Usage Limiters

Contents

Introduction

This document is intended for employees of banks or processing centres who are responsible for configuring WAY4™ and contains information about the configuration of contract activity limiters (Usage Limiters).

When working with this document it is recommended to use the following resources from the set of WAY4 documentation:

- "Documents"
- "Alert Notification Messaging"
- "WAY4™ Dictionaries"
- "Service Packages"
- "Issuing modules"
- "Acquiring modules"
- "Balance types"
- "Preferred counterparties"
- "Risk Monitoring", the WAY Real-Time Risk Management monitoring module
- "Tariff management"
- "WAY4 Client and Contract Classifiers"

The following conventions are used throughout this document:

- Field names in screen forms are displayed in *italics*.
- Names of screen form buttons are shown in square brackets, such as [Approve].
- The sequence for selecting a user menu item is given using arrows, as in "Configuration Setup → Contract Types".
- Warnings that there is a risk of making an incorrect action are marked with the  sign.
- Messages marked with the  sign contain information about important features; additional facilities or the optimal use of certain functions of the system.

Chapter 1. Principles of Usage Limiter Operation

WAY4 makes it possible to set various limits on contracts. For example, users can limit the total number of transactions for a contract over a period of time, the total transaction amount of operations over a period, the amount of a single transaction, the number of online mini-statements issued without charge, etc. Such limits are set with usage limiters. Usage Limiters are divided into transaction limiters (limits on the amounts, the number of transactions, etc.) and non-transaction limiters (limits on the provision of mini-statements, balances, etc.).

Limiter parameters are set in general templates configured in Service Packages or in individual templates configured for a contract. General templates determine limiter parameters for all contracts using the corresponding Service Package. An individual template determines limiter parameters for that contract for which it is configured.

Criteria for suspicious transactions are set with contract usage limiters configured in special Service Packages used for risk control (see the document "Monitoring suspicious transactions", the Real-Time Risk Management module).

The principle of limiter operation (using the example of transaction limiters) can be described as follows. A limiter is set for a group of transactions meeting particular conditions, such as the channel for authorisation request, merchant group, type of operation, Service, and others. A limiter has two counters which determine maximum permissible values: a counter for the number of transactions and a counter for transaction amount. Limits on the amount of a single transaction can be set in the limiter template.

Limiters are checked in the following cases:

- **During authorisation**:
  - A set of limiters is determined whose conditions fit the transaction parameters; limiters are selected according to analysis of the following possible sources:
    - Parameters of the current contract:
      - Limiters inherited from the contract's Service Package.
      - A contract's individual limiters (see the section "Individual Templates").
      - Limiters in one hierarchical structure with those mentioned above (for information about the influence of hierarchies on limiter operation, see the section "Combining and Excluding Limiters").
    - If the contract being analysed has higher-ranking contracts and its parameters indicate that it is necessary to consider the limiters of the higher-ranking contracts as well as its own (the value of the *Usage Scenario* field is set to "Main and Own"):

- Limiters inherited from the Service Package of the higher-ranking contract.
- Individual limiters of the main contract (see the section "Individual Templates").
- Limiters in one hierarchical structure with those of the higher-ranking contract mentioned above (for more information about the influence of hierarchies on limiter operation, see the section "Combining and Excluding Limiters").

♦ All currently active limiters are determined.

▪ Counter values increase according to transaction parameters.

- If the value of even one counter or controlled parameter exceeds the set threshold, the limiter activates and WAY4 executes certain actions (execution of a particular Event, sending a particular system response code in response to an authorisation request, charging a fee), in other cases, the limiter is not activated.**When a financial document is received for which no authorisation document is found** (for operations with the "Always" or "Maybe" value of the *Is Authorized* parameter; "Full → Configuration Setup → Transaction Types → Transaction – ALL"). When posting a financial document for which no authorisation document was found, limiter counters increase the same way as when processing an authorisation request for the amount of the financial document.
- The USAGE_FOR tag in a transaction subtype can be used to set up checking limiters **when posting financial documents for which authorisation is not required** (for operations with the "Never" value of the *Is Authorized* parameter; "Full → Configuration Setup → Transaction Types → Transaction – ALL"). For example, for limiters to activate in credit and debit transactions. Tag Values:
  - "S" (Source) – source contract limiters.
  - "T" (Target) – target contract limiters.
  - "B" (Both) – source and target contract limiters.

  When processing transactions that have a transaction type *Is Authorised* parameter value of "Never" and the USAGE_FOR tag set, limiter counters only increase by the value of the transaction's base amount, fees do not affect limiter counters (both when posting original documents and when posting adjustment documents). Before version 03.42.30, for such cases fee amounts were included in limiter counters.
- When posting a reversal or adjustment of a transaction that changed limiter counters.
- When a document is reposted, limiter counters will be recalculated (i.e. the transaction's effect on limiter counters will be reversed and counters will be recalculated).

  If the target contract changed for a reposted document, a limiter counter will be decreased in the "old" contract and increased in the "new" one.

- Limiters are checked for acquiring contracts **when messages are received online from POS terminals**. Limiters are not usually configured for acquiring contracts.

Contents of counters accumulate during the time period indicated in the limiter's parameters (the *Period* and *Period Type* fields), after which counters reset their values (resetting counters means refreshing counter values; this takes place when the first transaction meeting limiter conditions is made, in a new period). The exception is limiters with the property "Forever", whose counters do not reset to zero (see the section "Period Type").

The current status of counters is displayed in the forms "Usage for <contract name>", opened by clicking the [Usage] button in a higher-ranking form showing the contract balance (see the section "Working with Usage Limiters").

Chapter 2. Entering and Configuring Limiter Templates

This section describes the procedure for entering and configuring general and individual limiter templates (see the sections "General Templates" and "Individual Templates" respectively).

General Templates

The Form "Usage for <Name of Service Package>"

Limiter templates in Service Packages are entered and configured in the "Service Packs" form (Full → Configuration Setup → Products → Service Packs) or in special forms with a list of Service Packages (Full → Configuration Setup → Products <name of product group> → <Name of client category> Service Packs).

Clicking the [Usage] button in the abovementioned forms opens the "Usage for <Name of Service Package>" form (see Fig. 1).

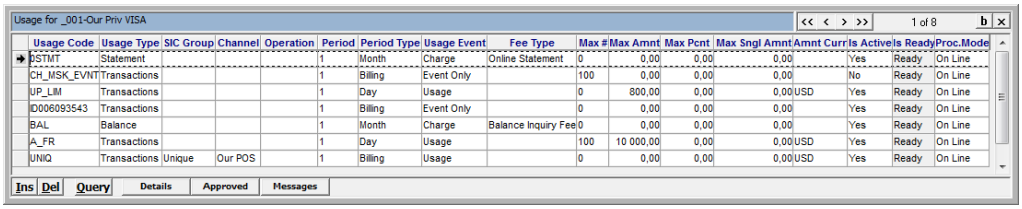

Fig. 1. Form for entering and editing Service Package limiters

The "Usage for <name of Service Package>" form contains fields to set the main parameters of limiters. For a description of fields, see the section "Main Parameters of Limiters".

The [Details] button is used to access configurations of a limiter's additional parameters (see the section "Additional Parameters of Limiters (Details)").

Based on limiter template configuration for contracts using the given Service Package, entries are generated for the storage of counter values (see the section "Working with Usage Limiters").

The [Approved] button is used to access the form containing entries corresponding to all changes to a limiter's template parameters ever approved (see Fig. 2). For every approval of changed limiter template parameters (this happens when the corresponding Service Package is approved), a new entry is made in this form, containing the template parameters, the date from which the approved parameters are effective (*Date From*). At the same time, the previous approved entry is "closed", the value for this entry in the *Date To* field (end date of changed template parameters effective period) is set to the date the new parameters become effective. This form makes it possible to determine which parameters were in use at a given time. For a detailed description of form fields, see the section "History of Changes in Limiter Parameters".

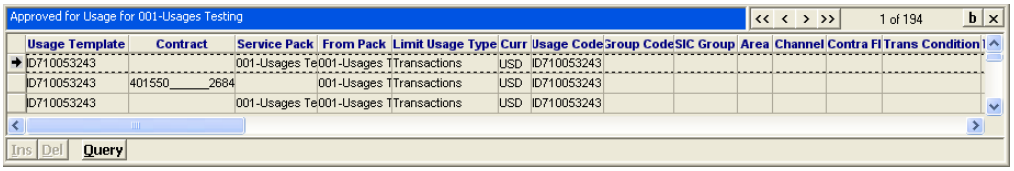

Fig. 2. Form for viewing the history of approved changes to a limiter template

Main Parameters of Limiters

Specifics of the combination of the *Max #*, *Max Amnt* and *Max Sngl Amnt* parameters:

- If all three fields have empty values, a limiter will be activated during a transaction.
- If even one of these fields has a non-empty value, the empty values of the remaining fields in the list remove the corresponding limits.

Examples.

1. *Max #*=0, *Max Amnt*=1000, *Max Sngl Amnt*=200 – in this configuration, no limit is set on the total number of transactions on a contract for a period (Max #). The total transaction amount for a period (*Max Amnt*) and single transaction amount (*Max Sngl Amnt*) are limited.
2. *Max #*=10, *Max Amnt*=0, *Max Sngl Amnt*=200 – in this configuration, the total number of transactions on a contract for a period and single transaction amount are limited. No limit is set on the total transaction amount for a period.
3. *Max #*=10, *Max Amnt*=1000, *Max Sngl Amnt*=0 – in this configuration, the total number of transactions on a contract and total transaction amount for a period are limited. No limit is set on the single transaction amount.

Usage Code

A limiter template code has a maximum length of 32 symbols; this code will be indicated in the authorisation log when an authorisation request for a transaction is refused because a transaction exceeds the set limit.

Usage Type

This is the type of limiter; depending on the contract type, the following types of limiters are used:

- For all contract types:
  - "Transaction" – used to limit the number and amount of transactions. Limiters of this type do not apply to operations whose transaction type has the DR\CR parameter set to "Credit" (for information about transaction types, see the section "Transaction Types and their Parameters" in the "Documents" Administrator manual).
  - "Credit" – used to limit the number and amount of transactions for operations whose transaction type has the DR\CR parameter set to "Credit".
  - "Add Service" – used to limit the use of additional online services; for issuing contracts, these can be PIN code changes, verification of bankcards; for acquiring contracts, the payment of mobile provider

services, etc. In the *Operation* field of the limiter template, select the appropriate instruction from the "Usage Operation" table. Additional online services are configured in the table "Full → Configuration Setup → Merchant Device Setup → Additional Online Services".

- "Negative RC" – used to set limits on the number of responses (both positive and negative) to an authorisation request; in the *Operation* field, select the appropriate instruction from the "Usage Operation" table; the necessary response codes are set up in the table "Full → Configuration Setup → Alerting Setup → Response Code Usage".
- "Alert" – a special limiter type used for notification messaging; in the Operation field, select the appropriate instruction from the "Usage Operation" table (see the Alert Notification Messaging Administrator manual).
- "Risk Rule" – used to monitor suspicious operations (see the Risk Monitoring Administrator manual, the WAY Real-Time Risk Management monitoring module). The limiter is used to limit the number and amount of transactions on a contract. Moreover, limits are applied to all transaction types ("Transaction", "Balance Inquiry", etc., see the description of the "Service Class" transaction type classifier in the document "Documents").

  All transactions, including declined ones, influence "Risk Rule" type limiter counters.

- For issuing contracts and bank contracts:
  - "Overdraft" – this type of limiter makes it possible to use the amount specified in the *Max Amnt* field when available funds (Amount Available) are insufficient.

    The "Overdraft" type of limiter can be considered an additional credit limit. Nevertheless, it is important to emphasise the difference between these mechanisms for provision of funds. An "Overdraft" limiter counter does not reset to 0 when the loan is repaid. The counter resets when the time limit for that limiter runs out; that is, the amount available for use is renewed regardless of whether the loan has been repaid.

    For example, the following settings were made for a contract:

    - Contract credit limit – 10,000 USD
    - Current balance on the contract – 0
    - A limiter with the "Overdraft" type has been set, with a maximum amount of 5,000 USD and a effective cycle of 1 month.

    Therefore, 15,000 USD is available (the credit limit + the maximum amount of the "Overdraft" limiter type).

    When making a transaction for 14,000 USD, 10,000 is taken from the contract's credit limit and the remaining 4,000, from the limiter's maximum amount. Available funds on the contract are 1,000 USD.

At the end of the limiter's effective cycle, its counters reset to 0 and the amount of 5,000 USD is available again (whether or not the loan was repaid).

- "Balance" – limits the number of free online balance inquiries a client can make.
- "Statement" – limits the number of free online statements provided to a client.
- "Payment" – used to set limits on the use of online requests to activate payment orders.
- "Ext Payment" – used to set limits on payments to arbitrary requisites.
- "Top Up" – used to set limits on the number of changes in the amount allowed for making card transactions offline (for smart cards), as well as limits to the amount itself.
- "STIP" (StandIn Processing) – works similar to the "Overdraft" value. Specifies permissible amounts and the number of transactions when the "main" system is unavailable.

- For device contracts:
  - "Device" – limits device operations; in the *Operation* field, select the appropriate instruction from the "Usage Operation" table; operations are set up in the "Full → Configuration Setup → Alerting Setup → Usage Operation Request" table.

SIC Group

This parameter makes it possible to additionally define a limiter depending on the merchant's SIC group (MCC) (see the section ""SIC Group" Dictionary" in the WAY4™ Dictionaries Administrator manual).

Channel

The channel of the counterparty contract (the service channel of the other participant in the transaction); the list of authorisation channels is provided in the "Message Channels" grid form (Full → Configuration Setup → Main Tables → Message Channels).

Operation

The "Usage Operations" system instruction on which limits will be imposed, selected from a list.

The list of possible values for the *Operation* field is generated when the required instructions are selected from the "Usage Operations" dictionary (Full → Configuration Setup → Alerting Setup → Usage Operations) based on the value of the *Usage Type* field.

See the section "Using "Usage Operations" System Instructions to Configure Usage Limiters".

Period

The time period for which the limiter is active, in units set in the *Period Type* field.

Period Type

The type of time period unit for which the limiter is active:

- "Day" – time period is calculated in calendar days

  If the value "7" is set in the "Period" field, the limiter will be active from Monday to Sunday inclusively, and not 7 days from the moment the counter is activated.

- "Month" – time period is calculated in calendar months.
- "Billing" – time period is calculated in billing cycles.
- "Quarter" – period is calculated in quarters.
- "Yearly" – in calendar years. Transaction counters accumulate from January 1 of one year to January 1 of the next year for the specified number of years (the number of years is set in the *Period* field).
- "Single" – a single-use limiter whose conditions are used in a time interval set on the contract level in the form "Date From – To and Reason". For more information about the procedure for setting a limiter time interval on the contract level, see the section "Managing Limiters". At the end of the period set in the "Date From – To and Reason" form, the action of a "Single" type limiter is terminated. To renew the limiter's activity, reset the time interval in the "Date From – To and Reason" form. The *Period* field of the limiter must have the conditional value of "1" for the limiter to work correctly.

  If a "Single" type limiter is set on the Service Package and the time interval was not initially set on the contract level, this limiter will be activated when a transaction is made and will be effective during the period from the time of the transaction to the time specified using the *Period* field (by default, for a "Single" type limiter, the period is calculated in days – the number of days is set in the *Period* field).

  A "Single" type limiter is used, for example, in the "Security profile" module to temporarily open a transaction window.

- "Sliding Days" – the limiter is active for the number of days specified in the *Period* field before the current transaction was made. For example, if the value of the *Period* field is 1 and the last transaction was made at 17:35:44 on 22.01.2010, the limiter will take into account all transactions made from 17:35:45 21.01.2010 up to the current transaction.
- "Single Sliding" – the limiter is active for a time interval set on the contract level (the interval can be shown in minutes for this period type).

  This type of limiter is managed using external applications, for example, using the Mobile Banking module. When an online request is received from an application to turn on a limiter (for example, an SMS-message) the parameters of the limiter template are automatically changed (Redefine) in accordance with the parameters of the request.

  The *Period* field must have the conditional value of "1" for the limiter to work correctly.

- "Sliding Hours" – the limiter's activity is extended to the number of hours indicated in the *Period* field preceding the time of the current transaction.
- "Sliding Minutes" – the limiter's activity is extended to the number of minutes indicated in the *Period* field preceding the time of the current transaction.
- "Forever" – no frequency cycle is set for the limiter; counter contents accumulate constantly and counters do not reset to zero.

