

Operation Manual

Documents

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The purpose of the WAY4™ system is to support the accounting and processing of card transactions. To achieve this, WAY4 is set up as a document processing system.

The manual is intended for administrators of WAY4 (employees of banks or processing centres) and describes the specifics of working with documents in WAY4.

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

- DB Manager System Administrator Manual
- Interchange Module
- Daily Procedures
- WAY4™ Global Parameters
- Interchange Routing
- Financial Institutions
- Currency Conversion
- WAY4™ Service Packages
- Usage Limiters
- WAY4™ Accounting Schemes
- Events
- WAY4 Accounting

The following notation is used in the document:

- Field labels in screen forms are shown in *italics*.
- Button labels in screen forms are shown in square brackets, as in [Approve].
- User 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".
- Key combinations used in working with DB Manager are shown in angular brackets, for example <Ctrl>+<F3>.



Warnings about potentially hazardous situations or actions.



Information about important features, additional options or the best use of certain system functions.

1 Terms and Definitions

A *Document* is a form for representing and registering data on all types of transactions executed with contracts registered in WAY4.

Documents are created in WAY4 as a result of:

- Receiving information from external systems:
 - Acceptance of online messages from device networks, payment systems, processing systems of other banks (affiliated banks).
 - Loading files from payment systems, bank systems, processing systems of other banks (affiliated banks).
- Execution of internal system processes, for example, as a result of processing Events, standing payment orders, activation of contract usage limiters calling for a fee to be charged, processing of other documents, etc.
- Manual input of data.

A *Contract* is a WAY4 accounting object that defines the form of relations between the financial institution (issuer or acquirer) and the member of the card payments (cardholder, merchant, or bank branch).

A *Message* is a piece of information accompanied by a request/instruction to process transaction data that refers to a contract or two contracts existing in the system database. The messages can be received or sent through message channels. The system generates outgoing messages based on documents created in the WAY4 database.

The format of incoming or outgoing messages is defined by its channel's regulations.

WAY4 processes incoming messages and generates outgoing ones by means of message codes used in the message channels. Message codes are matched to WAY4-supported transactions through a WAY4 system directory (see the section "Message Types").

A *Transaction* is an operation exchanging data between two contracts; the operation can lead to fund flow, change of the contract's account balance and make certain Services available. A transaction is the result of execution of the following operations:

- Bank card transactions including those requiring authorization.
- Operations to set/modify credit limit.
- Transactions to collect a fee.

- Execution of payment orders.
- Transfer of money.
- Interest accrual, etc.

A *Macrotransaction* – an automatically generated system instruction to post an entry/entries to contract accounts with specification of the transaction amount, fee amount (if fees are charged), source and/or target contract accounts, as well as processing parameters. Macrotransactions are generated according to the results of processing and acceptance of financial documents, as the result of posting other macrotransactions, and as the result of executing various system processes (for example, accruing interest, generating reserves). Posting macrotransactions generates entries for WAY4 contract accounts, WAY4 subsidiary GL accounts and for WAY4 GL accounts. A macrotransaction is represented by a record in the M_TRANSACTION table.

2 Document Overview

The Fig. 1 shows the general document form "Doc - General"

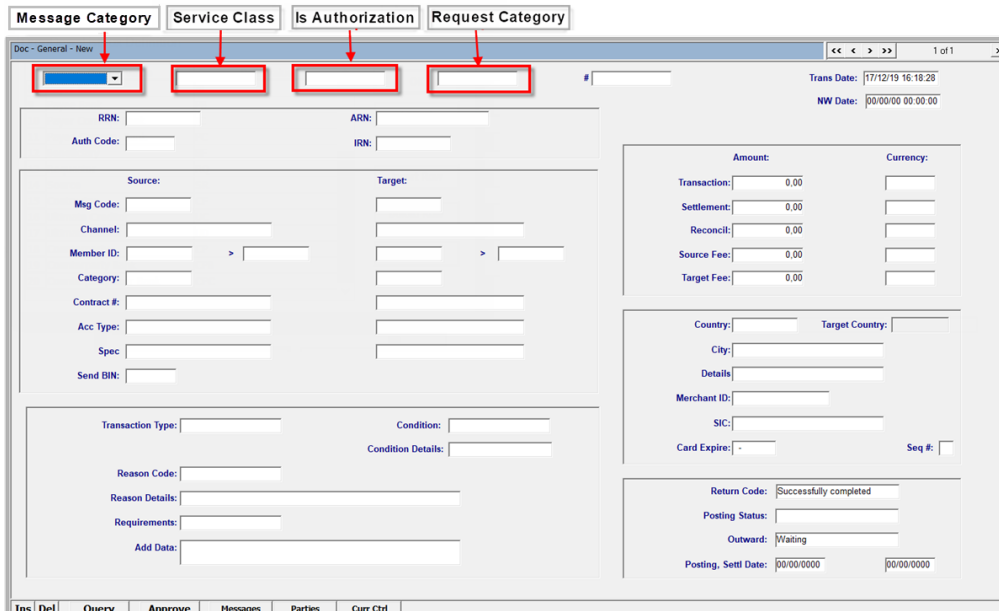


Fig. 1. General form of a document in WAY4

Document parameters can be divided into two groups:

- Parameters which allow the document to be classified, to specify the method for processing transaction data (see the section "Document Classification").
- Main parameters containing transaction data (see the section "Document Parameters").

2.1 Document Classification

Document classification in WAY4 is based on the following categories defining the method for processing transaction data.

2.1.1 Message Category

- "File Summary" – stands for the file header if the loaded file contains a number of message batches; the category is reserved for future versions and is not currently used.
- "Batch Summary" – the category is reserved for future versions and is not currently used.

- "Batch Header" – stands for the message batch header, which serves as a summary of the batch's contents.
- "Single" – stands for a single message; the category is used by default if no value is specified in the *Message Category* field.
- "Batch Message" – stands for an individual message in a batch of messages, e.g. a message relating to an individual bank card during batch loading/uploading of card production data or a message regarding an individual payment when a batch of payments is entered into WAY4.

2.1.2 Service Class (Transaction type classifier)

See the section "Service Class".

2.1.3 Is Authorization (Category of financial/authorization documents)

- "Auth" – a document generated by the issuer:
 - An authorisation document generated when an authorisation request is received; processing documents of this category may result in funds blocking in the card account; this category includes documents that do not block funds, e.g. documents for a contract account balance inquiry.
 - A document generated when an issuing or card contract's credit limit changes.
- "Fin" – a financial document whose processing results in accounting transactions in contracts' accounts
- "PreAuth" – an authorisation document generated by the acquirer:
 - When a smart card is acquired in the acquirer's device.
 - When a non-financial bank card transaction, e.g. a balance or mini-statement request, is performed in the acquirer's device.
 - To register a preliminary authorisation for a transaction with deferred payment, e.g. to block funds in a card account when the cardholder checks in a hotel where payment is deferred until the end of the stay.
- "PostAuth" – authorisation document generated by the acquirer after exporting a smart card transaction cryptogram.
- "AuthCheck" – an authorization document generated by the issuer when a request is received to check the availability of a transaction, for example, note acceptance. If the client is charged a fee for the requested transaction, data including the fee amount will be sent in the return message for this request.

"AuthCheck" is processed according to the same rules as "Auth" category documents, but after a response message has been sent to the acquirer, all changes made in the database (contract usage limiter parameters, amounts available) are reversed. If a fee is charged for the transaction, its amount is saved in the parameters of a custom procedure.

- "Transit Auth" – transit authorisation document registered by a sponsor bank when an authorisation request:
 - For an affiliated issuing bank is received from the payment system.
 - Sent to the payment system by an affiliated acquiring bank.
- "Auth Check Transit" – transit authorisation document registered by a sponsor bank when an authorisation request to perform a note acceptance transaction for an affiliated issuing bank is received from the payment system.

2.1.4 Request Category

- "Request" – request to carry out a transaction.
- "Advice" – advice on the completed transaction including transaction types like chargebacks or representments.
- "Reversal" – advice on transaction reversal.
- "Adjustment" – advice on partial transaction reversal.
- "Part Advice" – advice on partial chargeback or partial representment.

2.2 Document Parameters

2.2.1 Identification Numbers

Identification numbers make it possible to search and to handle documents in a dispute cycle, match documents, etc.

The following document properties can be used as identification numbers (see Fig. 1 in the section "Document Overview"):

- *RRN* (Retrieval Reference Number) – unique database number of the original transaction corresponding to a document; when a sequence of documents is created e.g. in a dispute cycle or in case of a decline, WAY4 assigns the same RRN of the original transaction to each document in the sequence.
- *ARN* (Acquirer Reference Number) – unique transaction ID provided by the acquirer to the payment system.

- *IRN* (Issuer Reference Number) – unique transaction ID provided by the issuer to the payment system. For example, the issuer generates an IRN during a chargeback. If the acquirer creates a representment, this document has the same IRN.
- *Auth Code* – authorization code used as the transaction ID generated by the issuer.
- *#* – document registration number assigned by the sender (Source Registration Number).

2.2.2 Sources and Targets of Transaction Data

In keeping with WAY4 conventions, WAY4 needs to identify the source contract and the target contract in order to process documents.

Contracts are defined by the following fields (see Fig. 1 in the section "Document Overview"):

- *Msg Code* – transaction message code in the message channel.
- *Channel* – message channel name, e.g. "VISA", "MC", "Our ATM", "Our VISA Cards" etc..
- *Member ID* – group includes two sets of fields, a set for the transaction data source contract and a set for the target contract:
 - *Source* (incoming and transit documents):
 - ♦ *Source Member ID* – document source ID in the corresponding message channel, e.g. the payment system channel or the affiliated channel.
 - ♦ *Rec Member ID* – document target ID generated in WAY4 (ID of the financial institution serviced by WAY4) according to the source message channel's regulations.
 - *Target* (outgoing and transit documents):
 - ♦ *Send Member ID* – document source ID generated in WAY4 (ID of the financial institution serviced by WAY4) according to the target message channel's regulations.
 - ♦ *Target Member ID* – document target ID in the corresponding message channel, e.g. the payment system channel or the affiliated channel.
- *Category* – contract category (card, accounting or device contract).
- *Contract #* (source number, target number) – number of the contract created in the system or the number of a card or device used in a transaction with a member of the same payment system.



The "Doc-Brief" form contains an additional *Contract* field (see Fig. 25 in the section "Manually Creating Matching Documents") – for the number of the contract registered in WAY4 including the contract used for transactions with other members of the payment system. This field is automatically filled in when processing a document in WAY4.

- *Acc Type* – account type used to carry out accounting transactions. The value of this field redefines the value of the Service's *Account Type* parameter: if this field in the document is filled in, the account type specified in the document is used for posting entries and not the account type specified on the Service level.
- *Spec* – field specifying an additional contract linked to the source/target contract as "Related"; this additional contract will be used when the document is processed as the source/target of the transaction data.
- *Send BIN* – acquirer BIN (used only by Mastercard).

