The SAP R/3 System displays a list of active and reversed activities as well as activities which have been replaced by a follow-up activity. From this list you can call up a display of the individual activities. You also see their status and the user who processed them.	• The History displays the sequence of previous activities related to a selected transaction.

Create Spot/Forward Transaction

Procedure

Entries:

1. Choose *Create.*

2. Make the following entries in the relevant fields: Enter the *Company code, Product type, Transaction type* and the *Business partner.*

3. If the transaction is to be assigned to a portfolio, this must be entered in the specifications area. Alternatively, you can enter the portfolio on the tab page via *Management → Portfolio assignment*.

4. Under Activity, decide whether the transaction should be created as a *Contract* or *Order/Fixing.*

5. If you are working with *External number assignment*, assign a key to the transaction in the relevant field so that it can be uniquely identified within a company code. Otherwise, the number is automatically assigned by the system and confirmed when you save the transaction.

6. Press ✔ **ENTER** to reach the basic data screen. On the tab page, Structure [Ext.], you enter the actual transaction data of the spot, forward/fixing transaction.

7. Press *Enter* to get to the basic data screen. Enter the data required such as *Currencies, Value date, Trading amount* and *Exchange rate*. Alternatively, the rate can be calculated if you enter the two trading amounts. You will find detailed information under Basic data. [Ext.]

8. For forward transactions, you enter the spot rate and the swap rate in the corresponding fields. The resulting forward rate (outright rate) is then automatically shown in the *Rate* field.

9. **Spot + Swap = Rate**   The value you enter manually is recognized by the system as a fixed value. When later changes are made, the values determined by the system are changed, not the manual ones.

10. When you create a *forex fixing transaction*, you enter the following transaction data on the entry screen: contract conclusion, currencies, payment amounts, value date, etc - but **no** rate. You can enter the fixing date manually or allow the system to do so automatically with "Value date minus 2 bank workdays". Rate fixing [Page 88] takes place later within the back office. This can be manual or automatic.

11. Save the forex transaction created.

12. You can also branch to the entry screens for general transaction management (Administration, [Ext.] Cash flow [Ext.], Other flows [Ext.], Payment details [Ext.], Memos [Ext.] and Status [Ext.]) using tab pages.

13. Via the upper applications toolbar, you gain access to further functions via Extras [Page 43] and Environment [Page 44].

⇨

Comments:

- You can display the current rate and swap proposals for the foreign currency valuation. You access the *Cross rate calculator* via *Extras → Cross rates* or by pressing the   *Cross rate calculator* 🖩 button . This provides you with futher support when converting currencies.

- Refer to the units entitled Spot/forward transaction [Page 10] and Edit spot/forward transaction [Page 11].

Forex Swap

Definition

When creating a foreign exchange swap, the SAP R/3 System creates a spot transaction and forward transaction at the same time. The foreign currency bought at the spot rate is sold again at the forward rate. The foreign currency sold at the spot rate is bought back again at the forward rate.

A forex swap is entered via the *combined entry* of a spot exchange transaction and a forward exchange transaction.

Use

Rate and Swap Proposal

The forward rate is automatically determined via an incoming premium or discount. The conditions for the authorized business partner, like the payment details, correspond to those for spot and forward transactions. Provided that you have Realtime Datafeed [Page 167], transactions can also be simulated with rate and swap proposals and, thus, allow direct comparison with the rates agreed. You can use copy functions to speed up input. These functions allow you to copy identical data from the first transaction(spot/forward) into the corresponding field of the second transaction (forward/spot).

Premature Settlement and Rollover

The rollover of a forex swap prolongs the forward transaction - the initial transaction is offset and the forward transaction is newly created with a changed due date. The relevant data is transferred to the forward transaction to be generated as default values. Offsetting with a new transaction is linked to premature settlement. The value date of the new transaction is earlier than the original end of term. You have the *Liquidity effect* field to clear rate differences.

Foreign Currency Valuation

Foreign currency valuations are carried out on the basis of the individual transactions generated. With a forward exchange transaction, you can also have a split valuation with spot and swap transactions provided that the required settings have been made.

Refer to **Object links. [Ext.]**

Procedure

1. Choose *Forex swap*.

2. As when you entered single spot or forward transactions, you need to enter the following data: *Company code, Product type, Transaction type, Business partner.*

3. This takes you to the screen to create the forex swap. The swap entry screen saves you time because you can enter two forex transactions simultaneously.

4. Select the copy function in the following lines: *Buy, Sell, Spot*

5. Enter the following data for the first transaction: *Currency, Amount traded, Spot rate, Value date.*

6. Enter the following data for the second transaction: *Swap rate, Alternative value date.*

7. It is not possible to enter payment details as the forex swap involves input help. You enter the payment details in both individual transactions.

8. Press the **ENTER** button. The SAP R/3 System calculates the corresponding forward rate, enters the missing amount details and any missing transaction data. You can then save the data.

Example:

Forex Swap: Data Screen	

Company code	1000 **IDES AG**	**Transaction** 300003
Product type	60A **Forex -external**	

Contract

Trader	Bockmayer
Date	08/09/YYYY
Time	12:00:12

Partner

1000000002	Berliner Sparkasse / 10340
Business partner	

1st trans.

X **Purchase**	USD 20,000,000
Sale	DEM 34,000,000
Rate	1.70
Value date	09/15/YYYY

2nd trans.

DEM	34,200,000
USD	20,000,000
	1.71
	10/30/YYYY

Tab Pages

Use

When editing a transaction, you can branch to the entry screens for general transaction management. You can use tab pages to navigate between screens.

Structure

- Structure [Ext.]

- Administration [Ext.] with Account assignment reference. [Ext.]

- Other flows [Ext.]

- Payment details [Ext.] with Input help for payment details [Ext.]

- Cash flow [Ext.]

- Memos [Ext.]

- Status [Ext.]

Via the *Conditions* pushbutton on the upper applications toolbar, you get to the *Condition overview*. You will find further information in the unit entitled Condition details. [Ext.]

Other tab pages:

- Underlying (Currency option)

- Outgoing flows (Swap)

- Incoming flows (Swap)

- Interest adjustment data [Ext.] (Cap/Floor)

Extras

Use

Under *Extras* in the upper applications toolbar, you have the following functions:

Structure

- Effective interest rate [Ext.]: This function allows you to calculate the effective interest rate and have it updated in the database when processing transactions in Money market.

- **Amount overview**: Specification of the whole capital amount in the position currency and of the interest amount.

- **Calendar**

- Option price calculator [Page 54]

- **Cross-Rates** : In forex trading, you have the additional function, cross rate calculator, which is used to convert currencies.

- **NPV calculation**

- **User data**

- **User information**

Environment

Use

You will find the following functions in the upper applications toolbar under Environment:

Structure

- Worklist [Page 67] or pushbutton 📧

- Object links [Ext.] (Links to the respective transaction)

- Change documents for transaction [Page 130]

- Regulatory reporting [Ext.] (in Money market)

Standard Option

Use

With a forex standard option (also known as OTC option - Over The Counter -), the purchaser has the right to receive a fixed forex amount on the exercise date at a fixed rate he determined in advance. The purchaser pays a premium for this which depends on demand and supply on the currency market.

OTC currency options are asymmetrical hedging instruments - that is, rights and obligations between the purchaser and seller are distributed unevenly.

Unlike listed instruments, these options with any structure characteristics are directly traded between business partners.

The main difference compared to the forward exchange transaction is that the purchaser of an option has the right, but not the obligation, to purchase or sell a certain currency amount.

🗨 Call and Put (you will find further information under Term explanation [Page 29] and Input help [Page 30]).

Integration

You can also enter the standard (currency) option via *Derivatives → OTC option*.

Forex trading		Derivatives
Standard option	=	OTC currency option

Prerequisites

Prior to using transaction management, you must maintain master data. You must

- Create your Business partners [Ext.], assign the corresponding roles to them and maintain transaction authorizations. Processing of forex transactions requires that the banks have been defined in the system as authorized business partners with the relevant payment details.

- Set up Standing instructions [Ext.] (correspondence, payment details) and release the business partner.

You must also make the following settings in Customizing:

- Definition of the product type (as long as you do not wish to use the standard product types, you can define these individually). Based on the product types, financial transactions are created and managed, and positions are managed. An example of a product type: *Forex.*

- Definition of the transaction type. The financial transaction determines the types of transactions that can be carried out with a certain product type and also controls the transaction and position management process. Example: *Spot transaction.*

- Definition of the flow type. Flow types describe different changes to the payment flows. Example: *Sale of foreign currencies*.

- Assignment of the flow type to the transaction type.

Standard Option

Refer to the corresponding unit in the Implementation Guide (IMG).

You can then define forex trading transactions in the system.

Features

You will find detailed information in the units entitled <u>Edit standard option [Page 23]</u> and <u>Create OTC option. [Page 26]</u>

Edit Standard Options

Prerequisites

Refer to the unit entitled Standard option. [Page 21]

Procedure

Choose *Treasury → Treasury management → Foreign exchange → Trading → Standard option*. This takes you to the initial screen. From here, you can carry out the certain functions. These include:

Function	Entries	Comment
Fast entry	1. Choose *Fast entry* 2. You reach a Fast entry screen where you enter only the most important data such as company code, product type, transaction type, partner and structure (purchase, sale, currency), strike and exercise date.	• The entry of the most common currency options is speeded up via fast entry which contains the most important input data on an entry screen. • Via the 🖼 *Detail entry* function, you reach the detail screen for the transaction created. • The 🖼 Cross rate calculator allows you to convert currencies. • You can get the current rates via the *Rate proposal* function (Datafeed).
Create	You will find information on creating a standard option under Create OTC option [Page 26].	

Edit Standard Options

Change	1. Choose *Change.* 2. The screen for changing basic data appears. 3. Make the necessary changes and save the forex transaction.	• You can now overwrite the data in the active entry fields or you can enter data in the empty fields. • Via the Tab pages [Page 42], you can branch to the screens for general transaction management to make changes there if necessary. • You can use this function to change the activity provided that it is not a posting-relevant activity. The last activity in the activity chain is posting-relevant. When you save the posting-relevant activity, the transaction is fixed (the flows are actual Treasury records in the subledger) and the flows are *'flagged for posting'*.
Display	4. Choose *Display*. 5. This takes you to the screen where you can display the basic data.	• The entry fields are not active. • You can branch to further screens using the tab pages to access information on the transaction. • Via 🔲, you can branch to the master data of the business partner.
Option spread	You can find more information on this under Object links. [Ext.]	
Exercise	1. Choose *Exercise* 2. This takes you to the screen where you can display the basic data. 3. The option is saved in the relevant activity category.	• When an option is exercised with cash settlement, the settlement amount is calculated on the basis of the difference between the strike and market price. With physical exercise, the spot transaction is automatically generated from the underlying transaction (option).
Expiration	1. Choose *Expiration* 2. This takes you to the screen where you can display the basic data.	• If the option has no value, it is deleted. As with exercise, depending on the processing category, it may be necessary to settle the expiration once again.

Give notice	3. Choose *Give Notice* 4. This takes you to the screen headed *Give Notice on OTC Options.*	• A possible settlement payment can be manually entered. • This function is used to represent premature sale.
Reverse	You will find information on reversing standard options transactions under Reverse [Ext.].	
History	1. Choose *History* 2. The SAP R/3 System displays a list of active and reversed activities as well as activities which have been replaced by a follow-up activity. From this list, you can branch to a detailed display of the individual activities. You also see their status and the user who processed them.	• The History displays the sequence of previous activities related to a selected transaction.

Create OTC Currency Option

Procedure

1. Choose *Create.*

2. Enter the *company code, product type, transaction type* and *business partner.* When you create a currency option, you are documenting the purchase/sale intention for a currency option.

3. If the transaction is to be assigned to a *portfolio,* enter this in the specifications area*.* Alternatively, you can enter the portfolio on the tab page via *Management → Position assignment.*

4. In the *Activity* area, choose whether the transaction is to be created as a *Contract* or an *Order*.

5. If you are working with *external number assignment*, you must assign a key to the transaction in the relevant field so that it can be uniquely identified within a company code. Otherwise, the number is automatically assigned by the system and confirmed when you save the transaction.

6. Press ✅*Enter* to reach the basic data screen for the option. Structure [Ext.] on the tab page allows you to enter the actual transaction data of the purchase/sale.

7. A dialog box can appear here if you have assigned several flow types to a flow category in Customizing.

   Possible flow types: Option premium (OTC) or option premium (balance sheet-relevant).

   On the following screen, you enter option-relevant data alongside the underlying forex spot or forward exchange transaction. You will find more detailed information on the individual fields via Basic data. [Ext.]

8. The *Option* area contains the following fields:

- The *Due date (Exercise date)* is the date on which the option may be exercised.

- In the field, *Exe,* you can determine the type of exercise (European or American).

- *Settlement* differentiates between physical or cash settlement.

- You can predefine both of these input parameters in Customizing by maintaining the product types.

- You should enter the option data in the areas headed *Purchase, Rates* and *Sale* in the same way as when you entered data for a forward exchange transaction/spot transaction/forward transaction. You will find further Input help [Page 30] for transactions created with the local currency.

- As well as the currency keys, the traded amount and a rate fixed in advance (*Strike price*) must be entered.
  The *Value date* is the delivery date when the option is exercised. (The delivery date is generally two workdays after the exercise date).

-

- 9. The *Purchase/Sale premium* area contains the following input fields:

- The *payment date* under the heading *Premium* is the date on which you pay the option premium. Refer to Conditions detail: Option premium. [Ext.] You branch to the Option price calculator [Page 54] via *Extras* → *Option price calculator* to calculate the option premium.

- The option price is shown in points in the field, *Pts*. Otherwise, you must enter the premium amount manually.

- You must enter the code of the currency in which the premium is paid in the field marked *Curr.*

- If this currency is the currency of the currency pair involved in the option, the SAP R/3 System calculates the amount automatically after the option price is entered.

10. As the option premium is normally posting-relevant, the entry of a zero amount, at the latest, when posting takes place, leads to an error. To be able to represent free options as well, you must also define a non-posting-relevant flow type for the option premium in Customizing and assign this to the respective product type. When you create the transaction, a dialog box appears from which you choose the required flow type for the option premium (posting-relevant, not posting relevant).

11. You can branch to the entry screens of general transaction management (Management [Ext.], Cash flow [Ext.], Other flows [Ext.], Payment details [Ext.], Cash flow [Ext.], Memos [Ext.] and Status [Ext.]). There are tab pages to allow you to navigate between screens.

12. Via *Underlying*, you get to the transaction underlying the option.

13. In the upper applications toolbar, you have access to further functions via Extras [Page 43] and Environment [Page 44]

14. Save your currency option.

Comments:

− OTC currency options/standard options are assigned to both forex trading (standard options) and the derivatives area (OTC options) and can be created in both areas. The input logic for derivatives is the same as that for other option types allowing you to branch from the option data to separate input for underlyings (in the case of currency options, the spot transaction).

− When the transaction is concluded, the transaction consists only of the premium. Both European and American options can be portrayed in the SAP R/3 System *(Settlement).*

  For premium and market data calculations, the ⊞ Option price calculator is available. You use the ⊞ Cross rate calculator to convert currencies.

− Refer to the units entitled Edit standard option [Page 23]and Edit OTC option [Page 36]

Create OTC Currency Option

Call and Put - Explanation

Definition

When you purchase a currency option, you have the right but not the obligation to

- purchase the currency (Call)

- sell a currency (Put)

- AT a price fixed in advance

- AT a point in time fixed in advance (European option) or within a period of time fixed in advance (American option)

- make a payment of a fixed premium option to the vendor

The vendor is obliged to purchase/sell on the exercise date.
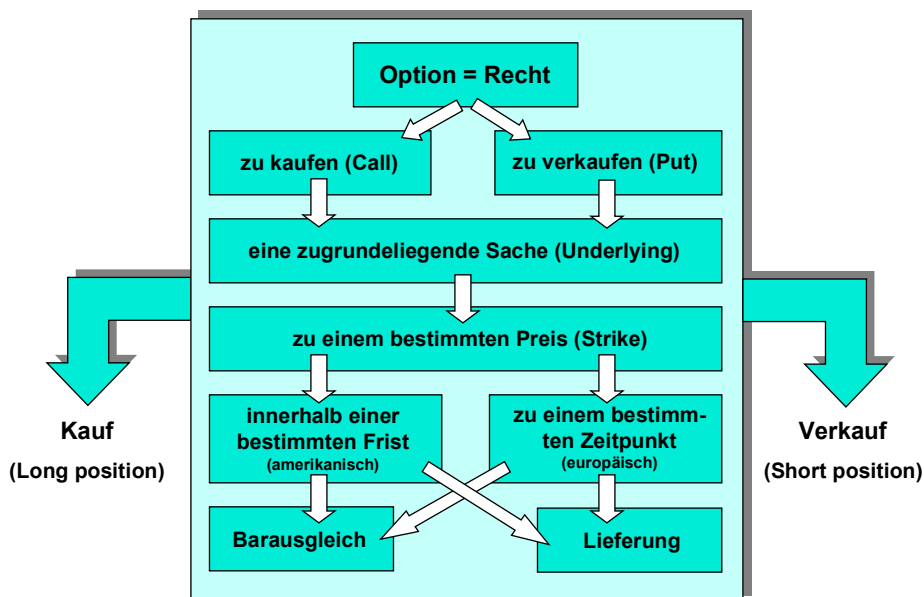
Input Help for Calls and Puts

Features

With the help of this matrix, you get an overview of the 4 different possible entries for creating a currency option transaction with your local currency.

Transaction type:	Purchase option	Sale option
Underlying (Spot transaction):		
Purchase foreign currency with local currency	**Long Call**	**Short Put**
Sell foreign currency for local currency	**Long Put**	**Short Call**

You fix the short/long positions when you enter the transaction type i.e. purchase or sell the option.

You fix the call/put positions in the underlying. There are two possibilities:

- If one of the two currencies is the local currency, the foreign currency is used to decide whether a call or put is involved. Example: Purchase USD, sale DEM, result: USD-Call.

- If both currencies are foreign curencies, the leading currency in the settings table determines whether a call or put is involved (refer to Define leading currency.) [Ext.]

Example:

You want to sell a call in a foreign currency (short call). The following entries are required for this:

1. Choose transaction type, *Sale*, in the initial screen.

2. Enter your *Local currency* in the *Purchase* field.

3. Enter the *Foreign currency* in the *Sale* field.

4. *Exercise date, Strike* and *Premium sale data* are further mandatory fields.

5. Save the *Short call* you have created.

You can get detailed information via Basic data. [Ext.]

Tab Pages

Use

When editing a transaction, you can branch to the entry screens for general transaction management. You can use tab pages to navigate between screens.

Structure

- Structure [Ext.]