  Counters of a limiter with the "Overdraft" type and the "Forever" activity period are reset if a contract's amount available is equal to or more than zero (i.e. they are reset if the contract balance changes).

For a limiter for which in the current active period there are already records in the "Usg History…" form (see the section "History of Changes in Limiter Counter Values"), the *Period Type* and/or *Period* parameters cannot be changed if these changes shorten the current period for which the limiter is active. Such changes cannot be approved. These changes cannot be approved until the end of the current period for which the limiter is active.

Usage Event

System actions when a given limiter is activated. The field can have one of the following values:

- "Usage" – when the limiter is activated, the system response code will be equal to:
  - "61" - if the transaction amount counter exceeds the maximum permissible value indicated in the *Max Amnt* field
  - "65" – if the transaction number counter exceeds the maximum permissible value indicated in the *Max #* field

    The list of system response codes is found in the "Response Codes" system dictionary (Full → Main Tables → Response Code (Customise)).
- When the value "Charge" is selected, activation of the limiter results in a fee being charged of the type indicated in the *Fee Type* field. If funds are not sufficient to pay the fee, the system response code will be "51" (the list of response codes is found in the "Response Codes" system dictionary).
- When the value "No Funds" is selected, the system response code will be "51" (the list of response codes is found in the "Response Codes" system dictionary).
- When the value "Response" is selected, it is necessary to indicate in the *Custom RC* field (see the section "Additional Parameters of Limiters (Details)") the response code that will be returned in response to an authorisation request.
- "Event Only" – if this value is selected, when the limiter is activated an Event specified in the *Event Type* field will open (see the section "Additional Parameters of Limiters (Details)").

Fee Type

The type of fee charged for authorising a transaction if the transaction parameters exceed the limiter's parameters. This field is filled in by selecting a value from a list of fee types registered in the system. The list can be edited in the "Fee Types" form (Full → Configuration Setup → Transaction Types → Fee Types). Only types containing the contract category for which the Service Package is configured ("Card", "Account", or "Device") in the *Target* field of the "Fee Types" form will be shown in the *Fee Type* field of the "Usage for <name of Service Package>" form.

Max #

- For transaction limiters, this is the maximum permissible number of transactions for a set period. For an example of transaction limiter configuration, see the section "Preventing Fraudulent Operations".
- For nontransaction limiters, this is the maximum number of statements, balance inquiries, etc, which are provided online to a client free of charge. For examples of nontransaction limiter configuration, see the section "Limiting Online Statement (Balance) Requests".

Max Amnt

The maximum permissible total amount of all transactions for a given period.

Max Pcnt

This field (if it is filled in) is used in calculating threshold values for the amount or number of transactions, depending on the value of the *Algorithm* field (see the description of the *Algorithm* field in the section "Threshold Calculation"). For example, for algorithms related to calculating the average or total value for the amount of transactions, the limit is calculated as a set percentage of the average or total calculated amount of transactions. If the algorithm is related to calculating the average or total number of transactions, a set percentage is applied to the calculated number of transactions. For the "Fixed" algorithm, a percentage is only applied to the *Max Amnt* amount. I.e. if this field is filled in, the value received with it redefines the value of the *Max Amnt* or *Max #* field (depending on the algorithm.

For a specific balance type, this field determines the maximum permissible total transaction amount for a set period, as a percentage of the available funds of the corresponding balance type (see the section "Balance Type"). If the balance type for a limiter is not specified, the maximum permissible transaction amount is calculated as a percentage of the contract credit limit.

A null value in this field means that no limits are set.

Max Sngl Amnt

The maximum amount permitted for a single transaction. A null value in this field means that no limits are set.

Amnt Curr

The currency of the maximum total amount of all transactions (*Max Amnt*), of a single transaction (*Max Sngl Amnt*) as well as *Max Trans Amount* and *Min Trans Amount*.

Is Active

Shows whether a given limiter template is active:

- "Yes" – the limiter template is active and the corresponding limiter can be used by contracts with the given Service Package.
- "No" – the limiter template is not active and the corresponding limiter cannot be used with the given Service Package until it is activated individually for the contract.

Is Ready

Shows whether changes made to a limiter template were approved and the necessary changes made in the DB. Approval of changes in a limiter template is made when changes to the corresponding Service Package are approved.

Proc. Mode

The mode for processing limiters (mode for recording operations in limiter counters):

- "Online" – the limiter is processed when an authorisation is received. This is the default value.
- "Off Line" – the limiter is not processed when an authorisation is received. This value enables the mode for deferred processing of limiters used in the Real-Time Risk Management module, see the document "Risk Monitoring".

  When a financial document is received for which no authorization document is found, limiters with the "Offline" value of the Proc. Field are not checked in the "Offline Usage Limiters Processing" deferred process. In this case, the check is made when processing and accepting the document.

Additional Parameters of Limiters (Details)

The [Details] button in the "Usage for <name of Service Package>" form (see Fig. 1 in the section "Entering and Configuring Limiter Templates") opens the "Details for Usage for <name of Service Package>" form (see Fig. 3), used to enter additional limiter parameters.

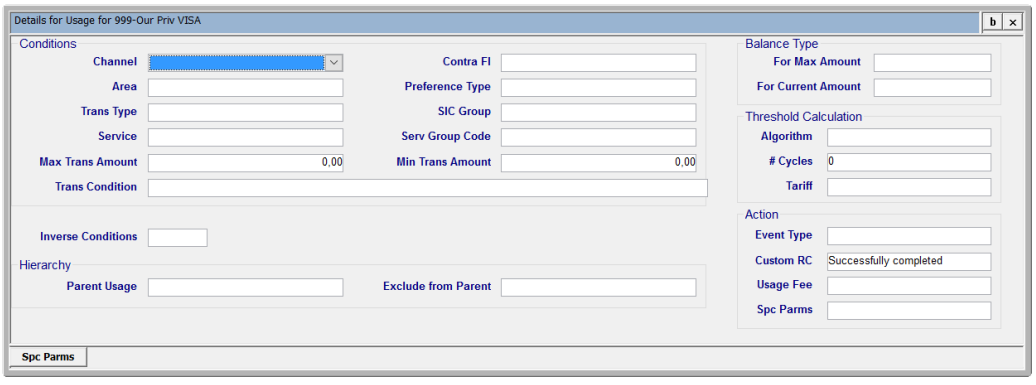

Fig. 3. Form for entering additional limiter parameters

The fields of the "Details for Usage for <name of Service Package>" form are divided into five groups: "Conditions", "Hierarchy", "Balance Type", "Threshold Calculation" and "Action".

Conditions

This group determines the parameters according to which operations are selected for comparison with limiters and contains the following fields:

Channel – see the description of the *Channel* field in the section "Main Parameters of Limiters"

- *Area* – transaction counterparty region: merchant region for limiters set up for issuing contracts, or the issuing bank region for limiters set up for acquiring contracts (see the section "Configuring Country Areas" in the WAY4™ Dictionaries Administrator manual)

SIC Group – see the description of the SIC Group field in the section "Main Parameters of Limiters"

- *Contra FI* – name of the financial institution in which the counterparty contract is registered and to which the limiter is applied; the list of financial institutions registered in the system is provided in the "Financial Institutions" grid form (Full → Configuration Setup → Main Tables → Financial Institutions)
- *Preference Type* – the category of preferred counterparties with whom operations have limits imposed. For more information, see the document "Preferred counterparties".
- *Trans Type* – the type of transaction.
- *Trans Condition* – conditions for making a transaction; a list of all conditions registered in the system is contained in the "Transaction Conditions" dictionary.

  ⚠ When configuring limiters, only group conditions for transactions should be used (in the "Transaction Conditions" list, these records have the name "<name> (Group)").
- *Service* – the name of the Service on which limits are imposed.
- *Serv Group Code* – the service group code. This field can contain several values separated by commas. A limiter with the value XXX in this field will be activated when an operation is executed using a service whose *Service Details* field contains the value GROUP_CODE=XXX;. This rule is applicable both for a limiter set for the contract whose service is used in the operation and for the limiter set up for a higher-ranked contract in the hierarchy (Main/Sub, Liability) if the limiter is checked according to a usage scenario. For example, a limiter can be set up for a higher-ranked Liability contract. Then, the limiter will be activated when operations are executed on services of subordinate contracts, if the group code is specified for the services of this group of contracts.
- *Max Trans Amount* – the maximum amount of transactions considered by the limiter. When filling in this field, note that if the value of the limiter's *Max Sngl Amnt.* field exceeds the value specified here, all transaction amounts considered by the limiter will be lower than the maximum single amount.
- *Min Trans Amount* – the minimum amount of transactions considered by the limiter.

- The *Inverse Conditions* field makes it possible to invert parameters according to which operations are selected.
  - When the value "Yes" is chosen – if the conditions of the given limiter meet the parameters of the transaction, this limiter will not be applied. If the transaction falls into the group of transactions specified in the limiter (*Usage Type* field) but the conditions of the given limiter, specified in the field group "Conditions" do not meet the transaction parameters, the limiter will be applied.
  - The "No" value cancels inversion.

    Inversion is applied to the entire set of "Conditions" field group parameters and to tags in the *Spc Parms* field. I.e. the limiter will be applied if all the conditions set in the "Conditions" field group and in the *Spc Parms* field do not satisfy transaction parameters.

Hierarchy

This group contains the *Parent Usage* and *ExcludeFromParent* fields, which are used to configure limiter hierarchy (see the section "Combining and Excluding Limiters").

Balance Type

This group contains fields that determine rules for working with balance types:

- *For Max Amount* – type of balance whose value will be used as the maximum total transaction amount (*Max Amnt*) as well as to determine the amount of available funds when checking limits specified in the *Max Pcnt* of a limiter template.
- *For Current Amount* – type of balance whose value will be used instead of the current value of the counter for the total amount of transactions; that is, it will be added to the amount of a current transaction when checking limits on the total amount of transactions for a period.

  For more information, refer to the Balance Types Administrator manual.

  When using a balance type in the *For Current Amount* field, the following should be considered:
  - In additional to the specified balance type, the limiter counter also considers authorisation blockings, therefore, to avoid funds being considered more than once, it is not recommended to use balance types in the *For Current Amount* field that include fund blocking (for example, BLOCKED or AVAILABLE).
  - After a financial document for authorisation is posted, the amount of the operation must be shown in the balance specified in the *For Current Amount* field. Therefore, it is not necessary in the counter to consider authorisations matched with a posted financial document. For the counter to consider only authorisation blockings that have not been matched with financial documents, specify the NOT_MATCHED; tag in the *SpcParms* field.

Threshold Calculation

This group contains fields that determine the rules for specifying threshold values:

- The *Tariff* field – contains a list of registered types of tariffs with the "Usage" role. In this field, threshold values are set using the numeric values of tariffs. A value can be selected in this field if the supply package includes the tariff management module.

  ⚠ If threshold values are set using a tariff, all its parameters, including the Is Active flag are taken from the tariff. If the tariff is used, limiter parameters (including turning off the limiter) can only be changed in tariff parameters (which in this case means it is not possible to turn off the limiter directly in the Service Package).

  ⓘ The WAY4 Tariffs module is not included in the basic WAY4 configuration and is supplied under a separate agreement with the WAY4 system vendor.

- *Algorithm* – threshold value calculation method:
  - "Fixed" – the same as the blank field; in this case, threshold values are specified in the limiter's fields *Max #*, *Max Amnt*, and *Max Sngl Amnt*.
  - "Average Single Amount" – the maximum allowed single transaction amount is the sum total of all operations that were executed over a specified number of cycles and whose parameters meet the limiter parameters, divided by the number of the operations.
  - "Average Amount", "Average Number" – threshold values are the average total amount and number of operations that were executed over a specified number of cycles and whose parameters meet the limiter parameters.
  - "Av Total Amount", "Av Total Number" – threshold values are the average total amount and number of operations executed over a specified number of cycles.
  - "Av Amnt & Nmbr" – combination of two thresholds: "Average Amount" and "Average Number". The limiter is activated when either threshold is exceeded.
  - "Av Total Amnt & Nmbr" – combination of two thresholds: "Av Total Amount" and "Av Total Number". The limiter is activated when either threshold is exceeded.
  - "Aggr Amnt & Nmbr" – combination of two thresholds: "Aggregate Amount" and "Aggregate Number". The limiter is activated when either threshold is exceeded.
  - "Parent Average S. Amnt" – "Average Single Amount" is calculated according to the average value of a Parent limiter transaction amount.
  - "Bal Type Pcnt" – the maximum permissible transaction amount is calculated as a percentage (set in the *Max Pcnt* field) of the balance type specified in the *For Max Amount* field.

- "Cr Limit Pcnt" – the maximum permissible total transaction amount is calculated as a percentage, set in the *Max Pcnt* field, of the contract's credit limit.
- "Doc Amount Single" – the maximum allowed single transaction amount is calculated as a percentage (set in the *Max Pcnt* field) of the document Settlement Amount.
- "Maximal Single Amount" – the maximum allowed single transaction amount is calculated based on the maximum amount of a single operation among those processed during a specified period of time.
- "Aggregate Amount", "Aggregate Number" – the total amount of all operations for a specified period and the total number of all operations for a specified period, respectively, are used as threshold values.
- "Custom" – a limit is set using a custom procedure.

- *# Cycles* – number of cycles specified in limiter parameters (*Period Type* and *Period*) averaged to calculate threshold values.

The *Algorithm*, *# Cycles* fields are used when it is necessary to set threshold values that take into account the history of contract activity. These fields are used when configuring Risk Rules (for more information, refer to the Risk Monitoring Administrator manual, the WAY Real-Time Risk Management monitoring module).

Average and aggregate threshold value calculation has the following features:

- Average and aggregate threshold values are calculated starting with the second cycle after limiter activation, e.g. from the second day for *Period Type* = "Day" and *Period* = "1" or from the third month for *Period Type* = "Month" and *Period* = "2".
- During the first cycle after limiter activation, threshold values are the default values specified in the field *Max Sngl Amnt* for the "Average Single" and "Maximal Single Amount" methods, field *Max Amnt* for methods "Average Amount", "Av Total Amount" and "Aggregate Amount", and field *Max #* for methods "Average Number", "Av Total Number" and "Aggregate Number".
- The system calculates average threshold values at the end of a cycle and uses them during the next limiter cycle.

If threshold values for amounts are set in the "Threshold Calculation" field group, the limiter's *Amnt Curr* field must be filled in. The value of this field is saved each time the limiter is changed (approved).

If no currency is specified for an approved limiter with thresholds set for amounts in the "Threshold Calculation" field group (this was possible in earlier versions of WAY4), the contract currency will be used.

Action

This group contains fields determining additional actions that can be executed when a limiter is activated, as well as special limiter conditions:

- *Event Type* – the name of the Event which is opened if the limiter is activated. The field is filled in by selecting a value from a list of Events registered in the system. The Event specified in this field will open regardless of the value of the *Usage Event* field. A description of working with Events is provided in the "Events" document.

  In this field, it is recommended to use an Event with the "Post Later" value of the *Post Immediate* field. See the section "Event Types" of the document "Events".

- *Custom RC* – the response code for an authorization request. Response codes are found in the "Response Codes" system dictionary.

- *Usage Fee* – see the description of the *Fee Type* field in the section "Main Parameters of Limiters".

- *Spc Parms* – a field that, using tags, specifies special limiter parameters. See the section "Tags in the *Spc Parms* Field of a Usage Limiter Template". The [Spc Parms] button in the "Details for Usage for <Service Package name>" form is used to optimise the process of entering and editing tags, for more information, see the section "Entering and Editing Tags".

Entering and Editing Tags

The "Details for Usage for <Service Package name>" form contains the *Spc Parms* field for entering tags.

The "Spc Parms…" form is used to optimise the process of entering and editing tags in the *Spc Parms* field. This form is opened by clicking the [Spc Parms] button in the "Details for Usage for <Service Package name>" form (see Fig. 3 in the section "Additional Parameters of Limiters (Details)").

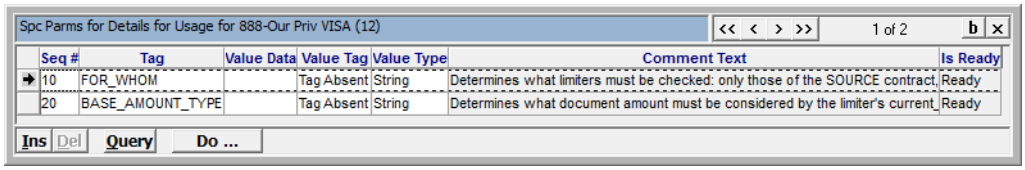

Fig. 4. "Spc Parms…" form

In this form, tags can be added from the system dictionary of tags for managing usage limiters. If a tag is not present in the system dictionary, it can be added using the keyboard.