2.2.3 Transaction Parameters in the Document

WAY4 displays transaction parameters referred to in the document in the following fields (see Fig. 1 in the section "Document Overview"):

- *Transaction Type* – transaction type created in WAY4 and stored in the "Transaction – All" reference form (Full → Configuration Setup → Transaction Types → Transaction – All).
- *Conditions* – transaction conditions defining the document processing method (see the section "Transaction Conditions").
- *Condition Details* – transaction attributes which determine the value of the *Conditions* field.
- *Sec Condition Details* – transaction attributes for a secondary document. The field is only shown in the "All Docs" form (Full → Documents Input & Update → Doc - General Form → All Docs → [Full]).
- *Reason Code* – reason for generating this document, registered in the system for this dispute document type according to regulations of the payment system (for more information, see the section "Reasons for Generating Transactions (Reason Codes)" of the document "WAY4™ Dispute Management").
- *Reason Details* – dispute document details.
- *Requirements* – method to send the information requested in the dispute cycle: a copy by fax, the original document, etc. for more information, see

the section "Additional Information Parameters (Requirements)" of the document "WAY4™ Interchange Interfaces).

- *Add Data* – field for specifying additional parameters as tags.

2.2.4 Document Amounts and Currencies

The document specifies the following financial parameters of the transaction (see Fig. 1 in the section "Document Overview"):

- *Transaction* – transaction amount and currency.
- *Settlement* – settlement currency and amount posted on the contract accounts.
- *Reconcil* – reconciliation amount and currency; the reconciliation currency is specified in the agreement made with the payment system.
- *Source Fee* – amount and currency of the fee collected from the document source contract. The value of this field redefines settings of the Service for charging fees.
- *Target Fee* – amount and currency of the fee collected from the document target contract. The value of this field redefines settings of the Service for charging fees.
- *Settl Date* – date when the amount was converted from the settlement currency of a payment system member into the settlement currency of another member of the payment system; in a document transferring money between accounts (see the section "Account Transfer") WAY4 can specify the date of the correcting transaction made in the General Ledger in this field if the transaction is made postdated.



If the transaction currency of an incoming adjustment does not match the currency of the outgoing document, this adjustment is posted using a contract dispute account (and the document category changes to "Advice").

2.2.5 Additional device and card parameters

The following parameters for the device and card used in a transaction are specified in a document (see (see Fig. 1 in the section "Document Overview"):

- *Country, City* – country and city in which the acquirer's device is located.
- *Details* – merchant name.
- *Merchant ID* – merchant ID (corresponds to the *Card Acceptor ID* field in device contract settings).
- *SIC* – code that classifies the merchant (SIC/MCC) according to business type.

- *Card Expire* – card expiry date.
- *Seqv #* – plastic sequence number (for Mastercard).
- *Target Country* – issuer's country of registration. The field is filled in automatically when processing documents for transactions for which this field must be filled in.

2.2.6 Document Posting Indices

WAY4 posts documents in a number of stages. At the end of each stage it creates a corresponding response code and changes the document posting indices.

The document posting indices are represented by the following document properties (see Fig. 1 in the section "Document Overview"):

- *Return Code* – (response code) information about document processing results; the list of response codes is stored in the "Response Codes" reference form;
- *Posting Status* – document processing status (see Fig. 2):
 - "Posted" – document has been successfully posted.
 - "Closed" – reversal (document) has been successfully posted.
 - "Inactive" – document status after its reversal document was successfully posted, or authorization document status after its financial document was successfully posted.
 - "Rejected" – document was rejected when it was loaded (for authorization documents).



The workflow of financial documents generated by online messages from "own" devices differs from that of authorization documents (see Changing Statuses during Document Processing).

- "Decline" – document was rejected when it was processed.
- "Suspended" – authorization document is waiting to be posted.
- "Decline Service" – document has been posted with the dispute contract.
- "Waiting" – document is waiting.
- "Processed" – intermediary status of a document during processing. This status is often given for example, to a financial document in the "When available" category during the processing stage if the required amount is not available on contract accounts.



The "Processed" status can be given to a suspended authorization document created as a result of processing a request to issue cash at an ATM. The document will have this status after the ATM controller sends a confirmation that the transaction can be executed, before receiving a confirmation from the ATM of cash issue.

- "Under Workflow" – the document is being processed in the Workflow Management module. This status is assigned to documents when it is necessary to stop standard processing of documents for additional checks (manual review). For example, when manually entering a batch of documents, or if the corresponding documents were not found during reconciliation.

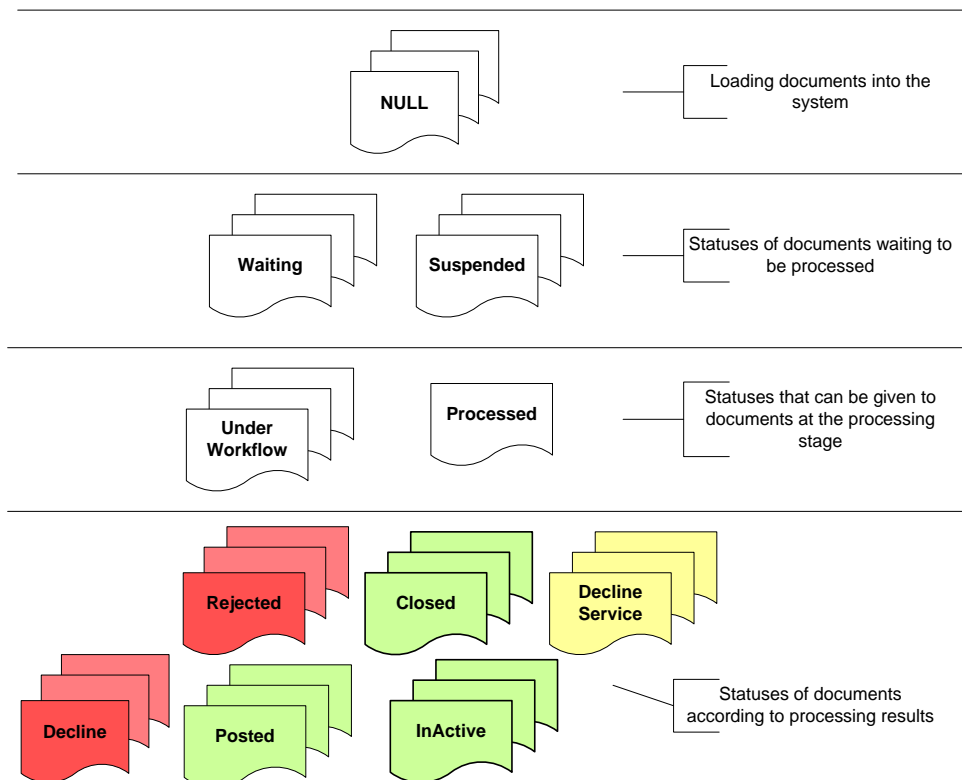


Fig. 2. Document processing statuses

See Changing Statuses during Document Processing for a detailed scheme of document status changes during processing.

- *Outward* – document status on uploading to an external system (see Fig. 3):
 - "To be Sent" – document is ready to be uploaded.
 - "Closed" – processed document, not intended to be uploaded.
 - "Sent" – document has been uploaded.

- "Rejected" – status of a financial document that was rejected by the payment system.
- "Suspended" – document has been suspended due to problems occurring at the uploading stage.
- "Processed" – status used in addition to the posting status value when an error occurs in document processing.
- "Waiting" – status of waiting document.
- "Settled" – the original document was successfully processed by the payment system. "History" – status of a document loaded from another system (document not intended to be uploaded).
- "Accounted" – the document was processed by the payment system (remuneration has been received or the corresponding funds have been withdrawn from the bank).
- "Not for Export" – processed authorization document (not intended to be uploaded).

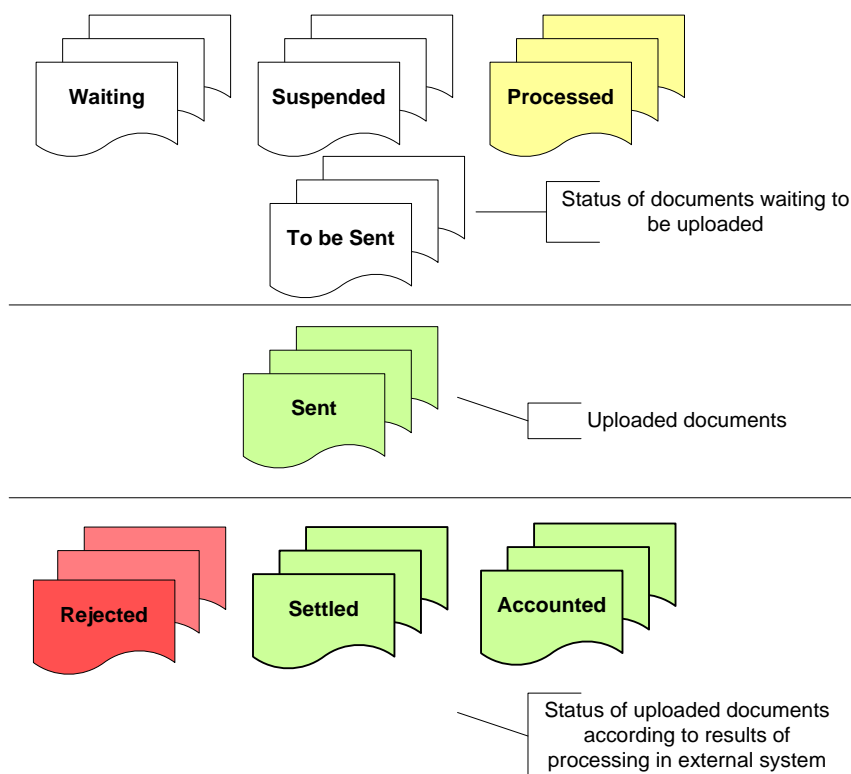


Fig. 3. Document outward statuses

- *Posting Date* – banking date of document processing.



Analysis of the document state is based on analysis of document statuses and errors that occurred during document processing. The [Messages] button in the document form is used to access error descriptions.

2.2.7 Payment (Transaction) Party Bank Requisites

2.2.7.1 Recording Payment Party Requisites

When processing a document, payment (transaction) party bank requisites can be saved in WAY4 in special records accessible by clicking the [Parties] button in the document form (see the form "Parties for Doc- General in Fig. 4). Information on transaction data target and source requisites is registered under the document.



Payment party bank requisites are recorded under a document if the tag `CORE_BANKING=Y`; in the *Fee Algorithm Options* field of the corresponding transaction subtype.