- Administration [Ext.] with Account assignment reference. [Ext.]

- Other flows [Ext.]

- Payment details [Ext.] with Input help for payment details [Ext.]

- Cash flow [Ext.]

- Memos [Ext.]

- Status [Ext.]

Via the *Conditions* pushbutton on the upper applications toolbar, you get to the *Condition overview*. You will find further information in the unit entitled Condition details. [Ext.]

Other tab pages:

- Underlying (Currency option)

- Outgoing flows (Swap)

- Incoming flows (Swap)

- Interest adjustment data [Ext.] (Cap/Floor)

Extras

Use

Under *Extras* in the upper applications toolbar, you have the following functions:

Structure

- Effective interest rate [Ext.]: This function allows you to calculate the effective interest rate and have it updated in the database when processing transactions in Money market.

- **Amount overview**: Specification of the whole capital amount in the position currency and of the interest amount.

- **Calendar**

- Option price calculator [Page 54]

- **Cross-Rates** : In forex trading, you have the additional function, cross rate calculator, which is used to convert currencies.

- **NPV calculation**

- **User data**

- **User information**

Environment

Use

You will find the following functions in the upper applications toolbar under Environment:

Structure

- Worklist [Page 67] or pushbutton 📇

- Object links [Ext.] (Links to the respective transaction)

- Change documents for transaction [Page 130]

- Regulatory reporting [Ext.] (in Money market)

Exotic Option

Use

Trading and processing of exotic options allows you to control liquidity in your company and recognize, analyze and hedge currency risks.

Integration

Exotic options/OTC options are assigned to forex trading (exotic option) and derivative financial instruments (OTC option) and can be created in both areas. The entry logic for derivatives is the same as for the other option types so that you can branch from the option data to the separate entry of the underlying.

Forex trading		Derivatives
Exotic options	=	OTC option

Prerequisites

Prior to using transaction management, you must maintain master data. You must

- Create your Business partner [Ext.], assign the corresponding roles to it and maintain the transaction authorizations. The processing of financial transactions requires that the corresponding banks have been defined in the system as the authorized business partners with the relevant payment details.

- Set up Standing instructions [Ext.] (correspondence, payment details) and release the business partner.

You must also make the following settings in Customizing:

- Definition of the product type (as long as you do not wish to use the standard product types, you can define these individually). Based on product types, financial transactions are created and managed, and positions are managed. Example of a product type: *Forex.*

- Definition of the transaction type. The financial transaction determines what types of transactions can be carried out with a certain product type and also controls the transaction and position management process. Example: *Spot transaction.*

- Definition of the flow type. Flow types describe different changes to the payment flows. Example: *Sale of forex.*

- Assignment of the flow type to the transaction type.

Refer to the corresponding unit in the IMG.

You can then define forex transactions in the system.

Features

OTC option:	Corresponding underlying:
Currency barrier option [Ext.]	Forex spot transaction with additional barrier [Page 11]
Swaption [Ext.]	Swap [Ext.]
IRG [Ext.]	FRA [Ext.]

| Bond option [Ext.] | Security created as class [Ext.] |
| Compound option [Ext.] | Currency option [Ext.] |

Refer to the unit entitled Edit OTC option [Page 36]

Edit OTC Option

Prerequisites

For more information, see Exotic Option [Page 34] and OTC Option [Ext.].

Procedure

Choose *Treasury → Treasury Management→ Derivatives → Trading → OTC options* or *Foreign exchange → Trading→ Exotic options.* This takes you to the initial screen for trading. From here, you can carry out all trading functions. These include:

Function	Entries	Comment
Create	For more information on creating OTC transactions, see Create OTC Options [Page 26]	• You can also create an OTC option (currency and currency barrier option) via the entry screen in forex trading. ⚠️ Note the following differences: • When entering data in the Derivatives area, you can branch to the underlying transaction via the tab index, **Underlying**. • In forex trading, you will find the additional function, the **Cross rate calculator.** You can convert currencies using the cross rate calculator.

Change	1. Choose *Change.* 2. Make the following entries in the relevant fields: *Company code, transaction.* 3. The screen for changing the structure appears. 4. Make the necessary changes and save the OTC transaction.	• You can now overwrite the active entry fields or you can enter data in the empty fields. • Using the Tab pages [Page 42], you can branch to screens for general transaction management to make changes there if necessary. • The activity can be changed using this function as long as it is not an activity that is relevant for posting. The last activity in the activity chain is posting-relevant. When you save the posting-relevant activity, the transaction is fixed (the flows are Treasury actual records in the subledger) and the flows are *'flagged for posting'.*
Display	1. Choose *Display* 2. Make the following entries in the relevant fields: *Company code, transaction.* 3. The screen for displaying the structure characteristics appears.	• The entry fields are not active. • Using the tab pages, you can branch to further screens to display information on the transaction. • Using 🔃, you can branch to the master data of the business partner.

Edit OTC Option

Knock-In	1. Choose *Knock-In* 2. Make the following entries in the relevant fields: Company code, Barrier transaction number. 3. This takes you to the screen where you can display the basic data. The transaction has the activity category, **Knock-in**.	• If a barrier option has reached the agreed limit or barrier, you have to knock in the option by choosing this menu option (see Barrier option [Ext.]). • Using the **knock-in** activity, the option is activated for **exercise** or **expiration**. • Depending on the processing category, settlement can be a prerequisite for knock-in. • You can check the in/out strikes of currency barrier options with the *Expiration/barrier check (→*Collective processing)*. By comparing the transaction data with the relevant rates, the SAP R/3 System proposes a transaction (knock-in knock-out or expiration), for further processing of the transaction. • You can access the *barrier* input screen from here.
Knock-Out	1. Choose *Knock-Out* 2. Make the following entries in the relevant fields: *Company code*, *Barrier transaction number*. 3. The screen for displaying the basic data appears. The transaction has the activity category, **Knock-out**.	• If a barrier option reaches the agreed limit or barrier, you have to knock it out by choosing this menu option. • Using the **Knock-Out** activity, the option is activated for expiration. • You can also call up the *barrier* entry screen via the application toolbar.

Exercise	1. Choose *Exercise*. 2. The screen for displaying the basic data appears. 3. The option is saved in the relevant activity category.	• You cannot exercise an OTC transaction until it has the activity *Order*, *Knock-in* or *Knock-out*. • You must first process a knock-in option using the *Knock-in* process. • When an option is exercised with cash settlement, the settlement amount is calculated on the basis of the difference between the strike and market price. In the case of physical exercise, the spot transaction is automatically generated from the base transaction (option). • To transfer unrealized gains and losses that have already been posted, you must start the report entitled "Determination of realized gains/losses".
Expiration	1. Choose *Expiration*. 2. The screen for displaying the basic data appears.	• If the option has no value, it is deleted. As with exercise, depending on the processing category, you may have to settle the expiration again in the back-office area.
Give notice	1. Choose *Give Notice*. 2. The *Give Notice on OTC Option* screen appears.	• When you give notice on an OTC option, the transaction remains active and transfers to the activity category, *Notice*. When this transaction is valued again, postings of unrealized gains and losses that have already been made are reset. • When you give notice, you offset the OTC option.
Reverse	For more information on reversing OTC options, see [Reverse [Ext.]]().	
History	1. Choose *History*. 2. The system displays a list of active and reversed activities as well as activities that have been replaced by a follow-up activity. From this list, you can branch to a detailed display of the individual activities. You also see their status and the user who processed them.	• The *History* displays the sequence of previous activities related to a selected transaction.

OTC Options

Procedure

1. Choose Create.

2. Enter the *company code, product type, transaction type* and *business partner.*

3. If the transaction is to be assigned to a *portfolio,* please specify this. Alternatively, you can enter the portfolio on the tab page via Administration → *Portfolio assignment.*

4. Decide whether the transaction is to be created as a *contract* or *order* in the *Activity* area.

5. If you are working with *external number assignment*, specify a key for the transaction in the corresponding field so that it can be uniquely identified within a company code. Otherwise, the number is automatically assigned by the system and confirmed when you save the transaction.

6. Choose ✔ *Enter* to access the basic data screen for the option. On the Structure [Ext.] tab page, enter the actual transaction data for the purchase/sale.

7. A dialog box can appear here if several flow types have been assigned to a flow category in Customizing.

🗨 Possible flow types: Option premium (OTC) or balance sheet-relevant option premium.

8. The following fields must/can be filled with transaction data:

Area: Structure - Exercise date, exercise type and settlement (refer to the unit entitled Basic data - Derivatives). [Ext.]

Enter the underlying transaction via *Underlying*. The fields on the entry screen on the tab page depend on the type of option transaction (product type) - that means that a different entry screen appears depending on the product type.

Enter the values required in the *Premium* area.

9. Enter the barriers required for knock-in or knock-out options via *Edit → Barriers or* via the Barriers button.

10. In order to assign the transaction entered as a counter transaction to an existing transaction, you can use the extra fields in the administrative data. Both transactions are handled separately.

11. In the case of a disclaimer, bost transactions must have notice given on them in the system.

12. You can also branch to the entry screens of general transaction management (Administration [Ext.], Cash flow [Ext.], Other flows [Ext.], Payment details [Ext.], Memos [Ext.] and Status [Ext.]).

13. In the upper applications toolbar, you have access to further functions via Extras [Page 43] and Environment. [Page 44]

14. To save the basic data, choose *OTC Option → Save.*

15. Refer to the unit entitled OTC option [Ext.].

Prerequisites

Corresponding *underlyings* are included in the definition of product types. A spot exchange transaction is, for example, defined as an underlying in currency options. In general, underlying transactions are automatically generated in physical exercise. You can enter alternative payment methods for the option due to this separation into two transactions.

OTC currency option

Underlying

Prod. type	**60a**	**Forex - external**	**Strike 1.70**
Transaction	**101**	**Spot transaction**	**Pmnt amnt 3,400,000 UNI**
Trans. type	**14**	**Call 2,000,000 USD**	

Tab Pages

Use

When editing a transaction, you can branch to the entry screens for general transaction management. You can use tab pages to navigate between screens.

Structure

- Structure [Ext.]

- Administration [Ext.] with Account assignment reference. [Ext.]

- Other flows [Ext.]

- Payment details [Ext.] with Input help for payment details [Ext.]

- Cash flow [Ext.]

- Memos [Ext.]

- Status [Ext.]

Via the *Conditions* pushbutton on the upper applications toolbar, you get to the *Condition overview*. You will find further information in the unit entitled Condition details. [Ext.]

Other tab pages:

- Underlying (Currency option)

- Outgoing flows (Swap)

- Incoming flows (Swap)

- Interest adjustment data [Ext.] (Cap/Floor)

Extras

Use

Under *Extras* in the upper applications toolbar, you have the following functions:

Structure

- Effective interest rate [Ext.]: This function allows you to calculate the effective interest rate and have it updated in the database when processing transactions in Money market.

- **Amount overview**: Specification of the whole capital amount in the position currency and of the interest amount.

- **Calendar**

- Option price calculator [Page 54]

- **Cross-Rates** : In forex trading, you have the additional function, cross rate calculator, which is used to convert currencies.

- **NPV calculation**

- **User data**

- **User information**

Environment

Use

You will find the following functions in the upper applications toolbar under Environment:

Structure

- Worklist [Page 67] or pushbutton 📧

- Object links [Ext.] (Links to the respective transaction)

- Change documents for transaction [Page 130]

- Regulatory reporting [Ext.] (in Money market)

Order

Prerequisites

During its processing, a financial transaction goes through various activities which are indicated in the activity information. You create some transactions as orders (e.g. a currency option) whereas other transactions are created directly as contracts (e.g. a forward exchange transaction). The order allows you to enter the transactions. By entering the order, the cash flow of the transaction is built up. The transactions do not, however, have to be carried out unlike the contract. The contract makes the transaction legally binding.

The order for forward transaction trading must contain the following entries:

- Traded class

- Open or Close

- Business partner

- Securities account

- Purchase or sale

- Number of contracts

- Put or call for options

When an order is entered, the cash flow of a transaction is created. The intended transactions do not have to be carried out unlike with the contract.

Features

An order can be executed for *Currency options, Traded options* and *Futures*.

With orders, you differentiate between Open [Ext.] and Close [Ext.]transactions. Items are created with Open transactions. They are closed again with Close transactions.

The order activity (after settlement, if required) is carried out using the functions, *Execute* or *Expiration.*

Function	Entries
Execute	1. Choose *Trading → Order → Execute.* 2. Make the following entries in the relevant fields: – Company code – Transaction number. 3. Press the **ENTER** button to call up the entry screen for executing the order. 4. If necessary, you can correct the displayed transaction data. 5. Save the transaction. The transaction is saved in activity category, *Contract*.

Order

Expiration	The expiration of the order takes place automatically when the due date is reached. The order can then no longer be executed. i.e the order becomes inactive.
	1. Choose *Trading → Order → Expiration.*
	2. Make the following entries in the relevant fields:
	− Company code
	− Transaction number.
	3. Press the `ENTER` button to reach the entry screen for order expiration.
	4. Enter the expiration date in the field marked *Value date*.
	5. Save the forex transaction. The transaction is saved in activity category, *Contract expiration*.

Offer

Use

The *Offer* function allows you to save all the offers from different banks that are made prior to conclusion of a Forex or Money Market transaction in the system.

This enables you to sort the offers according to their quality (for example, for a forex purchase the lowest rate is the best). Saving the offers of different competitors as transaction data allows you to evaluate the quality and competitiveness of the prices of individual business partners.

You can then accept the best offer and conclude a contract. The contract data is saved.

Features

These functions are available in the Money Market for *Fixed-term deposits,* and in Foreign Exchange for *Forex spot* and *Forward exchange transactions.*

By choosing *Trading → Offer*, you can *create, execute and display* an offer. Using the best offer, you can create a contract directly from the offer data.

Prerequisites

For transactions with activity type *Offer*, you must create your own number range. You assign this number range to the relevant transaction type in the *Number range for offers* field in Customizing for transaction types. These transactions have active status "4".

Activities

To create an offer, enter the significant transaction data such as *company code*, *product* and *transaction type*, *amount*, *term* and/or *value date* and *partner name* (with contact person). Per counterparty, enter the relevant *interest rate* in Money Market and/or the rate for a Forex transaction.

You can now save this data in the short term without having to create an active financial transaction in the *Contract* activity. After you have called up the data again, you can generate a transaction in the *Contract* status is possible.

To create an active financial transaction directly from the entry screen, choose *Execute* from the upper applications toolbar.

The offers are created with their own number range. A contract leading to transaction conclusion is created in the number range for the respective transaction type. All offers as well as the contract are brought together in a *Reference* for offers.

An evaluation report that can be individually configured provides information regarding the number of specified offers and the resulting contracts. This report is included in the Money Market and Foreign Exchange areas: *Report selection → Transaction → Offers*. See also Evaluation - Offers [Page 121].

Simulation

Use

For certain analyses and evaluations in *Market Risk Management*, it is sensible to carry out calculations on the basis of *fictitious transaction data*. Simulated money market or forex transactions are used for this.

The data from a *simulated transaction* can be used as reference for contract conclusion.

Features

Via *Trading → Simulation,* you can *create, change/execute, display* and *delete* simulations.

Activities

To enter simulated transactions, an entry screen is used which has the following input fields for the respective product category:

- Money Market: Product type, transaction type, currency, amount, start of term, end of term, percentage rate, calculation method

- Foreign Exchange: Product type, transaction type, purchase currency, purchase amount, sale currency, sale amount, rate, spot rate, swap rate, value date

The input of characteristics and assignment information allows the grouping of simulated transactions.

　　　　No business partner is required for simulation.

With money market transactions, the input parameters for the interest structure are correspondingly predefined but can be individually changed. The counterparty as well as the payment details cannot be entered.

When saving, the transaction and activity data is stored with the active indicator (active status 5) entitled *simulated*. The data record receives a number from the number range for simulated transactions.

If you decide to change a simulated transaction into a legally binding *Contract*, choose *Execute simulation.* A dialog box appears where you enter the corresponding business partner. The standing instructions for the payment details are also added to and the necessary correspondence data is read. The complete data record is saved as an *active financial transaction* in the *Contract* activity with a new transaction number.

Transaction Management

Use

Collective processing allows user-specific management of transactions in Treasury. Alongside selection and display functions, you can branch to individual processing of transactions.

Functions

Transaction management covers the entry and processing of transactions with the following product categories:

- Fixed-term deposit and deposit at notice

- Commercial Paper

- Cash flow transaction

- Spot exchange transaction and forward exchange transaction

- Interest derivative

- OTC and listed option

- Future

- Security order

Activities

Start of collective processing

Proceed as follows:

Choose *Trading → Collective processing → Transaction management* or *Back office → or Collective processing → Transaction management.* This takes you to the processing screen for collective processing which is split into two areas:

The left hand area of the screen shows selection variants in a freely configured tree view and the right hand area displays the last transaction selection of the user.

Selection of transactions

Collective processing allows you to create the list of trasnactions according to freely definable selection criteria. To enter selection criteria on an entry screen:

1. Choose Worklist → New.

2. This takes you to the entry screen for collective processing. Enter the selection criteria here according to which the list of transaction activities will be created. (e.g.General selections, position assignment, entered/last changed by, etc.).

3. Choose *Execute*.

4. You see a list of selected transactions.

Transaction Management

You can also save as many selection definitions as you want as variants and then manage them in collective processing in the tree view user-specifically or not. All management functions can be accessed via a context menu in the tree view.

To add a variant that you have already defined to the tree view:

1. Click on the tree node under which the variant is to be added with the right mouse button to open the context menu.

2. Then choose *Add → Variant.*

3. Enter the name of the variant being added and confirm via enter.

4. The variant now appears beneath the selected tree node as an independent node.

   Double-click on the node to carry out the selection assigned to the variant.

Visualization of transactions

The list of transactions is displayed with the help of the ABAP list viewer which provides many options for creating lists according to lines and columns, sorting and summation.

Processing of transactions

You can also process the transactions from the collective processing list:

1) Mark the transaction to be processed.

2) Use the right hand mouse button to open the context menu. This displays a selection of functions with which you can process the selected transaction. Alternatively, you can also call up the functions from the button list above the list display.

3) By selecting a function, go to the relevant processing screen from where you can carry out the necessary steps.

Collective Processing: Financial Transaction

Use

The *Collective processing* function gives you an overview of all transactions which you have selected on the basis of various criteria entered in the initial screen.

The Collective processing function helps you to manage your transactions effectively by displaying a list of all transactions with common selection criteria and providing the necessary processing functions. You can branch directly from the processing list to the individual transaction to display detailed information.

You can use collective processing to speed up selection and processing for all financial transactions. You can also carry out all necessary work steps from collective processing (e.g. knock-in or knock-out, exercise or rollover, etc.)