This form's fields correspond to the fields of the "Tagged Data" form used to enter and edit tags for Service Packages. Form fields are described in the section "Entering and Editing Tags" of the document "WAY4™ Service Packages".

Combining and Excluding Limiters

WAY4 allows limiters to be combined or excluded. For example, it is possible to set a general limiter for transactions in certain branch offices (combination of limiters).

The "Hierarchy" group of the "Detail for Usage for <name of Service Package> form (see Fig. 3 in the section "Additional Parameters of Limiters (Details)") contains the following fields that define the hierarchy of limiters:

Parent Usage

The name of the limiter that is the parent to the current limiter. The list of field values is generated from the list of limiters set up for the given Service Package (in the table "Usage for <name of Service Package>").

Exclude from Parent

This field adds or excludes a child limiter from a parent limiter. It can have one of the following values:

- "Yes" – operations which meet the conditions of the child limiter and change its counter values, do not change the parent limiter's counter values.
- "No" – operations which meet the conditions of the child limiter and change its counter values, change the parent limiter's counter values.

A limiter cannot be a parent and a child. Only one level of addition/exclusion of limiters is possible.

Table 1 shows the possibilities for the configuration of limiter hierarchy, fulfilment of their conditions and changes to counters.

Table 1. Possibilities for limiter hierarchy configuration, fulfilment of their conditions, and counter updates

ADDITION of child limiter conditions to those of the parent limiter (value of the child limiter's *Exclude from Parent* field is "No")			
Fulfilment of limiter conditions		**Counter change**	
Parent	**Child**	**Parent**	**Child**
+	+	+	+
+	-	+	-
-	+	+	+
EXCLUSION of child limiter conditions from those of a parent limiter (value of the child limiter's *Exclude from Parent* field is "Yes")			
Fulfilment of limiter conditions		**Counter change**	
Parent	**Child**	**Parent**	**Child**
+	+	-	+
+	-	+	-
-	+	-	+

When excluding child limiter conditions (the value of the limiter's *Exclude from Parent* field is "Yes"), the value "Yes" will automatically be specified in the parent limiter's *Exclude from Parent* field.

The system supports configuration of several child limiters for one parent limiter. In standard use of several child limiters, the conditions of all child limiters will be either be included in the conditions of the parent limiter or excluded from them.

For an example of how limiter exclusion is used, see the section "Managing the Correspondent Account of an Affiliated Bank".

Individual Templates

Templates of individual limiters are set on the contract level.

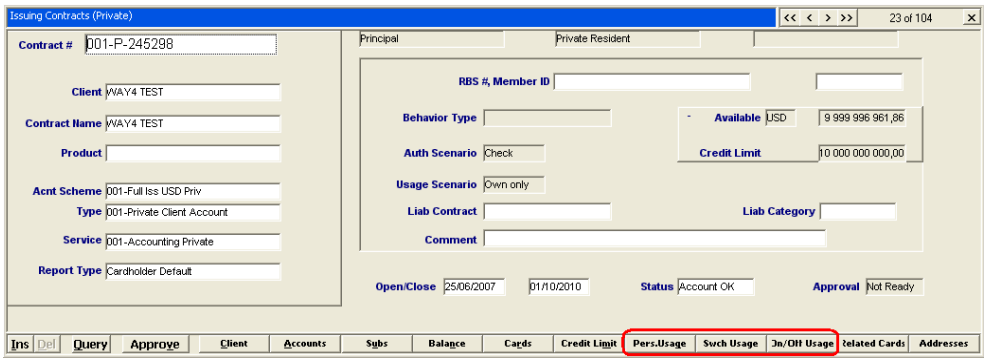

Fig. 5. Contract form, buttons for limiter configuration/management

The form for editing contract parameters (see Fig. 5) contains the following buttons for working with usage limiters:

- [Pers.Usage] button – used for configuring templates of individual limiters
- [Swch Usage], [On/Off Usage] buttons – used for managing all usage limiters of a contract (with templates configured both in the Service Package and individually on the contract level). For more information, see the section "Managing Limiters".

To create an individual limiter template for a contract, click the [Pers.Usage] button in the form for editing the parameters of the corresponding contract.

Fig. 6 shows the "Pers.Usage for <name of contract>" form, which is used to enter and edit individual limiter templates for issuing contracts. The system has similar forms for other types of contracts.

Fig. 6. Form for entering and editing individual limiter parameters

The fields and buttons in the "Pers.Usage for <name of contract>" form are the same as those in the form for configuring limiter templates in Service Packages (see the section "Entering and Configuring Limiter Templates").

Changes in an individual limiter template are accepted when the contract is approved.

Based on the configurations of a contract's individual limiter template, a record of the limiter is generated for the storage of counter values (see the section "Working with Usage Limiters").

Using "Usage Operations" System Instructions to Configure Usage Limiters

The "Usage Operations" list of system instructions is used to set links between "external" events (for example, processing a certain type of transactions,

receiving a negative response code) and system actions. A system action is understood to be the activation of a usage limiter or opening of an Event.

System instructions are specified in various WAY4 tables for "external" events. System instructions are configured for usage limiters in the following stages:

- The list of system instructions is configured in the "Usage Operations" form (Full → Configuration Setup → Alerting Setup → Usage Operations), see Fig. 7.

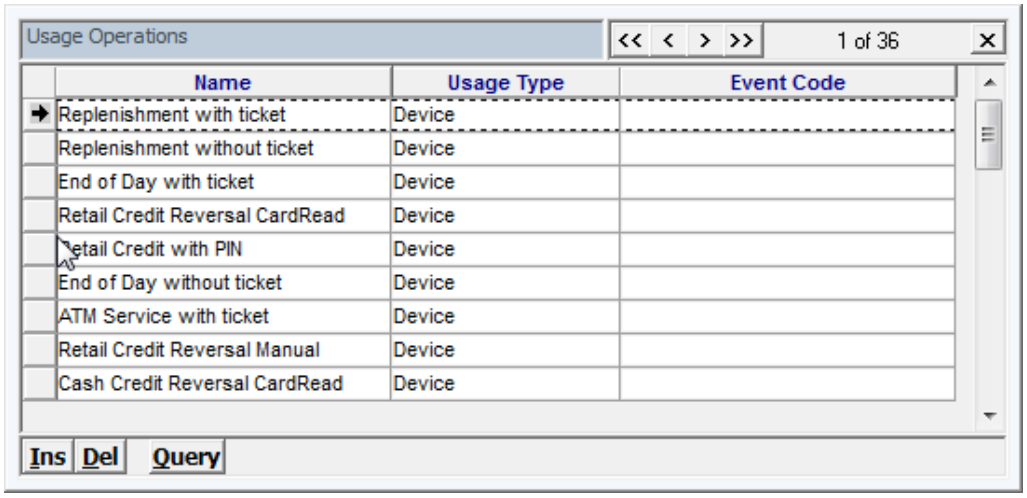

Fig. 7. "Usage Operations" form

The "Usage Operations" form contains the following fields:

- *Name* – name of system instruction.
- *Usage Type* – type of usage limiter for which this instruction will be available (selected from the list of limiter types registered in WAY4).
- *Event Code* – the type of Event (selected from the list of Event types registered in WAY4) that will be opened when the corresponding instruction is executed.

- The "Usage Operation Request" form (Full → Configuration Setup → Alerting Setup → Usage Operation Request) makes it possible to configure rules for filtering transactions (operation parameters). When such transactions are made, the instruction from the "Usage Operations" form will be executed, see Fig. 8.

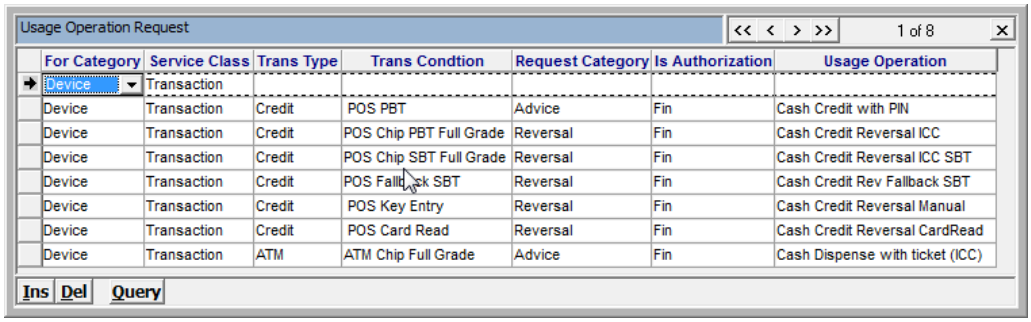

Fig. 8. "Usage Operation Request" form

The form contains the following fields:

- *For Category* – category of contracts for which this rule for operation filtering (for which the system instruction will be executed) is configured. The field can be left empty.
- *Service Class* – transaction type according to the "Service Class" classifier (see the section "Service Class" of the document "Documents").

  The *Service Class* field is mandatory. If the field is left empty, when the corresponding operation is made (with the parameters specified in the other fields of the record), this record will not be found and correspondingly, the system instruction will not be executed.
- *Trans Type* – transaction type. The list of available field values is generated from the dictionary of transaction types registered in WAY4 (Full → Configuration Setup → Transaction Types → Transactions - All).
- *Trans Condition* – transaction condition; the list of all conditions registered in WAY4 is found in the "Transaction Conditions" system dictionary.
- *Is Authorization* – category of financial/authorization documents (transaction message) (see the section "Is Authorisation (Category of financial/authorization documents" of the document "Documents").

The same system instruction can be matched with different transaction types and different transaction conditions – i.e. the same system instruction can be specified for several records in the "Usage Operation Request" form. Specifying this instruction in limiter parameters allows on e limiter to be used for a set of operations.

A system instruction (Usage Operation) with set rules for filtering operations for its execution is specified in the parameters of a limiter in the *Operation* field (see the section "Operation").

Chapter 3. Working with Usage Limiters

This section provides the following information:

- The procedure for viewing limiter information (see the section "Information on Limiter Parameters")
- A description of operations executed with usage limiters (see the section "Managing Limiters")
- Examples of how limiters are used (see the section "Typical Examples of Limiter Use")

Information on Limiter Parameters

Summarised Data on Contract Usage Limiters

Information on a contract's usage limiter parameters is accessible on the "Usage for <name of contract>" form (see Fig. 9), opened from the "Balance for <name of contract>" form by clicking the [Usage] button.

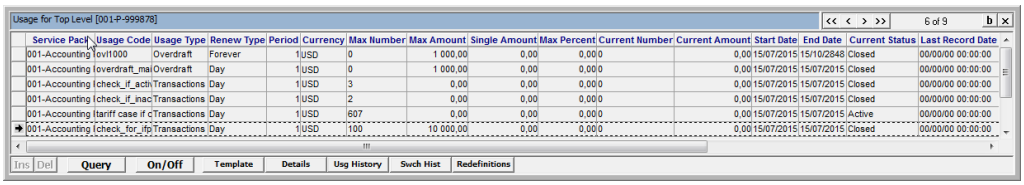

Fig. 9. Form for working with a contract's usage limiters

This form contains information on a contract's usage limiters whose templates are set up both in Service Packages and individually on the contract level. Individually configured limiters are shown in this form without reference to the Service Package. The form contains information on limiter parameters, current counter values, data accumulation period and the current limiter status.

If the limiter's threshold is exceeded, the counter value is highlighted in red.

The limiter's current status (the *Current Status* field) can have the following values:

- "Active" – the limiter is activated
- "Closed" – the limiter is deactivated in the template
- "Temporary Active" – the limiter is temporarily activated
- "Temporary Closed" – the limiter is temporarily deactivated
- "Expired" – status of limiters with the parameter *Period Type* = "Single", before the start and after the end of their effective date.
- "Service deactivated" – status of limiters whose templates are configured in additional Service Packages (see the section "Configuring Additional Service Packages" in the WAY4™ Service Packages Administrator manual), that are currently deactivated for the given contract.

- "Redefined" – this status is set if "Redefined" is specified in the *Switch Status* field.

The form "Usage for <name of contract>" (see Fig. 9) also contains fields to manage limiters; that is, to change limiter parameters for a specified period (see the section "Managing Limiters")"

- *Switch Date From* – the date from which the changes in parameters take effect.
- *Switch Date To* – the end date of the period during which the limiter's modified parameters are effective.
- *Switch Status* – limiter status during the period when its modified parameters are effective:
  - "Activated" – limiter is activated.
  - "Deactivated" – limiter is deactivated.
  - "Redefined" – limiter parameters *Currency*, *Max Number*, *Max Amount*, *Single Amount*, *Max Pcnt* change.
  - "Group Tariff" – the limiter's threshold values are set using a standard (Global) tariff.
  - "Personal Tariff" – the limiter's threshold values are set using a personal tariff.
- *Tariff Name* – the name of the tariff used to set threshold values.

The [Templates] and [Details] buttons are used to view the respective limiter template forms (see the section "Entering and Configuring Limiter Templates").

The [Usg History] button is used to access to information on documents whose processing results in a change in the value of limiter counters for the current period (see the section "History of Changes in Limiter Counter Values").

The [Swch Hist] button is used to view additional information on changes in limiter parameters (see the section "History of Changes in Limiter Parameters")

The [Redefinitions] button is used to access information about the history of changes to limiter parameters (see the section "History of Changes in Limiter Parameters").

History of Changes in Limiter Counter Values

For each limiter, the system stores information on documents that when processed, caused the value of the limiter's counters to change for the current period. This information is accessed by clicking the [Usg History] button in the "Usage for <name of contract> form (see Fig. 9 in the section "Summarised Data on Contract Usage Limiters"). This opens the "Usg History for Usage for <name of contract>" form (see Fig. 10).

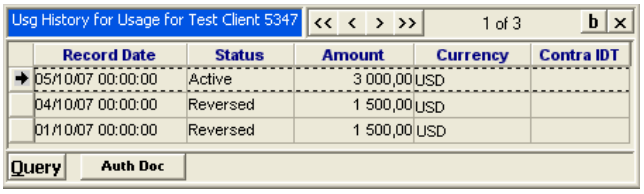

Fig. 10. Limiter operation history

Each record in this form corresponds to a processed document which caused counter values to change. Clicking the [Auth Doc] button opens the form containing the processed document's parameters.

History of Changes in Limiter Parameters

The "Redefinitions for Usage for <name of contract>" form (see Fig. 11) is used for access to information about the history of changes in limiter parameters. This form is opened by clicking the [Redefinitions] button in the "Usage for name of contract>" form (see Fig. 9 in the section "Summarised Data on Contract Usage Limiters"). The "Redefinitions for Usage ..." form contains records corresponding to changes in limiter parameters, and shows the changed parameters' active period.

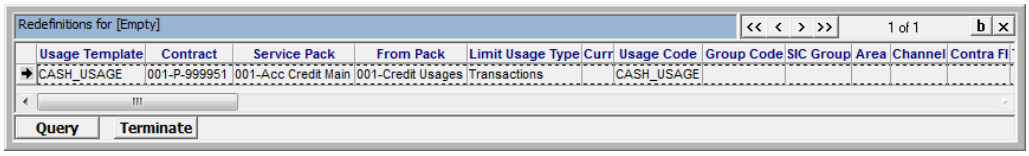

Fig. 11. The history of changes to a limiter

Each record in the form contains the following data:

- The full set of limiter parameters (field data of the "Usage for <name of Service Package>" form and the "Details for Usage for <name of Service Package>" form).
- Information on the active period of changed parameters
- If the template was created on the Service level:
  - The *Service Pack* field contains a reference to the limiter template's Service Package
  - The *From Pack* field contains a reference to the parent Service Package if a child package is indicated in the *Service Pack* field.
  - The *Contract* field contains the contract number for an individual limiter (see the section "Individual Templates")

The *Susp Factor* and *Predef Condition* fields are reserved for special use of limiters – contract usage limiters are used to configure criteria on suspicious transactions (see the document "Monitoring suspicious operations", WAY4 Real-Time Risk Management module).

This form is the same as the one opened by clicking the [Approved] button in the "Usage for <name of Service Package>" form (see Fig. 2 in the section "The Form "Usage for <Name of Service Package>""), with the exception that the "Redefinitions for <name of contract>" form contains the [Terminate] button

(this button is used to turn off changed parameters – see the section "Turning Off a Limiter's Changed Parameters").

