Derivatives

Release 4.6C

SAP™

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Icons

Icon	Meaning
⚠	Caution
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💡	Note
🧭	Recommendation
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Contents

Derivatives

Purpose

The Derivative Financial Instruments component covers the entire business process including FRAs and trading with OTC options, swaps, Caps/Floors, foreign exchange and options and futures. This process starts when you enter the transaction, through processing, to transferring data to Financial Accounting.

Integration

Derivatives play an important role in interest and currency management. For Risk Management, you must firstly carry out an analysis of the current situation based on current market data. This requires that you look at the aggregate of basic transactions and associated hedging transactions on a comparable basis. For derivatives, and options in particular, this results in the instruments being represented as delta equivalents. As a result only, only the volume of the viewed positions which is actually subject to market fluctuations is included in the risk analysis and the decision making process. In addition to analyzing the exposure and the market values, you need to take account of the special nature of derivatives when reviewing your liquidity situation. In contrast to the classical financial instruments, derivative instruments generate cash flows which have an element of uncertainty (either the amount is uncertain or the amount and the likelihood of occurrence are uncertain) in addition to the fixed cash flows. In Market Risk Management, you can display and simulate these cash flows (variable payments of a swap, options). As derivatives are dependent on variable financial market values such as reference interest rates, access to realtime datafeed which provides up-to-the minute market price information is advantageous. In the Trading area, an option price calculator helps you calculate prices.

Features

The product types in the Derivatives area are:

OTC Interest Rate Instruments

- Swaps
    - Interest rate swap
    - currency swap
- Forward rate agreement (FRA)
- Cap/Floor

OTC options

- Currency Option
- Currency barrier option
- Swaption
- IRG (option on FRA)
- Security option
- Compound option

Listed transactions

Derivatives

     –   Listed options and futures.

The following graphic shows how the various Derivatives components relate to one another:
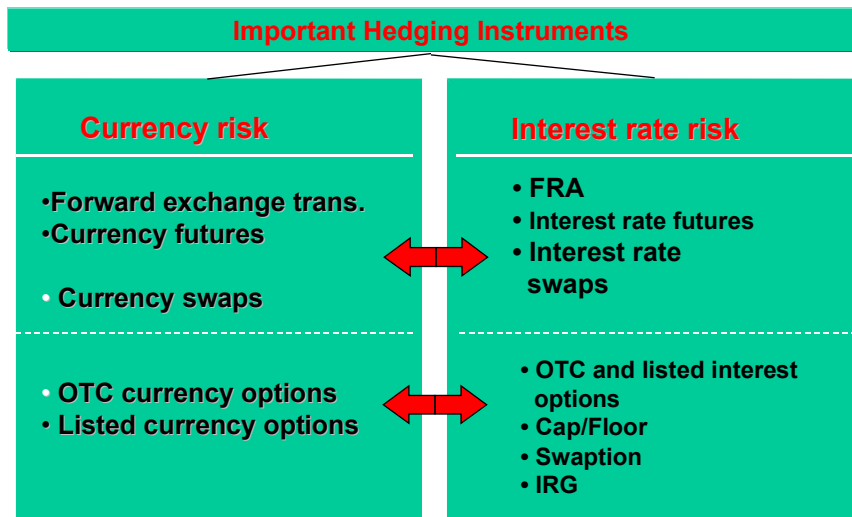
To enter the *Derivative Financial Instruments* component:

Choose *Accounting* → *Treasury* → *Treasury Management* → *Derivatives.*

The following sections give you an overview of the functions in this component.

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).

OTC Interest Rate Instrument

Use

Trading and processing of OTC interest rate instruments allows you to control liquidity in your company and recognize, analyze and hedge interest risks.

Prerequisites

Before using transaction management, the maintenance of master data is required. You must

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

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

You must 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: *Australian FRA.*

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

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

- Assignment of the flow type to the transaction type.

- Definition of the condition type. This determines the structure characteristics displayed when creating transactions. Example: *Interest rate adjustment.*

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

You can then define financial transactions in the system.

Features

The product types in the interest rate instrument area are:

- Swap [Page 15]
  - Interest rate swap [Page 17]
  - Currency swap [Page 19]
- Forward Rate Agreement (FRA [Page 20])
- Cap/Floor [Page 23]

Edit OTC Interest Rate Instruments

Prerequisites

Refer to the unit entitled <u>OTC interest rate instrument. [Page 10]</u>

Procedure

Choose *Treasury→ Treasury management→ Derivatives→ Trading→ OTC interest rate instrument.* This takes you to the initial screen. You can carry out all trading functions from here:

Function	Entries	Comment
Create	Refer to the units entitled • <u>Create swap [Page 15]</u> • <u>Create FRA [Page 20]</u> • <u>Create CAP/FLOOR [Page 23]</u>	• You will find more detailed information on the ⬛buttons via <u>Condition details. [Page 26]</u>
Change	1. Choose *Change.* 2. Make the following entries: *Company code, Transaction.* 3. This takes you to the screen for changing the structure. 4. Make the necessary changes and save the OTC interest rate instrument.	• You can overwrite the active entry fields/enter relevant data in the empty fields. • Via the <u>Tab pages [Page 44]</u>, you can branch to the screens for general transaction management to make changes there if required. • The activity can be changed via this function if 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 flows in the general ledger) and the flows are *'flagged for posting'.*

Edit OTC Interest Rate Instruments

Display	1. Choose *Display*. 2. Make the following entries: *Company code, Transaction.* 3. You arrive at the screen that displays the structure.	• The entry fields are not active. • Via 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.
Give notice	1. Choose *Give Notice*. 2. This takes you to the screen entitled: *Give Notice - OTC Interest Rate Instrument.*	• You can give notice on *Swaps* and *Cap/Floors* for a future date. Outstanding interest payments (fixed or variable interest) can still be made up to this date. • *Interest rate adjustment dates* that are before the notice date but after the point when the notice is given remain the same. The final repayment becomes due on the notice date. • *FRAs* can only be given notice on prior to the interest rate adjustment.
Stornieren	You will find information on reversing OTC options via Reversal. [Ext.]	
Display History	1. Choose *History*. 2. You see a list of the active or reversed activities, or those replaced by a subsequent activity. From here, you can branch to a display of individual activities. You also see the status and processor.	• The history shows you the activity sequence of a transaction you have chosen.

Create OTC Interest Rate Instrument

Prerequisites

Refer to the unit entitled OTC interest rate instrument [Page 10].

Procedure

You will find detailed information on creating individual product types in the units entitled Swap [Page 15], FRA [Page 20] and Cap/Floor [Page 23].

Swaps

Features

The swap market provides a number of product variants that enable you to hedge against different company risks. You can flexibly define the basic categories, Interest rate swap [Page 17] and Cross currency interest rate swap [Page 19] using the parameters nominal amounts, interest, and maturity term. Since the system allows you to define the conditions yourself, you can represent the most up-to-date swaps in Treasury Management. You can take account of changes to the nominal amounts and interest rates as well as maturity term shifts into the future or notice alternatives.

Activities

1. On the initial screen, enter the following basic data for the transaction:

    -   Company code

    -   Product type

    -   Transaction type (Swap)

    -   Current activity of transaction (e.g. order, contract)

    -   Business partner

2. Enter the transaction data in the following fields:

    -   Monthly frequency

    -   Interest calculation method

    -   Variable interest rate

For more information on this, see Structure [Ext.].

3. In Customizing, you can determine whether the name of the trader entering the transaction is shown automatically.You can also enter additional information, such as the contact person or a reference for the business partner.

4. You can also branch to other screens for general transaction management Administration [Ext.], Other flows [Ext.], Payment details [Ext.], Cash flow [Ext.], Memos [Ext.] and Status [Ext.].

5. For more detailed information on the 🖻 pushbuttons, see Condition details. [Page 26]

6. Both cash flows of an interest rate swap can be displayed individually or together and provide an overview of incoming and outgoing payments. For swaps with variable interest calculation, manual or automatic interest rate adjustments are carried out over the course of the term and the cash flow is gradually filled with the current values.

7. Press the ▦ button to create *nominal amount increases* or *decreases* during the term. Repayment structures are created via nominal amount decreases.

    After you have changed the nominal amounts, the button changes: ▦ *Nominal amount change exists.*

8. To save the basic data, choose *SWAP → Save*.

For more detailed explanations of the terms, see Basic data. [Ext.]

Swaps

Interest Rate Swap

Use

Interest rate swaps are swap transactions that usually have a term of over a year. They are effected on the basis of different interest rates in the *same* currency. You can represent the most common variants such as the swap of fixed interest rates against variable interest rates or variable interest rates against each other in the system.

Activities

- The conditions for *plain vanilla swaps* are currency, maturity term, both interest rates and rollover data. You can also enter further structural characteristics such as the interest calculation method for each transaction.

- You can display the two cash flows for an interest rate swap either together or separately. This provides you with an overview of the incoming and outgoing payments. For swaps with a variable interest rate calculation, manual or automatic interest rate adjustments are carried out over the course of the term and the cash flow is gradually filled with the current values.

- You can use the ▦ pushbutton to take *Nominal amount increases* or *decreases* from the 'incoming interest' side and copy them to the 'outgoing interest side' and vice versa.

- You can also calculate the value of the instrument with the *NPV calculator* on the basis of the *zero coupon curve.* The NPV calculator determines both the price which you would have to pay to clear the swap and the price which you would have to pay to buy the instrument. The difference between the displayed NPVs reflects the corresponding bid/ask spreads.

🖳 Example:

Interest Rate Swap

```
1              2  3            4  5              6  7
├──────────────┼──┼────────────┼──┼──────────────┼──┼──────────────────►
```
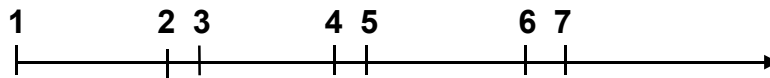
❶ Conclusion of SWAP and 1st interest rate fixing
   (input and settlement of transaction and 1st interest rate
   adjustment).

❷ Interest rate fixing for 2nd period of the variable interest
   rate (6 months).
   (Carry out interest rate adjustment -> Generation of
   interest flow)

❸ Interest payment variable side /start of 2nd period
   (posting of interest flow from ❶)

❹ Interest rate fixing for 3rd period.

❺ Interest payment variable and fixed side/start of 3rd
   period

❻ Interest rate fixing for 3rd period

❼ Interest payment variable side/start of 4th period.

