WAY4™ Global Parameters

Contents

Introduction

WAY4's additional global parameters allow users to configure system functions to execute certain procedures, for example, individual and consolidated accounting for contracts, interest accrual algorithms, and others. The global parameters dictionary can be accessed through the user menu path "Full → Configuration Setup → Main Tables → Additional Global Parameters".

These parameters significantly affect system functioning, so system parameters should only be changed with assistance from qualified representatives of the WAY4™ system vendor. Changing global parameter values without consulting the WAY4™ system vendor may result in system malfunction and subsequent financial loss.

Note that DB Manager must be restarted after a global parameter value is changed so that the change takes effect. It is also necessary to restart NetServer after changing values of global parameters used for authorisation.

This document is intended for WAY4 system administrators, bank or processing centre employees and describes the possible values for WAY4 global parameters and their use.

The parameters described in this document are grouped according to functionality, such as document processing, card production, currency conversion, and others. Each group contains a list of parameters presented in alphabetical order.

The following conventions are used throughout this document:

- Field labels in screen forms are displayed in *italics.*
- Names of screen form buttons are shown in square brackets, such as [Approve].
- Menu selection sequences are given using arrows, as in Issuing → Contracts Input & Update.
- Sequences for selection of items from the system menu are shown using another type of arrow, as in Database => Change password.
- 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. "Additional Global Parameters" Form

The list of global parameters is accessed by using the menu item "Full → Configuration Setup → Main Tables → Additional Global Parameters" to open the "Additional Global Parameters" form, see Fig. 1.

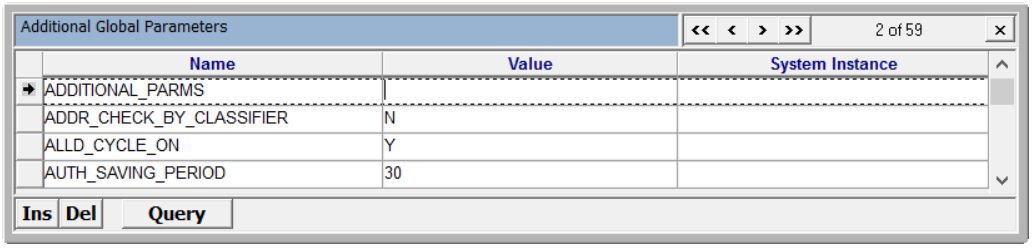

Fig. 1. "Additional Global Parameters" form

The form contains the following fields:

- *Name* – name of the global parameter.
- *Value* – value of the global parameter.
- *System Instance* – WAY4 system instance (database) for which this global parameter is used. Selected from the list set up in the "System Instances" form (Full → Configuration Setup → Main Tables → System Instances - Simple), see the section "System Instances" Dictionary" of the document "WAY4 Dictionaries".

Chapter 2. Document Acceptance

ACCEPT_AFTER_CRYPT_VALIDATION

The global parameter ACCEPT_AFTER_CRYPT_VALIDATION makes it possible to check the status of a smart card cryptogram before accepting the document. To execute the check, set the value of this parameter to "Y". The default value is "N".

ACCEPT_CHANGE_FI

When the value of this parameter is "Y", reversals and adjustments can be processed if the target financial institution changes. When a reversal is received, macrotransactions are generated for the new financial institution and reversed fee amounts are also taken from the new financial institution's Product parameters.

To restore previous system behaviour, when only reversals are processed in this situation, set the global parameter to "R".

AMOUNT_FORMAT_FOR_DOC_TAG

Amounts received from clearing or online are stored in special tags in the add_info field of a document. In particular, acquirer fee amounts and Cashback amounts (purchase with cash withdrawal) are stored in this way. The format for storing amounts in different tags differs – part of data is stored in ISO format (in "cents"), part in "dollars" (in decimal format with a decimal point).

When calculating fees, Services (WAY4) by default perceive the amounts from the corresponding tags of a document's add_info field as "cents". In order for tag amounts to be understood by WAY4 as "dollars", additional setup is required. To do so:

- Determine tags used when calculating fees and stored in "dollars" in the add_info field of a document. These tags include SURCHARGE_AMOUNT, TACCESS_FEE_AMOUNT, and SACCESS_FEE_AMOUNT (reserved for future use). See the document "Documents" for the list of tags for storing amounts that can be contained in a document’s add_info field.
- These tags must be entered in the list of values for the global parameter AMOUNT_FORMAT_FOR_DOC_TAG. Tags are comma-delimited.

AUTH_AMOUNT_DIFF_PCNT

AUTH_AMOUNT_DIFF_PCNT – This parameter defines the permissible percent difference between the financial transaction amount and the amount blocked when an authorization document is processed.

If the specified difference exceeds the value set by the parameter, when a financial document is posted, the corresponding error message will be generated and the difference between the authorization and financial document amount will be blocked.

The parameter value is a positive whole integer, and its default value is 15.

The parameter is used for all transactions with several financial documents for one authorization (these transactions may be made, for example, when renting a car or reserving a hotel room).

The global parameter can be redefined by the tag with the same name in a financial institution and in a transaction subtype. The tag in a transaction subtype has a higher priority

AUTH_AMOUNT_DIFF_PCNT_RETAIL

AUTH_AMOUNT_DIFF_PCNT – This parameter defines the permissible maximum percent difference between the financial transaction amount and the amount blocked when an authorization document is processed.

If the specified difference exceeds the value set by the parameter, when a financial document is posted, the corresponding error message will be generated and the difference between the authorization and financial document amount will be blocked.

The parameter value is a positive integer. The default value corresponds to the value of the "AUTH_AMOUNT_DIFF_PCNT" parameter.

The parameter is used for all transactions except those with several financial documents for one authorization (car rental or hotel reservation transactions, for example). The global parameter AUTH_AMOUNT_DIFF_PCNT is used for these exceptions.

The global parameter can be redefined by the tag with the same name in a financial institution and in a transaction subtype. The tag in a transaction subtype has a higher priority.

AUTH_SAVING_PERIOD

AUTH_SAVING_PERIOD – A parameter determining the interval in calendar days for which blocked amounts authorized on card accounts are saved.

The parameter value is a positive whole integer. Its default value is 30.

Funds blocked by authorizations for which financial documents from slips have not yet been processed during this interval may be unblocked through the user menu path "Daily Procedures → Document Processing Step by Step → Clear Old Pendings".

 Funds blocked as a result of executing transactions offline (for smart cards) can be unblocked by a procedure called with the menu item "EMV Smart Cards → Documents → Clear Old Offline Pendings".

The date funds are unblocked is calculated during authorization (and registered in the credit_history table). If the value of this global parameter is changed, the new value will be considered during new authorizations. The changed value will not affect dates calculated earlier for unblocking funds. That is, for earlier authorizations, funds will be unblocked according to the date for unblocking calculated at the time of authorization. That is, on authorizations made earlier, funds will be unblocked according to the date for unblocking calculated at the time authorization is made.

This global parameter can be redefined on the transaction subtype level (see the section "Tags Used when Posting Documents" of the document "Documents").

AUTH_SKIP_TAGS_INHERIT

AUTH_SKIP_TAGS_INHERIT – the parameter defines the list of tags whose values will not be considered when data from an authorization document are inherited to the corresponding financial document.

Tags in the list are separated by commas.

Default value of the parameter: CASHBACK_CURR, CASHBACK_AMOUNT, PURCHASE_CURR, PURCHASE_AMOUNT, POI_CURR, POI_AMOUNT, REP_AMOUNT, ORIG_AMOUNT, POI_ORIG_AMOUNT, ORIG_AMOUNT_R, ORIG_ISS_AMNT_R, REST_AMOUNT, REST_TR_AMOUNT, REPL_AMNT.

By default, these tags are not inherited from an authorization document to a financial document.

AUTH_TRANS_DATE_INTERVAL

The parameter allows additional document search conditions to be set. The parameter value determines the period of time in days within which it is permitted to match documents by PAN (card number) and authorisation code (by the *Auth Code* field value). The default value is 2.

For more information, see the section "Matching Documents" of the document "Documents".

BIN_ROUTING_TYPE

BIN_ROUTING_TYPE – A parameter allowing Interchange Routing to be performed according to transaction currency.

The default value of the parameter is NULL.

If the parameter value is set to "T", the value of the *Currency* field in the Interchange Routing table will be considered as the transaction currency and not the settlement currency. This way, transactions of selected currencies may be routed to a separate routing contract.

BLOCK_DISTRIBUTED_LIMIT

BLOCK_DISTRIBUTED_LIMIT – This parameter manages how funds are blocked on bank contracts when credit limits are set on issuing contracts.

Parameter values:

- "Y" (Yes) – When a credit limit is set, funds will be blocked on the corresponding bank contract.
- "N" (No) – The credit limit will not change the amount available for the bank contract. This is the default value.

BLOCK_IF_AVAILABLE_FEE

BLOCK_IF_AVAILABLE_FEE – A parameter that controls how funds are blocked when a miscellaneous fee is charged whose fee type has the "Category" parameter set to "When Available"

Parameter values:

- "Y" (Yes) – when a miscellaneous fee is charged, the system immediately blocks the amount in the corresponding contract account. Funds are unblocked when the system processes the financial document that replenishes the account from which the fee is collected.
- "N" (No) – funds are not blocked. The miscellaneous fee is posted when the system processes the financial document that replenishes the account from which the fee is collected. This is the default value.

CHECK_SRN_CHANNEL_LIST

CHECK_SRN_CHANNEL_LIST – This parameter allows the uniqueness of the SRN (Source Registration Number) parameter to be checked for incoming documents. A comma-delimited list of channels for which the check will be executed is specified as the parameter value.

COND_INH_FOR_AFF

A financial document can inherit a number of parameters from an authorization document. In particular, document tags from the *Add Data* field and transaction conditions are inherited when posting financial documents for transactions made on our devices or with our cards, and for transactions made on the devices of affiliate banks (when posting financial documents in a sponsor bank). For documents for transactions made on the devices of an affiliate bank, inheritance can be disabled by setting the value of COND_INH_FOR_AFF to "N".

By default, the parameter's value is "Y".

The global parameter can be redefined using the tag of the same name in a specific document.

CREDIT_LIMIT_POSTING

CREDIT_LIMIT_POSTING – the value of this parameter determines whether credit limits will be reflected on issuing contract accounts. When a credit limit is assigned, an authorization document is generated in WAY4. Credit limits are reflected on contract accounts by generating for this authorization document a macrotransaction to transfer funds from a bank contract account to the corresponding issuing contract account.

Parameter values:

- If the parameter is not set or has a null value, the mode set up on the financial institution or Accounting Scheme level is used for reflecting the credit limit on accounts.
- "N" – credit limits are not reflected on contract accounts (regardless of settings on the financial institution or Accounting Scheme level); this is the default value of the parameter.
- "Y" (Yes) – credit limits are reflected on contract accounts (regardless of settings in the financial institution or Accounting Scheme).

When the global parameter is disabled (if the parameter is not set or has a null value), the mode for reflecting a credit limit on accounts can be enabled on the financial institution or Accounting Scheme level in the *Cr Lim Posting* field of the "Details for <name of financial institution>" form or the "Details for <Accounting Scheme name>" form, respectively.

DECLINE_NON_AUTHORIZED

DECLINE_NON_AUTHORIZED – A parameter that affects how two types of financial documents are processed: when transactions are executed without an authorization code and their amount exceeds the floor limit set in the corresponding Service of the device contract; and when transactions are executed for which no authorization document was found.

Parameter values:

- "Y" (Yes) – Financial documents for which an authorization document was not found will be declined with the status "Decline".
- "N" (No) – Financial documents for which an authorization document was not found will be processed with an entry created in the process log that warns about potential errors. This is the default value.

 The global parameter can be redefined for a financial institution or specific document.

DEFAULT_INST_ROUTING

DEFAULT_INST_ROUTING – the parameter is used in processing interbranch transactions and defines whether it is necessary to search for a Service for an interbranch routing contract required to determine source and target accounts.

The parameter is used when generating macrotransactions in branches. The financial institution's place in a "Parent/Child" hierarchy and the settlement "direction" (settlement with the parent institution or with the child institution) affects generation of macrotransactions (the need to search for an interbranch routing contract Service).

Note that a child financial institution can simultaneously be a parent institution for another financial institution (in Fig. these are institutions FI 1 and FI 2 in a three-level hierarchy; further, "Parent+Child" institution). In this case, in one transit macrotransaction (for example, a transit macrotransaction in FI 1 for settlement between Principal and FI 1-1) the need to search for an interbranch routing contract Service will be determined in different ways. For more information, see below.

DEFAULT_INST_ROUTING parameter values:

- "Y" (Yes):
  - A search is not made in a child institution for a Service for settlements with the parent institution. Accounts set by default according to interbranch routing settings are used for an interbranch routing contract.
  - A search for a Service for settlements with a child institution is made in the parent institution. It is possible that there is no Service for the parent institution's settlements with the child institution. In this case, accounts set by default according to interbranch routing settings are used.
  - For a three-level hierarchy when a transit macrotransaction belongs to the "Parent+Child" institution (FI 1 and FI 2 in Fig.) a search for a Service is only made on the side of settlements with the child institution.

    This is the parameter's default value ("Y").
- "N" (No) – a search is always made for an interbranch routing contract Service. If a Service is not found, the document is rejected (i.e. default accounts are not used).
- "S" – a search is always made for an interbranch routing contract Service. If a Service is not found, the document is posted using accounts set by default according to interbranch routing settings.

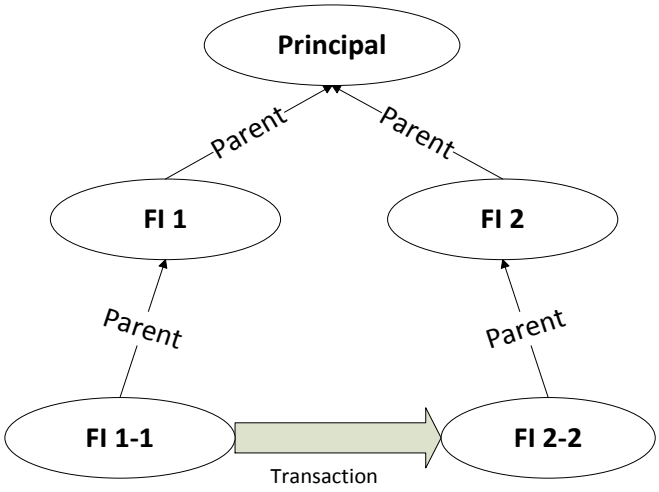

Fig. 2. A card for FI-2-2 is acquired in FI-1-1's device

Search for a Service in macrotransactions, using Fig. as an example:

- Source macrotransaction in FI 1-1:
  - A search is always made for a device contract Service (Source service).
  - The DEFAULT_INST_ROUTING parameter determines if a search will be made for an interbranch routing contract Target service:
    - "Y" – A search is not made for a Service. Default accounts are used (Interbranch Routing).
    - "N" – A search is made for a Service. If a Service is not found, the document is rejected.
    - "S" – A search is made for a Service. If a Service is not found, default accounts are used (Interbranch Routing)
- Target macrotransaction in FI 2-2:
  - A search is always made for a card contract Service (Target service).
  - The DEFAULT_INST_ROUTING parameter determines if a search will be made for an interbranch routing contract Source service:
    - "Y" – A search is not made for a Service. Default accounts are used (Interbranch Routing).
    - "N" – A search is made for a Service. If a Service is not found, the document is rejected.
    - "S" – A search is made for a Service. If a Service is not found, default accounts are used (Interbranch Routing).
- Transit macrotransaction in FI1: the DEFAULT_INST_ROUTING parameter determines whether a search will be made for a Source service and Target service:
  - "Y" – A search is not made for a Service. Default accounts are used (Interbranch Routing).
  - "N" – A search is made for a Service. If a Service is not found, the document is rejected.
  - "S" – A search is made for a Service. If a Service is not found, default accounts are used (Interbranch Routing).
- Transit macrotransaction in FI2: the DEFAULT_INST_ROUTING parameter determines whether a search will be made for a Source service and Target service:
  - "Y" – A search is not made for a Service. Default accounts are used (Interbranch Routing).
  - "N" – A search is made for a Service. If a Service is not found, the document is rejected.
  - "S" – A search is made for a Service. If a Service is not found, default accounts are used (Interbranch Routing).

- Transit macrotransaction in Principal: the DEFAULT_INST_ROUTING parameter determines whether a search will be made for a Source service and Target service:
  - "Y" – A search is not made for a Service. Default accounts are used (Interbranch Routing).
  - "N" – A search is made for a Service. If a Service is not found, the document is rejected.
  - "S" – A search is made for a Service. If a Service is not found, default accounts are used (Interbranch Routing).

DOC_SAVING_PERIOD

DOC_SAVING_PERIOD – A parameter determining the interval in calendar days from the transaction date, during which the combination of values from the # (Source Registration Number) and Contract # fields of the document containing Request Category = "Advice" must be unique.

The value of the parameter is a positive whole number, and the default value is "400".

This parameter checks that the combination of values is unique for new documents whose # (Source Registration Number) field is not empty. It also ensures that the transaction type corresponds to that of the original document in the document chain, which means that there is no reference to the previous document.

If a document is not unique for the period specified by this parameter, it cannot be processed successfully.

Using this parameter guarantees that the original document can be found for reversal operations, as well as for dispute cycle operations within the period indicated by the DOC_SAVING_PERIOD parameter.

 This parameter is used only when the value of the parameter UNIQUE_SLIP_NUMBER = "Y".

EXCEPTION_BINS

EXCEPTION_BINS – A parameter used by affiliated banks in document acceptance if the transaction has been executed on a card with a bank BIN but the corresponding card contract is absent in the database.

Parameter values:

- Empty (NULL) – When processing a document for a transaction involving a card with a bank BIN whose number is absent from the database, the document will be declined. This value is the default value.
- Contract subtype codes separated by the ";" symbol – When processing a document for a transaction involving a card whose number is absent from the database and whose contract subtype is indicated in the parameter value, the

document will be sent to the target according to Interchange Routing rules (through the BIN table).

FINAL_AUTH_SAVING_PERIOD

FINAL_AUTH_SAVING_PERIOD – this parameter specifies the time interval in calendar days during which fund blocking on card accounts according to final authorisations is saved.

The parameter value is a whole positive integer.

When a final authorisation is received, a search is first made for the parameter FINAL_AUTH_SAVING_PERIOD. If it is not found, a search is made for the parameter AUTH_SAVING_PERIOD. If neither of these parameters is set, the default value, "30", is used.

Funds blocked by authorisations for which financial documents were not processed in this time period can be unblocked by a procedure called using the menu item "Daily Procedures → Document Processing Step by Step → Clear Old Pendings".

Funds blocked resulting from the execution of offline transactions (for smart cards) can be unblocked by a procedure called using the menu item "EMV Smart Cards → Documents → Clear Old Offline Pendings".

The date of unblocking funds is calculated at the time of authorisation (and registered in the credit_history table). If the value of this global parameter is changed, the new value will be considered when making new authorisations. The changed value will not affect the dates of unblocking funds for authorisations made earlier. I.e. for authorisations made earlier, funds will be unblocked according to the unblocking date calculated at the time of authorisation.

This global parameter can be redefined:

- On the transaction sub-type level.
- On the Service level.

FROM_SEC_TRANS_DATE

The global parameter regulates generation of entries for secondary documents posted using Services with the FROM_TRANS_DATE marker.

When the value is "Y" (default value), entries for a secondary document will be generated with their own transaction date (secondary document's SEC_TRANS_DATE field).

When the value is "N", entries for a secondary document will be generated with the same transaction date as that of the original document – the date specified in the secondary document's *Trans Date* (TRANS_DATE) field. In this case, SEC_TRANS_DATE is not used for a secondary document.

HOLD_REVERSAL

The global parameter HOLD_REVERSAL makes it possible to block amounts when accepting an authorisation reversal for a financial document posted earlier.

To do so, set the value of the global parameter HOLD_REVERSAL to "Y". In the *Service Details* field of Services for which funds must be blocked, set the "HOLD_REVERSAL;" tag. By default (if this setting is not made) the amount available will be changed (funds returned) after posting reversal financial documents.

LATE_PRESENTMENT

LATE_PRESENTMENT – A parameter determining the maximum allowed interval in calendar days from the transaction date to the document processing date. If the interval from the transaction date to the document processing date exceeds the parameter value, the financial document for this transaction will be declined during processing.

The parameter value is a positive whole integer; the default value is 180.

The parameter value can be redefined using the FORCE_TRANS_DATE; tag in the *Add Data* (add_info) field of the document. When this tag is set, if the interval between dates is greater than the value set by the LATE_PRESENTMENT parameter, the document will be processed.

MATCH_REVERS_INT

MATCH_REVERS_INT – A parameter determining the maximum interval in calendar days between the original transaction date and the reversal document posting date. The default value is 180.

If the number of days between the transaction date and the reversal document posting date exceeds the parameter value, the document is declined.

MULTI_AUTH_STRICT

If the value of the global parameter MULTI_AUTH_STRICT is "Y", documents with the "Hotel/Motel", "Airline" and "Vehicle Rental" SIC groups are not considered as transactions with several financial documents for one authorization, if a multiple clearing tag sent by an acquirer is not present in these documents. When the value is "Y", these documents are considered as regular transactions are processed according to the value of the global parameter AUTH_AMOUNT_DIFF_PCNT_RETAIL (see the section "AUTH_AMOUNT_DIFF_PCNT_RETAIL").

The default value of the MULTI_AUTH_STRICT parameter is "N". I.e. by default, these documents are processed according to the value of the AUTH_AMOUNT_DIFF_PCNT parameter (see the section "AUTH_AMOUNT_DIFF_PCNT").

MERGE_NOT_SENT_DOCS

MERGE_NOT_SENT_DOCS – determines the procedure for generating adjustment documents if an adjustment document has not yet been exported to the payment system.

- When the parameter value is "Y", when processing an adjustment document, two documents are generated in the system: a reversal document for the entire amount of the original transaction and a new document (presentment) for the adjusted amount. The reversal document will have the "FROM_ADJUSTMENT" value in the *Source Code* field (the *Source Code* field of the "All Docs" form corresponds to the *Msg Code* field in the "Source" section of the "Doc-General" form), the new presentment will be exported to the payment system.
- When the parameter value is "N" (default value), an adjustment document is generated for the adjustment amount. The original document and adjustment document are exported to the payment system.

ORDER_PCNT_RULE

ORDER_PCNT_RULE – This parameter determines the method for calculating the amount of a standing payment order transferring a specified percentage of an account balance. The document amount for such standing payment orders is determined by the value of the *Amount Percent* field.

Parameter values:

- Empty (NULL) – In this case, a document is generated for (100 - <value of the *Amount Percent* field>) % of an account balance; this is the default value.
- "I" – a document is generated for <value of the *Amount Percent* field>% of an account balance.

For example, if the *Amount Percent* field of a standing payment order contains "20", when the default value of the global parameter is set, a document will be generated for 80% of the account balance; when the "I" value is set, for 20% of the account balance.

 The amount for a "Downgrade To" or "Upgrade To" type payment order is calculated according to a different scheme:

- Empty (NULL) – in this case, the amount of funds on the account should be reduced to the value (100 - <contents of the *Amount Percent* field>)%. The document amount will be <contents of the *Amount Percent* field>% of the amount of funds on the account.
- "I" – in this case, the amount of funds on the account should be reduced to the value (<contents of the *Amount Percent* field>)%. The document amount will be (100 - <contents of the *Amount Percent* field>)% of the amount of funds on the account.

PAYMENT_TYPE_TAGS_TO_SO

The global parameter PAYMENT_TYPE_TAGS_TO_SO makes it possible for tags and their values set in the *Add Info* field of the "Payment on Account Types" form to be copied (inherited) to a document created by a payment order with the corresponding payment type. To do so, the tags, delimited by commas, must be specified as the value of this global parameter.

PATCH_REVERSAL_ACCOUNT

The PATCH_REVERSAL_ACCOUNT parameter is used to configure recording of the difference between the settlement amount of an original and secondary document (for example, of a reversal document). The parameter value is the code of the source contract account to which the difference between amounts will be transferred.

POSTING_DATE_DELAY

The global parameter POSTING_DATE_DELAY specifies the maximum allowed time interval between the posting date received from external sources and the current banking date. If the interval from the posting date to the current banking date exceeds the parameter value, the document for this transaction will be declined during processing. The parameter is not applied to internal system documents generated on the basis of Events, standing payment orders, non-transaction fees.

The parameter value is set in calendar days from 1 to 30. By default, the parameter is not set.

The global parameter POSTING_DATE_DELAY can be redefined using the FORCE_POSTING_DATE tag in the *Add Date* (add_info) field of the document. When the value of this tag is set to "Y", if the interval between dates is greater than the value set by the POSTING_DATE_DELAY parameter, the document will be processed.

PREAUTH_SAVING_PERIOD

PREAUTH_SAVING_PERIOD – determines the time interval in calendar days during which fund blocking in card accounts according to "PreAuth" authorization results is saved.

The value of the parameter is a positive integer, the default value is "30".

Funds blocked by authorizations for which financial documents were not posted in this period can be unblocked by the procedure called by the menu item "Daily Procedures → Document Processing Step by Step → Clear Old Pendings".

 Funds blocked as the result of offline transactions (for smart cards) can be unblocked by the procedure called by the menu item "EMV Smart Cards → Documents → Clear Old Offline Pendings".

The date for unblocking funds is calculated at the time of authorization (and is registered in the credit_history table). If the value of this global parameter changes, the new value will be used in new authorizations. The changed value will not affect dates for unblocking funds for authorizations made earlier. This means that for authorizations made earlier, funds will be unblocked according the date for unblocking that was calculated at the time of authorization.

This global parameter can be redefined in a transaction subtype or in a specific Service (see the section "Tags Used when Posting Documents" of the document "Documents").

ROUNDED_FEES

ROUNDED_FEES – A parameter used to indicate that the fee will be rounded to a unit of the fee currency.

Parameter values:

- Empty (NULL) – fees are not rounded when calculated; this is the default value.
- The value of a Service's *Fee Code* field – when a financial document is posted using the Service whose *Fee Code* field value is specified as the value of this parameter, the fee will be rounded during calculation. If necessary, rounding can be performed for several Services; their *Fee Code* field values separated by commas should be specified as the parameter value.

SAVE_ARN_FOR_CHANNEL

The global parameter SAVE_ARN_FOR_CHANNEL is used to configure the procedure for reposting a document for original transactions.

The *ARN* field of the reposted document is copied from the original document only when the following conditions are met:

- The document's *Source Channel* field contains a value for which the *Is On Us* marker in the "Message Channels" dictionary has the "Yes" or "Affiliated" value.
- The value of the document's *Source Channel* field is missing from the comma-delimited list of the global parameter "SAVE_ARN_FOR_CHANNEL" values.

In other cases, the *ARN* field of a reposted document remains empty.

SET_DEFAULT_ACCOUNT

SET_DEFAULT_ACCOUNT – A parameter affecting how contract relations behave during online operations. In the current version of WAY4, online operations, including those with account selection, are only supported for bank cards registered in the system database.

Parameter values:

- "Y" (Yes) – If a contract with a corresponding relation type is not found for the card or device contract when processing an online operation, the original card or device contract will be used to process the transaction. This is the default value.
- "N" (No) – If a contract with a corresponding relation type is not found for the card or device contract when processing an online operation, the transaction will be declined.
- "F" (Foreign) – If when processing online operations on the device of another payment system member the system does not find a related contract for the card contract, the original card contract is used for processing the transaction; in similar conditions, if the operation has been executed on a device registered in the DB or belonging to an affiliated bank, the transaction will be declined.

SKIP_TRANSIT_MTR

This parameter with the "Y" value makes it possible to deactivate generation of transit macrotransactions. This parameter can be used to decrease the size of the database and optimise the operation of WAY4.

The SKIP_TRANSIT_MTR=Y; tag can be used to redefine this parameter for a financial institution.

 This parameter can only be used after approval of the WAY4 vendor.

TRANSIT_AUTH_FOR_CHANNELS

This parameter makes it possible to configure the necessity of searching for an authorisation document when a transit document is received on a certain channel (the certain channel of an affiliate bank). To do so, a comma-delimited list of channels is specified as the parameter value. An error message is generated for all presentments going through the listed channels for which no authorisation document was found.

UNIQUE_SLIP_NUMBER

UNIQUE_SLIP_NUMBER – A parameter used to check the uniqueness of the combination of the # (Source Registration Number) and *Contract #* field values of documents where Request Category = "Advice".

Parameter values:

- "Y" (Yes) – In document approval, the parameter is used to check the uniqueness of this combination for the interval defined by the DOC_SAVING_PERIOD; parameter; if the document does not meet the uniqueness condition, it cannot be successfully processed. This is the default value.
- "N" (No) – No check is performed.

The use of this parameter assures that the original document is found for reversal operations and dispute cycle operations during the interval indicated by the DOC_SAVING_PERIOD parameter.

Chapter 3. Currency Conversion

AUTH_USE_DOMESTIC

AUTH_USE_DOMESTIC – A parameter affecting how the blocked amount is determined during authorization.

If this parameter is set to "Y" (Yes), the blocked amount is the transaction amount in the transaction currency if the transaction currency is the same as the FI's local currency.

If this parameter is set to "C", the blocked amount is the transaction amount in the transaction currency if the transaction currency is the same as the FI's local currency and the transaction country is the same as the FI's country.

If this parameter is set to "A" (All), the blocked amount is the transaction amount in the transaction currency if the transaction currency is the same as any of the currencies used in the FI.

If the value "N" is set (the default value), the blocked amount will be the transaction amount in the settlement currency with the appropriate currency conversion, even if the transaction currency is the same as the FI's local currency and the contract's currency.

Instead of this parameter, it is recommended to use configurations based on the CHANGE_CURRENCY global parameter and USE_TRANS_AMOUNT tag.

This parameter can be redefined on the financial institution level in the *Special Parms* field of the form with additional information about the financial institution (Full → Configuration Setup → Main Tables → Financial Institutions → [Details]), on the Product level in the *Custom Data* field of the "Full Info for <name of Product>" or on the Service Package level in the *Special Parms* field of the form with additional information about the Service Package (Full → Configuration Setup → Products → Service Packs → [Details]).