In the Money Market area, you can use a more limited version of collective processing for fixed-term deposits and deposits at notice - Fast processing [Ext.].

Features

	Trading	Back office
Money Market	Fixed-term deposit investment/borrowing.	Fixed-term deposit investment/borrowing
	Deposit at notice investment/borrowing.	Deposit at notice investment/borrrowing
	Commercial Paper purchase/sale	Commercial Paper purchase/sale
	Cash flow transaction investment/borrowing	Cash flow transaction investment/borrowing
Foreign Exchange	Spot/Forward Transaction	Spot/Forward Transaction
	Order	Options
	Options	
	Expiration/Barrier check	
Derivatives	OTC - Interest rate instruments	OTC - Interest rate instruments
	OTC options	OTC options
	Expiration/Barrier check	

Comment: There is only **one** type of collective processing in the Money Market area. Collective processing in the Foreign Exchange and Derivatives areas takes place **separately** according to the product types in the tables.

Collective Processing: Financial Transaction

Activities

To use the *collective processing* function, carry out the following steps:

1. Choose *Trading → Collective processing* or *Back office → Collective processing.*

2. This takes you to the initial screen for collective processing (for example - Collective Monitoring of Options: Expiry/Knock-In/Knock-Out). Enter the selection criteria according to which the list of transactions is to be created (e.g. exercise, current activity category, general selections).

3. Choose *Program → Execute* (or press the *Execute* button on the upper applications toolbar).

4. The SAP R/3 System shows you a list of the selected transactions.

5. By double-clicking on a transaction, you access the basic data screen of the particular transaction.

6. You can also process transactions from the collective processing list:

   a. Select the transaction you wish to process.

   b. Choose the relevant processing function via the menu or via the applications toolbar at the top of the screen.

   c. This takes you to the respective screen for the particular processing function.

   d. Save your changes.

   e. If you leave the processing function, you get to the collective processing list again and can process another transaction.

Utilities

Use

When editing transactions, you have different utility functions available for monitoring your data entries and to facilitate the transaction management process.

Features

In the Money Market, Foreign Exchange and Derivatives areas, you have the Date check [Page 57] function in order to establish whether a due date falls on a workday or not.

Use the NPV calculator [Ext.] for transactions with Commercial Papers to determine the amount to be created.

You can also use an Option price calculator [Page 54]in the Money Market, Foreign Exchange and Derivatives areas in order to compare option prices with your own market-based calculations.

Example: You can use the following utilities in Money Market which support trading:

Partner data

Business partner management

Standing instructions

• **Payment details**
• **Correspondence**
• **Derived flows**

- **Entry and editing help:**
  • **Standing instructions**
  • **Copy functions**
  • **Abbreviations and key structures**
  • **Fast entry**
  • **Collective/fast processing**

- **Automatic checks**
  • **Workdays**
  • **Transaction authorization**

- **Valuation tools**
  • **NPV calculator,**
  • **etc.**

- **Dealing slip**
- **Limit management**
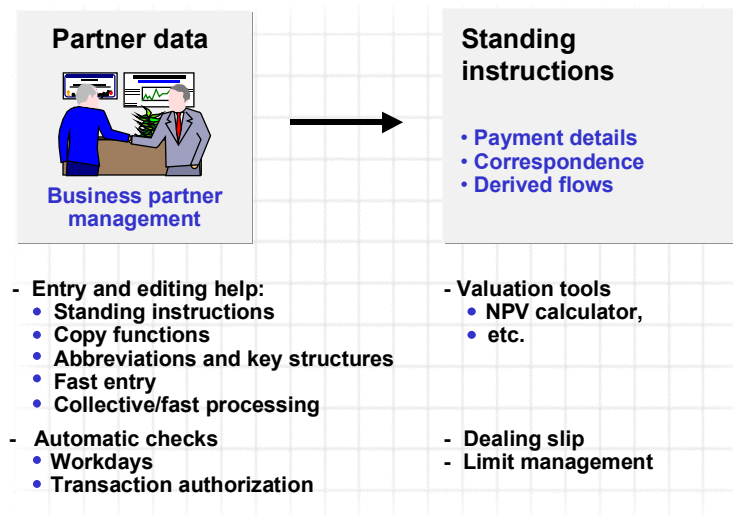
Option Price Calculator

Use

To calculate the value of the Option premium [Ext.], you can directly link to the option price calculator during input:

You can also use the option price calculator to perform market data calculations for *Currency options.*

The option price calculator also delivers the important sensitivities of the respective option alongside the premium. The option premium can be used in the entry screens as a percentage rate of the base transaction (in points) or as a fixed amount.

It takes into account the agreed *Barriers* and *Rebates* that are paid upon expiration of the option if necessary.

You will find further information in the Market Risk Management (MRM) documentation under Option price calculator. [Ext.]

Features

You get to the option price calculator via *Trading → Utilities → Option price calcualtor* or via *Extras → Option price calculator.* Alternatively, you can also press the option price calculator button ▦ .

The option price calculator offers you the following options:

Market data

To perform current market data calculations:

1. Choose *Trading → Utilities → Option price calculator*.

  This takes you to the entry screen, *Premium Calculation for OTC Options.*

2. Enter the following data:

 − Currency pair (e.g. USD/DEM)

 − Start and end date of option term.

3. Press **ENTER**. The term and the value date (plus 2 days after the end of the term) will be entered automatically by the SAP R/3 System in the relevant fields.

4. By pressing *Market data*, all fields in the area of the screen headed *Market data* are filled automatically with current values. Spot rates, interest rates for currency 1 and 2 as well as market volatility.

5. The system uses this data to calculate the swap value.

6. Alternatively, you can enter strike prices for the foreign exchange transaction for 3 Put and Call options.

Swap and forward rate calculation

1. If you wish to calculate swap rates and forward rates, enter the following data in the entry screen: the bid/ask spot rate, the interest rates for the 1st and 2nd currencies and the volatility of the bid/ask rate.

2. If you need to calculate the forward rates and the interest rate of the 2nd currency, enter the following data in the entry screen: the bid/ask spot rate, the interest rate for the 1st currency, the swap rates and the volatility of the bid/ask spot rate.

3. Choose the *Swap/forward rates* function and the corresponding fields are filled automatically.

Calculating premiums

The calculation of the premium is based on: The calculation of the premium is based on: Spot price, strike price, term, interest rates without risk in both currencies, option category and the volatility of the exchange rate.

1. Having calculated the market data, enter the strike price (exercise rate) in the fields, *Put 1* to *3,* and, *Call 1* to *3,* under the heading *Premiums* in the entry screen.

2. Choose *Premiums*.

3. The SAP R/3 System calculates the premium in price points (bid/ask) for European-style and American-style exercise.

Sensitivities

After you determine market data and premiums, you can call up a list of the sensitivities of one premium or all premiums.

To view the *sensitivities* of a premium:

1. Position the cursor on a premium.

2. Choose the *Sensitivities* function. The option sensitivities (Delta, Gamma, etc.) are calculated and displayed in an additional window of this premium.

Implicit volatilities

If you want to find out the *volatility* on which the calculation of a known option premium is based, carry out the following steps:

1. Enter one or more premiums in the area of the entry screen headed *Premiums*.

2. Position the cursor on an entry.

3. Press the *Implicit volatility* button.

4. The calculated implied volatility is displayed in an additional window. You can integrate this volatility into your market data.

List

To display the *sensitivities* of all premiums:

1. Choose *List.*

2. The SAP R/3 System generates a global evaluation/list of all sensitivities.

Option Price Calculator

Exotic Options

1. Choose *Exotic options* to switch to the entry screen for exotic options and choose *Standard options* to return to the entry screen for standard options.

2. The *Premium* area is split up into the following fields: *Category, Basis, Barrier, Rebate.* The premium is calculated in the *European* way.

Premium Calculation for Standard Options		
Mkt data Swap/Forward **Premium** **Sensitivities** Implicit vol. **List**		

Curr. pair

Market data

Spot	1.70900	/	1.71100	**Int rate 1st curr.**	6.4152	/	6.4574
Swap	0.11212-	/	0.10644-	**Int rate 2nd curr.**	3.8005	/	3.8997
Forward	1.59688	/	1.60456	**Volatility**	10.0000	/	10.0000

Premium

	Basis	**European**		**American**	
Put 1			/		/	
Put 2	1.700000	0.06347	/	0.06527	0.06366	/	0.06545
Put 3			/		/	
Call 1			/		/	
Call 2	1.700000	0.04502	/	0.04650	0.04878	/	0.05020
Call 3			/		/	

Date Check

Use

You use **Date check** to determine whether the requested due date falls on a workday. You can also use this function to check a transaction date against two calendars.

Features

Before you conclude a transaction, you can use the *Date check* function to check that a specific date is a working day for both business partners (e.g. a due date).

Activities

You use *Date check* function as follows:

1. Choose *Trading→ Utilities → Date check.*

2. In the two fields marked *Calendar,* enter your own calendar ID (e.g. US for factory calendar US standard**)** and your business partner's calendar ID (e.g. 01 for factory calendar Germany standard).

3. Enter the date to be checked in the fields *Start of term* and *End of term*.

4. Confirm your entries by choosing *Enter*.

5. If the date you have entered is not a workday in your business partner's calendar e.g a due date or fixing date is on a weekend or holiday, the SAP R/3 System will show the previous workday and the next workday.

Back Office

Use

In the back-office area, you process and settle transactions that were entered in the trading area. When you settle a transaction, the system checks and completes it.

Features

Once you have entered financial transactions in the trading area, you settle the transactions in the back-office area. As in trading, the back-office area also enables you to call up information on existing transactions or make changes at a later date. You use the settlement function to monitor and check financial transactions. This enables you to add missing data, such as payment instructions or posting specifications. When you save a settlement activity, the system changes the activity category of the transaction to record how it is monitored and processed in the back-office area.

The back-office area also includes Correspondence [Page 71] functions, such as the function for automatically generating confirmations.

You can also use the collective processing functions in this area. The back-office also includes functions for Netting [Page 83] transactions and for entering or editing References [Page 85].

The Securities area also includes the **position management** functions in the back-office area. These include Securities Account Transfers [Ext.], Corporate Actions [Ext.], Updating Planned Records [Ext.], processing disposition blocks, and the EMU additional functions.

Process Spot/Forward Transaction

Procedure

Choose *Treasury → Treasury Management → Foreign Exchange → Back Office →
Spot/Forward Transaction.* The individual editing functions are:

Function	Entries	Comment
Change	1. Choose *Change.* 2. The screen for changing basic data appears.	• You can now overwrite the active entry fields or you can enter data in the empty fields. • You can branch to further screens via the buttons on the upper applications toolbar.
Display	3. Choose *Display.* 4. This takes you to the screen where you can display the basic data.	• The entry fields are not active. • You can branch to further screens via the buttons on the upper applications toolbar.

Process Spot/Forward Transaction

Settle	5. Choose *Settle* 6. This takes you to *OTC Transaction: Settle Contract* screen. 7. Enter or change settlement data as required by choosing the relevant area in the menu. 8. When you save a settlement activity, the SAP R/3 System changes the activity category of the transaction in order to record how it is monitored and processed in the back office area. 9. The contract can only be posted after settlement.	• Using the *Settle spot/forward transaction* function, you can mark the transaction to indicate that it has been processed in the back office. • As in Trading, the back office area also enables you to call up information about existing transactions or make later changes to them. You can monitor and check transaction activities with the settlement function. You can also add missing data such as payment instructions or posting details. • In Customizing, you can use the settlement category to control whether the transaction is to be *settled/monitored.* If you have defined a processing category that contains settlement activities for the product category, spot/forward transaction, in Customizing via Define transaction types, then a trader must create a spot/forward transaction in the trading block and it must be settled/monitored by a different user in the *Back office.*
Reverse	You will find information on the reversal function under [Reversal](#) [Ext.].	
History	1. Choose *History* 2. The SAP R/3 System displays a list of active and reversed activities as well as activities which have been replaced by a follow-up activity. From this list, you can branch to a detailed display of the individual activities. You also see their status and the user who processed them.	• The History displays the sequence of previous activities related to a selected transaction.

Process Standard Options

Use

You use this function to settle financial transactions for the contract activity. The flows for the sale/purchase in the *Plan* status are changed to the *Actual* status.

As in trading, you can call up information on transactions entered or make subsequent corrections. Via the settlement function, you can monitor transaction activities. You can add missing information such as payment instructions or posting details.

Example: For the product category, Fixed-term deposit, you define processing category 00002.

Procedure

Choose *Treasury → Treasury management → Foreign exchange → Back office → Standard option.* The individual processing functions are:

Function	Entries	Comment
Change	1. Choose *Change.* 2. The screen for changing basic data appears.	• You can now overwrite the active entry fields or you can enter data in the empty fields. • Via the Tab pages [Page 42], you can branch to the screens for general transaction management to make changes there if necessary.
Display	3. Choose *Display.* 4. This takes you to the screen where you can display the basic data.	• The entry fields are not active. • You can branch to further screens via the tab pages • Via 🔍, you can branch to the master data of the business partner.

Process Standard Options

Settle	5. Choose *Settle* 6. This takes you to the *Settle Contract* screen. 7. Enter or change settlement data as required by choosing the relevant area in the menu. 8. When you save a settlement activity, the SAP R/3 System changes the activity category of the transaction in order to record how it is monitored and processed in the back office area. 9. The contract can only be posted after settlement.	• Using the *Settle standard options* function, you can mark the transaction to indicate that it has been processed in the back office. • Upon settlement, the data for the financial transaction is checked and added to if necessary. The data is also fixed (actual records) when the transaction is saved and the transaction flows are *flagged for posting.*
Reverse	You will find information on the reversal function under <u>Reversal [Ext.]</u>.	
History	1. Choose *History.* 2. The SAP R/3 System displays a list of active and reversed activities as well as activities which have been replaced by a follow-up activity. From this list, you can branch to a detailed display of the individual activities. You also see their status and the user who processed them.	• The History displays the sequence of previous activities related to a selected transaction.

Refer to the units entitled <u>Standard opiton [Page 21]</u>, <u>Edit standard option [Page 23]</u> and <u>Create OTC option. [Page 26]</u>

Processing an OTC Transaction

Use

Using this function, you settle financial transactions of the activity, contract. The flows from the purchase/sale in the *Plan* status are transferred to *Actual* status.

As in trading, you can call up information on transactions entered or make later changes. Via the settlement function, you can monitor transaction activities. You can add in missing information such as payment instructions or posting activities.

Prerequisites

You can use the back office category in *Customizing* to control whether the financial transaction is to be *settled/monitored*. If you have defiined a back office category that contains settlement activities for the product category via Define transaction types [Ext.], then a transaction must be created by a trader in the trading block, and settled/monitored by another processor in the *Back office*.

Example: Define back office category 00002 for the product category, fixed-term deposit.

Procedure

Choose *Treasury→ Treasury management→ Foreign exchange → Back office → Exotic option/Derivatives → Back office → OTC option.* The individual processing functions are:

Function	Entries	Comment
Change	1. Choose *Change* 2. The screen for changing basic data appears. 3. You can make changes to the following: − Administration − Basic data (contract and partner) − Additional data (generate new flows) − Payment details − Memo book	• Via Tab pages [Page 42], you can branch to screens for general transaction management to make changes there if necessary.

Processing an OTC Transaction

Display	1. Choose *Display.* 2. This takes you to the screen where you can display the basic data.	• The entry fields are not active. • Via the tab pages, you can branch to other screens to display information on the transaction. • Via 🖼️, you can branch to the master data of the business partner.
Settle	3. Choose *Settle* 4. You reach the *Settlement (settle contract, exercise, give notice, expiration)* screen. 5. Enter or change settlement data as required by choosing the relevant area in the menu. 6. When you save a settlement activity, the SAP R/3 System changes the activity category of the transaction in order to record how it is monitored and processed in the back office area. 7. The contract can only be posted after settlement.	• Using the function, *Settle OTC transaction*, you can mark the transaction to document that it has been processed in the back office. • When you settle, the data of the financial transaction is checked and added to if necessary. When you save the transaction, the data is fixed (actual records) and the flows of the transaction are *flagged for posting*.
Reverse	You will find information on the reversal function under Reversal [Ext.].	⮕Note: − *Expiration settlement: OTC transaction reversed → becomes → Expiration* − Expiration:*OTC transaction reversed → becomes → Contract settlement* − *Offer: OTC transaction reversed → becomes → Reversed*

History	1. Choose *History*	• The History displays the sequence of previous activities related to a selected transaction.
	2. The SAP R/3 System displays a list of active and reversed activities as well as activities which have been replaced by a follow-up activity. From this list, you can branch to a detailed display of the individual activities. You also see their status and the user who processed them.	

Refer to the unit entitled

Documentation not Available in Release 4.6B

Transaction Management

Use

Collective processing allows user-specific management of transactions in Treasury. Alongside selection and display functions, you can branch to individual processing of transactions.

Functions

Transaction management covers the entry and processing of transactions with the following product categories:

- Fixed-term deposit and deposit at notice

- Commercial Paper

- Cash flow transaction

- Spot exchange transaction and forward exchange transaction

- Interest derivative

- OTC and listed option

- Future

- Security order

Activities

Start of collective processing

Proceed as follows:

Choose *Trading → Collective processing → Transaction management* or *Back office → or Collective processing → Transaction management.* This takes you to the processing screen for collective processing which is split into two areas:

The left hand area of the screen shows selection variants in a freely configured tree view and the right hand area displays the last transaction selection of the user.

Selection of transactions

Collective processing allows you to create the list of trasnactions according to freely definable selection criteria. To enter selection criteria on an entry screen:

2. Choose Worklist → New.

5. This takes you to the entry screen for collective processing. Enter the selection criteria here according to which the list of transaction activities will be created. (e.g.General selections, position assignment, entered/last changed by, etc.).

6. Choose *Execute*.

7. You see a list of selected transactions.

Transaction Management

You can also save as many selection definitions as you want as variants and then manage them in collective processing in the tree view user-specifically or not. All management functions can be accessed via a context menu in the tree view.

To add a variant that you have already defined to the tree view:

3. Click on the tree node under which the variant is to be added with the right mouse button to open the context menu.

4. Then choose *Add → Variant.*

5. Enter the name of the variant being added and confirm via enter.

6. The variant now appears beneath the selected tree node as an independent node.

   Double-click on the node to carry out the selection assigned to the variant.

Visualization of transactions

The list of transactions is displayed with the help of the ABAP list viewer which provides many options for creating lists according to lines and columns, sorting and summation.

Processing of transactions

You can also process the transactions from the collective processing list:

4) Mark the transaction to be processed.

5) Use the right hand mouse button to open the context menu. This displays a selection of functions with which you can process the selected transaction. Alternatively, you can also call up the functions from the button list above the list display.