A company finances an existing investment with a fixed interest loan at 6.5%. The company treasurer expects falling interest rates and, therefore, agrees an interest rate swap with a bank. From this interest rate swap, the company receives a fixed interest yield of 7.25% and pays a variable rate of 6-M-EURIBOR.

The company, therefore, has the following interest rate costs:

- Interest expenditure of 6.5% and 6-M-EURIBOR

- Interest yield from SWAP of 7.25%

⇒ This results in interest expenditure of 6M-EURIBOR - 0.75%

Currency Swap

Use

A cross currency interest rate swap is an exchange of payment flows comprising interest payments and capital payments in *different* currencies. In a currency swap, you exchange fixed and variable interest rates in any combination against each other.

Although a swap of the nominal amounts is not absolutely necessary at the beginning of the transaction, it serves as a calculation basis for determining the respective interest amounts. At the end of the transaction, however, the two capital amounts must be swapped. The necessary periodic adjustments of the reference interest rate are made either manually or automatically via a separate entry.

FRA

Use

Forward Rate Agreements are financial instruments that buyers and sellers use today to specify a fixed interest rate for a future period.

A FRA is based on a fictitious money market transaction with a capital amount which merely serves as a calculation factor. Buyers of FRAs cover themselves against rising interest rates, while sellers of FRAs cover themselves against falling interest rates. You enter a FRA in the system according to your requirements in a format that reflects the general trading conventions.

Example:

Forward Rate Agreement 3:9

- *Base amount* 10 million DEM $\Rightarrow$ 10m

- *Interest rate* (*FRA rate*) 5% $\Rightarrow$ in 3 months for 6 months

- *Reference interest rate* LIBOR 6 months

- *Interest comparison* in 3 months, hedging period 6 months

- 6M LIBOR in 3 months = 6% $\Rightarrow$ clearing payment to the purchaser

The "3 on 9" FRA has a contract period of 6 months with the start of the hedge period in 3 months. At this point, the contract is also settled and paid out.

If the LIBOR rate were lower than the FRA rate, the purchaser would have to make the clearing payment.

Features

- Both parties of the contract are free to choose their own transaction data for the term and interest structure.

- The FRA record reflects the forward yield curve.

- When you define the product type in Customizing, you can create an Australian FRA in addition to the standard FRA. The two FRAs differ in the way in which the *Settlement payment* is calculated.

  Calculating the settlement payment for the *Standard FRA:*

  − The reference interest rate is fixed on the fixing date

  − The interest amount is calculated automatically on the basis of the difference between the FRA record and the reference interest rate

  − The interest amount is discounted automatically using the reference interest rate at the start of the hedge period

  − The settlement payment is displayed as the incoming or outgoing payment in the cash flow.

  Calculating the settlement payment for the *Australian FRA:*

  − The reference interest rate is fixed on the fixing date

−   The interest amount is calculated automatically both on the basis of the FRA record and the reference interest rate

−   The interest amount is discounted automatically at the start of the hedge period each time with the interest rate used for calculating the interest amount

−   The settlement payment is calculated as the difference between the discount amounts and displayed as an incoming or outgoing payment.

Activities

1.   On the initial screen, enter the following basic data for the transaction:

−   Company code

−   Product type

−   Transaction type

−   Current transaction activity (order or contract)

−   Business Partner

2.   Choose ✅ *Enter* to go to the basic data screen for the transaction. On the tab page Structure [Ext.] enter the actual transaction data for the FRA.

3.   The fields listed below are either required or optional fields:

Term area:

−   Start of lead time

−   Start of hedge period (in the example: ++3)

−   End of hedge period (in the example: ++9)

Interest structure area:

−   Base amount

−   Interest rate

−   Interest calculation method

−   Reference interest rate (in example: LIB_6)

−   Fixing

Business calendar area:

−   Here, you enter the relevant factory calendar for shifting the working day (such as USA).

Both parties of the contract can choose their own amounts, currencies, and terms; the interest rate reflects the forward yield curve.

4.   You can specify in Customizing whether you want the name of the trader to be displayed automatically. You can also enter additional information, such as the business partner or a reference for the business partner.

5.   You also have the option of branching to the entry screens for general transaction management (Administration [Ext.], Other Flows [Ext.], Payment Details [Ext.]. Cash Flow [Ext.], Memos [Ext.] and Status [Ext.]). You can use the tab pages to navigate between the different screens.

6. To save the basic data, choose *FRA → Save*.

For more information about options on FRAs, see <u>Interest Rate Guarantee (IRG) [Page 41]</u>.

For general explanations on terms, see <u>Basic Data. [Ext.]</u>

CAPs and Floors

Features

- CAP

  A CAP is a series of interest rate options with an *upper limit (strike)* which the seller of the CAP guarantees to the buyer.

  The important parameters for a CAP are the *maturity term, base amount, strike price, reference interest rate, capital amount* and *premium.* Once you have entered these condition characteristics, the system can directly display the cash flow. From this, you can see that the capital amount is only used to calculate the settlement payments and does not trigger a cash flow. The system also automatically determines and displays the rollover data.

  At the scheduled interest rate adjustment, you can either enter the reference interest rate manually or let the system import the data to determine any interest receivable that is due. If the option is in-the-money, the system calculates this amount automatically and displays it either as an individual amount or together with the preceding payment flows in the cash flow. The system repeats this procedure for each interest rate adjustment until the transaction expires. If the CAP is out-of-the money, there are no payments on either side.

- FLOOR

  Floors are processed similarly. Purchasers of floors want to protect themselves against falling interest rates and pay sellers a premium in return for their interest rate guarantee. The purchaser claims interest receivables as soon as the reference interest rate passes through the agreed *lower limit (floor).*

Activities

1. Enter the following basic data in the initial screen:

   - Company code

   - Product type

   - Transaction type

   - Business partner

2. In the *Activity* area, you decide whether the transaction will be created as a contract or order.

3. If you are working with *external number assignment*, you must enter 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.

4. Press *Enter* to reach the basic data screen.

5. A dialog box may appear here if you have assigned several flow types to a flow category

   Possible flow types for the premium of a CAP: accrual/deferral-relevant or non-accrual/deferral relevant.

CAPs and Floors

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

    –   Strike upper limit (lower limit)

    –   Reference interest rate

    –   Frequency of interest rate adjustment

    –   Interest calculation method

    –   Term

    –   Nominal amount and currency

    –   Due date

    –   Premium

        For more information, see Structure. [Ext.]

7. You can set up your system in Customizing to show the name of the dealer entering the transaction. You can also enter additional information, such as the business partner or a business partner reference.

8. For more information about the pushbuttons 🔳, see Condition Details. [Page 26]

9. Select the 🔳 button, to *create principal increases* or *decreases*. Repayment structures are created by principal decreases.

10. After you have changed the nominal amounts, the following button changes: 🔳 Nominal amount change.

11. 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.]).

12. In the upper applications toolbar, you access further functions by choosing Extras [Page 45] and Environment [Page 46]

13. To save the basic data, choose *Cap/Floor → Save.*

For more general explanations of terms, see 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. [Page 26]

Other tab pages:

- Underlying (Currency option)

- Outgoing flows (Swap)

- Incoming flows (Swap)

- Interest adjustment data [Page 91] (Cap/Floor)

Condition Details

Use

On the *Structure* tab page/on the upper applications toolbar, you will find pushbuttons for Money market and OTC interest rate instruments which can be used to access detail views of the respective transaction.

Structure

- [Conditions [Ext.]](Conditions [Ext.])

and condition details

- [Interest rate [Ext.]](Interest rate [Ext.])
- [Interest rate adjustment [Ext.]](Interest rate adjustment [Ext.])
- [Option premium [Ext.]](Option premium [Ext.])

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 60]]()

- **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 72] or pushbutton 📋

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

- Change documents for transaction [Page 155]

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

OTC-Option

Use

Trading and processing OTC options enables you to control liquidity in your company and recognize, analyze, and hedge currency risks.

Integration

You can assign OTC options to forex trading and to derivatives, and enter them in both areas accordingly. You enter them in the Derivatives area in the same way as you enter other option types, which enables you to branch from the options data to the separate entry screens of the underlying transactions.

Forex trading		Derivatives
Standard option	=	OTC currency option
Exotic options	=	OTC option

Features

OTC option:	Related underlying:
Currency Option [Page 37]	Forex Spot Transaction [Ext.]
Currency Barrier Option [Page 38]	Forex Spot Transaction with Additional Barrier [Ext.]
Swaption [Page 40]	Swaps [Page 15]
IRG [Page 41]	FRA [Page 20]
Warrants [Ext.]	Security Created as Class [Ext.]
Compound Option [Page 43]	Currency Option [Page 37]

Prerequisites

Before you can use Transaction Management, you are required to enter master data. You must:

- Create your Business Partners [Ext.], assign the relevant roles to them and authorize them for the relevant transactions. To process financial transactions, you must have defined the relevant banks as authorized business partners with the corresponding payment details in the system.

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

You must also make the following settings in Customizing:

- Define the product type (if you do not wish to use the standard product types, you can define these individually). You create and administer your financial transactions and manage your positions on the basis of the product types. Example of a product type: *Forex.*

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

OTC-Option

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

- You must assign flow types to transaction types.

For more information, see the corresponding unit in the Implementation Guide (IMG).

You are then able to define financial transactions in the system.

Edit OTC Option

Prerequisites

For more information, see Exotic Option [Ext.] and OTC Option [Page 29].

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 [Ext.]	• 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.

Edit OTC Option

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 44], 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.

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 [Page 38]). • 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.