The [Swch Hist] button in the "Usage for <name of contract>" form (see Fig. 9 in the section "Summarised Data on Contract Usage Limiters") is used to view additional information on changes in limiter parameters (information about the initiator of changes, the date and the reason changes were made) (see Fig. 12).

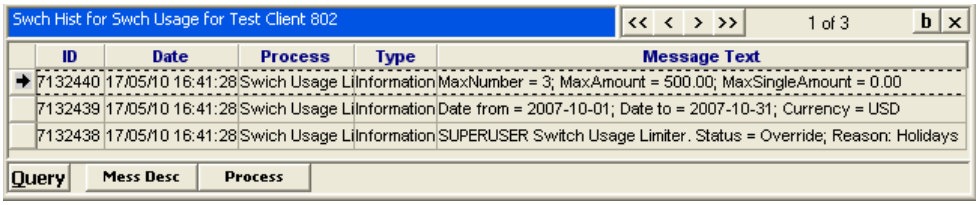

Fig. 12. History of changes to a limiter, additional information

Managing Limiters

Switching On/Off Limiter Template Parameters

If limiter parameters were changed, to restore template parameters, do as follows:

- Disable changed limiter parameters using the [Terminate] button in the "Redefinitions for Usage …" form or with the "Restore Standard" value of the *Is Active* field in the "Usage Template Switch" form (see the section "Turning Off a Limiter's Changed Parameters").
- Activate template parameters in one of the ways described below (see the sections "Standard Mode", "Simple Mode").

Standard Mode

Limiter template parameters can be switched on (activated) in the "Swch Usage for <name of contract>" form, opened by clicking the [Swch Usage] button in the form for editing contract parameters (see Fig. 5 in the section "Individual Templates").

The "Swch Usage for <name of contract>" form is the same as the "Usage for <name of contract>" form opened from the "Balance for <name of contract>" form (see Fig. 9 in the section "Working with Usage Limiters") with the difference that it contains the [Switch] button.

If a limiter is selected in the "Swch Usage for <name of contract>" form and the [Switch] button is clicked, the "Usage Template Switch" button will be displayed (see Fig. 16).

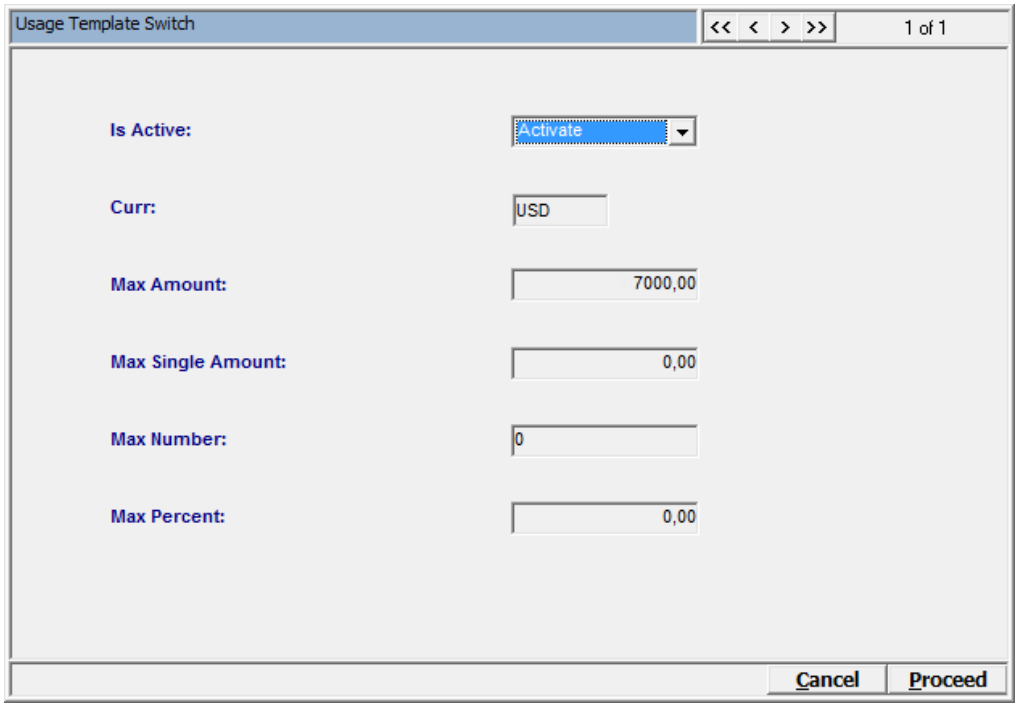

Fig. 13. "Usage Template Switch" form

To activate template parameters, select the "Activate" value in the *Is Active* field of the "Usage Template Switch" form.

The "Deactivate" value is used to deactivate limiter template parameters.

The "Redefine" and "Restore Standard" values are used to change limiter template parameters (see the section "Changing Limiter Template Parameters") and to restore template parameters after they have been changed (see the section "Turning Off a Limiter's Changed Parameters").

After filling in the fields of the "Usage Template Switch" form, click the [Proceed] button. The "Date From – To and Reason" form will be displayed (see Fig. 14), used to specify the effective period of limiter template parameters.

Fig. 14. Form for specifying the effective period of new limiter parameters

After specifying the start and end dates of limiter validity in the *Date From* and *Date To* fields, click the [Proceed] button.

The *Reason* field of this form is used when changing limiter template parameters (see the section "Changing Limiter Template Parameters").

Simple Mode

Switching on/off limiter template parameters in the "Swch Usage for <name of contract>" form requires the effective start and end dates to be entered. WAY4 supports a simplified mode of switching on/off limiter template parameters (without entering dates). To do so, the "On/Off Usage for <name of contract>" form is used. This form is opened by clicking the [On/Off Usage] button in the form for editing contract parameters (see Fig. 15).

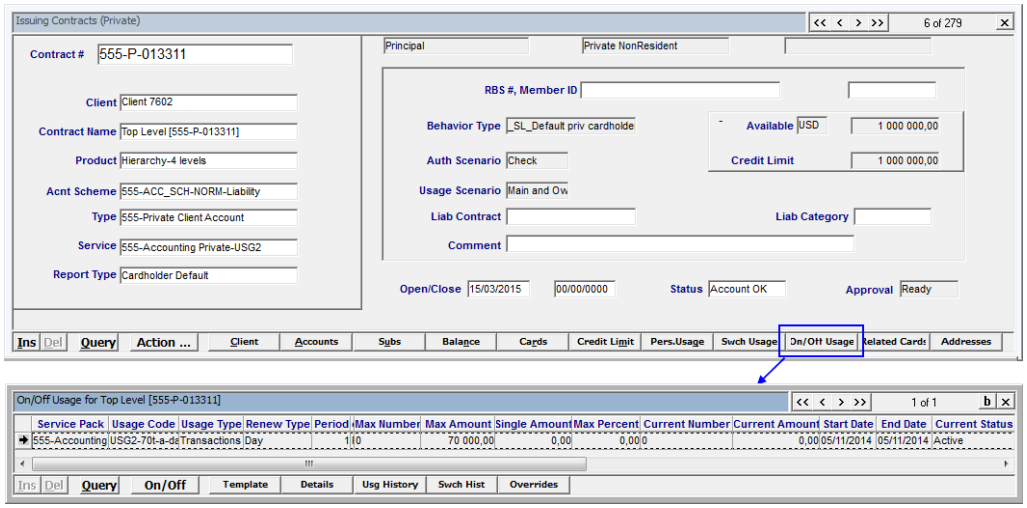

Fig. 15. "On/Off Usage for <name of contract>" form

The "On/Off Usage for <name of contract>" form is the same as the "Usage for <name of contract>" form opened from the "Balance for <name of contract> form (see Fig. 9 in the section "Summarised Data on Contract Usage Limiters").

To switch on a limiter template parameters in the "On/Off Usage for <name of contract>" form, use the [On/Off] button. Clicking this button opens a local menu in which the "Activate" (switch on limiter template parameters) item should be selected.

The "Block" item is used to switch off the limiter template parameters.

Limiter template parameters are switched on/off from the current date. The effective period end date remains open.

Changing Limiter Template Parameters

Limiters are managed in the "Usage Template Switch" form (see Fig. 16 in the section "Standard Mode").

To change limiter template parameters, select the "Redefine" value in the form's *Is Active* field. When this value is specified, the remaining fields of the form become editable (see Fig. 16).

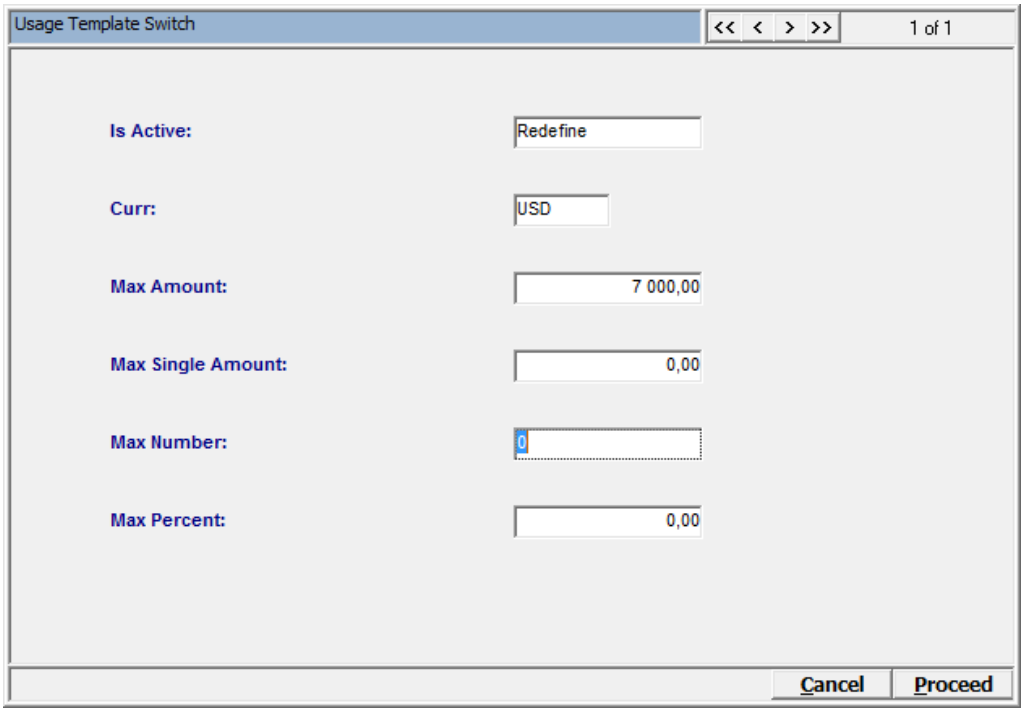

Fig. 16. Form for setting temporary changes in limiter parameters

This form contains the following fields:

- *Curr* – list of currencies for calculating limit amounts
- *Max Amount* and *Max Single Amount* – new values of the maximum allowed total transaction amount and the maximum allowed single transaction amount, respectively.
- *Max Number* – new value of the maximum allowed number of transactions.
- *Max Percent* – new value determining the maximum allowed transaction amount, calculated as a percentage of the available funds (Amount Available) of the corresponding balance type (see the section "Balance Type" for information on balance type selection) or as a percentage of the contract credit limit (see the section "Max Pcnt").

After filling in the fields in the "Usage Template Switch" form, click the [Proceed] button. The "Date From – To and Reason" form (see Fig. 14 in the section "Standard Mode") will be displayed. This form is used to specify the period during which the new parameters of the limiter are effective.

In the "Date From – To and Reason" form in the *Date From* and *Date To* fields specify the start and end dates of the effective period of the new parameters of a limiter; in the *Reason* field, indicate the reason for changes to limiter parameters

If limiter template parameters are changed (when the value of the "Usage Template Switch" form's *Is Active* field is "Redefine") after clicking the [Proceed] button in the "Date From – To and Reason" changed parameters will be activated automatically on the specified dates.

One of the most common reasons for using temporary limiter parameters is when a client needs to temporarily increase limits on the number and amount of operations, for example, during a trip or vacation. In this case, temporary

parameters are set up for a limiter with the Usage Type = "Transaction". Temporary parameters will take effect on a preconfigured date, e.g. the date a trip or vacation starts. When the specified period is over, the limiter parameters set up in the template will be restored.

If limiter parameters were changed several times, and the effective periods of the redefined parameters overlap, the system remembers the changed values in the overlapping time periods.

For example:

- On 01.10.2009 a card was opened for a client. A limit of 300 USD was set on this card for operations at ATMs
- The client requested that for a period of one month, beginning 05.10.2009, the limit on his card be increased from 300 USD to 600 USD
- On 10.10.2009 the client asked to increase the limit on his card from 600 USD to 900 USD for one day.
- Therefore, from 01.10.2009 to 04.10.2009 the limit will be 300 USD, from 05.10.2009 to 09.10.2009 it will increase to 600 USD, on 10.10.2009 it will be 900 USD, and from 11.10.2009 to 05.11.2009 the limit will be 600 USD again (see Fig. 17). After 05.11.2009 the limit will return to 300 USD.

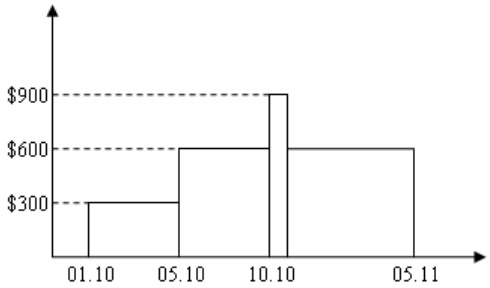

Fig. 17. Overlap of changed limiter parameters

Changed limiter template parameters are switched off using the [Terminate] button in the "Redefinitions for Usage…" form (see the section "Turning Off a Limiter's Changed Parameters").

Turning Off a Limiter's Changed Parameters

A limiter's changed parameters are turned off (to restore them to limiter template parameters) in the following ways:

- In the "Redefinitions for Usage for <name of contract>" form (see Fig. 11 in the section "History of Changes in Limiter Parameters") opened by clicking the [Redefinitions] button in the "Usage for <name of contract>" form (see Fig. 9 in the section "Summarised Data on Contract Usage Limiters").

  In the "Redefinitions for Usage for <name of contract>" form, select the necessary record and click the [Terminate] button. In the "Date to and reason" form which opens, indicate the end date of the effective period for the limiter's changed parameters and click the [Proceed] button.

  Note that there may be several records redefining limiter template parameters; i.e. to restore template parameters, several records may have to be disabled in the form "Redefinitions for Usage for <name of contract>" form.

- In the "Usage Template Switch" form (see Fig. 13 in the section "Standard Mode"), select the "Restore Standard" value in the *Is Active* field and click the [Proceed] button. In the "Date From –To and reason" field, specify the period for which template parameters are being restored and click the [Proceed] button.

  All records will be disabled that redefine template parameters for this period, in the "Redefinitions for Usage for <name of contract>" form.

Deactivating (Switch off) a Template Limiter

A template limiter can be deactivated in one of the following ways:

- **First method.** Turn off all a limiter's changed template parameters (see the section "Turning Off a Limiter's Changed Parameters") and set the value of the *Is Active* parameter to "No" in the limiter template (in the form "Usage for <name of Service Package>", see the section "Is Active"). In this case, the limiter will stop working for all contracts with cancelled changed template parameters and for contracts working with template parameters. If the "No" value of the *Is Active* parameter is set in a template, but active changed template parameters are left on the contract level, these changes will work according to the parameters defined in them.
- **Second method.** Set the value of the *Is Active* parameter to "No" in the limiter template (in the form "Usage for <name of Service Package>", see the section "Is Active"). For contracts that don't have changed template parameters, the limiter will stop working. If a contract has changed limiter parameters, these changes will work according to the rules defined in them.
- **Third method.** Delete the limiter template from the Service Package. After approval of the Service Package with the deleted template, all the limiter's changed template parameters will be disabled (since the limiter template will not be found for them). The limiter will stop working for all contracts with this Service Package.

Deferred Processing of Limiters

Starting from WAY4 version 03.38.30, to decrease the load in online processing of transaction messages in WAY4, deferred offline processing is supported for limiters used, for example, as risk rules (see the document "Risk Monitoring") or to charge fees, such as a balance inquiry fee.

When configuring limiters that can be processed offline, specify the "Off Line" value in the *Proc. Mode* field.