Bank requisites can be recorded under a document for the following reasons:

- For convenient recording of payment party requisites that are received in a transaction message.
- For recording (storing) the requisites of parties in direct payments to arbitrary requisites (for example, in making payments at kiosks, when the requisites of the other party to the payment are entered manually).
- For recording (storing) the requisites of parties in direct payments – payments according to documents that are created on the basis of specially configured standing payment orders. Such standing payment orders can be used, for example, to pay utilities at an ATM. In doing so:
 - Data on the transaction information target to which the payment order refers are taken from the form "Parties for <name of payment recipient>" (see Fig. 4 in the section "Recording Payment Party Requisites"). Usually, a payment order for paying utilities will refer to an external party to the payment (not having a contract registered in WAY4).
 - Data on the requisites of the transaction information source are automatically taken from the system.



When executing direct payments, funds are directly transferred to the transaction information target's address directly from the bank requisites of the party that is the source of transaction information, bypassing intermediaries (for example, bypassing the acquirer on whose device the utilities payment is being made).

For more information, see the section "Direct Payments with Standing Payment Orders" of the document "Standing Payment Orders".



In the current WAY4 version, execution of direct outgoing payments when the transaction information source is always a client with a contract in WAY4 is implemented. The transaction information target is the payment recipient (usually an external payment recipient).

Fig. 4. Form for viewing payment party requisites

The form "Parties for Doc- General" contains the following fields:

- *Party Type* – the type of payment party:
 - "Payer" – payer.
 - "Payee" – payment recipient.
 - "Payer Bank" – payer's bank.
 - "Payee Bank" – payment recipient's bank.
 - "Payer Corresp. Bank" – payer's correspondent bank.
 - "Payee Corresp. Bank" – payment recipient's correspondent bank.
 - "Ultimate Creditor" – actual recipient of funds

- "Ultimate Debtor" – actual payer
- "Counterparty" – payment party. With this value, the payment party is determined as the payee or payer, according to the document parameters/transaction type parameters.
- "Counterparty Bank" – payment party's bank. With this value, the payment party is determined as the payee or payer, according to the document parameters/transaction type parameters.
- "Counterparty Corr Bank" – payment party's counterparty bank. With this value, the payment party is determined as the payee or payer, according to the document parameters/transaction type parameters.

The values "Counterparty", "Counterparty Bank", "Counterparty Corr Bank" are used for setting up payment participants for a contract (see the section "Configuring Payment Party Requisites"). These values are not used in the "Parties" form for a document. In this case, a payment party will be determined on registration in the "Parties for" form as a payer or payee based on document and transaction subtype parameters. I.e. when the values "Counterparty", "Counterparty Bank", "Counterparty Corr Bank" are used the *Trans Type* field in the payment order must be filled in to determine the direction of the transaction.



The "Ultimate Debtor" and "Ultimate Creditor" values are used for the "WAY4 SEPA Interface" solution. For more information, see the document "Working with the SEPA Interface (SEPA_Interface_operation)". The solution is provided according to an additional agreement with the WAY4 vendor.

- "Client" field group:
 - *Party Client* – field for selecting a client registered in WAY4. In the current WAY4 version, this field is not used when configuring payment party requisites for further use in payment orders (see the section "Configuring Payment Party Requisites"). The field is used for automatic recording of the requisites of payment parties with contracts in WAY4, or when recording requisites received from transaction messages, when generating documents without the use of payment orders.
 - *Party Name* – the name of the payment party.
 - *Party Name English* – the name of the payment party in English.
 - *Client Category* – client type:
 - ◆ "Private" – private client.

- ◆ "Commercial" – legal entity.
- ◆ "Accountant" – bank department.
- *Residence* – residence status:
 - ◆ "Resident" – permanent resident.
 - ◆ "Non-resident" – non-resident.
- *Birth-Reg. Date* – client date of birth.
- *Birth Place* – client place of birth.
- *Reg. Number Type* – source of information for determining client number (for example, passport).
- *Reg. Number* – information used to identify client (for example, passport number).
- *Reg. Details* – detailed client information.
- *Individual Tax Number* – taxpayer ID.
- *Tax Position* – tax registration reason code (for Russian Federation).
- The "Affiliation" field group is used to configure additional relations between clients (for example, between a client from whose account payment is being made and the client initiating the payment by power of attorney).
 - "Affiliation" – type of client relation. For example "power of attorney".
 - "Affiliation Source Number" – number of the external document (for example, power of attorney) based on which the relation is being established.
 - "Affiliation Date From" – date the relation becomes valid.
 - "Affiliation Date To" – date the relation is no longer valid.
- The "Address" field group:
 - *Country* – drop-down list of countries registered in WAY4 (see the list in "Full → Configuration Setup → Main Tables → Country Table").
 - *Municipality Code* – OKATO code (for addresses in the Russian Federation).
 - *Address Line 1, Address Line Eng 1* – the first line of the address, arbitrary text (in the local language and in English).
 - *Address Line 2, Address Line Eng 2* – the second line of the address; street name (in the local language and in English).

- *Address Line 3, Address Line Eng 3* – the third line of the address; house/building number (in the local language and in English).
- *Address Line 4, Address Line Eng 4* – the fourth line of the address, apartment number (in the local language and in English).
- The "Account" field group:
 - *Account Number* – bank account number.
 - *Account Member* – payment party identifier (if the Payee or Payer corresponds to the Member ID field in the parent form).
 - *Account Date Open* – account date of opening.
 - *Account Branch Code* – branch number.



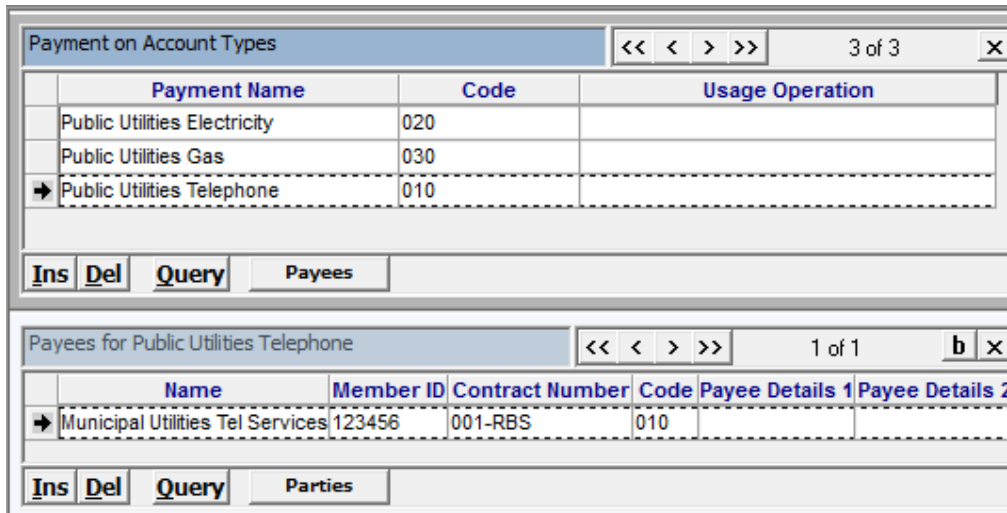
For the transaction information target and transaction information source several records (sets) with requisites can be registered under the document, in accordance with the conditions of the payment being executed.

For information about configuring sets of transaction party requisites (in the current WAY4 version these are transaction information recipient requisites) that are used when generating documents for direct payments, see the section "Configuring Payment Party Requisites".

2.2.7.2 Configuring Payment Party Requisites

The list of payment parties can be configured in the following forms:

- Standard payment parties are configured in the form "Payees for <name of payment type>" (Full → Configuration Setup → Transaction Types → Payment on Account Types → [Payees]), see Fig. 5. Standard payment parties are accessible, for example, when configuring template payment orders.
- Custom lists of payment parties that are used, for example, when configuring personal payment orders accessible only for a specific client. In this case, payment parties are registered in the "Payees for <client name>" form, subordinate to the form with client parameters (for example "Full → Issuing → Contracts Input & Update → Clients (Private) → [Client - Edit] → [Payee]"). The set of fields in the "Payees for <client name>" form corresponds to the fields in the "Payees for <name of payment type>" form, see Fig. 5.
- Payment parties and their requisites can be configured using the Advanced Applications module. For more information, see the document "Advanced Applications R2".



The screenshot shows two overlapping windows from a software application. The top window is titled 'Payment on Account Types' and contains a table with three columns: 'Payment Name', 'Code', and 'Usage Operation'. It lists 'Public Utilities Electricity' (Code 020), 'Public Utilities Gas' (Code 030), and 'Public Utilities Telephone' (Code 010). Below the table are buttons for 'Ins', 'Del', 'Query', and 'Payees'. The bottom window is titled 'Payees for Public Utilities Telephone' and contains a table with columns: 'Name', 'Member ID', 'Contract Number', 'Code', 'Payee Details 1', and 'Payee Details 2'. It lists 'Municipal Utilities Tel Services' with Member ID 123456, Contract Number 001-RBS, and Code 010. It also has buttons for 'Ins', 'Del', 'Query', and 'Parties'.

Payment Name	Code	Usage Operation
Public Utilities Electricity	020	
Public Utilities Gas	030	
Public Utilities Telephone	010	

Name	Member ID	Contract Number	Code	Payee Details 1	Payee Details 2
Municipal Utilities Tel Services	123456	001-RBS	010		

Fig. 5. Form for configuring payment parties

The "Payees..." form contains the following fields:

- *Name* – name of payment party.
- *Member ID* – payment party bank ID.
- *Contract Number* – payment party bank account number.
- *Code* – payment party code. The value in this field must be unique.

For each payment party, register requisites in the "Parties for <name of payment party>" form opened by clicking the [Parties] button. The fields of the "Parties for <name of payment party>" form correspond to the fields of the "Parties for Doc-General" form (see Fig. 4 in the section "Recording Payment Party Requisites").

If the values "Counterparty", "Counterparty Bank", "Counterparty Corr Bank" of the *Party Type* field are used, or the tag TGT_PAYM_TAG, the *Trans Type* field of the payment order must be filled in to determine the transaction direction. I.e. in this case, the payment party will be determined on registration in the "Parties for" form as the payer or payee, depending on document and transaction subtype parameters.



Several records (sets) with requisites can be registered for one payment party. For example, payee requisites are usually registered using three records:

- A record with the "Payee" value in the *Party Type* field – corresponds to the payment recipient (for example, kindergarten No. 23).
- A record with the "Payee Bank" value in the *Party Type* field – the payment recipient's bank.
- A record with the value "Payee Corresp. Bank" in the *Party Type* field – the payment recipient's correspondent bank.

One record of each payment party type (see the *Party Type* field) can be registered for one payment party.