Edit OTC Option

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 45] and Environment. [Page 46]

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

15. Refer to the unit entitled OTC option [Page 29].

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**	
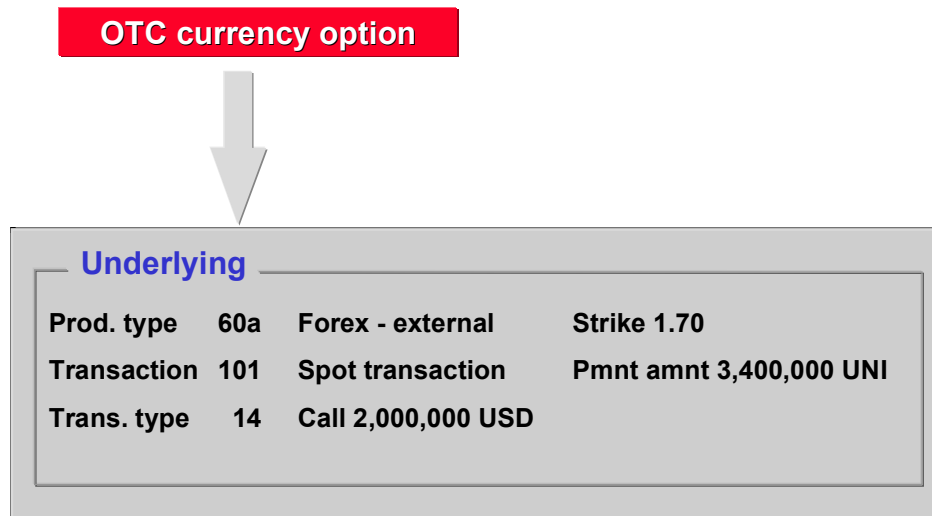
Currency Option

Use

The currency option is an option on a *spot exchange transaction*.

OTC currency options are assigned to both forex trading and the derivatives area and can be created in both areas.

Activities

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).

See also: Create OTC Currency Option [Ext.]

Currency Barrier Option

Use

Currency barrier options have a defined upper and lower limit (instrike or outstrike), which distinguishes them from ordinary OTC options. If the market exceeds or falls below these limits, the option either becomes effective or expires depending on the option type. You enter these barriers together with the financial transaction data.

Using the knock-in/out activities, you activate the options for exercise/expiration.
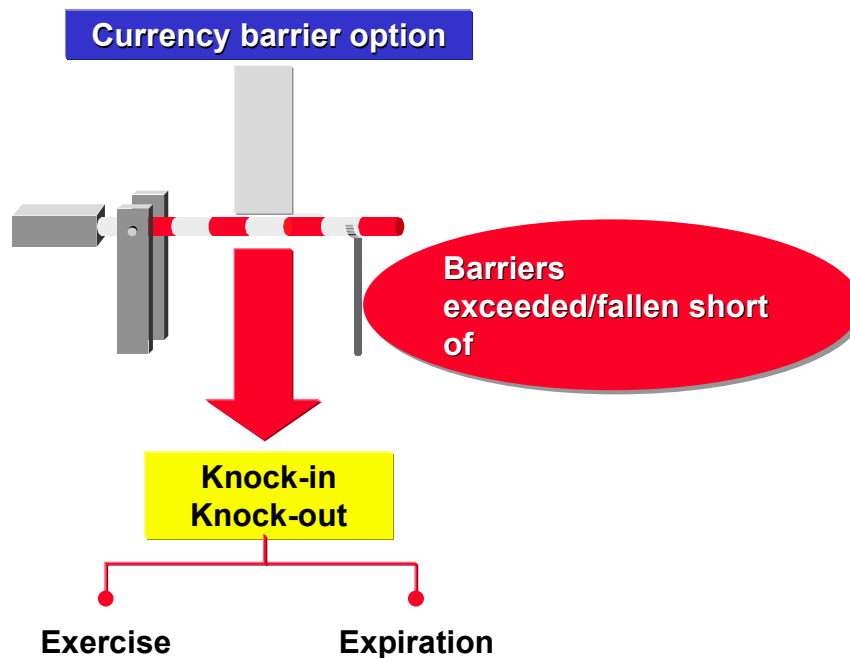
You can check the in/out strikes of currency barrier options with the *Expiration/barrier check* in collective processing. By comparing the transaction data with the relevant rates, the system proposes a transaction (knock-in knock-out or expiration), for further processing of the transaction.

You can use the Option Price Calculator [Page 60] to calculate market-based option prices. The option price calculator takes into account the agreed *Barriers* and *Rebates* that are paid upon expiration of the option if necessary.

Rebates cannot be entered in the structure of the transaction.

Features

In Treasury Management, you can represent the basic option categories used for trading on the market. The basic categories for calls (purchase options) and for puts (sale options) are:

- Down & Out - option expires at or below the outstrike

- Up & Out - option expires at or above the outstrike

- Down & In - option is activated at or below the instrike.

- Up & In - option is activated at or above the instrike.

You can also enter double barrier options. They are activated or expire when the values exceed/fall below two barriers. A double barrier option knock-in becomes effective, for example, when either the upper limit is exceeded by the market or the market falls short of the lower limit.

Swaption

Use

A swaption is an option on an <u>Interest Rate Swap [Page 17]</u>. The buyer purchases the right to either pay fixed interest rates (payer swaption) or receive fixed interest rates (receiver swaption). The buyer pays the seller a premium for this right when the transaction is concluded.

Activities

In the system, you first enter the option premium and the exercise date. Afterwards, you enter the basic data of the swap via the underlying instrument.

The <u>Basic Data [Ext.]</u> comprises:

- Currency

- Nominal amount

- Term

- Conditions for the variable and fixed interest rate (strike price).

Interest Rate Guarantee (IRG)

Use

This instrument is an option on a Forward Rate Agreement [Page 20] *(FRA).* The seller of the option guarantees the buyer a short-term forward interest rate agreed in advance (strike price). The two variants of this option are call-on-FRA and put-on-FRA, which define the buyer's right to either buy or sell an FRA.

Activities

The premium is calculated according to generally accepted conventions. To enter the transaction, you enter both the underlying instrument (that is, the underlying FRA with its structural characteristics) and the option together with the corresponding premium. At the beginning, the cash flow only displays the paid or received option premium. On the due date, the option is either exercised or expires, rendering it worthless. If the option is exercised, the cash flow displays the calculated settlement payment.

Security Option

Use

An OTC security option gives you the right to purchase or sell a security. In order to be able to transfer the security to the option as an underlying instrument, you must enter a security class in the option's basic data.

Activities

When you create the option in the system, you enter the ID number plus the nominal amount and the reference price. For the option itself, you then enter the exercise date, premium, exercise type (American or European) and the settlement.

When an option is exercised physically, the SAP R/3 System separates the option from the underlying transaction (the purchase or sale of the security). You execute the underlying transaction according to the status transitions which you have defined.

Refer to: Security - warrant [Ext.]

Compound Option

Use

A Compound option is an option on a currency option.

A compound option is an option on an option i.e. for the relevant underlying (Currency option [Page 37]), there is another underlying (e.g. spot exchange transaction).

Prerequisites

When creating the product type, compound option, the product type, standard currency option, must be maintained as an underlying (refer to 'Define Product Types' in the IMG).

Integration

The input logic for compound options is the same as that for other option types so that you can branch from option data to the separate input of the underlying.

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. [Page 26]

Other tab pages:

- Underlying (Currency option)

- Outgoing flows (Swap)

- Incoming flows (Swap)

- Interest adjustment data [Page 91] (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 60]

- **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 72] or pushbutton

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

- Change documents for transaction [Page 155]

- 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 [Page 106] and Close [Page 107]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*.

Listed Transactions

Use

Listed Options and *Futures* are standard forward transactions that are traded on exchanges.

Integration

In principle, the application neither recognizes the exchanges nor the finance products. The system only recognizes them after you have defined them in Customizing.

The exchange acting as the institution whose infrastructure allows free trading with these contracts, collects collateral provisions from trading parties on the exchange in the form of additional (initial), premium, spread, and non-spread margin payments. For futures and future styled options, gains and losses are calculated daily (valuation margin) and cleared immediately. In this case, the name variation margin, is misleading since margins are not included, rather actual gains and losses.

Prerequisites

- Create Master Data [Page 128]

    – Class Data - Futures [Page 131]

    – Class Data - Listed Options [Page 133]

    – Assign Exchange [Page 54]

- Entering Security Prices [Page 136]

Activities

The terms, *Purchase* and *Sale,* do not describe the increase or decrease of positions here but they define the side of the forward transaction. *Positions* are generated both by purchases and by sales.

The increase and decrease of positions is represented by *Open* and *Close*.

The decrease of the position occurs via a counter transaction with the same class and the same indicator of this transaction as the offsetting transaction (*Closing*). The possibility of leaving the market at any time by means of an offsetting transaction without having to get the counterparty to agree is one of the two most important characteristics of listed options and futures as opposed to options and futures in the OTC area. The second most important characteristic is the strict standardization of the contents of the contract

For more information, see:

- Transaction entry

    – Open Transaction [Page 106]

    – Close Transaction [Page 107]

- Margin Management [Page 104]

- Close - Determine Rate Gains

Edit Listed Options and Futures

Use

Refer to the unit entitled Listed transaction [Page 49].

Procedure

Function	Entries

Edit Listed Options and Futures

Create	1. Choose *Trading → Listed transaction → Create.*
	2. Make the following entries:
	• Product type,
	• Transaction type (optional: Open [Page 106] or Close [Page 107]transaction),
	• Partner.
	4. If you are working with *external number assignment,* you must 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.
	5. You can choose between order or contract (execution). The result of the order execution is the status of a binding contract.
	6. The clearing house of the exchange enters the contract after the transaction comes into being as counterparty for both sides.
	7. The order expires automatically when you reach the validity date of the order. After this, the order can no longer be executed. The order becomes inactive.
	8. Make the following entries:
	• Trader
	• Order header (Securities account)
	• Items (Flow type - Purchase or sale - Number of units, ID number, price or rate).
	9. 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.]). You can use Tab pages [Page 44] to navigate between screens.
	10. When you save the transaction, enter the Account assignment reference [Ext.] in the dialog box that appears.
	11. You get to the posting log "Distribution list for orders of listed options and futures" from which you can see the number of posted FI documents.
Change	1. Choose *Trading → Listed transaction → Change.*
	2. This takes you to the screen for changing basic data.
	3. Via the Tab pages [Page 44], you can branch to the screens for general transaction management to make changes there if necessary.
	4. Make the necessary changes and save the listed transaction.
	5. The activity can be changed using 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 actual Treasury records in the subledger) and the flows are 'flagged for posting'.

Display	1. Choose *Trading → Listed transaction → Display*.
	2. This takes you to the screen for displaying basic data.
	3. You can branch to other screens to display information on the transaction (for example, *securities account cash flow, administration, payment details, etc*.)*.
Reverse	1. Choose *Trading → Listed transaction → Reverse.*
	2. Enter the *Reversal reason*. This is required to reverse the transaction. You can define reversal reasons in Customizing. Refer to Reversal [Ext.].