6) By selecting a function, go to the relevant processing screen from where you can carry out the necessary steps.

Collective Processing: Financial Transaction

Use

The *Collective processing* function gives you an overview of all transactions which you have selected on the basis of various criteria entered in the initial screen.

The Collective processing function helps you to manage your transactions effectively by displaying a list of all transactions with common selection criteria and providing the necessary processing functions. You can branch directly from the processing list to the individual transaction to display detailed information.

You can use collective processing to speed up selection and processing for all financial transactions. You can also carry out all necessary work steps from collective processing (e.g. knock-in or knock-out, exercise or rollover, etc.)

In the Money Market area, you can use a more limited version of collective processing for fixed-term deposits and deposits at notice - Fast processing [Ext.].

Features

	Trading	Back office
Money Market	Fixed-term deposit investment/borrowing.	Fixed-term deposit investment/borrowing
	Deposit at notice investment/borrowing.	Deposit at notice investment/borrrowing
	Commercial Paper purchase/sale	Commercial Paper purchase/sale
	Cash flow transaction investment/borrowing	Cash flow transaction investment/borrowing
Foreign Exchange	Spot/Forward Transaction	Spot/Forward Transaction
	Order	Options
	Options	
	Expiration/Barrier check	
Derivatives	OTC - Interest rate instruments	OTC - Interest rate instruments
	OTC options	OTC options
	Expiration/Barrier check	

Comment: There is only **one** type of collective processing in the Money Market area. Collective processing in the Foreign Exchange and Derivatives areas takes place **separately** according to the product types in the tables.

Collective Processing: Financial Transaction

Activities

To use the *collective processing* function, carry out the following steps:

7. Choose *Trading → Collective processing* or *Back office → Collective processing.*

8. This takes you to the initial screen for collective processing (for example - Collective Monitoring of Options: Expiry/Knock-In/Knock-Out). Enter the selection criteria according to which the list of transactions is to be created (e.g. exercise, current activity category, general selections).

9. Choose *Program → Execute* (or press the *Execute* button on the upper applications toolbar).

10. The SAP R/3 System shows you a list of the selected transactions.

11. By double-clicking on a transaction, you access the basic data screen of the particular transaction.

12. You can also process transactions from the collective processing list:

    a. Select the transaction you wish to process.

    b. Choose the relevant processing function via the menu or via the applications toolbar at the top of the screen.

    c. This takes you to the respective screen for the particular processing function.

    d. Save your changes.

    e. If you leave the processing function, you get to the collective processing list again and can process another transaction.

Correspondence

Use

With the *Correspondence* function, you can generate and send out special correspondence relating to the financial transactions managed in the SAP R/3 System.

Correspondence can be sent directly from the system via *fax, e-mail, SWIFT Files* or *IDocs* (in money market and forex trading), or output via a printer.

Correspondence serves documentation and helps to match financial transactions that have been carried out.

Prerequisites

1. In Customizing, via *Define corresponding types*, different correspondence types must firstly be created. For each correspondence type, you determine:

    - whether an internal or external correspondence type is involved.

    - whether the correspondence should be archived (Indicator *'Optical archive'*)

        Business object BUS2042; document type TRO_CONF

    - whether possibly no initial reversal correspondence should be generated for external correspondence types.

    - which language the correspondence should be in.

    - For the creation of IDocs, you can define the *Partner type* and *Partner number* here. These settings determine a receiver port in the SAP Basis communication interface. The following scenarios are possible:

    *   You enter a *Partner type* and *Partner number* here. This means that all outgoing IDocs for this correspondence type are sent via this port.

    *   Only enter a *'Partner type'*. This means that for each IDoc of this correspondence type, the 'Partner number' is the name of the business partner. Each IDoc is sent via a specific port.

    *   You can also assign the *Partner type* and *Partner number* individually in the customer exit (RFTBCOEX).

2. Via *Define correspondence'*, you can control at company code level, when a particular correspondence type should be generated with a particular form (SAPscript). This setting must also be made with SWIFT File and IDoc - i.e. even when a SAPscript form is not necessary.

3. You define the correspondence activities via the product type, transaction type and activity categories which are assigned to the relevant correspondence type with the relevant forms.

Example of a correspondence activity:

In company code 0001, an external correspondence (001) is to be generated for purchases of fixed-interest bonds (Product type 041) for activity, Contract (20). This results in the following:

CoCd.	ProdTyp.	TransTyp.	ActCat.	CorrTyp.	Form
0001	04I	100	20	001	F_TR_CONFIRM_ALL

➡ Specify a sample text with individual layout that is output at the time of correspondence generation with the current transaction data. You can define different sample texts for different product and transaction types, activities, etc.

The SAPscript forms (Sample Customizing) F_TR_CONFIRM_ALL (as sample confirmation letters for external correspondence) and F_TR_DEALER_ALL (as sample confirmation letters for internal correspondence) are described in the respective form documentation.

You will find technical information for structuring SAPscript forms in TR confirmations via Structure of SAPscript forms. [Ext.]

4.   You also specify here whether correspondence should be generated *automatically* for each correspondence activity. *Automatically* means that the planned record for correspondence is immediately carried out when you save the correspondence-relevant activity.

If you do not set this indicator, when you save the correspondence-relevant activity, the planned record for correspondence is saved. Correspondence is then generated via the report entitled *'Outgoing correspondence'*.

Process: Creation of correspondence planned records
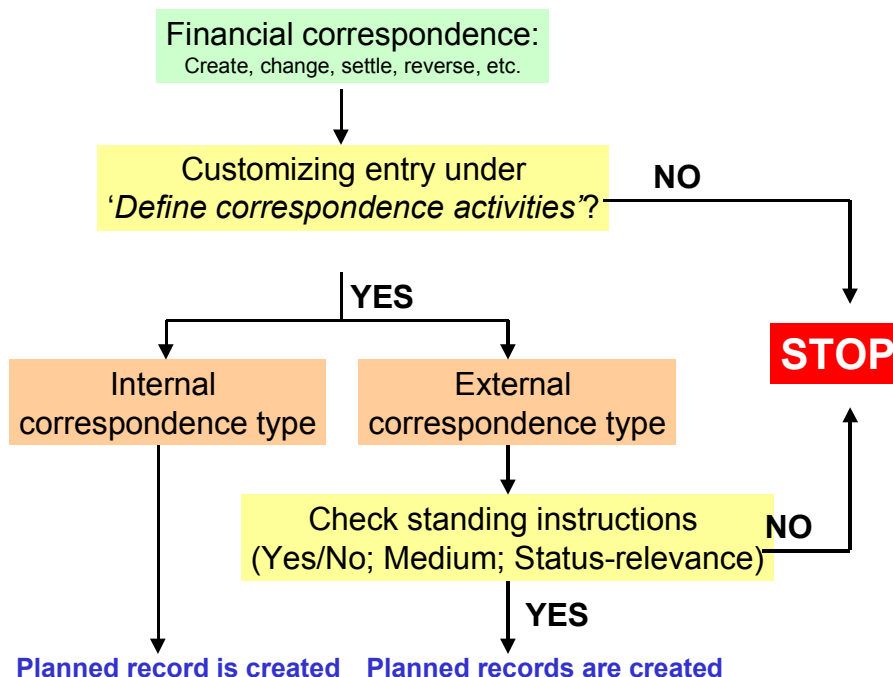
5. The status-relevant external correspondence can be counterconfirmed. Set the *'Counterconfirmation required'* indicator here.

·   In the IMG activities, *'Define printer options'* and *'Define fax options (Spool)'* - only relevant if you are using the Basis communication interface, SAPcomm - enter which printer or fax machine is to be used to output correspondence for correspondence activities for each company code.

⇨If you have made correspondence settings in Customizing of the application areas, you can control the settings via the *Check* IMG activity.

·   For *external correspondence*, it is also necessary to maintain *'Standing instructions: Correspondence'* for each business partner in the master data of the business partner. This allows you to control external correspondence types based on the business partner.

For each correspondence type per business partner at contract type, product category, product type and transaction type level, you determine which media (Printer, fax, E-Mail, SWIFT or IDOc) will be used to generate correspondence.

⚠If no assignment is made in the standing instructions for the business partner, then no external correspondence is generated for the financial transactions with this business partner.

⇨If you wish to send correspondence via email, the communication interface, SAPconnect, must be set up. (Also refer to note number: 152474).

You also establish here whether a counterconfirmation is required.

In field, F (*Leading transfer medium for correspondence status*), you establish which of the selected media should have leading status. Also refer to the F1 Help for this field.

·   In Customizing of Treasury Basic Functions, you can influence the processing of a financial transaction by using *'Change message control'* for the status-relevant correspondence type of the transaction activity via the message category *(I,W,E).*   These settings can be made for all users (user name specified) or individual users.

When are messages output?

Status at activity level Outgoing correspondence	Status at activity level Incoming confirmation	Activity/Message
Not required	Not required	-

Correspondence

Required	Not required	Activity transition, e.g: Settlement → T0 828 Rollover → T0 828
Required	Required	Activity transition, e.g: Settlement → T0 827 Rollover → T0 827
Carried out	Required	Activity transition, e.g: Settlement → T0 829 Rollover → T0 829
Carried out	Matched	Change → T0 843

The short texts for the messages are as follows:

T0 827   Confirmation and counterconfirmation not yet carried out.

T0 828   Confirmation (Correspondence type X, medium Y) has not yet been carried out.

T0 829   Counterconfirmation match not yet carried out.

T0 843   Current activity already counterconfirmed.

Message categories:

W = Warning message

E = Error message

I = Note

- = Switch off message

Example:

If you define message T0 843 as the *E* message for user X, then this user can no longer change a transaction that has already been counterconfirmed.

Features

Correspondence can be defined as

- external correspondence types (e.g. *confirmation letters*) and

- internal correspondence types (e.g. *dealing slips*)

The planned records generated for correspondence can be automatically carried out when you save the correspondence-relevant activity. Alternatively, the planned records are saved and then carried out via the *'Outgoing correspondence'* report.

The data for the financial transactions is prepared and put in the confirmation letters (forms).

Correspondence can be output via a printer or fax machine. It can also be sent directly from the system via e-mail.

 For fixed-term deposits and forex transactions, SWIFT files (MT 300, MT230) or IDocs can be generated.

You can also have a counterconfirmation status for the financial transaction:

After you have set the *'Counterconfirmation required'* indicator via *'Define correspondence activities'* and also in *'Standing instructions for correspondence'*, you can use the following functions for counterconfirmation:

1. In the money market and forex trading areas, counterconfirmation takes place via the *'Incoming confirmations'* function.

2. In other areas, you can set the counterconfirmation-relevant correspondence activities as matched via the *'Correspondence monitor'.*

Correspondence letters can be *archived (Optical archiving).* You access the archived correspondence from the transaction display. If you are in the display/change mode for a transaction, you can display the correspondence activities via *Goto*. By double-clicking on a line from the correspondence overview, you activate the archive link and you can display the transaction. The content of the file is displayed for SWIFT correspondence.

The confirmation status information (i.e. time, activity, processor, form used and the output medium for incoming and outcoming confirmations) is in the transaction.

Via *'Message control'* , you can check whether the outgoing confirmation of the previous activity has already been carried out for each activity transition.

The Correspondence monitor has the following editing and monitoring functions:

*   Overview of current editing status

*   Setting of counterconfirmation status to *'matched'*

*   Planned correspondence can be carried out directly from the monitor

*   Correspondence already generated can be output again

*   Access to IDoc management

*   Access to transaction history

*   Access to optical archive display

See also:

*   Standing instructions - Correspondence [Ext.] in the master data of the business partner

    –   Create standing instructions for correspondence [Ext.]

Correspondence

- Outgoing correspondence [Page 77]

- Incoming confirmations [Page 80] (only for money market and forex trading)

- Generate SWIFT file [Page 79] (only for money market and forex trading)

- Correspondence monitor [Page 123]

- Also refer to documentation on the IMG activities mentioned above under **Prerequisites.**

Outgoing Correspondence

Use

Using the report, correspondence is carried out on the basis of planned records generated for selected financial transactions.

You can also view the correspondence generated via 'Preview'.

> In the productive system, you usually let this report run daily at a certain time in the batch.

Integration

Refer to:

Correspondence [Page 71]

Prerequisites

Planned records for correspondence must already have been generated.

Features

Selection

Use the following criteria to select correspondence planned records:

- Company code
- Product type
- Transaction
- Correspondence type
- Activity category
- ID number
- Securities account
- Business partner
- Portfolio
- Trader
- Term end/Due date
- Entry/Change date
- Entered by/Changed by

Outgoing Correspondence

Sorting

Use the sort variants to influence the sequence of correspondence generation.

Use the '*Descending sort'* indicator to change the sort sequence from ascending to descending.

Output control

- Select your output medium here. You can choose between*: Printer, Telefax, E-Mail, IDoc.*

   Only the planned records for whom you have selected a medium here are executed. This allows you to, for example, carry out correspondence via fax at a different time to correspondence that is to be output via a printer.

   To output SWIFT-Files in the *Money market* and *Foreign exchange* areas, you can use the 'Generate SWIFT-Files' report.

- Set the '*Preview (not for IDoc's)'* indicator to view the correspondence generated.

   If you select *'Preview'*, the confirmation letters generated appear one after the other in the display - this means that you can output them individually for each transaction (not possible with IDoc's).

   Information for navigating in the correspondence run with print preview:

   BACK: Is not for navigating backwards! '*Back*' removes the display of the current transaction and shows you the next transaction.

   END: Allows you to end the correspondence run prematurely.

   CANCEL: Allows forward navigation.

   Further tip

   After output from the screen view via 🖨, you can move on to the next transaction.

- Set the *'Output immediately'* indicator, if you wish to create the correspondence immediately.

Output

A correspondence log is output. An error log is also output.

Activities

Choose *Back office* → *Correspondence* → *Outgoing correspondence*.

Generate a SWIFT File

Prerequisites

Within correspondence, you can generate SWIFT files MT320 for fixed-term deposits and MT300 for foreign exchange. With the help of a user exit, this allows you to use FX match for outgoing confirmations.

An external correspondence type must be defined in order to generate a SWIFT file (compare with Outgoing confirmations [Page 77]).

In the Standing Instructions [Ext.] (see Create standing instructions for correspondence [Ext.]), the 'SWIFT' indicator must be set.

Procedure

1. Choose *Back office → Correspondence → Generate SWIFT file.*

2. Enter the key values for correspondence, e.g. *company code, transaction, product type, partner* etc. in the relevant fields.

3. Specify details for file generation, such as:

    - Date

    - Identification

    - Decide whether to select the following: Collective file, Repeat file generation, PC output.

    - File name

4. Choose *Program → Execute* .

Generate Incoming Confirmations

Prerequisites

For external correspondence, you can specify in the standing instructions whether there should be a counterconfirmation for the business partner. Manual entry of incoming confirmations and automatic matching against the corresponding outgoing confirmation is shown in the confirmation status.

Incoming confirmations can only then be processed if an outgoing, external correspondence (e.g confirmation) has been previously created. The *'Counterconfirmation required'* indicator must be set in the standing instructions. If the allocation is not unique, a message appears asking you to make it unique. The counterconfirmation status is set as *'reconciled'* once the confirmations have been reconciled.

Procedure

In order to reconcile incoming confirmations with outgoing confirmations, proceed as follows:

1. Choose *Back office → Correspondence → Incoming confirmations.*

2. Choose the product type you require.

3. Enter the key values to be used for entering confirmation data, e.g. *company code, partner, currency*, *interest rate,* etc., in the corresponding fields.

4. Save the data entered.

Monitor

Features

The correspondence monitor provides the following processing and monitoring functions:

- An overview of the current processing status

- Setting the counterconfirmation status to *reconciled* directly from the monitor

- Generating planned correspondence directly from the monitor

- Repeating a a correspondence run. For example, you can repeat a correspondence run that was not successful (as the printer toner ran out, for instance)

- Navigating to manage Idoc, the transaction (history) or the display from the optical archive.

Integration

The correspondence monitor has been realized with the ABAP list viewer. As a result, there are many different options aviailable for creating lists. The display variants can be specified in the program at the start.

Activities

1. Choose *Back office* → *Correspondence* → *Monitor*.

2. In the entry screen, you have a variable view of correspondence data with comprehensive processing options. Enter the required *transaction data* (general selections for the transaction) as well as *correspondence data* (outgoing/incoming confirmation, output control).

3. Choose *Program* → *Execute* or press the *Execute* button.

4. You see an overview of all selected transactions with details of the current processing status (OK, counterconfirmation required, correspondence output required, transaction reconciled). In this field, you have an *optical signal*. Here, you can make an assignment according to the 'Status relevance' and 'Counterconfirmation' criteria. The program assigns red, green or yellow signals for status-relevant records. Refer to the F1 Help for the meaning of the individual signals.

   This overview can be adapted according to your own criteria using user exit RFTBCOMO.

   Example: An overdue counterconfirmation with business partner X can be highlighted with a red signal if the counterconfirmation has been outstanding for at least 45 minutes.

5. To set the counterconfirmation status to *reconciled*, mark the line of the the relevant transaction and press the Counterconfirmation button on the upper applications toolbar. Consequently, you can have a counterconfirmation status for all product categories that allow an outgoing confirmation.

Netting

Use

Transactions from Money Market, Foreign Exchange and Derivatives can be brought together and paid collectively with *Netting.* Situations can arise where several transactions are to be paid collectively; this happens especially with transactions with business partners that are not house banks i.e they require the exchange of payments.

Example:

- Fixed-term deposit investment in DEM and fixed-term deposit borrowing in DEM

- You balance the open payment amounts and only pay or receive the net amounts

- Advantage: Saving of transaction costs and/or bank charges

For this purpose, transactions can be brought together in "Netting transactions".

Prerequisites

The transactions must be created in the same company code with the same business partner and in the same currency. They must also have the same value date and identical payment details.

Trigger for a netting transaction:

- All netting transactions are explicit agreements between business partners to simplify payment processing.

- When the transactions are confirmed (correspondence), they get a link to the other participating transactions.

- The decision to create a netting transaction is usually taken shortly before the payment flows are due, mostly on the same day as the posting of the participating transactions. Only then is it known which transactions (e.g. forward exchange and spot exchange transactions) are suitable for net payment.

- Before transactions can be brought together, identical payment activities must be created. In particular, all transactions that are to be netted must be able to produce payment requests as a netting transaction can only be carried out via the Payment program for payment requests [Ext.].

Activities

The "Netting/proposal list" report supports the selection of transactions that can be netted according to the criteria you have selected. You can process the netting transaction directly from the report and execute it. The allocation of individual transactions for netting means that payment requests are generated that come under one grouping key and are processed collectively in the enhanced payment program. This grouping key controls which payment requests will be separated from others. All payment requests involved in the same netting transaction receive the same unique grouping key and are, therefore, separated from other payment requests. They should not be grouped together with other requests. You cannot make retrospective changes to netting-relevant data in the individual transactions (especially due

Netting

dates, amounts, house bank and payment data). A transaction linked to a netting transaction is shown as such when processed..