When filling in the *Account Number* field:

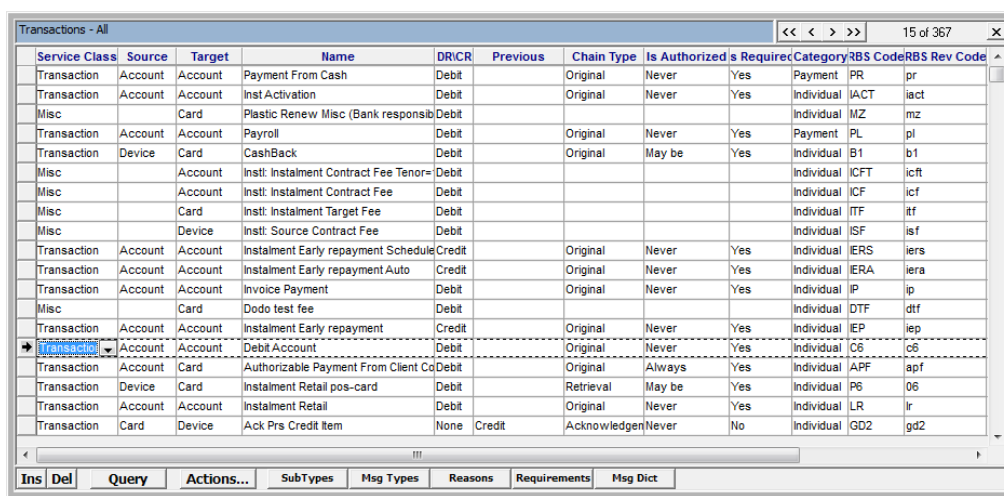
- For the payment recipient, the bank account number is specified.
- For the payment recipient bank, the correspondent account number is specified.
- The field is not filled in for the correspondent bank.

3 Transaction Types and their Parameters

To configure transactions supported by WAY4, choose "Full → Configuration Setup → Transaction Types" from the user menu.

3.1 Main Parameters of Transactions

Basic transaction parameters are represented in the "Transaction – All" grid form (see Fig. 6). To display the form, choose "Full → Configuration Setup → Transaction Types → Transaction – All" from the user menu.



Service Class	Source	Target	Name	DR/CR	Previous	Chain Type	Is Authorized	s Required	Category	RBS Code	RBS Rev Code
Transaction	Account	Account	Payment From Cash	Debit		Original	Never	Yes	Payment	PR	pr
Transaction	Account	Account	Inst Activation	Debit		Original	Never	Yes	Individual	IAC	iact
Misc		Card	Plastic Renew Misc (Bank responsib	Debit					Individual	MZ	mz
Transaction	Account	Account	Payroll	Debit		Original	Never	Yes	Payment	PL	pl
Transaction	Device	Card	CashBack	Debit		Original	May be	Yes	Individual	B1	b1
Misc		Account	Inst: Instalment Contract Fee Tenor=	Debit					Individual	ICFT	icft
Misc		Account	Inst: Instalment Contract Fee	Debit					Individual	ICF	icf
Misc		Card	Inst: Instalment Target Fee	Debit					Individual	ITF	itf
Misc		Device	Inst: Source Contract Fee	Debit					Individual	ISF	isf
Transaction	Account	Account	Instalment Early repayment Schedule	Credit		Original	Never	Yes	Individual	ERS	iers
Transaction	Account	Account	Instalment Early repayment Auto	Credit		Original	Never	Yes	Individual	ERA	iera
Transaction	Account	Account	Invoice Payment	Debit		Original	Never	Yes	Individual	IP	ip
Misc		Card	Dodo test fee	Debit					Individual	DTF	dtf
Transaction	Account	Account	Instalment Early repayment	Credit		Original	Never	Yes	Individual	EP	iep
Transaction	Account	Account	Debit Account	Debit		Original	Never	Yes	Individual	CS	c6
Transaction	Account	Card	Authorizable Payment From Client Co	Debit		Original	Always	Yes	Individual	APF	apf
Transaction	Device	Card	Instalment Retail pos-card	Debit		Retrieval	May be	Yes	Individual	P6	06
Transaction	Account	Account	Instalment Retail	Debit		Original	Never	Yes	Individual	LR	lr
Transaction	Card	Device	Ack Prs Credit Item	None	Credit	Acknowledgen	Never	No	Individual	GD2	gd2

Fig. 6. List of the transaction types supported by WAY4

This form contains the following control buttons:

- [Action] → "Fill" – used to generate unique transaction codes *RBS Code*, *RBS Rev Code*.
- [Action] → "Check All" – check the *Trans Type Idt* and *RBS Code* fields. The uniqueness of these fields is checked – a check for duplicates if made and if any are found:
 - For the *TransTypeIdt* field, the value of this field is automatically corrected. If the *TransType Idt* field is not filled in, it will be filled in automatically when the check is performed.
 - For the *RBSCode* field, when a duplicate is found, a window with an error message opens and the error is registered in the Process Log.
- [SubTypes] – used to configure transaction subtypes (see the section "Transaction Subtypes").

- [Msg Types] – used to configure codes of messages for sending transaction information (see the section "Message Types").
- [Reasons] – used to configure the dictionary of reasons for generating a dispute transaction (for more information, see the section "Reasons for Generating Transactions (Reason Codes)" of the document "WAY4™ Dispute Management").
- [Requirements] – used to configure the dictionary of requirements for documentation presented in the dispute cycle (for more information, see the section "Additional Information Parameters (Requirements)" of the document "WAY4™ Dispute Management").

This form contains fields corresponding to the following transaction parameters:

3.1.1 Service Class

This parameter is a transaction type classifier and determines the way documents or macrotransactions are processed.

The parameter can have the following values:

- "Transaction" – card transactions.
- "Misc" – collecting/paying a fee.
- "Interests" – accruing interest on accounts.
- "Account Transfer" – corrective accounting transaction.
- "Credit Limit" – specifying or changing the credit limit.
- "Upper Norm", "Lower Norm", "Upper Limit Special", "Lower Limit Special" – amount normalization, i.e. the mandatory money transfer from one account to another when the account balance exceeds the specified value.
- "Due Norm", "Due Special", "End Cycle" – time normalization, i.e. the mandatory money transfer from one account to another by a specified date.
- "Rev/Exp" – daily interest accrual on the account or supplementary accounting transactions, e.g. repaying loan interest.
- "Interest Fee" – collecting a fee from the accrued interest.
- "Reserve for Bad Debts" – loan reservation.
- "Balance Inquiry" – balance inquiry on card account.
- "Online Statement" – request for mini-statement on card account.
- "Online Payment" – payment through ATM.
- "Additional Cr Limit" – setting and changing additional limit.

- "Additional Online Service" – additional online transactions
- "Top Up" – change in amount available for card transactions offline (for smart cards).
- "Verification" – check of cryptographic parameters according to a special request.

3.1.2 Source, Target

These parameters specify the contract category of the source and target of transaction data.

According to the contract categories used in WAY4, the parameter can take the following values:

- "Device" – device contract.
- "Card" – card contract.
- "Account" – accounting contract.

3.1.3 Name

Name of transaction type.

3.1.4 DR\CR

This parameter defines the "direction" of the transaction:

- "Debit" – target contract is debited.
- "Credit" – target contract is credited.
- "None" – contract is neither debited nor credited.

3.1.5 Chain Type

The parameter specifies whether the transaction is the original or a secondary (subsequent) one, for instance, in a dispute cycle:

- "Original" – original transaction.
- "Chargeback" – secondary transaction (chargeback).
- "Retrieval" – secondary transaction (retrieval of the card transaction details).
- "Fulfillment" – secondary transaction (fulfillment of the retrieval request).
- "Representment" – secondary transaction (representment of the card transaction payment request).
- "Second Chargeback" – secondary transaction (repeat chargeback).

- "Write-off" – secondary transaction (write off of the full or partial amount of a transaction from the bank's dispute contract account to the bank's expense or income account).
- "Annex" – secondary transaction which when generating a document uses the contract parameters (Source/Target) from the previous document.
- "Acknowledgement" – secondary transaction (in which the correspondence of the amounts of secondary and original documents is checked when matching documents; in a successful match, the value of the *Outward Status* field of the original document is set to "Settled", if the amounts do not correspond, the status is also set to "Settled", but a message is generated). Reserved for use in future versions.

3.1.6 Previous

The parameter is used in a secondary transaction; it defines the transaction type of the previous transaction.

3.1.7 Is Authorized

The parameter specifies whether the transaction should be authorized:

- "May be" – to make the transaction, authorization may be required depending on additional conditions.
- "Always" – transaction authorization is mandatory.
- "Never" – no authorization is required to make the transaction.

3.1.8 Is Required

The property specifies whether the transaction is mandatory ("Yes") in a sequence of transactions, e.g. in a dispute cycle, or not ("No"). For instance, a retrieval request and a fulfillment are not mandatory transactions in a dispute cycle.

3.1.9 Category

- "Interbank" – transaction carried out between banks.
- "Individual" – other transactions.
- "Payment" – payment made to or from a contract account; this transaction type is normally used by card contracts.
- "Settlement" – transaction used in settlements with a payment system.
- "When Available" – transaction only made when there is an amount available on the account (taking the credit limit into account).
- "When Credit" – a transaction only made when there is an amount available on the account (without taking the credit limit into account).

3.1.10 RBS Code

The parameter specifies the transaction's unique Service code used to generate entry codes (see the section "Entry Codes" of the document "WAY4 Accounting").

3.1.11 RBS Rev Code

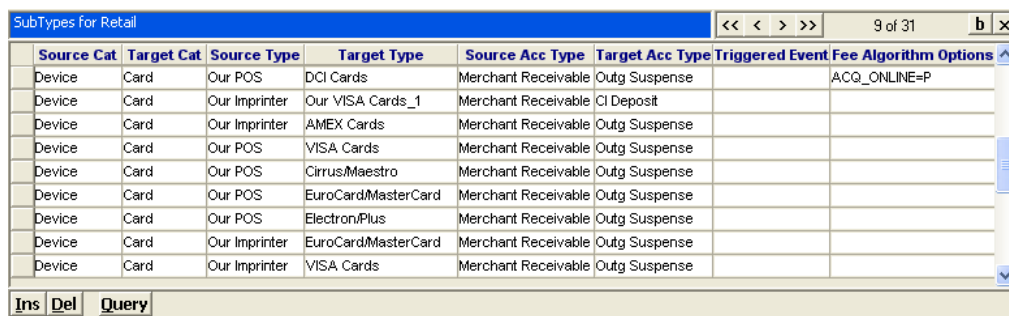
The parameter specifies the transaction's unique Service code reversing the current transaction; it is used to generate transaction entry codes (see the section "Entry Codes" of the document "WAY4 Accounting").

3.2 Additional Parameters of Transactions

3.2.1 Transaction Subtypes

You can create transaction subtypes of any transaction type defined in the "Transaction - All" form to set additional transaction parameters.

To open the "Sub Types for ..." grid form (see Fig. 7), select the required transaction type in the "Transaction - All" form and click on [Sub Types].