Assign Exchange

Prerequisites

After you have created the master data for listed options and futures, define the respective exchange via *Extras.* Before you can assign exchanges, they must have been defined under Define exchange [Ext.] in Customizing.
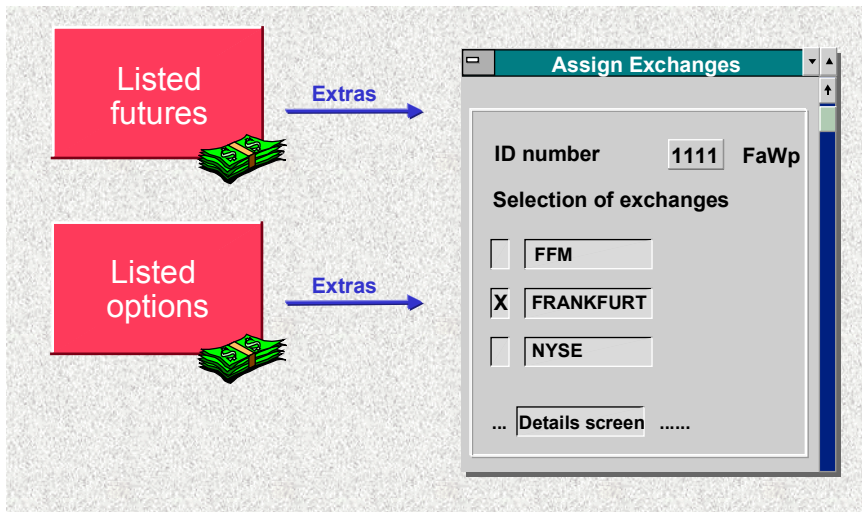
Procedure

1. In the *Create* or *Change* mode, choose *Extras → Exchange → Change.*

2. Assign the respective exchange.

3. The *Detail screen* button takes you to the screen headed *Change Exchanges: Detail.* You can make the following entries relating to the rate here:

   − Currency

   − Flat rate (yes or no)

   − Domestic exchange (yes or no)

   − Listing (Define listing key in Customizing via Define listing key [Ext.])

1. *Save* your entries.

2. Choose *Extras → Exchange → Display* in the display mode.

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 63] 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 60]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**
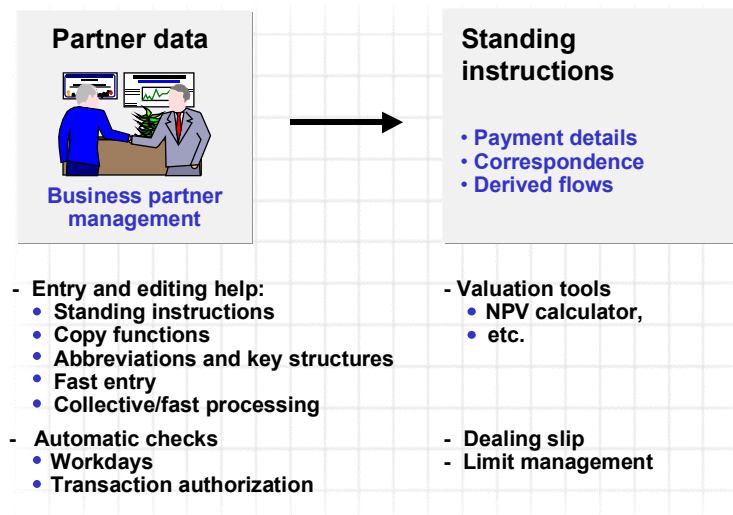
Option Price Calculator

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 76] 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 86] transactions and for entering or editing References [Page 88].

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 OTC Interest Rate Instrument

Use

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

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

Prerequisites

In *Customizing*, you can use the processing category to control whether the financial transaction is to be settled/monitored. If you have defined a processing 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 be settled/monitored by another processor in the *Back Office* area.

Procedure

Choose *Treasury→ Treasury management→ Derivatives → Back office → OTC interest rate instruments.* The individual processing functions are:

Function	Entries	Comment
Change	1. Choose *Change*. 2. This takes you to the screen for changing basic data.	• You can now overwrite the active entry fields or enter data in the empty fields. • Via the Tab pages [Page 44], you can branch to screens for general transaction management to make changes there if necessary.
Display	1. Choose *Display*. 2. This takes you to the screen for displaying basic data.	• The entry fields are not active. • Via the tab pages, you can branch to further screens to display information on the transaction. • Via 🖳, you can branch to the master data of the business partner.

Process OTC Interest Rate Instrument

Settle	1. Choose *Settle*. 2. This takes you to the screen entitled *Settlement (Settle contract, exercise, notice).* 3. Choose the area for which you wish to enter or change settlement data. 4. By saving the settlement activity, the system changes the activity category of the transaction to document its monitoring and processing in the back office. 5. The contract can only be posted after settlement.	• Via the *Settle OTC transaction* function, you can mark a transaction to indicate that it has been edited in the back office. • When you settle, the data of the financial transaction is checked and added to if necessary. When you save, the data for the transaction is fixed (actual records) and the flows of the transaction are *flagged for reversal.*
Reversal	You will find information on the reversal function via Reversal. [Ext.]	 • Expiration settlement:OTC transaction *reversed* → becomes → Expiration. • Expiration:OTC transaction *reversed* → becomes → Contract settlement. • Offer:OTC transaction *reversed* → becomes → Reversed.
History	3. Select *History.* 4. You receive a list of active or reversed transactions, or those replaced by a later transaction from which you can branch to the display of the individual activities. You also see the status and processor.	• The history shows you the activity sequence of a transaction you have selected.

For more information, see OTC Interest Rate Instrument [Page 10].

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 44], 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 Edit exotic option/OTC option. [Page 31]

Edit Listed Transaction

Use

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

In Customizing, you can use the back office category to control whether the financial transaction is to be *settled/monitored*: If you have defined a back office category in Cutomizing (that contains settlement activities) for the product category, listed transaction, a listed transaction must be created by a trader in the trading block and settled/monitored by another processor in the *Back Office.*

Procedure

Choose *Treasry→ Treasury management→ Derivatives → Back office → Listed transaction.* 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: – Trader – Partner – Order – Items (Number of units, ID number)	• You can now overwrite the active entry fields or you can enter data in the empty fields. • Via the Tab pages [Page 44] , you can branch to screens for general transaction management to make changes there if necessary.
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 further screens to get information on the transaction. • Via 🖼, you can branch to the master data of the business partner.

Settle	3. Choose *Settle*	• Using the function, *Settle listed transaction*, you can mark the transaction to document that it has been processed in the back office.
	4. This takes you to the *Contract Settlement* screen.	
	5. Enter or change settlement data as required by choosing the relevant area in the menu.	• With settlement, the data relating to the financial transaction is checked and, if necessary, added to. When you save the transaction, the data is fixed (actual records) and the flows of the transaction are *flagged for posting.*
	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.	
Reverse	You will find information on the reversal function under Reversal [Ext.].	

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.

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.

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

Financial correspondence:
Create, change, settle, reverse, etc.

Customizing entry under '*Define correspondence activities"*?   **NO**

YES

Internal correspondence type   External correspondence type

Check standing instructions (Yes/No; Medium; Status-relevance)   **NO**

YES

STOP

Planned record is created   Planned records are created
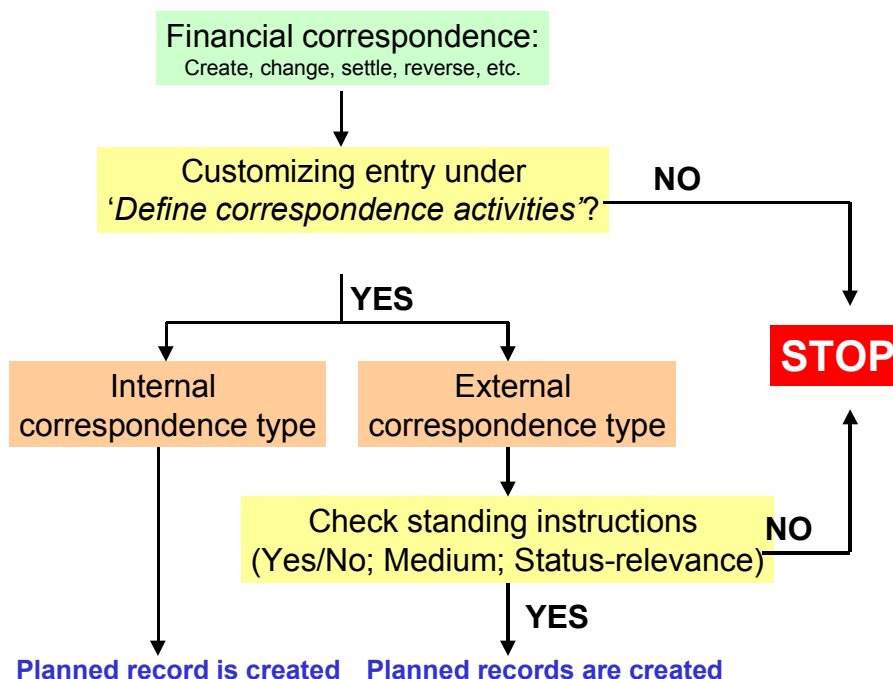
Correspondence

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	-

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.

Correspondence

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.]

- Outgoing correspondence [Page 82]

- Incoming confirmations [Ext.] (only for money market and forex trading)

- Generate SWIFT file [Ext.] (only for money market and forex trading)

- Correspondence monitor [Page 147]

- 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 76]

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

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*.

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

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

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 86] 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**

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.

Interest Rate Adjustment

Use

Interest rate adjustments that you must make based on variable interest rates can either be carried out manually or - based on the reference interest rates that you have entered in the system - automatically, so that the interest due can be determined. In both cases, a reference interest rate is linked with an interest rate value on a particular date. You perform interest rate adjustments for all interest rate instruments on the scheduled fixing dates.

With the **automatic** method, a check is made in a table to see whether the current interest rate value for a reference interest rate exists.

For the **manual** method, you enter the interest rate value per reference interest rate for each transaction. This data is saved in a table.

The tables in which the interest rate values are saved are different in both cases. A control is, therefore, necessary to determine which interest rate value should be read/from which table the percentage values for the Planned Record Update [Page 93] should be read.