CHANGE_CURRENCY

CHANGE_CURRENCY – if this parameter is set, the mode for using the USE_TRANS_AMOUNT parameter is enabled, which determines the way for calculating the amount debited from "on-us" cards when posting a financial document imported from a payment system, and the amount of funds blocked when processing an authorisation request. If the CHANGE_CURRENCY parameter is set, WAY4 checks the value of the USE_TRANS_AMOUNT tag on the level of the financial institution, Service Package or Product.

The global parameter's value is the code of the type of account used to record the difference between the Transaction Amount and Settlement Amount when these amounts are in the same currency.

The code of the account set as the CHANGE_CURRENCY value is used to search for the account only in the event of different Transaction Amount and Settlement Amount amounts in the same currency. When determining the debited/blocked amount in other situations, the value of the CHANGE_CURRENCY global parameter will be considered exclusively as enabling the mode for checking the USE_TRANS_AMOUNT tag.

For more information, see the section "Calculating the Debited Amount (USE_TRANS_AMOUNT tag)" of the document "Financial Institutions".

It is not recommended to set the value of the CHANGE_CURRENCY global parameter to "Y". This value remains for backward compatibility. If "Y" is specified, USE_TRANS_AMOUNT tag settings may be redefined (among other things, the tag's absence may be ignored). In particular, when USE_TRANS_AMOUNT=N and CHANGE_CURRENCY=Y, if the transaction currency matches the settlement currency, the value of the USE_TRANS_AMOUNT tag will be redefined to "Y" (i.e. entries are generated as for USE_TRANS_AMOUNT=Y;).

These settings do not work for secondary transactions. I.e., these settings do not influence, for example, calculation of the amounts of secondary financial documents in a dispute cycle (Chargeback, Representment).

FX_MARGIN_MODE

The global parameter FX_MARGIN_MODE is used to configure recording (withholding) of the FX margin. To enable the FX margin mode, set the parameter value to "Y".

FX_RATE_INVERSE

FX_RATE_INVERSE – A flag to invert rates. If this parameter is set to "N" (No, the default value) the conversion rate (Buy, Sell, Middle, CB Rate) is indicated in units of the local currency to units of the conversion currency. For example, if the local currency is Danish kroner, and the conversion currency is US dollars, then the middle rate may be indicated as 6.55 DKK/USD. If this parameter is set to "Y" (Yes), the conversion rates are indicated in units of the conversion currency to units of local currency. For example, if the local currency is Danish kroner and the conversion currency is US dollars, the middle rate may be indicated as 0.15 USD/DKK.

RESERVE_CALC_IN_LOCAL_CURRENCY

This parameter is used when calculating a reserve for currency accounts.

- When the parameter value is "Y", the account balance is converted into the local currency, after which the reserve is calculated.

- When the parameter value is "N" (or if the value is not set), first a reserve for the account is calculated in a foreign currency and then converted into the local currency.

The parameter works for both group and individual reserving. In group reserving, the client account balances in one currency are totalled and then the RESERVE_CALC_IN_LOCAL_CURRENCY parameter is applied.

USE_AUTH_FX

USE_AUTH_FX – A parameter that determines by the date for the FX rate used in conversion when processing the financial document. If this parameter is set to "Y" (Yes), conversion will take place when posting the financial document according to the rate on the authorization date. If this parameter is set to "N" (No, the default value) conversion will take place according to the rate on the posting date.

If the USE_AUTH_FX parameter is set to "P", the USE_AUTH_FX tag is analysed to determine an FX rate. If the tag is set to "Y", the FX rate on the authorisation document date is used. If the tag is set to "N" or not specified, the FX rate on the financial document date is used.

The USE_AUTH_FX tag can be set:

- On the Product level – in the *Custom Data* field of the "Full Info for <name of Product>" form.
- On the Service Package level – in the *Special Parms* field of the "Service Packs" form.
- On the financial institution level – in the *Special Parms* field of the "Details for <name of financial institution>" form.

On the financial institution level, the USE_AUTH_FX tag is checked regardless of the global parameter's value.

USE_BRANCH_FX_ACC

The global parameter USE_BRANCH_FX_ACC is used to specify special accounts for FX transaction calculations instead of "Trade Account" and "Reval Account" specified in the FX Scheme.

This functionality is used in the following way;

- The value of the global parameter USE_BRANCH_FX_ACC should be set to "Y".
- Create a bank contract "<bank contract number prefix>-FX" for the head financial institution.
- Create a bank contract "<bank contract number prefix>-FX_<branch code>" for the branch.

These bank contracts will be used when making conversion entries:

- If the "Branch" parameter value for a client contract corresponds to the aforementioned _<branch code>, the FX entry will be recorded on the bank contract "<bank contract number prefix>-FX_<branch code>".
- If the "Branch" parameter is not specified for a client contract, the FX entry will be recorded on the contract "<bank contract number prefix>-FX".
- If for a client contract a branch code is specified for which the bank contract "<bank contract number prefix>-FX_<branch code>" was not created, the entry will not be generated.

USE_CROSS_FX

USE_CROSS_FX – A flag to use the cross rate. This parameter determines how conversion will be made from one foreign currency to another. If this parameter is set to "Y" (Yes), conversion will be made directly between the conversion accounts of these currencies according to the cross rate calculated by the system across the rates of each foreign currency to the local currency. Conversion accounts in the local currency are not used.

If the parameter is set to "N" (No, the default value), the amount in the original foreign currency will be converted to the local currency, and the amount obtained will be converted into the second foreign currency.

Chapter 4. Posting of Macrotransactions

BALANCE_XF_CODE

BALANCE_XF_CODE – A parameter used along with the global parameter OFF_BALANCE_XF_CODE to separate the balance and off-balance accounting subsystems.

If it is necessary to transfer funds from the contract's balance account to the off-balance account of the same contract, the system will make two entries (see Fig. 3):

- From the original account to the balance account of the bank contract indicated as the interest contract in the original account's template.
- From the off-balance account of the abovementioned bank contract to the off-balance account of the original contract.

To execute these entries, it is necessary that: first, both accounts of the original contract refer to the same bank contract as the interest contract, and second, the accounts of the bank contract that will participate in the entries are indicated.

The bank contract's accounts that are required to execute these entries may be defined on the account template level of the original contract. If the bank contract's accounts are not indicated in the original contract's account templates, the system will use the values of the global parameters BALANCE_XF_CODE and OFF_BALANCE_XF_CODE to execute the entries.

The parameter BALANCE_XF_CODE is used to indicate the balance account of the bank contract (account XXX in Fig. 3). The parameter value is the account type code; the default value is empty (NULL).

The parameter OFF_BALANCE_XF_CODE is used to indicate the off-balance accounts of the bank contract (account YYY in Fig. 3). The parameter value is the account type code; the default value is empty (NULL).

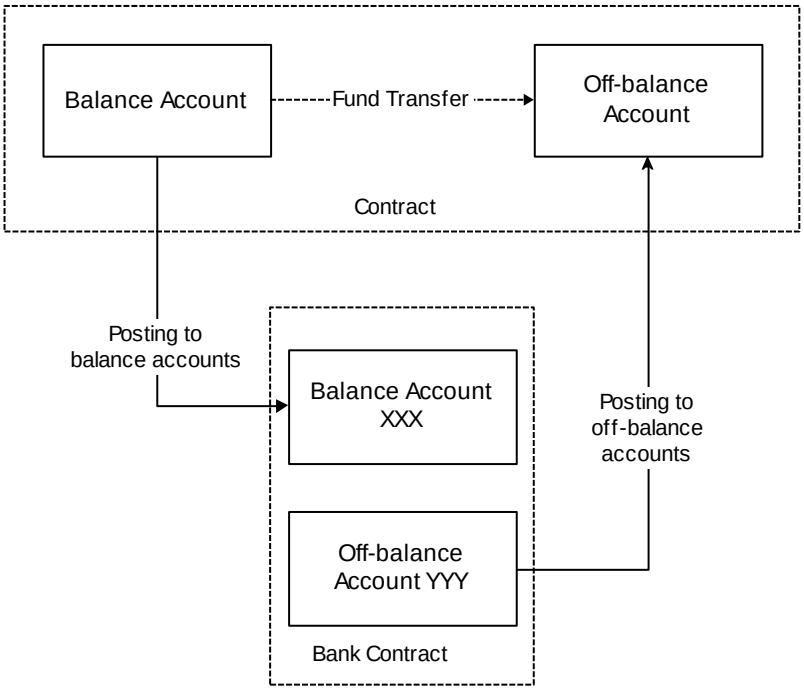

Fig. 3. Separation of balance and off-balance accounting systems

BASE_AMOUNT_FX_RATE_TYPE

The global parameter BASE_AMOUNT_FX_RATE_TYPE is used to support conversion of the fees Fee Base, Fee Min and Fee Max at the rate set in the *FX Rate Type* field of the contract's Service. To do so, the global parameter BASE_AMOUNT_FX_RATE_TYPE must be assigned the "SERVICE" value.

The global parameter's default value is "M". Conversion is made at the Middle rate.

The parameter can be set (redefined) in the Service using the tag of the same name.

BRANCH_DELAY_ACC

BRANCH_DELAY_ACC – A parameter used in time zone mode (see USE_TIME_ZONE).

The parameter’s value is a letter that represents the code of a transit account type belonging to the FI’s (branch’s) routing contract. These transit accounts are used in asset-liability account pairs and used in posting documents to "delay" funds in order to standardize the bank date of FIs located in different time zones.

CB_TERRITORY_ADDR

CB_TERRITORY_ADDR – A parameter used to determine the geographical location of contracts when gathering statistics.

The parameter value is the Address Type used for determining the location of contracts when it is necessary to gather statistical data by location.

CB_TERRITORY_ADDR_TAG

CB_TERRITORY_ADDR_TAG – this parameter is used to specify the territory to which contracts belong when collecting statistics (for more information, see the document "WAY4™Statistical Report Data Preparation"). Used together with the CB_TERRITORY_ADDR parameter. The value of the CB_TERRITORY_ADDR_TAG is a variable that delivers data from a specific field of the contract address table (the address type is set by the parameter CB_TERRITORY_ADDR). For more information on variables, see the document "Configuration of Client Messages".

Beginning with version 03.34.30, the value of the CB_TERRITORY_ADDR_TAG is set by default to SUBSTR(%ADDR_MUNICIPALITY_CODE%,1,2).

This means that data for grouping will be taken from the first two places of the MUNICIPALITY_CODE field of the additional address record registered for a contract or client (from the CLIENT_ADDRESS table) with the address type set using the CB_TERRITORY_ADDR parameter.

 In earlier versions, the default value of this parameter was %ADDR_ZIP%, meaning data was grouped by the values of the ADDRESS_ZIP field of the additional address record registered for a contract or client with the address type set using the CB_TERRITORY_ADDR parameter.

CORP_STAT_CONF

The global parameter CORP_STAT_CONF determines which *Service Class* values must be present in the macrotransaction to apply the conditions in the statistics scheme to statistics gathering.

The parameter value is the *Service Class* code with the addition of the symbol ";". For example, CORP_STAT_CONF = T; or CORP_STAT_CONF = T;M;.

DIRECT_OVL_NORMALIZATION

DIRECT_OVL_NORMALIZATION – determines what GL entries are generated during amount normalisation if a deposit account has a negative balance and a zero credit limit.

Parameter values:

- "N" (No) – normalisation is performed in two steps: first, funds are transferred to the loan account and then to the overdraft account (OVL). This is the default value.
- "Y" (Yes) – normalisation is performed in one step: funds are transferred directly to the overdraft account.
- "S" – this value is used if there are several sets of current, loan and overdraft accounts (e.g. when accounting for retail and cash withdrawal transactions must be done separately); normalisation is performed in two steps, as for the "N" value, but the priority of loan accounts is not considered.

DM_ID_CACHE_LEN

DM_RECORD_ID field cache size.

The default value is 20.

It is recommended to increase the value of the parameter (for example, to set 1000) if blockings occur for the NUM_SEQ_RANGE table when a large volume of data is inserted into the DM_RECORD table.

DOC_STAT_BY_GL_DATE

DOC_STAT_BY_GL_DATE – A parameter affecting how statistics are gathered on macrotransactions (financial documents).

Parameter values:

- "N" (No) – Statistics gathering takes place on the posting date; this is the default value.
- "Y" (Yes) – Statistics gathering takes place on the local date; that is, the date on which the macrotransaction is recorded in the General Ledger.

DOC_STAT_BY_RELATED

DOC_STAT_BY_RELATED – A parameter affecting how statistics are gathered for financial documents on additional online operations, for example, mobile phone service payments, pre-paid services, etc. at ATMs.

Parameter values:

- "Y" (Yes) – Statistics are gathered on related contracts (ATM Retail). This is the default value.
- "N" (No) – Statistics are gathered on contracts of the ATMs at which the operation was executed, and not on related contracts (ATM Retail).

DUE_FOR_SKIP_DUE

The DUE_FOR_SKIP_DUE parameter is used to set up rules for working with an Event (a hardcoded DUE_FOR_<account type code> Event), if funds are not transferred to the next delinquency account according to the configuration of the MIN_DUE/MIN_TOTAL_DUE parameters (see the section "Reclassifying Delinquency" of the document "WAY4™ Advanced Tariff Management").

If a hardcoded DUE_FOR_<account type code> Event must not be opened, set the value of the global parameter to "N".

If a different Event must be opened, set the prefix of the corresponding Event type code (instead of the DUE_FOR_ prefix) as the value of the DUE_FOR_SKIP_FOR global parameter. When normalization for an account is reversed, a search is made for the Event type with the code <specified prefix><code of the account type for which due normalization is reversed>.

DUE_FOR_WAIVED_PD

The DUE_FOR_WAIVED_PD parameter is used to set up rules for working with an Event (a hardcoded DUE_FOR_<account type code> Event) if correction of the delinquency level (return to the previous delinquency level) is not performed according to the configuration of the WAIVED_PD and WAIVED_PD_MODE parameters (see the section "Reclassifying Delinquency" of the document "WAY4™ Advanced Tariff Management").

If a hardcoded DUE_FOR_<account type code> Event must not be opened, set the value of the global parameter to "N".

If a different Event must be opened, set the prefix of the corresponding Event type code (instead of the DUE_FOR_ prefix) as the value of the global parameter DUE_FOR_WAIVED_PD. When normalization for an account is reversed, a search is made for the Event type with the code <specified prefix><code of the account type for which due normalization is reversed>.

DUE_TO_WRK_DAY

DUE_TO_WRK_DAY – A parameter affecting how due normalization macrotransactions are posted to accounts. The parameter's main use is to shift the normalization date to a working day if the normalization due date falls on a weekend or holiday.

The global parameter DUE_TO_WRK_DAY works together with the PAYMENT_DUE_ADVANCE global parameter. For information about how various combinations of these parameter values affect the shift in the normalization date, see the description of DUE_TO_WRK_DAY parameter values and Fig. 7 and Fig. 8 in the section "PAYMENT_DUE_ADVANCE".

Parameter values:

- "Y" (Yes) – When generating due normalization macrotransactions, if the posting date falls on a weekend or a holiday, the posting date and local date are determined as follows:
  - When the value of the global parameter PAYMENT_DUE_ADVANCE is "Y" – the date of the next working day (for example, Monday, if the normalization due date falls on a Saturday).
  - When the value of the global parameter PAYMENT_DUE_ADVANCE is "N" – if the normalization due date falls on a Saturday, Sunday, or Monday, the normalization date will be shifted to Tuesday.

    If the due date falls on a Monday, the normalization date is shifted from Monday to Tuesday (when DUE_TO_WRK_DAY="Y" and PAYMENT_DUE_ADVANCE="N") because Monday is often opened on Friday and in this case, normalization when opening Monday will not meet conditions set with these parameters.

  For more information, see Fig. 7 and Fig. 8 in the section "PAYMENT_DUE_ADVANCE".

If the "Contract Due" value is set in the *Due Type* field of the account template, the value of the DUE_TO_WRK_DAY parameter is always interpreted as "Y" (regardless of the global parameter's settings) and can only be redefined on the date scheme level (see the document "Contract Functional Dates").

- "N" (No) – when generating a due normalization macrotransaction, if the posting date falls on a weekend or holiday, the posting date and local date are determined as follows:
  - When PAYMENT_DUE_ADVANCE="Y" – the date of the last working day before the weekend/holiday (if the normalization due date falls on a Saturday, for example, normalization is performed when closing Friday).
  - When PAYMENT_DUE_ADVANCE="N" – the macrotransaction date is set regardless of weekends and holidays. For example, if the normalization due date falls on a Saturday, the macrotransaction will be posted when Monday is opened, but Saturday will be specified as the Posting Date and Monday as the GL date.

    This is the default value of the parameter.

  For more information, see Fig. 7 and Fig. 8 in the section "PAYMENT_DUE_ADVANCE".

The global parameter DUE_TO_WRK_DAY="N" together with the global parameter PAYMENT_DUE_ADVANCE="Y" affects how due normalization macrotransactions are posted on working days. Normalization is performed when closing the day that precedes the normalization due date (for example, when Due Date falls on a Wednesday, normalization will be performed when closing Tuesday. For more information, see the section "PAYMENT_DUE_ADVANCE".

The global parameter DUE_TO_WRK_DAY can be redefined using the *Due To Work Day* parameter in an account template.

The global parameter DUE_TO_WRK_DAY affects calculation of an Event's End Date. For more information, see the section "Closing Events" of the document "Events".

FULL_TRANS_CODES

FULL_TRANS_CODES – when the value is "Y", the parameter makes it possible to generate transaction codes (the *GL Trans Code* field of the "GL Entries – Full Info" form (until 03.35.30, the "GL Transfer – All" form)) without truncating each of the three transaction code components to two characters. The default value is "N" (by default, transaction code components are truncated to two characters).

FX_MARGIN_CURRENT_RATE

FX_MARGIN_CURRENT_RATE – determines the date on which rates are taken for calculating the FX rate difference (Local Date or Posting Date). The

parameter is used to configure calculation of the FX rate difference when reversing a transaction or posting a macrotransaction on a closed banking day during execution of internal system processes (for example, when accruing interest).

Parameter values:

- By default (if the parameter is not set or is set to "N"), rates for calculating the FX rate difference are taken on the macrotransaction's Posting Date. If a macrotransaction is reversed, rates will be calculated on the Posting Date of the original (being reversed) macrotransaction.
- When the value is "Y", the FX rate difference will be calculated based on the current rates of the country's Central Bank. If a macrotransaction is reversed, the FX rate difference will be calculated according to the rates on the current banking date (on the Local Date of the reversal macrotransaction) and not at rates on the Posting Date of the reversal macrotransaction.

For more information, see the section "Dates in Entries" of the document "WAY4 Accounting" and the section "Configuring the FX Rate Difference" of the document "Currency Conversion".

HEADOFFICE_DELAY_ACC

HEADOFFICE_DELAY_ACC – A parameter used in time zone mode (see USE_TIME_ZONE).

This parameter’s value is a letter that represents the code of a transit account type belonging to the FI’s (head office’s) routing contract. These transit accounts are used in asset-liability account pairs and used in posting documents to "delay" funds in order to coordinate the bank dates of FIs located in different time zones.

INTERBRANCH_XF_CODE

INTERBRANCH_XF_CODE – A parameter defining the FI’s dispute contract account used for posting that becomes necessary after transferring a contract from one FI to another for transferring balances to client balance accounts.

To transfer a contract from one FI to another, the dispute contracts of both FIs must contain accounts with the code defined by this parameter.

The parameter value is the code of the dispute contract’s account; the default value is NULL.

INTERBRANCH_XF_CODE_OFFB

INTERBRANCH_XF_CODE_OFFB – A parameter determining a financial institution's dispute contract account used for generating entries required after transferring a contract from one financial institution to another, for transferring balances to client off-balance accounts.

To transfer a contract from one financial institution to another, the dispute contracts of both financial institutions must contain accounts with the code defined by this parameter.

The parameter value is the code of the dispute contract account; the default value is NULL.

INTEREST_DELAY

INTEREST_DELAY – This parameter specifies the date from which interest is accrued and the date to which interest is accrued, and consequently, the posting date of interest accrual macrotransactions. This parameter also affects the date of posting due normalisation macrotransactions at the end of a billing cycle.

Parameter values:

- "N" (No) – Interest is accrued from the day the account is replenished until the day before the day before the day funds are withdrawn from the account, inclusively; this is the default value.

  For example, 100 US dollars entered the account on the 5th, and 100 US dollars were withdrawn from the account on the 15th of that month, interest will be accrued for the funds held in the account from the 5th until the 14th day of the month.

  When the parameter is set to this value and funds are transferred to an account during one billing cycle and withdrawn from the account during another billing cycle, then interest is accrued up to the last day of a billing cycle (inclusively) when the billing cycle is closed and the processing date of the interest accrual macrotransaction is set to the first day of the next billing cycle. For example, when a billing cycle lasts 1 month (from the 1st to the 31st) and INTEREST_DELAY="N", the macrotransaction posting date will be the 1st day of the new billing cycle.

  For due normalisation macrotransactions, the macrotransaction posting date will be the 1st day of the new billing cycle.

- "Y" (Yes) – Interest is accrued from the day after the day the account is replenished until the day funds are withdrawn from the account inclusively;

  For example, if on the 5th 100 US dollars entered the account, and 100 US dollars were withdrawn from the account on the 15th of that month, interest will be accrued for the funds contained in the account from the 6th until the 15th day of the month.

  When the parameter is set to this value and funds are transferred to an account during one billing cycle and withdrawn from the account during another billing cycle, then interest is accrued up to the last day of a billing cycle (inclusively) and the interest accrual macrotransaction is posted on the last day of the closing billing cycle. For example, when a billing cycle lasts 1 month (from the 1st to the 31st) and INTEREST_DELAY="Y", the macrotransaction posting date will be the 31st day of the closing billing cycle.

  For due normalisation macrotransactions, the macrotransaction posting date will be the last day of the closing billing cycle.

The global parameter can be redefined using the same tag in a financial institution.

When the global parameter INTEREST_DELAY with the "Y" value is used together with the USE_DATE_OPEN tag (the tag is specified in the *Special Parms* field of the Account Scheme) interest on the account for the first billing cycle is accrued beginning from the day after the contract was opened.

INTEREST_IN_CYCLE

INTEREST_IN_CYCLE – A parameter determining in which billing cycle the macrotransaction for interest accrual will be reflected in the General Ledger and in a statement of the contract's accounts.

Parameter values:

- "Y" (Yes) – Interest for the billing cycle is accrued on the last day of the closing billing cycle, that is, the local date (i.e. the date when accounting entries are reflected in the General Ledger) is the last day of the closing billing cycle. Interest accrual will be reflected in the statement for the closing billing cycle.
- "P" – Interest for the billing cycle is accrued on the last working date of the closing billing cycle, that is, the local date (i.e. the date when accounting entries are reflected in the General Ledger) is the last working day of the closing billing cycle. Interest accrual will be reflected in the statement for the closing billing cycle.
- "N" (No) – Interest for the billing cycle is accrued on the first working day of the opening billing cycle, that is, the local date (i.e. the date when accounting entries are reflected in the General Ledger) is the first working day of the opening billing cycle. Interest accrual will be reflected in the statement for the opening billing cycle. This is the default value.
- "B" – interest for a billing cycle is accrued on the first working day of the opening billing cycle, i.e. the date the entries are recorded in the General Ledger (Local Date) is the first working day of the opening billing cycle. Interest will be shown in a statement for the closing billing cycle.
- "D" – interest for a billing cycle is accrued on the first day of the opening billing cycle. Interest accrual will be shown in the statement for the closing billing cycle.

The parameter INTEREST_IN_CYCLE can be redefined on the Accounting Scheme level using the INT_IN_CYCLE tag.

The EOM_INT_MODE tag redefines the global parameter INTEREST_IN_CYCLE (or the INT_IN_CYCLE tag set in the Accounting Scheme) with regard to determining the GL date of macrotransactions for accruing interest at the end of the month (see the section "EOM_INT_MODE" of the document "Interest Accrual", section "Special Parms" of the document "WAY4™ Accounting Schemes" document).

MULTICURRENCY_NORMALIZATION

MULTICURRENCY_NORMALIZATION – This parameter specifies how multicurrency normalization is performed.

- When this parameter is set to "N" (No), limit normalization will occur only using the accounts indicated in the normalization configuration. Contract accounts of the same type registered in other currencies will not be used in normalization.
- If this parameter is set to "Y" (Yes; the default value), normalization is executed by indirect multicurrency normalization. In this case, limit normalization for any account will also affect other contract accounts of the same type registered in other currencies. For example, if there are not enough funds on the deposit account registered in the local currency to repay a loan, additional funds for repayment may be taken from a deposit account registered in a foreign currency. During multicurrency normalization, currency may be converted either at a basic FX rate or at the rate of an additional FX type indicated in the Accounting Scheme.

The global parameter MULTICURRENCY_NORMALIZATION can be redefined in an Accounting Scheme's *Special Norm* field (see the section "Special Norm" of the document "Accounting Schemes").

When there are normalizing standing payment orders, these payment orders are used for multicurrency normalisation regardless of the value of the global parameter MULTICURRENCY_NORMALIZATION. In this type of multicurrency normalization, currency may be converted either at the main rate or at an additional FX type rate specified in the accounting scheme. For more information, see the section "Multicurrency Normalisation" of the document "Standing Payment Orders".

NEW_INTERBRANCH_ROUTING

Starting from version 03.36.30, new Interbranch routing standards are available in WAY4. These allow Interbranch entries to be posted in the head financial institution's bank contract accounts.

The global parameter NEW_INTERBRANCH_ROUTING with the "Y" value enables the new Interbranch routing mode. By default, the parameter value is "N" (by default, the new Interbranch routing mode is not enabled).

Special settings should be preconfigured in WAY4 (see the section "Settings for Migrating to New Interbranch Routing Standards (Starting from Version 03.36.30)" in the document "Financial Institutions").

The global parameter NEW_INTERBRANCH_ROUTING specifies the mode for generating transit entries. When Accounting Schemes, bank contracts and the "Interbranch Routing" table are configured according to new routing standards, the new routing settings become effective immediately for documents whose "Source" or "Target" contract is in the head office.

OFF_BALANCE_XF_CODE

OFF_BALANCE_XF_CODE – A parameter used together with global parameter BALANCE_XF_CODE to separate the balance and off-balance accounting subsystems.

To use this parameter, see the description of the parameter BALANCE_XF_CODE.

ONLINE_NORMALIZATION

ONLINE_NORMALIZATION – A parameter determining whether limit normalization will take place during posting.

Parameter values:

- "Y" (Yes) – Accounts used to create the macrotransaction will be normalized during posting; this is the default value.
- "N" (No) – Accounts will be normalized when a special user menu item (Full → DB Administrator Utilities → Special Contract Utilities → Limit Normalization) is selected or when the contract and Accounting Scheme are approved.

PATCH_REVERSE_INTEREST

PATCH_REVERSE_INTEREST – A parameter used when reversing an operation in the event that limit normalisation or due normalisation was performed in the period from the creation of the original operation to its reversal.

When reversing a financial operation, if limit normalisation or due normalisation was not performed in the period from the creation of the original operation to its reversal, the posting date for the reversed document is the same as the posting date of the original document with the recalculation of accrued interest.

If limit normalisation or due normalisation took place in the period from the creation of the original operation to its reversal, the system generates a warning and the posting date for the reversed document is the value of the parameter PATCH_REVERSE_INTEREST.

Parameter values:

- "N" – the posting date of the reversed document is the same as the original document's posting date.
- "Y" (Yes) – The posting date of the reversed document will be the posting date of the original document, if during the period from the time the original transaction was registered to its reversal limit normalisation or due normalisation was not performed. If normalisation was performed, the posting date of the reversal document is the same as the current banking date.
- "0" – The posting date of the reversed document will be the current banking date, this is the default value.

When this value is specified, interest is accrued for accounts during the period from the original document's posting date to the reversed document's posting date. Use the Reversal Management module to recalculated accrued interest. See the document "Reversal Management Limited" (module basic functionality) or the document "Reversal Management (full version of the module.

The full version of the Reversal Management module is provided according to an additional agreement with the WAY4 vendor.

- "C" – The posting date of the reversed document will be determined using a custom procedure.

PERS_FEE_CODES

The global parameter PERS_FEE_CODES makes it possible to specify the account to which a fee will be transferred (Fee Account) within a client contract (usually a fee is transferred to the account of the bank contract specified in Service parameters). The value of the global parameter PERS_FEE_CODES is a comma-delimited list of Fee Codes for which this operation will be executed.

When processing a macrotransaction with Services of the specified type, the client contract is searched for an account with the same code as the bank contract account specified in the Service.

When this account is missing from the contract, an error message is displayed and the fee is transferred to the corresponding bank contract account.

POST_DUE

POST_DUE – A parameter affecting how pending macrotransactions for due normalization (on the local date, i.e. the date the macrotransaction is reflected in the General Ledger) of accounts with the normalization type "End Cycle Due" and "Quarter" are posted at the opening of a new billing cycle.

Parameter values:

- "Y" (Yes) – Macrotransactions with a posting date that equals the opening date of the new billing cycle will be reflected in the General Ledger on the closing day of the previous billing cycle: the local date (GL date) of the macrotransactions will correspond to the closing date of the previous billing cycle, that is, these macrotransactions will affect the outgoing balance of the closing billing period and the incoming balance of the opening billing period. This is the default value.
- "P" – Macrotransactions with a posting date that equals the opening date of the new billing cycle will be reflected in the General Ledger on the last business day of the previous billing cycle: the local date (GL date) of the macrotransactions will correspond to the last business day of the previous billing cycle.
- "N" (No) – Macrotransactions with a posting date that equals the opening date of the new billing cycle will be reflected on the first day of the new billing

cycle and will not affect the balance of the closing billing cycle: the local date (GL Date) of the macrotransactions will correspond to the first day of the new billing cycle.

- "D" – Macrotransactions with a posting date that corresponds to the opening date of a new billing cycle will be reflected on the first day of the new billing cycle, even if this day falls on a non-business day: the local date (GL Date) of the macrotransactions will correspond to the first day of the new billing cycle.

POST_REVERSED_MTR

POST_REVERSED_MTR – determines how macrotransactions are processed if an adjustment is received when there are macrotransactions that have not yet been processed.