Source Cat	Target Cat	Source Type	Target Type	Source Acc Type	Target Acc Type	Triggered Event	Fee Algorithm Options
Device	Card	Our POS	DCI Cards	Merchant Receivable	Outg Suspense		ACQ_ONLINE=P
Device	Card	Our Imprinter	Our VISA Cards_1	Merchant Receivable	CI Deposit		
Device	Card	Our Imprinter	AMEX Cards	Merchant Receivable	Outg Suspense		
Device	Card	Our POS	VISA Cards	Merchant Receivable	Outg Suspense		
Device	Card	Our POS	Cirrus/Maestro	Merchant Receivable	Outg Suspense		
Device	Card	Our POS	EuroCard/MasterCard	Merchant Receivable	Outg Suspense		
Device	Card	Our POS	Electron/Plus	Merchant Receivable	Outg Suspense		
Device	Card	Our Imprinter	EuroCard/MasterCard	Merchant Receivable	Outg Suspense		
Device	Card	Our Imprinter	VISA Cards	Merchant Receivable	Outg Suspense		

Fig. 7. Grid form containing transaction subtypes

The following transaction details can be specified in the form:

- *Source Type* – type of the source contract. The value is selected from the list of contract types for this contract category (*Source Cat*) (Full → Configuration Setup → Contract Types).
- *Target Type* – type of the target contract. The value is selected from the list of contract types for this contract category (*Target Cat*) (Full → Configuration Setup → Contract Types).
- *Source Account Type* – type of the account in the source contract (Full → Configuration Setup → Accounting Setup → Account Types).
- *Target Account Type* – type of the account in the target contract (the list is generated in the form "Full → Configuration Setup → Accounting Setup → Account Types").

- *Fee Algorithm Options* – this field is used to specify special parameters of transactions as tags. See the section "Tags used when processing documents" of the document "Setup Tags".

3.2.2 Message Types

Transaction information can be exchanged through message channels through special codes according to the regulations of each channel.

Codes for each transaction are contained in a special grid form "Msg Types for ..." (see Fig. 8), invoked by clicking on the [Msg Types] button after selecting the desired transaction in the "Transaction - All" form.

Msg Types for Retail							
				<< < > >>		1 of 42	
Channel	Name	Code	Category	Is Authorization	Trans Type	Msg Details	Service Class
Union Card	Retail Rev Part	1440401C301	Adjustment	Fin	Retail		Transaction
MasterCard (IPM)	Retail Rev Part	124020000J	Adjustment	Fin	Retail		Transaction
Affiliated	Retail Adj	2515	Adjustment	Fin	Retail		Transaction
Our POS	Retail	R	Advice	Fin	Retail		Transaction
MasterCard (IPM)	Retail	124020000	Advice	Fin	Retail		Transaction
VISA SMS	Retail SMS	0220_0_SMS05	Advice	Fin	Retail	OUT_ST=Y;	Transaction
MasterCard (ECCF)	Retail	1240200F101	Advice	Fin	Retail		Transaction
	Retail Sales Cc	01201R	Advice	Auth	Retail	UPD_BLK=Y;	Transaction
	Retail Fin Advic	02200R	Advice	Fin	Retail		Transaction

Fig. 8. Table grid with dictionary of message codes for sending transaction information

The following fields are available in the form:

- *Channel* – name of the WAY4 message channel; for authorization messages no value is specified in this field.
- *Name* – name of the message.
- *Code* – code of the transaction message in the message channel.
- *Category* – request/advice category (see the section "Request Category").
- *Is Authorization* – transaction message type: Authorization (Auth, PreAuth) or Financial (Fin).
- *Trans Type* – the name of the transaction type (the value of the *Name* field in the higher-ranking form "Transaction - All").
- *Msg Details* – additional parameters specified as tags. See the section "Tags used when processing documents" of the document "Setup Tags".
- *Service Class* – value for classifying transaction types (see the section "Service Class (Transaction type classifier)").

3.2.3 Transaction Conditions

Conditions for executing a card transaction, e.g., entering a PIN through a PIN-pad, using a card reader to read magnetic stripe data from the card, manual input of

the card number etc., are taken into account when processing the transaction data.

When posting a document, WAY4 uses transaction conditions along with other document parameters to find the required Service.

The transaction condition value is specified at document creation. WAY4 creates the value on the basis of the transaction message received from the device. The type of transaction condition depends on the executed transaction type described in the "<Device> Operations" system dictionary.



Please note that the system dictionary can only be modified by WAY4 system vendor representatives.

Transaction Conditions									
Name	Code	Terminal Category	Category Code	Security Code	Addendum	Default Condition	Late Condition	Condition Details	
POS Card Read Late	PLE	POS	B			POS Key Entry			
Mail/Phone Order Single w CVV2	NMO2	Imprinter	B			Imprinter			
Mail/Phone Order Single	NMO	Imprinter	B			Imprinter			
Mail/Phone Order Recurring w CVV	NMR2	Imprinter	B			Imprinter			
Mail/Phone Order Recurring	NMR	Imprinter	B			Imprinter			
Imprinter w CVV2	NMN2	Imprinter	B			Imprinter			
IFC w/Add	PAV	POS	B		Yes	POS Key Entry	POS Key Entry		
IFC Fallback	POVF	POS	B			POS Key Entry			

Fig. 9. Transaction conditions system dictionary

Main data of the "Transaction Conditions" reference form (see Fig. 9) is contained in the following fields:

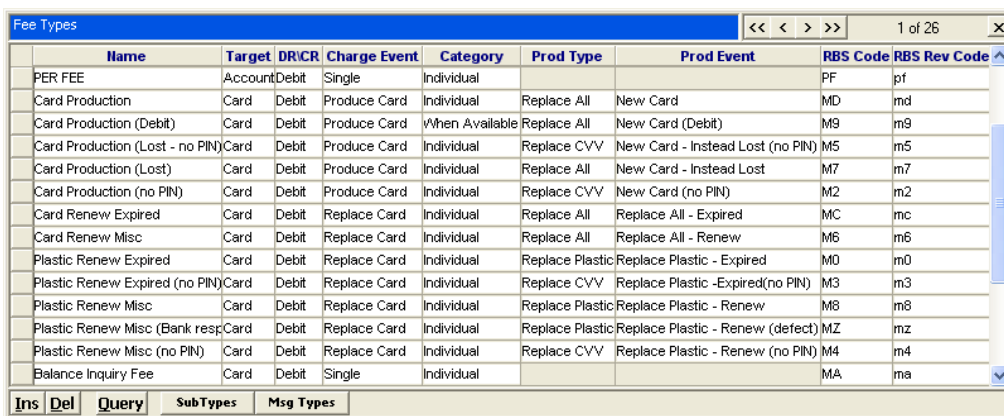
- *Name* – condition name;
- *Code* – condition code used to post the document;
- *Terminal Category* – category of the device used to carry out the card transaction;
- *Default Conditions* – default condition; the value is used to post a document if the original value of the transaction condition is not found in the list of Services created for that transaction type; for instance, if the Service Package created for the transaction type contains Services involving transaction conditions "Imprinter" and "Pos Card Read", and the transaction condition is "Mail Order Single", then the transaction will be executed using the Service including the "Imprinter" transaction condition.
- *Late Conditions* – parameter value used instead of the current value if the document posting date differs from the transaction date by more than the *Expiry Period* field value (number of days) of the respective Service; WAY4 does not modify the transaction condition value if the *Expiry Period* field of the Service contains a null value.

3.2.4 Non-transaction Fee Types

Fees collected while processing financial transactions are defined in the service configuration for that operation (see the sections "Target Services", "Source Services" "Full Information about a Service" of the "WAY4™ Service Packages document). Fees of this type are charged as a result of a financial document being processed for an operation and does not create a separate financial document in the WAY4 system.

Non-transaction fees in WAY4 are fees that are not connected with financial transactions, for example, a fee for producing a bankcard or an annual service (see the sections "Miscellaneous Services", "Full Information about a Service" of the "WAY4™ Service Packages document). A fee of this type will create a separate financial document in the system. This document and the created macrotransaction will have the transaction type classifier value Service Class = "Misc".

The list of transaction types used for non-transaction fees is configured in the special form "Fee Types" (Full → Configuration Setup → Transaction Types → Fee Types) (see Fig. 10).



Name	Target	DR/CR	Charge Event	Category	Prod Type	Prod Event	RBS Code	RBS Rev Code
PER FEE	Account	Debit	Single	Individual			PF	pf
Card Production	Card	Debit	Produce Card	Individual	Replace All	New Card	MD	md
Card Production (Debit)	Card	Debit	Produce Card	When Available	Replace All	New Card (Debit)	M9	m9
Card Production (Lost - no PIN)	Card	Debit	Produce Card	Individual	Replace CVV	New Card - Instead Lost (no PIN)	M5	m5
Card Production (Lost)	Card	Debit	Produce Card	Individual	Replace All	New Card - Instead Lost	M7	m7
Card Production (no PIN)	Card	Debit	Produce Card	Individual	Replace CVV	New Card (no PIN)	M2	m2
Card Renew Expired	Card	Debit	Replace Card	Individual	Replace All	Replace All - Expired	MC	mc
Card Renew Misc	Card	Debit	Replace Card	Individual	Replace All	Replace All - Renew	M6	m6
Plastic Renew Expired	Card	Debit	Replace Card	Individual	Replace Plastic	Replace Plastic - Expired	M0	m0
Plastic Renew Expired (no PIN)	Card	Debit	Replace Card	Individual	Replace CVV	Replace Plastic - Expired (no PIN)	M3	m3
Plastic Renew Misc	Card	Debit	Replace Card	Individual	Replace Plastic	Replace Plastic - Renew	M8	m8
Plastic Renew Misc (Bank resp)	Card	Debit	Replace Card	Individual	Replace Plastic	Replace Plastic - Renew (defect)	MZ	mz
Plastic Renew Misc (no PIN)	Card	Debit	Replace Card	Individual	Replace CVV	Replace Plastic - Renew (no PIN)	M4	m4
Balance Inquiry Fee	Card	Debit	Single	Individual			MA	ma

Fig. 10. Table grid of non-transaction fee types

The "Fee Types" table contains the following fields:

- *Name* – name of fee type.
- *Target* – category of target contract for the transaction information; this value is used by default for all transaction subtypes relating to this type of non-transaction fee, and may be redefined on the subtype level.
- *DR/CR* – direction of funds flow:
 - "Debit" – the target contract account is debited.
 - "Credit" – the target contract account is credited.

- *Charge Event* – field, determining how frequently the fee is charged, or an event causing a fee charge will occur:
 - "Single" – single charge.
 - "Daily" – daily charge.
 - "Weekly" – weekly charge.
 - "Monthly" – monthly charge.
 - "Quarterly" – quarterly charge.
 - "Yearly" – yearly charge.
 - "Billing Date" – once during the billing period.
 - "Produce Card" – when bankcard is produced.
 - "Replace Card" – when bankcard is replaced.
 - "Close Account" – when account is closed (bank balance becomes 0).
 - "Open Account" – when account is opened (bank balance becomes other than 0).
 - "End of Billing" – charge a fee at the end of a billing period.
 - "End of Month" – charge a fee at the end of the month (the last day of the calendar month is the GL entry date).
 - "Use Contract Date" – a fee is charged on a specific functional date for a contract. The functional date that will be used is specified with the `USE_DUE_DATE=<functional date code>;` tag in the *Fee Algorithm Options* of the transaction subtype. By default (if the tag is not set), the "DueDate" date (`DUE_DATE`) is used. See the document "Contract Functional Dates".
 - "Custom" – frequency is determined by a custom procedure.
- *Prod Type* – bankcard production type (plastic production and PIN-mailer, replacement of plastic only, etc.); this field is filled only for types of bankcard production fees;
- *Prod Event* – name of reason, calling bankcard production (new card production, card replacement, etc.); this field is filled in only for bankcard production fee types; the set of possible values for this field, taking into account values of fields *Charge Event* and *Prod Type* is created in the "Production Events" dictionary (Full → Configuration Setup → Transaction Types → Production Events).
- *Category* – transaction type category for given fee type (see the section "Category").