When you adjust the interest rate, flows are generated in the cash flow that you can post to FI (if required, with a posting release). In both cases, you can import current market data via a file interface or a Realtime Datafeed Link [Page 196].

Activities

Creating a manual interest rate adjustment

To manually create an interest rate adjustment:

1. Choose *Back office* → *Interest rate adjustment* → *Create.*

2. Enter the *Company code* and the *Transaction* ID on the initial screen.

3. Choose *Enter.* The screen for determining the reference interest rate appears with entries for the planned interest rate fixing date and the reference interest rate. Enter the current rate for the reference interest rate in the *Interest rate* field. The *Actual date* and *Actual time* of the rate fixing is defaulted to the CPU date and time, but you can change it.

4. Press *Enter* or click the *Copy* pushbutton.

5. The entry screen for creating interest rate settlements appears. You can display the new flows, the old flows, or all the flows.

6. To save the interest rate adjustment, choose *Settlement* → *Save*.

7. When you save the interest rate adjustment, the settlement is saved under a transaction number i.e. the financial transaction is assigned one of the following activities: *interest receivable, interest payable* or *expiration*.

Editing an interest rate adjustment

You can edit the interest rate adjustments as follows:

1. Choose *Back office* → *Interest rate adjustment* → *Edit*.

2. Enter the *Company code* and the *Transaction* ID on the initial screen.

Interest Rate Adjustment

3. A list appears containing all the interest rate adjustments with entries for the activity category, transaction status, actual and planned date for interest rate adjustment, reference interest rate and percentage rate.

4. From here, you can perform new interest rate adjustments using the *Create* function. If you want to edit an existing interest rate adjustment, position the cursor on the relevant activity and choose one of the following functions:

   − Change

   − Display

   − Reverse

5. To edit the interest rate or the interest rate fixing date, you must reverse the activity.

Automatic interest rate adjustment

To carry out interest rate adjustments automatically:

1. Choose *Back office* → *Interest rate adjustment* → *Automatic*. This takes you to the entry screen for the automatic interest rate adjustment for interest rate instruments.

2. Enter the following selection parameters:

   − Company code

   − Function

   − Due date until.

3. To start *Due date processing,* choose *Program* → *Execute*.

4. You can call up a list of the due date processing in Treasury.

> If the current reference interest rate exceeds the strike when adjusted, the seller of the CAP has to pay the purchaser the corresponding settlement payment.

Update Planned Records

Use

The *Update planned record* function relates to the derivative financial instruments, Cap, Floor, Swap and FRA.

Usually, future interest payments are passed on to Cash management to have a correct liquidity status. Flows with a fixed interest rate are immediately passed on to Cash management when the transaction is created.

Estimated values of amounts for flows with a *variable interest rate* must be determined as the percentage values of reference interest rates can change daily.

You use the *Update planned record* function for:

1. Determination of all planned records that are relevant/still exist.

2. Determination of all reference interest rates that have an influence on the size of the amount of the individual record.

3. Determination of the interest rate (percentage value) per reference interest rate.

4. Determination of an amount per planned record using the interest condition.

5. Iteration of all planned records.

6. Resetting of the corresponding planned records in Cash management

7. Update of this record in Cash management using planning level control.

Prerequisites

In Customizing, you must maintain a planning level via *Product types* to be able to assign a planning level to the transaction activity.

When defining the flow type for interest flows, you must be careful to describe it as "Relevant to Cash management" (otherwise, these flows get a Cash management block).

Activities

Selection

1. Choose *Derivatives → Back office → Update planned records.*

    This takes you to the screen entitled *Cash Management - Update of Flows with Variable Interest Rate.*

2. You have the following selection criteria available for the report:

    a. Company code

    b. Product type

    c. Transaction number

3. Note the following points in the *Update planned record* area:

    −   *Earliest adjustment date*: The selection date controls the date on which the relevant interest rates are read from the interest rate table. The planned records are passed on to Cash management with these rates. The date on the day is usually used.

Update Planned Records

– *Manual interest rate adjustment:* Set this flag if you only require manual *interest rate adjustments*. Interest rate adjustments can be carried out manually per transaction or automatically for all transactions (refer to the unit entitled <u>Interest rate adjustment [Page 91]</u> for more information).

– The function can also be used in the *Test run*. The amounts for each planned record are determined and displayed, the database is, however, not updated.

4. Choose *Execute.*

Output

The output list *Update of variable planned interest in Cash management* is in the following format:

- Company code

- Transaction number

- Interest rate

  By double clicking on the interest value, you get to the reference interest rate and the value.

  ✖: This sign means that the reference interest rate is used in one or several transactions but that a value was not found by the specific table search.

- Number of updates

  Via double-click, you access the single planned records and their amounts that are passed on to Cash management in a productive run. You can also see the planning level at which the planned record is posted in the planned record detail view (for a productive run).

- Product type

- Transaction type

- Activity

- CM update (only in productive run)

  ◉◉◉ shows success of update

  ◉◉◉ Error message (see above: Prerequisites)

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 167] / Posting journal. [Page 169]

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 97]

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 99], Reverse documents [Page 100], Reverse manually [Page 102], Release posting [Page 114] and Block posting [Page 115].

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

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

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.]

Variation Margin

Definition

Variation Margin represents the daily gains and losses in the valuation method. In this sense, it is not a margin. The variation margin is, therefore, not a valuation but a settlement method via the daily valuation of market prices. The variation margin is the amount attributed to purchasers and vendors of *futures* for holding a position according to price development.

Use

A new valuation of the position can take place on each key date. If you use the valuation margin method, this is supposed to prevent an unmanageable number of payables/receivables flowing between the counterparties over a long period of time. The payables/receivables are, therefore, immediately settled when they arise. The maximum loss here is then only a daily fluctuation.

Although the amounts are credited to/debited from the margin account daily and even discounted in the variation margin process, they are *unrealized gains/losses.* The position as such is pending. Consequently, you must differentiate these amounts in accounting from amounts that have arisen as realized gains or losses via the close transactions.

Prerequisites

Refer to the relevant unit in the Implementation Guide (IMG) via *Derivatives → Acccounting → Define margin management/flow types/Assign flow types to flow categories*.

Features

You must fill in the following fields to calculate the variation margin. Security ID number, company code, rate type and exchange. You can carry out a test run without database changes, otherwise an update run takes place.

- This valuation can be *reversed*.

- The daily calculated variation margin, rate/price gains and losses from close transactions as well as the variation margin of the close transaction are in the variation margin, *Journa*l. The posting information for these flows is also output here.

Choose *Accounting → Posting → Variation Margin (and/or Reverse Variation Margin /Variation Margin Journal).*

Activities

Business backgrounds:

1. A new individual position *(Item)* is generated by each *Open transaction*.

2. This can be closed by one or several *Close transactions.*

3. When you enter the Close, the assignment for one or several individual positions is offered. The assignment is carried out manually (Individual item assignment).

4. All open positions can be valued daily with the variation margin at the settlement rate. The calculation is carried out by calling up the 'Variation margin' report.

5. When you enter a close transaction, the concluding variation margin and price gain is determined and posted.

6. The posting of the variation margin and the realized gains and losses takes place when you save the order execution/contract.

   If the flow with category, purchase/sale, is marked as posting-relevant in Customizing, it is then posted in the posting run - that is, in a separate activity.

You will find information on the necessary settings in Customizing via Margin management [Ext.] in the IMG.

The following graphic illustrates the contexts in which margin management is used.
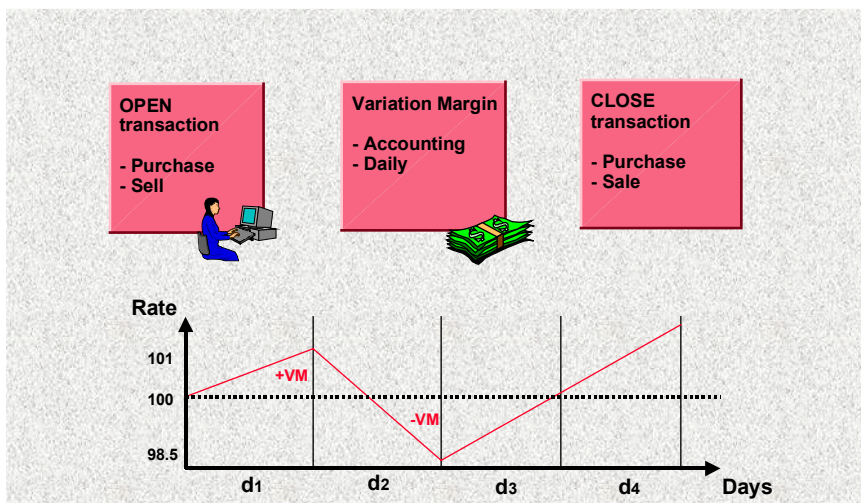
Open Transaction

Use

Purchasing an Open places the item on the market. If the user wishes to leave the market, he must make a sale and indicate it as a *Close.* It is only then that the item disappears from the market. If he was to make a sale without indicating it to be a Close, he would have two open items on the market (with the corresponding risk). He would then have to deal with both according to the contracts.

Features

At present, you can only process *charges, commissions* and *taxes* as other flows.

Activities

Future:

Open purchase	Offset via:	Close sale
Open sale	Offset via:	Close purchase

Options

Open purchase call	Offset via:	Close sale call
Open sale call	Offset via:	Close purchase call
Open purchase put	Offset via:	Close sale put
Open sale put	Offset via:	Close purchase put

Close Transaction

Prerequisites

Determination of final gains/losses for forward transactions takes place when the item is offset (closing). It is, therefore, firstly necessary that the closing items are correctly assigned to the open items.

When you enter a closing transaction, there is a brief check to see if there are open transactions of the same value in the securities account for the option/future master. You must indicate whether the open transaction has been closed or not.

Activities

Individual item assignment - Close (Lot management):

If you would like to conclude a close transaction, you must assign it to a position (open transaction). You make this assignment via *Manual matching.*

Journal - Variation Margin

Use

The daily calculation of the *Variation Margin* on the basis of the settlement rates is carried out by calling up the Variation Margin report.

The Variation Margin calculated each day, the rate gains and losses from close transactions and the variation margin of the close transaction are disclosed in the Variation Margin Journal. The posting information for these flows is also output from here.