Parameter values:

- "N" (No) – macrotransactions for the original and adjustment documents are not processed.
- "Y" (Yes) – macrotransactions for the original and adjustment documents are processed, and GL traces are generated; this is the default value. During processing of the original macrotransaction, limit normalisation is not performed.
- "L" – macrotransactions for the original and adjustment documents are processed, and GL traces are generated. During processing of the original macrotransaction, limit normalisation is performed and then reversed (the corresponding secondary macrotransactions are generated).

SHIFT_DATE_FROM_TO_WRK_DAY

The parameter SHIFT_DATE_FROM_TO_WRK_DAY makes it possible when defining a normalization period to shift the start date of this period to a work day if the original date falls on a non-working day. The parameter value:

- "Y" – enables the mode for shifting a normalization period start date to a working day. This mode can be redefined on the account template level using the SHIFT_DATE_FROM_TO_WRK_DAY tag with the "N" value (disables date shifting in a certain template).
- "N" – a normalization period start date will not be shifted to a working day (default value). Settings in an account template with the SHIFT_DATE_FROM_TO_WRK_DAY ("Y", "N") tag are ignored.
- "C" – the normalization period start date is calculated based on the account template. If the tag SHIFT_DATE_FROM_TO_WRK_DAY ("Y", "N") is set in the template, these settings are used when calculating the normalization period. If the tag is not set in the template, default system behaviour is supported.

If contract functional dates are used (see the document "Contract Functional Dates"), this global parameter is used in calculating the date if the *Shift Base Date* field in date calculation rules is not filled in and the *Base Date* date falls on a weekend/holiday. In this case, when the value of the global parameter is "N", there is no shift. When the value is "Y", the date is shifted to the first working day after the weekend/holiday. If contract functional dates are used, the global parameter can be defined for a tariff by using the tag SHIFT_DATE_FROM_TO_WRK_DAY ("Y","N", "P", "+","-").

SHIFT_MTR_GL_DATE

The SHIFT_MTR_GL_DATE parameter allows shifting the date of posting a macrotransaction (entries within the macrotransaction) to GL accounts (Local Date) to a working day if this date falls on a non-working day according to the results of applying other system settings affecting Local Date (for example, INTEREST_IN_CYCLE, POST_DUE).

Parameter values:

- When the "+" value is set, the GL Date is shifted to the first working (banking) day after the non-working days.
- When the "-" value is set, the GL Date is shifted to the last working date before the non-working days.

For example, for interest accrual entries, the parameter SHIFT_MTR_GL_DATE is checked if the value of the INTEREST_IN_CYCLE is "Y" and the Local Date of the entry fell on a non-working day. If the value of the INTEREST_IN_CYCLE is "N", the SHIFT_MTR_GL_DATE parameter is not checked.

This global parameter can be redefined on the Standing Order level using the tag of the same name. See the section "Tags in the Posting Details Field of a Standing Payment Order" in the "Standing Payment Orders" document.

SPC_NORM_CODES

SPC_NORM_CODES – A parameter defining how codes for limit normalization macrotransactions or ageing macrotransactions are formed.

Parameter values:

- "N" (No) – Limit normalization macrotransaction codes are created in the following format: <letter value indicating a Service class ID><code of normalized account>; this is the default value.
- "Y" (Yes) – Limit normalization macrotransaction codes are created in the following format: <letter value indicating a Service class ID><code of normalized account><code of account used for normalization>.
- "F" – ageing macrotransaction codes are created in the following format <letter value indicating a Service class ID><code of normalized account><code of account used for normalization>.

STORNO_TYPE

STORNO_TYPE – A parameter defining to which accounts posting will occur during a reversal operation on the accounts of an asset-liability pair.

Parameter values:

- "Y" (Yes) – Reversal operations on the account of an asset-liability pair will be posted to the same accounts as the original operation, that is, the system will reverse the entry; this is the default value.
- "N" (No) – Reversal operations on the account of an asset-liability pair will always be posted to the pairs of the accounts used in the original operation.
- "B" (Billing) – Operations reversing the current billing cycle's operations, excluding those executed on the first day of the billing cycle, will be posted to the same accounts as the original operation; that is, entries for the original operations will be reversed; reversals for operations executed during previous billing cycles and on the first day of the current billing cycle will be posted to the pairs of the accounts used in the original operation.
- "D" (Day) – Operations used to reverse operations executed on the current banking date (or a later date) will be posted to the same accounts used in the original operation; that is, entries for the original operations will be reversed; reversals for operations executed on previous days will be posted to the pairs of the accounts used in the original operation.

The global parameter can be redefined using the STORNO_TYPE tag in the account template.

SUSPEND_NEGATIVE_INTEREST

The "Y" value of the SUSPEND_NEGATIVE_INTEREST parameter makes it possible to not pay negative interest from the deposit account (if a negative balance arises in the deposit account), and positive interest from the loan account (if a positive balance arises on the loan account).

Payment of interest is deferred to the next billing cycle.

SYNC_ENTRY_GL_TRANS_CODE

The global parameter SYNC_ENTRY_GL_TRANS_CODE with the "Y" value enables the mode to synchronise a code for an entry in the ENTRY table (trans_code field) with the code for an entry in the GL_TRACE table (gl_trans_code field). I.e. in this mode, the code for an entry from the GL_TRACE table is inherited to the ENTRY table.

This mode can be enabled when the CUST_TRANS_CODE procedure is used. The procedure makes it possible to generate entry codes according to custom rules. For more information, see the section "Entry Codes" of the document "WAY4™ Accounting".

USE_MONTH_WEIGHT

USE_MONTH_WEIGHT – A parameter affecting the interest accrual algorithm when the value of the global constant *Days in Year* = "360" ("Full → Configuration Setup → Main Tables → Global Constants") or the same value is set for the *Interest Scheme* field in the "Financial Institution" form ("Full → Configuration Setup → Main Tables → Financial Institution") for the financial institution.

Parameter values:

- "Y" (Yes) – For purposes of interest accrual, every month is counted as having the same value, that is, 1/12 of a year. For example, one day in February will accrue more interest than one day in January. This is the default value.
- "N" (No) – For purposes of interest accrual, months are counted as having different values relative to the number of days in the month. For example, one day in February will accrue the same amount of interest as one day in January.
- "B" – when accruing interest for a billing cycle that does not correspond to a calendar month, each billing cycle is considered to have a different weight according to the number of days in the cycle.

  "B" can be set in an account template, Accounting Scheme or financial institution by using the USE_MONTH_WEIGHT=B; tag.

For more information, see the section "Determining a Daily Interest Rate" of the document "Interest Accrual".

USE_TIME_ZONE

USE_TIME_ZONE – this parameter is used to enable the mode for working with documents and contracts separately by financial institutions with regard for the time zone they are located in.

Parameter values:

- "Y" (Yes) – Time zone mode is active.
- "N" (No) – Time zone mode is inactive; this is the default parameter.

See the document "Time Zones".

 A separate agreement with the WAY4 vendor is required to use time zone mode.

Chapter 5. Procedure for Closing the Banking Day

CAN_RESET_NEW_DATE

The CAN_RESET_NEW_DATE parameter allows/denies the possibility to edit the banking date when opening a banking day:

- If this parameter has the value of "N", the date field in the "Set New Banking Date" form cannot be edited.
- If this parameter has the value of "Y" (the default value), the banking date is entered as usual (the date field in the "Set New Banking Date" form can be edited.)

CONTRACT_READY_RULE

This parameter defines when a fatal error will occur during "Contracts – Daily Update" procedures for unapproved contracts (the *Approval* field contains the "Not Ready" value).

Parameter values:

- "N" – when this value is used:
  - If "Contracts – Daily Update" procedures are performed on the day of closing a billing cycle, the fatal error "Unable to close billing for <>" will occur.
  - If "Contracts – Daily Update" procedures are performed in the middle of a billing cycle, the error "Contract <> is not approved. CDU skipped" will occur.
- "R" – when this value is used:
  - When "Contracts – Daily Update" procedures are performed on the day of closing a billing cycle, the fatal error "Unable to close billing for <>" will only occur if the contract has changed its Accounting Scheme, Service Package or contract currency. If another field changes, the error "Contract <> is not approved. CDU skipped" occurs.
  - If "Contracts – Daily Update" procedures are performed in the middle of a billing cycle, the error "Contract <> is not approved. CDU skipped" will occur in all aforementioned cases.
- "Y" – the error "Contract <> is not approved. CDU skipped" will occur> I.e. a fatal error will not occur.

Error records are available in the process log.

DIRECT_REPLEN_TO_INT_REVENUE

DIRECT_REPLEN_TO_INT_REVENUE – A parameter defining how loan interest accrual is posted upon repayment. Loan interest accrual upon repayment is activated when the *Calc Int Mode* parameter in the account template is set to "Yes".

Parameter values:

- "N" (No) – This is the default value; if it is set, the following entries for a simple credit scheme will be created for accrued loan interest when the loan is repaid (see Fig. 4):
  - Accrued interest from the start of the current billing cycle will be transferred to the loan interest accrual account ("Loan Int Accrual") from the client loan interest account ("Cl Loan Int").
  - The loan on the client loan account ("Cl Loan") will be repaid from the client deposit account ("Cl Deposit").
  - The loan interest on the client loan interest account ("Cl Loan Int") will be repaid from the client deposit account ("Cl Deposit").
  - Funds from the loan interest accrual account ("Loan Int Accrual") will be posted to the loan interest revenue account ("Loan Int Revenue") equal to the amount of the repaid loan interest.

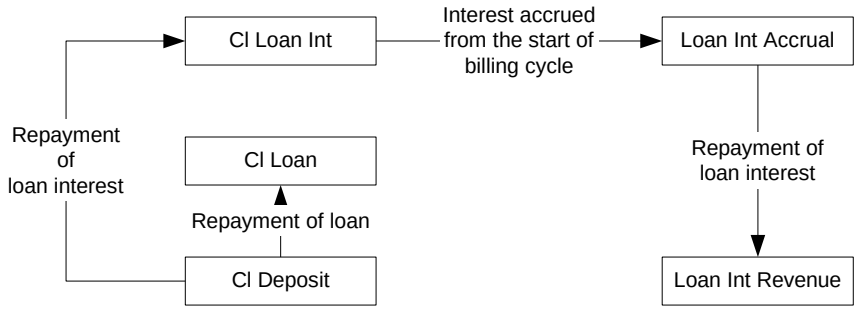

Fig. 4. Loan interest accrual scheme upon repayment when the value of the parameter DIRECT_REPLEN_TO_INT_REVENUE="No"

- "Y" (Yes) – If this value is set, loan interest accrual upon repayment will be posted depending on whether interest was accrued for previous billing cycles.
  - If interest for previous billing cycles was not accrued, the following entries will be made for a simple credit scheme (see Fig. 5).
    - Interest accrued from the beginning of the current billing period will be directly repaid from the client deposit account ("Cl Deposit") to the loan interest revenue account ("Loan Int Revenue").
    - The loan from the client loan account ("Cl Loan") will be repaid from the client deposit account ("Cl Deposit").

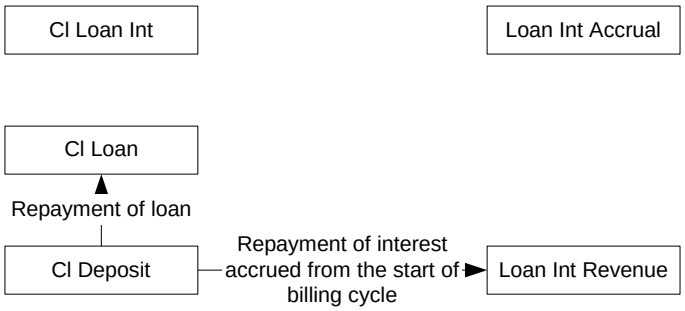

Fig. 5. Loan interest accrual scheme upon repayment when the value of the parameter DIRECT_REPLEN_TO_INT_REVENUE="Yes" and when no interest has been accrued for previous billing cycles

- If loan interest has already been accrued for previous billing cycles, the following entries will be made for a simple credit scheme (see Fig. 6):
  - Interest accrued from the beginning of the current billing cycle will be transferred from the client deposit account ("Cl Deposit") to the loan interest revenue account ("Loan Int Revenue").
  - Loan interest accrued on the client loan interest account ("Cl Loan Int") will be repaid from the client deposit account ("Cl Deposit") for previous billing cycles.
  - The loan on the client loan account ("Cl Loan") will be repaid from the client deposit account ("Cl Deposit").
  - Posting will be made to the loan interest revenue account ("Loan Int Revenue") from the loan interest accrual account ("Loan Int Accrual") for the amount of the repaid loan interest that had been accrued for previous billing cycles.

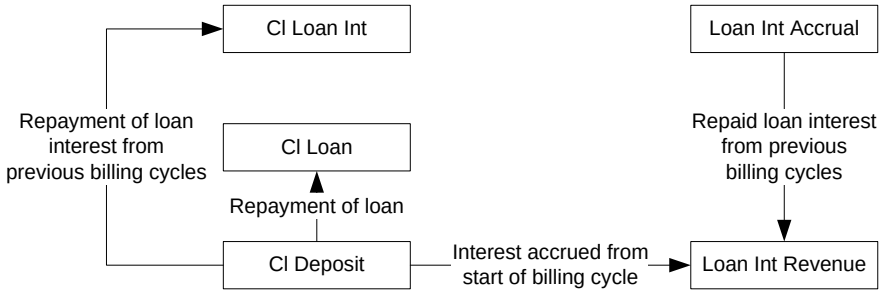

Fig. 6. Loan interest accrual scheme on repayment when the value of the parameter DIRECT_REPLEN_TO_INT_REVENUE="Yes" and loan interest has been accrued for previous billing cycles

FORCE_CDU

The global parameter FORCE_CDU with the "Y" value allows, when processing transactions, forced execution of the "Contracts – Daily Update" (CDU) procedure for contracts for which this procedure was not executed (for example, when CDU was executed in daily procedures, the contract had the "Not Ready" status).

If the value of the parameter is "N" (the default value), CDU will not be executed. During processing, a transaction is declined with the error "Contracts daily update not finished yet".

INTEREST_BY_CREDIT

INTEREST_BY_CREDIT – A parameter determining how loan interest will be accrued upon repayment.

Parameter values:

- "Y" (Yes) – Loan interest does not exceed the deposited amount.
- "N" (No) – Loan interest is accrued in full regardless of the deposited amount. This is the default value.

MAIN_SUB_RECOVERY

The parameter is used to regulate balances of Is Am Av = "Y" accounts of subordinate "Main/Sub" contracts.

The accounts of "Main/Sub" card subcontracts usually reflect card debit transactions; replenishment operations are normally posted using the main contract account and are not reflected in card accounts. As a result, a negative balance invariably accumulates in card accounts.

This global parameter is used to regulate the balances of such accounts.

When the parameter is set to "Y" (the default value), balances of Is Am Av = "Y" accounts of subcontracts are reset to zero when a billing cycle is closed. The system generates a special macrotransaction with the Service Class = "Due Norm" between accounts of the subcontract and the main contract. The macrotransaction does not generate GL traces between the contract accounts; only an entry for the subcontract account is registered.

When the parameter is set to "N" account balances do not change.

MKH_DATE_FORMAT_STYLE

The parameter defines the code of the format for the banking date in the DB Manager status row.

By default, the parameter is not set (the "dd/MM/yyyy" template is used).

To change the default format of the banking date, do as follows:

- Create a formatting style in the "Formatting Styles" form (menu item Full → Configuration → Setup → Client Classifiers → Formatting Styles) for the "Date/Time" variable. Examples of templates:
  - yyyy.MM.dd 'at' HH:mm:ss – 2016.09.14 at 12:08:56;
  - EEE, MMM dd, "yy, HH:mm – Thu, Feb 03, '11, 12:08;
  - EEE, dd MMM yyyy hh 'o"clock' a – Wed, 25 Feb 2009 12 o'clock PM;

- dd.MM.yyyy – 14.09.2016;
- M/d/yy – 9/14/16.

- Specify the format code (*Style Code* field value) in the MKH_DATE_FORMAT_STYLE parameter.

If necessary, different formatting styles can be set for different languages. The system user's language will be used for display. This language is specified in the *Language* field of the "Constants for <user group name>" form opened by clicking the [Constants] button in the "User Groups and Users - View" form (Full → DB Administrator Utilities → Users & Grants → User Groups and Users – View). For example, create 2 formatting styles in the "Formatting Syles" form with the same format code value but with different languages in the *Language* field, the value in the *Country Code2* field must be empty. Specify the language for the required user groups in the "User Groups and Users - View" form.

ORDER_IN_START_OF_DAY

ORDER_IN_START_OF_DAY – A parameter defining the order in which standing payment orders are processed.

Parameter values:

- "Y" (Yes) – Standing payment orders are processed during daily procedures when opening a new banking day; this is the default value;
- "N" (No) – Standing payment orders are processed when closing the banking day. This value may only be used if the bank uses Two-phased banking date mode (see the section of the same name in the Daily Procedures User Manual).

  When the value is "N" for payment orders with the "Monthly" indicator, if the date for activating the order falls on a non-working day (according to the *Event Day* parameter):

  - By default, the payment order will be processed when closing the last working day before the non-working days (when closing "Friday").
  - If the tag DUE_TO_WRK_DAY=Y; is set in the payment order, the order will be activated when closing the first working day after the non-working days (when closing "Monday").

PAYMENT_DUE_ADVANCE

PAYMENT_DUE_ADVANCE – A parameter used in daily contracts update and determining the posting date and local date for "Value Date Due", "Payment Due", "Long Payment Due", "Sliding" and "Sliding + Clear" and "Contract Due" due normalization.

 The global parameter PAYMENT_DUE_ADVANCE works together with the DUE_TO_WRK_DAY global parameter. For information about how various combinations of these parameter values affect the shift in the normalization date,

see the description of PAYMENT_DUE_ADVANCE parameter values and Fig. 7 and Fig. 8.

PAYMENT_DUE_ADVANCE parameter values:

- "N" (No) – when the value is "N", normalisation is always performed when opening the day (both in two-phased banking date mode, and in combined mode). The normalization date is shifted as follows:
  - If the normalization due date falls on a working day, this will be the posting date and local date. Normalization is performed when opening the day corresponding to the due date, see Fig. 7.
  - If the normalization due date falls on a weekend/holiday, the normalization date depends on the value of the DUE_TO_WRK_DAY global parameter, see Fig. 8:
    - ♦ When DUE_TO_WRK_DAY="Y" – if the normalization due date falls on a Saturday, Sunday, or Monday, normalization is performed when opening Tuesday (entries are posted to accounts on Tuesday).

    The normalization date is shifted from Monday to Tuesday (when DUE_TO_WRK_DAY="Y", PAYMENT_DUE_ADVANCE="N") because Monday is often opened on Friday and in this case, normalization when opening Monday will not meet conditions set with these parameters.
    - ♦ When DUE_TO_WRK_DAY="N" – if the normalization due date falls on a weekend (Saturday/Sunday), the macrotransaction will be posted when opening Monday, but Saturday will be specified as the Posting Date and Monday as the GL date.

  The default value of the PAYMENT_DUE_ADVANCE parameter is "N".
- "Y" – when the value is "Y", normalization will always be performed when closing the day (this value is only allowed if the bank uses two-phased banking date mode, see the section "Two-phased Banking Date Mode" in the document "Daily Procedures"). The shift in the normalization date depends on the value of the DUE_TO_WRK_DAY global parameter, see Fig. 7 and Fig. 8:
  - If the normalization due date falls on a working day:
    - ♦ When DUE_TO_WRK_DAY="Y" – the normalization date is not shifted. Normalization is performed when closing the day corresponding to the normalization due date (for example if the due date falls on a Wednesday, normalization will be performed when closing Wednesday).
    - ♦ When DUE_TO_WRK_DAY="N" – normalization is performed when closing the day preceding the normalization due date (for example, when the due date falls on a Wednesday, normalization will be performed when closing Tuesday).
  - If the normalization due date falls on a weekend/holiday:
    - ♦ When DUE_TO_WRK_DAY="N" – normalization is performed on the last working day before the weekend/holiday (for example, if the due

date falls on a Saturday, normalization will be performed when closing Friday). This rule also applies when the due date falls on a Monday.

- When DUE_TO_WRK_DAY="Y" –normalization is performed on the first working day after the weekend/holiday (for example, if the due date falls on a Saturday, normalization is performed when closing Monday).

The global parameter PAYMENT_DUE_ADVANCE can be redefined using the tag of the same name in an Accounting Scheme (see the document "WAY4™ Accounting Schemes").

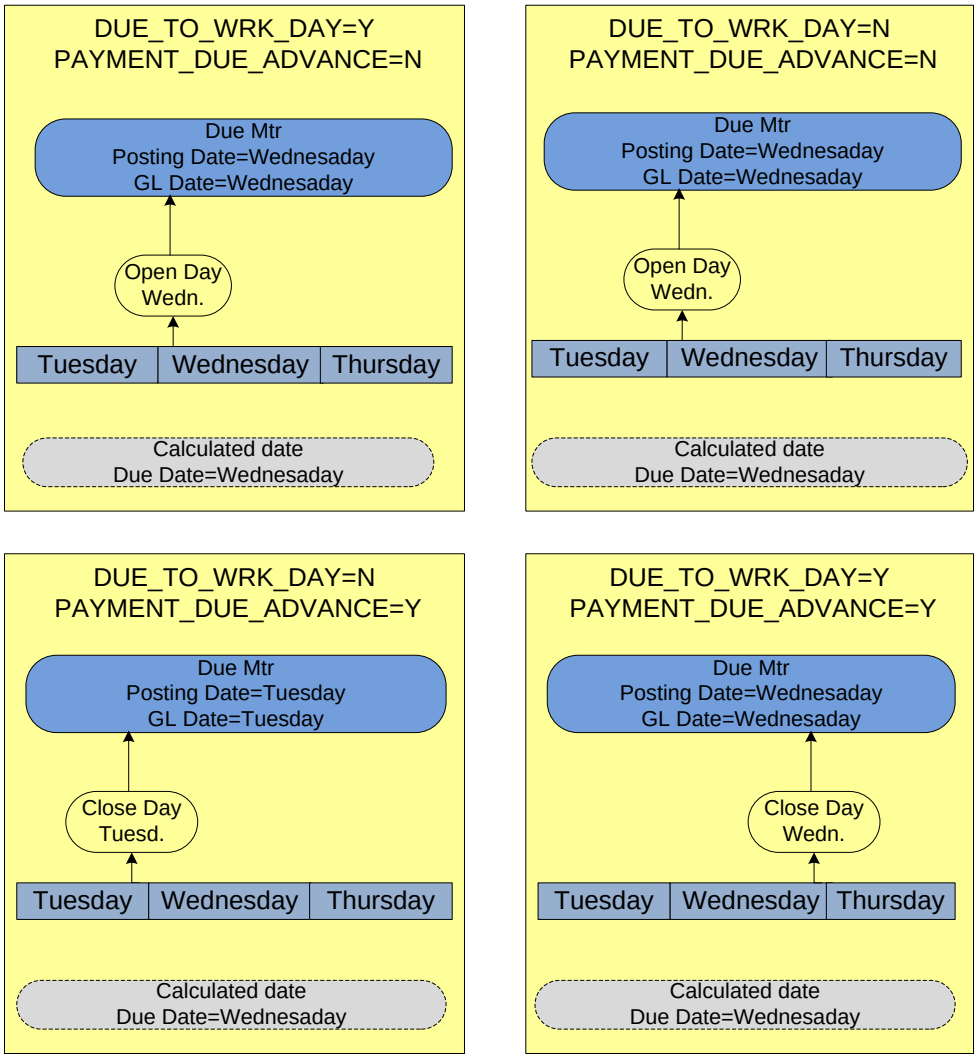

Fig. 7. Influence of the global parameters PAYMENT_DUE_ADVANCE and DUE_TO_WRK_DAY on a shift in due date falling on a working day (due date on a Wednesday is used in the example)

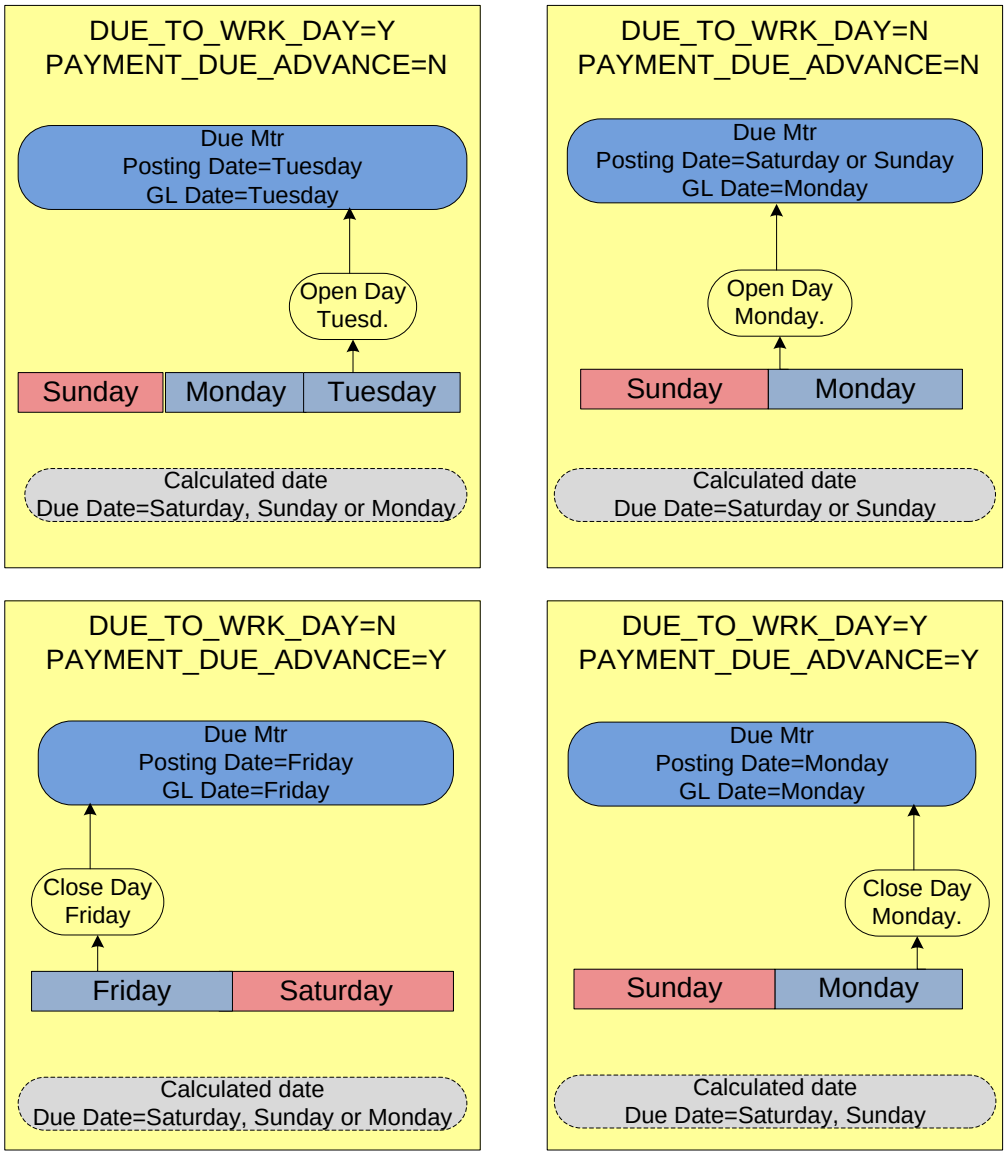

Fig. 8. Influence of the global parameters PAYMENT_DUE_ADVANCE and DUE_TO_WRK_DAY on a shift in due date falling on a weekend/holiday (and in a number of cases, on a Monday)

RESERVE_IN_LOCAL_CURR

RESERVE_IN_LOCAL_CURR – A parameter defining currency conversion rules when calculating the reserve in a foreign currency account.

Parameter values:

- "Y" (Yes) – This parameter value determines that conversion will be made separately for each account when calculating the reserve.
- "N" (No) – This parameter value determines that the reserve conversion will be made for the total reserve value calculated for all accounts in the foreign currency; this is the default value.

Chapter 6. Card Production

AUTH_KEY_STORAGE_FORM

The AUTH_KEY_STORAGE_FORM parameter allows the selection of a required set (storage place) of keys from sets stored in the system and the use of this set for authorisation.

The parameter value is the code for the key storage method:

- "HH" – HSM/Host/Hex keys
- "WH" – OWSem/Host/Hex keys

CARD_FEE_ALGORITHM

CARD_FEE_ALGORITHM – A parameter defining how fees are charged for issuing a card.

Parameter values:

- NULL – Default value.

  If this parameter has a value of NULL, the card issuing fee will be charged in a standard way, that is, for the amount indicated in the card contract's Service Package. The fee amount does not depend on the effective period of the card. That is, if the standard effective period for the card type is 12 months and the card was issued for 15 months or 10 months, the fee for issuing the card will be the same as that charged for a 12-month card.

- "P" – The card production fee will be proportional to the effective period of the card.

  If this parameter has a value of "P", the fee will be charged immediately when the card is issued. For example, if the standard effective period for the card is set as 12 months in the contract subtype but the actual effective period is 15 months, then the fee will be calculated as 15/12 of the standard fee and be withdrawn from the account when the card is issued.

CARD_NAME_LENGTH

CARD_NAME_LENGTH – A parameter defining the maximum length of the name embossed on the plastic and including the following components: title, first name, last name, and delimiters between the components.

The parameter value must be a positive whole integer. The default value is 24.

According to international payment system standards, the length of the card name must not exceed 24 characters.

This parameter can be redefined on the contract subtype level (see the description of the *Add Parms* field in the section "Card Contract Subtypes Form" in the "Products and Contract Subtypes" document).

 It is recommended that users not change the value of this parameter without consulting international payment organizations and representatives of the WAY4™ system vendor.

CARD_PROD_ENABLED_EVENTS

The global parameter CARD_PROD_ENABLED_EVENTS is used in marking cards for issue/reissue. Parameter values are Production Event codes delimited by commas and set in the following format (a string must begin and end with a comma):

CARD_PROD_ENABLED_EVENTS=,RALL,NCRD,

If such an event code is specified in a card production application, when marking the card the system will not check for the corresponding miscellaneous Service for charging a production fee in the Service Package of the corresponding card contract.