Features

- Proposal list for netting transactions.

- Create

- Change

- Display

- Write off

Integration

Transactions linked by netting are referenced with each other via Object links [Ext.] (Reference key: KMP).

Reference

Use

A reference between Treasury transactions records a relationship between any number of transactions. The reference category defines the meaning of a reference.

References are supported in the money market, foreign exchange, derivatives, securities and loans areas. In the securities and loans areas there is a *General reference* category, which you can use to represent relationships between transactions in these areas. In other words, you can use this reference category to link any transactions you choose in these areas.

Features

Some references are created automatically when a certain activity is carried out. Others have to be created by the user. Reference categories, which are created automatically when you enter a transaction, can also be created manually.

Reference category	Description	Comments
BID	Offer	Generated automatically
CON	SWIFT confirmation files	Generated automatically
EUR	Euro transaction currency changeover	Generated automatically
MIR	Mirror transaction - link	Not supported
KMP	Netting	Create manually using the Netting [Page 83] function.
OPT	Option reference - derivatives	Generated automatically
PRL	Rollover of forex transactions	Generated automatically
REF	General reference	Create manually
SWP	Forex swap	Generated automatically

You can also use the reference function to process existing references as well as create references for reference categories that are normally generated automatically. This is the only function you can use, however, to create and process references manually. (**Exception**: You use the netting function to create and process references from reference category *KMP* (netting). You can, however, also use the *Collective processing* function for references to edit existing references from this category).

The following functions are available for references:

1. **Creating a new reference**

   You can create a reference between two or more transactions that are related to one another.

   The system performs an internal check when you create references for the *Option reference - derivatives*, *Rollover of forex transactions* and the *Forex swap* categories.

   You can create a general reference between any transactions you choose.

2. **Editing existing references**

Reference

You can change, display or undo existing references.

➡

Only in exceptional circumstances is it necessary to manually edit a reference that was created automatically. For example, if an option belonging to an option spread had to be reversed and you have to assign the new option to the other option again.

3. **Collective processing**

The collective processing report program enables you to display a list of references in one or several application areas. You can restrict your selections according to the following criteria:

a. Reference category

b. Reference

c. Status

d. Company code

e. Transaction

f. Order number

g. Loan number

h. Other selection parameters for netting transactions:

    i. Business partner

    ii. Due date

An overview list is generated which displays the transactions selected for each reference.

From here you can jump to the detailed screen for the transaction you want to edit by positioning your cursor on the transaction and choosing *Reference* → *Change/Display/Undo*. You can add individual transactions to a reference, or remove them.

To obtain an overview of all netting transactions with particular business partners involved in money market transactions:

    a. Choose the *Money market* application.

    b. Choose the *KMP (netting)* reference category.

    c. Restrict your selections to one or several partners.

    d. *Execute* the report program.

To obtain an overview of all references for a particular transaction:

    a. Do **not** enter a reference category.

    b. Enter the *Company code* and the *Order number* of the transaction.

    c. *Execute* the report program.

Rate Fixing

Use

You must fix rates for forex transactions that you have created in Trading.

Features

You can fix rates manually or it can be done automatically.

In the case of Automatic fixing [Page 89], the SAP R/3 System firstly reads the corresponding rate (usually the average rate) from the rate table. Subsequently, a premium/discount to the value of the separately defined fixing margin is calculated. By using this method, you can use spreads that differ from the ask/bid margin.

With Manual fixing [Page 90] , you enter the exchange rate manually.

When the fixing is carried out, the transaction is transferred to the *Contract* activity.

Via double-click, you access the individual fixing transactions.

Automatic Fixing

Prerequisites

With automatic fixing, currency table, TCURR, must be filled. The middle rate entered in the table for the fixing day is entered in the transaction and the fixing transaction is transferred to activity, *Contract*.

Procedure

With automatic fixing, the SAP R/3 System firstly reads the relevant rate (usually the middle rate) from the rate table. A premium/discount to the amount of the fixing margin defined in Customizing is then calculated. Via this procedure, you can use spreads that deviate from the bid/ask margin.

Refer to the unit entitled Assign fixing magins [Ext.]in the Implementation Guide (IMG).

To carry out the automatic fixing function:

1. Choose *Back office* → *Rate fixing* → *Automatic fixing.*

2. This takes you to the screen headed A*utomatic Processing for Forex Fixing Transactions*.

3. Enter the required selection parameters e.g.

    −   Company code

    −   Transaction

    −   Portfolio

    −   Treasury finance project

    −   Date of rate fixing

4. Via *Program* → *Execute*, you start automatic processing of forex fixing transactions*.*

Manual Fixing

Procedure

With the manual fixing function, you can correct certain transactions or add additional data manually.

Proceed as follows:

1. Choose *Back office* → *Rate fixing* → *Manual fixing.*

2. Enter the *company code* and the *transaction* for processing the fixing manually.

3. This takes you to the initial screen for spot/forward transactions.

4. You can now make the changes or new entries in the active fields in the entry area. You can set the exchange rate here, for example.

5. The spot/forward transaction is now saved as a contract.

Accounting

Use

After the transactions are entered at the *Trading* stage and checked and completed in the *Back office*, they are processed for accounting purposes. Treasury uses certain FI functions.

In this section, you will learn about processing in accounting.

Features

In the accounting area, you have functions for transfer to FI - e.g. reports for documenting posting (**Posting overview**). The **Posting journal** provides you with information about the posted flows of selected transactions. You will find more information via *Information System →
Report Selection →* Posting Overview [Page 140] / Posting journal. [Page 142]

Financial transactions and positions in the closing activities must also be correctly handled. Alongside operative postings, accounting, therefore, also contains functions such as **accrual/deferral** of expenses and revenues to the appropriate accounting period. Money Market and Foreign Exchange also incorporate **valuation activities** such as key date valuation and the determination of realized gains and losses.

In the **payment** area, you can either post the individual flows via a G/L account (enhanced payment program, **payment request**) or post them to a customer account (**open items**). See also: Posting logic [Page 93]

Posting

Purpose

The posting function transfers data to Financial Accounting.

Process Flow

Each financial transaction is based on certain transaction data (e.g. nominal amounts, interest rates). The flows relating to a financial transaction are generated from this transaction data. These flows are used to determine the data necessary for posting, such as document types, balance sheet accounts or income statement accounts and the posting key. This data and the flows to be posted are transferred to the FI interface which generates the relevant postings and documents via the corresponding functions. The document principle is used throughout the entire SAP R/3 System. In other words, postings are always saved as documents. The document remains as a unit in the SAP R/3 System until it is archived.

The posting responsibility is in Accounting but the account assignment rules for the posting types are fixed and monitored in Treasury Management. This reporting structure guarantees a separation of functions and Accounting is not burdened with posting that would be inefficient. In this way, posting errors and loss of information are avoided.

Before you transfer flows to FI, determine the relevant posting specifications via *flexible account determination.* The posting specifications identify the accounts used in the posting run. Account determination is based on a general concept with replacement rules and masking. You make the setting for account determination **once** during implementation. This guarantees a uniform procedure and the minimization of input fields.

See also: Account assignment reference [Ext.]

Features

The SAP R/3 System provides the following functions: Execute posting [Page 95], Reverse documents [Page 96], Reverse manually [Page 98], Release posting [Page 100] and Block posting [Page 101].

Posting Logic

Purpose

The posting-relevant Treasury information is transferred to Financial Accounting via an interface. The posting logic is based on the flow types generated and the Account assignment reference [Ext.] of the transaction as well as user-specific account determination.

You can generally post the individual flows via *G/L accounts* or on *the debit side.* The posting of payment activities usually takes place on corresponding clearing accounts. The items from these clearing accounts are usually processed further via Cash Management (account statement) or Financial Accounting (payment program). For Money Market, Foreign Exchange and Derivatives, you can also use an enhanced payment program [Ext.] *(payment request).* To do this, Payment requests [Ext.] are firstly generated from Treasury so that they can later be paid individually or collectively via the payment program. For individual payments, there are four combinations:

Number for posting logic	Payment activity	Payment request
1. G/L accounts without payment requests	No	No
2. G/L accounts with payment requests	No	Yes
3. Customers without payment requests	Yes	No
4. Customers with payment requests	Yes	Yes

Process Flow

1. **G/L accounts without payment requests:**

You post the flows from a G/L account to a bank clearing account and clear the flows either via the manual or electronic account statement. This passive procedure is especially useful for incoming flows where payments are automatically initiated by the bank i.e active initiation of payment is not required.

Procedure:

- G/L account to Bank clearing account

- - Bank clearing account to bank account

Example:

- Incoming interest payments from Money Market transactions with your house bank are a typical example.

2. **G/L accounts with payment requests:**

If the transaction is not carried out with a *House bank* or there is no Account debit agreement or if transactions are to be *netted,* the payment must be actively initiated. Firstly, a payment request is generated per flow and the posting is carried out on the *payment request clearing account.* If the payment program is then called up, it generates the corresponding forms (e.g Transfers) according to the *payment method.* The payment run that takes place will bring the payment requests together if necessary (netting) and carry out the posting on the bank clearing account. After receipt of the bank statement, the *Bank account* is reconciled with the *Bank clearing account* again.

Posting Logic

Procedure:

- G/L account to Bank clearing account

- Payment request clearing account to bank clearing account

- - Bank clearing account to bank account

Examples

- Transactions that you have **not** concluded with your house bank are typical examples.

- You can also use this procedure if you wish to settle transactions grouped together through netting (payment netting) to save transaction costs.

3. **Customers without payment requests:**

Instead of posting via G/L accounts, you can post via *customer accounts*. The customer payment program processes data and initiates active payment. Open items are generated in the customer account and are paid via the payment program.

Procedure:

- - G/L account to customer account

- - Customer account to bank clearing account

- - Bank clearing account to bank account

Examples

- This procedure is useful if you wish to use administrative functions in the customer area. This is the case if a qualified receivables evaluation (interest or repayment) may be possible.

- You can also use this procedure for active loans to initiate the payment of the credit amount.

4. **Customers with payment requests:**

Postings take place as in 3., with the difference that the payment program for payment requests is used. This allows you to use multi-level payment methods. Netting is not possible here.

Procedure:

- - G/L account to customer account

- - Customer account to bank clearing account

- - Bank clearing account to bank account

Example:

- Customer payment (with additional advantages of the payment program).

Post Released Flows

Prerequisites

Prior to posting, you select the flows to be posted. You can carry out a *Test run* in order to check the accuracy of the posting specifications in the posting log. When the posting run takes place, the transfer of the flows and posting information to FI takes place. The relevant documents can then be generated. You can also *reverse documents, release postings* or *block postings.* There is also a direct link to the enhanced payment program and debit positions and clearing.

Procedure

To post released flows:

1. Choose *Accounting → Transaction → Post.*

2. This takes you to the screen headed *Treasury: Post Flows*. Enter the selection criteria in the corresponding fields.

3. Remove any selections in the fields *Money Market, Foreign Exchange* and *Derivatives* which are not applicable. This will speed up the response times for all subsequent operations as only the transactions in the components you have selected are taken into account.

4. Choose *Program → Execute*.

    The SAP R/3 System shows you a list of flows to be posted.

    If you choose *Test run* under *Control*, you can simulate the posting run.

5. Double-click on a document line to display the single document.

6. With a second double-click on an item line in the document, you can view details relating to a particular document item.

    ⇨

    Before you post flows, you may have to release them via
    Accounting → Posting → Release.

Reverse Documents

Prerequisites

If there are postings linked to an activity that is to be reversed, you can make reverse postings.

If you need to reverse posted flows relating to a transaction, you first have to reverse the activity relating to the transaction. The flows which have been posted are then flagged accordingly. The corresponding functions are offered in the *Trading* and *Back office* areas. The flows are flagged to indicate that the related documents have to be reversed.

To reverse the relevant documents in FI, use the "*Reverse Posting Documents"* report.

Procedure

1. Choose *Accounting → Transaction → Post.*

2. This takes you to the *Treasury: Reverse Posting Documents* screen

3. Remove any selections in the *Money Market, Foreign Exchange* and *Derivatives* fields which are not applicable. This will speed up the response times for all subsequent operations as only the transactions in the components you have selected are taken into account.

    Enter any necessary selection criteria in the corresponding fields.

    If you choose *Test run* under *Control*, you can simulate the posting run.

    In the test run, the system cannot carry out all the necessary reversal checks. As a result, you may get the message "Reversal not possible" in the productive run although reversal flows were proposed in the test run.

4. Choose *Program → Execute.*

5. You may have to release flows via *Accounting → Transaction → Release.*

6. You receive a list of flows of the transactions that are flagged for reversal.

7. In the productive run, the relevant FI documents are reversed. A reversal document with a document number is generated and the FI document is marked as "reversed".

8. From the initial FI document, you can access the administrative data of the accounting document to find out the number of the reversal document in FI via the *Document Header* button.

9. Via the *Transaction* button, you reach the basic data of the relevant transaction.

In certain cases, an FI document cannot be reversed from Treasury - for example, if the document has already been matched in FI. If the document has already been reversed in FI, it must be manually reversed in Treasury instead of using the "Reverse documentation" transaction. Refer to the unit entitled <u>Reverse manually. [Page 98]</u>

You will find further information in the unit entitled <u>Reversal. [Ext.]</u>

Reverse Documents Manually

Prerequisites

Documents which cannot be reversed automatically (for example, if they have been cleared in FI) must be processed manually.

Via the menu option, *Reverse manually*, you can select the flows to be reversed and then reverse them.

Imagine you have rolled over or given notice on a transaction and suddenly realize that you have to cancel this activity. It may be that this activity already has flows that have been posted. In this case, you must reverse both the activity and the flows in FI.

Procedure

1. Choose *Accounting → Transaction → Reverse manually.*

2. This takes you to the screen headed *Treasury: Manual Reversal of Posted Flows.*

3. Remove any selections in the *Money Market, Foreign Exchange* and *Derivatives* fields which are not applicable. This will speed up the response times for all subsequent operations as only the transactions in the components you have selected are taken into account. Enter any necessary selection criteria in the corresponding fields.

4. Choose *Program → Execute*.

    The SAP R/3 System calls up a list of transaction flows flagged for reversal.

5. Double-click on an entry to reach the processing mode of this transaction. In the processing mode, you will see a list of the flows to be reversed.

6. In the column headed **Re** *(Reversal type),* you enter the key, where appropriate, for the manual reversal. You define the permitted reversal types as part of system configuration.

    Example of manual reversal of posted flows in FI:

    Re *01 →* **Description** Entry of reversal document

7. Now select the document line with the reversal type entry and choose *Flow → Save*.

8. The flows are automatically assigned a reversal indicator. The report entitled "Reversal of posting documents" identifies all flows with this indicator and reverses the corresponding documents in FI.

9. Repeat steps 5, 6 and 7 for any other flows you need to reverse.

As no FI document is reversed in the "Reverse manually" activity, the document header of the original document can also not be given a reversal document number.

You will find further information in the unit entitled Reversal. [Ext.]

Release

Procedure

If your company uses the release management function, flows sometimes have to be released before they can be posted or reversed.

➡ For organizational reasons, a second user must carry out the manual posting release.

If you mark posting release with an 'x', posting release is carried out automatically - this means that the transaction does not have to be released by a second user.

To release a posting:

1. Choose *Accounting → Transaction → Release*.

2. Enter the data required in the fields:

    –   Company code

    –   Transaction number.

3. Via *Execute*, you will get a list of flows that are to be released.

4. By choosing *Edit → Release* until payment date, the first column in the list is marked*.

5. You can release the flows with the *Save* function.

    The SAP R/3 System displays the following message: Posting releases for transaction XXX saved.

Block Posting

Procedure

If you do not want flows related to a financial transaction to be posted for the time being, you can block flows for posting.

To block the flows:

1. Choose *Accounting* → *Transaction* → *Block*.

2. Enter the data required in the fields:

    –   Company code

    –   Transaction number.

3. Via *Execute*, you will get a list of all flows relating to the transaction.

4. By choosing *Edit* → *Block* from payment date, the SAP R/3 System flags the first column in the list.

5. Block the flows via the *Save* function.

    The SAP R/3 System displays the following message: Posting blocks for transaction XXX saved.

Payment

Features

You have two payment programs available:

1. The standard payment program from FI settles open items [Page 103] from the accounts receivable/payable area.

2. The enhanced payment program [Page 104] also covers G/L accounts. Unlike the standard payment program, the open items (FI documents) are not the basis for payment but rather the payment requests.

Use

If transactions are concluded with a business partner that does not have a house bank account but whose bank details are known and each transaction will not be paid actively, you can generate *payment requests* that will be processed through the enhanced payment program. This allows you to collectively settle transactions that have been grouped together.

Examples:

- Several transactions are concluded with a business partner that is not a house bank;

- When you post to the fixed-term deposit balance sheet account, you generate payment requests at the same time;

- All transactions are managed on the payment request clearing account;

- All transactions can be brought together/netted;

- When the time of payment arrives, a payment run is triggered in accounting and the payment amount is posted to the bank clearing account;

- A payment medium is generated at the same time that is passed on to the house bank;

- Posting to the bank acount takes place when you receive the account statement one day later.

See also: Posting logic [Page 93]

Open Items

Use

You will find information on this topic in the FI documentation (accounts receivable and accounts payable) under Execute payment program [Ext.] and Editing of open items. [Ext.]

Payment Request

Use

Via this function, you call up the Payment program for payment requests [Ext.] (=enhanced payment program).

Prerequisites

Before you can use the payment program for payment requests, you must first make certain settings in Customizing for Treasury in addition to settings in the configuration of the payment program.

1. Make the following settings in Customizing for Treasury so that payment requests can be generated in the Money Market, Foreign Exchange, Derivatives and Securities areas.

   a) In Customizing for *Basic Functions,* choose Define number ranges for payment requests [Ext.] to enter a number range for key number assignment of payment requests.

   b) In Customizing for *Cash Management*, set up the planning levels for payment requests by choosing *Define Levels in Payment Requests*.

   c) In the chart of accounts, you must establish the 'Clearing account for payment requests' and then assign it to the company code in *Basic Functions* Customizing under Define clearing account for payment request. [Ext.]

   d) To generate **Payment requests in the Securities area**, choose Define company code additional data [Ext.] in Customizing for *Basic Functions* and activate the standing instructions in the area headed *Securities settings.*

      You maintain the default values for payment requests in the standing instructions for the business partners. To do this, set the payment request flag and enter at least one payment method in the field headed *List of payment methods*.