Deferred processing of limiters works according to the following rules:

- When processing limiters (see the section "Principles of Usage Limiter Operation"), from the documents being processed, a set of documents is generated for which processing of limiters must be deferred.
- The "Offline Usage Limiters Processing" process is used for deferred processing of limiters. This process can be started by the menu item "Full → Daily Procedures → Offline Limiters Processing → Run Offline Processing - Single pass".

- For periodic running of the "Offline Usage Limiters Processing" process, set the frequency with which the process will be run. The time interval between starts of the process is set (in seconds) in the *Period* field of the "Process Parameters" form (Full → Daily Procedures → Offline Limiters Processing → Process Parameters). If required, parallel execution of the process can also be set in this table (see the document "Running WAY4™ Processes in Parallel").

  Note that the list of processes in the "Process Parameters" form contains only those processes for which the Process Log contains information; i.e., processes that have already been executed in WAY4. Therefore, to be able to select the "Offline Usage Limiters Processing" process from the list to set its parameters, the process must be executed using the menu item "Full → Daily Procedures → Offline Limiters Processing → Run Offline Processing - Single pass".

- If errors occurred when processing a document set processing is stopped and can be restarted after the errors have been eliminated. The list of document sets whose processing was interrupted is available for the issuing mode in the form "Full → Daily Procedures → Offline Processing → Troubleshooting → Crude Offline Batchs" and for the acquiring module in the form "Risk Management Acquiring → Monitoring → Offline Limiters Processing → Troubleshooting → Crude Offline Batchs". This form contains the row "Unprocessed Docs" corresponding to the document set waiting for processing and the "Docs to Processing" rows corresponding to document sets whose processing was interrupted. The [ProcessLog] button makes it possible to get information about process results and errors that occurred during its execution. The process to process limiters for the selected document set can be restarted by clicking the [StartProc] button.

It is important to note that deferred processing of limiters is only possible for operations whose documents are stored in the database document table. This means that if the value of the global parameter LOG_ALL_OPERATIONS is "N" (see the document "WAY4™ Global Parameters"), deferred processing of limiters for balance inquiries and mini-statement requests will be executed as when this value of the global parameter is set, authorisation documents for these operations are not generated.

Typical Examples of Limiter Use

Preventing Fraudulent Operations

Transaction limiters play a key role in preventing fraudulent operations.

For example, a situation where is necessary to set up the following limiters for cards of a certain Product: only 10 operations with a total amount not exceeding 5,000 USD are allowed per day. In this case, a template limiter template with the "Transaction" type and the necessary values in the *Max#* and *Max Amnt* fields (see Fig. 18) is set up in the Service Package. When an authorisation is attempted for the 11th time on the same day, the system will generate a response ("Exceeds withdrawal frequency limit"). If an attempt is made to exceed the set withdrawal

amount limit, the system will generate another response ("Exceeds withdrawal amount limit").

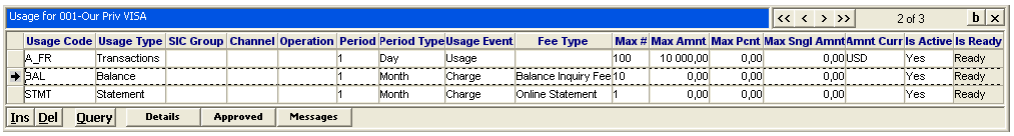

Fig. 18. Examples of limiter use

Limiting Online Statement (Balance) Requests

The "Statement" limiter template, as shown in Fig. 18 of the section "Preventing Fraudulent Operations" can be configured to limit the number of free online balance statements that can be provided for a certain period of time, but also allows clients to receive additional statements for a set fee. In this case, a client can receive one free statement a month, but all subsequent ones during that month will be provided for a set fee.

Limits on the provision of free balance information are set up in the same way. In the example shown in Fig. 18 of the section "Preventing Fraudulent Operations", a client can receive ten free balance reports a month, but a fee will be charged for all subsequent ones during that month.

Managing the Correspondent Account of an Affiliated Bank

The following describes how the system manages an affiliated bank's correspondent account on the financial institution level. It does so by limiting the total amount that can be authorised by the bank agent's card during a 24-hour period, with the exception of authorisations processed through the VISA channel.

For the XXX-Branch Nostro contract of the affiliated bank, two limiter templates "Usage 1" and "Usage 2" are configured in the following way"

- The main limiter parameters are configured as shown in Fig. 19.
- Additional parameters of the "Usage 2" limiter template are filled in as shown in Fig. 20.
- For the "Usage 1" limiter template, the *Exclude from Parent* field in the "Details for Usage for ..."form is automatically filled in with the value "Yes".
- The SINGLE_OVERRIDE; tag can be set in the limiter template. This tag allows only one redefinition of a limiter – i.e. when the parameters of a limiter in which this tag is set are corrected, all previous redefinitions will be deactivated. This setting is recommended for long-tem limiters redefined for a long period of time. For more information, see the section "Tags in the *Spc Parms* Field of a Usage Limiter Template".

The main limiter "Usage 1" is configured for all transactions of the given affiliate bank, the limiter "Usage 2" excludes transactions going through the VISA channel."

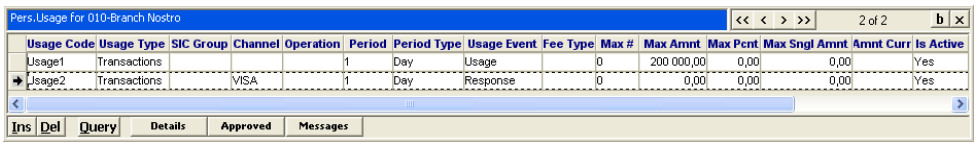

Fig. 19. Limiter configuration for the XXX-Branch Nostro contract

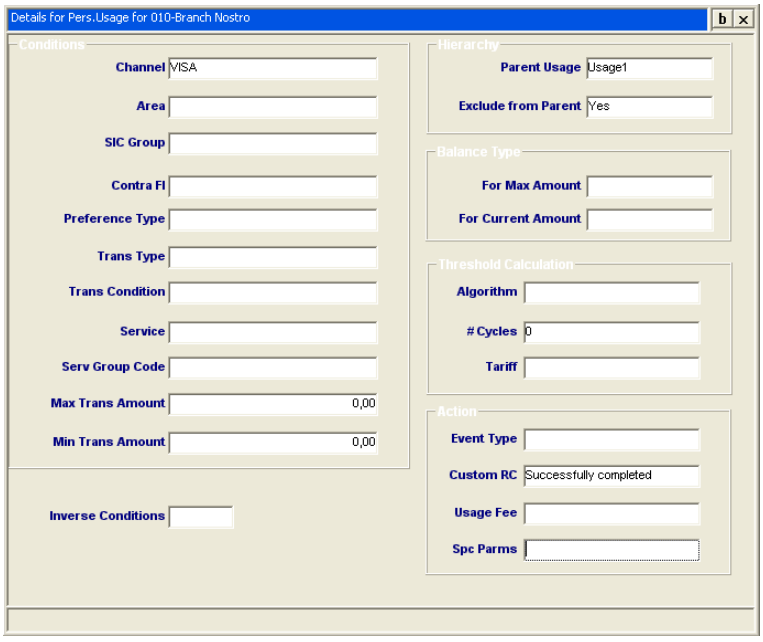

Fig. 20. Configuration of additional parameters for a child limiter

Note that a Liability contract must be set up for a financial institution. See the section "Configuring Institution Specifications" of the document "Financial Institutions".

Limiting Cash Withdrawal with a Credit Card (Configuring a Credit Limit for Cash Withdrawal Transactions)

To limit cash withdrawal using a credit card, a credit limit is set up for cash withdrawal transactions. General configuration scheme:

- Cash withdrawal transactions are recorded in a special loan account.
- The credit limit for cash withdrawal is configured using usage limiters (see Fig. 21):
  - A usage limiter is set up in the Service Package for card contracts and for the settlement contract (main contract for a card in a "Main/Sub" hierarchy).

    A limiter can also be set up for an account contract in a "Liability" hierarchy.
  - A limit is set up as a percentage of the contract's credit limit. Setup is performed in the standard way (using the limiter fields *Max Pcnt, Algorithm* with the "Cr Limit Pcnt" value, etc.).
  - The "Forever" or "Billing" value should be set in the limiter's *Period Type* field, and the "Cash" value in the *SIC Group* field.
  - A unique value in the *Group Code* field is specified for the limiter.

  If the *Auth Scenario* parameter in the card contract has the "Check" or "Billing Limit" value, the limit for cash withdrawal transactions is calculated as a percentage of the card's credit limit.

Usage for 001-Cash Limit

Usage Code	Usage Type	SIC Group	Ch	Op	Period	Period Type	Usage Event	Fee Type	Max #	Max Amnt	Max Pcnt	Max Sngl Amnt	Amnt Curr	Is Active	Is Ready
CASH_LIMIT	Transactions	Cash			1	Forever	Usage		0	0,00	0,00	0,00		Yes	Ready

Fig. 21. Credit limit for cash withdrawal transactions. Limiter setup

- Using the tag CLEAR_USAGE_GROUP=<limiter *Group Code* field value> specified in the account template, the configured usage limiter is linked with the balance of the loan account (accounts) in which cash withdrawal transactions are recorded. In the example in Fig. 21, the link was made as follows:
  - The CASH_LMT value is specified in the limiter's *Group Code* field.
  - The tag CLEAR_USAGE_GROUP=CASH_LMT; is set in the *Template Details* field on the level of the account template for the settlement contract used to record cash withdrawal transactions.
- If a payment for a card contract must be shown in limiters with the same code as other card contracts (all these card contracts must have the same parent contract), set the tag PAYMENT_RESTORE with the "ALL" value in the *Custom Data* field of this subordinate Product. The payment will be shown in other cards after debt for the current card contract is paid.

- These settings work as follows: when the balance in a loan contract changes, counter values for the linked limiter change:
  - All limiters with the same code in the *Group Code* field are updated for the entire contract hierarchy, including contracts in a "Liability" hierarchy.
  - When a cash withdrawal transaction is made, records are created in the USAGE_HISTORY table (records in the "Usg History" form), and the limiter balance changes (in the *Current Amount* field of the "Usage for" form, see Fig. 9 the section "Summarised Data on Contract Usage Limiters". I.e. cash withdrawal transactions decrease the "cash" credit limit of a card and the corresponding settlement contract.
  - When a payment is made for a loan account where cash withdrawal is recorded, records in the USAGE_HISTORY table are updated (changed). I.e. the limit for making cash withdrawal transactions is restored. Update of records in the USAGE_HISTORY table depend on the contract for which the payment is being made and on the payment amount:
    - ♦ If the payment is being made for a card and the payment amount is more than the amount in the card loan account, the limit for this card is restored, as well as for other cards under this settlement contract (depending on the PAYMENT_RESTORE; parameter, records in the USAGE_HISTORY table are updated in the order transactions with other cards are made – by transaction date). The settlement contract's limit is restored correspondingly.
    - ♦ If the payment is being made for a settlement contract, the limit in card contracts (and, accordingly, in the settlement contract) is restored in the order card transactions are made.
    - ♦ If the payment amount is larger than the transaction amount (the amount of the record in the USAGE_HISTORY table), the record in the USAGE_HISTORY table will be closed (it will be assigned the "Closed" status).
    - ♦ If the payment amount is less than the transaction amount (the amount of the record in the USAGE_HISTORY table), the amount of the record in the USAGE_HISTORY table is updated, see Fig. 22.

Usg History for Cash Credit Limit

Record Date	Status	Amount	Currency	Contra IDT	Susp Degree	Cell ID
01/01/15 00:00:00	Active	140,00	USD	Original amount 200	0,0000	

Fig. 22. Credit limit for cash withdrawal transactions. Change to a record in the USAGE_HISTORY table when partial payment is made.

Chapter 4. Tags in the *Spc Parms* Field of a Usage Limiter Template

Name	Value	Description
Tags in the *Spc Parms* field of a usage limiter template:		
FOR_WHOM	"OWN" "SOURCE" "TARGET" "BILLING"	The FOR_WHOM tag can be set in Main contracts, Liability contracts, and in bank routing contracts.The tag allows limiters to be used separately for issuing and acquiring subordinate contracts: • "TARGET" – for issuing contracts (the limiter is checked if the contract acts as the target). • "SOURCE" – for acquiring contracts (the limiter is checked if the contract acts as the source). • The "OWN" value is used when making a transaction on a subordinate contract so that only limiter's own counter increases (regardless that the Usage Scenario parameter of the subordinate contract is equal to "Main and Own"). The parent contract's counter will not increase (even if it uses the same Service Package). • BILLING – if the contract is included in a Main/Sub hierarchy (any level of subordinacy to 100) the limiter will activate in this contract and in every contract in the higher-ranking hierarchy up to the first account contract, inclusively.
CUSTOM_LIMIT		Allows the custom procedure CUST_USAGE_LIMIT to be called. For more information, contact WAY4 customer support.
NOT_MATCHED		The limiter only counts authorizations that were not matched with financial documents. This limiter can be used, for example, in bank contracts for monitoring the activity of a third-party bank by a sponsor bank. The counter value of such a limiter increases when an authorization request is processed and decreased when a financial document is posted (in matching and unblocking funds).
BY_SRC_NUMBER		This tag makes it possible to check a limiter by device ID. If a limiter is activated, the device ID will be shown in the *Contra Idt* field of the "Usg History…" form, see *the* section "History of Changes in Limiter Counter Values" of the document "Usage Limiters". The tag works for devices registered in WAY4 and for foreign devices not registered in WAY4. !Cell mode for this type of limiter does not work.

Name	Value	Description
BY_CARD_RANGE		This parameter makes it possible to check the limiter for all foreign cards (not registered in the system) by card range (if a limiter is activated, the card rangewill be shown in the *Contra Idt* field of the "Usg History…" form, see the section "History of Changes in Limiter Counter Values" of the document "Usage Limiters".
BY_CARD		This parameter makes it possible to check a limiter for foreign cards by individual card numbers. When the limiter is activated, card numbers are considered. When processing each request/document, the history of the limiter's activation is analysed to determine whether requests were processed for a card from which the current request came. In this way, request processing can be individually counted for each card number. With this tag it is possible, for example, in a merchant contract to set up a limit for the amount of transactions for each separate card.
BASE_AMOUNT_TYPE	"SRCF" "TGTF" "TRANSACTION" "RECONCILIATION" "SETTLEMENT" "FROM_CHILD" "OVER_BALANCE:<BaseAmountType>" "<имя тега> "	This tag determines which amount from the document to consider in the limiter's counter in the *Current Amount* field (current_amount) (see the section "Summarised Data on Contract Usage Limiters" of the document "Usage Limiters"). Possible tag values: • SRCF – only the amount specified in the document's *Source Fee Amount* field (source_fee_amount) is considered. • TGTF – only the amount in the document's *Target Fee Amount* field (target_fee_amount) is considered. • TRANSACTION – the amount specified in the document's *Transaction Amount* field (Trans_Amount) is considered. • RECONCILIATION – the amount specified in the document's *Reconcil Amount* (Recons_Amount) is considered. • SETTLEMENT – the amount specified in the document's Settl_Amount field is considered. • FROM_CHILD – amounts calculated for a child limiter are accumulated in the parent limiter's counters. If no child limiters are activated for a document, the parent limiter will not consider this transaction. • OVER_BALANCE:<BaseAmountType> – the transaction amount minus the contract's funds will be compared with the threshold values. <BaseAmountType> specifies the amount from which the amount of the contract's funds (Balance) will be subtracted for comparison with the threshold value; TGTF – from the amount of the fee charged from the target contract; TRANSACTION – from the transaction amount; RECONCILIATION; from the reconciliation amount; SETTLEMENT – from the settlement amount; <OtherBaseAmountType> – for

Name	Value	Description
		other values an attempt is made to obtain the values of the tags <BaseAmountType>_CURR" and "<BaseAmountType>_AMOUNT" from a document. • <tag name> – the amount and currency will be taken from the document tags <tag name>_CURR and <tag name>_AMOUNT. By default (without the BASE_AMOUNT_TYPE tag) the counter considers the amount debited from the contract resulting from posting the corresponding document (i.e. with consideration of fees, FX). For the "TRANSACTION", "RECONCILIATION", and "SETTLEMENT" values, If FX rates are not set up for the specified amount type, the counter will consider the amount debited from the contract converted, when required, to the limiter's currency. For other tag values, the transaction amount counter in the limiter does not change in this situation.
MIN_SUSP_PCNT		Used to set the minimum suspicious factor when processing a document. This functionality allows a negative response code (RC) or notification to be generated when several risk control rules are violated. To implement this functionality, set the NegativeRC limiter. In the *Spc Parms* (spc_condition) field, specify the tag MIN_SUSP_PCNT=<number from 0 to 99>;. This limiter will activate only when processing documents with a total suspicious factor that is larger than MIN_SUSP_PCNT/100. Used to monitor suspicious operations (see the Risk Monitoring Administrator manual, the WAY Real-Time Risk Management monitoring module).
PREV_PCNT		Used when configuring additional limiter parameters in a Service Package for risk control. Allows, if there are limits to making operations on the same card with subsequent decreasing of the transaction amount (the "Amount Fitting" value is set in the *Predefined Condition* field) specification of the permissible change of an amount as a percentage of the previous amount. The limiter will activate if the requested amount is less than the percentage of the previous amount set by the value of the PREV_PCNT tag. Used to monitor suspicious operations (see the Risk Monitoring Administrator manual, the WAY Real-Time Risk Management monitoring module).
OVERFLOW	"AND"	By default (tag not set), if two conditions are set in the limiter, Max Number *and Max* Amount, *the* limiter will activate if even one of them is exceeded. In this case, when setting a tag with the AND value, the limiter will only activate if both limits are exceeded (both Max Number *and Max* Amount).