- *RBS Code* – parameter displaying a unique transaction Service code used to create entry codes (see the section "Entry Codes" of the document "WAY4 Accounting").
- *RBS Rev Code* – parameter displaying a unique transaction Service code reversing a transaction; this code is used for creating entry codes (see the section "Entry Codes" of the document "WAY4 Accounting").

These transaction subtypes, involving fee charges, lack a direct reference to the source contract of the transaction information. The contract (fee contract) and its account are defined in Service Packages (see the "Miscellaneous Services" section in the "WAY4™ Service Packages" document).

To access transaction subtypes relating to a fee type, click the [SubTypes] button. The following parameters are additionally defined in the transaction subtype grid form:

- *Target Type* – type of target contract corresponding to the target category selected in the "Fee Types" form (*Target*).
- *Target Account Type* – target contract account type (a list is generated in the table "Full → Configuration Setup → Accounting Setup → Account Types"); this account will be used for accounting transactions.
- *Triggered Event* – drop-down list of Event types registered in WAY4. The selected Event will open when a non-transaction fee is charged (after a Misc Service operation is executed for this transaction subtype). This Event must be registered in the corresponding Service Package.



A Triggered Event only works for recurring fees. An Event will not open for fees with the "Single", "Open Event", or "Close Event" value in the *Charge Event* field.

3.3 Transaction Type Extensions

A Service for processing a transaction is selected depending on the number of criteria set in it corresponding to transaction parameters. From several appropriate Services, the Service describing the transaction in the most detail will be selected. Transaction type extensions make it possible to more exactly determine the Service that should be used to process a transaction.

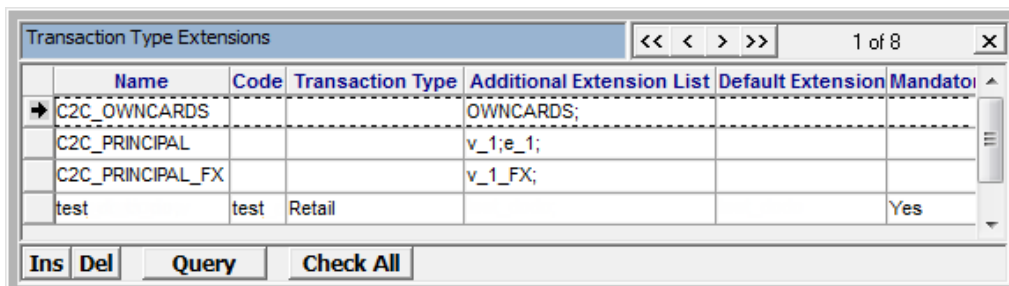
In a transaction type, extensions can be set that more exactly reflect (determine) a document's purpose. A transaction type is stored in a document's *trans_type* field, and a transaction type extension, in the document's *source_fee_code* field.

When configuring a Service, one or several transaction type extensions can be specified for which this Service will work.

General setup procedure:

- Configure a record in the "Transaction Type Extensions" form and in this record specify:
 - Transaction type.
 - The transaction type extension is the code from the document's source_fee_code field that will be used to search for a record in the "Transaction Type Extensions" form.
- To configure a Service that will only process documents with this code in the source_fee_code field and with the specified transaction type, fill in the Service's *Transaction Type Extension* field. In this field, select a record from the list configured in the "Transaction Type Extensions" form (record set up in the previous step).

The "Transaction Type Extensions" form is opened by executing the menu item "Full → Configuration Setup → Transaction Types → Transaction Type Extensions", see Fig. 11.



Name	Code	Transaction Type	Additional Extension List	Default Extension	Mandator
C2C_OWNCARDS			OWNCARDS;		
C2C_PRINCIPAL			v_1;e_1;		
C2C_PRINCIPAL_FX			v_1_FX;		
test	test	Retail			Yes

Fig. 11. "Transaction Type Extensions" form

The form contains the following fields:

- *Name* – extension name.
- *Code* – code that corresponds to the code in the document's source_fee_code field. When searching for a record in the "Transaction Type Extensions" form, the value in this field is matched with that in the document's source_fee_code field.
- *Transaction Type* – transaction type. Selected from a list of transaction types registered in WAY4. This field is not mandatory. One record (Transaction Type Extensions) may correspond to several transaction types.
- *Additional Extension List* – makes it possible to define additional transaction type extensions (additional codes corresponding to the code of

the document's `source_fee_code` field). Codes are specified in the format `<code1>;<code2>;` (the semicolon at the end of the code is mandatory), see Fig. 11. When searching for a record in the "Transaction Type Extensions" form the codes set in this field are matched with the value in the document's `source_fee_code` field (as when checking the *Code* field).

- *Default Extension* – code of the record in the "Transaction Type Extensions", form that will be checked if this record's parameters do not satisfy the search.
- *Mandatory* – indicates if it is mandatory for the Service's *Transaction Type Extension* field value to match the code set in this record (document's `source_fee_code` code). If the Service's *Transaction Type Extension* field value does not match the document's `source_fee_code` value, the Service will not be used to process a transaction (including Services with empty *Transaction Type Extension* fields). The field may have one of the following values:
 - "Yes" – if the Service's *Transaction Type Extension* field value does not match the document's `source_fee_code` code, the Service will not be used to process a transaction (including Services with empty *Transaction Type Extension* fields).
 - "N" – if when searching for a Service, WAY4 finds several Services that meet search conditions, with the same priority and one of the Services has a *Transaction Type Extension* field value that matches the document's `source_fee_code` field value, the Service with the value set in the *Transaction Type Extension* field will be used.
 - If when searching for a Service, two Services are found that meet search conditions and the Service with a *Transaction Type Extension* field value matching the value of the document's `source_fee_code` has a lower priority, the Service with the higher priority and empty *Transaction Type Extension* field will be selected.

3.4 Processing Additional Online Operations for Issuing Contracts

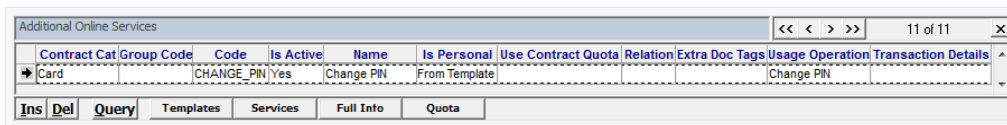
Additional online operations (transactions with the "Additional Online Service" value of the "Service Class" parameter) for issuing contracts are operations such as those to change PINs and unblock cards.

Additional online operations for issuing can be supported in one of the following ways:

- Total prohibition or permission to execute additional online operations for all contracts registered in WAY4. In this case, prohibition or permission to execute operations is determined by the existence of the corresponding record in the "Additional Online Services" (Full → Configuration Setup → Merchant Device Setup → Additional Online Services), see Fig. 12.



The "Additional Online Services" handbook is a system handbook, with a list of additional online issuing and acquiring operations.



Contract Cat	Group Code	Code	Is Active	Name	Is Personal	Use Contract Quota	Relation	Extra Doc Tags	Usage Operation	Transaction Details
Card		CHANGE_PIN	Yes	Change PIN	From Template				Change PIN	

Fig. 12. "Additional Online Services" handbook

To create an additional online issuing operation, use the [Ins] button to add an empty row in the "Additional Online Services" handbook and fill in the following fields:

- Specify the operation code in the *Code* field. Additional online issuing operations have predefined codes. When executing an additional online operation, a search is made in the "Additional Online Services" handbook for the code of the operation (the code received in the authorization request to execute the operation). If a record with this code is found in the handbook (and this record is active, see the *Is Active* field), the operation is executed.
- Specify the "Yes" value in the *Is Active* field. If the "Yes" value is specified in this field, the additional online operation is active; if "No" is specified, the operation is not active.
- Specify "Card" in the *Contract Cat* field.
- Differentiated prohibition or permission to execute additional online operations for different issuing contracts. To do so, the following settings are required:
 - Configuration of the list of additional online issuing operations in the "Additional Online Services" handbook (Full → Configuration Setup → Merchant Device Setup → Additional Online Services), see the previous item.
 - Configuration of transaction types for additional online issuing operations (Full → Configuration Setup → Transaction Types → Transaction – ALL), see the section "Main Parameters of Transactions").

- Configuration of message codes for additional online issuing operations in the "Message Types" form (see the section "Message Types"). The message type in the "Message Types" form must correspond to the code of the additional online operation in the "Additional Online Services" handbook.
- Configuration of rules for processing additional online issuing operations – configuration of the corresponding Services, see the document "WAY4™ Service Packages".
- Configuring restrictions on executing additional online operations (if necessary) – configuration of usage limiters (for example, for the transaction type configured above), see the document "Usage Limiters".

4 Document Links

4.1 Link Types

When documents are created or posted in WAY4, various types of links can be established between them. In terms of links, the documents can be classified as follows (see Fig. 13).

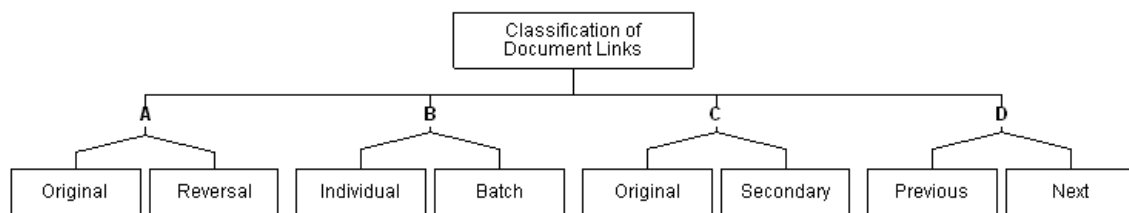


Fig. 13. Classification of document links

Classification A covers financial documents and authorization documents.

Classification B is applied when the document batches are created or loaded, for example, to input batches of payments or slips manually. A batch message corresponds to a single payment or a slip and the batch header is a kind of a registry list of the whole batch. It also keeps financial information of every document in the batch, such as the total amount of input payments.

Classification C covers financial documents in the current version of WAY4. It may be used in the dispute cycle. According to this classification, presentment is the original document, whereas all the subsequent documents in the dispute cycle (such as a chargeback, a representment etc.) are secondary documents.

Classification D (the "previous-next" link) can cover both authorization documents and financial documents; for instance, it can be established between the original document and the reversal document or between two sequential documents in a dispute cycle.