CARD_PROD_RESPONSE_DEFERRED_PROCESSING

If the value of the CARD_PROD_RESPONSE_DEFERRED_PROCESSING parameter is "Y", the "mrk.PLASTIC_FROM_PROD" procedure responsible for fee generation, changes in plastic status, etc., is not called during import of a response file from the card production system. This procedure is called in multi-thread mode after importing all response files (in execution of the menu item "Full → Issuing → Send / Receive Production Batches → PIN Management Response File Import").

The default value of the parameter is "N".

CARD_RENEW_ADVANCE

CARD_RENEW_ADVANCE – A parameter whose value is indicated in months and is used as a threshold value when calculating the effective period for a reissued bankcard.

Parameter value: "0" or a positive integer, the default value is "1".

This parameter is used as follows: if the interval to the expiry date of the current plastic exceeds the value of CARD_RENEW_ADVANCE +1, when it is reissued, the new plastic will have the same expiry date.

For example, if the expiry date is in December and the value of the parameter CARD_RENEW_ADVANCE is 1, when the card is reissued in October the expiry date of the new plastic will be the same as the current one, that is, December. If the card is reissued in November, the expiry date for the new plastic will be calculated from the value of the parameter CARD_RENEW_FROM_TODAY.

If the value of parameter CARD_RENEW_ADVANCE is 2, then in the same case as above, the card when reissued in September will have the same expiry date as the current one, that is, December. If it is reissued in October, the expiry date for the new plastic will be calculated from the value of parameter CARD_RENEW_FROM_TODAY.

The CARD_RENEW_ADVANCE parameter can be redefined on the contract subtype level (see the description of the *Add Parms* field in the section "Card Contract Subtypes Form" of the "Products and Contract Subtypes" document).

CARD_RENEW_FROM_TODAY

CARD_RENEW_FROM_TODAY – A parameter determining the date from which the effective period of a reissued card will be calculated.

Parameter value: integer, the default value is "0".

If the expiry date of the previous plastic was less than the current banking date for more than the number of months defined by the value of the parameter CARD_RENEW_FROM_TODAY, the effective period for the new plastic will start from the current banking date. In all other cases, the effective period will start from the expiry date of the previous plastic.

The global parameter CARD_RENEW_ADVANCE controls how the expiry date of the new plastic is calculated from the date calculated through the global parameter "CARD_RENEW_FROM_TODAY".

Example 1:

The global parameter "CARD_RENEW_FROM_TODAY" is equal to 0 (by default). The global parameter "CARD_RENEW_ADVANCE" is equal to 1 (by default); the current date is 01.01.2003; the plastic is issued for 12 months.

- If the previous plastic was active until 31.12.2002, the new one will be active until 31.01.2004.
- If the previous plastic was active until 31.01.2003, the new one will be active until 31.01.2004.
- If the previous plastic was active until 28.02.2003, the new one will be active until 28.02.2004.

Example 2:

The global parameter "CARD_RENEW_FROM_TODAY" is equal to −1. The global parameter "CARD_RENEW_ADVANCE" is equal to 1 (by default); the current date is 01.01.2003; the plastic is issued for 12 months.

- If the previous plastic was active until 31.12.2002, the new one will be active until 31.01.2004.
- If the previous plastic was active until 31.01.2003, the new one will be active until 31.01.2004.
- If the previous plastic was active until 28.02.2003, the new one will be active until 31.01.2004.

- If the previous plastic was active until 31.03.2003, the new one will be active until 31.03.2003.

Fig. 9 illustrates how expiry dates are determined for reissued plastics depending on the values of the parameters CARD_RENEW_FROM_TODAY and CARD_RENEW_ADVANCE.

The CARD_RENEW_FROM_TODAY parameter can be redefined on the contract subtype level (see the description of the *Add Parms* field in the section "Card Contract Subtypes Form" of the "Products and Contract Subtypes" document).

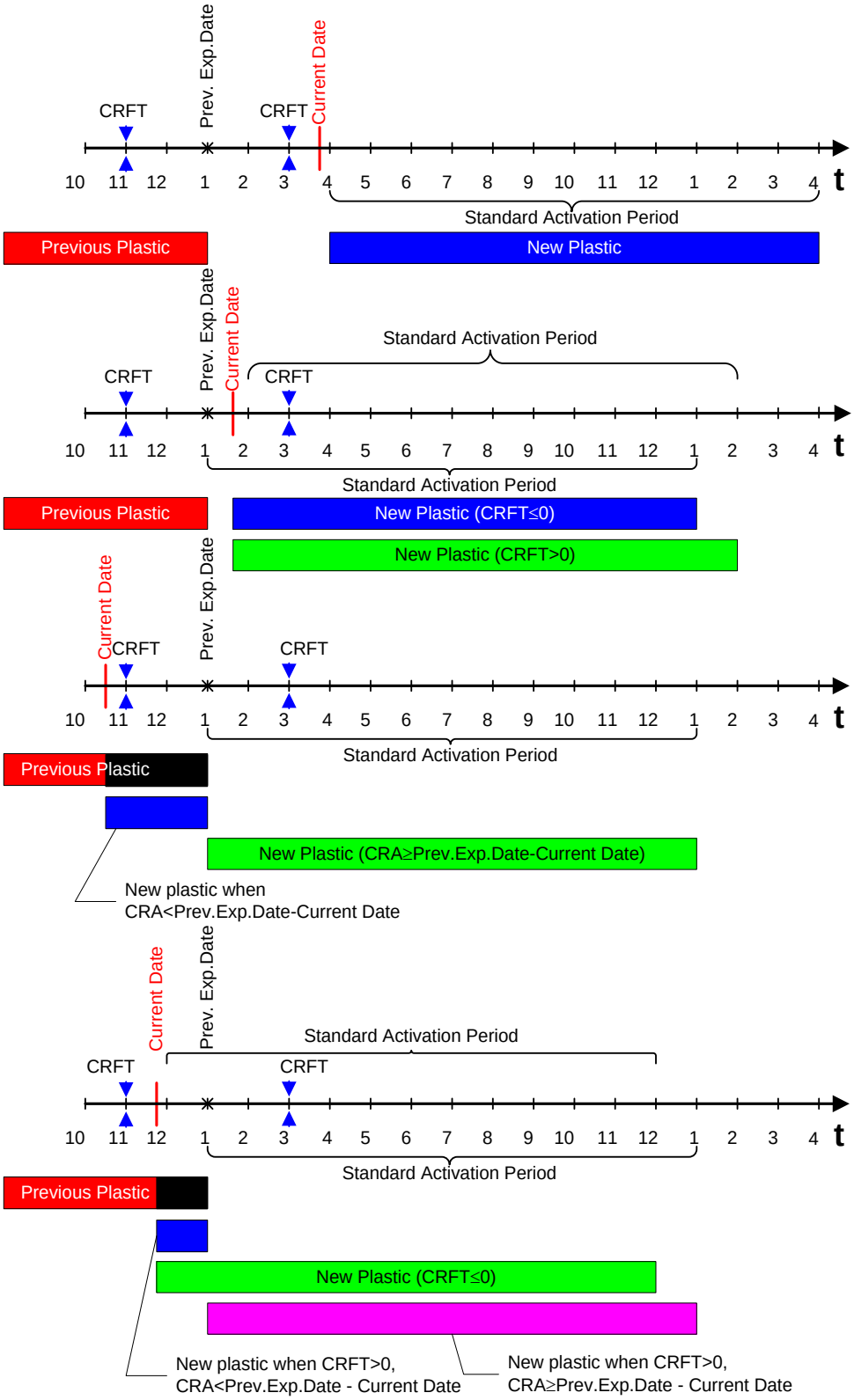

Fig. 9. How effective periods are determined for reissued plastics depending on the values of the global parameters CARD_RENEW_ADVANCE (CRA) and CARD_RENEW_FROM_TODAY (CRFT)

CARD_WITHOUT_PIN

If an arbitrary value is set for this parameter and the tag CARD_WITHOUT_PIN=<value of the global parameter of the same name> (instead of the "CVV only" value) is specified in the *Validation Type* field on the contract subtype level, a PIN code will not be generated for a card issued on a contract corresponding to this subtype.

This parameter can be redefined on the contract subtype level (see the description of the *Add Parms* field in the section "Card Contract Subtypes Form" of the "Products and Contract Subtypes" document).

CLIENT_STATUS_IGNORED_FOR_CONTRACT

The global parameter makes it possible to create a new card for a client who is in a stop list. To do so, the global parameter's value is specified as the code (codes) of the client's blocking status (see the value of the classifier with the STOP_LIST_STATUS code; this classifier's values correspond to response codes from the RESP_CODE table) for which a card contract can be created.

By default (if the parameter is not set), a new card contract cannot be created for a client in stop list.

COMPANY_NAME_LENGTH

COMPANY_NAME_LENGTH – A parameter defining the maximum length of the company name embossed on the plastic.

The parameter value must be a positive whole integer. The default value is 24.

According to international payment system standards, the length of the company name must not exceed 24 characters.

This parameter can be redefined on the contract subtype level (see the description of the *Add Parms* field in the section "Card Contract Subtypes Form" of the "Products and Contract Subtypes" document)

 It is recommended that users not change the value of this parameter without consulting international payment organizations and representatives of the WAY4™ system vendor.

INHERITE_LOST_CARD_DELIVERY_PRM

The global parameter INHERIT_LOST_CARD_DELIVERY_PRM allows inheritance of the value in the *Order To* field when a card is reissued due its loss (inheritance is carried out from the record of the lost card). This function is active when the parameter has the value of "Y".

The default value is "N".

LOST_CARD_EVENT

The LOST_CARD_EVENT global parameter is used when reissuing a card to replace a lost card. A comma-delimited list of bankcard production event codes is specified (reissue reason codes) as a parameter value.

When marking the card, the event for which a Service is configured will be used from the list of this global parameter's values.

MAX_CARD_EXPIRE

MAX_CARD_EXPIRE – A parameter specifying the maximum effective period of a plastic in months.

After calculating the expiry date of plastic to be issued or reissued, the system checks that the effective period of the plastic does not exceed the value of this parameter. If this condition is not met, the plastic cannot be issued.

The parameter value is a whole positive integer. The default value is 60.

This parameter can be redefined on the contract subtype level (see the description of the *Add Parms* field in the section "Card Contract Subtypes Form" of the "Products and Contract Subtypes" document).

MIN_CARD_EXPIRE

MIN_CARD_EXPIRE – A parameter determining the minimum effective period of a plastic in months.

After the expiry date is calculated for an issued or reissued plastic, the system checks that the effective period for the plastic exceeds the value of this parameter. If this condition is not met, the plastic will not be issued.

The parameter value is a positive whole integer. The default value is 3.

The value of this parameter is used by the system to perform a check on the financial institution. The system checks that the effective period for the new or reissued plastic as defined in the card contract subtype exceeds the value of the parameter MIN_CARD_EXPIRE.

This parameter can be redefined on the contract subtype level (see the description of the *Add Parms* field in the section "Card Contract Subtypes Form" of the "Products and Contract Subtypes" document).

MRK_DISABLE_DUPLICATE_CARD_EXPIRE

The global parameter MRK_DISABLE_DUPLICATE_CARD_EXPIRE is used in marking plastics for reissue.

When the value of this parameter is "Y", reissue of the plastic with the same expiry date is not permitted.

The default value is "N".

MRK_ERASE_SEC_VAL

The global parameter MRK_ERASE_SEC_VAL determines the order for inheritance of a plastic's properties when it is reissued.

If the value of this parameter is "Y", when a plastic is reissued with new parameters (in accordance with PCI DSS requirements), if the *PIN*, *PVV*, *CVC*, *CVC2* fields of the previous plastic were filled in, the values of these fields will not be inherited in the reissued plastic.

The default value is "N".

The global parameter MRK_ERASE_SEC_VAL can be redefined using the ERASE_SEC_VAL tag in the *Add Prod Parms* field of the "Production Events" form (Full → Configuration Setup → Transaction Types → Production Events).

MARK_INHERIT_LOST_CARD_EXPIRE

If the value of the global parameter MRK_INHERIT_LOST_CARD_EXPIRE is set to "Y", when a lost card is reissued, the expiry date of the lost plastic will be used to calculate the expiry date of the new (replacement) card contract's card in the same way as when reissuing a plastic without the creation of a new card contract.

MRK_PRODUCE_LOCKED

The global parameter MRK_PRODUCE_LOCKED makes it possible to reissue (mark) locked cards. To do so, the value of this parameter must be set to "Y".

The default value is "N".

The MRK_PRODUCE_LOCKED global parameter can be redefined using the PRODUCE_LOCKED tag in the *Add Prod Parms* field of the "Production Events" form (Full → Configuration Setup → Transaction Types → Production Events).

PAN_LENGTH_CHECK

The global parameter PAN_LENGTH_CHECK is used to check the length of a card number in accordance with the card production parameters specified in the *PAN MIN* and *PAN MAX* field of the "PM Parameters" form.

The value of this parameter must be set to "Y" for the check to be performed. When the value "N" is set, no check is performed.

The default value is "N".

PM_KEY_EXPIRE_DFLT_PERIOD

This parameter is used to set the effective period of keys used in card production. The value is set in months.

The default value is 24.

PM_KEY_EXPIRE_WRN_EXT_PERIOD

The PM_KEY_EXPIRE_WRN_EXT_PERIOD parameter is used in generating warnings after the export of data on tasks executed in issuing bank cards. Warnings are generated if the number of months between the expiry date and the date in the *Ready Till* field of the "PM Parms" table (the "Parameters for <name of bank>" form) is less than that set by the PM_KEY_EXPIRE_WRN_EXT_PERIOD parameter.

The value is set in months. The default value is 2.

PM_PIN_TRANSLATE

The "PM File Export" pipe supports the sending of PIN blocks encrypted under ZPK. The "PM. Security Calc & Mailer Printing" pipe of the PIN Management module supports translating a PIN block encrypted under ZPK into a PIN block encrypted under LMK.

To use this function, the PM_PIN_TRANSLATE global parameter must be set to "Y", and the ISSUER_PIN_FORM='UNDER_ZPK tag must be specified in additional parameters (Full → Configuration Setup → Card Production Setup → Bank Production Parameters → [Parameters] → [Options]).

PM_TSK_LOAD_BANK_CHECK

PM_TSK_LOAD_BANK_CHECK – If this parameter is set to "N", the PIN Management module does not check the *Bank* fields in a task to issue a card (PM Task) and its job file (PM Job) for equivalence.

The default parameter value is "Y".

SHIFT_CARD_EXPIRE_FROM

SHIFT_CARD_EXPIRE_FROM – A parameter indicating the day of the month and used as a threshold value in the algorithm for calculating the card's effective period in its initial issue.

The parameter value must be a whole integer from 0 to 99. The default value is 99.

This parameter is used as follows:

If the banking date on the date of the card's issue is later than the day of the month set by this parameter, the card is issued with an effective period for one month longer than the standard period set by the contract subtype.

If the banking date is less or equal to the day of the month set by this parameter, the card is issued with a standard effective period.

For example, if the parameter SHIFT_CARD_EXPIRE_FROM has a value of 15, the card effective period by default is 12 months. The card is issued in April

2010. If the card is issued on the 15th of April, the expiry date will be calculated as 04.2011. If the card is issued on the 16th of April, the date will be calculated as 05.2011.

This parameter can be redefined on the contract subtype level (see the description of the *Add Parms* field in the section "Card Contract Subtypes Form" of the "Products and Contract Subtypes" document).

SHRINK_EXPIRE_TO

This parameter determines the day of the month used as a threshold value in calculating the effective period of a bankcard when issuing and reissuing the card.

Parameter values are whole numbers from "0"-"99". The default value is "0".

This parameter is used as follows:

If the banking date on the day of card issue is less than the day of the month set by this parameter, the card is issued with an effective date of one month less than the standard one specified by the contract subtype.

If the banking date is more or equal to the day of the month set by the parameter, the card is issued with a standard effective period.

UNLOCK_CARDS_MODE

UNLOCK_CARDS_MODE – A parameter defining how to execute the procedure for batch unlocking of issued cards.

Issued cards are unlocked according to bank procedures after a file containing card production data is loaded into the database. The unlocking procedure is started by a special user menu path in the DB Manager program.

Parameter values:

- "A" (All) – All cards are unlocked, regardless of contract and plastic status.
- "C" (Card) – The unlocking procedure is executed separately for each card. If a card cannot be unlocked, for example, because of its contract or plastic status, it will not prevent other cards from being unlocked if file data on them has been received.
- "F" (File) – If a card cannot be unlocked, no other cards whose data is contained in the file will be unlocked. This is the default value.

For contract status to be considered in batch unlocking, the UNLOCK_PLASTIC_FOR_VALID_CONTRACT_ONLY global parameter value must be "Y".

UNLOCK_PLASTIC_FOR_VALID_CONTRACT_ONLY

UNLOCK_PLASTIC_FOR_VALID_CONTRACT_ONLY – this parameter allows contract status to be considered when unlocking plastic cards. To do so,

set the parameter value to "Y". When this value is specified, the plastic will only be unlocked if the contract status has the *Is Valid* field value "Valid" (see the "Contract Statuses" form; "Full → Configuration Setup → Contract Types → Contract Statuses").

The default value of the parameter is "N".

Chapter 7. Working with Contract and Client Records

ADDR_CHECK_BY_CLASSIFIER

The ADDR_CHECK_BY_CLASSIFIER parameter is configured when the address classifier is used in WAY4.

This parameter determines the procedure for checking client addresses according to an address classifier (the check is performed when checking client records, checking addresses, and in approving contracts).

- If the value of this parameter is "N" (the default value), the system functions as usual and during a check addresses are not searched for in a reference book.
- If the value of this parameter is "Y", a search for addresses will be made in a reference book and missing parameters will be filled in (for example, postal codes). If an address is not found, the system will generate an error message.
- If the value of this parameter is "W", a search will be made and missing parameters filled in as for the "Y" value. If an address is not found, the system will generate a warning, but the address will not be declined.

The address classifier is not included in the WAY4 basic configuration and is supplied according to a separate agreement with the WAY4 vendor.

ADDR_SCHEME_DEFAULT

The ADDR_SCHEME_DEFAULT parameter is configured when the address classifier is used in WAY4. The code of the address scheme used should be specified as the value of the global parameter ADDR_SCHEME_DEFAULT.

The address classifier is not included in the WAY4 basic configuration and is supplied according to a separate agreement with the WAY4 vendor.

ALTERNATIVE_RELATION

The ALTERNATIVE_RELATION parameter with the "Y" value enables redefinition of the types of relations between contracts (Related Contracts) and makes it possible to redefine the standard relation type (with the code 10, 20, etc.) between the main card and related contract to an internal relation type. This allows the related contract with which a transaction will be made to be changed flexibly.

The parameter with the "Y" value is used together with the following parameters:

- Contract custom parameters specified by users in contracts related with the main card (related cards). These related contracts have an "internal" relation type (for example, 80, 81). Custom parameters can be specified using applications, manually, etc.:

- REL#ACC_TYPE=<code of the standard relation type>; - the parameter sets the standard relation type that will correspond to this contract's internal relation type.
- REL#PRIM – when the value is "Y", the parameter defines this related contract as the default contract. The default contract is used, for example, if a related contract with the relation type specified in the document is not configured. The REL#PRIM=Y; parameter is set in one contract related with the card. The value of this parameter for the remaining related contracts must be "N".

  If a relation type is not set in an authorization document (the document's *Spec* field is not filled in), the default contract is used to post the authorization document, even if the value of the SET_DEFAULT_ACCOUNT parameter is "N".

  When there is no related contract with the relation type specified in the document (the document's *Spec* field is filled in), use of a default related contract depends on the global parameter SET_DEFAULT_ACCOUNT. When the value of SET_DEFAULT_ACCOUNT is "N":

  - Authorization requests are declined.
  - The default related contract is used when posting authorization advices and financial documents (presentments).
- REL#SEQ_N=<priority> - the parameter sets the priority for using this related contract when there are several related contracts with different types of internal relation, for which one standard relation type is specified. Priority is specified in numeric format (1, 2, etc.) and a lower value indicates a higher priority.

The custom parameters REL#PRIM, REL#ACC_TYPE, REL#SEQ_N must be registered in the "Contract Parameters" list (see the section "Contract and Client Custom Parameters" of the document "WAY4™ Client and Contract Classifiers").

Internal relation types must be registered in the "Contract Relations" form (Full → Configuration Setup → Accounting Setup → Contract Relations) and specified in the *Relation* field of the corresponding related contracts.

- Technical custom parameters for contracts, which are automatically set in the base card and are recalculated when the aforementioned parameters of related cards change:
  - ASSIGN_<code of standard relation type>=<code of internal relation type>. The tag is specified in the contract's ext_date field. This tag shows redefinition of the relations set by the REL#ACC_TYPE, REL#SEQ_N parameters (see above), i.e. redefinition of the standard relation type to an internal relation type.
  - ASSIGN_DEFAULT=<code of internal relation type> - the default related contract for this base card. The tag is set in the contract's ext_data field.

ASSIGN technical custom parameters are recalculated when the parameters of related contracts change (REL#PRIM, REL#ACC_TYPE, REL#SEQ_N), in particular, when processing the corresponding applications to set custom

parameters andwhen approving contracts, closing contracts, breaking the link between a related contract and base card (when the *Relation Tag* parameter value is "Inactive Related, see the section "Additional Product Parameters" in the document "Products").

When closing a related contract with the REL#PRIM=Y; parameter, a search is made for an active related contract with the same relation type, the parameter value for the contract that is found changes from "N" to "Y". Correspondingly, the ASSIGN_DEFAULT parameter is recalculated in the main card. If a contract with the same relation type is not found, an existing related card with the REL#ACC_TYPE parameter is used.

When closing a related contract, if there is no other related contract with the same REL#ACC_TYPE=<code of the standard relation type> tag the ASSIGN_<code of the standard relation type> tag in the main card is not recalculated. When posting a document (since no related contract was found), the default related contract is used (ASSIGN_DEFAULT).

"ASSIGN_" custom parameters are not registered in the "Contract Parameters" list.

APPROVE_IMMEDIATE

This parameter determines whether contracts are refreshed when their Service Packages, Accounting Schemes and Products are approved.

Parameter values:

- "Y" (Yes) –changes will be applied to corresponding contracts immediately when approving their Service Packages, Accounting Schemes and Products (regardless of the selected mode). This is the default value.
- "N" (No) –changes will be applied to corresponding contracts when the user menu item "Full → Configuration Setup → Products → Apply Service Packs Changes" or "Full → Configuration Setup → Products → Apply Account Scheme Changes" is selected for Service Packages and Accounting Schemes, respectively. To apply Product changes, go to the "Products" form (Full → Configuration Setup → Products\Product Definition → Products), click the [Approve] button and select the "Check and Apply" item from the context menu.

  When the value is "N", changes are applied in all cases within the Contracts Daily Update.

  Note that applying changes to a large number of contracts may take a considerable amount of time. To speed up the procedure, use parallel run mode, activated through the following menu items:

  - "Full → DB Administrator Utilities → Special OpenWay Utilities → Parallel Run → Apply Service Packs Changes" – when Service Packages are modified.

- "Full → DB Administrator Utilities → Special OpenWay Utilities → Parallel Run → Apply Account Schemes Changes" – when Accounting Schemes are modified.
- "Full → DB Administrator Utilities → Special OpenWay Utilities → Parallel Run → Apply Product Changes" – when Products are modified.

Note that starting from version 03.44.19.28 on initial installation of WAY4, the global parameter APPROVE_IMMEDIATE has been added to the "Additional Global Parameters" list with a value of "N". It is recommended to use the "N" value. When upgrading WAY4 to 03.44.19.28, if "Y" was set in the previous version of the system (or if the parameter wasn't set, which corresponds to the default value, i.e. "Y"), the value is not automatically changed to "N".

BLOCK_IF_AVAILABLE_FEE_DIFF

This parameter is used to configure how fees with the "When Available" category will be charged if the fee rate changed. If the account does not have sufficient funds to pay the fee at the new rate, and the percentage by which the fee at the new rate differs from the original amount exceeds the value specified using the BLOCK_IF_AVAILABLE_FEE_DIFF, the blocking amount is corrected.

The default value of the parameter (the percentage of the fee amount initially blocked) is 5.

The global parameter can be redefined using the tag of the same name in the financial institution.

CHANGE_STATUS_STR

The value of this parameter is the code prefix of the event type that is opened when the contract status changes.

The default parameter value is "Change Status".

For example, if the system creates an event type with the code "<value of parameter CHANGE_STATUS_STR>_05", this event will be opened when the contract status changes to "Card do not honor".

CHECK_CLIENT_EMBOSSING_DATA

The CHECK_CLIENT_EMBOSSING_DATA parameter with the "N" value disables the check of embossing data in client record fields when approving a client and contract.

The default value is "Y".

CLOSE_CONTRACT_STR

The value of this parameter is the code of the event type that opens when a contract is closed.

The default parameter value is "Close Contract".

CLIENT_MOVE_FI_AFFILIATED

The CLIENT_MOVE_FI_AFFILIATED parameter influences the procedure for moving client data to another financial institution (when the value of the UNIQUE_CLIENT global parameter is "N"). Possible values of the CLIENT_MOVE_FI_AFFILIATED parameter:

- "Y" – when client data are moved, a new record is created in the CLIENT table (the "Client…" form) and in the AFFILIATED_CLIENT table (the "Linked Clients…" form), i.e. a link is specified for the new client record with the client record in the original financial institution.
- "N" – when client data are moved, a new record is created only in the CLIENT table. The client record in the original financial institution becomes available for deletion. This is the default value. I.e. a new client record is not linked with the client record in the original financial institution.

CLEANOUT_TRANS_CODE_PATTERN

The CLEANOUT_TRANS_CODE_PATTERN parameter is used during execution of the CLEAR_ACCOUNT procedure when closing a contract (this procedure allows the balance on the account of a closed contract to be transferred to the bank contract account).

To do so:

- A bank contract must be configured whose accounts must have the same codes (account type code) as the accounts of the closed contract from which the balance will be transferred.
- Two transaction types must be configured (Full → Configuration Setup → Transaction Types → Transactions - All). One is for clearing the positive account balance, the second for clearing the negative account balance. The codes of these transaction types must differ from the codes of other transaction types and must have a common unique prefix.
- The CLEANOUT_TRANS_CODE_PATTERN parameter value is a mask of the transaction type code according to which the two transaction types configured in the previous step must be unambiguously determined.

CREATE_ALL_ACCOUNTS

CREATE_ALL_ACCOUNTS – A parameter that regulates how a contract's accounts are created.

Parameter values:

- "Y" (Yes) – All contract accounts for the contract are automatically created upon contract approval. This is the default value.

- "N" (No) – Upon contract approval, only contract accounts having templates with the value "First Approve" in the *Numeration Type* field will be automatically created. All other accounts will be created automatically as needed, for example, during posting of macrotransactions that refer to a corresponding contract account.

 It is not recommended to change the parameter value from "N" (No) to "Y" (Yes) as in this case the system does not check whether a contract has the necessary account during transaction processing. As a result, an error will occur if the necessary account is absent. If it is necessary to change the parameter value, first specify the tag "CREATE=ALL;" in the *Template Details* field of all account templates.

CREATE_FOR

The global parameter CREATE_FOR is used to create a contract that is common to all the client's other contracts.

The value of the global parameter is a Product code (Liability Product code). When creating an issuing account contract for a certain client, a liability contract is automatically created (based on the Product with the code specified in the parameter and the Reporting relation type). If such a liability contract was already created for the client, its number is automatically specified in the issuing account contract's *Liab Contract* field. I.e. for issuing contracts belonging to the same client, one common liability contract is created.

The global parameter can be redefined using the tag of the same name on the institution level (see the section "Tags in the Special Parms Field of a Financial Institution" of the document "Financial Institutions").

CR_LIMIT_FX

The global parameter CR_LIMIT_FX with the "Y" value allows a contract credit limit to be set in a currency that differs from the contract currency. The credit limit amount is converted at the Middle rate at the time the credit limit is set.

The default value of the parameter is "N".

EMAIL_NO_CHECK_ADDR_TYPES

EMAIL_NO_CHECK_ADDR_TYPES – A parameter that allows client e-mail address verification to be cancelled. The system checks e-mail addresses for correctness during a client record check.

If the parameter has the value "CLI_OWN_ADDR", then during a client record check the system will not check the e-mail address specified in the parameters of the record (in the CLIENT table).

To cancel verification of e-mail addresses specified during additional address setup (in the CLIENT_ADDRESS table), assign the code of the corresponding address type to the parameter.

If it is necessary to assign several values to the parameter, the values must be separated by commas.

ENABLES_SHIFT_DAY

Use of the ENABLES_SHIFT_DAY parameter with the "Y" value in a production system makes it possible to open a non-working day as a banking day. If the date being opened cannot be later than the date of the next working day. I.e. a non-working day following the current banking day (defined according to the table "Business Calendar"; "Full → Configuration Setup → Main Tables → Business Calendar") can be opened as a banking day.

By default, the parameter value is "N".

The ENABLES_SHIFT_DAY parameter can be redefined in an institution's *Special Parms* field using the tag of the same name.

This parameter does not need to be set in test systems when working with the Product Inspector module. However, for manual testing in a test system (without the use of Product Inspector), the parameter must be set so that banking days can be opened out of sequence. If the system is marked as a test system, any banking date in the future can be opened (including a non-working day). The test system must be registered in the "System Instances – Simple" list and marked in this list as a test system (for more information, see the section ""System Instances" Dictionary" of the document "WAY4 Dictionaries".

GENERATE_LUHN

The global parameter GENERATE_LUHN with the "Y" value makes it possible to restore previous system behaviour when a check bit was used in numbering account contracts and device contracts if the *Numeration Type* field value was "Random". By default, the parameter is not set.

In the system's current behaviour, a check bit is not used by default when numbering account contracts and device contracts (only when numbering card contracts, see the description of the "Random" value for the "Numeration Type" field in the section ""Card Contract Subtypes" Form" of the document "Products and Contract Subtypes").

MERCHANT_ADDRESS_TYPE_NL

Merchant address type used if an address must be shown in a local language. Used when generating address tags in the NMAS_DOC table to export merchant data to a payment system. This parameter contains an address code from the ADDRESS_TYPE table.

PAST_DUE_BALANCE

The global parameter PAST_DUE_BALANCE is used to configure display of the date and term of a contract's delinquent debt in customer service workbench.