      To generate a payment request for a transaction, choose *Goto → Payment request* when you enter a transaction. A dialog box appears in which you maintain the payment details. The fields contain data from the standing instructions. To generate a payment request, the payment request flag must be set.

      Exactly one payment request is generated per transaction by the net payment amount of the transaction. If a transaction contains several flows, they are grouped together to form one payment request.

      In the relevant posting record, the bank clearing account is exchanged for the clearing account for payment requests. The payment program for payment requests clears this posting by posting between the payment request clearing account and the initial bank clearing account.

      ➡️

      Using payment requests in the Securities area is subject to the following restrictions:

      - You can only generate payment requests for transactions.

      - The system only supports payment requests for G/L account postings. It does not support customer payment requests.

- Individual payments can always be made for the payment requests generated, irrespective of the settings made in the standing instructions for grouping payment requests.

e) Before you can generate **payment requests** from transactions **in the Money Market, Foreign Exchange and Derivatives areas**, you have to flag the payment request indicator for the three areas in Customizing by choosing Define flow types [Ext.]. This determines whether or not the individual flow types are allowed to generate payment requests. You can choose from the following:

Sign	Create payment request?
	None
-	For outgoing payments
+	For incoming payments
X	For outgoing and incoming payments

If you want to generate payment requests for transactions with a business partner, you can define these in the standing instructions for payment details. (These entries are only effective if the settings made for payment requests allow them to be generated at flow level, as described above). To do this, flag the payment request indicator in the standing instructions of the payment details and enter at least one payment method in the field headed *List of payment methods*. These settings are the default values for the payment details for each transaction with the business partner.

You make the final decision as to whether to generate a payment request, however, when you actually enter the transaction. If you do not want to generate a payment request, you can overwrite the default values from the standing instructions in the payment details for the transaction.

2. You also make settings in the configuration of the payment program for payment requests.

There you define, for example, your house banks and your bank accounts as well as the required payment methods and payment forms.

To do this, see the R/3 library: AC → *TR - Treasury* → *Treasury Management (TR-TM)* → *Payment Program for Payment Requests* → *Customizing of the Payment Program.*

Features

- Choose *Environment* → *Configuration.* This takes you to Customizing for the payment program.

- From the initial screen headed *Automatic Payment Transactions for Payment Requests*, you can start a payment run.

Activities

To start a payment run, proceed as follows:

1. Enter a date and payment run ID.

   All information relating to the payment run is stored under these values.

2. By selecting *Edit* → *Parameter* → *Maintain,* you reach the *Automatic Payment Transactions* screen. . Enter the values for the parameters.

Payment Request

3. The *Dynamic selections* function gives you the option of using other fields for selecting payment requests.

4. You can create an additional log via *Additional log*.

5. You can include report programs for printing payment media and creating lists in the payment run by choosing *Edit → Print programs.* You enter the programs and variants on the *Automatic Payment Transactions: Print Programs* screen.

6. Save the parameters for the payment run.

7. You can now carry out a proposal run or a payment run. Choose *Edit → Proposal → Schedule or Edit → Payment → Schedule*.

8. Specify a starting time (or immediate start) and, if required, a computer.

9. If you have firstly created a proposal, you can display the log, payment and exception list. The payment proposal can also be edited or deleted. If you are satisfied with the payment proposal, execute the update run via Edit → *Payment → Schedule.*

10. At the end of the payment run the system generates the posting documents, payment and exceptions list and the payment media. This concludes the payment run.

More detailed information is available in the documentation about the Payment Program for Payment Requests [Ext.] This can be found in the R/3 library under *AC → TR - Treasury → Treasury Management (TR-TM) → Payment Program for Payment Requests.*

Valuation

Use

After the transfer to FI, it is necessary to carry out *Position management* tasks. This includes, in particular, accounting valuation of transactions that you have carried out in a currency that is not your local currency.

Prerequisites

Via *general valuation rules* for which you make settings in Customizing, you can display country-specific valuation rules in Treasury. Define the valuation rules based on the company code, product and transaction type. Refer to the Valuation [Ext.] unit in the IMG (Implementation Guide).

- Define the One-step valuation principles [Ext.] and classes for key date valuation, "**unrealized gains and losses**":

    - Unrealized losses: No write down or write down to the key date value.

    - Unrealized gains: No write up or write up to the acquisition value or write up to the key date value.

- Define the Valuation flows [Ext.] and assign them to the product/transaction type combination.

- Carry out the foreign currency rate determination for the key date valuation and for the determination of "**realized gains and losses".**

Features

Valuation includes *foreign currency valuation, valuation of OTC options* and *forward exchange transactions*

Key date valuation [Page 110] : to prepare closing operations (e.g. create balance sheet).

Realized gains and losses [Page 112]*:* to document the gains and losses from transactions on the corresponding income statement accounts after the contract has been concluded.

For differentiated valuation, you have access to the classification according to rate categories (e.g. valuation rate, spot rate, bid rate, ask rate or closing rate) in the central rate tables.

Special function in Forex: Refer to: Split valuations of spot and swap [Page 114]

Example: Foreign currency valuation for forward exchange transactions

Valuation

Forex transaction:	USD/EUR
Conclusion date:	03/01/YY
Value date:	05/31/YY
USD purchase amount:	1,000,000 USD
EUR sale amount:	1,620,000 DEM
Spot rate:	1.59
Forward rate:	1.62
1st valuation:	on 03/31/YY
2nd valuation:	on 04/30/YY
Closing valuation:	on 05/31/YY

Date	Forward rate	EUR	Unrealized	Realized
03/01/YY	1.62	1,620,000		
03/31/YY	1.59	1,590,000	- 30,000	
04/30/YY	1.63	1,630,000	+ 40,000	
05/31/YY	1.60	1,600,000		- 30,000

Valuation on 03/31/YY:

The difference between the forward rate upon contract conclusion and the forward rate on the key date (based on the purchase volume of 1 billion USD) results in an **unrealized loss** of 30,000 EUR. A passive provision to this value is portrayed.

Valuation on 04/30/YY:

The difference between the forward rate upon contract conclusion and the forward rate on the key date (based on the purchase volume of 1 billion USD) results in an **unrealized gain** of 40,000 EUR that is **not disclosed**. Therefore, no posting takes place here. The provision for the unrealized loss from the previous key date valuation is, however, not reversed.

Valuation on 05/31/YY:

The difference between the forward rate upon contract conclusion and the forward rate on the key date (based on the purchase volume of 1 billion dollars) results in a **realized loss** of 30,000 EUR.

In this example, a common *Valuation principle* is used that allows use of single-step valuation and the strict lowest value principle. The exchange rate determination is based on the middle rate. Furthermore, in accordance with the calculation rules underlying this example, it is assumed that the unrealized gains are not disclosed.

You will find further information via Valuation principles and valuation classes [Ext.] and Two-level valuation methods [Ext.] and Reverse valuation [Page 115].

Key Date Valuation

Use

The key date valuation refers to the accounting valuation of transactions or positions compared to the market value *on a particular key date*.

The key date valuation covers (depending on the valuation principle) the posting of unrealized gains and losses and the resulting creation/reversal of provisions as well as the posting of write ups/write downs. For each transaction type within a company code, you can make settings in Customizing to determine which rate types are used in valuation.

Realtime Datafeed [Page 167] provides the valuation rates required.

> In the case of *Foreign currency valuation*, for example, this means the use of spot rates or forward rates.

Activities

Proceed as follows:

1. Choose *Accounting* → *Valuation* → *Key date valuation.*

   This takes you to the entry screen headed *Treasury: Valuation per Key Date*.

2. Enter your selection criteria in the following entry fields:

   − Company code

   − Product type

   − Transaction type

   − Partner

   − Due date

   − Transaction

   − Active status

   − Portfolio

   - Key date (current date as default value)

3. If you flag the test run field, you can also run the key date valuation as a simulation.
   In this test run, the valuation list is output without the database changes (postings) being carried out.

4. If you flag the *Carry out posting immediately* field, the flows generated by the key date valuation are immediately posted. Otherwise, the flows must be posted later by using the relevant functions.

5. Set the *Derivatives* flag if you would like to value derivatives. At present, the valuation of OTC options is supported in this area.

6. Enter a NPV value. If you are using the Market Risk Management (MRM) component, it will provide data for the key date valuation here. NPVs of the NPV type specified hereare supplied (These NPVs have been saved in the system using the report entitled 'Saving of OTC NPVs'.) The NPV amount in the display currency (from MRM) is converted to the currency of the option premium within the key date valuation.

7. Choose *Program* → *Execute*.

8. You receive the key date valuations.

⇨ Unrealized gains and active provisions are not disclosed in Germany. According to the *Imparity principle* (accounting valuation), unrealized losses must be anticipated.

Calculate Realized Gains/Losses

Use

With this function, you calculate the gains/losses resulting from the difference between the rate (foreign currency against local currency) used for posting (Posting value) and the price agreed upon conclusion of the transaction.

> Forward exchange transactions are usually pending transactions i.e. transactions that still need to be fulfilled.
>
> Gains and losses are only then realized when the other partner has fulfilled his obligation.

Prerequisites

You have to conclude and post the transactions concerned before you can determine the related realized gains and losses.

Activities

To determine realized gains and losses:

1. Choose *Accounting → Valuation → Realized gain/loss.*

    This takes you to the entry screen headed *Treasury: Realized Gains/Losses.*

2. Enter your selection criteria in the following entry fields:

    – Company code

    – Product type

    – Transaction type

    – Business partner

    – Due date

    – Transaction no.

    – Active status

    – Portfolio

3. If you select *Test run*, you can also run a simulation for valuing realized gains/losses. This test run generates a valuation list. No database changes/postings are carried out (no document number).

4. If you flag the *Carry out posting immediately* field, the flows generated by the posting are immediately posted. Otherwise, the flows have to be posted later using the relevant functions.

5. Set the *Derivatives* flag if you wish to value derivatives. At present, the valuation of OTC options is supported in this area.

6. Choose *Program → Execute.*

7. The SAP R/3 System displays a list of realized gains/losses.

Split Valuations of Spot and Swap

Use

You usually use Realtime datafeed [Page 167] for valuation in the forex area. This provides the valuation rates required. You can carry out the valuation run for transactions that can be flexibly selected. You determine the realized gains and losses according to the principle of individual valuation of transactions.

Activities

There are two methods for calculating gains and losses: Take the difference between the forward rate upon contract conclusion and the rate posted on the value date to arrive at the valuation rate. The second method entails the generation of split spot and swap valuations (refer to points 4 and 5 for foreign currency rate determination in the Valuation [Page 107] unit.).

In this way, you firstly calculate gains or losses on the basis of the difference between the spot rate on the day when the transaction is concluded and the spot rate on the valuation key date. From the swap part that has been accrued/deferred, the SAP R/3 System generates swap revenues/expenses up to the key date. The SAP R/3 System also carries out a valuation of remaining items and generates unrealized gains and losses for the accrued/deferred swap part from the key date until the end of term.

Foreign currency valuations are carried out on the basis of the individual transactions generated. With a forward exchange transaction, you can also have a split valuation with spot and swap transactions provided that the required settings have been made.

Reverse Valuation

Use

You can reverse valuation postings carried out on a specific key date in one step using the *Reverse valuation* function. To limit the number of flows to be reversed, you have various selection criteria available.

You cannot reverse realized gains/losses using this function.

Activities

To reverse a valuation:

1. Choose *Accounting → Valuation → Reverse.*

   This takes you to the entry screen headed *Treasury: Reverse Valuation.*

2. Remove any selections in the fields *Money Market, Foreign Exchange* and *Derivatives* which are not applicable. This will speed up the response times for all subsequent operations, since only the transactions in the components you have selected are taken into account.

3. Enter your selection criteria in the entry fields under the following headings:

   – General selections

   – Entered/last changed by

   – Control

4. You can only mark the flows as to be reversed (and with a separate reversal run), or make the reversal at the same time in the G/L.

5. Via *Edit → Free Selections,* you can individually set the selection criteria for the reversal of the valuation.

5. Choose *Program → Execute.*

Master Data

Definition

Transactions and positions in the SAP Treasury System are managed on the basis of master data. Master data is general data which does not vary from one transaction to another and which you, therefore, only have to enter once.

Master data in forex trading includes Business partner data [Page 117] and Standing instructions [Page 118].

Use

You use master data to process business transactions. You need to create it in order to execute transactions.

Master data is also frequently used as a selection criterion for creating evaluation reports.

Business Partner

Definition

You will find introductory information under [Business Partner [Ext.]](#) in Basic functions.

Integration

In the SAP Treasury System, you always process transactions in connection with the business partner with whom transactions are concluded. Transactions are carried out with business partners within Treasury. Typical partners are, for example, banks or a central treasury department.

Create business partner and release:

The functions of the business partner in the transaction are defined via business partner roles. **In the Foreign exchange module, before contracts can be concluded with a specific partner, the '*Treasury partner'* role must be assigned to the partner.** When you enter a transaction, the SAP R/3 System checks whether the partner exists in the corresponding role.

This assignment takes place in Basic Functions Customizing via *Business Partner → Define Role Types.*

Before entering a transaction and the partner with whom it is being concluded, partner master data must be maintained in the SAP R/3 System. Maintaining business partner master data includes general tasks such as *creating, changing* and *displaying* master records, in addition to specific functions where you define *Standing instructions* for payments processing, for instance.

Before you create a forex transaction, the corresponding bank can be created in the *Partner bank* role. In the business partner master record, you must define this partner bank ID.

You can release the business partner with the *Release business partner* function.

Transaction authorizations:

You must always define *Transaction authorizations* for a partner for the product and/or transaction type, before you can enter transactions with this partner.

Standing Instructions

Definition

You will find introductory information under <u>Standing Instructions [Ext.]</u> in the Basic functions of Treasury management.

Integration

If the same bank and payment details are always used for certain product types with a business partner, they can be entered automatically.

You can maintain *payment details* as standing instructions for a business partner both in Basic Functions via *Master Data → Business Partner → Standing Instructions* and in the Money Market, Foreign Exchange and Derivatives area via *Master Data → Standing Instructions*.

You activate standing instructions in Customizing of *Basic Functions* via <u>Define company code additional data.</u>

Information System

Use

In the information system area, you can access reports for the relevant *money market, foreign exchange, derivatives, securities* and *loans* applications.

In Customizing, choose *Structure Report Selection* (in the area menu maintenance) to display the report structure, that was integrated in the menu of the relevant area.

See also:

The documentation on structuring the report selection in the Implementation Guide.

Transaction

Offers - Evaluation

Features

This report provides an evaluation overview via individual configuration (e.g. sorting according to counterparty, currency, product type) for:

- offers made

- resulting contracts that have been concluded

  This gives you an overview of the quality of offers and the competitiveness of prices of individual business partners.

Also refer to the unit entitled Offers [Page 47] for foreign exchange and fixed-term deposit.

Transaction Overview: Journal

Use

You can use the journal to select transactions concluded by certain traders or with certain business partners in a certain period. It contains important data, sorted according to date or contract type e.g. Business partner, term, status, etc. You can branch to the basic data of the respective transaction from here.

To call up the journal:

1. Choose *Information System → Journal*

2. This takes you to the screen headed *Journal of Financial Transactions.*

    Enter the selection criteria in the corresponding fields.

    If you want to display all the transactions you have entered for a certain product type, enter the product type in the field *product type* and your name in the *User* field.
    The transactions can be sorted by *Date* or by *Activity category*. Under *Page change,* you specify when the system should automatically start a new page. You can choose between two variations:

    - start a new page for each new *company code, product type, transaction type,* or *date*

    - start a new page for each new company code, activity category or product type

    Remove any selections in the fields *Money market, Foreign exchange* and *Derivatives* which are not applicable. This will speed up the response times for all subsequent operations as only the transactions in the components you have selected are taken into account.

3. Choose *Program → Execute.*

4. The SAP R/3 System displays the journal for the OTC transactions you have selected. It contains the related key data, e.g. *counterparty, activity category, status*, *term*, etc.

    Position the cursor on the particular transaction. To display the basic data for an OTC transaction and branch to further screens, double-click on the required transaction, or place the cursor on the required transaction and press the **Choose** pushbutton.

Monitor

Features

The correspondence monitor provides the following processing and monitoring functions:

- An overview of the current processing status

- Setting the counterconfirmation status to *reconciled* directly from the monitor

- Generating planned correspondence directly from the monitor

- Repeating a a correspondence run. For example, you can repeat a correspondence run that was not successful (as the printer toner ran out, for instance)

- Navigating to manage Idoc, the transaction (history) or the display from the optical archive.

Integration

The correspondence monitor has been realized with the ABAP list viewer. As a result, there are many different options avialable for creating lists. The display variants can be specified in the program at the start.

Activities

5. Choose *Back office → Correspondence → Monitor*.

6. In the entry screen, you have a variable view of correspondence data with comprehensive processing options. Enter the required *transaction data* (general selections for the transaction) as well as *correspondence data* (outgoing/incoming confirmation, output control).

7. Choose *Program → Execute* or press the *Execute* button.

8. You see an overview of all selected transactions with details of the current processing status (OK, counterconfirmation required, correspondence output required, transaction reconciled). In this field, you have an *optical signal*. Here, you can make an assignment according to the 'Status relevance' and 'Counterconfirmation' criteria. The program assigns red, green or yellow signals for status-relevant records. Refer to the F1 Help for the meaning of the individual signals.

    This overview can be adapted according to your own criteria using user exit RFTBCOMO.

    Example: An overdue counterconfirmation with business partner X can be highlighted with a red signal if the counterconfirmation has been outstanding for at least 45 minutes.

6. To set the counterconfirmation status to *reconciled*, mark the line of the the relevant transaction and press the Counterconfirmation button on the upper applications toolbar. Consequently, you can have a counterconfirmation status for all product categories that allow an outgoing confirmation.

Overdue List for Counterconfirmations

For external correspondence, you can specify in the standing instructions whether there should be a counterconfirmation for the business partner. You can monitor *overdue counterconfirmations* using the back-office functions. You can only have a counterconfirmation status if the "Counterconfirmation required" setting was made in Customizing.

Procedure

1. Choose *Back Office → Correspondence → Overdue Counterconfirmations. .*

2. Enter the key values for the overdue list, e.g. *company code, transaction, product type, partner* etc., in the relevant fields.

3. Choose *Program → Execute* .

4. An *Overdue List for Counterconfirmations* is displayed on the screen.

   This list only includes transactions:

   - which have been defined to require counterconfirmation in the standing instructions and in Customizing (Counterconfirmation status = required) and

   - to which no incoming confirmation has yet been allocated.

   In the financial transaction the tab page Administration [Ext.] shows you the status of the financial transaction, either as:

   - required

   - confirmed

   - matched (i.e. counterconfirmation has been received and matched).

For more information, see Define Correspondence Types [Ext.] in the Implementation Guide (IMG).