4.2 Matching Documents

WAY4 automatically matches documents in the following cases:

- According to search results for an authorization (Auth) document if the issuer receives a message generating either a financial document or a document reversing the authorization. (see the section "Searching for an Authorization (Auth) Document").

- According to search results for transit authorisations (Transit Auth) when a messages is received that generates a financial document or a document reversing the authorization (performed in the same way as authorization document matching, see the section "Searching for an Authorization (Auth) Document").
- According to search results for an authorization (PreAuth) document if the acquirer generates a financial document or receives a message from a device that generates a document reversing the authorization. See the section "Searching for an Authorization (PreAuth) Document").
- According to search results for the previous financial document if it receives a message that leads to a reversal financial document or a dispute cycle document. (see the section "Searching for a Previous Financial Document").

In each of the cases above, WAY4 applies a special search algorithm.



When manually creating a linked document (see the section "Manually Creating Matching Documents"):

- The document for which it is necessary to create a linked document is searched for manually in the "All Docs" or "Doc – Search" form.
- Documents are matched manually – a linked document is created in the "Doc – Brief" form of the original document (see Fig. 25 in the section "Manually Creating Matching Documents").



When secondary documents are received from external systems (the transaction source is a channel with *Is On Us*="No"), *Conditions* (trans_condition), *Condition Details* (trans_cond_attr), *SIC* (sic_code) field values and the values of fields with clearing information (for example, bin_record) are not inherited from the previous document. For example, when a financial document is received for a transit authorization.

4.2.1 Searching for an Authorization (Auth) Document

An authorization document is searched for according to the following main criteria:



The Posting Status of the document must have the "Posted" value.

- A search is made for a specific card number (PAN) – i.e. the value of the *Target Number* field for linked documents must match.

- A search is made according to the RRN (Retrieval Reference Number). The values of the RRN of documents to be matched must be the same.
- If the RRN search did not provide a result (RRN does not correspond; no RRN value in the document that is being matched with the authorization document) or several documents are found:
 - A search is made taking into account the *Auth Code* parameter (authorization code) – the authorization code of documents being matched must correspond.
 - A search is made taking into account the calendar date of the transaction (*Transaction Date*) of the documents being matched.



By default, the difference between dates is 2 days, but can be redefined using the global parameter "AUTH_TRANS_DATE_INTERVAL" (see the "WAY4™ Global Parameters" document). Documents are matched according to transaction date taking into account the difference in time zones of financial institutions (for interbranch transactions), as well as the circumstance that the transaction time is not specified in the presentment.

If document searching and matching is successfully completed, then the original authorization document will become "Inactive" after the financial document is posted and accepted, the financial document matched to it will become "Posted", and the matching reversal document will become "Closed".



Possible statuses for authorization documents (messages) are listed in the section "Changing a Contract's Amount Available" of the document "WAY4™ Authorisation Subsystem".

If documents could not be matched for some reason, the status of the created reversal document will become "Rejected", but the status of the financial document after posting will depend on the device accepting the card:

- If the bank card was used on "our" device, the financial document status will be defined by value of the "DECLINE_NON_AUTHORIZED" global parameter (see document "WAY4™ Global Parameters"). If the parameter value is "Yes", the financial document status will be "Decline", which prevents it from being processed further. If the value is "No", the financial document will become "Posted with Warning" in the "Process Message" grid form displayed after the document processing procedure is executed (see section "Document Processing" in the document "Daily Procedures").
- If the card has been accepted with the device of another member of the payment system, the financial document will be referred to the "Posted

with Warning" category, in the "Process Message" grid form displayed after the document processing procedure is completed.

If document matching failed, the *Return Code* field value of the created document will have a return code corresponding to the message "Chain not found". The situation should be analysed in detail to reveal the reasons why the original document could not be found.

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 automatically inherited when financial documents are posted for transactions made on our devices or with our cards, and for transactions made on affiliate bank devices (when financial documents are posted in a sponsor bank). For documents for transactions made on affiliate bank devices, inheritance can be disabled with the "N" value of the global parameter COND_INH_FOR_AFF.



Through Visa and Mastercard, the issuer can receive several financial documents for one authorization. For example, if a purchase at an online retailer includes goods from several merchants, the issuer may receive one general authorization message (according to which funds are blocked) and separate presentments from each merchant. All financial documents are linked to one authorization document. When the next financial document is received, funds for the amount of this document are unblocked: the original block for the total amount is removed and a new block is generated for the remaining amount of financial documents that have not yet been received. For more information, contact the WAY4 system vendor.

4.2.2 Searching for an Authorization (PreAuth) Document

WAY4 searches for an authorization (PreAuth) document according to the following main criteria:

- A search is made for a specific card number (PAN) – i.e. the value of the *Target Number* field for linked documents must match.
- A search is made according to the RRN (Retrieval Reference Number). RRN values of the documents being matched must be the same.
- *Posting Status* of the authorization document must be "Posted", "Waiting" or "Closed".
- *Source Channel* field (see *Channel*) in the authorization document should have a value for which a "Yes" value is set in the *Is On Us* field in the "Message Channels" (Full → Configuration Setup → Main Tables → Message Channels) reference form.

If document searching and matching is successful, the original authorization document will become "Inactive" after the financial document is posted and accepted successfully, and the financial document matched to it will be "Posted".

If due to a reason the documents could not be matched, the financial document status will be defined by the "DECLINE_NON_AUTHORIZED" global parameter value (see document "WAY4™ Global Parameters"):

- If the global parameter value is "Yes", the status of the financial document becomes "Decline", which prevents it from being processed further.
- If this parameter has the value "No", the financial document as well as the reversal document will be considered as "Posted with Warning" in the "Process Message" grid form, displayed after the daily processing procedure is executed (see chapter "Document Processing" in the document "Daily Procedures").

In this case the *Return Code* field value of the created document will become "Chain not found". The situation should be analyzed in detail to reveal the reasons why the original document could not be found.

4.2.3 Searching for a Previous Financial Document

The search for a previous financial document for matching with a financial (dispute) document or reversal document is made according to the following main criteria:



The Posting Status of the authorization document must have the "Posted", "Decline Service" value.

- A search is made for a specific card number (PAN) – i.e. the *Target Number* field value of the document being linked must match the value in the previous financial document's *Source Number* or *Target Number* field.
- A search is made according to the value of the "RRN" (Retrieval Reference Number) parameter. The "RRN" value of documents being matched must be the same.
- If the document was not found, or several documents were found, an additional search is made according to the "ARN" (Acquirer Reference Number) parameter – the "ARN" value of documents being matched must be the same.
- If the search according to the abovementioned parameters did not provide a result, an additional search is made according to the "Auth Code" parameter (authorization code) – the "Auth Code" value of documents being matched must be the same.

- When searching for a previous financial document according to "Auth Code" and "RRN" parameter values, the transaction dates of liked transactions are considered. When searching by "RRN", this additional search condition is used if several documents with one "RRN" parameter value are found.

The difference between dates of liked transactions by default is 2 days, but can be redefined using the global parameter "AUTH_TRANS_DATE_INTERVAL" (see the document "WAY4™ Global Parameters"). Documents are matched according to transaction date taking into account the time zones of the payment system member bank and the processing centre as well as the circumstance that the transaction time is not shown in the presentment.

- If the "RRN" and/or "ARN" parameter is absent in the document being matched, or the search by RRN, ARN, Auth Code, Transaction Date did not provide results, a search is made according to the value of the "SRN" (*Source Registration Number*) parameter.

When the document searching and matching procedure completes successfully, the original financial document will become "Inactive", the secondary financial document linked to it will become "Posted" and the matched reversal document, "Closed" after the secondary financial document is posted and accepted successfully.

If for some reason the documents could not be matched, the status of the created document (financial or reversal) will become "Decline" or "Decline Service", which prevents it from the further posting.

In this case the *Return Code* field value of the created document will become "Chain not found". The situation should be analyzed in detail to reveal the reasons why the original document could not be found.

5 Creating and Loading Documents

5.1 Main Forms for Working with Documents

5.1.1 Forms for Working with Documents

The grid forms "All Docs", "Doc-Search" are used to work with documents registered in WAY4.

The "All Docs" (see Fig. 14) grid form is opened with the user menu item "Full → Documents Input & Update → Doc - General Form → All Docs".

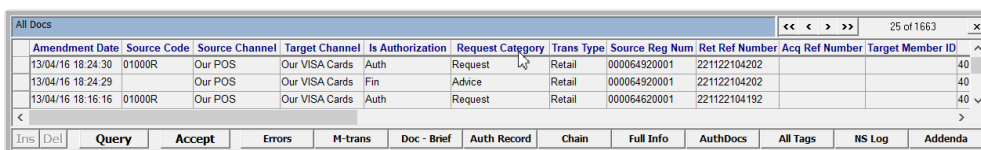


Fig. 14. "All Docs" grid form

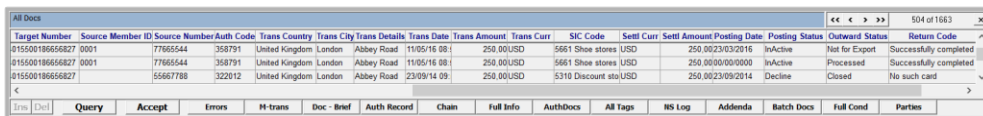


Fig. 15. "All Docs" grid form, continued

The "Doc - Search" form (see Fig. 16) is opened with the user menu item "Full → General Ledger → Doc - Search".

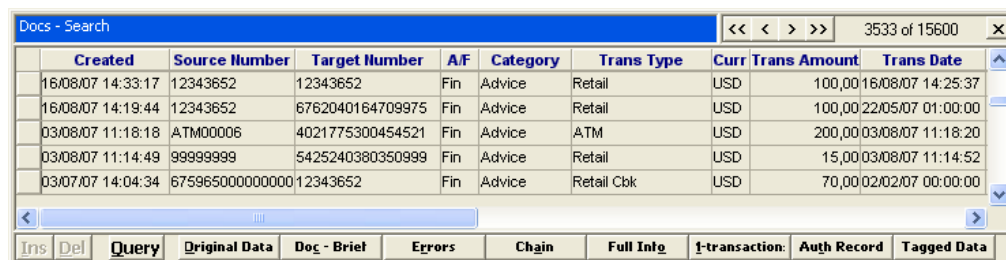


Fig. 16. "Docs - Search" grid form

These forms show the *PS Ref Number* field (a transaction identifier that is defined by the payment system). This field is shown in forms for viewing documents and is not shown in the form for manual entry of documents.