As the parameter value, specify the code of the balance type for recording the total amount of debt. For more information, see the section "Configuring Display of Past Due Date and Past Due Days in Customer Service Workbench" of the document "WAY4™ Accounting Schemes" and the section "Customer Service Form" of the document "Customer Service Manual".

POSTPONE_ACNT_HIERARCHY_AFTER

The parameter is used to optimise the process of approving contracts in a multilevel hierarchy. In this optimisation, basic processes are executed when approving a contract; secondary processes (normalisation) can be postponed and executed in the background.

The following processes are considered secondary (normalisation):

- Inheritance of preferred counterparties down a contract hierarchy.
- Inheritance of device parameters for acquiring contracts, for example *Device URL*, *Postal Code.*
- Definition of relations between contracts in a hierarchy to perform the "Extra Limit Normalization" procedure (registration in the add_pack_inc table of the relation between a top-level contract and subcontracts).
- Filling in the contract_level field in the acnt_contract table to show contracts in a certain order in the interface (contracts of the same level).

The parameter value is a number of seconds. If contract approval takes longer than the period set by this parameter, normalisation processes will be postponed and executed in the background with the "Object Task Scheduler" tool. A task will be created in "Object Task Scheduler".

The recommended value is "5".

Background execution of processes can be monitored in PROCESS_MESS.

To create a task in "Object Task Scheduler", execute the menu item "Full → DB Administrator Utilities → Start Object Tasks Scheduler" before starting the contract approval process.

If for a certain large hierarchy of contracts (bank contracts or specific issuing contracts) secondary (normalisation) processes are not required, for example, for a hierarchy of cards that have been issued but not sold. When issued, these cards are put into a special technical contract and then transferred to the bank's balance; i.e. they are put into real contracts (using applications, see the document "Advanced Applications R2"). In this case, after the STOCK; tag has been set in the *Custom Data* field of the Product for the top-level technical contract, the corresponding data in the contract hierarchy are not refreshed/inherited when contracts are approved. Note that this tag cannot be used for regular issuing/acquiring contracts.

PREDICTION_MAX_AMOUNT

The global parameter PREDICTION_MAX_AMOUNT is used when predicting a client's contract balance.

To calculate the amount to pay (ToPay), when predicting a balance, a technical payment is made to the client's contract. The technical payment is made, in particular, on the basis of this global parameter's value.

The global parameter PREDICTION_MAX_AMOUNT determines the technical amount used by the procedure when calculating the amount to pay on a specified date. The default value is 1000000000.

PREDICTION_MSG_CODE

The global parameter PREDICTION_MSG_CODE is used when predicting a client's contract balance.

To calculate the amount to pay (ToPay), when predicting a balance, a technical payment is made to the client's contract. The technical payment is made, in particular, on the basis of this global parameter's value.

The global parameter PREDICTION_MSG_CODE sets the type of document created by this technical payment. The default value is "PAYACC".

PREDICTION_SOURCE

The global parameter PREDICTION_SOURCE is used when predicting a client's contract balance.

To calculate the amount to pay (ToPay), when predicting a balance, a technical payment is made to the client's contract. The technical payment is made, in particular, on the basis of this global parameter's value.

The global parameter PREDICTION_SOURCE sets the bank contract from which the amount of the technical payment is paid to the client's contract. The default value is "001-TELLER"

RENEW_ADDRESS_LINK

Loading of tasks to update addresses in storage is enabled by default. Load is only performed if the value of the global parameter RENEW_ADDRESS_LINK is "Y".

To start the process, run the menu item "Full → DB Administrator Utilities → Object Tasks → Start Object Tasks Scheduler" once.

Primary load (Full → DB Administrator Utilities → Special OpenWay Utilities → Refresh external Client Addresses storage) is also only performed when the RENEW_ADDRESS_LINK parameter value is "Y".

SHIFT_TO_WRK_DAY

The SHIFT_TO_WRK_DAY parameter (with the "Y" value) allows the due date to be shifted for accounts with the "Payment Due" and "Sliding Due" due normalization type to the nearest working day.

If the SHIFT_TO_WRK_DAY parameter is used (unlike the global parameter DUE_TO_WRK_DAY) the date of contract account activity (Statement Entry) is corrected and the corrected value is shown in the statement.

The default value is "N".

The parameter can be redefined on the account template level using the tag SHIFT_TO_WRK_DAY ("Y","N").

If contract functional dates are used (see the document "Contract Functional Dates"), this global parameter is used in calculating the date if the *Shift Result Date* field in date calculation rules is not filled in and the calculated date falls on a weekend/holiday. In this case, when the value of the global parameter is "N", there is no shift. When the value is "Y", the date is shifted to the first working day after the weekend/holiday. If contract functional dates are used, the global parameter can be defined for a tariff by using the tag SHIFT_ TO_WRK_DAY ("Y","N", "P", "+","-").

SKIP_ROUTING

The global parameter with the "Y" value (default value) makes it possible skip filling in the routing idt field in the acnt_contract table when approving new contracts.

If "Distributed Processing" technology is used, when the routing idt field must be filled in for regular contracts, the value of the global parameter is set to "N". In this case, to skip filling in the routing idt field, for example, for cards that have been issued but haven't been sold yet, specify the custom parameter SKIP_ROUTING with the "Y" value in the corresponding client. When these cards are issued, they will be put into a special technical contract and then transferred to the bank's balance, i.e. put into real contracts (using applications, see the document "Advanced Applications R2").

UNIQUENESS_CLIENT_SOCIAL_NUMBER

This parameter affects the process of controlling social security number uniqueness. This number is specified in the *Social Security #* field of the form for entering and editing client information.

Parameter values:

- "N" (No) – the uniqueness of a client's social security number is not controlled.
- "Y" (Yes) – the uniqueness of a client's social security number is controlled as follows: if a client of the same client category with this social security

number is already registered at the financial institution, the new record gets the "Not Ready" status when the "Check Client" procedure is executed.

The list of registered client categories can be found in the *Client Category* field of the form "Full → Configuration Setup → Client Classifiers → Client Types"

The parameter's default value is "Y".

This parameter can be redefined for a financial institution using the tag of the same name.

UNIQUE_CLIENT

This parameter determines how clients and contracts are transferred from one financial institution to another.

If this parameter has the value "Y", when a contract is transferred a client is not copied and remains in the original financial institution.

If the "N" value is set (the default value) a new client record is created in the financial institution to which the contract is being moved.

UNIQUENESS_CLIENT_ITN

This parameter determines whether the uniqueness of an client's individual identifier (taxpayer ID) will be checked. This number is specified in the *Individual Number* field (*Client Taxpayer Number*) of the form for entering and editing client information.

Parameter values:

- "N" (No) – the uniqueness of a client's individual identifier is not checked.
- "Y" (Yes) – the uniqueness of a client's individual identifier is checked as follows: if there is already a client registered with this individual number in the financial institution, the new record gets the "Not Ready" status when the "Check Client" procedure is performed.

The parameter's default value is "Y".

This parameter can be redefined using the tag of the same name in a financial institution.

UNIQUENESS_CLIENT_NUMBER

This parameter affects how the system checks the uniqueness of the client number. This number is shown in the *Reference* field of the client data form.

Parameter values:

- "N" (No) – The system does not check for client number uniqueness.
- "Y" (Yes) – The system checks client number uniqueness as follows: if more than one record of clients with the same number is registered at the financial institution, during the approval procedure of the contracts of such clients an

error message will be generated and the contracts will have the status "Not Ready". This is the default value.

UNIQUENESS_CLIENT_REG_NUMBER

This parameter affects how the system checks for the uniqueness of the client registration number during the "Check Client" procedure. This number is shown in the *Registration #* field of the client data form.

Parameter values:

- "N" (No) – The system does not check for the uniqueness of the client registration number.
- "Y" (Yes) – The system checks for the uniqueness of the client registration number as follows: if the financial institution has a client record with a registration number and client category that is the same as those of an existing record in that financial institution, the new record will receive the status "Not Ready" after the "Check Client" procedure. This is the default value.

UNIQUENESS_RBS_NUMBER

UNIQUENESS_RBS_NUMBER – A parameter affecting how the system checks for the uniqueness of the contract RBS number and the automatic enumeration of the contract's accounts.

Parameter values:

- "Y" (Yes) – Upon contract approval, the system checks main contracts with the same RBS Member ID values as that contract to see whether there are any with the same RBS number that aren't affiliated with "Bank Accounting" type products. If any such contracts are found, the approval procedure will be interrupted and the system will generate an error message. The contract status will remain "Not Ready";
- "N" (No) – No system check is performed, this is the default value.

The algorithm that is used by the custom procedure to automatically enumerate contract accounts and is included in the standard WAY4 setup also depends on the value of the parameter UNIQUENESS_RBS_NUMBER. If this parameter has the value "Y", the unique part of the contract account number will be taken from the last six digits of the contract's RBS number. Otherwise (if the parameter is set to "N"), the unique part of the contract account number will be taken from the counter whose value is stored in the *ACC_NUMBER_COUNTER* field of the corresponding account template.

Chapter 8. Acquiring Parameters

ALLOW_DUPL_TERMINAL_ID

The global parameter "ALLOW_DUPL_TERMINAL_ID with the "Y" value makes it possible for additional parameters to identify a contract (merchant ID, financial institution ID) to be stored in a document generated with a payment order. This setting is necessary to correctly generate documents with orders when there are terminals with the same number (Terminal ID) in different financial institutions.

When the value of ALLOW_DUPL_TERMINAL_ID is "Y":

- If a device contract is the transaction source, the *Merchant ID*, *Source Member ID* and SOURCE_IDT_SCHEME (by default, this field is not shown in the form) fields are additionally filled in the document.
- If a device contract is the transaction target, the *Target Member ID* and TARGET_IDT_SCHEME (by default, this field is not shown in the form) fields are additionally filled in the document.

ALLOW_UNDEFINED_RC

If the parameter value is set to "Y", a response code not registered in the handbook that is returned to the device by the system will not replaced with the "96-System Malfunction" code.

ALLOW_REV_IN_TREE

This parameter is used to prohibit reversal of operations executed on one POS on another POS whose contract belongs to the same contract tree as the contract of the original POS.

- If the parameter value is set to "N", it is possible to reverse an operation only if the POS Merchant IDs are the same.
- If the parameter value is set to "Y" (default value), reversal of operations is possible if the POS Merchant IDs are the same and/or the contracts of both POSes belong to one tree.

CREATE_EMPTY_ACQ_KEYS

This parameter allows empty keys to be created when executing the first transaction on a device for which cryptographic keys are not configured:

- When this parameter has a value of "N", no empty keys are created for the device.

- If the parameter value is set to "Y" (the default value), empty keys are automatically created for the device.

DEVICE_STATISTICS_HIST_LENGTH

DEVICE_STATISTICS_HIST_LENGTH – A parameter defining the number of calendar days during which statistics are gathered from the fields of the DEVICE_STAT table, used to collect statistics on operations executed on acquiring devices.

The default value is 90 calendar days and is the standard recommended by VISA for the given period.

DEVICE_TIMEOUT_MIN

DEVICE_TIMEOUT_MIN – A parameter setting the interval in minutes from the time an operation is executed on a POS or an ATM until timeout.

If the communication server receives a request from a device to execute an operation, it will send back a negative reply if the device is busy at the moment executing an operation (the *Current Doc* field of the device's registration entry is not empty) and the interval from the start of the previous operation to the current time does not exceed the value of this parameter.

If the server receives a request from the device to execute an operation, and the interval between the start of the previous operation and the current time exceeds the value of the parameter, the *Current Doc* field of the device's registration entry is cleared and the received request is processed.

The default value is 300.

DOUBLET_INTERVAL_MIN

DOUBLET_INTERVAL_MIN – A parameter defining the interval in minutes between the payment terminal's transaction messages when processing a card belonging to another payment system member. If this interval is exceeded, the next message will be counted as a message belonging to a new transaction.

The default value is 0.

ENABLE_COUNTRY_STATE_SUPPORT

The ENABLE_COUNTRY_STATE_SUPPORT parameter defines whether information about the state (region) in which a transaction was made must be included in outgoing messages (for example, sent to payment systems). The code of the state (region) is determined from the message received from the terminal device, or (if the required data are absent) based on the corresponding device's parameters in the WAY4 database (the value of the State field in the device's address data).

Possible values:

- "Y" – information about the state (region) is included in outgoing messages.
- "N" – information about the state (region) is not included when generating outgoing messages.

The default value is "N".

ENABLE_DEVICE_STATISTICS

ENABLE_DEVICE_STATISTICS – A parameter that regulates how statistics on acquiring devices are gathered.

Parameter values:

- "N" (No) – Statistics are not gathered.
- "Y" (Yes) – Statistics are gathered on operations for all types of cards. This is the default value.
- "F" (Foreign) – Statistics are gathered only for operations involving cards of other payment systems members.

ENABLE_MERCHID_OVERRIDE

When the value is "N" (default value), specific values of device parameters (DEVICE OVERRIDES) for certain payment systems are not considered and MERCHANT_ID is taken from the device contract.

When the value is "Y", specific values of device parameters (DEVICE OVERRIDES) for certain payment systems are considered and MERCHANT_ID is taken from the document. Therefore, by default the transaction chain is built for one merchant_id without considering specific values of device parameters (DEVICE OVERRIDES).

ENABLE_MPD_COUNTRY_CODE

The ENABLE_MPD_COUNTRY_CODE parameter determines the mode for including the POS terminal country code in an outgoing message in ISO format for MasterCard.

Possible values:

- "Y" – when generating messages for MasterCard based on data from a POS terminal, the MPD tag set in the WAY4 database for the corresponding terminal type is modified.

  The country code received in a message from a POS terminal is set in positions 14-16 (F61.13) of this tag. Unused positions to the left are padded with zeros. An MPD tag obtained in this way is used to generate field N 61 of outgoing messages in ISO format to MasterCard.

- "N" – the MPD tag value is not modified by adding the country code received from the POS terminal.

The default value is "N".

ENABLE_MERCH_NAME_VAR_LENGTH

The parameter enables the mode for limiting the maximum length of an acquirer device contract *Merchant Name* field value depending on the payment system channel.

Possible values:

- "Y" – the maximum length of the Merchant Name field value for a specific payment system channel is limited by the value of the corresponding global parameter (for example, see the description of the parameter MERCHANT_NAME_LENGTH_X).
- "N" – the maximum length of the Merchant Name field value is always limited by the value of the global parameter MERCHANT_NAME_LENGTH.

The default value is "N".

EXCLUDE_DEVICE_STATISTICS

EXCLUDE_DEVICE_STATISTICS – A parameter that regulates what transaction types are excluded when gathering statistics on operations using acquiring devices (see ENABLE_DEVICE_STATISTICS).

Parameter values:

- "N" (No) – Statistics are gathered without any restrictions. This is the default value.
- "Y" (Yes) – ATM operations are excluded from statistics.
- "C" (Cash) – Cash withdrawal operations are excluded from statistics.

MERCH_PARMS_COUNTRY_NOT_CHECK_FOR

This parameter makes it possible to not check that the device postal code (device address *ZIP* field) is filled in when approving an acquiring contract. To do so, as the parameter value, specify the list of country codes (comma-delimited) for which this check will not be executed. This setting makes it possible to avoid the "Postal Code is empty" error.

MERCHANT_NAME_LENGTH

MERCHANT_NAME_LENGTH – A parameter defining the maximum length of the value in the *Merchant Name* field in acquiring device contracts. This value is used when creating field 43 of ISO 8583 standard online messages.

The default value of this parameter is 24.

⚠ It is recommended that users do not change this parameter’s value without consulting international payment organizations and representatives of the WAY4™ system vendor.

MERCHANT_NAME_LENGTH_X

The parameter defines the maximum length of the *Merchant Name* field value for the American Express and Diners Club International channels.

The default value is "83".

This limit is only set when the ENABLE_MERCH_NAME_VAR_LENGTH parameter is enabled (set to "Y"). Otherwise, the MERCHANT_NAME_LENGTH parameter sets limits on the length of the *Merchant Name* field value.

MIGRATED_CONTRACT_DELAY

This parameter is used to check new contracts when they are approved (the last_scan field of this contracts is empty; the last_scan field is filled in when the first "Contracts Daily Update" procedure is executed for the contract. The time interval between the contract opening date (*Open* field) and current banking date is checked. The contract opening date cannot be earlier than the current banking date by more than the number of days specified as the MIGRATED_CONTRACT_DELAY parameter.

The default value is 7.

MULTIPLE_ADJUSTMENTS

When the value of the global parameter MULTIPLE_ADJUSTMENTS is "Y", WAY4 supports processing several sequential partial reversals (with creation of a "Reversal" document) or adjustments (with creation of an "Adjustment" document) following the original authorization.

When the parameter's value is "N" (default value), after the first reversal or adjustment all subsequent adjustments or reversals will be rejected.

The parameter's value can be redefined in the device type configuration (*Special Configuration* field of the "POS Type" form) with the tag of the same name.

RETAIL_BRANCH_CODE_TO_ATM

This parameter controls how a financial institution’s code is sent to the ATM controller (a financial institution's code, in particular, is used for printing advertising on ATMs):

- When the value of the parameter is "Y" the value of the *Branch Code* field of the financial institution in which the device contract is registered (the ATM owner’s financial institution) is sent to the ATM controller.
- When the parameter value is "N" (the default value) the value of the *Branch Code* field of the financial institution in which the ATM Retail contract is registered is sent.

RRN_FALLBACK_ALLOWED

RRN_FALLBACK_ALLOWED – this parameter determines the procedure for linking documents for transactions made on a payment terminal:

- When the value is "Y" (the default value), documents are linked in the same mode (using RRN) without using the STAN parameter.
- When the value is "N", documents are linked using the STAN parameter. If a search using this parameter gave no results, linking is considered unsuccessful, and an additional search by RRN is not made.

On the POS terminal type level (Full → Configuration Setup → Merchant Device Setup → POS Types) the RRN_FALLBACK_ALLOWED tag can be set in the *Special Configuration* field, allowing the procedure for linking documents to be determined for a specific POS terminal type.

SOFT_BATCH_UPLOAD

SOFT_BATCH_UPLOAD – A parameter defining the order in which financial documents are posted on payment terminal operations where the devices were operating in dual message mode after the batch upload procedure.

Parameter values:

- "N" (No) – After the batch upload procedure, financial documents are assigned a "Waiting" status. This is the default value.
- "Y" (Yes) – After the batch upload procedure, posting of financial documents is suspended, the documents are assigned a "Suspended" status and an event with the event type code "POS_RECON_REVERSE" is opened.

UNIQUE_DEV_NW_ADDR

If the value of the UNIQUE_DEV_NW_ADDR parameter is set to "Y", a check is performed on the uniqueness of the value of the "NW Address" parameter when approving an ATM contract. If the value of UNIQUE_DEV_NW_ADDR is set to "N" (the default value), no check is performed.

USE_CUT_OFF_TIME

USE_CUT_OFF_TIME – A parameter regulating the *Cut-Off Time* parameter. This parameter is indicated in the device's registration entry and defines the period up until which operations using that device are registered with the current banking date.

Parameter values:

- "N" (No) – The *Cut-Off Time* parameter is not considered when registering operations using the device; this is the default value.
- "Y" (Yes) – The *Cut-Off Time* parameter is considered when registering operations using the device. That is, if the current system date of the

communication server is later than the system banking date with the value of *Cut-Off Time* added, one workday will be added to the posting date for documents created online. The calendar of workdays is also considered. If the next day is a weekend, the posting date will be the date of the next workday.

USE_SUBDEVICE_KEYS

The parameter determines the mode to generate and search for subdevice keys:

- "Y" – for subdevices, their own keys are used.
- "N" – the "parent" device determines subdevice keys.

The default value is "N".

WAIT_BATCH_UPLOAD

WAIT_BATCH_UPLOAD – A parameter defining the acceptance order of documents for operations executed on payment terminals working in dual message mode.

Parameter values:

- "Y" (Yes) – Financial documents are not processed and are not sent until the batch upload procedure has been executed.
- "N" (No) – Financial documents with the request/alert category "Advice" are processed and sent within one day, "Reversal" category documents are processed only after the batch upload procedure has been executed. This is the default value.
- "R" – Financial documents with the request/alert category "Advice" and "Reversal" type documents for operations executed on on-us cards are processed and sent within one day, "Reversal" documents for "foreign" cards are only processed after the batch upload procedure has been executed.

Chapter 9. Processing Online Operations

3DS_MC_EXTRA_BRANDS

This global parameter is used for support of the 3-D Secure protocol.

A list (comma-delimited) of identifiers of payment system additional products (the *Brand* field of the BIN table) processed by the MasterCard SecureCode system (except "MAST", "CRUS", "ECCR", ECHA", "ECMC", MAES") is specified as the parameter value.

3DS_VISA_EXTRA_BRANDS.

This global parameter is used for support of the 3-D Secure protocol.

A list (comma-delimited) of identifiers of payment system additional products (the *Brand* field of the BIN table) processed by the Verified By VISA system (except 'VISA', 'PLUS') is specified as the parameter value.

ADD_PACK_BT

The global parameter ADD_PACK_BT with the "N" value makes it possible to not analyse additional Service Packages when generating balances returned in a response to an authorisation request.

The default value of the parameter is "Y", i.e. additional Service Packages are analysed.

This setting can be made for a specific Service Package, not all Packages, by specifying the ADD_PACK_BT=N; tag in the Service Package's *Special Parms* field.

ALLOWED_AUTH_SRC_CH_LST

This parameter allows authorisation to be performed for specified channels, if no source contract and no routing contract (sending channel) was found during authorisation. To do so, the parameter value must be a list of channels, separated by commas, for which authorisation is permitted without a source contract.

If no routing contract was found during authorisation and the source contract is absent in the list of channels specified as the value of this parameter, authorisation is declined with the response code RC="3" (with the error "Device ID is not on file").

ALTERNATIVE_CONTRACT_ID_TYPE

The global parameter ALTERNATIVE_CONTRACT_ID_TYPE specifies the code of the identification scheme type used to search for contracts (Authentication Module\Identification Types).

If the contract number received in the request is not found in the ACNT_CONTRACT table, and the identification type code is set using the global parameter ALTERNATIVE_CONTRACT_ID_TYPE, a search will be made for this identifier in the TD_AUTH_SCH table.

AUTH_CLIENT_CHCK

If this parameter is set to "Y", the system checks whether a client is included in the stop list when authorising on-us cards. The default parameter value is "N" (do not check if a client is included in the stop list).

AUTH_EMPTY_TRANS_DATE

This parameter makes it possible to regulate filling in the transaction date field in the document (*Trans Date*) if date information is absent in incoming information on the transaction. Possible values:

- "DB_DATE" (default value) - the system date is used as the transaction date (ie. the date the issuer accepted the transaction message).
- "NW_REF_DATE" - the GMT date the payment system accepted the transaction message is used as the transaction date.

AUTH_FIN_DOC_MODE

This parameter sets the mode for creating documents for authorisation when an online message is received (transaction information exchange using the Single Message System service).

Parameter values:

- "SMS" – one document is created to check available funds, block and withdraw.
- "FIN" – a financial document is created. Checking and blocking are not performed.
- "DUAL" – (default value). If checking and blocking are successful, authorization and financial documents are created.

This parameter can be redefined on the document or message type level.

AUTH_ONLINE_TAGS

This parameter allows user-define tags to be sent to NetServer when processing an authorisation request.

Tags delimited by semi-colons (";") are used as a parameter value. These tags are searched for in the fields *Service Details* (in Service properties), *Fee Algorithm Options* (in transaction subtype properties) and *Add Parms* (in contract subtype properties).

If tags are found, their values are sent in the parameter "ExtOutData".

AUTH_RESP_BERTLV_MSG_TAG

This parameter allows informational messages to be sent together with the response to an authorisation request (these informational messages are displayed on the screen of an ATM (kiosk) or printed on a check). The global parameter AUTH_RESP_BERTLV_MSG_TAG is used to turn on this function. It sets a higher-level tag container in which messages will be sent. It is recommended to use the "EF" value.

If the AUTH_RESP_BERTLV_MSG_TAG parameter is not specified, messages are not sent.

Additional settings are required to enable this functionality. For more information, contact the WAY4 vendor.

AUTH_REV_MCC_CHECK_LIST

The global parameter AUTH_REV_MCC_CHECK_LIST is used to prevent fraudulent reversals of authorisations (for example, reversal of authorisation for a cash withdrawal transaction). The parameter enables an additional check when an authorisation reversal is received (in addition to the standard check that the "RRN" parameter matches) to check that the source_member_id and ps_ref_number parameters of the original authorisation request and received authorisation reversal match.

A transit document about a transaction reversal or adjustment is sent to the recipient even if the aforementioned parameters differ from the original document. The SUSP_REV_FRAUD; tag is automatically set in the ADD_INFO field for the document being sent. For some target channels, this default behaviour can be changed with the global parameter AUTH_REV.REJ_FRAUD_FOR (see the section "AUTH_REV.REJ_FRAUD_FOR").

AUTH_REV_MCC_CHECK_LIST parameter values:

- The parameter value is a comma-delimited list of merchant category codes (the *Code* field of the "Full → Configuration Setup → Main Tables → SIC Codes" form) for which the additional check is performed (default merchant categories are also checked, see below).

  The default value of the parameter is "6011,6012,6536,6537,6538".

- To perform the additional check for all merchant category codes, set the "ALL" value.

AUTH_REV.REJ_FRAUD_FOR

The value of the AUTH_REV.REJ_FRAUD_FOR parameter is a list of target channel codes (*Code* field of the form "Full → Configuration Setup → Main Tables → Message Channels") for which transit reversal or adjustment documents will be rejected if they did not pass an additional check enabled by the global parameter AUTH_REV_MCC_CHECK_LIST.

By default (if the global parameter AUTH_REV.REJ_FRAUD_FOR is not set), these documents are sent to the recipient with the marker (tag) SUSP_REV_FRAUD;. For more information, see the section "AUTH_REV_MCC_CHECK_LIST".

It is not recommended to use the AUTH_REV.REJ_FRAUD_FOR parameter without consulting with the WAY4 system vendor's representatives.

AUTH_SMS_CHCK

The global parameter AUTH_SMS_CHCK makes it possible to optimise the authorization posting procedure when there are high loads on the system.

The global parameter is used when processing SMS (Single Message System) messages.

When the value is "N", after a financial document is generated for a message, the document is not checked.

The global parameter's default value is "Y".

AUTH_TIMEOUT

The global parameter AUTH_TIMEOUT is used to specify the period in milliseconds for creating a response to an authorisation request. If creation of the response takes longer, the record of the authorisation request is deleted with a corresponding message in the system protocol. The default value is 0 (the parameter is turned off, tracing is not performed).

It is highly recommended that users do not change the value of this parameter without consulting representatives of the WAY4™ system vendor.

AUTH_TOKEN_ADDR_TYPE

The address type (value of the ADDRESS_TYPE table's Code field) used to identify a contract or client's address type when processing a Tokenization Authorization Request (TAR) is set in the AUTH_TOKEN_ADDR_TYPE parameter. This identification of a contract's (client's) address type is used for transactions made using NFC (phones, tokens, etc.).

AUTH_USE_FORCE_AMOUNT

If the global parameter AUTH_USE_FORCE_AMOUNT has a value other than the default value of "N", the tags FORCE_AMOUNT and FORCE_CURR specified in a Service's *Service Details* field will be processed. This way, for a Service it is possible to set the value of an amount that will be used instead of the value received in an authorization request.

BAL_FX_RATE_TYPE

This parameter determines the type of FX rate used to calculate the balance of a contract with accounts in different currencies:

- If the value of this parameter is set to "M" (the default value), the balance on which information is given on a check after performing an operation or provided in response to a balance inquiry is calculated at the middle rate.
- If the value "B" is set for this parameter, the balance is calculated at the FX Sell rate.
- If this parameter has a value of S", the balance is calculated at the rate specified in the Service.

This global parameter can be redefined in the *Special Parms* field of the Service Package using the tag of the same name.

BALANCE_TYPE_1, BALANCE_TYPE_2

These global parameters can be used to specify the balance types, information on the values of which is sent in the response to an authorization request. The balance type code is specified as the parameter value.

The default values are "02" and "91".

CHCK_BASE_USAGES

If the value of the CHCK_BASE_USAGES parameter is "Y" (default value), when processing a request for a related card contract (Related Card), the limiters of this contract and of the "base" contract (Base Card) are checked.

When the value of this parameter is "N", previous system behaviour is restored, when only the limiters of the related contract are checked.

This parameter can be redefined using the CHCK_BASE_USAGES=Y/N; tag in the *Special Parms* field in the form with full information about a Service Package (Full → Configuration Setup → Products → Service Packs" → [Details]).

CHIP_ATC_MAX_INCREMENT

The global parameter CHIP_ATC_MAX_INCREMENT is used to set the maximum permissible difference between the ATC value (Application

Transaction Counter (ATC)) in the database and the new value of this counter in a smart card when an online transaction is made using this card.

If the ATC value received in a request exceeds the value stored in the database by more than the amount set in this parameter, the transaction is declined.

CHIP_ATC_DEFERRED

Processing of "deferred" authorisation requests for smart card transactions. Parameter values:

- "ENABLE" – ATC (Application Transaction Counter) value ranges are logged in database and checked. If the ATC value received in a request exceeds the value stored in the database by more than 1, the transaction is permitted, and the range that is skipped (difference between the value in the database and the value from the request) is recorded in the database . If when processing the next authorisation request for this smart card the ATC value falls in the stored range, the transaction is permitted, otherwise it is prohibited. This is the default value.
- "DISABLE" – the range of skipped ATC value is not logged and checked. If the ATC value in an authorisation request is less than the value in the database, the transaction is rejected.

CLEAR_BILLING_BLOCKED

CLEAR_BILLING_BLOCKED – this parameter determines the mechanism for blocking available funds in higher-ranking and subordinate contracts if the "Billing Limit" rule is used to calculate available funds (Auth Scenario="Billing Limit", "Main/Sub" contract hierarchy). For a "Billing Limit" scenario, all a subordinate contract's accounts are reset at the end of a billing cycle. In this way, the contract's amount available is restored each month. The CLEAR_BILLING_BLOCKED parameter is used to determine how blocked funds will be recorded:

- "Y" – at the end of a billing cycle, all funds blocked for subordinate card contracts are moved to the higher-ranking account contract. The operation is performed during the nearest Contracts – Daily Update procedure. Therefore, with the start of a new billing cycle, the entire amount of an individual credit limit becomes available in a subordinate contract.
- "N" – in a new billing cycle, the amount of available funds in a subordinate contract decreases by the amount blocked for transactions made in the previous billing cycle.