Work Item List

Use

You can display a list of transactions still to be processed here.

1. Choose *Information System* → *Position List*

2. This takes you to the screen entitled *Transaction Release: Work Item Overview and Status of all Transactions.* Enter the selection criteria in the Transaction data and Addtional data fields.

3. Choose *Program* → *Execute*. The workflow data is read.

4. This displays an overview with the status of the transactions selected. .

Payment Schedule

Use

The *Payment schedule* provides an overview of payments which have been made or which are still due and contains information on the corresponding business partners and bank details.

Features

You can structure the payment schedule flexibly by choosing and arranging report columns and saving them as report variants. You can sum and sort columns to access particular information and navigate the report data. You can access more detailed information about a particular transaction by double-clicking on it.

Activities

To call up the Payment schedule, proceed as follows:

1. Choose *Information system → Payment schedule*

2. This takes you to the screen headed *Payment Schedule.* Enter the selection criteria in the corresponding fields.

3. Choose *Program → Execute* .

   The system displays a list of payments including information about the business partner involved and the bank details used for settlement.

4. Use *Edit → Sort in ascending/descending order* to sort the list according to the following criteria:

   − Company code

   − Payment date

   − Currency of payment amount

   − Name

   − Portfolio

   − Payment amount

5. The status column tells you which payments have already been posted.

   Posting status and posting release

Posting status (PS)	Posting release (Re)	Description
1		not yet posted
2		posted
3		flagged for reversal
4		reversed in FI
	X	release given

Maturity Schedule

Use

You can call up maturity schedules for spot/forward transactions and for OTC options according to various selection criteria.

Features

Maturity schedule - spot/forward transactions:

To call up the *Maturity schedule* for spot and forward transactions:

1. Choose *Information system → Maturity schedule → Spot/forward.*

2. This takes you to the screen headed Maturity Schedule for Spot/Forward Transactions. Enter the selection criteria in the corresponding fields.

3. Choose *Program → Execute*.

4. The SAP R/3 System calls up the Maturity Schedule for all due dates within the period you specified.

Maturity schedule - OTC options:

Via the *Maturity schedule: Options* function, all OTC options that can be exercised in the specified period of time are displayed according to the selection criteria.

To view detailed information, you can branch from the list to the display transaction of the OTC option. You can also use the *Exercise* or *Expiration* transactions.

If you wish to exercise an option or if you decide to let it expire, you can call up the corresponding transaction from this list.

You call up the maturity schedule as follows:

1. Choose *Information system → Maturity schedule → Options.*

2. This takes you to the screen headed Maturity Schedule for OTC Options. Enter the selection criteria here (such as Put or Call, European or American option) in the corresponding fields.

3. Choose *Program → Execute*.

4. The SAP R/3 System displays a list of OTC options.

Transaction Changes

Use

You can select transaction changes to be displayed according to date and user here.

1. Choose *Information system* → *Transaction changes*

2. This takes you to the screen entitled *Change Documents for Transaction*. Enter the selection criteria in the corresponding fields.

3. Choose *Program* → *Execute*.

4. You see all the changes made to the selected transactions in a list.

Position Management/Position Trend

The *Position management/Position trend* node includes all the reports that analyze the available positions.

Position List

Use

The position list gives you an overview of your money market position on a particular key date. You can also choose money market transactions carried out from a certain start of term or due up to a certain end of term. Position valuations are carried out in relation to traders or business partners by transactions being sorted and listed according to conditions.

To call up the position list:

1. Choose *Information system → Position list*

2. This takes you to the screen headed *Money Market: Position List.* Enter the selection criteria in the corresponding fields.

   In the area headed *Control,* you define the key date for the evaluation. Here you can also determine the fields for which sub-totals are to be generated. You can also define the field which is to be used for the sort sequence.

3. Choose *Program → Execute*.

   The SAP R/3 System produces a list of the positions per key date. The transactions are sorted according to product/transaction category, product/transaction type, company code and the sort criteria defined on the selection screen. If you enter summation criteria, the list will also contain the related sub-totals. You can change both the sort and the summation criteria directly from this screen. The current selection will always be displayed in the heading.

   At the bottom of the list, the SAP R/3 System shows a totals sheet. It is sorted according to product/transaction category, product/transaction type and company code and displays the corresponding sub-totals.

Features

You can generate the following position lists:

- Money market (all product types)

- Forex

- Listed options and futures

- OTC interest rate instruments

In General drilldown reporting [Ext.] (in the *R/3 Library* under *CA → CA- General drilldown reporting*), refer to the following units: Working With The Report [Ext.], Overview: Report-Report Interface [Ext.], Save, Print, Export, Send, Graphic. [Ext.]

Remaining Terms

Use

The *Remaining Terms Statistics* reports for the money market or the foreign exchange areas provide an overview of the positions available for financial transactions on a key date, including the remaining term in days on the key date.

It displays assets and liabilities transactions as nominal amounts in different position currencies. Accounting values (book values, accruals/deferrals) are not used here.

Prerequisites

You must have entered money market or foreign exchange transactions in the system.

Features

The key figures delivered with the system both for assets/liabilities transactions for the key date entered are as follows:

- Nominal value

- Interest rate

- Remaining term in days

For more information on the drilldown-reporting tool, see Drilldown Reporting [Ext.] (go to the *SAP Library* and choose *CA → CA Drilldown Reporting*). See, in particular, the following sections: How to Process Report Lists [Ext.], Overview: Report/Report Interface [Ext.], Saving, Printing, Exporting, Sending, Graphics [Ext.].

Revenue Analysis

Revenue List

Use

- The cross-Treasury revenue list displays any expenses and revenues that have incurred in Treasury between two key dates specified by the user.

  The performance data is divided up according to the Treasury functional areas.

  The report is designed for use at the top controlling level or accounting level. It focuses much less on the operative aspects of business.

  The report serves as a standard list that you can use as it is or as a template for creating your own reports.

- In addition to analyzing the revenue across the whole of Treasury, the revenue list can also be used in the individual areas: Money Market, Foreign Exchange, Securities, Derivatives (OTC interest rate instruments), and Loans.

Integration

You can branch to the following operative transactions from the report by choosing *Goto → Call up report.*

Money market	Collective processing
Foreign exchange transactions	Collective processing
OTC interest rate instruments	Collective processing
Listed derivatives	Display order
Securities	Collective processing
Securities	Position information
Loans	Create

Prerequisites

You must have created transactions from the various TR functional areas in the system.

Features

Selection

In the *Control parameters* area, you specify how the currency should be translated to the chosen display currency by selecting a *Translation type* (such as mean rate, as of today).

Enter the *Reference date* (for more information, see the F1 help for the field).

Report selections

- *Company code*
- *Product type*
- *Financial transaction*
- *Contract number: Loan*

- *Security ID number*

- *Securities account*

- *Business partner*

- *From date*

- *To date*

➡️

> If you perform the revenue analysis for a particular area, you can also enter more specific selection criteria.

Output

Select the *Output type* you require:

• Graphical report output	Corresponds to the classic drilldown report, but also offers other navigation options (drag-and-drop).
• Classic drilldown report	The system defaults to the output type classic drilldown report. However, you can also select a different output type.
	For more information on the options provided by drilldown reports, see the sections on Drilldown Reporting [Ext.] (in the *SAP Library: Cross-Application Components → CA-Drilldown Reporting*). See the following chapters in particulars: How to Process Report Links [Ext.], Overview: Report/Report Interface [Ext.], Saving, Printing, Exporting, Sending Graphics [Ext.].
• Object list (more than one lead column)	If you select this output type, the report is output using the ABAP List Viewer [Ext.].

It displays the flow key figures from Treasury Management. The following key figures are delivered for the period between the start and end date:

Profit and loss according to TR functional areas:

- Loans: Profit/loss in P/L currency

- Securities: Profit/loss in P/L currency

- Foreign exchange: Profit/loss in P/L currency

- Derivatives: Profit/loss in P/L currency

- Total profit/loss amount in P/L currency

- Total profit/loss amount in local currency

Accruals/deferrals

- Revenue accrued/deferred in P/L currency

- Revenue accrued/deferred in local currency

Payment-relevant flows

- Payment amount of period in payment currency

Revenue List

- Payment amount of period in local currency

For more information on using the drilldown reporting tool, see Drilldown Reporting [Ext.] in the *SAP Library* by choosing *Cross-Application Components* → *CA - Drilldown Reporting)*. See the following sections in particular: How to Process Report Lists [Ext.], Overview: Report/Report Interface [Ext.], Saving, Printing, Exporting, Sending, Graphics [Ext.].

.Accounting

Use

This node in the report trees includes all the posting reports for the respective applications.

Posting Overview

Use

Using the *Posting overview* function, you can generate a list of all the flows posted for selected transactions.

The SAP R/3 System creates a list split into two sections. The first section, *Transaction data,* contains information on the underlying financial transactions. The second section, *Posting data,* contains information on the related flows and, if appropriate, the document numbers of the postings.

By making the appropriate selection, you can sort the list by business partner.

You can also branch directly to the basic data screen online via double-click.

- Under *Transaction data,* you branch to the single transaction display.

- Under *Posting data,* you can branch directly to the individual display of the posting document, provided the FI document number is displayed.

Activities

1. Choose *Information system → Accounting → Posting overview.*.

   The *Posting Overview* screen is displayed.

2. Remove any selections in the *Money Market, Foreign Exchange* and *Derivatives* fields which are not applicable. This will speed up the response times for all subsequent operations as only the transactions in the components you have selected are taken into account.

   If you select the field, *Sort by counterparty,* under *Further selections*, the SAP R/3 System sorts the list by business partner.

3. Enter the appropriate criteria to select the transactions you require and the related flows.

4. Choose *Program → Execute*.

5. The SAP R/3 System displays a list with the transactions you selected.

   From here, you can branch online to the basic data. By making selections in the section, *Transaction data*, you come to a display of the transaction concerned. Via *Posting data,* you can display a single posting document provided the selected flow has already been posted. You can tell that a flow has already been posted because the corresponding FI document number is shown in the list. Otherwise, the following give you more information on the transaction:

   Posting status and posting release:

Posting status (PS)	Description	Posting release (Re)	Description
1	not yet posted	X	release given
2	posted		
3	flagged for reversal		

4	reversed in FI		

Posting Journal

Use

The Posting journal gives you detailed information about the posted flows of selected transactions. In particular, the posting type, key and accounts are displayed.

Features

You are free to arrange the posting journal according to different characteristics and sort evaluations using the link to the ABAP List viewer [Ext.]. You can save the display variants you have defined and call them up again at any time.

Unlike the Posting overview, only the flows actually posted with the corresponding accounts are shown here.

Activities

1. Choose *Information system → Accounting → Posting journal*. The *Posting Journal* screen is displayed.

2. Remove any selections in the *Money Market, Foreign Exchange* and *Derivatives* fields which are not applicable. This will speed up the response times for all subsequent operations, since only the transactions in the components you have selected are taken into account.

3. Enter the appropriate criteria to select the transactions you require and the related flows.

4. Choose *Program → Execute*.

5. The SAP R/3 System displays a list with the transactions you selected.

   By clicking on the *Company code, Transaction and Product type,* you can branch to the transaction basic data. Under the heading*, Posting data,* you can call up the individual display of the posting document.

Risk Settings

This node includes the reports for limit management.

Limits: Overview

Use

You get an overview of limits for the selected limit types by running the *Limits: Overview* report.

Prerequisites

You have already created limits.

See also: Edit limits [Ext.]

Features

Selection

Area	Selection
General access options	*Limit types*
	Currencies (these currencies are used to manage limits in the system)
Either	
Entry selections per key date	*Limits key date*
	The limits selected are effective for a period covering the key date entered.
or	
Selection via direct entry of validity ranges	
	Start of limit validity
	End of limit validity

Output

The overview list displays all limits selected according to limit type.

From this overview, you can branch to the Overview of Limit Utilizations [Page 146] of the individual limits.

You can also branch to the business partner data from here.

You can display the overview containing data present in the system in different ways. Refer to the ABAP List Viewer [Ext.] documentation for information on editing the lists.

Limits: Display Changes

Use

Use this report to get an overview of the changes made to the limits for the limit types you have specified, depending on the change date and the changing user name you enter.

Features

Selection

Selection ranges	What you should know
Limit type	
Date	Period for which you want change documents to be displayed.
User	The *User* whose change documents you want to see.

Output

The SAP R/3 System displays a list of *Changes To Limits*, sorted by limit type in ascending date order. In this list, you can look at old and new entries for limits, the person who made the changes, the change document and further information.

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Via *Edit → Search For...* you can search for terms in comprehensive lists.

Activities

1. Choose *Limit Management → Limits → Display changes.*

2. Enter the following ranges as selection criteria for the changes to limits:

    – Limit type

    – Date

    – User

3. Choose *Execute*.

Limit Utilizations: Overview

Use

Via the *Utilizations*: *Overview* function,you get an overview of limits and limit utilizations for the limit types selected relating to the key date specified.

Prerequisites

Generate limit utilizations [Ext.]

Features

Selection

Area	Selection
General access options	Limit types
	Currencies
Selection of limit utilizations	Key date of limit utilizations from...to

Output

You use the ABAP list viewer to output a list. This list contains the totals records for the limit utilizations sorted according to limit type and limit characteristics.

Limits which have been exceeded are shown in red.

Via *Goto → Partner*, you can branch to the partner data if the partner has been assigned to the limit type as a limit characteristic.

Via *Goto → Individual utilizations*, you can branch to the individual utilizations for totals records. You can see the individual transactions here from which the utilizations originate. Via *Goto → Transaction details*, you can branch to the transactions display from here.

You can display the overview containing data present in the system in different ways. Refer to the ABAP List Viewer [Ext.] documentation for information on editing the lists.

Activities

1. Choose *Limit management → Utilizations → Overview.* This takes you to the screen entitled *Overview of Limit Utilizations (Totals Records).*

2. Enter the range for the limit type, the currencies and the key date of the evaluation as selection criteria for the limit utilizations.

3. Choose *Execute*.

Master Data

The Information System contains the following reports for analyzing the business partner data. You find them by choosing *Master Data*.

- Business Partner Roles [Page 150]

- Business Partner Data [Page 151]

- Business Partner Relationships [Page 153]

- Standing Instructions [Page 154]

- Changes to Business Partners [Page 155]

The *Securities* area also includes reports for the Class Information [Ext.] and the Securities Account List [Ext.].

The *Money Market* area also includes the following reports for the master agreement:

- Limits/Utilization of Master Agreement [Ext.]

- Changes to Master Agreement [Ext.]

Business Partner Data Analysis

Use

A business partner is an organization or a natural person in which a business interest exists. The importance of the business partner in Treasury as a whole is reflected in the information system by the many reporting functions offered for analyzing the business partner data.

Integration

The *ABAP List Viewer* enables you to adapt the reports according to the information you require.

To call up the individual reports in the securities area, choose *Information system → Master data → Business partner.*

Features

- The following reports are available for analyzing the business partner data:

   Business partner roles

   This report displays the various functions (roles) assigned to a business partner. For example, a business partner can be assigned the roles of issuer, counterparty or payment bank.

   You can group and display the data in the report according to different criteria.

   Business partner data

   This report lists all the business partners according to the selection criteria entered. You can then call up detailed information for each partner, such as address details, credit data or bank data.

   Business partner relationships

   This report shows you all the business partner relationships on a particular date at any selection level you choose (number of levels displayed in a relationship hierarchy).

   Standing instructions

   This report enables you to display the standing instructions (authorizations, payment details, correspondence or derived flows) that are defined for the business partners you have selected.

   Changes to business partners

   This report allows you to call up the change documents for the master data of the business partner.

- You can print out the reports and/or download them.

- You can branch from the lists to the master data for the business partner.

Business Partner Roles

Use

This report displays the various functions (roles) assigned to a business partner. For example, a business partner can be assigned the roles of issuer, counterparty or payment bank.

Features

- The report provides business partner information about the role categories, role types and the availability of deletion flags.

- You can restrict the list to certain business partners and/or role categories, or you can use the fields in the business partner master (general data) to restrict it by choosing *Edit →* *Dynamic selections*.

- You can branch from the list to the business partner data.

Activities

1. Choose *Information System → Master Data → Business Partner → Business Partner Roles.*

   The *Business Partner: Overview* screen appears.

2. You have the option of restricting the list to certain business partners and/or role categories.

3. By choosing *Edit → Dynamic selections*, you can make further selections in the business partner master (general data).

4. Under the heading *Sort by*, you can define the structure of the overview list. You can use the following criteria to list the business partner data:

   a. Partner number

   b. Grouping

   c. External partner number

   d. Role category

5. *Execute* the report program.

   The screen *Business Partner: Overview* appears (three columns).

6. To branch to the business partner data, position your cursor on the business partner number and choose *List → Choose,* or double-click on the business partner number.

   The *Business Partner Display: Role Overview* screen appears.

   You can navigate in the business partner data in the usual way.

Partner Data

Use

This report first displays all the partners according to the selection criteria you enter. You can then call up detailed information for each partner, for instance, address details, credit data or bank data.

Features

- This report allows you to display all the data for a business partner in a list containing the field names, the short text and the contents of the field.

- You can restrict the list to certain business partners and/or company codes, or you can restrict it by choosing *Edit → Dynamic selections* and use the fields in the business partner master (general data).

- You can branch from the list to the business partner data.

- You can print out the report and/or download it.

Activities

1. Choose *Information System → Master Data → Business Partner → Business Partner Data.*

   The *Evaluation Report: Business Partner Data* screen appears.

2. You have the option of restricting the list to certain business partners and/or company codes.

3. By choosing *Edit → Dynamic selections*, you can choose from a further selection of fields in the business partner master (general data).

4. *Execute* the report program.

   The system displays the *Business Partner Data* list.

5. Using the buttons at the top of the screen, you can display the business partner data in lists.

   You can use the buttons to branch to the following areas:

a. *Master data*

b. *Role data*

c. *Address data*

d. *Bank data*

e. *Dunning data*

f. *Credit standing data*

g. *Fiscal data*

h. *Relationship data*

i. *Employment data*

   By choosing the *Complete list* button, you can display the data for a business partner in one list. Here, you can define precisely which data you want to include in the list. You

Partner Data

also have the option of displaying additional data to the data you can display using the other buttons.

The *Choose* button enables you to branch to the business partner data.

The *Business Partner Display: Role Overview* screen appears.

You can navigate in the business partner data in the usual way.

Partner Relationships

Use

The report displays all the business partner relationships on a given date at any selection level you choose (number of levels displayed in a relationship hierarchy).

Integration

The incoming relationships of a business partner are all the relationships that were created in the master data of the other business partner.

The outgoing relationships are all the relationships with other business partners that were maintained in the master data for the relevant business partner.