Activities

Selection

1. Choose *Derivatives → Accounting → Posting → Journal variation margin*. This takes you to the input screen entitled *Derivatives Document: Document Journal with Flows.*

2. The following selection criteria are available:

    a. Company code

    b. Product type

    c. ID number

    d. Securities account

3. You can make selections via data you have entered:

    a. User

    b. Entry date

4. You can make selections via the following posting data:

    a. Internal document number

    b. External document number

    c. TR posting date

    d. Account assignment reference

5. You can display *posted* and *reversed* flows and/or *Flows blocked for posting in TR.* Flows that are set as not relevant to posting, for example, are not selected.

Output

You receive the document journal according to the required selections. The fields available for output are as follows:

- Company code
- Internal document number
- Item
- Individual position
- TR status

- Flow type

- Bezeichnung

- ID number

- Securities account

- Position value date

- Number of units

- Settlement currency

- Settlement amount

- Local currency

- Amount in local currency

- Year

- Document number

By linking to the general List Viewer, there are many options for creating the list such as :

- Sorting according to fields

- Summation of totals

- Further filtering of data

- Definition of own display variants that can be saved and later called up again.

> The complete documentation for issuing lists can be found in the area of cross-application components (CA) under CA-ABAP List Viewer [Ext.].

Journal O/F-Position

Use

You can use the journal to display a list of all positions of *listed options and futures.*

Activities

Selection

1. Choose *Derivatives → Accounting → Posting → Journal O/F position*. This takes you to the entry screen entitled *Position List - Listed Derivatives*.

2. The following selection criteria are available to you:

    a. Company code

    b. Product type

    c. ID number

    d. Securities account

Output

You receive the position list according to the selection criteria. The fields available for the output are as follows:

-   Company code

-   Securities account

-   ID number

-   Single position

-   Long/Short

-   Key date

-   Company code currency

-   Number of units

-   Nominal total in underlying position currency

-   Acquisition value in underlying position currency

-   Book value underlying

-   Variation margin (Position currency)

-   Rate

-   Current rate value of underlying

By linking to the general list viewer, you have many different options for constructing lists as regards lines and columns, sorting and summation - for example:

- Sorting according to any fields

- Forming of group totals

- Further filtering of data

- Definition of own display variants that can be saved and later called up again.

The documentation for output of lists is in the cross-application area (CA) in CA-ABAP List Viewer [Ext.].

Journal O/F Flows

Use

You can use the journal to display a list of all flows of listed options and futures.

Activities

Selection

1. Choose *Derivatives → Accounting → Posting → Journal O/F-flows*. This takes you to the entry screen entitled *Flow List - Listed Derivatives*.

2. The following general selection criteria are available:

   e. Company code

   f. Product type

   g. ID number

   h. Securities account

Output

You see the position list according to the selections. The fields available for the output are:

- Company code
- Securities account
- ID number
- Single position
- Change in number of units
- Change in nominal value in position currency
- Change in acquisition value in position currency
- Change in acquisition value in local currency
- Change in book value in position currency
- Change in book value in local currency
- Position currency
- Local currency

By linking to the general list viewer, you have many options available for creating lists with regards to lines and columns, sorting and summation such as:

- Sorting according to any fields
- Forming of group totals
- Further filtering of data
- Definition of own display variants that can be saved and called up again later.

Documentation on list output can be found in the cross-application areas (CA) in ABAP List Viewer [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.

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.

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		

Posting Overview

4	reversed in FI		

Payment

Features

You have two payment programs available:

1. The standard payment program from FI settles open items [Page 120] from the accounts receivable/payable area.

2. The enhanced payment program [Page 121] 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 97]

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.

Payment Request

- 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.

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.*

Accruals/Deferrals

Use

The Accounting area contains accrual/deferral functions that enable you to assign receipts and outgoings to the correct accounting period. You use the accrual/deferral function to calculate the outgoings and receipts for a period on a certain key date/period-end closing (for example, at the end of a fiscal year).

Prerequisites

Accrual/deferral amounts are calculated on the basis of flows for the individual transactions that are to be accrued/deferred. The main variables for calculating the amount are the accrual/deferral period and the flow types that are indicated as being relevant for accrual/deferral. You have to make settings in Customizing to ensure that the *Accrual/deferral flow types* (Accrual [Ext.], Deferral [Ext.], or reversal) are indicated correctly. You also define the accrual/deferral method in Customizing (see Define Accrual/Deferral [Ext.]).

The *Accrual/deferral method* describes how the SAP System calculates the amount that you want to accrue/defer - pro rata temporis or pro rata temporis with linear discounting or using financial mathematics (e.g. for Commercial Papers).

The *Accrual/deferral procedure*, on the other hand, describes the way in which the SAP System updates data on the expense and revenue accounts.

Features

You can use the following accrual/deferral procedures:

- **Reset or Accumulation Procedure**

    This procedure adjusts the income statement accounts on the accrual/deferral key date by the amount of accrual or deferral calculated, and then resets them.

    The accrual/deferral amount is calculated and posted for the period between the start of the calculation period and the key date (accruals) and between the key date and the end of the calculation period (deferrals) for the related item (for instance, interest payment). At a later date (usually on the following working day), this posting is reset by the corresponding reversal posting in order to clear the income statement accounts. You must carry out the reset posting separately.

- **Difference procedure**

    This procedure transfers any expenses and revenues incurred in the period between the most recent and the present accrual/deferral from the accrual/deferral accounts to the related income statement accounts.

Activities

You calculate and post the accrual/deferral amounts for a period that you specify using the Executing Accruals/Deferrals [Page 126] function. The SAP System calculates the accrual/deferral amounts for freely definable transactions or positions and periods. It generates the accrual/deferral amount for each relevant amount and the corresponding accrual/deferral flows. These can be posted to FI immediately or processed later on in the *Posting run.* You can also carry out a test run beforehand.

The Reversing Accruals/Deferrals [Page 127] function allows you to reset the accrual/deferral flows immediately (by reversing the related FI documents), or process them later (by indicating them for reversal).

Executing Accruals/Deferrals

Prerequisites

This report enables you to accrue/defer expenses and revenues resulting from financial transactions to the correct accounting period. The accrual/deferral run can include money market and derivatives transactions at the same time.

The accrual/deferral program is based on the flows of the transactions you have selected. It calculates the accrual/deferral amount for each relevant *flow*. The system generates an accrual/deferral flow for the amounts calculated.

You specify the accrual/deferral period by making the required selections when you call up the functions.

When you perform an update run, the accrued/deferred transactions are selected and the accrual/deferral flows are added. The accrual/deferral flows can be posted immediately in Financial Accounting. If you opt not to use the immediate posting function, you can post the accrual/deferral flows at a later point in time using the *Posting* function.

When you use the difference procedure, the whole payment amount is accrued/deferred - this means that an accrual/deferral must be carried out in the last income period too.

If you carry out a test run, only the results of the accrual/deferral are documented. The selected transactions are not updated and the accrual/deferral flows are not posted.

Procedure

To perform the accrual/deferral function:

1. Choose *Accounting → Accrual/Deferral → Execute.*

2. The initial screen *Accrual/Deferral of Expenses and Revenues* appears*.*

3. In the application area, indicate from which component financial transactions are to be selected - you can choose from Money market, Foreign exchange and Derivatives.

4. Enter your selection criteria in the relevant fields in the General Selections area.

5. The *Test run* field allows you to control whether a productive run or a test run is involved. If you flag the Test run field, an accrual/deferral list is output; postings are, however, not carried out.

6. Choose *Program → Execute* to carry out the accrual/deferral.

   For more information, see the report documentation and IMG (see Define Accrual/Deferral [Ext.]). All entry fields are also documented online.

Reversing Accruals/Deferrals

Prerequisites

Use this report to reverse an accrual/deferral run.

You can choose to immediately reverse the flows created during the accrual/deferral run by reversing the related document in Financial Accounting. Alternatively, you can first flag the flows to be reversed and reverse them at a later stage using the corresponding function.

Use

When you reverse accruals/deferrals according to the difference procedure, all accrual/deferral flows of the same transaction that follow a certain key date are reversed.

This is not the case for accruals/deferrals according to the reset procedure - here, only accruals/deferrals carried out on a certain key date are reversed.

Procedure

To perform a reversal:

1. Choose *Accounting → Accrual/Deferral → Reverse.*

2. This takes you to the initial accrual/deferral screen.

3. In the application area, indicate from which component financial transactions are to be reversed. You can choose from Foreign exchange, Money market and Derivatives.

4. Enter your selection criteria in the relevant fields in the General Selections area.

5. The Test run field allows you to control whether an update run or test run is involved. If you flag the Test run field, an accrual/deferral list is output; postings are, however, not made.

6. Choose *Program → Execute* to reverse the accrual/deferral.

> For more information, see the report documentation and IMG (see Define Accrual/Deferral [Ext.]). All entry fields are also documented online.

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 of derivative financial instruments includes Business partner data [Page 129], Standing instructions [Page 130], Class data for futures [Page 131] and Listed options [Page 133].

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.

Structure
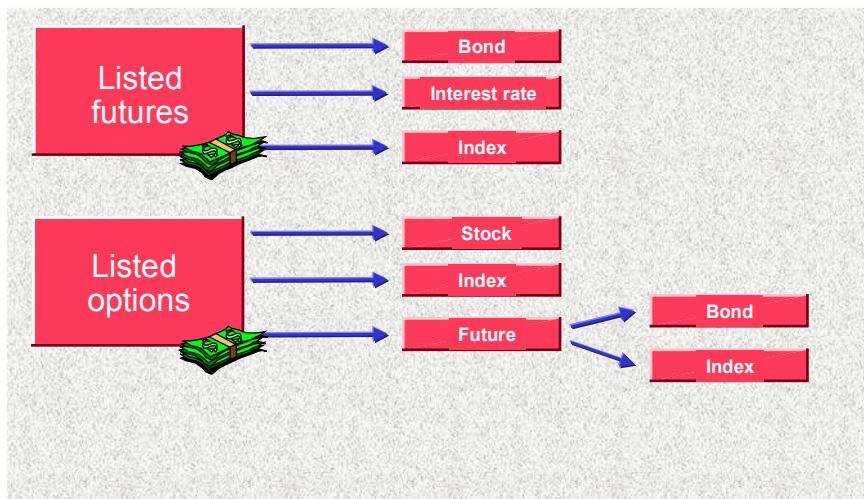
Business Partner

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 Derivatives, 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 system. Maintaining business partner master data includes general tasks such as creating, changing and displaying master records, in addition to specific transactions where you define *Standing instructions* for payments processing, for instance.