The default value is "Y".

CLOSE_PREV_PLASTIC

CLOSE_PREV_PLASTIC – A parameter used to solve problems arising due to the simultaneous use of old and reissued plastics.

Parameter values:

- "A" – the system locks the old plastic when the reissued plastic is unlocked.
- "Y" (Yes) – When the first operation with the new plastic is registered, the system locks the old plastic.
- "N" (No) – This is the default value and allows both the old and reissued plastics to be used.

CSA_NO_SUCH_CARD_IN_HEADOFFICE

This parameter is used to configure the CSA - Card Suspect Activity Monitoring module.

When the "Y" value is set (the default value) the CSA - Card Suspect Activity Monitoring module registers authorisation requests on absent cards in the dispute contract of the head financial institution and when the value is set to "N", in the contract with the appropriate subtype.

EMV_ATC_CHECK

This parameter is used in fighting fraud. The parameter allows a check of the Application Transaction Counter (ATC) on smart card EMV applications. The ATC for each consecutive operation must be larger than for the previous operation. If this condition is not met, the operation is declined.

This function is active when the parameter value is set to "Y" (the default value). To turn off checking, the parameter must be set to "N".

HIDE_NEGATIVE_BALANCE

If the value of this parameter is "Y", when a balance inquiry is made on a contract with a negative balance, the response will show a zero balance.

If the value is "No", the response will show the actual balance.

INTRANET_SERVER

When declining authorisation with the code RC="01" (Call Issuer) forced authorisation is performed (the authorisation code is generated manually) according to the results of a call to the issuer. If the contract balance is not maintained in the WAY4™ system but in another banking system, it is necessary to send the appropriate information to this system. To do so, the global parameters INTRANET_SERVER,
NETSERVER__CHANNEL_<Message Channel Code>,
NETSERVER_TIMEOUT_<Message Channel Code> are used.

Parameter values are set in the following format:

- INTRANET_SERVER = <Intranet Station Code>

- NETSERVER_CHANNEL <Message Channel Code> = <NetServer Channel Code>
- NETSERVER TIMEOUT <Message Channel Code>= <number of seconds>

The Message Channel Code (bank system channel code) is set in the table Full → Configuration Setup → Main Tables → Message Channels.

LOCKED_CARD_RC

A parameter containing the response code returned by the system to a device when an attempt is made to authorize a newly issued card that has a "Locked" status.

The default parameter value is 54 ("The card has expired").

The default value can be substituted with a custom value if the transaction does not lead to plastic being unlocked and its conditions make it possible.

1. Unambiguously identify a plastic, and this plastic is in "Locked" status.
2. Select an "appropriate" plastic, and this plastic is in "Locked" status.

LOG_ALL_OPERATIONS

LOG_ALL_OPERATIONS – A parameter regulating how balance inquiries and online statement requests are logged.

Parameter values:

- "Y" (Yes) – The system creates the corresponding authorization documents for balance inquiries and online statement requests.
- "N" (No) – Authorization documents are not created for balance inquiries and online statement requests. This is the default value.

For transit documents, this parameter value is not taken into account as authorisation documents are always generated for transit operations.

LOG_MISSING_ATC_TO_DOC

LOG_MISSING_ATC_TO_DOC – log missing Application Transaction Counter (ATC) values for smart cards in document tags. Parameter values:

- "Y" – ATC values are specified in tags in the document's *Add Info* field:
  - If the counter value in a processed message is less than the value of the counter in the database, tags will be added to the document:
    - DEFERRED_ATC – value received in the processed message.
    - LAST_ATC – value stored in the database.
- If the counter value in a transaction exceeds the counter value in the database by more than one unit, the following tags will be added to the document:

- ♦ OLD_ATC – value stored in the database.
- ♦ "NEW_ATC – value received in the processed message.

- "N" or the parameter is not set – counter values are not logged in the document.

When setting up this parameter, setup of the CHIP_ATC_DEFERRED global parameter must be considered (CHIP_ATC_DEFERRED should be set to "ENABLE").

MERCHANT_PREFERENCE_CASE_SENSITIVE

The parameter defines case sensitivity when checking preferred counterparties according to the MERCHANT_ID, TRANS_CITY, and MERCHANT_NAME parameters and parameters set using the MI_LIST and EXC_MI_LIST tags. The check can be made according to parameters set in the properties of the counterparty itself, and in "Custom Handbooks" handbooks (see the section "Using "Custom Handbooks" to Configure Preferred Counterparty Parameters" of the document "Preferred Counterparties").

The parameter's default value is "N"; by default, checks are not case-sensitive.

MSG_PRE_CACHE

This parameter is used to force data caching before generation of a message. The default value is "Y". To increase productivity, this function can be turned off by setting the parameter value to "N".

NETSERVER_CHANNEL <Message Channel Code>

For a description of this parameter, see the description of the "INTRANET_SERVER" parameter.

NETSERVER_TIMEOUT <Message Channel Code>

For a description of this parameter, see the description of the "INTRANET_SERVER" parameter.

ONLINE_CREDIT_PENDING

ONLINE_CREDIT_PENDING – A parameter regulating how the amount available is changed in the account of the card contract when credit operations are executed at ATMs and payment terminals.

Parameter values:

- "Y" (Yes) – When funds are deposited, the amount available on the card contract increases immediately when the operation is executed due to the blocking of a negative amount of funds in the account. This amount is

unblocked when the financial document for the deposited funds has been posted.

- "N" (No) – The amount available on the card contract increases only after the financial document for the deposited funds has been posted. This is the default value.
- "L" – When transactions are performed with on-us cards on "on-us devices", the card contract's amount available increases immediately after the transaction; when transactions are performed with "on us" cards on "foreign" devices, the card contract's amount available increases only after the financial document is posted.

  It is not recommended to use the global parameter ONLINE_CREDIT_PENDING with online credit transactions on an account with the Is Am Av=No flag. This setting is not correct as when a transaction is made the amount available does not change.

This global parameter can be redefined using the PENDING=<value>; tag on the transaction sub-type level (see the document "Documents").

ONLINE_STATEMENT_PERIOD

This parameter defines the length of time in calendar days, counted from the current calendar day, during which executed transactions will be shown in an ATM mini-statement.

The range of possible parameter values is from 1 to 1000. The default value is 30.

Regardless of this parameter's value, mini-statements can contain no more than the 10 last transactions.

All authorization documents whose amounts are not yet unblocked are selected for the time period indicated by the parameter ONLINE_STATEMENT_PERIOD, as well as no more than the last ten financial documents by posting date. The selected documents are sorted by their transaction dates and no more than the last ten documents by transaction date are selected to be included in the mini-statement.

PARTIAL_APPROVAL_ENABLE

In standard system behaviour, if an authorisation request contains a flag that the merchant is ready to accept partial authorisation (PARTIAL_APPROVAL_SUPPORT=Y;) and the available amount on the contract is less than required, the amount is corrected.

The global parameter PARTIAL_APPROVAL_ENABLE allows partial authorisations to be prohibited. To do so, set the parameter value to "N".

This global parameter can be refined on the Service Package or transaction subtype level.

RM_USG_CHCK_MODE

This parameter determines how usage limiters with the "Risk Rule" type will be checked:

- If the value is "CSA" (the default value) the check is performed as part of the CSA – Card Suspect Activity Monitoring module check.
- If the value is "USG", the check will be performed during the check of the remaining usage limiters.

SEC_VAL_COUNTS_TR_COND

The global parameter SEC_VAL_COUNTS_TR_COND is used to specify the list of codes for methods allowing the number of transactions made with certain conditions to be limited. For example, without PIN entry, or without cardholder verification (No-CVM transactions).

Methods are set up in the authentication type dictionary (TD_AUTH_TYPE).

In each of these methods, a list of transaction conditions whose number must be limited (INCREMENT parameter) and a list of transaction conditions for which the counter must be reset (RESET parameter).

SEND_PVV_2_PS

The global parameter SEND_PVV_2_PS with the "Y" value makes it possible to generate a message to the payment system to send card PVV data when changing a PIN. A message is generated when changing a PIN through an online request and when accepting data from "PIN Management" if a new PIN is being issued (Reorder PIN).

The global parameter can be redefined in a contract subtype's *Add Parms* field using the SEND_PVV_2_PS tag (i.e., using the SEND_PVV_2_PS=N ; tag, sending PVV data to the payment system can be disabled on the contract subtype level).

The default value of the SEND_PVV_2_PS parameter is "N".

STMT_SERV_CLASSES

The global parameter STMT_SERV_CLASSES specifies operations included in a statement.

Parameter values are transaction types (Service Class) separated by commas or without separation.

STMT_SHOW_NOT_AM_AV

The global parameter STMT_SHOW_NOT_AM_AV allows operations on contract accounts whose balance is not considered when calculating the amount available on the contract (Is Am Av = "No") to be hidden in a mini-statement.

To use this function, the value of the STMT_SHOW_NOT_AM_AV parameter must be set to "No".

The default value is "Yes". When this value is set, the mini-statement will show operations on all accounts of the contract.

SUSP_VISA_TERM_TYPE_LST

The global parameter SUSP_VISA_TERM_TYPE_LST makes it possible to not accept reversals sent from suspicious VISA terminal types. To do so, set a comma-delimited list of such terminal types as the SUSP_VISA_TERM_TYPE_LST parameter value. For the list of possible values, see field 60.1 in the VISA specification.

The default value is "7" ("Telephone device (including Visa dial terminals)").

To disable this mode, specify "NONE" as the value of the global parameter.

TD_CHECK_ATN

When the TD_CHECK_ATN parameter has a "Y" value (the default value), an ATN (Authentic Tracking Number) check will be performed for 3D Secure transactions. The parameter must be set to "N" to turn off this function.

USAGE_LIMITER_LOG_STATE

When the value of the global parameter USAGE_LIMITER_LOG_STATE is "Y", the state of usage limiters when processing documents can be logged.

Limiter parameters, the current values of limiter counters (values of the *Max Number*, *Max Amount*, *Current Number*, *Current Amount* fields) and, if using cells, the "cell" state (the values of the Locked_Amount, Locked_Number, Res_Amount, Res_Number fields) are written to the corresponding fields of the USAGE_HISTORY table at the time a document is processed.

By default, the value of the global parameter is not set – limiter state is not logged.

The global parameter USAGE_LIMITER_LOG_STATE can be redefined on the level of a particular limiter using the LOG_STATE tag ("Y" and "N" values are possible) in the *Spc Parms* field of the limiter template.

USG_THRESHOLD_CALC_DELAY

The global parameter USG_THRESHOLD_CALC_DELAY with the "Y" value allows average threshold values of a limiter to be calculated and activated after the end of a number of cycles set in the limiter's *# Cycles* field (the number of cycles to be averaged). Before this, fixed threshold values specified in the limiter template are effective (the fields *Max #*, *Max Amnt* and *Max Sngl Amnt*).

When the value is "N", the earlier scheme is kept – average values are calculated and activated beginning with the second cycle the limiter is effective (from the second cycle determined by the limiter parameters *Period Type* and *Period*).

The value of this global parameter can be redefined using the THRESHOLD_CALC_DELAY ("Y" and "N" values) in the *Spc Parms* field of the limiter template.

USAGE_LIMITER_FOR_DUPLICATE

When a card is reissued with a new card contract (i.e. a contract with a new number), by default, the usage limiter is moved from the old contract to the new when the new contract is created (and the old contract's counters are reset).

The global parameter USAGE_LIMITER_FOR_DUPLICATE with the MOVE_WHEN_ACTIVATE value makes it possible to move a limiter to a new contract when it is activated (when the new plastic is unlocked), and not when it is created.

If this setting must not be used for all limiters, the global parameter is not used. In this case, the tag FOR_DUPLICATE=MOVE_WHEN_ACTIVATE; should be used in the templates of those limiters that will be moved to the new contract when it is activated. The tag is set in a limiter's Spc Parms field. See the section "Tags in the SPC PARMS Field of a Usage Limiter Template" of the document "Usage Limiters".

 If not all contracts are explicitly activated (unblocked) (for example, when a contract is created already in an active status), limiters for these contracts will not be moved when the value of the USAGE_LIMITER_FOR_DUPLICATE parameter is MOVE_WHEN_ACTIVATE.

WAIVED_PD_MODE

The global parameter WAIVED_PD_MODE is used when reclassifying delinquency (see the section "Reclassifying Delinquency" of the document "WAY4™ Advanced Tariff Management"). By default (if the global parameter is not set), delinquency is reclassified if the delinquency account's balance is less than the amount set in the corresponding tariff.

If "<=" is set for the global parameter, delinquency will be reclassified if the delinquency account balance is less than or equal to the amount specified in the tariff.

The WAIVED_PD_MODE=<=; tag can be used to set this condition for a specific financial institution.

ZERO_CARD_SEQV_NUMBER_ALLOWED

The global parameter ZERO_CARD_SEQV_NUMBER_ALLOWED specifies the order for searching for plastic when an authorisation request is received:

- If the value is "Y", when the SEQV_NUMBER parameter with a "0" value is received in a request, a search for plastic with the set number will be made. If there is no plastic with the number "0", another record will not be selected.
- If the value is "N" (default value), the standard mode of operation is maintained – when the SEQV_NUMBER parameter with a "0" value is received in a request, a search under the contract is made for plastic with a number differing from "0".

Chapter 10. Mobile Banking

SMS_ADDR_TYPE

SMS_ADDR_TYPE – A parameter used in providing services requested by SMS from a client's mobile phone. Such services can include balance inquiries by account, mini-statements, blocking cards, etc.

When processing incoming requests if the full number of the card is not indicated (only its last digits) a procedure is executed to find out the card's full number according to the sent digits and the sender's telephone number.

The parameter value is the address type code registered in the ADDRESS_TYPE table in the database.

When fulfilling the request, the system checks that the phone number from which the request was received is shown in the *Address_ZIP* field of one of the records in the CLIENT_ADDRESS table, and the *Type* field of this record contains the same value as that of the SMS_ADDR_TYPE parameter.

Chapter 11. Advanced Applications Module

APP_RESET_USAGE

This parameter determines how the parameters of a contract's Usage Limiters inherited from the Service Package are changed. If the value of this global parameter is "Y", when an application for changing the parameters of the limiter is processed, first parameter values set in the Service Package are restored and then parameter values are changed in accordance with the application.

If the value of this global parameter is "N" (default), when an application for changing the parameters of the limiter is processed, only the parameter values indicated in the application are changed.

The parameter is used for the Advanced Application R1 and R2 modules.

APPL_ALLOW_CHANGE_NUMBER

APPL_ALLOW_CHANGE_NUMBER – If this parameter is set to "N" (the default value), the system writes a record of the "Warning" type to the process log when processing an application to change a contract number. If the parameter is set to "Y", no record is written to the process log.

The parameter is used for the Advanced Applications R1 module.

APPL_ALLOW_NOT_READY

APPL_ALLOW_NOT_READY – the parameter is used for applications imported to WAY4 by the "XML Applications Import" pipe.

If the value of APPL_ALLOW_NOT_READY is "Y", when approving applications, the status of Products, Accounting Schemes and Service Packages will not be checked. When accepting applications, a check will be made regardless of this parameter's value.

The parameter's default value is "N".

The parameter is used for the Advanced Applications R2 module.

APPL_CHECK_EVNT

The "Y" value of this parameter turns on application import mode, in which messages about errors occurring during event processing are generated as well as messages about errors occurring during application processing (error messages are recorded in a response file and are displayed on the screen). This functionality is only useful for events processed simultaneously.

The parameter is used for the Advanced Applications R1 and R2 modules.

When the "N" value is set (the default value), event processing errors are ignored.

The default value for the Advanced Applications R1 module is "N", the default value for Advanced Applications R2 is "Y".

APPL_CLIENT_ID_TYPE

APPL_CLIENT_ID_TYPE – A parameter used to specify the criterion according to which a client record search is performed when working with applications entered directly from forms for working with database objects (clients, contracts, addresses).

If the parameter is set to "C", a search is made by client number; if it is set to "R" (the default value), by client registration number (Registration #).

The parameter is used for the Advanced Applications R1 module.

APPL_DEFAULT_ORDER

APPL_DEFAULT_ORDER – Parameter used to specify a bank department that has accepted a client application (Order Department) for all registered applications. The parameter value is the value of the CODE field in the BRANCH table. This parameter is used when entering applications directly from forms for working with database objects (clients, contracts, addresses).

The default parameter value is 0101.

This parameter value can be redefined in the settings of the menu item used to open the required form for working with a database object.

The parameter is used for the Advanced Applications R1 module.

APPL_DEFERRED_APPROVE

This parameter determines how the contract Approval operation is performed when the tree of applications is processed.

If the value of this parameter is "Y" (default), the contract to which the higher-ranked application refers to is approved after the processing of the last application in the hierarchy.

If the value of this parameter is "N", the contract is approved after the processing of every application in the tree that changes the properties of the contract.

The parameter is used for the Advanced Applications R1 and R2 modules.

APPL_EMPTY_DPRT

If the value of this global parameter is "Y", the processing of applications with an empty *Order Department* field is permitted.

If the parameter value is "N" (default), the processing of applications with an empty *Order Department* field is prohibited.

The parameter is used for the Advanced Applications R1 and R2 modules.

APPL_FORM_WF_STAGE

This parameter is used to redefine the workflow of a manually entered application.

The parameter value is the code of the application workflow type (WF_STAGE).

The default value is NULL.

The parameter is used for the Advanced Applications R1 module.

APPL_FRM_ACCEPT_STAGE

This parameter is used for simultaneous processing of manually entered applications. The parameter determines the workflow stage at which such applications are accepted to enter changes in the DB. The default value is "ACCEPT".

The parameter is used for the Advanced Applications R1 module.

APPL_FULL_WF

This parameter is used to enable the full Case Management mode for applications. This mode includes:

- Automatic determination of a case owner in case workflow according to Case Management settings.
- Saving calculated values of case parameters used when configuring rules.

The default value is "N".

The parameter is used for the Advanced Applications R2 module.

APPL_IGNORE_REG_TYPE

The Advanced Applications module allows clients to be searched in the database by client registration number (Reg Number) without taking the registration number type (RegNumber Type) into account.

To activate this function, set the APPL_IGNORE_REG_TYPE global parameter to "Y" (the default value is "N"). This function allows the processing of applications to change both client registration numbers and client registration number types.

The parameter is used for the Advanced Applications R1 and R2 modules.

APPL_NEW_CARD_IN_RESPONSE

This parameter determines whether information about a new unique card number (PAN) will be contained in the response file generated by the "XML Applications Overall Response" and "XML Applications Response" pipes when applications are processed to reissue cards with a change in the card contract number.

When the value of this global parameter is "Y", when an application is processed, the response file will contain information about the new contract created as the result of the application, and about the new PAN.

If the value of this global parameter is "N" (default), when an application is processed, information about the old contract and old PAN will be included in the response file.

APPL_NON_SAFE_ON_SECONDARY

This parameter determines how applications will be posted in an HA secondary node in "no workflow" mode.

When the value of this parameter is "APPROVE", instead of being accepted, an application is approved. After synchronisation in the primary node, the application will have the "Waiting" status and can be accepted.

When the value of this parameter is "DECLINE" (default value), applications will be declined (Posting Status = Declined).

The parameter is used for the Advanced Applications R2 module.

APPL_OFFICER_DEFAULT_PASSWORD

The parameter contains the default password value for new users created with Advanced Applications R2 module applications (with new user identifiers not yet existing in the database).

If this global parameter is not set, the default password for new users will be "******" (6 asterisks).

For information about adding new users, see the section "Applications to Work with User Records" of the document "Applications for Administering WAY4™ Users (Advanced Applications R2 Module)".

APPL_ORDER_INDIVIDUAL

This parameter allows personal payment orders to be created (or the parameters of personal payment orders to be changed) using applications. To turn on this function, the APPL_ORDER_INDIVIDUAL parameter value must be set to "Y".

If the parameter value is set to "R", several personal payment orders with different codes can be generated according to the template payment order.

The default value is "N".

The parameter is used for the Advanced Applications R1 and R2 modules.

APPL_RESET_CARD_EXPIRE

APPL_RESET_CARD_EXPIRE is a parameter that determines the way the Expiry Date of a card is set in a contract created as the result of an application's processing.

If the value of this parameter is "Y", the Expiry Date is set from the application. In addition, the value of the APPL_OLD_CARD_PROD parameter must be set to "Y".

If its value is "N" (default), the Expiry Date is automatically set by the system.

The parameter is used for the Advanced Applications R1 module.

APPL_SPLIT_RESPONSE

APPL_SPLIT_RESPONSE is a parameter determining whether a deferred response file is generated for stand-alone applications split from higher-ranking application.

If the value of this parameter is "Y", a deferred response file is generated after all the applications split from higher-ranking applications have been processed. In this case, the file contains the results of processing the split applications.

If the value of this parameter is "N" (default), a deferred response file is generated without accounting for split applications.

The parameter is used for the Advanced Applications R1 module.

APPL_UNIQ_REG_NUMBER

If the value of this parameter is "Y" (the default value), when the uniqueness of an application registration number is checked, applications of all levels are checked (main and subordinate applications). When this parameter has an "N" value, only higher-level applications are checked.

The parameter is used for the Advanced Applications R1 module.

APPL_USE_DFLT_CBS_MEMBID

To search for a contract according to the value of the "RBS Number" field, with an empty value in the "RBS Member ID" field, the Advanced Applications module uses the APPL_USE_DFLT_CBS_MEMBID parameter.

Set the global parameter APPL_USE_DFLT_CBS_MEMBID value to "Y" to use the value of the "Branch Code" field of the financial institution record as the value of the "RBS Member ID" field, making it possible to search for the contract.

When this parameter is turned on, the "RBS Member ID" field of the contract record must be filled in.

The default parameter value is "N".

The parameter is used for the Advanced Applications R1 and R2 modules.

CHECK_OPEN_APPL_CASE

The global parameter is used to configure how contracts are closed, depending on whether there are application cases for the contract. The global parameter is analysed if an Event with the CLOSE_IF_EMPTY=OPEN_CASE_LIST; tag is processed when an attempt is made to close the contract.

If the value of the global parameter CHECK_OPEN_APPL_CASE is "Y", when closing a contract, open application cases for this contract will be analysed. If there are open cases, the contract will be closed only after the cases have been closed.

When the value is "N" (default value), the existence of open application cases for this contract is not checked when closing a contract.

CROSS_INST_CLIENT

CROSS_INST_CLIENT – a parameter defining how the system searches for a client record in the WAY4 database when processing applications.

Parameter values:

- "Y" – client records are searched in all financial institutions.
- "N" – client records are searched only in the financial institution referred to in the application; this is the default value.

The parameter is used for the Advanced Applications R1 and R2 modules.

DEFAULT_WF_STAGE

DEFAULT_WF_STAGE – parameter used at the application loading stage.

The parameter value is the code of the workflow stage type (WF_STAGE) set for the application in the event that an error occurs at the loading stage.

The default value is NULL.

The parameter is used for the Advanced Applications R1 module.

FILL_APPL_PRODUCT

FILL_APPL_PRODUCT is a parameter that determines the content of the *Product* field of the application form for applications loaded from files.

If the value of this parameter is "Y", the name of the Product corresponding to the application, will be entered in the *Product* field of the application form.

If the value of this parameter is "N" (default), the *Product* field of the application form will remain empty for the applications loaded from a file.

The parameter is used for the Advanced Applications R1 module.

PS_ADDRESS_TYPE

This parameter is used to show the type of address for which device parameters will be specified.

The default value is "OWS PS".

The parameter is used for the Advanced Applications R1 and R2 modules.

USE_NOT_READY

USE_NOT_READY – A parameter defining whether an application associated with objects (client records, contracts, etc.) that have the status "Not Ready" may be processed.

- "Y" – it is permitted to execute operations with objects having the "Not Ready" status as a result of application processing.
- "N" – it is forbidden to execute operations with objects having the "Not Ready" status; when processing applications for these objects the system will generate an error message; this is the default value.

The parameter is used for the Advanced Applications R1 module.

Chapter 12. Interchange

CHECK_PAN_LENGTH

The global parameter CHECK_PAN_LENGTH with the "Y" value enables checking of the card number length when searching for a record in the BIN table (by the *PAN Len* field of the BIN table). By default, a check is made that the length of the contract number is in a range between 13 and 19 characters, inclusively. When the value is "Y", the check is only made for "Visa".

To check if the card number fully matches a value defined in the BIN table, as the parameter's value, specify a list of channel codes, separated by commas (the *Code* field in the "Message Channels" form (Full → Configuration Setup → Main Tables → Message Channels)), for which this check will be made.

The parameter's default value is "N". In this case, the card number length will not be checked when searching for a record in the BIN table.

COMPANY_ADDRESS_TYPE

The global parameters MERCHANT_ADDRESS_TYPE and COMPANY_ADDRESS_TYPE are used to create address tags in the NMAS_DOC table when exporting merchant data to the payment system. These parameters contain the address code from the ADDRESS_TYPE table; for example, for the address type "Address for Payment Scheme", the code is "OWS PS".

CONVERT_ACQ_BIN

The global parameter CONVERT_ACQ_BIN with the "Y" value redefines the value of field N 32 (Acquiring Institution ID) in an ISO format message received on a channel for interchange with an external system (with an *Is On Us* field value other than "Yes" in the "Message Channels" form; "Full → Configuration Setup → Main Tables → Message Channels") with the value of the OUR_BIN field from the INTERCH_ROUTING Interchange routing table (Full → Configuration Setup →Routing →Interchange Routing Contracts).

The default value of the parameter is "N".

The parameter value can be redefined in a financial institution using the same tag with the "Y" or "N" value.

The value of field N 32 in an ISO format message can be redefined with the global parameter CONVERT_ACQ_BIN_CH. The value of the CONVERT_ACQ_BIN_CH parameter has a higher priority than the value of the CONVERT_ACQ_BIN parameter.

CONVERT_ACQ_BIN_CH

The global parameter CONVERT_ACQ_BIN_CH redefines the value of field N 32 (Acquiring Institution ID) in an ISO format message received on a channel for interchange with an external system (with an *Is On Us* field value other than "Yes" in the "Message Channels" form; "Full → Configuration Setup → Main Tables → Message Channels").

The value of the global parameter CONVERT_ACQ_BIN_CH is a list of channels for which routing is determined according to the OUR_MEMBER_ID field of the BIN_TABLE table.

The parameter can be set in a financial institution using the same tag.

If the parameter is not set, routing is performed according to the value of the global parameter CONVERT_BIN_ACQ.

CUP_RELEASE

This parameter is used to switch to operation according to UnionPay regulations specified in the document describing the corresponding release.

The parameter value is the release number in YY.N, format; for example "14.2".

DCI_RELEASE

This parameter is used to switch to operation according to Diners Club regulations specified in the document describing the corresponding release.

The parameter value is the release number in YY.N, format; for example "14.1".

DEFAULT_MEMBER_FOR_CHANNEL <Channel>

The global parameter DEFAULT_MEMBER_FOR_CHANNEL <Channel> is used to determine the default Member ID code used when no Member ID is found during routing. The parameter value is set in the following format: DEFAULT_MEMBER_FOR_CHANNEL <Channel>=<Default Member Id>. The default code must be specified in the BIN_TABLE (Full → Configuration Setup → Routing → BIN Groups → [BIN Table]).

FINANCIAL_REJECTS

The global parameter FINANCIAL_REJECTS is used to support recording of financial documents rejected by payment systems:

- If this parameter has a value of "Y", the financial mode of processing rejects for all payment systems is turned on. For more information, see the section "Working with Financial Documents Rejected by a Payment System" of the document "Documents".

- The default value of the parameter is "N". When this value is set, the financial mode of processing is turned off and nonfinancial recording of rejects is supported.

In the mode for non-financial recording of reversals (when the value of the FINANCIAL_REJECTS parameter is "N") fund activity in accounts will not take place when rejected documents are posted.

IC_ACCEPT_NON_EL_FOR_CHNL

The global parameter IC_ACCEPT_NON_EL_FOR_CHNL allows "non-electronic" transactions to be made using electronic cards on certain channels. The parameter value is the codes of channels for which such transactions are permitted, separated by commas:
IC_ACCEPT_NON_EL_FOR_CHNL=<Ch1>,<Ch2>,…,<ChN>.

This parameter is applied in interacting with the MasterCard payment system.

MERCHANT ADDRESS TYPE

For a description of this parameter, see the description of the COMPANY_ADDRESS_TYPE parameter.

MERCH_PARMS_PS_CHECK_FOR

The system checks for the Merchant Address and Postal Code during approval of an acquiring module contract. This check can be performed with consideration for the requirements of the corresponding payment system. To do so, the global parameter MERCH_PARMS_PS_CHECK_FOR is used, the values of which are separated by commas (for example, VISA, MASTERCARD). The name of the payment system in the parameter value means that the system will check contract parameters with consideration for this payment system's requirements. The absence of a parameter or its empty value means a check will be made according to the requirements of all payment systems.

In the current version of the system, this parameter only works with the MasterCard payment system.

MCC_LCC

The global parameter MC_LCC is used to determine the location of the Local Clearing Center (LCC). The parameter value is the code of the country in which the LCC is located.

MC_CPI_GROUPS

This parameter is used by the pipe for loading BIN tables (com.openwaygroup.pipe.mc.mpe_import.jar) run using the menu items "OpenWay → MasterCard → MC. Daily Procedures → MC. Load Bin Table

and Handbooks → MC MPE Daily Files Import" and "OpenWay → MasterCard → MC. Daily Procedures → MC. Load Bin Table and Handbooks → MC MPE Daily Files Import with Conversion".

The parameter is used to separate BIN table records into BIN groups.

 It is mandatory to set a value for the parameter; otherwise, an error message will be generated when loading the BIN table.

The recommended value is "M=CIR,MSI".