Name	Value	Description
LOG_STATE	"Y" "N"	Tag can be used to redefine the value of the global parameter of the same name (for more details, see the document "WAY4™ Global Parameters")
ADD_DOC_TAG	<DOC_TAG>	The tag "ADD_DOC_TAG=<DOC_TAG>;" makes it possible to include the tags "<DOC_TAG>;", "<DOC_TAG>_CURR=<limiter currency>;" and "<DOC_TAG>_AMOUNT=<amount exceeded>; in additional data of the authorisation document when a limiter is activated. These tags are used to recalculate the blocked amount with consideration for a fee, whose currency and amount is specified by these tags. The same tags will be inherited when generating a financial document for the transaction. The corresponding entry for the fee will be generated when processing this financial document.
IF_CS_TYPE	<Classifier type code>	This tag sets the type of classifier checked. Used together with the IF_CS_VALUE, IF_NOT_CS_VALUE, IF_CS_TYPE_FOR tags. For more information, see the section "Executing Actions Depending on Classifier Values" of the document "WAY4™ Client and Contract Classifiers". It is possible to set a check of several classifiers for a contract by using the IF_CS_NUMB, IF_CS_TYPE<N>, IF_CS_VALUE<N>, IF_NOT_CS_VALUE<N>, IF_CS_TYPE_FOR<N> tags. See the description of the IF_CS_NUMB tag.
IF_CS_VALUE	<CS_STATUS_VALUE.CODE 1>, <CS_STATUS_VALUE.CODE 2>,…,<CS_STATUS_VALUE.CODE N>	A usage limiter is activated only if clients and their contracts correspond to the set value of this classifier. Several codes separated by commas may be specified as the value of this tag. Used together with the IF_CS_TYPE tag. For more information, see the section "Executing Actions Depending on Classifier Values" of the document "WAY4™ Client and Contract Classifiers". It is possible to set a check of several classifiers for a contract by using the IF_CS_NUMB, IF_CS_TYPE<N>, IF_CS_VALUE<N>, IF_NOT_CS_VALUE<N>, IF_CS_TYPE_FOR<N> tags. See the description of the IF_CS_NUMB tag.
IF_NOT_CS_VALUE	<CS_STATUS_VALUE.CODE 1>, <CS_STATUS_VALUE.CODE 2>,…,<CS_STATUS_VALUE.CODE N>	A usage limiter is not activated if clients and their contracts correspond to the set value of this classifier. Several codes separated by commas may be specified as the value of this tag. Used together with the IF_CS_TYPE tag. For more information, see the section "Executing Actions Depending on Classifier Values" of the document "WAY4™ Client and Contract Classifiers". It is possible to set a check of several classifiers for a contract by using the IF_CS_NUMB, IF_CS_TYPE<N>, IF_CS_VALUE<N>,

Name	Value	Description
		IF_NOT_CS_VALUE<N>, IF_CS_TYPE_FOR<N> tags. See the description of the IF_CS_NUMB tag.
PROLONGATE_HISTORY	"Y" "<number of periods>"	PROLONGATE_HISTORY makes it possible to prohibit execution of transactions on a contract during a set time period. The period is counted from the time the last transaction that activated the limiter was made and can be set using the following tag values: • "Y" – the action extends to the current counter accumulation period (specified in the limiter's properties). • "<number of periods>" – a set number of counter accumulation periods is added to the date of the transaction that activated the limiter. This tag is generally used when configuring risk rules (see the document "Risk Monitoring", the WAY Real-Time Risk Management monitoring module).
THRESHOLD_CALC_DELAY	"Y" "N"	This tag allows the value of the global parameter USG_THRESHOLD_CALC_DELAY to be redefined on the level of a separate limiter. For more information, see the document "WAY4 Global Parameters".
IF_PARM	<tagged parameter name> CLIENT.SHORT_NAME CLIENT.FIRST_NAME CLIENT.LAST_NAME CLIENT.COMPANY_NAME CLIENT.AGE	This tag sets the checked classifier type. Used together with the IF_CS_VALUE or IF_NOT_CS_VALUE tag. For more information, see the section "Executing Actions Depending on Classifier Values" of the document "WAY4™ Client and Contract Classifiers". A number of client parameters can be checked. To do so, the following values can be specified as the tag's value: CLIENT.SHORT_NAME – check the *Short Name* field in the client form. CLIENT.FIRST_NAME – check the *First Name* field in the client form. CLIENT.LAST_NAME – check the *Last Name* field in the client form. CLIENT.COMPANY_NAME – check the *Company Name* field in the client form (place of work) CLIENT.AGE – client age. Determined according to date of birth (*Date of Birth* field) and the system date (i.e. age at the time of the request is determined). These client attributes do not have to be registered as contract custom parameters. It is possible to set a check of several parameters for a contract by using the IF_PARM_NUMB, IF_PARM<N>, IF_PARM_VALUE<N>, IF_PARM_FOR<N> tags. See the description of the IF_PARM_NUMB tag.
IF_PARM_VALUE	"<tagged parameter value>" "NOT_EMPTY" "EMPTY"	A usage limiter is activated only if clients and their contracts correspond to the set classifier value. Used together with the IF_PARM tag. The IF_PARM_VALUE=NOT_EMPTY; tag is used to check for the existence of a

Name	Value	Description
	"LIST_WITH:<list of values separated by commas>" "BETWEEN<value> AND <value>"	parameter (the tag set using the IF_PARM tag) without checking its value. When the IF_PARM_VALUE=EMPTY; tag is set, the limiter will be activated if the specified parameter doesn't have a value. Note that with this value, the limiter will also be activated if the parameter is not present in the contract. When "IF_PARM_VALUE=LIST_WITH:<list of values separated by commas>" is set, the limiter will be activated if even one value from the list (LIST_WITH) matches that set in the contract. When "IF_PARM_VALUE=BETWEEN<value> AND <value>" the limiter will be activated if the value in the contract falls in the range set by the tag (for example, IF_PARM_VALUE=BETWEEN40 AND 50;). The value must be set with spaces, as shown in the example. It is possible to set a check of several parameters for a contract by using the IF_PARM_NUMB, IF_PARM<N>, IF_PARM_VALUE<N>, IF_PARM_FOR<N> tags. See the description of the IF_PARM_NUMB tag.
DOC_TAG	<tag name>	Makes it possible to set conditions for activating a usage limiter depending on document parameters specified as tags in the *Add Data* and *Reason*. Several values, delimited by commas, can be specified as the value of the DOC_TAG_VALUE tag.
DOC_TAG_VALUE	<tag value>	
IF_INACTIVE_EVNT	<EventCode>	A limiter is activated only if the Event specified in the tag (with the specified code) is closed.
IF_ACTIVE_EVNT	<EventCode>	A limiter is activated only if the Event specified in the tag (with the specified code) is opened.
RESET_COUNTERS		When the RESET_COUNTERS; parameter is set, counters can be reset when a threshold value is reached that is set using a limiter. Reversal of the transaction that caused changes in limiter counters does not lead to reversal of actions caused by reaching the limiter's threshold value. I.e. if a fee is charged when a threshold value is reached, reversal of a transaction that led to this threshold being reached does cause the fee to be reversed.
SAME_MCC		The SAME_MCC; tag is used to limit transactions at merchants with the same category (SIC group). !Cell mode for this type of limiter does not work.
FX_DR_CR	"1" "-1"	By default, the amount of a document in the settlement currency is converted to the contract currency. When a limiter is checked, this amount is converted to the limiter currency (if the limiter currency differs from the contract currency) at the "Middle" rate. The FX_DR_CR tag makes it possible to convert at the

Name	Value	Description
		"Buy"/"Sell" rate: "Buy" – when the value is "1". "Sell" – when the value is "-1". If necessary, it is possible to specify the FX_TYPE=<FX type code>; tag specifying the additional FX type that will be used in conversion.
FX_TYPE	<FX type code> <BUY_FX_TYPE_CODE>,<SELL_FX_TYPE_CODE>,<MIDDLE_FX_TYPE_CODE>	Makes it possible to specify the additional FX type that will be used when converting a document amount (blocked amount) to the limiter currency. The value of the Code field in the "FX Types" form is specified as the tag value. The tag value may be a composite FX Type in the format "<BUY_FX_TYPE_CODE>,<SELL_FX_TYPE_CODE>,<MIDDLE_FX_TYPE_CODE>,", where <BUY_FX_TYPE_CODE> is the FX Type code (Code field in the "FX Types" form) that corresponds to the buy rate <SELL_FX_TYPE_CODE> – is the FX Type code (Code field in the "FX Types" form) that corresponds to the sell rate <MIDDLE_FX_TYPE_CODE> – is the FX Type code (Code field in the "FX Types" form) that corresponds to the middle rate. Note that the "," (comma) character is used as a delimiter instead of the ";" (semicolon) character. For example, FX_TYPE=BMD,MDS,MD,;
SINGLE_OVERRIDE		The tag makes it possible to have only one redefinition of a limiter - i.e. when correcting the parameters of a limiter whose template contains this tag, all previous redefinitions will be disabled. This setting is recommended for long-term limiters whose parameters are overridden for a significant period of time (in particular for bank contract limiters).
OWN_CURR	"Y" "N"	The tag is used to configure a usage limiter for transactions in a currency that differs from the contract currency (to configure a limiter for "in contract currency"/"not in contract currency" transactions). • When the value is "Y", the limiter will meet transaction parameters if the transaction currency (by default, the Settlement Currency in the document is used) matches the contract currency. • When the value is "N", the limiter will meet transaction parameters if the transaction currency (by default, the Settlement Currency in the document is used) differs from the contract currency.

Name	Value	Description
		The document's currency type that is compared with the contract currency can be set using the OWN_CURR_TYPE tag.
OWN_CURR_TYPE	"TRANS_CURR" "RECONS_CURR"	The tag defines the document currency (Settlement Currency, Transaction Currency, Reconciliation Currency) that will be compared with the contract currency when processing the OWN_CURR tag. If the tag is not set, the document's Settlement Currency will be used by default
FOR_DUPLICATE	MOVE_WHEN_ACTIVATE	When a card is reissued and a new card contract is created (i.e. a contract with a new number), by default, a usage limiter is moved from the old contract to the new contract when the new contract is created (and counters in the old contract will be reset). To move a usage limiter to a new contract when the contract is activated (when the new plastic is unlocked) and not at the time of its creation, specify the FOR_DUPLICATE=MOVE_WHEN_ACTIVATE; tag in the *Spc Parms* field of this limiter's template. If this setting must be used for all limiters, use the global parameter USAGE_LIMITER_FOR_DUPLICATE with the value "MOVE_WHEN_ACTIVATE" (see the section "USAGE_LIMITER_FOR_DUPLICATE" of the document "WAY4™ Global Parameters").
IF_CURRENCY	<tag name> TRANS_CURR SETTL_CURR RECONS_CURR CONTRACT <tag or contract custom parameter> <classifier code> <three-digit numeric currency code or currency name>	This tag sets the document currency that must be checked. Possible values: • Document tag containing the currency code. • TRANS_CURR – transaction currency from the document. • SETTL_CURR – settlement currency from the document. • RECONS_CURR – reconciliation currency from the document (in the currency in which the source bank provides transaction information to the payment system). • CONTRACT – contract currency. • Tag or contract custom parameter with a currency code. A contract's custom parameter can be registered as a "Primary" classifier. •Code of the classifier with a currency code. •Explicit specification of currency – the tag value may be a code or the name of a certain currency. Used together with the IF_CURRENCY_VALUE, IF_CURRENCY_RULE, IF_CURRENCY_FOR tags.

Name	Value	Description
IF_CURRENCY_VALUE	EMPTY NOT_EMPTY USE_IN_BANK <currency code1>, <currency code2>,…,<currency codeN> <currency name1>, <currency name2>,…,<currency nameN> <tag name>	A usage limiter will be activated only if the document currency specified with the IF_CURRENCY tag corresponds to parameters set in the IF_CURRENCY_VALUE tag. Possible values: • EMPTY – this currency is not specified. • NOT_EMPTY – this currency is specified. • USE_IN_BANK – this currency has the Use in Bank parameter value of "Yes" (i.e. for this currency, conversion can be performed in WAY4 and the rate of the currency to the financial institution's local currency can be entered during the daily opening procedure). • A code or name of a certain currency or several currencies, separated by commas can be used as the tag value. • Tag or contract custom parameter containing a currency code or list of currencies separated by commas can be used as the tag value. A contract custom parameter can be registered as a "Primary" classifier.
IF_CURRENCY_RULE	ACC_SCHEME EQUAL NOT_EQUAL NOT_IN_LIST	To set additional conditions for checking a currency, use the IF_CURRENCY_VALUE tag together with the IF_CURRENCY_RULE tag: • To check the currency set in the IF_CURRENCY for correspondence to the Accounting Scheme it is necessary to set the tags IF_CURRENCY_RULE=*ACC*_SCHEME;IF_CURRENCY_VALUE=<list of account codes separated by commas>;. If a list of account codes is set, the currency is searched for among the specified Accounting Scheme account templates. If a list of accounts is not set, the currency is searched for among all Accounting Scheme account templates. • To check a currency for correspondence (or non-correspondence) to another document currency, it is necessary to set the tags IF_CURRENCY_RULE=EQUAL; or IF_CURRENCY_RULE=NOT_EQUAL; the value of IF_CURRENCY_VALUE is also set as the value of the IF_CURRENCY tag. • When IF_CURRENCY_RULE=NOT_IN_LIST; is specified, a check will be made that the currency is not included in the list of currencies specified explicitly or through the parameter in the tag IF_CURRENCY_VALUE.
SAME_IP		The tag is used to limit transactions made by consumers specifying the same IP address. !"Cell" mode does not work for a limiter with this tag.