Before you create a 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 Standing Instructions [Ext.] 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 automatically be entered.

You can maintain *payment details* as standing instructions for a business partner both in Basic functions under *Master data → Business partner → Standing instructions* and in the Money market area under *Master data → Standing instructions*.

To activate the standing instructions in Customizing, choose *Organization → Define company code additional data*.

Class Data - Futures

Definition

A Future is a forward transaction traded at a forward exchange which is binding on both parties. It has a *standardized* issue structure. The standardized contract elements are entered in the *Class master data*. As with all forward transactions, the price is the current daily price minus the financing costs.

Structure

Via *Master data → Class data → Futures*, you can create, display and change the following:

1. Futures - Securities (Bonds)

2. Futures - Interest rates

3. Futures - Stock indexes

Use

Example:

An investor has an asset balance of fixed interest bonds.

Target:

At the start of the next quarter, he requires 250,000 DEM which he wishes to raise via the sale of bonds.

Measure:

In order to protect himself against price fluctuations, he has two options:

1. He sells the securities today at the current price and invests the money received in fixed-term deposits.

2. He holds on to the securities and sells a bonds futures contract.

The price of the forward transaction at the time of conclusion of the transaction must be such that the investor is not worse off than the he would be with the first option. Otherwise, he will not enter into the transaction. At this moment in time, he can do no better, otherwise he will find no counterparties.

Result:

The conclusion of the forward transaction on the due date is not at the fixed forward rate but at the rate valid at the time. During the term of the future, the settlement rate is determined each day. Profit and loss are immediately cleared (variation margin) using this rate. The sum of these cash flows corresponds to the agreed strike price in the end.

Procedure

To create a future, you must fill in the following fields:

*   Name

*   Exchange (issuer, calendar)

*   Dates (last trading day, last working day, delivery day)

Class Data - Futures

- Tick (tick in %-Pts., tick value, tick currency)

- There are 3 product types in the *Underlying*:

    🛈 Examples

    Security future: Underlying fictitious bond e.g. Bund Future with nominal value 250,000.*00* → Interest calculation method *2* → Percentage rate *6* → Nominal currency DEM → Final due date 02/03/2006
    Interest future: Underlying reference interest rate e.g. 1 month Libor with nominal value 1,000,000.*00* → Interest calcualtion method *2* → Reference interest DEM 03 M middle → Nominal currency DEM
    Index future: Underlying security index e.g. *DAX* with Security index point value 100.00 → Currency index point DEM

Via *Extras* → *Exchange*, you get the name or short description of the exchange.

Class Data - Listed Options

Definition

A listed option is a forward transaction traded at a forward exchange which is binding on one party. It has a *standardized* issue structure. The standardized contract elements are entered in the *Class master data*. Unlike with futures, the risk is not evenly distributed here. The purchaser (owner of long position) of an option has the right to exercise. This right must be paid for: The purchaser must pay the seller the premium option. The vendor (writer, owner of the short position) must fulfill the conditions of the transaction if the purchaser exercises it.

The differing risk for long and short influences the collateral provisions that the counterparties have to make.

There are two methods:

- Normal style

    The purchaser (long) of the option bears no risk, he makes no collateral provision. For each of his long positions, he receives a contribution credit which is offset with his short positions.

    The seller (short) has to pay a premium margin. This margin must offset the loss that would arise if the position was sold today. If the price is such that the loss of the seller rises, the seller must increase the collateral provision.

- Future style

    With DTB options on the DAX future and DTB options on the BUND future and BOBL future, you do not pay the option premium immediately. More often, the daily settlement price is determined and the difference is directly offset as profit and loss. As this settlement method is the same as that for futures, it is called *future style*. As *both sides of the transaction bear a risk, both must provide collateral.*

Structure

Via *Master data → Class data → Listed options*, you can create, display and change the following options:

1. *Stock option*

    The purchaser of a stock option has the right to receive a fixed number of stocks of a class at a fixed price or to sell them (Call option). If a purchaser exercises an option, then the clearing house of the forward exchange randomly assigns a vendor to the purchaser. The assigned vendor is then exercised by the clearing house. Part exercise of positions is possible.

2. *Option - Stock indexes*

    A purchaser of a stock index option has the right to buy (call option) or sell (put option) a block of stock corresponding to the index at a fixed price. As the processing of the security transaction would not be possible when it is exercised, the exercise basically takes place via cash settlement.

3. *Option - Security future (Bond)*

Class Data - Listed Options

> By purchasing a futures option, you have the right to purchase a futures contract (call option) or sell one (put option). When exercising the option, the purchaser of a put option has a short position, that of a call option a long position.
>
> With these options, the premium is not paid upon purchase. The settlement takes place as with futures.

4. *Option - Index future*

> Trading of this product currently takes place at the DTB (Deutsche Terminbörse = German Forward Exchange).

Note: You specify the option category when defining the product type in Customizing.

Use

You create the class data for options here.

There are four basic positions:

- Long Call = right to purchase the underlying from the owner at the base price agreed in advance.. The investor hopes for increasing prices. He will exercise the option as soon as the market price exceeds the base price as he can then purchase at below the market price.

- Short Call = obligation to deliver the underlying to the owner of the long call position at the price agreed in advance. The investor hopes for prices that remain the same or fall slightly so that the option becomes worthless. The option is not exercised. The investor can collect the premium option as a yield improvement of his portfolio in the case of a covered call.

- Long put = right to deliver the underlying to the owner of the short put position at the price agreed in advance. The investor hopes for falling prices. He will exercise the option as soon as the market price falls below the base price as he can then sell at above the market price.

- Short Put = obligation to take the underlying from the owner of the long put position and to pay the base price agreed in advance. The investor hopes for prices that remain the same or increase slightly so that the option expires worthless and he receives the option premium.

Refer to the graphics in the following units: Term explanation:Call and Put [Ext.] and Input help for call and put. [Ext.]

You specify whether a put or call is involved in the contract details.

Procedure

To create a listed option, you must fill in the following fields:

- Exchange (issuer, calendar)

- Dates (last trading day, expiration date, settlement date)

- Tick (Tick amount, tick value)

- Contract details (Put/call, number of units, strike amount, securities index, etc.)

Via *Extras → Exchange*, you get the name or short description of the exchange (refer to the unit entitled Assign exchange). [Page 54]

Header data such as option category, settlement, etc. is based on Customizing settings.

Entering Security Prices Manually

Use

This function enables you to edit security prices manually. It does not matter if you import the prices into the system using the market data file interface or using datafeed.

Prerequisites

Before you can enter security prices, you must have defined at least one *exchange* for the class, and for unit-quoted securities, you must have defined the price currency. See also: Assigning an Exchange [Ext.].

Features

1. Choose *Treasury → Treasury Management → Securities → Environment → Market data → Manual market data entry → Enter security prices* or *Treasury → Treasury Management → Basic Functions → Market data management → Manual market data entry → Security and index → Enter security prices.*

2. Enter the *ID number* and the *exchange*.

3. By choosing *Display,* you can display the prices entered previously.

4. By choosing *Change,* you branch to the change mode.

5. The screens for displaying and changing security prices are divided into three areas.

    The first area displays the *General data* for the ID number and the second area alongside displays the *High/low prices*.

    The third area below, *Price information,* displays the security prices in chronological order. You can see the following entries for the price in the list:

    a. *Price date*

    b. *Price type*

    c. *Market value* (the market value is entered in line with the price type)

    💡 A market value of zero is not defined.

    d. *Currency*

    💡

        This field does not appear for percentage-quoted securities.

    e. *Price notation*

    f. *Source* (The source tells you whether the price was entered manually or whether it was imported by some automatic transmission system (e.g. TELERATE)

6. By choosing *Chart,* you can display the price trends graphically.

7. If you want to know when the prices were high or low, click the relevant ⛏ (*Search)* button to the right of the price. The price you are searching jumps to the first line.

8. If you want to display the price for a certain day, enter the date in the field in the lower part of the screen and press *Enter*. The price for that day jumps to the first line.

9. In the change mode, you enter new price information in the first line of the price information list. Enter the *Price date,* the *Price type,* the *Market value* and the *Price notation.* The price date (current date) and the price type (01) are default settings, but you can overwrite them.

10. You can also overwrite existing price data manually (such as data which has been imported via datafeed).

11. To enter other prices, choose *Edit → New input line*.

   If the new price differs from the price deviation range defined in the class data, a warning appears in the status line.

12. To delete a price entry, choose *Edit → Delete price entry*.

13. Save your entries.

Collective Price Maintenance

1. In the derivatives menu, choose *Master data → Security prices → Collective price maintenance.*

2. Enter the required date in the *Prices on* field.

3. You may overwrite the date that appears automatically.

4. Enter the required *Exchange*.

5. *Execute* the program if you wish to edit all the classes in this exchange.

6. If, however, you only want to maintain certain prices, you can restrict your selections according to the following criteria:

   − *ID number* or *Alternative key*

   − *Issuer*

   − *Short name*

   − *Product type*

   − *Product category*

   − *Price type*

7. Choose *Program → Execute*.

8. The *Maintain Security Price (Collective): Basic Data* screen appears.

   The very top line shows you when and for which exchange you are maintaining prices.

   The 6-column list below displays the ID number and the short name of the respective class in two lines, the date and amount of the price last entered, and the entry fields for price maintenance.

9. In addition to the security price, you also have to enter the relevant price type. You may overwrite the default value for the price type (01).

   You can also maintain the price notation.

   You define the choice of price types in Customizing under *Define security price type.* You define price notations in Customizing under *Maintain price notations.*

   If you want to position a specific security at the top of the list, enter the relevant *ID number* or the related date *(prices on)* in the field in the bottom left-hand corner of the screen. Then press *Return*.

10. You can print the list using the button at the top of the screen.

11. *Save* your entries.

Securities Account

Definition

You use securities accounts to manage and value your positions. You need securities accounts for all transactions which require position management. The securities accounts created in the system usually correspond to actual securities accounts at a bank.

Use

You must have a securities account if you want to purchase a security.

You can perform the following functions on the basis of securities accounts:

- Securities Account Transfer [Ext.]

    To transfer (all or part of) a position from one securities account to another.

- Securities Account Cash Flow [Ext.]