Features

- You can display the incoming or outgoing relationships of one or several business partners. This enables you to restrict the depth to which you expand the relationships.

- Choose *Edit → Dynamic selections* and use the fields in the business partner master data (general data) to restrict the list.

Activities

1. Choose *Information system → Report Selection → Master Data → Business Partner → Partner relationships*. The *Business Partner: Report Relationships of Several Business Partners* screen appears.

2. You have the option of restricting the list to certain business partners.

3. Choose *Edit → Dynamic selections* and use the fields in the business partner master data (general data) to restrict the list.

4. Select whether you want to display the incoming or the outgoing relationships.

5. Define the *Selection date* and the *Selection depth*. The current date and selection depth 5 are the default values here, but you can overwrite them.

6. *Execute* the report program.

   The system displays the *Incoming* or *Outgoing Relationships* list for the business partner.

Standing Instructions

Use

This report enables you to display the standing instructions (authorizations, payment details, correspondence or derived flows) that are defined for the business partners you have selected .

Features

Depending on the standing instruction, you can make selections using the following data:

- Company code

- Business partner

- Contract type

- Product category

- Product Type

- Transaction type

You can also display the business partner which is marked with a deletion flag.

> You only see the partners which you are also authorized to display by the relevant standing instructions.

Displaying Changes

Use

This report allows you to call up the change documents for the master data of the business partner.

Features

Selection Criteria

You can select data according to particular business partners and/or according to the data you want to change (date, user).

Output

From the change documents list, you can see when a change was made, who made it, and exactly what was changed (the old and new value is displayed for each field changed).

Environment

Use

Via *Environment*, you can branch to Market data management.

Features

- Manual market data entry [Page 159]

- Market data transfer from spreadsheet [Page 162]

- File interfaces [Page 164]

- Datafeed [Page 167]

- DME management [Page 172] (in money market and forex trading)

Manual editing of exchange rates [Page 160]

Manual editing of reference interest rates [Ext.]

Import market data [Page 165]

Generate requirements list [Page 166]

Display market data [Page 169]

Request current market data [Page 170]

Market Data Management

Use

Here, you find the functions for transferring market data to the SAP System. You can transfer market data can be transferred to the SAP System both using the file interface or realtime datafeed.

Features

- Manual market data entry

  Here, you find the initial screen for entering the market data you require in the relevant application area. You can change the individual values manually.

- Using the Market Data Transfer from Spreadsheet [Page 162] function, you can import up to 1000 rates and prices from a spreadsheet to the SAP System.

- The *market data file interface* enables you to do the following:

  – You can import a file containing external market data, check it and if necessary update the operative SAP database tables for the market data.

  – You can display a list of all the activities that have been performed and all the errors that occurred.

  – You can retrieve the master data defined in the SAP System for the market data and generate a list of the requested market data in SAP notation.
    You can save the list as a file.

  – Import statistical data.

- The functions provided by *realtime datafeed* allow you to work with market data effectively and efficiently. You need an external interface program supplied by your datafeed provider that delivers the market data to the SAP System in a suitable form.

  The following functions are available:

  – Market data/error buffer management

    The system enables you to list and analyze current market data and the most recent errors that occurred during data transfer or delivery.

  – External data transfer

    One report enables you to transfer current and historical market data in datafeed notation.

  – User log

    The user log records the number of times each user accesses the SAP TR datafeed interface. You can display, print out or archive this user log. You can also download it as an ASCII file.

Manual Market Data Entry

Use

Using the *Manual market data entry* function, you can branch directly from the application to the functions for maintaining market data, which are stored in Customizing.

Features

The entry fields are different for each application area:

The *money market* area includes the following activity:

- *Enter exchange rates*

The *foreign exchange* area includes the following activities*:*

- *Enter foreign exchange swap rates*
- *Enter exchange rates*

The *securities* area includes the following activities:

- *Enter exchange rates*
  - *Enter reference interest rates*
  - *Enter security prices*

The *derivatives* and *loans* areas include the following activities:

- *Enter reference interest rates*
- *Enter exchange rates*

Editing Exchange Rates Manually

Use

You use this function to enter exchange rates in relation to time (*Valid from*).

Integration

- To find this function, go to Customizing and choose *Implementation Guide for R/3 Customizing → General Settings → Currencies → Enter Exchange Rates,* and Customizing for *Basic Functions* in Treasury and choose *Enter Exchange Rates.*

- The system uses the exchange rates defined in rate type 'M' for currency translation when you post and clear documents. There must be an entry in the system for this rate type.

- The exchange rates are valid for all company codes.

Prerequisites

Before you can enter exchange rates, you must make the following Customizing settings by choosing *Implementation Guide for R/3 Customizing → General Settings → Currencies*:

1. *Check Exchange Rate Types*

   Define the rates types under which you want to store your exchange rates.

2. *Check Currency Codes*

   Define the currency keys you require.

3. *Define Translation Ratios for Currency Translation*

   Define the translation ratios for

   a. the currency pair

   b. the rate type

   c. the date

See also:

The relevant section in the Implementation Guide (IMG) by choosing *Implementation Guide for R/3 Customizing → General Settings → Currencies.*

Features

- You can make new entries and/or delete existing entries. To do this, you can use the following functions in the input help: *Copy as, Undo change* and *Position.*

- The system displays the currency translation ratios.

Activities

1. Choose *Treasury → Treasury Management → Securities → Environment → Market data → Manual market data entry → Enter exchange rates* or *Treasury → Treasury Management → Basic Functions → Market Data Management → Manual market data entry → Currency → Enter exchange rates.*

2. All the existing exchange rates appear in a table in the *Change View "Currency Exchange Rates": Overview* screen.

3. To change an existing value, you simply overwrite it.

4. To delete an entry, select it and choose *Delete*.

5. To make a new entry, choose the *New entries* function. You can enter the new values on the following screen. Enter the following data:

   a. *Rate type*

   b. The currency *from* and *to* which the rate is valid.

   ➡

   If you have not defined any translation ratios for this combination (*rate type, from* and *to*), a message appears giving you the option of making these entries.

   c. *Valid from* date

   d. The *rate*

   ➡

   The *Copy as* function enables you to copy an existing entry so that you only have to enter the *Valid from* date and the new *Rate.*

6. *Save* your entries.

Market Data Transfer from Spreadsheet

Use

This function allows you to call up market data directly in the SAP R/3 System from a spreadsheet and transfer the data.

Integration

The integration of the external spreadsheet (Microsoft Excel 97 or Lotus 1-2-3, Version 9.0 Millenium Edition) with the SAP R/3 System takes place via OLE.

The program is preconfigured to work with Microsoft Excel 97.

⇨ If you do not use this program, adjustments may be necessary.

Prerequisites

- A spreadsheet program is installed on the PC.

- This function is exclusively designed for the Enjoy screen size of 27 lines and 120 columns.

  ⇨

  Read the report documentation *'Importing Market Data via the File Interface'* (RFTBFF00) and *'Output of the Requirements List'* (RFTBFF01). The requirements regarding field length, field meaning, etc. are also valid here.

Features

- You can import existing market data files.

  ⚠

  You can transfer a maximum of 1000 rates and prices to the SAP R/3 System at the same time via the spreadsheet. If you wish to transfer more rates and prices, you should use the file interface or datafeed.

- You can create new files. The master data that has been defined in the SAP R/3 System is transferred as the table framework so that only the values still have to be entered.

Activities

1. Choose *Basic functions → Market data management → Spreadsheet.*

2. Press the *"Spreadsheet"* button which controls the interface parameters of the report.

   a. *Application that is to be started:* Via F4-Help, choose the spreadsheet that you wish to use. (The spreadsheet must support the Table category.)

   b. *Document template (WEB repository):* You enter a template here that is copied from the WEB repository to the current document when you create a new spreadsheet.

   c. *First and second macro to be run*: You enter the macros here that are called up in the work file of your spreadsheet for transferring table information. The first macro transfers

data back into the SAP R/3 System (*TableBackToR3*). The second macro fetches the data from the SAP R/3 System. (*FillTableFromR3*).

SAP delivers an Excel template with the relevant macros. Only change the standard macro names if you wish to create your own template with its own macros and wish to use your own macro names.

3. If you wish to import an existing file, then enter its name and path where you can find it.

4. If you wish to create a new file, you can specify the market data you wish to enter under *Market data selection for new creation*. The table is then preconfigured so that you can enter the values for all defined characteristics of this market data.

5. Switch to the *Spreadsheet* tab page.

6. Choose *Create* to enter new files and then enter the data. Use the *Import market data* function to load data into the SAP R/3 System.

7. When you import an existing file, the spreadsheet is opened. Use the *Import market data* function to load data into the SAP R/3 System.

File Interfaces

Refer to:

Rates and prices [Ext.]

Statistical data [Ext.]

Import Market Data

1. Choose *Tools → Market Data File → Rates and Prices → Import.*

    The screen entitled *File Interface: Import Market Data* appears.

2. Under the heading *File,* enter the directory path and the file name of the market data file you want to import in the field marked, *Name.*

    If you check the box marked *Test run* under the heading *Other*, the system will only run a simulation of the market data import.

3. Choose *Program → Execute.*

    The SAP R/3 System now imports the market data.

Generate Requirements List

1. Choose *Market data management* → *File interfaces* → *Rates and prices* → *Generate requirements list.*

    The screen entitled *File Interface: Generate Requirements List* appears.

2. Under the heading *Output,* in the field marked *File name,* enter the directory path and the file name of the file in which the requirements list is to be output. The directory path must already exist on the application server.

    You can restrict the requirements list to be generated by selecting the following *Instrument classes:*

    a. *Currencies*

    b. *Securities*

    c. *Interest rates*

    d. *Indexes*

    Under *Selection,* you can enter further restrictions for the requirements list by entering master data and instrument properties.

3. Choose *Program* → *Execute*.

    The SAP R/3 System displays a selection list for requesting market data. You select the requested market data by marking the relevant entries in the column marked *OK.*

4. Choose *Market data* → *Save* to save the requirements list to the output file.

Datafeed

Use

You can use the R/3 Treasury datafeed to incorporate current market data in your financial transactions via an open interface. The following graphic provides an overview of the use of datafeed in the SAP R/3 System.
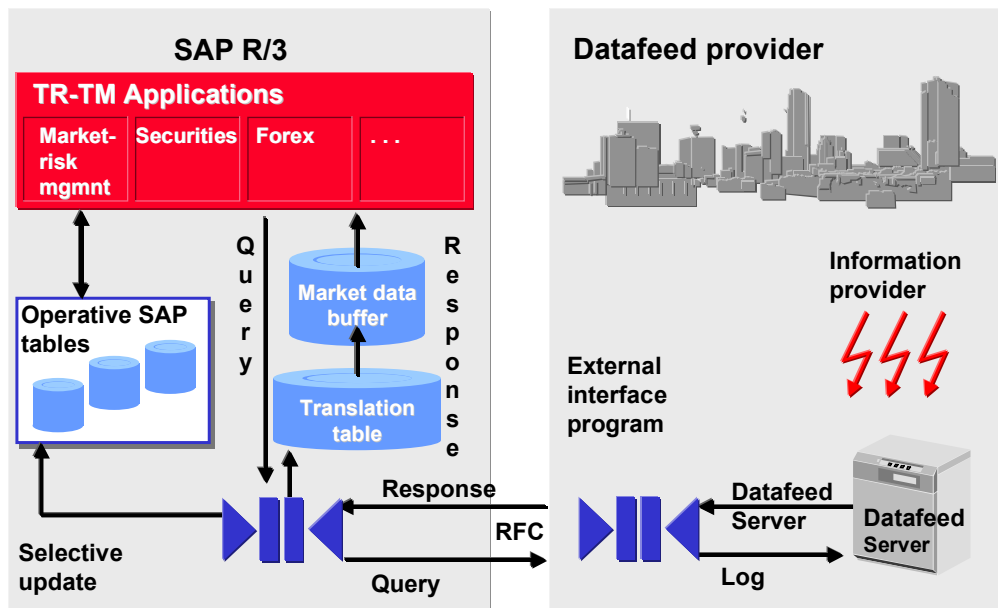
Prerequisites

- You have a real-time datafeed in operation in your company.

- The system platform of your real-time datafeed provider supports the R/3 datafeed.

Features

- Market data buffer containing current market price information

- Standardized communication structures compatible for all providers

- Reports to request and receive price information from datafeed providers

- Reports for directly evaluating the market data buffer and for saving information on exchange rates, interest rates and securities in the relevant SAP standard tables

- Flexible conversion of financial instrument names

- Query log to document access to the data buffer

- Datafeed Workflow - Handling Errors

  The workflow recognizes transfer errors or Customizing errors and informs the relevant processor who can then deal with the error.

Datafeed

- User Exit for Rate/Price Calculations

  To calculate average rates/prices, invert rates/prices, etc, you can use TRTMDF01. You have access to rates/prices that are permanently in R/3 and can calculate new ones if necessary.

- Rates/prices via the Internet Make the necessary settings in Customizing via *Internet Settings for the External Partner Program* such as Universal Resource Indicator (URI), user and password (coded).

  ⚠️

  Note that you can only use this functionality if you connect to the WEB server of a SAP certified partner whose certificate is also valid for internet access.

You can transfer the following types of market data via the datafeed interface:

- Exchange rates

- Security prices

- Reference interest rates (e.g. LIBOR, FIBOR)

- Indexes

- Forex swap rates (Forwards)

- Currency volatilities

- Securities volatilities

- Index volatilities

- Interest rate volatilities

- Commodities (not used in Treasury but in SAP Oil & Gas)

Displaying Market Data

Use

Depending on the selection criteria you define, the *Display market data* function generates a list of the most recently imported market data and of any errors by calling up report RFTBDF00.

You can select, display or print out market data from this list.

Activities

1. Choose *Tools* → *Datafeed* → *Display market data.*

    The system displays the screen headed *Datafeed: Market data management.*

2. Enter your selection data for the market data you wish to display.

3. Choose *Program* → *Execute*.

    The SAP R/3 System lists the market data you selected.

4. You can now select or flag the market data to view detailed information.

5. You can print out the list of market data via the menu path *Market data* → *Print.*

Requesting Current Market Data

Use

Current market data is requested using report RFTBDF07. The selected market data is obtained via the datafeed interface and written to a market data buffer.

Features

The R/3 master data table (Exchange rates, securities prices,etc.) is only updated with this report if an update is explicitly asked for in the selection. To do this, you must select *Save market data in R/3 permanently, if defined in Customizing.* The SAP R/3 System only updates market data if you set the *Refresh* indicator during Customizing. All others are updated in the market data buffer only.

You can generate an error log and/or a market data list as required.

Prerequisites

- The link with the partner system/coupling program is working

- Customizing settings are maintained in datafeed

- At the start of the report, ensure that you have the following RFC authorizations:

  - Authorization object S_RFC with field attributes RFC-TYPE='FUGR', RFC_NAME='TBDF' and ACTVT=16 (Execute) and

  - Authorization object F_T_FBNAME for asynchronous calling up with field attributes ACTVT=01 (add or generate) and FNMA='TB_DATAFEED_RATE_R'.

    These authorization objects are contained in the F_DTFEED_ALL profile.

- To maintain the rates/prices in the operative SAP tables, you need the following authorization groups:

  - FC32 (Currencies)

  - FC16 (Interest rates)

  - TRZ (Indexes)

  - FC00 (Currency volatilities)

  - TRMK (Interest rate volatilities).

Features

Report RFTBDF07 generates an R/3 inquiry on one occasion that leads to a delivery of rates/prices.

> If your external datafeed supports realtime rate/price provision, you can initialize a Real-time-rate/price provision [Ext.] with report RFTBDF14. In this case, the market data buffer and, if necessary, the R/3 master data table is updated then and several times via the external datafeed.

Activities

1. Choose *Market data management* → *Datafeed* →*Market data* → *Request current market data.*

    This takes you to the screen entitled *Datafeed: Refresh Market Data and R/3 Tables.*

2. Enter the data necessary for your selection.

3. Choose *Program* → *Execute*.

    The SAP R/3 System calls up the market data management basic list generated according to your selection criteria.

4. You can now select or flag the market data to view detailed information.

5. You can print out the list of market data via the menu path *Market data* → *Print.*

Data Medium Administration

Use

Data medium administration (DME administration) helps you to manage the data media that you create in Financial Accounting and in Human Resources.

In the Accounts Receivable or Accounts Payable menu, choose *Periodic processing* → *Payments*. The system displays the Automatic Payment Transactions: Status screen. From here, choose *Environment* → *Payment medium* → *DME administration* to reach the DME administration screen.

In the Payroll country menus, choose *Payroll* → *Bank transfer* → *DME management*.

In the DME administration overview, the system displays all the data media created with the selection criteria you have specified. You can call up further information for each data medium. Select the required data medium.

Features

DME administration includes the following functions:

- **Displaying data medium attributes**

  Choose *Extras* → *DME attributes*

  The system displays the following information for the selected data medium:

  - Payment run ID

  - House bank or clearing house

  - Date and time of data medium creation

  - Responsible person

  - Amount paid in currency specified

  - Further technical data

- **Deleting an individual or several data media**

  The accompanying administrative data is deleted from the system at the same time.

  Select the required data medium and then choose *Edit* → *Delete data medium*. A confirmation prompt appears. The selected data media are deleted when you confirm this prompt.

  If you wish to delete data media from several company codes, then you should use the reorganization function within the payment program.

  See also:

  Deleting DME Administrative Data Across Company Codes [Ext.]

- **Downloading one or more files from the SAP system or from the file system to hard drive or disk**

  See also:

  Downloading a DME File onto Disk [Ext.]

- **Displaying the contents of a data medium on the screen or printing the contents**

    Choose *Edit → Display DME* contents from the DME administration overview screen.

    The following functions are **not** available for payments from *Human Resources* (HR).

- **Displaying Documents**

    Choose *Extras → DME attributes* and then *Environment → Display documents*. By selecting *Choose*, you branch into the selected payment document.

- **Displaying the transferred data after receiving and entering the account statement**

    To do this, choose *Extras → Bk transact.attribs* from the DME administration overview screen. If your electronic account statements are processed automatically, then the system fills in the fields within the *Account statement* group.

- **Printing the payment summary for the selected data medium**

    To do this, choose *Extras → Payment summary* from the DME administration overview screen.

- **Creating a payment advice note**

    If you do not use the automatic transfer of electronic account statements but instead enter the account statement data manually, you can simplify this work by means of payment advice notes within DME administration.

    You can create a payment advice note for a specified data medium using *Environment → Generate doc.pmt adv*. You can enter this payment advice number at a later stage when clearing the bank clearing account. During clearing, the system then only proposes those open items which belong to the payments specified in the payment advice.

    You can find more information on the use of this function in Great Britain, (for the creation of a Telepay file, for example) in the documentation of report RFFODTA1.