Name	Value	Description
SAME_EMAIL		The tag is used to limit transactions made by consumers specifying the same e-mail address. !"Cell" mode does not work for a limiter with this tag.
SAME_PHONE		The tag is used to limit transactions made by consumers specifying the same phone number. !"Cell" mode does not work for a limiter with this tag.
TRANS_FX		When the tag is set, the usage limiter is only activated if the transaction currency differs from the settlement currency, i.e. if conversion is performed.
SIC_LIST	<SIC1>,<SIC2>,…<SICN>	A usage limiter is activated if a transaction is made at certain merchants (of the specified type). The tag sets a list of SICs (MCC), separated by commas, for which the limiter activates.
EXC_SIC_LIST	<SIC1>,<SIC2>,…<SICN>	If the document's SIC (MCC) is included in this list, the limiter will not activate. Codes are comma-delimited.
CHECK_FOR	"BILLING" "LIABILITY" "TOP" "BASE" "DOC_SOURCE" "DOC_TARGET" "FROM_SERVICE" "FROM_DOC" "RELATED" "DOC_TARGET_NUMBER" "CONTRACT_ROLE" CONTRACT_ROLE_PARM=<tag name> "LIAB_CATEGORY"	Conditions for activating limiters IF_PARM, IF_ACTIVE_EVNT, IF_CS are checked for the contract specified in the CHECK_FOR tag. The limiter is activated if the check is successful. Possible values for the tag: • "BILLING" – the check is made for the account contract. • "LIABILITY" – the check is made for the higher ranking contract in the Liability hierarchy. • "TOP" – the check is made for the top contract in the hierarchy. • "BASE" – the check is made for the main contract in a "Main/Sub" hierarchy, with which this contract is related (with which transactions are made). • "DOC_SOURCE" – the check is made for the contract specified in the *Source Contract* (source_contract) field of the document (see the form "Doc-Brief") • "DOC_TARGET" – the check is made for the contract specified in the *Target Contract* (target_contract) field of the document (see the form "Doc-Brief") •"FROM_SERVICE" - the check is made for the contract specified in the Service (fee_contract, fee_account field). • "FROM_DOC" – the check is made for the contract from the *Add Data* (add_info) field of the document according to the tag specified with the CONTRACT_TAG tag (in the same field) • "CONTRACT_ROLE" – for this value, specify the CONTRACT_ROLE=<role code> tag in this field; for example:

Name	Value	Description
		CHECK_FOR=CONTRACT_ROLE;CONTRACT_ROLE=PAYMENT_LEVEL;. In this case, a search will be made for a contract with the CONTRACT_ROLE=<role code>; tag upward in a Liability hierarchy (in our example, a search for the CONTRACT_ROLE=PAYMENT_LEVEL tag). The check is made for the contract with the specified tag. If no contract with this tag is found in the Liability contract, the top contract in the hierarchy will be selected. • When a search for a contract must be made in a Liability hierarchy according to the value of an arbitrary tag, the CONTRACT_ROLE_PARM=<tag name>; tag must be additionally used in the configuration: For example, when the following settings are specified in the configuration: CONTRACT_ROLE=LEVEL1;CONTRACT_ROLE_PARM=LEVEL; WAY4 will search upward in the Liability hierarchy for a contract with the LEVEL= LEVEL=LEVEL1; tag. The check is made for the contract with the specified tag • "LIAB_CATEGORY" – in this case, a search for a contract will be made upward in a Liability hierarchy within the category/categories set in this field using the LIAB_CATEGORY=<category1>,<category2> tag. Liability category codes, separated by commas, are specified as the LIAB_CATEGORY tag value: "Y" – "Full Liability" category "N" – "Affiliated" category "R" – "Reporting" category "A" – "Only Check Balance" category. For example, when the CHECK_FOR=LIAB_CATEGORY;LIAB_CATEGORY=Y,N; tags are specified, a search is made for the top contract in a "Liability" hierarchy, starting from the current contract within the "Full Liability" ("Y") and "Affiliated" ("N") categories. If a contract has no higher-ranking contracts, it will be used. If a higher-ranking contract belongs to another LIAB_CATEGORY, for example "Reporting" ("R")), no move up the hierarchy will be made. I.e. a contract from the middle of the Liability hierarchy will be used, the top one in in the "Full Liability" ("Y") and "Affiliated" ("N") categories. • "RELATED" – the check is made for a related contract with the relation specified in the RELATION tag. Note: if the contract set with the CONTRACT_FOR tag is not found, a check will be made for the original contract.
IF_PARM_FOR	"BILLING" "LIABILITY"	The IF_PARM_FOR tag is used together with the IF_PARM/IF_PARM_VALUE tags to redefine the contract for which these checks are made.

Name	Value	Description
	"TOP" "BASE" "DOC_SOURCE" "DOC_TARGET" "FROM_DOC" "CONTRACT_ROLE" CONTRACT_ROLE_PARM=<tag name> "LIAB_CATEGORY"	• "BILLING" – for the account contract from which settlement is made. • "LIABILITY" – for a higher-ranking contract in a "Liability" hierarchy. • "TOP" – for the top contract in a hierarchy. • "BASE" – for the main contract in a "Main/Sub" hierarchy, with which this contract is related. • "DOC_SOURCE" – for the contract specified in the document's *Source Contract* (source_contract) field (see the "Doc-Brief" form). • "DOC_TARGET" – for the contract specified in the document's *Target Contract* (target_contract) field (see the "Doc-Brief" form). • "FROM_DOC" – the contract is taken from the document's *Add Data* (add_info) field, according to the tag specified with the CONTRACT_TAG tag (in the same field). • "CONTRACT_ROLE" – for this value, specify the CONTRACT_ROLE=<role code> tag in this field; for example: IF_PARM_FOR=CONTRACT_ROLE;CONTRACT_ROLE=PAYMENT_LEVEL;. In this case, a search will be made for a contract with the CONTRACT_ROLE=<role code>; tag upward in a Liability hierarchy (in our example, a search for the CONTRACT_ROLE=PAYMENT_LEVEL tag). The check is made for the contract with the specified tag. If no contract with this tag is found in the Liability contract, the top contract in the hierarchy will be selected. • When a search for a contract must be made in a Liability hierarchy according to the value of an arbitrary tag, the CONTRACT_ROLE_PARM=<tag name>; tag must be additionally used in the configuration: For example, when the following settings are specified in the configuration: CONTRACT_ROLE=LEVEL1;CONTRACT_ROLE_PARM=LEVEL; WAY4 will search upward in the Liability hierarchy for a contract with the LEVEL= LEVEL=LEVEL1; tag. The check is made for the contract with the specified tag • "LIAB_CATEGORY" – in this case, a search for a contract will be made upward in a Liability hierarchy within the category/categories set in this field using the LIAB_CATEGORY=<category1>,<category2> tag. Liability category codes, separated by commas, are specified as the LIAB_CATEGORY tag value: "Y" – "Full Liability" category "N" – "Affiliated" category "R" – "Reporting" category "A" – "Only Check Balance" category. For example, when the

Name	Value	Description
		IF_PARM_FOR=LIAB_CATEGORY;LIAB_CATEGORY=Y,N; tags are specified, a search is made for the top contract in a "Liability" hierarchy, starting from the current contract within the "Full Liability" ("Y") and "Affiliated" ("N") categories. If a contract has no higher-ranking contracts, it will be used. If a higher-ranking contract belongs to another LIAB_CATEGORY, for example "Reporting" ("R")), no move up the hierarchy will be made. I.e. a contract from the middle of the Liability hierarchy will be used, the top one in in the "Full Liability" ("Y") and "Affiliated" ("N") categories. It is possible to set a check of several parameters for a contract by using the IF_PARM_NUMB, IF_PARM<N>, IF_PARM_VALUE<N>, IF_PARM_FOR<N> tags. See the description of the IF_PARM_NUMB tag.
IF_CS_TYPE_FOR	"BILLING" "LIABILITY" "TOP" "BASE" "DOC_SOURCE" "DOC_TARGET" "FROM_DOC" "CONTRACT_ROLE" CONTRACT_ROLE_PARM=<tag name> "LIAB_CATEGORY"	The IF_CS_TYPE_FOR tag is used together with IF_CS group tags to redefine the contract for which these checks are made. • "BILLING" – for the account contract from which settlement is made. • "LIABILITY" – from a higher-ranking contract in a "Liability" hierarchy. • "TOP" – from the top contract in a hierarchy. • "BASE" – from the main contract in a "Main/Sub" hierarchy, with which this contract is related. • "DOC_SOURCE" – for the contract specified in the document's *Source Contract* (source_contract) field (see the "Doc-Brief" form). • "DOC_TARGET" – for the contract specified in the document's *Target Contract* (target_contract) field (see the "Doc-Brief" form). • "FROM_DOC" – the contract is taken from the *Add Data* (add_info) field. • "CONTRACT_ROLE" – for this value, specify the CONTRACT_ROLE=<role code> tag in this field; for example: IF_CS_TYPE_FOR=CONTRACT_ROLE;CONTRACT_ROLE=PAYMENT_LEVEL;. In this case, a search will be made for a contract with the CONTRACT_ROLE=<role code>; tag upward in a Liability hierarchy (in our example, a search for the CONTRACT_ROLE=PAYMENT_LEVEL tag). The check is made for the contract with the specified tag. If no contract with this tag is found in the Liability contract, the top contract in the hierarchy will be selected. • When a search for a contract must be made in a Liability hierarchy according to the value of an arbitrary tag, the CONTRACT_ROLE_PARM=<tag name>; tag must be additionally used in the configuration: For example, when the following settings are specified in the configuration: CONTRACT_ROLE=LEVEL1;CONTRACT_ROLE_PARM=LEVEL; WAY4 will search upward in the Liability hierarchy for a contract with the LEVEL=

Name	Value	Description
		LEVEL=LEVEL1; tag. The check is made for the contract with the specified tag • "LIAB_CATEGORY" – in this case, a search for a contract will be made upward in a Liability hierarchy within the category/categories set in this field using the LIAB_CATEGORY=<category1>,<category2> tag. Liability category codes, separated by commas, are specified as the LIAB_CATEGORY tag value: "Y" – "Full Liability" category "N" – "Affiliated" category "R" – "Reporting" category "A" – "Only Check Balance" category. For example, when the IF_CS_TYPE_FOR=LIAB_CATEGORY;LIAB_CATEGORY=Y,N; tags are specified, a search is made for the top contract in a "Liability" hierarchy, starting from the current contract within the "Full Liability" ("Y") and "Affiliated" ("N") categories. If a contract has no higher-ranking contracts, it will be used. If a higher-ranking contract belongs to another LIAB_CATEGORY, for example "Reporting" ("R")), no move up the hierarchy will be made. I.e. a contract from the middle of the Liability hierarchy will be used, the top one in in the "Full Liability" ("Y") and "Affiliated" ("N") categories. It is possible to set a check of several parameters for a contract by using the IF_CS_NUMB, IF_CS_TYPE<N>, IF_CS_VALUE<N>, IF_NOT_CS_VALUE<N>, IF_CS_TYPE_FOR<N>. See the description of the IF_CS_NUMB tag.
IF_CURRENCY_FOR	"BILLING" "LIABILITY" "TOP" "BASE" "DOC_SOURCE" "DOC_TARGET" "FROM_SERVICE" "FROM_DOC" "RELATED" "DOC_TARGET_NUMBER" "CONTRACT_ROLE" CONTRACT_ROLE_PARM=<tag name> "LIAB_CATEGORY"	Redefines the contract for which a check is made using the IF_CURRENCY tag. Possible values: • "BILLING" – for the account contract from which settlement is made. • "LIABILITY" – for a higher-ranking contract in a "Liability" hierarchy. • "TOP" – for the top contract in a hierarchy. • "BASE" – for the main contract in a "Main/Sub" hierarchy, with which this contract is related. • "DOC_SOURCE" – for the contract in the *Source Contract* field of the document (source_contract) of the document (see the"Doc-Brief" form). • "DOC_TARGET" – for the contract in the *Target Contract* field (target_contract) of the document (see the "Doc-Brief" form). • "FROM_SERVICE" – for the contract specified in the Service (fee_contract, fee_account fields). • "FROM_DOC" – the contract is taken from the document's *Add Data* field

Name	Value	Description
		(add_info) according to the tag specified using the CONTRACT_TAG tag in the same field) • "RELATED" – related contract, with the relation specified in the RELATION tag. • "CONTRACT_ROLE" – for this value, specify the CONTRACT_ROLE=<role code> tag in this field; for example: IF_CURRENCY_FOR=CONTRACT_ROLE;CONTRACT_ROLE=PAYMENT_LEVEL;. In this case, a search will be made for a contract with the CONTRACT_ROLE=<role code>; tag upward in a Liability hierarchy (in our example, a search for the CONTRACT_ROLE=PAYMENT_LEVEL tag). The check is made for the contract with the specified tag. If no contract with this tag is found in the Liability contract, the top contract in the hierarchy will be selected. • When a search for a contract must be made in a Liability hierarchy according to the value of an arbitrary tag, the CONTRACT_ROLE_PARM=<tag name>; tag must be additionally used in the configuration: For example, when the following settings are specified in the configuration: CONTRACT_ROLE=LEVEL1;CONTRACT_ROLE_PARM=LEVEL; WAY4 will search upward in the Liability hierarchy for a contract with the LEVEL= LEVEL=LEVEL1; tag. The check is made for the contract with the specified tag • "LIAB_CATEGORY" – in this case, a search for a contract will be made upward in a Liability hierarchy within the category/categories set in this field using the LIAB_CATEGORY=<category1>,<category2> tag. Liability category codes, separated by commas, are specified as the LIAB_CATEGORY tag value: "Y" – "Full Liability" category "N" – "Affiliated" category "R" – "Reporting" category "A" – "Only Check Balance" category. For example, when the IF_CURRENCY_FOR=LIAB_CATEGORY;LIAB_CATEGORY=Y,N; tags are specified, a search is made for the top contract in a "Liability" hierarchy, starting from the current contract within the "Full Liability" ("Y") and "Affiliated" ("N") categories. If a contract has no higher-ranking contracts, it will be used. If a higher-ranking contract belongs to another LIAB_CATEGORY, for example "Reporting" ("R")), no move up the hierarchy will be made. I.e. a contract from the middle of the Liability hierarchy will be used, the top one in in the "Full Liability" ("Y") and "Affiliated" ("N") categories.

Name	Value	Description
IF_CS_NUMB	<number of additional checks>	Sets the number of additional checks for the IF_CS_TYPE tag. The tag is used together with the IF_CS_TYPE<N>, IF_CS_VALUE<N>, IF_NOT_CS_VALUE<N>, IF_CS_TYPE_FOR<N> tags. I.e. by default the IF_CS_TYPE tag is checked. If the IF_CS_NUMB=<number of additional checks>; tag is set, the specified number of IF_CS_TYPE<N> tags is checked. For example, if IF_CS_NUMB=3;, the IF_CS_TYPE1, IF_CS_TYPE2, IF_CS_TYPE3 tags are checked in addition to the IF_CS_TYPE tag.
IF_PARM_NUMB	<number of additional checks>	Sets the number of additional checks for the IF_PARM tag. The tag is used together with the IF_PARM<N>, IF_PARM_VALUE<N>, IF_PARM_FOR<N> tags. I.e. by default the IF_PARM tag is checked. If the IF_PARM_NUMB=<number of additional checks>; tag is set, the specified number of IF_PARM<N> tags is checked. For example, when IF_PARM_NUMB=3;, the IF_PARM1, IF_PARM2, IF_PARM3 tags are checked in addition to the IF_PARM tag.
IF_COMPARE_FIRST	PARM_<Code> TAG_<Code> CS_<Code>	The IF_COMPARE_FIRST tag together with the IF_COMPARE_SECOND tag sets parameters for comparison. Possible values: • PARM_<Code> – the code of the custom parameter for comparison is set in this format. • TAG_<Code> – the code of the tagged parameter for comparison is set in this format. • CS_<Code> – the code of the classifier for comparison is set in this format. There may be no value for the IF_COMPARE_SECOND tag. In this case, the same parameter/classifier specified in the IF_COMPARE_FIRST tag will be checked. The tag is used together with the IF_COMPARE tag. A check of several parameter pairs for a contract can be set with the IF_COMPARE_NUMB, IF_COMPARE<N>, IF_COMPARE_FIRST<N>, IF_COMPARE_SECOND<N> tags. See the description of the IF_COMPARE_NUMB tag.
IF_COMPARE_SECOND	PARM_<Code> TAG_<Code> CS_<Code>	The IF_COMPARE_SECOND tag together with the IF_COMPARE_FIRST tag sets parameters for comparison. Possible values: • PARM_<Code> – the code of the custom parameter for comparison is set in this format. • TAG_<Code> – the code of the tagged parameter for comparison is set in this format. • CS_<Code> – the code of the classifier for comparison is set in this format.