MC_NO_IRD_ERR

If the value of the MC_NO_IRD_ERR parameter is "Y" (default value), a document for which IRD cannot be calculated when posting is declined, and gets the "Decline" status. This situation may occur, for example, due to errors in settings for calculating IRD. The "Decline" status means that the document cannot be exported to the payment system without reposting. If the parameter value is "N", when IRD cannot be calculated, the document can be posted and a corresponding warning will be generated. The required IRD value can be added manually to this document, after which the document can be exported to the payment system.

 If the bank uses calculation of Interchange fees (fee prediction), the "N" value of the parameter should not be used since an Interchange fee will not be calculated for documents for which it was not possible to calculate IRD.

MC_RELEASE

This parameter is used to switch to operation according to MasterCard requirements specified in the document describing the corresponding release.

The parameter value is a release number in the YY.QN format, for instance, "14.Q4".

ROUTE_BY_FORWARDING_MEMBER_FOR_CHANNELS

To comply with the requirements of the section "Global 558—Customer Identification for Bridged Transactions" of the MasterCard document "Release 14.Q4 Document" the value of the global parameter ROUTE_BY_FORWARDING_MEMBER_FOR_CHANNELS must be set to "E".

If the parameter's value is "E", routing will be performed according to the transaction message field DE 33 value (Forwarding Institution ID Code) saved by the pipe in the original_doc.source_member_id field.

If the parameter is not set, MasterCard transactions are routed according to the transaction message field DE 94 value (Transaction Originator Institution ID Code), that after import is saved to the doc.source_member_id field by the IPM Inward Processing pipe

SAFE_FDN_SEPARATE_DAY

The SAFE_FDN_SEPARATE_DAY parameter specifies a day of a month and is used as a threshold value during generation of fraud negative reports.

Parameter values are integers from "0" to "31". The default value is "0".

The parameter is used as follows.

If a report is generated on a banking date that precedes the day of the month specified by the parameter, the system will check whether there are SAFE documents for the previous calendar month, otherwise, for the current one.

For example, if the value of SAFE_FDN_SEPARATE_DAY is set to "10" and a user attempts to generate a report on the 9th day of a month, the system will check that there were no SAFE documents for the previous calendar month. If a user attempts to generate a report on the 11th day of a month, the system will check that there were no SAFE documents from the 1st to the 11th day of the current calendar month. If there were no SAFE documents for the checked period, the report will be successfully generated.

SAFE_ONUS_PERMIT

SAFE_ONUS_PERMIT – If this parameter is set to "Y", a SAFE document based on On-Us transactions can be generated. When generating a SAFE document of this type, the *Members ID* field value will be determined according to Interchange routing tables (BIN Table, Interchange Routing), and an ARN will be generated.

SAFE_CHAIN_CHECK

The SAFE_CHAIN_CHECK parameter is used when working with SAFE/FRS documents. When the value of this parameter is set to "Y", a check is performed of the chain of documents of any type ("Add", "Change", "Delete", "Confirm", "Reactivate") related to one financial document. When the parameter value is "N" (the default value), no check is performed.

SL_NETSERVER_ADDRESS

This parameter is used to indicate the NetServer address to which requests are sent for placing in stop lists.

If the value of this parameter is not specified, the system uses the value of the INTERNET_SERVER tag set in the user menu item that starts the procedure for sending this information to the corresponding payment system.

SL_NETSERVER_TIME_OUT

This parameter is used to set the period within which a response to the request for placing in stop lists must be received from NetServer. The parameter value is indicated in seconds.

If no value is specified for this parameter, the system uses the value of the TIMEOUT tag set in the user menu item that starts the procedure for sending the given information to the corresponding payment system.

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STOPLIST_ADD_CHANNELS

The global parameter STOPLIST_ADD_CHANNELS is used to set additional channels for sending requests for placing in stop lists (the main channels are international payment system channels; additional channels are Host-to-Host channels).

The parameter value is set in the following format: STOPLIST_ADD_CHANNELS = CHANNEL <WAY4MessageChannel>=<NetServerChannel>;.

USE_ADD_ROUTE_CHECK

The global parameter USE_ADD_ROUTE_CHECK is used for an additional validity check of a card's routing for the VISA channel according to Combined Routing Table data. The parameter must have a value of "Y" for the check to be performed.

When the parameter value is set to "N" (the default value), no check is performed.

VISA_NO_RA_ERR

If the VISA_NO_RA_ERR parameter value is "Y" (default value), a document for which RA cannot be calculated when posting is declined, and gets the "Decline" status. This situation may occur, for example, due to errors in settings for calculating RA. The "Decline" status means that the document cannot be exported to the payment system without reposting. If the parameter value is "N", when RA cannot be calculated, the document can be posted and a corresponding warning will be generated. The required RA value can be added manually to this document, after which the document can be exported to the payment system.

 If the bank uses calculation of Interchange fees (fee prediction), the "N" value of the parameter should not be used since an Interchange fee will not be calculated for documents for which it was not possible to calculate RA.

VISA_RELEASE

This parameter is used to switch to operation according to Visa requirements specified in the document describing the corresponding release.

The parameter value is a release number in the YY.N format, for instance, "09.1".

Chapter 13. "High Availability" Module

CDU_CHECK_FILTER

The parameter defines the filter for distributing contracts being processed between nodes. The parameter is used in the "Distributed Processing" solution for distributed execution of the "Contracts – Daily Update" (CDU) procedure.

It is recommended to use a filter for the ROUTING_IDT field of the ACNT_CONTRACT table according to which partitioning is performed, for example:

```
routing_idt in ('c0_1') or routing_idt is null
```

Specify the necessary node in the *System Instance* field.

By default, the parameter is not set.

CHECK_QUE_EVENT_ON_SECONDARY

The parameter makes it possible to check Events in a secondary node for their reproduction in a primary node:

- "Y" – check Events. The "SAFE" tag must be specified in the *Special Parameters* field, otherwise an error message will be generated.
- "N" – do not check.

The parameter's default value is "Y".

CONFIG_EXPIRE_SEC

The parameter defines the interval (in seconds) for updating the configuration cache in an Oracle session, including global parameters and the list of services for the high availability solution.

The default value is 600.

DOC_RECORD_KEY_ATTRIBUTE

Changes in data applied by the Apply process are grouped (in action groups). An action group determines rules for separating data by parallel streams.

The DOC_RECORD_KEY_ATTRIBUTE group determines the rule for grouping changed data in the DOC table. DOC table data can be grouped by the following attributes:

- SOURCE_NUMBER
- TARGET_NUMBER
- SOURCE_CONTRACT

- MERCHANT_ID

In addition, the value DOC_RECORD_KEY_ATTRIBUTE=CUSTOM can be used. In this case, a custom function, CUST_GET_DOC_RECORD_KEY is applied in which the user implements a custom algorithm for generating an attribute for grouping changed data based on the aforementioned attributes and the IS_AUTHORIZATION attribute.

The default value of the parameter is TARGET_NUMBER.

This parameter influences generation of an action group only when synchronising changes:

- From a secondary node to the primary node (for HA Cluster topology).
- From the StandIn node to the production node (for StandIn topology).

For HA Switch topology, this parameter will set the same grouping rules for replicating changes from each Online node to Back-Office as well as between both (all) Online nodes.

HA.DEFERRED_DOC_APPLY

The parameter makes it possible to defer processing authorisation documents when they are moved from a secondary node to the primary node.

Possible values:

- "Y" – deferred posting of authorisation documents is enabled.
- "N" – deferred posting of authorisation documents is disabled.

When deferred records are moved, they are processed by a separate process (the process is started using the menu item "Full → DB Administrator Utilities → Object Tasks → Start Object Tasks Scheduler" and stopped using "Full → DB Administrator Utilities → Object Tasks → Stop Object Tasks Scheduler" is used).

If before this process is completed, an authorisation request is received for a contract from a contract tree in which there are already documents that have been moved but not processed, the respective documents are processed "jumping the queue", and then the authorisation request that was received is processed.

The default value of the parameter is "N".

HA.DEFERRED_DOC_APPLY_DELAY

The parameter determines the delay (in seconds) in posting a document after it has been received by the deferred apply process.

The default value is "0".

LAST_SCAN_MODE

The parameter determines the table used during the "Contracts – Daily Update" (CDU) procedure. The parameter is used in the "Distributed Processing" solution for distributed execution of CDU.

If the parameter is not set or its value is "T", the ACNT_CONTRACT table is used during CDU. If the parameter is set and has a value other than "T", the ACNT_CDU table is used in CDU.

By default, the parameter is not set.

USG_LIM_COUNTER_MODE

This parameter manages the ability to synchronise update of usage limiter counters in secondary nodes when reversing transactions.

Possible values:

- "SYNC" – limiter counters are updated.
- "LAZY" or not set – counters are not updated.

By default, the parameter is not set.

When a Deadlock related to limiter update occurs, it is necessary to set the tag "COUNTER_MODE=LAZY;" in the *Spc Parms* field of the limiter template.

The parameter does not apply to limiters using "cells".

IN_FLIGHT_PERIOD_SECS

IN_FLIGHT_PERIOD_SECS – period of time in seconds during which it is possible to continue processing In-Flight operations in the node where the Service was being processed before switching.

The default value is "10".

This global parameter can be redefined on the Service level (*In-Flight Period* field, "Services" form, menu item "Synchronising Systems → Configuration Setup → Services") (see the section "Configuring Switching of Service Processing Between Nodes" of the document "Monitoring the State of High Availability Nodes").

SI_NODE_RECORD_GROUPS

This parameter sets the number of logical groups into which each table being synchronised is separated. Each group, depending on the number of apply threads can be processed by a different apply thread. For an RAC cluster, the number of groups is obtained by multiplying the value of this parameter by the number of nodes in the cluster. To decrease the possibility that different groups will fall into one apply thread, a prime number is used as the parameter value. The number of groups must match the number of apply threads.

The default value of the parameter is 31.

Affects the "Capture" process.

SI_COPY_DELAY

The parameter determines the delay (in seconds) between the time a record of changed data is created in the source node and the time data copying to the destination node is started.

The default value of the parameter is 1.

Affects the "Copy" process.

SI_COPY_REPEAT_INTERVAL

Pause (in seconds) between attempts to copy records from SI_CONN_SRC, if all data have already been copied to SI_CONN_DST. If there are still data that have not been copied, the process runs without any pause.

Increasing this parameter reduces system load volume but increases latency, so a value of more than 3 seconds is not recommended.

The default value of the parameter is 1.

Affects the "Copy" process.

SI_COPY_MAX_SIZE

The parameter sets the maximum number of records simultaneously copies from the SI_LOG_SRC table in the source node to the SI_LOG_DST table in the destination node.

The default value of the parameter is 100000.

Affects the "Copy" process

SI_PARALLEL_THREADS_NUM

The parameter sets the number of parallel threads. For "Apply" – either equal to the SI_NODE_RECORD_GROUPS value or the closest prime number larger than the result of division by a small integer. For example, if SI_NODE_RECORD_GROUPS is set to 31, recommended values are 31, 17, 11, 7. For "Copy" – the closest prime number larger than the number for "Apply" divided by 4. For example if "Apply" has 17, "Copy" will have 5.

The default value of the parameter is 1.

Affects the "Copy" and "Apply" processes.

SI_APPLY_FETCH_SIZE

The parameter sets the number of records simultaneously sent from the SI_LOG_SRC table from the source through database link.

The default value of the parameter is 1000.

Affects the "Apply" process.

SI_APPLY_MAX_SIZE

The parameter sets the maximum number of records accepted from the SI_LOG_DST table.

The default value of the parameter is 1000.

Affects the "Apply" process.

SI_APPLY_MAX_ATTEMPTS

The parameter sets the maximum number of attempts to apply changed data.

The default value of the parameter is 10.

Affects the "Apply" process.

SI_APPLY_ERROR_DELAY

The parameter sets the delay (in seconds) between attempts to apply changed data. The delay between subsequent attempts will be calculated as the product of this parameter by 2 to the power (the number of the last unsuccessful attempt is -1).

The default value of the parameter is 5.

Affects the "Apply" process.

SI_APPLY_REPEAT_INTERVAL

Pause (in seconds) between attempts to apply changes, if all changes have already been applied. If there are still unapplied changes, the process runs without any pause.

Increasing this parameter reduces system load volume but increases latency, so a value of more than 3 seconds is not recommended.

The default value of the parameter is 1.

Affects the "Apply" process.

SI_LOG_PROC_INTERVAL

Interval (in seconds) to log synch processes run details into SYNCH_PROCESS_INSTANCE_LOG table.

The default value of the parameter is 3.

Affects the "Copy" and "Apply" processes.

SI_LOG_PROC_STAT_INTERVAL

Interval (in seconds) to log statistic details of synch processes run details (table SYNCH_PROCESS_INSTANCE_LOG). Used to calculate synch speed, latency and estimated time to complete synch.

The default value of the parameter is 30.

Affects the "Copy" and "Apply" processes.

SI_APPLY_VIEW_CHANGES_PERIOD

The parameter sets the period (in days) for which rejected changes or changes that have not yet been applied in the destination node are shown in DB Replication Console. Used to enhance performance of heavy queries for the SI_LOG_DST table.

The default value of the parameter is 5.

Affects the "Apply" process.

SW_CHECK_MAX_DELAY_MS

Maximum time of the delay when polling services, in milliseconds.

The default value is 0 (no delay). The recommended value is 300. The actual delay is selected randomly from 0 to the value set in the parameter.

SW_CHECK_DELAY_THRESHOLD_SEC

The minimum time services can be inactive, in seconds, after which a delay is activated when they are polled.

The default value is 0 (a delay happens only once after a connection has been established). The default value is 300.

SW_CHECK_FORCED_DELIVERY

In "Emergency" mode, the parameter manages the check that a delay in a synchronization thread from the current node to the new node of a service being switched does not exceed ten seconds. If the parameter is set to 'N', no check is made.

By default, the parameter is not set (a check is made).

 If the parameter is set to 'N', but for some neither the mechanism for replicating the state of nodes and services with the Transaction Switch application (HABroadcasting) nor WAY4Replication is working, a situation is possible when services will be deactivated in the secondary node, which leads to a long failure in service. Therefore, when setting this parameter, it is necessary to monitor the operation of critical services.

SYNCH_REFRESH_LATENCY_INTERVAL

The parameter determines the minimum interval (in seconds) for refreshing data from the SYNCH_PROC_INSTANCE_LOG table in each session.

The parameter's default value is 3.

The parameter can be set as an "Object Task Scheduler" process parameter (for more information, see the description of the global parameter HA.DEFERRED_DOC_APPLY), or as a global parameter.

Chapter 14. Dispute Assistant Module

DISPUTE_CM

This parameter defines which version of the Dispute Assistant module is used.

Parameter values:

- "N" – the Case Management platform is not used (the default value).
- "Y" – the Case Management platform is used.

DISPUTE_MGMT_LEVEL

This parameter defines which documents will be processed by the Dispute Assistant module.

Parameter values:

- "Y" (All) – all dispute documents are processed:
- Primary document with a response code other than "0".
- Secondary document (Chargeback, Retrieval Request).
- Presentment Reversal or Presentment Adjustment.
- Interbank document.
- Document from a document chain if a dispute case was opened for the previous document.
- "F" (Foreign) – all dispute documents for transactions made using the devices or cards of other members of a payment system (non-on-us) are processed.

  When the Dispute Assistant module based on the Case Management platform is used, documents for transactions made using "our" devices or "our" cards (on-us) will be also processed if this is a secondary document, reversal or adjustment for an initial presentment, Fee Collection or a document rejected by a payment system.

DSP_BACKUP_FX_TYPE

This parameter determines the FX rate used to calculate the amount of issued presentments and expected reimbursements. It is only used when there is no payment system rate.

The parameter value is the FX Type code.

By default no additional rates are used.

DSP_CASE_CLOSE_MODE

This parameter determines how the second phase of closing a dispute cycle is executed.

- AUTO – a dispute cycle is closed automatically (the default value).
- MANUAL – a cycle is closed manually.

DSP_CASE_CREATION_MODE

This parameter defines how a dispute cycle is opened for documents marked with the DISPUTE_MGMT_LEVEL parameter.

Parameter values:

- "MANUAL" – dispute cycle is opened manually (the default value);
- "AUTO" – dispute cycle is opened automatically for the following documents:
- By an issuer for incoming presentments if any errors are detected when processing a document, i.e. there is an "Error" message in the "Messages" form (Full → Process Log → Messages).
- By an acquirer for all chargebacks and retrieval requests.

DSP_RECLASSIFIED_CBKS_<channel code>

The global parameter is used when processing duplicates of incoming dispute documents (duplicate chargeback, 2nd presentment, or 2nd chargeback). The global parameter is used if the payment system allows chargebacks to be reclassified (when in response to a 2nd presentment, a chargeback with a different reason code is sent).

When the value is "Y", the DSP_DUPL=Y tag indicating a duplicate is not set for a duplicate dispute document. For example, a new chargeback (when the dispute cycle has a chargeback and 2nd presentment that have not been reversed) goes into the same dispute cycle and is further considered as the first chargeback for the original transaction.

If the global parameter is not set (the default value is "N"), a 2nd chargeback with a different reason code is marked with the DSP_DUPL=Y tag.

When the "Dispute Assistant" module is used, if a duplicate document is found (DSP_DUPL=Y), a new dispute case is created for the same original transaction.

 The "Dispute Assistant" module is not included in the basic configuration of WAY4 and requires an additional license.

DSP_WRITEOFF_MODE

This parameter determines how the WRITE_OFF operation is executed when closing a dispute cycle.

Parameter values are:

- MANUAL – the operation is only executed manually (the default value).
- AUTO – the operation is executed automatically and the next phase of closing the cycle is entered.
- NONE – The bank does not use the WRITE_OFF operation, the next phase of closing the cycle is automatically entered.

MC_HOST_REGION

This parameter allows the determination of transaction interaction borders (regions), to separate intraregional and interregional transactions. The parameter is used when interacting with the MasterCard payment system.

The value of the global parameter MC_HOST_REGION is the region in which the processing centre is located. The default value is "D" – Europe.

Chapter 15. Other Parameters

CHECK_ACC_SCHEME_CODE

When this parameter is set, the uniqueness of the Accounting Scheme code is checked when approving an Accounting Scheme. Possible values:

- "ALL" – Accounting Schemes for all Product categories are checked (uniqueness is checked in each category of Product).
- "<comma-delimited list of Product categories>" – Accounting Schemes are checked in each specified category of Product. Product categories:
  - "M" – acquiring contract Products ("Acquiring" category).
  - "A" – bank system contract Products ("Accounting" category). This value remains for backward compatibility.
  - "C" – issuing contract Products ("Issuing" category).
  - "B" – bank contract Products ("Bank Accounting" category).

CLL_TO_KEEP_CLASS

CLL_TO_KEEP_CLASS – determines the way WAY4 Consumer Collections cases are reclassified.

Parameter values:

- "Y" (Yes) – the rules corresponding to the current class are checked first during reclassification. If the parameters comply with the rule, the case is not moved to another class.
- "N" (No) – during reclassification, the check starts with the first row of the list of classification scheme rules ("Definition for <name of classification scheme>") from top to bottom and does not consider the current class. This is the default value.

CP_HANDBOOK_FILTER

The global parameter CP_HANDBOOK_FILTER is used to set the mode for filtering handbooks in the WAY4 Customer Profile module:

- If the parameter's value is set to "STRONG" (default value), a check is made of whether the filtering handbook contains the value (ParentCode) passed for filtering the handbook. If the handbook doesn’t contain the value, the cps_api.getHandbook query returns a "No such ParentCode" error and the return code (RetCode) "7".
- If the parameter's value is set to "WEAK", and the value (ParentCode) passed for filtering doesn’t exist in the filtering handbook, the entire handbook without filtering will be returned.

CP_STATISTICS

The CP_STATISTICS parameter determines if statistics will be gathered on the use of WAY4 Customer Profile services:

- Setting the parameter value to "Y" turns on maintenance of counters for service requests.
- When the parameter value is "N" (the default value), statistics are not gathered.

CM_HSK_KEEP

The parameter is used to configure the mode for protecting Case Management case documents from deletion by Housekeeping.

- If the parameter's value is "Y", when closing a case, documents related to it save the HSK_KEEP tag value set for them and thereby are protected from deletion by Housekeeping.
- If the value is "N" (default), when closing a case, documents related to it are freed from the HSK_KEEP tag and will be deleted by Housekeeping.

CM_<DomainCategory>_AUTOCREATE_USER

The global parameter CM_<DomainCategory>_AUTOCREATE_USER sets the mode for automatically creating Case Management users, where <DomainCategory> is the Case Management domain category.

- When the parameter's value is "Y", the mode for automatically creating Case Management users is enabled. In this mode a check is made of whether the WAY4 user is registered as a domain user (the search is made among domain users according to the value of the *Connected As* field). If a corresponding domain user was not found, a user will be created with the following parameters:
  - If the domain user group name is specified by the AUTO_CREATE_IN_GROUP=CMUser Group; tag in the *Add Info* field of the group to which the WAY4 user belongs, a domain user record will be linked to this group. If a group name is not specified, the record created for the domain user will belong to the "Default" group.
  - If the domain user group specified by the AUTO_CREATE_IN_GROUP=CMUser Group; tag (or the "Default" group) has a template user record (record with an empty value in the *Connected As* field and "TEMPLATE" in the *User Type* field), a new domain user record will be created according to the parameters set for the template record. If a template record does not exist, it will be created and linked to a new "Autocreated: All Activities" role.
- When the value is "N" (default value) users are not automatically created.

DEFAULT_CHANNEL_ACQ_BIN_<Channel>

The parameter DEFAULT_CHANNEL_ACQ_BIN_<Channel> (where <Channel> is the source channel code) is used to search for a routing contract when processing authorisation requests if Member ID is unknown. A contract search is made based on the BIN table record (Full → Configuration Setup → Routing → BIN Table) in which the Member ID value matches the value of this parameter.

DECISION_LOG_MODE

The global parameter DECISION_LOG_MODE determines the mode for logging the history of changes to calculated classifiers (Decisions) in the CS_DECISION_LOG table. The logging mode can be set globally or for specific decisions.

The history of changes to calculated classifier values is logged, for example, to optimise the export of data to external systems, for example to the Datamart module. The module is not included in the basic configuration of WAY4 and is supplied according to a separate agreement with the WAY4 vendor.

 Before version 03.46.30, history was logged in deferred mode after running the menu item "Full → DB Administrator Utilities → Object Tasks → Start Object Tasks Scheduler" once. Starting from version 03.46.30, decisions are not logged by default.

Possible values for the global parameter:

- "SKIP" – changes are not logged.
- "IMMEDIATE" – a change is logged immediately when a linked classifier changes.
- "DEFERRED" – changes are logged in deferred mode after running the menu item "Full → DB Administrator Utilities → Object Tasks → Start Object Tasks Scheduler" once. In deferred logging mode, a classifier value is calculated in the background over the course of the day, not at the time of the corresponding request.

 For the "SKIP", "IMMEDIATE", and "DEFERRED" values, the logging mode is not checked for specific classifiers, meaning these values only work globally. These values do not affect the mode for logging decisions exported to Datamart.

- "CHECK_SKIP" – used if the logging mode is determined individually for specific decisions. When this value is specified, a check is made for the LOG_MODE tag in the classifier. If the tag is not set, the default mode is used (in this case, "SKIP").
- "CHECK_IMMEDIATE" – used if the logging mode is determined individually for separate decisions. When this value is specified, a check is mode for the LOG_MODE tag in the classifier. If the tag is not set, the default mode is used (in this case, "IMMEDIATE").

- "CHECK_DEFERRED" – used if the logging mode is determined individually for separate decisions. When this value is specified, a check is mode for the LOG_MODE tag in the classifier. If the tag is not set, the default mode is used (in this case, "DEFERRED").

The LOG_MODE=<value> tag is set in a decision's *Add Info* field. The tag can have one of the three following values:

- "SKIP" – changes are not logged (see the description of the same value for the global parameter "DECISION_LOG_MODE").
- "IMMEDIATE" – a change is logged immediately when a linked classifier changes (see the description of the same value for the global parameter "DECISION_LOG_MODE").
- "DEFERRED" – changes are logged in deferred mode (see the description of the same value for the global parameter "DECISION_LOG_MODE").

⚠ Decisions that are exported to Datamart are always logged, and logging cannot be disabled for them or incorrect data will be imported to Datamart. It is recommended to set up logging mode for these classifiers individually (only for those that are included in export to Datamart). Only the CHECK_IMMEDIATE (default) or CHECK_DEFERRED mode can be selected for them (see the descriptions above).

DO_NOT_SCAN_INVOICES

The global parameter DO_NOT_SCAN_INVOICES determines the procedure for contacting the INVOICE_LOG table during "Contracts – Daily Update" (CDU) procedures. Possible values:

- "Y" – scanning of invoices in the INVOICE_LOG table is skipped.
- "N" – invoices in the INVOICE_LOG table are scanned during CDU. This is the default value.

The "Y" value is recommended to optimise (speed up) the "Contracts – Daily Update" (CDU) procedure if invoices are not used in WAY4 (invoices are used, for example, when working with instalment loans).

EXCL_PARTIAL_STATUS_FOR_<invoice code>

The global parameter EXCL_PARTIAL_STATUS_FOR_<invoice code> is used when working with invoices in WAY4.

If an invoice code is specified as the value of this parameter, during partial payment of an invoice, its status does not change.

EVNT_MSG_STORE_AS_TEMPLATE

EVNT_MSG_STORE_AS_TEMPLATE – A parameter defining the storage format for event messages.

If an event must create a message when opened, when configuring the event type, the user should configure the message template to be used for creating the message.. The message template contains text and the names of variables that will appear in the created message.

Event messages are stored in the EVNT_MESSAGE table.

Parameter values:

- "N" (No) – Event messages are stored in the EVNT_MESSAGE table in their final form, that is, as text in the desired language with the appropriate variable values. This is the default value.
- "Y" (Yes) – Event messages are stored in the EVNT_MESSAGE table as templates. Variable values are contained in the *EVENT_DETAILS* and *MSG_TAGS_VALUES* fields in the group of event fields in the USAGE_ACTION table.

The use of this parameter with the "Y" value will allow messages to be created in their final form when they are sent, so that the same message can be sent in different languages depending on their addresses. For example, the same message can be included in a statement in a local language, but the message sent to the client's mobile phone can be in the basic language (English).

GEN_ANALYTIC_TRANSFERS

This parameter is used to enable generation of subsidiary GL entries for expanded subsidiary ledger accounting. To do so, set the parameter value to "Y".

The WAY4 base configuration does not include expanded subsidiary ledger accounting. This functionality is provided according to a separate agreement with the WAY4 vendor.

IGNORE_IPS_PRODUCT

The IGNORE_IPS_PRODUCT global parameter is used to disable validation of card contract subtype fields (including to disable filling in the *BIN Record* and *IPS Product* fields). To disable validation for all financial institutions, set "ALL" as the value of the IGNORE_IPS_PRODUCT global parameter.

The parameter can be set (redefined) for a specific financial institution by using the IGNORE_IPS_PRODUCT=ALL; tag in the *Special Parms* field.

The parameter can be set (redefined) for a specific subtype by using the IGNORE_IPS_PRODUCT; tag in the *Add Parms* field.

When the IGNORE_IPS_PRODUCT parameter is set (i.e. when validation of subtype fields is disabled), a Product will be approved (and an institution validate) when the *BIN Record* and *IPS Product* fields are not filled in or filled in incorrectly. A "Warning" message will be generated (i.e. an message about an error that it is not mandatory to fix).

Note that when the IGNORE_IPS_PRODUCT parameter is set (i.e. if the *BIN Record* and *IPS Product* fields are not filled in or filled in incorrectly),

WAY4 Datamart ETL processes (processes for loading data to WAY4 Datamart), "QMR" and "QOC" reports, and statistics reports for the Russian Central Bank (for example, form 0409250 reports) will work incorrectly.

ITEM_CYCLE_LENGTH

The global parameter ITEM_CYCLE_LENGTH is used if the ITEM table is partitioned. The parameter determines the period in calendar days for which future partitions must be created in the ITEM table (accordingly, if the ITEM table is partitioned, it must always contain future partitions for the specified period).

The default value is "1000".

When a record is created in the ITEM table, the CYCLE_DATE_TO field is checked. When the default value is used, if the value in the CYCLE_DATE_TO field exceeds 1000 calendar days from the current system date, the record is created with the "L" value of the PARTITION_KEY field and is put into the appropriate partition.

INST_ADV_FEE_OPEN

The global parameter INST_ADV_FEE_OPEN is used in the WAY4 Instalments module to set up rules for "Advance Fee" fees (fee from the start of the current billing cycle to the payment date) when performing early repayment:

- If an "Advance Fee" must be additionally accrued and made effective when performing early repayment, set the parameter value to "Y".
- If the value is "N", the "Advance Fee" is moved to the first instalment of a new instalment plan.
- If the value is "W", the "Advance Fee" is waived when performing early repayment or when a plan is recalculated.

The default value of the parameter is "N".

For more information, see the document "Instalment Loans in WAY4". The WAY4 Instalments module is not included in the basic WAY4 configuration and is provided according to a separate agreement with the WAY4 vendor.

INST_ACCOUNTING_INT_DELAY

The global parameter INST_ACCOUNTING_INT_DELAY regulates whether to include interest for the date of the "Effective Date" in the current effective instalment or in the next instalment.

The parameter is used when the value of the INT_DELAY tag in the instalment scheme is "Y" or when the value of the global parameter "INTEREST_DELAY" is "Y".

When the value of the global parameter INST_ACCOUNTING_INT_DELAY is "Y", interest for the date of the "Effective Date" is included in the current effective instalment. This is the default value.

When the value of the global parameter INST_ACCOUNTING_INT_DELAY is "N", interest for the date of the "Effective Date" is included in the next instalment (before version 03.42.30, this was the default behaviour; starting from version 03.42.30, the "Y" value of the global parameter INST_ACCOUNTING_INT_DELAY is used by default).

For more information, see the section "Instalment Plan" of the document "Instalment Loans in WAY4™").

The WAY4 Instalments module (module for managing instalment loans) is not included in the basic configuration of WAY4 and is provided according to an additional agreement with the WAY4 vendor.

INST_ADV_FEE_WAIVE_ON_CLOSE

The global parameter INST_ADV_FEE_WAIVE_ON_CLOSE is used to set up rules for working with "Advance Fee" fees (fee from the start of the current billing cycle to the payment date) when closing an active instalment plan.