    You can call up the securities account cash flow in the trading and back office areas to display the planned or executed flows for a particular security in a securities account.

- Key Date Valuation [Ext.]

    You use securities accounts to value your securities. When you create master data for a securities account, you can also assign the securities account to a portfolio as a superior position management unit, provided that you have made the relevant settings in Customizing for your portfolios. You then perform valuation at portfolio level. You also have the option of performing valuation for securities account groups.

- **Information System**

    Securities accounts can also be used as the basis for evaluating your positions and displaying the Securities Account Statement [Ext.]. All reports for the *Securities* area are included in the menu for the *Information System.*

Editing a Securities Account

Prerequisites

Before you can create a securities account, you first have to create the depository bank as business partner in the role of depository bank.

If you want to value and evaluate all your securities accounts, you can create portfolios to which you can assign individual securities accounts. To do this, set the portfolio indicator for company code valuation in Customizing for securities by choosing *Assign Company Code.* You define portfolios in basic functions in Customizing and use the field selection control in the securities account master data to display the portfolio field in the entry screen.
You can also assign securities account positions to securities account groups. Valuation then takes place at securities account group level.

Procedure

1. Choose *Treasury→ Treasury management→ Securities → Master data → Securities account.*

2. You can then choose one of the functions listed below and proceed as follows:

Function	Entries	Comments

Create	1. *Company code*
	2. *Securities account*
	3. *Enter*
	4. *Securities account name*
	5. *Bank information*
	6. *Beneficiary*
	7. *Portfolio*
	8. *Business area*
	9. *Blocking type* and *Blocking flag until*
	10. *Goto →BAV data*
	11. Maintain BAV data and *save*
	12. *Save* securities account data
		• *Securities account name* = detailed description of the securities account.
		
		• *Bank information*
		   Here you enter the depository bank, the securities account number and the bank clearing account number in the depository bank, and the bank clearing account in FI.
		
		• *Portfolio*
		
		   Only appears if you have selected the portfolio indicator in Customizing for the securities area by choosing *Assign Company Code*
		
		• *Blocking type* and *Blocking flag*
		   You can block the securities account with a blocking flag. To unblock the securities account, see also <u>Unblocking Disposition [Ext.]</u>.
		
		• If you activated the BAV indicator in Customizing for the company code, you must enter the BAV data.

Change	13. *Company code* 14. *Securities account* 15. *Enter*	• You can overwrite everything in the change mode, except for the *Company code*, *Securities account ID* and *Blocking flag*.

Editing a Securities Account

Display	16. *Company code*	• The system displays the securities account data.
	17. *Securities account*	
	18. *Enter*	

Securities Account: Securities Account List

Use

You can use the securities account list to display and print out the master data for one securities account, for several securities accounts or for all the securities accounts in a company code.

Activities

1. Choose *Information System* →*Master Data* → *Securities Account* → *Securities Account List.*

2. A selection screen appears.

3. Enter the *Company code*.

4. In the fields below, you can select the securities accounts you want to display.

   You can select a single securities account, the securities accounts for a certain portfolio, or those for a particular depository bank. You can also use the beneficiary as selection criteria.

   If you do not enter any other selection criteria, the system displays all the securities accounts in the company code.

5. Choose *Execute.*

6. The securities account list is generated according to the selections made.

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

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.

Deadline Monitoring: Interest Rate Adjustment Schedule

Use

The Interest rate adjustment schedule gives you an overview of interest rate adjustments already made and the related interest rate and reference interest rate adjustment. It also tells you when the next interest rate adjustment for a particular transaction is scheduled.

To call up the Interest rate adjustment schedule:

1. Select *Information system → Int. adjustment schedule*

2. This takes you to the screen headed *Fixing Schedule.*

    Enter the selection criteria in the corresponding fields.

    You can base your selection on *company code, scheduled fixing date, currency* or *reference interest rate*.

    The SAP R/3 System displays a list using the selection criteria you defined. The fixing schedule provides information relating to the OTC transaction such as business partner, fixing date, reference interest rate, etc. The **M** at the end of the list tells you if the interest rate adjustment has been carried out manually. **X** = Yes.

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 Overview

Use

The *Position Overview* report provides a list of the available positions from money market transactions or listed futures on a key date.

You can use the report for operational as well as accounting purposes.

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

Prerequisites

You must have entered financial transactions in the system.

Features

It displays transactions in various position currencies in addition to the local currency of the specified company codes. The key figures delivered with the system both for assets/liabilities transactions for the key date entered are as follows:

- Nominal value

- Accumulated depreciation

- Book value

- Interest rate

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.].

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.]

Treasury: Key Date Comparison

Use

The key date comparison report provides you with an overview of the Treasury positions on the assets and liabilities side of the balance sheet and the accrued profits/losses on any two key dates as well as the corresponding percentage deviations.

Operational aspects (trading support) play a lesser role in this report.

The report is mainly for controlling purposes. It serves as a standard list that you can use as it is or as a template for creating your own reports. You can, for example, easily expand the report to display more than two key dates (time series).

Integration

To go to the following operative transactions, choose *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

It displays trading transactions from Treasury Management. The key figures delivered with the system both for assets/liabilities transactions for the key date entered are as follows:

- Number of units/number of transactions

Assets:

- Nominal value in currency of investment/purchase

- Asset: Acquisition value in position currency

- Asset: Acquisition value in local currency

- Asset: Book value in position currency

- Asset: Book value in local currency

Liabilities:

- Nominal value in currency of investment/purchase

- Liability: Acquisition value in position currency

- Liability: Acquisition value in local currency

- Liability: Book value in position currency

- Liability: Book value in local currency

Profit/loss amounts:

- Total (accrued) depreciation in position currency

- Total (accrued) depreciation in local currency

- Unrealized gains and losses in local currency

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*

Revenue List

- *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

- 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

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

    The *Posting Overview* screen is displayed.

7. 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.

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

9. Choose *Program → Execute*.

10. 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		

Posting Overview

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

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

7. 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.

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

9. Choose *Program* → *Execute*.

10. 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 173] 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.

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 177]

- Business Partner Data [Page 178]

- Business Partner Relationships [Page 180]

- Standing Instructions [Page 181]

- Changes to Business Partners [Page 182]

The *Securities* area also includes reports for the Class Information [Ext.] and the Securities Account List [Page 143].

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

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 186]

  Manual editing of exchange rates [Page 189]

  Manual editing of reference interest rates [Page 187]

- Market data transfer from spreadsheet [Page 191]

- File interfaces [Page 193]

  Import market data [Page 194]

  Generate requirements list [Page 195]

- Datafeed [Page 196]

  Display market data [Page 198]

  Request current market data [Page 199]

- DME management [Ext.] (in money market and forex trading)

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 191] 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*

Entering Reference Interest Rates Manually

Use

This function enables you to enter reference interest rates in the R/3 System manually.

The system uses the interest rates defined here for calculating, for example, a variable interest rate that is linked to one of these reference interest rates.

> You can also call up this function in Customizing for *Basic Functions* in Treasury by choosing *Enter Interest Rates.*

Prerequisites

Before you can enter a reference interest rate for the first time, you have to define the reference interest rate in Customizing for *Basic Functions* in Treasury by choosing *Check Reference Interest Rates.*

Features

You can enter new data and/or change or delete existing entries. You can use the following functions in the input help to do this: *Copy as, Undo change* and *Position.*

Activities

1. Choose *Treasury → Treasury Management → Securities → Environment → Market data → Manual market data entry → Enter reference interest rates* or *Treasury → Treasury Management → Basic Functions → Market data management → Manual market data entry → Interest → Enter reference interest rates.*

2. In the *Change View "Reference Interest Rate Values": Overview,* all the reference interest rates entered previously appear in a table.

   > You define the interest rates according to time (*Valid from*).

3. To change an existing value, you simply overwrite it.

   > Use the *Position* function to access the value you want to change quickly. When you enter the reference interest rate you are searching for and the *Valid from* date, the interest rate you want jumps to the top of the list.

4. To delete an entry, select it and choose *Delete*.

5. Choose the *New entries* button to make a new entry. You can enter the new values on the following screen. Enter the following data:

   – *Reference interest rate*

   – *Valid from* date

   – The new *Interest rate*

6. *Save* the data.

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.*

Editing Exchange Rates Manually

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

Market Data Transfer from Spreadsheet

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*.
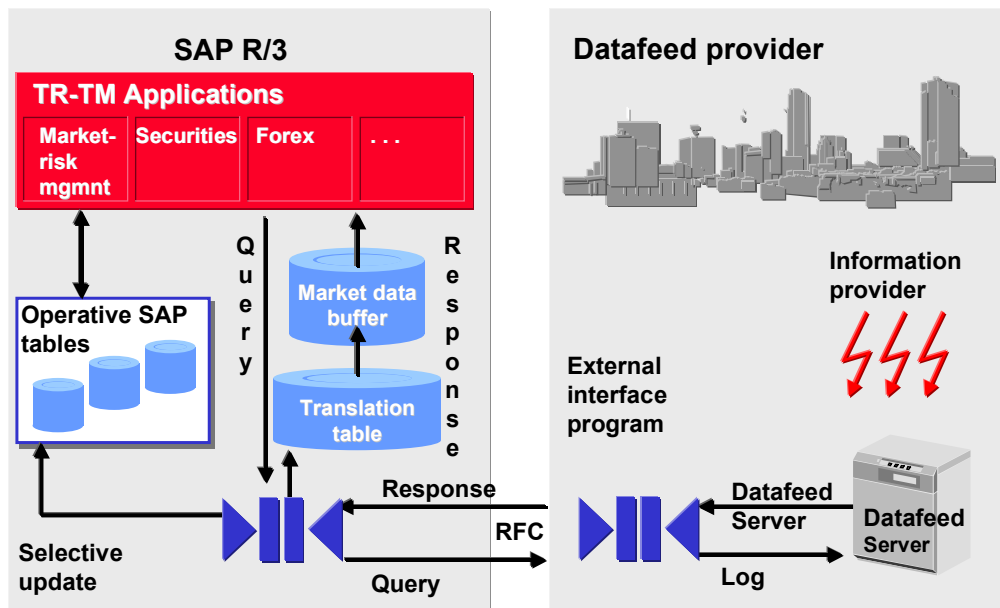
4. Choose *Market data* → *Save* to save the requirements list to the output file.

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.

- 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.

Requesting Current Market Data

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.*