Name	Value	Description
		There may be no value for the IF_COMPARE_SECOND tag. In this case, the same parameter/classifier specified in the IF_COMPARE_FIRST tag will be checked. The tag is used together with the IF_COMPARE tag.
IF_COMPARE_FIRST_FOR	"BILLING" "LIABILITY" "TOP" "BASE" "DOC_SOURCE" "DOC_TARGET" "FROM_SERVICE" "FROM_DOC" "RELATED" "DOC_TARGET_NUMBER" "CONTRACT_ROLE" CONTRACT_ROLE_PARM=<tag name> "LIAB_CATEGORY"	Redefines the contract for which a check is made using the IF_COMPARE_FIRST tag. Possible values: • "BILLING" – for the account contract from which settlement is made. • "LIABILITY" – for a higher-ranking contract in a "Liability" hierarchy. • "TOP" – for the top contract in a hierarchy. • "BASE" – for the main contract in a "Main/Sub" hierarchy, with which this contract is related. • "DOC_SOURCE" – for the contract in the *Source Contract* field of the document (source_contract) of the document (see the"Doc-Brief" form). • "DOC_TARGET" – for the contract in the *Target Contract* field (target_contract) of the document (see the "Doc-Brief" form). • "FROM_SERVICE" – for the contract specified in the Service (fee_contract, fee_account fields). • "FROM_DOC" – the contract is taken from the document's *Add Data* field (add_info) according to the tag specified using the CONTRACT_TAG tag in the same field) • "RELATED" – related contract, with the relation specified in the RELATION tag. • "CONTRACT_ROLE" – for this value, specify the CONTRACT_ROLE=<role code> tag in this field; for example: IF_COMPARE_FIRST_FOR=CONTRACT_ROLE;CONTRACT_ROLE=PAYMENT_LEVEL;. In this case, a search will be made for a contract with the CONTRACT_ROLE=<role code>; tag upward in a Liability hierarchy (in our example, a search for the CONTRACT_ROLE=PAYMENT_LEVEL tag). The check is made for the contract with the specified tag. If no contract with this tag is found in the Liability contract, the top contract in the hierarchy will be selected. • When a search for a contract must be made in a Liability hierarchy according to the value of an arbitrary tag, the CONTRACT_ROLE_PARM=<tag name>; tag must be additionally used in the configuration: For example, when the following settings are specified in the configuration: CONTRACT_ROLE=LEVEL1;CONTRACT_ROLE_PARM=LEVEL; WAY4 will search upward in the Liability hierarchy for a contract with the LEVEL= LEVEL=LEVEL1; tag. The check is made for the contract with the specified tag

Name	Value	Description
		• "LIAB_CATEGORY" – in this case, a search for a contract will be made upward in a Liability hierarchy within the category/categories set in this field using the LIAB_CATEGORY=<category1>,<category2> tag. Liability category codes, separated by commas, are specified as the LIAB_CATEGORY tag value: "Y" – "Full Liability" category "N" – "Affiliated" category "R" – "Reporting" category "A" - "Only Check Balance" category. For example, when the IF_COMPARE_FIRST_FOR=LIAB_CATEGORY;LIAB_CATEGORY=Y,N; tags are specified, a search is made for the top contract in a "Liability" hierarchy, starting from the current contract within the "Full Liability" ("Y") and "Affiliated" ("N") categories. If a contract has no higher-ranking contracts, it will be used. If a higher-ranking contract belongs to another LIAB_CATEGORY, for example "Reporting" ("R")), no move up the hierarchy will be made. I.e. a contract from the middle of the Liability hierarchy will be used, the top one in in the "Full Liability" ("Y") and "Affiliated" ("N") categories. A check of several parameter pairs for a contract can be set with the IF_COMPARE_NUMB, IF_COMPARE<N>, IF_COMPARE_FIRST<N>, IF_COMPARE_SECOND<N> tags. See the description of the IF_COMPARE_NUMB tag.
IF_COMPARE_SECOND_FOR	"BILLING" "LIABILITY" "TOP" "BASE" "DOC_SOURCE" "DOC_TARGET" "FROM_SERVICE" "FROM_DOC" "RELATED" "DOC_TARGET_NUMBER" "CONTRACT_ROLE" CONTRACT_ROLE_PARM=<tag name> "LIAB_CATEGORY"	Redefines the contract for which a check is made using the IF_COMPARE_SECOND tag. Possible values: • "BILLING" – for the account contract from which settlement is made. • "LIABILITY" – for a higher-ranking contract in a "Liability" hierarchy. • "TOP" – for the top contract in a hierarchy. • "BASE" – for the main contract in a "Main/Sub" hierarchy, with which this contract is related. • "DOC_SOURCE" – for the contract in the *Source Contract* field of the document (source_contract) of the document (see the"Doc-Brief" form). • "DOC_TARGET" – for the contract in the *Target Contract* field (target_contract) of the document (see the "Doc-Brief" form). • "FROM_SERVICE" – for the contract specified in the Service (fee_contract, fee_account fields). • "FROM_DOC" – the contract is taken from the document's *Add Data* field (add_info) according to the tag specified using the CONTRACT_TAG tag in the

Name	Value	Description
		same field) • "RELATED" – related contract, with the relation specified in the RELATION tag. • "CONTRACT_ROLE" – for this value, specify the CONTRACT_ROLE=<role code> tag in this field; for example: IF_COMPARE_SECOND_FOR=CONTRACT_ROLE;CONTRACT_ROLE=PAYMENT_LEVEL;. In this case, a search will be made for a contract with the CONTRACT_ROLE=<role code>; tag upward in a Liability hierarchy (in our example, a search for the CONTRACT_ROLE=PAYMENT_LEVEL tag). The check is made for the contract with the specified tag. If no contract with this tag is found in the Liability contract, the top contract in the hierarchy will be selected. • When a search for a contract must be made in a Liability hierarchy according to the value of an arbitrary tag, the CONTRACT_ROLE_PARM=<tag name>; tag must be additionally used in the configuration: For example, when the following settings are specified in the configuration: CONTRACT_ROLE=LEVEL1;CONTRACT_ROLE_PARM=LEVEL; WAY4 will search upward in the Liability hierarchy for a contract with the LEVEL= LEVEL=LEVEL1; tag. The check is made for the contract with the specified tag • "LIAB_CATEGORY" – in this case, a search for a contract will be made upward in a Liability hierarchy within the category/categories set in this field using the LIAB_CATEGORY=<category1>,<category2> tag. Liability category codes, separated by commas, are specified as the LIAB_CATEGORY tag value: "Y" – "Full Liability" category "N" – "Affiliated" category "R" – "Reporting" category "A" - "Only Check Balance" category. For example, when the IF_COMPARE_SECOND_FOR=LIAB_CATEGORY;LIAB_CATEGORY=Y,N; tags are specified, a search is made for the top contract in a "Liability" hierarchy, starting from the current contract within the "Full Liability" ("Y") and "Affiliated" ("N") categories. If a contract has no higher-ranking contracts, it will be used. If a higher-ranking contract belongs to another LIAB_CATEGORY, for example "Reporting" ("R")), no move up the hierarchy will be made. I.e. a contract from the middle of the Liability hierarchy will be used, the top one in in the "Full Liability" ("Y") and "Affiliated" ("N") categories. A check of several parameter pairs for a contract can be set with the IF_COMPARE_NUMB, IF_COMPARE<N>, IF_COMPARE_FIRST<N>,

Name	Value	Description
		IF_COMPARE_SECOND<N> tags. See the description of the IF_COMPARE_NUMB tag.
IF_COMPARE_NUMB	<number of additional checks>	The tag sets the number of additional checks for IF_COMPARE_FIRST, IF_COMPARE_SECOND parameter pairs. I.e. if the IF_COMPARE tag is set, the IF_COMPARE_FIRST and IF_COMPARE_SECOND tags are checked. if IF_COMPARE_NUMB=<number of additional checks>; is set, the specified number of IF_COMPARE<N>, IF_COMPARE_FIRST<N>, IF_COMPARE_SECOND<N> tag sets will be checked.
DIFF_CARDS		The DIFF_CARDS; tag is used to limit transactions made at the same merchant with different cards issued by an issuer bank. The maximum number of cards with different numbers is set in the limiter's *Max #* field. Note that the limit on the transaction amount that can be set in the *Max Amnt* field of the limiter will not be considered. The tag is used for risk monitoring (see the document "Risk Monitoring").
EXC_SIC_GROUP_LIST	<SIC-group code1>,<SIC-group code2>, ...,<SIC-group codeN>	If a document's SIC code (MCC code) is included in this group, the limiter will not activate. Group codes (the value of the *Group Code* field in the "SIC Groups" form (Full → Configuration Setup → Main Tables → SIC Groups)) are separated by commas.
IF_DATE	"CLIENT.BIRTH_DATE" "CLIENT.DATE_EXPIRE" "CLIENT.DATE_OPEN" "CLIENT.ADD_DATE_01" "CLIENT.ADD_DATE_02" "CONTRACT.FIRST_ACTIVITY_DATE" "CONTRACT.DATE_OPEN" "CONTRACT.LAST_BILLING" "CONTRACT.NEXT_BILLING" "CONTRACT.DATE_EXPIRE" "CONTRACT.CARD_EXPIRE"	IF_DATE group tags make it possible to configure actions (in this case, activation of a limiter) depending on contract/client dates. Contract/client dates can be compared with other dates (contract, client dates, system date, current banking date). Periods between dates can be checked according to various conditions. The IF_DATE tag sets the code of the date being checked, or the code of the date being compared with another date. Date codes can be contract/client dates specified in the following contract table (CONTRACT) or client table (CLIENT) fields: • "CLIENT.BIRTH_DATE" – a check is made according to the BIRTH_DATE field of the client's record • "CLIENT.DATE_EXPIRE" – a check is made according to the DATE_EXPIRE field of the client's record • "CLIENT.DATE_OPEN" – a check is made according to the DATE_OPEN field of the client's record (date on which the client was registered in the DB) • "CLIENT.ADD_DATE_01" – a check is made according to the ADD_DATE_01 field of the client's record • "CLIENT.ADD_DATE_02" – a check is made according to the ADD_DATE_02

Name	Value	Description
		field of the client's record • "CONTRACT.FIRST_ACTIVITY_DATE" – a check is made according to the FIRST_ACTIVITY_DATE field of the contract's record • "CONTRACT.DATE_OPEN" – a check is made according to the DATE_OPEN field of the contract's record • "CONTRACT.LAST_BILLING" – a check is made according to the LAST_BILLING field of the contract's record • "CONTRACT.NEXT_BILLING"– a check is made according to the NEXT_BILLING field of the contract's record • "CONTRACT.DATE_EXPIRE" – a check is made according to the DATE_EXPIRE field of the contract's record • "CONTRACT.CARD_EXPIRE" – a check is made according to the CARD_EXPIRE field of the contract's record The tag is used together with the IF_DATE_VALUE and IF_DATE_FOR tags. A check of several dates for a client/contract can be set using the IF_DATE_NUMB, IF_DATE<N>, IF_DATE_VALUE<N> and IF_DATE_FOR<N> tags. See the description of the IF_DATE_NUMB tag.
IF_DATE_VALUE	"EMPTY" "NOT_EMPTY" <Rule><Base Date Code><Period Rule>	The IF_DATE_VALUE tag sets rules for checking the date specified with the IF_DATE tag. Tag values: • "EMPTY" – the condition is met if the field for the date set with the IF_DATE field is not filled in. • "NOT_EMPTY" – the condition is met if the field for the date set with the IF_DATE field is filled in. The field value is not checked. • The tag value can be composite and set in the following format (components are listed without delimiters): IF_DATE_VALUE=<Rule><Base Date Code><Period Rule>;, where: ▪ <Rule> – comparison rule. Possible values: ♦ "<" – less than ♦ ">" – greater than ♦ "<=" – less than or equal to ♦ ">=" – greater than or equal to ♦ If a comparison rule (<Rule>) is not set, the date is checked for matching (for the "=" value). ▪ <Base Date Code> – code of the date with which the date from the IF_DATE tag is compared. Possible values: ♦ Values that are described for the IF_DATE tag can be specified (i.e. dates

Name	Value	Description
		from the contract or client table). ♦ "LDATE" – current banking date of the contract's financial institution ♦ "DB_DATE" – system (calendar) data (the system date is used without time) ▪ <Period Rule> – period that should be added or subtracted from the <Base Date Code> date. Set in the format <sign> <number of units ><period unit of measurement>, where ♦ <sign> – "+" or "-" (sign for adding or subtracting the specified period) ♦ <number of units> – number of days/months/years (see below) ♦ <period unit of measurement> – "D" (days), "M" (months), "Y" (years). Only one value can be set (i.e. one type of period is set in the tag). ♦ If the period <Period Rule> is not set, the two specified dates are compared according to the condition <Rule>. The tag is used together with the IF_DATE and IF_DATE_FOR tags. A check of several dates for a client/contract can be set using the IF_DATE_NUMB, IF_DATE<N>, IF_DATE_VALUE<N>, and IF_DATE_FOR<N> tags. See the description of the IF_DATE_NUMB tag. Examples of checks: Check of whether a client is already 40 years old: IF_DATE=CLIENT.BIRTH_DATE;IF_DATE_VALUE=<=DB_DATE-40Y; Check that a card has not expired: IF_DATE=CONTRACT.CARDS_EXPIRE;IF_DATE_VALUE=>=DB_DATE; Check that a card expires after a month: IF_DATE=CONTRACT.CARD_EXPIRE;IF_DATE_VALUE=<=DB_DATE+1M;
IF_DATE_FOR	"BILLING" "LIABILITY" "TOP" "BASE" "DOC_SOURCE" "DOC_TARGET" "FROM_DOC" "CONTRACT_ROLE" CONTRACT_ROLE_PARM=<tag name> "LIAB_CATEGORY"	The IF_DATE_FOR tag is used together with the IF_DATE/IF_DATE_VALUE tags to redefine the contract/client for which the check is being made. Note. If the IF_DATE tag is used to check a date from the client table, first a search is made for a contract according to the IF_DATE_FOR tag, and then this date is checked for the corresponding client. Possible values for the IF_DATE_FOR tag: • "BILLING" – the check is made for the account contract used for settlement. • "LIABILITY" – the check is made for the higher ranking contract in the Liability hierarchy. • "TOP" – the check is made for the top contract in the hierarchy. • "BASE" – the check is made for the main contract in a "Main/Sub" hierarchy, with which this contract is related. • "DOC_SOURCE" – the check is made for the contract specified in the *Source Contract* (source_contract) field of the document (see the form "Doc-Brief")

Name	Value	Description
		• "DOC_TARGET" – the check is made for the contract specified in the *Target Contract* (target_contract) field of the document (see the form "Doc-Brief") • "FROM_DOC" – the check is made for the contract from the *Add Data* (add_info) field of the document according to the tag specified with the CONTRACT_TAG tag (in the same field) • "CONTRACT_ROLE" – for this value, specify the CONTRACT_ROLE=<role code> tag in this field; for example: IF_PARM_FOR=CONTRACT_ROLE;CONTRACT_ROLE=PAYMENT_LEVEL;. In this case, a search will be made for a contract with the CONTRACT_ROLE=<role code>; tag upward in a Liability hierarchy (in our example, a search for the CONTRACT_ROLE=PAYMENT_LEVEL tag). The check is made for the contract with the specified tag. If no contract with this tag is found in the Liability contract, the top contract in the hierarchy will be selected. • When a search for a contract must be made in a Liability hierarchy according to the value of an arbitrary tag, the CONTRACT_ROLE_PARM=<tag name>; tag must be additionally used in the configuration: For example, when the following settings are specified in the configuration: CONTRACT_ROLE=LEVEL1;CONTRACT_ROLE_PARM=LEVEL; WAY4 will search upward in the Liability hierarchy for a contract with the LEVEL= LEVEL=LEVEL1; tag. The check is made for the contract with the specified tag • "LIAB_CATEGORY" – in this case, a search for a contract will be made upward in a Liability hierarchy within the category/categories set in this field using the LIAB_CATEGORY=<category1>,<category2> tag. Liability category codes, separated by commas, are specified as th LIAB_CATEGORY tag value: "Y" – "Full Liability" category "N" – "Affiliated" category "R" – "Reporting" category "A" - "Only Check Balance" category. For example, when the IF_PARM_FOR=LIAB_CATEGORY;LIAB_CATEGORY=Y,N; tags are specified, a search is made for the top contract in a "Liability" hierarchy, starting from the current contract within the "Full Liability" ("Y") and "Affiliated" ("N") categories. If a contract has no higher-ranking contracts, it will be used. If a higher-ranking contract belongs to another LIAB_CATEGORY, for example "Reporting" ("R")), no move up the hierarchy will be made. I.e. a contract from the middle of the Liability hierarchy will be used, the top one in in the "Full Liability" ("Y") and

Name	Value	Description
		"Affiliated" ("N") categories. A check of several dates for a client/contract can be specified using the IF_DATE_NUMB, IF_DATE<N>, IF_DATE_VALUE<N>, and IF_DATE_FOR<N> tags. See the description of the IF_DATE_NUMB tag.
IF_DATE_NUMB	<number of additional checks>	The tag sets the number of additional checks for the IF_DATE tag. The tag is used together with the IF_DATE<N>, IF_DATE_VALUE<N>, and IF_DATE_FOR<N> tags. I.e. by default, the IF_DATE tag is checked. If the IF_DATE_NUMB=<number of additional checks>; tag is set, the specified number of IF_DATE<N> tags is checked. For example, when IF_DATE_NUMB=3; in addition to the IF_DATE tag, the IF_DATE1, IF_DATE2, and IF_DATE3 tags are checked.