- If "Advance Fee" must be waived when closing a plan, set the parameter value to "Y".
- When the parameter's value is "N", "Advance Fee" will become effective according to settings in the instalment scheme. This is the default value.
- When the parameter's value is "A", all unpaid fees for the plan, including Advance Fee, for all cycles will become effective.
- When the value is "1" – "Advance Fee" from the start of the current billing cycle up to the payment date will become effective, as well as "Advance Fee" for the next portion.

The INST_ADV_FEE_WAIVE_ON_CLOSE parameter can be redefined using the INST_ADV_FEE_WAIVE_ON_CLOSE=Y; tag in the *Custom Data* field of the Product.

The INST_ADV_FEE_WAIVE_ON_CLOSE parameter can be redefined when closing a specific plan.

For more information, see the document "Instalment Loans in WAY4". The WAY4 Instalments module is not included in the basic WAY4 configuration and is provided according to a separate agreement with the WAY4 vendor.

INST_APPROVE_PLANS

The global parameter INST_APPROVE_PLANS is used in the WAY4 Instalments module. This parameter determines whether it is necessary to manually approve a plan created manually for a transaction or balance:

- When the value is "Y", a plan is created in "Preview" status and requires manual approval.

- When the value is "N", the plan is created in "Waiting" or "Inactive" status and does not require manual approval. In this case, the plan's initial status ("Waiting" or "Inactive") is set using the global parameter INST_START_STATUS.

The default value of the parameter is "N".

For more information, see the document "Instalment Loans in WAY4". The WAY4 Instalments module is not included in the basic WAY4 configuration and is provided according to a separate agreement with the WAY4 vendor.

INST_AUTH_ACTION

The global parameter INST_AUTH_ACTION is used in the WAY4 Instalments module.

The parameter is used to set up rules for automatically creating an instalment plan when processing authorisation documents. Parameter values:

- "CHECK" – the ability to generate an instalment plan is checked. An instalment plan is not generated. This is the default value.
- "CREATE_INACTIVE" – an instalment plan is generated in an inactive state (the status of invoices generated on the basis of the instalment plan is "Inactive"). In this case, the instalment plan can be activated automatically when the corresponding financial document is posted (to do so, the "ACTIVATE" value must be set for the INST_FIN_ACTION global parameter).

  If an instalment plan created when an authorisation is posted must not affect the amounts of limits in accounts, use the CREATE_INACTIVE value.
- "CREATE_PREVIEW" – an instalment plan is generated in the "Preview" status and requires manual approval. The status of the plan after approval ("Inactive" or "Waiting") depends on the value of the INST_START_STATUS global parameter.

For more information, see the document "Instalment Loans in WAY4". The WAY4 Instalments module is not included in the basic WAY4 configuration and is provided according to a separate agreement with the WAY4 vendor.

INST_AUTO_ER_BAL

The global parameter INST_AUTO_ER_BAL is used in the WAY4 Instalments module to set up automatic early repayment.

To set up automatic early repayment, a balance type can be configured that differs from the default one (balance type with a code other than INST_ER). For example, if different accounts are used for automatic and scheduled early repayment, different balance types are set up for them. The code of a balance type used for automatic early repayment (other than INST_ER) must be set as the value of the global parameter INST_AUTO_ER_BAL.

The global parameter can be redefined with the same tag, INST_AUTO_ER_BAL in an Accounting Scheme's *Special Parameters* field.

For more information, see the document "Instalment Loans in WAY4". The WAY4 Instalments module is not included in the basic WAY4 configuration and is provided according to a separate agreement with the WAY4 vendor.

INST_CREATE_ON_ADJUSTMENT

The global parameter INST_CREATE_ON_ADJUSTMENT is used in the WAY4 Instalments module.

To automatically create an instalment plan when an adjustment is received, set the value of the global parameter INST_CREATE_ON_ADJUSTMENT to "Y".

A new instalment plan will be created for the corrected amount.

This mode is disabled by default – by default the value of the global parameter INST_CREATE_ON_ADJUSTMENT is "N".

For more information, see the document "Instalment Loans in WAY4". The WAY4 Instalments module is not included in the basic WAY4 configuration and is provided according to a separate agreement with the WAY4 vendor.

INST_DAILY_INTEREST_CODES

The global parameter is used to enable daily accrual of interest on instalment loans. The codes of fees (value of the *Fee Code* field of the instalment scheme fee) that must be accrued daily should be specified, separated by commas, as the value of the global parameter INST_DAILY_INTEREST_CODES.

The global parameter can be redefined for a financial institution using the tag of the same name.

To enable daily accrual of loan interest additional settings are required. See the section ""Invoice Events" Form" of the document "Instalment Loans in WAY4". The WAY4 Instalments module is not included in the basic WAY4 configuration and is provided according to a separate agreement with the WAY4 vendor.

INST_EVENT_INHERIT_TAGS

The global parameter INST_EVENT_INHERIT_TAGS is used to set up inheritance of tags from an instalment plan (from the POSTING_DETAILS field of the INVOICE_LOG table) to a document. Tags that should be inherited are specified (separated by commas) as the parameter's value.

When a document is generated by a record in the "Invoice Events" form or a record in the "Invoice Event Fees" form, if the instalment plan contains this tag, the tag is added to the document's *Add Data* field.

The global parameter can be redefined for a financial institution by using the tag of the same name.

INST_FIN_ACTION

The global parameter INST_FIN_ACTION is used in the WAY4 Instalments module.

The parameter is used to set rules for automatically creating an instalment plan when posting financial documents. Parameter values:

- "CHECK" – the ability to generate an instalment plan is checked. No instalment plan is generated.
- "ACTIVATE" – when a financial document is received, it is possible to activate an instalment plan that was created in an inactive state on the basis of an authorization document (the status of invoices generated on the basis of the instalment plan changes from "Inactive" to "Waiting". This value is used together with the "CREATE_INACTIVE" value of the global parameter INST_AUTH_ACTION.
- "CREATE_INACTIVE" – an instalment plan is generated in an inactive state (the status of invoices generated on the basis of the instalment plan is "Inactive").
- "CREATE_ACTIVE" – an instalment plan is generated in an active state (the status of invoices generated on the basis of the instalment plan is "Waiting"). This is the default value.
- "CREATE_PREVIEW" – an instalment plan is generated in the "Preview" status and requires manual approval. The status of the plan after approval ("Inactive" or "Waiting") depends on the value of the INST_START_STATUS global parameter.

The WAY4 Instalments module is not included in the basic WAY4 configuration and is provided according to a separate agreement with the WAY4 vendor.

INST_INTEREST_FOR_OPEN

The global parameter INST_INTEREST_FOR_OPEN is used in the WAY4 Instalments module.

Starting from version 03.42.30, it is possible to calculate (accrue) interest for an open principal portion (in the "Open" status). This mode is enabled by the "Y" value of the global parameter INST_INTEREST_FOR_OPEN. Moreover, the fee for the portion in the "Waiting" status and for the fee portion in the "Open" status is included in the instalment plan.

By default, interest for a principal portion in the "Open" status is accrued (calculated in the instalment plan) from the date the portion opens to the "Due Date". If the principal portion in the "Open" status is paid before the "Due Date", the instalment plan is recalculated.

The WAY4 Instalments module is not included in the basic WAY4 configuration and is provided according to a separate agreement with the WAY4 vendor

 This mode can be enabled for schemes to accrue interest based on a daily interest rate.

INST_INTEREST_TO_DUE

The global parameter INST_INTEREST_TO_DUE with the "Y" value enables the mode for calculating loan interest linked to Due Date (from/to Due Date). The parameter works as follows:

- The fee amount in the first portion is calculated from the plan's date of creation until the first Due date.
- For subsequent portions, the fee for each portion is calculated from the Due Date of the previous portion to the Due date of the current portion.
- The fee becomes effective on the Effective Date and is not recalculated if payment is made before the Due Date up to which interest was calculated.

The INST_INTEREST_TO_DUE parameter with the "Y" value is used when capitalizing interest for a shift period (see the section "Capitalizing Interest for a Shift Period" of the document "Instalment Loans in WAY4".

If the INST_INTEREST_TO_DUE parameter is not set, interest is capitalized on the Effective Date.

The WAY4 Instalments module is not included in the basic WAY4 configuration and is provided according to a separate agreement with the WAY4 vendor.

INST_HOLIDAYS_FOR_OPEN

The global parameter INST_HOLIDAYS_FOR_OPEN is used in the WAY4 Instalments module. The WAY4 Instalments module is not included in the basic WAY4 configuration and is provided according to a separate agreement with the WAY4 vendor.

The INST_HOLIDAYS_FOR_OPEN global parameter regulates work with a plan's instalments that have the "Open", "Partially Paid", and "Overdue" statuses when payment holidays are granted:

- When the value is "Y" (the default value) – instalments will be restructured and will be assigned the "Waiting" status in a new plan.
- When the value is "N" – instalments with the "Open", "Partially Paid", and "Overdue" statuses are transferred to a new instalment plan with no changes (i.e. with the same status and amount).

The global parameter can be redefined in a financial institution.

INST_PAYIN

The global parameter is used when generating a response to an authorization request from a terminal that supports MasterCard Instalments. The global parameter is used in instalment plan simulation.

Possible values:

- "I" – only generation of an instalment plan is possible (default value).
- "B" – standard payment and generation of an instalment plan are possible.

The global parameter can be redefined in a financial institution, Product, Service.

See the section "Selecting a Transaction Payment Method (MasterCard Instalment)" of the document "Instalment Loans in WAY4™".

The WAY4 Instalments module is not included in the basic WAY4 configuration and is provided according to a separate agreement with the WAY4 vendor.

INST_RENEW_RATES

The global parameter INST_RENEW_RATES is used in the following cases:

- The global parameter INST_RENEW_RATES with the "Y" value makes it possible to apply new interest rates to existing instalment plans. See the section "Configuring Recalculation of Plans when Rates have Changed" of the document "Instalment Loans in WAY4™".
- The global parameter INST_RENEW_RATES with the "Y" values makes it possible to save the number of instalments from the original instalment plan when a plan is recalculated because of a Billing Date shift or early repayment. In other cases, the instalment amount is kept. The parameter is used if the AUTO_ER_KEEP tag (contract parameter) is not set. See the section "Automatically Recalculating a Plan after a Change in Billing Date or Due Date Contract Dates" of the document "Instalment Loans in WAY4".

The WAY4 Instalments module is not included in the basic WAY4 configuration and is provided according to a separate agreement with the WAY4 vendor.

INST_SCHEDULED_ER_BAL

The global parameter INST_SCHEDULED_ER_BAL is used in the WAY4 Instalments module to set up scheduled early repayment. To set up scheduled early repayment, a balance type can be configured that differs from the default one (balance type with a code other than INST_ER). For example, if different accounts are used for automatic and scheduled early repayment, different balance types are set up for them. The code of a balance type used for scheduled early repayment (other than INST_ER) must be set as the value of the global parameter INST_SCHEDULED_ER_BAL.

The global parameter can be redefined with the same tag, INST_SCHEDULED_ER_BAL in an Accounting Scheme's *Special Parameters* field.

For more information, see the document "Instalment Loans in WAY4". The WAY4 Instalments module is not included in the basic WAY4 configuration and is provided according to a separate agreement with the WAY4 vendor.

INST_SIM_SAVE

The global parameter INST_SIM_SAVE makes it possible to configure how the data of simulated instalment plans are saved. Possible values:

- "F" – full data for an instalment plan are saved (default value).

- "P" – partial data for an instalment plan are saved. When this value is set, the plan's main record is saved and detailed information about the plan's components – data for the Principal and Fee amounts, interest rate used in calculation, etc. (see the "Subtotals" form; "Instalments → Invoices & Instalments for Contracts → [Simulated] → [Subtotals]). Information about the plan's instalments is not saved in this mode.
- "M" – minimum data for an instalment plan are saved. When this value is set, the plan's main record is saved (without detailed information about the plan's components and without information about instalments).
- "N" – plans are not saved.

By default, full data for simulated plans are saved (the value of the INST_SIM_SAVE parameter is "F"). To optimise the process of simulating plans, it is recommended to set the value of INST_SIM_SAVE to "P".

If the value of INST_SIM_SAVE is "M", when a plan is created according to a simulated instalment plan, current system parameters are used if these data are not obtained from a financial document (for example, interest rate). I.e. the amounts for the original simulated plan's components and for the actual instalment plan may differ.

The global parameter INST_SIM_SAVE can be redefined by the tag of the same name in the Service.

For more information, see the document "Instalment Loans in WAY4". The WAY4 Instalments module is not included in the basic WAY4 configuration and is provided according to a separate agreement with the WAY4 vendor.

INST_START_STATUS

The global parameter INST_START_STATUS is used in the WAY4 Instalments module. This parameter determines the status of an instalment plan generated manually for a transaction or balance and that does not require approval (the plan is created when the INST_APPROVE_PLANS parameter value is "N"):

- When the value is "W", an instalment plan created manually for a transaction or balance is assigned the "Waiting" status.
- When the value is "I", an instalment plan created manually for a transaction or balance is assigned the "Inactive" status.

The WAY4 Instalments module is not included in the basic WAY4 configuration and is provided according to a separate agreement with the WAY4 vendor.

INV_DISTRIBUTE_OVERPAYMENT

When making a payment for a certain invoice (when the tag "INVOICE_REF_NUM= <invoice ID>; is set in a financial document's *Add Info* field), if the document amount exceeds the amount of the specified invoice, by default, the amount remaining is used to pay other invoices in the "Open" status

(to do so, an Event must be configured with the code EXTRA_PMNT_<invoice code>").

When the value of the global parameter INV_DISTRIBUTE_OVERPAYMENT is "N", only the specified invoice will be paid.

If the specified invoice is not found (or already paid), the payment will be processed according to the setting of the global parameter INV_PAYM_REF_MODE.

INV_INHERIT_LIST

The global parameter INV_INHERIT_LIST allows tags from a document and Service to be inherited by an invoice when it is created. Tags (comma-delimited) that are to be inherited serve as the parameter value. When an invoice is created, if the ADD_INFO field of the document or the SERVICE_DETAILS field of the SERVICE_APPROVED table contain this tag, the tag is added to the POSTING_DETAILS field of the invoice (in the INVOICE_LOG table).

A tag in the POSTING_DETAILS field of an invoice may be used, for example, to set an additional condition for opening an Event when the invoice status changes: if the *Additional Condition* field of the "Invoice Events" form (Invoices → Invoice Events) is filled in, this value must be contained in the POSTING_DETAILS field of the invoice for the Event to activate.

INV_PAYM_REF_MODE

When making a payment for a certain invoice (when the tag "INVOICE_REF_NUM= <invoice ID>; is set in a financial document's *Add Info* field), if this invoice cannot be found, by default, the payment is distributed among all open invoices (for this to happen, an Event must be configured with the code EXTRA_PMNT_<invoice code>).

When the value of the global parameter INV_PAYM_REF_MODE is STRICT, a payment will not be processed. The following message will be registered in the error log: "Invoice not found by ref # <invoice ID, ref # field value>".

This setting can be made for a separate document using the tag PAYMENT_MODE=STRICT; in the document's *Add Info* field.

INVOICE_POST_DUE

The global parameter INVOICE_POST_DUE is used when working with invoices in WAY4.

The global parameter INVOICE_POST_DUE influences how an Event is processed that opens when an invoice status changes at the end of a billing cycle.

Parameter values:

- "Y" (Yes) – when an Event opens during the procedure for opening the first banking day of a new billing cycle, the Posting Date of this Event is equal to the date of the banking day being opened minus one day. When an Event

opens during the procedure for closing the last day of a past billing cycle, the Posting Date of this event is equal to the billing cycle closing date. This is the default value.

- "P" – the Posting Date of the Event is equal to the date of the last working day of the past billing cycle.
- If the value is not specified, the value of the financial institution's *Post Due* field is used as the value of the global parameter INVOICE_POST_DUE. If the field is not filled in, the value of the global parameter POST_DUE is used as the value of the global parameter INVOICE_POST_DUE.

LINK_COPIED_PRODUCTS

The global parameter LINK_COPIED_PRODUCTS is used when copying financial institution settings (see the section "Copying Basic FI Configurations) of the document "Financial Institutions").

When the value is "Y" if the *Template Product* field is filled in the Product being copied (i.e. there is a link to the Product in another institution), this link is kept in the new Product.

If the parameter is not set or its value is "N", the link in the *Template Product* field is not copied to the new Product (the field will be empty in the new Product).

<ProcessName>.NON_STOP_HOURS

This parameter allows configuration of the possibility to execute long processes in the Housekeeping module (more than 24 hours) without interruption.

The value of the parameter is the number of hours for which the given process can be executed without interruption. The default value is 24 hours.

OFFICER_MAX_INACTIVITY_DAYS

The global parameter OFFICER_MAX_INACTIVITY_DAYS is used when blocking unused user accounts.

The parameter's value is the number of days from the last time the user logged into the system after which this user account should be blocked.

Pursuant to PCI DSS recommendation 8.5.5, the default value of the parameter is "90".

ONLINE_REFRESH_CP_SEGMENT

The global parameter ONLINE_REFRESH_CP_SEGMENT is intended to optimize the procedure for client segmentation in the WAY4 Customer Profile module:

- If the value of this parameter is set to "Y" (the default value), calculation results of segmentation rules are saved in the system and are used in processing requests to execute operations.
- If the parameter has an "N" value, calculation results are not saved. Calculation is performed each time requests are processed.

<invoice_code>_OUT_PARMS

The global parameter <invoice_code>_OUT_PARMS is used when working with invoices in WAY4. When invoice parameters change, a search is made for the global parameter <invoice_code>_OUT_PARMS whose (<invoice_code>) code corresponds to the invoice code. If a global parameter with the corresponding code is found:

- When this global parameter's value is "bank_code", a search is made for a collection with the code corresponding to the value of the financial institution's *Bank Code* field for registration of the invoice in this collection (for subsequent export). If the collection is not found, a collection with this code will be created.
- When the value of this global parameter is "branch_code", a search is made for a collection with the code corresponding to the financial institution's *Branch Code* field for registration of the invoice in this collection (for subsequent export). If the collection is not found, a collection with this code will be created.

PI_COLLECT_TAGS

The global parameter PI_COLLECT_TAGS is used when working with the WAY4™ Product Inspector module. The parameter enables a mechanism for collecting information about tags used when executing test scripts. To activate collection, set the global parameter's value to "Y".

Information about the tag, its value and place in the code where it is used is logged to the Process Log with the Type = "X" field value.

The default parameter value is "N".

PI_LOG_GL_TRACE_EXCPT

The global parameter PI_LOG_GL_TRACE_EXCPT is used in the WAY4™ Product Inspector. The global parameter affects processing of the tag "LOG_MODE=GL_TRACE_EXCPT;" – i.e. logging information from the GL_TRACE_EXCPT table where information goes about service entries posted to contract accounts and about macrotransactions for past dates.

If the global parameter is not set or its value is "Y", information from the GL_TRACE_EXCPT table is always logged, i.e. regardless of whether the tag "LOG_MODE=GL_TRACE_EXCPT;" is set. If the value of the global parameter "PI_LOG_GL_TRACE_EXCPT" is "N", the tag "LOG_MODE=GL_TRACE_EXCPT;" should be set to log information.

For more information, see the section "Scripts" of the document "WAY4™ Product Inspector Module".

PREFFIXED_ERRORS

PREFFIXED_ERRORS – If this parameter is set to "Y", all displayed error messages are prefixed with a message code.

The default parameter value is "N".

RESEND_PAYM_INHERIT_TAGS

The global parameter RESEND_INV_INHERIT_TAGS is used when working with invoices in WAY4.

The global parameter's value is a list of tags, separated by commas, that will be inherited from the previous (original) invoice to a new invoice when resending a document. For example, RESEND_INV_INHERIT_TAGS=BATCH_ID,PAYME.

RESEND_INV_INHERIT_TAGS

The global parameter RESEND_INV_INHERIT_TAGS is used when working with invoices in WAY4.

The global parameter’s value is a comma-delimited list of tags that a new invoice will inherit from the previous (original) invoice when resending a document. For example,
RESEND_INV_INHERIT_TAGS=BATCH_ID,PAYME.

SAVE_ACCOUNT_NUMBER

This parameter makes it possible to specify the procedure for renumbering subsidiary GL accounts when an account's GL number changes.

- If the value is "N" (default value), when the GL number of an account is changed, the subsidiary GL accounts numbers corresponding to this GL number are changed.
- If the value is "Y", subsidiary GL accounts are not renumbered.

For more information, see the document "WAY4 Accounting".

STORNO_LOG_OBJECTS

The global parameter makes it possible to expand logging of changes made when operations are performed using the Reversal Management module. Possible values:

- "C" – changes to classifiers are logged.
- "B" – changes to balance types are logged.

- "B", "C" – changes to balance types and classifiers are logged.

STMT_CL_NAME_FORMAT

The value of the parameter STMT_CL_NAME_FORMAT defines the format of client names as shown in statements.

Parameter values may be ASCII symbols and the following variables in any order:

- %CONTRACT_NAME%;
- %CONTRACT_NUMBER%;
- %TITLE%;
- %CLIENT_LAST_NAME%;
- %CLIENT_FIRST_NAME%;
- %FATHER_S_NAME%;
- %ACNT_ADD_INFO_01%;
- %ACNT_ADD_INFO_02%.

STAT_COLLECT

This parameter is used to set a list of service classes codes considered when generating quarterly statistics on macrotransactions.

STAT_HIDE_REPOST

The global parameter STAT_HIDE_REPOST allows repost and adjustment documents to be hidden in statistics reports. To turn on this function, set the parameter value to "Y".

When the value of the parameter is "N" (the default value) these document types will be included in the report. For example, a repost document will appear in the report as one reversal document and two advice documents.

STOPLIST_TS_CHANNELS

When using a Transaction Switch platform solution to send requests to put cards in exception lists, the value of the global parameter STOPLIST_TS_CHANNELS must be set to "V,X,E".

See the section "Generating Requests to Add Cards to Exception Lists" of the document "WAY4™ Stop Lists".

SYNC_PERSONAL_TARIFFS

The global parameter SYNC_PERSONAL_TARIFFS is used when synchronising template tariff data and the data of personal tariffs created earlier on the basis of these templates (see the document "WAY4™ Advanced Tariff Management").

When SYNC_PERSONAL_TARIFFS parameter value is "Y", synchronisation is performed.

When the value is "N" (default value), synchronisation is not performed.

The SYNC_PERSONAL_TARIFFS=N; tag can be used to redefine the "Y" value of this global parameter for a Product.

STORNO_AUTO_HIDE_GL_CORRECTION

The global parameter STORNO_AUTO_HIDE_GL_CORRECTION is used when working with the Reversal Management module.

The parameter is used to hide the following entries:

- When correcting entries whose data have not yet been exported to the CBS, it is possible to not export the original and reversal entry to the CBS and not show them in forms.
  - When the value of this parameter is "Y" (default value), original entries and their reversals are marked in the process of correction as entries not intended for export (the *For Export* field for such entries has the "No" value). Only the correction entry is exported to the CBS.
  - When the value of this parameter is "N", all entries affected by the correction process are exported to the CBS – original entries, their reversals and correction entries (in this case, the *For Export* field for such entries has the "Y" value).
- To hide entries that were reversed and reposted without any changes (not affected by the original operation's change or reversal)
  - When the value of this parameter is "Y" (default value), only the original entry is exported to the CBS (if it had not yet been exported to the CBS at the time changes were made). The reversal and new entry for the same amount are marked as not intended for export (the *For Export* field for such entries has the "No" value).
  - When the value of this parameter is "N", all entries are exported to the CBS.


The Reversal Management module is not included in the WAY4 basic configuration and is supplied according to a separate agreement with the WAY4 vendor.

STORNO_CANCEL_REVERSALS

The global parameter STORNO_CANCEL_REVERSALS is used when working with the Reversal Management module.

The default value of this parameter is "N" (recommended value). When this value is set, if the original and reversal entry fall in a correction plan's effective period, these entries will be cancelled and reapplied.

If an original document and its reversal are reposted when applying a correction plan (these documents have the same *Posting Date* date), these documents (document macrotransactions) are posted together and limit normalization will be performed after they have been posted. Any chain of documents with the same *Posting Date* date, where reversal macrotransactions are present will be posted in the same way. For example, several adjustment documents with the same *Posting Date* date will be posted together, one after another, and then limit normalization will be performed.

The "N" value of the global parameter STORNO_CANCEL_REVERSALS makes it possible to calculate data for specific balances related to reversals.

When the value is "Y", these entries (original and reversal entries) are reversed and are not made again.

Note that when the value is "Y", an original transaction and reversal are not shown in a statement (i.e. separate balances related to reversals are not kept).

STORNO_GL_TRANS_DISTINCTION

The global parameter STORNO_GL_TRANS_DISTINCTION is used when working with the Reversal Management module.

The global parameter STORNO_GL_TRANS_DISTINCTION allows configuration of the way GL entries are generated in the GL_TRANSFER table when correcting transactions:

- When the value is "C" [*Common*], reversal and correction entries for contract accounts are recorded in GL entries in standard mode. In this case, entries generated as a result of corrections are not distinguished from other entries.
- When the value is "D" [*Distinct*] (default value), entries generated in the transaction correction process can be recorded in separate GL entries. The *Order_Type* field in the GL_TRANSFER table is used to separate entries. The following values may be entered in this field:
  - "R" [*Reversal*] – a GL account reversal entry generated in the transaction correction process.
  - "C" [*Correction] – a GL* account correction entry.
  - "S" [*Standard*] – a GL account "standard" entry.
- The parameter value "P" [Partial] – entries generated in the transaction correction process are recorded in separate GL entries or standard GL entries depending on the status of the corrected source transaction's entries.

- When correcting a transaction whose entries are closed and exported to the CBS (in the "Closed" status), reversal and correction entries are generated and exported in the same way as when the value STORNO_GL_TRANS_DISTINCTION parameter has the "D" value. That is, reversal and correction entries are generated and exported separately from standard entries.
- When correcting a transaction whose entries are in the "Active" or "Extracted" status, reversal and correction entries are generated and exported in the same way as when the value of the STORNO_GL_TRANS_DISTINCTION parameter is "C". That is, reversal and correction entries are generated and exported like standard entries.

The Reversal Management module is not included in the WAY4 basic configuration and is supplied according to a separate agreement with the WAY4 vendor.

STORNO_SKIP_HOLIDAYS

The global parameter STORNO_SKIP_HOLIDAYS is used when all days, including weekends and holidays are opened in WAY4. In this case, when revising a contract's lifecycle, weekends/holidays in the period being revised must also be considered in recalculation. To do so, set the value of the global parameter STORNO_SKIP_HOLIDAYS to "N".

When the value is "Y" (default value), weekends/holidays for the period are skipped when revising a contract's lifecycle.

The same tag can be used to redefine the global parameter for a financial institution.

SUSPEND_ALL_PROCESSES

This parameter is used to stop a number of processes being executed in WAY4. When the parameter value is "Y", processes for which the "Current Number" counter is used are stopped (for these processes, the value of the *Current Number* field in the form "Full → Process Log → Process Log" is more than zero, see the section ""Process Log" Menu Item" of the document "DB Manager Manual"). The parameter is used, for example, to increase the performance of system processes.

The default value of the parameter is "N".

After resolving the corresponding system performance tasks, the SUSPEND_ALL_PROCESSES parameter must be set to its inital value of "N" to renew execution of processes in WAY4.

USE_ANALYTIC

This parameter is used to enable/disable expanded subsidiary ledger accounting. By default, the parameter value is "N", i.e. this mode is disabled. To enable the mode, set the parameter value to "Y".

This parameter can be redefined on the financial institution level using the tag of the same name (in the *Special Parms* field of the financial institution form – "Full → Configuration Setup → Main Tables → Financial Institutions → [Details]").

WAY4 expanded subsidiary ledger accounting functionality is provided according to a separate agreement with the WAY4 vendor.

USE_AUTO_STORNO

The global parameter USE_AUTO_STORNO is used when working with the Reversal Management module. For more information, see the documents Reversal Management, Reversal Management Limited.

The Reversal Management module is not included in the WAY4 basic configuration and is supplied according to a separate agreement with the WAY4 vendor.

TRIVIAL_GL_TRANSFER

The parameter TRIVIAL_GL_TRANSFER influences how GL entries are generated and represented:

- When the value is "N" (default value) – if the same GL account (GL_NUMBER) is used as the debited and credited account, when account templates and subsidiary GL account numbers (ACCOUNT_NUMBER) match, GL entries (records in the GL_TRANSFER table) and journal entries (records in the GL_TRACE table) **are not generated**.

  If these entries must be shown in GL accounts, use the "A" value of this global parameter.

- When the value is "A", GL entries (records in the GL_TRACE and GL_TRANSFER tables) are generated and shown without the aforementioned conditions and restrictions. When closing GL entries, no check is made that the numbers of accounts and templates match.

- When the value is "S", records in the GL_TRANSFER and GL_TRACE tables are generated as for the "N" value. However, when the value is "S", GL entries (GL_TRANSFER) with the same GL account number (GL_NUMBER) for debit and credit are not included in turnover for the corresponding GL accounts in the GL_ACCOUNT and GL_ITEM tables .

VOICE_AUTH_RRN_PREFIX

VOICE_AUTH_RRN_PREFIX – A parameter used when creating a unique RRN (Retrieval Reference Number) in the database when performing a voice authorization.

The parameter value is a positive two-digit integer.

When a value is set for this parameter, it will be used as a prefix during voice authorizations when creating the transaction's reference number, instead of the default prefix, 99.

This parameter is used by affiliated banks when exchanging data through a host-to-host channel with a sponsoring bank.

WAIVE_INT_ROUNDING

During interest accrual, rounding errors may occur (related to rounding to the minimum fractional currency unit; for example, for dollars, this is two digits after the comma). The global parameter WAIVE_INT_ROUNDING with the "N" value allows the amount of the rounding error arising during interest accrual to be considered in the next accrual of interest (if interest is accrued several times during one billing cycle – for example, when accruing interest on an instalment loan). In the next accrual of interest executed in the same billing cycle, the amount of the rounding error not previously considered is added to the calculated amount. When this global parameter's value is "Y", the amount of the rounding error is not considered.

This parameter can be redefined using the tag of the same name on the account template level in the *Template Details* field.