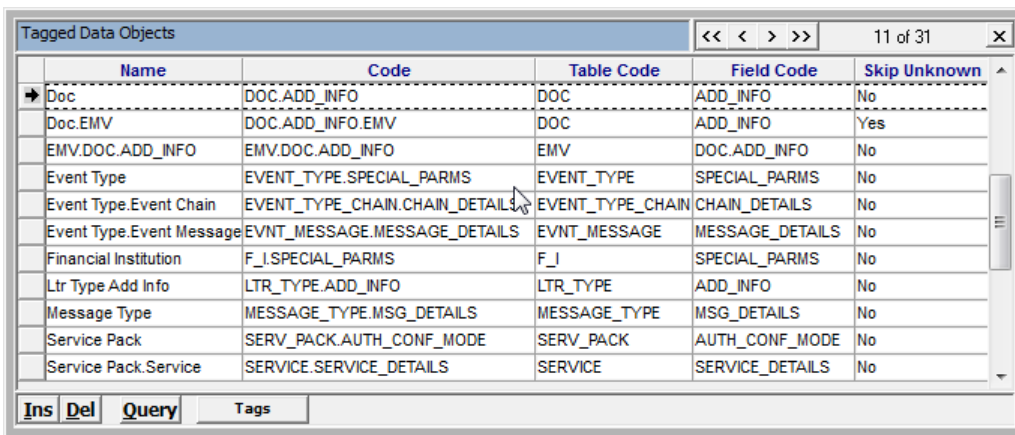
5.1.2 Forms for Working with Document Tags

The *Add Data* field of the document form (see the section "Transaction Parameters in the Document") is used to specify additional document parameters as tags. Special forms are used to optimise viewing tags of the *Add Data* field:

- The "Tagged Data Objects" form (Full →DB Administrator Utilities →System Utilities → Tagged Data Objects) is used to enter tag descriptions (interpretations). See the section ""Tagged Data Objects" Form".
- The special forms "All Tags for All Docs" and "Tagged Data for Docs – Search" are used to view tags. See the section "Document Tag Viewing Forms".

5.1.2.1 "Tagged Data Objects" Form

Tag definitions (interpretations) are entered in the "Tagged Data Objects" form (Full →DB Administrator Utilities →System Utilities →Tagged Data Objects), see Fig. 17.



Name	Code	Table Code	Field Code	Skip Unknown
Doc	DOC.ADD_INFO	DOC	ADD_INFO	No
Doc.EMV	DOC.ADD_INFO.EMV	DOC	ADD_INFO	Yes
EMV.DOC.ADD_INFO	EMV.DOC.ADD_INFO	EMV	DOC.ADD_INFO	No
Event Type	EVENT_TYPE.SPECIAL_PARMS	EVENT_TYPE	SPECIAL_PARMS	No
Event Type.Event Chain	EVENT_TYPE_CHAIN.CHAIN_DETAILS	EVENT_TYPE_CHAIN	CHAIN_DETAILS	No
Event Type.Event Message	EVNT_MESSAGE.MESSAGE_DETAILS	EVNT_MESSAGE	MESSAGE_DETAILS	No
Financial Institution	F_I.SPECIAL_PARMS	F_I	SPECIAL_PARMS	No
Ltr Type Add Info	LTR_TYPE.ADD_INFO	LTR_TYPE	ADD_INFO	No
Message Type	MESSAGE_TYPE.MSG_DETAILS	MESSAGE_TYPE	MSG_DETAILS	No
Service Pack	SERV_PACK.AUTH_CONF_MODE	SERV_PACK	AUTH_CONF_MODE	No
Service Pack.Service	SERVICE.SERVICE_DETAILS	SERVICE	SERVICE_DETAILS	No

Fig. 17. "Tagged Data Objects" form

Each record in the "Tagged Data Objects" form corresponds to a specific field of a specific table in which tags are entered. A "Doc" record corresponds to the *Add Data* field of a document. Document tag definitions are entered in this record using the [Tags] button.



Records in the "Tagged Data Objects" form are automatically generated during the first attempt to view the corresponding field's tags (for example, the first time the document's [All Tags] button is clicked).



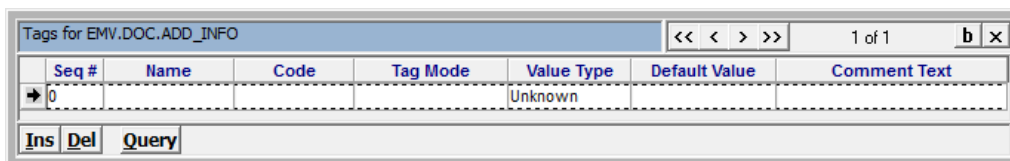
If the tag is registered in this form, when viewing document tags in the special forms "All Tags for All Docs" and "Tagged Data for Docs – Search", an expanded description from the "Tagged Data Objects" form will be displayed for it.

The "Tagged Data Objects" form contains the following fields:

- *Name* – object name.
- *Code* – name of the table and name of the field in which tags are entered.

- *Table Code* – name of the table containing the field in which tags are entered.
- *Field Code* – name of the field in which tags are entered.
- *Skip Unknown* – this field makes it possible to configure the way *Add Data* field tags are shown in special viewing forms if they are not registered in the list of tags in the "Tagged Data Objects" form:
 - When the value is "N" (default value), tags specified in the corresponding field are shown in special viewing forms if they are not registered in the list of tags in the "Tagged Data Objects" form.
 - When the value is "Y", tags specified in the corresponding field are not shown in special viewing forms if they are not registered in the list of tags in the "Tagged Data Objects" form.

Clicking the [Tags] button in the "Tagged Data Objects" form opens the "Tags for <name of object>" form used to enter tag definitions (interpretations) (see Fig. 18).



Seq #	Name	Code	Tag Mode	Value Type	Default Value	Comment Text
0				Unknown		

Ins Del Query

Fig. 18. Form for entering tag definitions (interpretations)

The form contains the following fields:

- *Seq#* – order (sequence) in which the tag will be shown in the list in the special tag viewing form.
- *Name* – tag name,
- *Code* – name of the tag as it is shown in the *Add Data* field.
- *Tag Mode* – mode for displaying tags; possible values are:
 - "Skip" – do not display the tag in the special viewing form.
 - "Read Only" – the tag is only accessible as read only. If an attempt is made to edit this tag in the special tag viewing form (this mode is unavailable when working with document tags), an error message will appear when checking the tag (see the description of the [Do] button of the tag viewing form – see the example in Fig. 19 in the section "Document Tag Viewing Forms").
 - "Create if Absent" – if this tag is absent from the document field, it will be shown in the special tag viewing form marked as "Absent" (see Fig. 19).
- *Value Type* – tag value type:

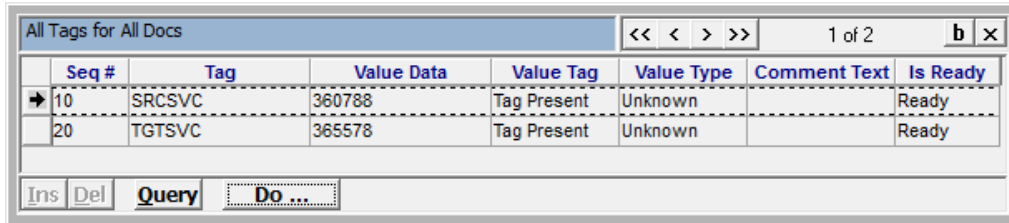
- "CheckBox" – this type of tag does not have a value (the *Value Data* field does not contain a value).
- "String" – string value.
- "Counter" – the tag value is a whole number (from 0 to 9).
- "Tag" – the tag value is either "Y" or "N".
- "Money" – numeric tag value.
- "Currency" – the tag is a numeric currency code.
- "Unknown" – the tag value is not determined; however, a value is shown in the *Value Data* field.
- *Default Value* – default value. This value is shown in the tag viewing form, for example, when the *Tag Mode* parameter is "Create if Absent".
- A description (interpretation) of the tag should be entered in the *Comment Text* field.

5.1.2.2 Document Tag Viewing Forms

Document tag viewing forms:

- In the form "All Tags for All Docs" (Full → Documents Input & Update → Doc - General Form → All Docs → [All Tags], see Fig. 14 in the section "Forms for Working with Documents") all tags of a document's *Add Data* field are shown, regardless of whether these tags are registered in the "Tagged Data Objects" system dictionary:
 - If the tag is registered in the system dictionary, its description from the "Tagged Data Objects" form is shown in the "All Tags for All Docs" form.
 - If the tag is not registered in the system dictionary, information from the *Add Data* field (without additional descriptions) is shown in the "All Tags for All Docs" form.
 - Settings in the "Tags for <name of object>" form (see Fig. 18) influence the way tags are shown in special viewing forms, see the section ""Tagged Data Objects" Form".
- The form "Tagged Data for Docs - Search" (Full → General Ledger → Doc - Search → [Tagged Data]) (see Fig. 14 in the section "Forms for Working with Documents") is similar to the "All Tags for All Docs" form (see above).

The set of fields and control buttons of these forms correspond. See Fig. 19 for an example.



Seq #	Tag	Value Data	Value Tag	Value Type	Comment Text	Is Ready
10	SRC SVC	360788	Tag Present	Unknown		Ready
20	TGT SVC	365578	Tag Present	Unknown		Ready

Fig. 19. "All Tags for All Docs" form

The form contains the following fields:

- *Seq#* – order (sequence) in which the tag will be shown in the special tag viewing form.
- *Tag* – tag name.
- *Value Data* – tag value.
- *Value Tag* – marker of tag's presence in the document.
 - "Tag Absent" – this value is shown if the tag is not specified in the document, but is displayed in the tag viewing form pursuant to settings in the form for entering tag descriptions (interpretations) (see the description of the *Tag Mode* field of the "Tags for <name of object> form in the section ""Tagged Data Objects" Form")>
 - "Tag Present" – this value is shown if the tag is present in the document.



This field is also used in the mode for entering and editing tags in Account Schemes, Service Packages, etc.

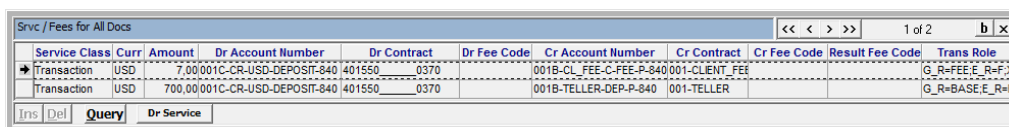
- *Value Type* – value type of the tag specified in the *Value Data* field:
 - "CheckBox" – the tag does not have a value (the *Value Data* field does not contain a value).
 - "String" – string value.
 - "Counter" – the tag value is a whole number (from 0 to 9).
 - "Tag" – the tag value is either "Y" or "N".
 - "Money" – numeric tag value.
 - "Currency" – the tag is a numeric currency code.
 - "Unknown" – the tag value is not determined; however, a value is shown in the *Value Data* field.
- *Comment Text* – the description (interpretation) of the tag set in the the "Tags for <name of object>" form (see the section ""Tagged Data Objects" Form").

- *Is Ready* – this field is not used for document tags. The field is used in the mode for entering and editing tags in Account Schemes, Service Packages, etc. to obtain information about the results of checking tag parameters.

The [Do...] button – this button's commands are used to check and save manually entered or edited tags. This button is not used when working with document tags (the button is used in the mode for entering and editing tags in Account Schemes, Service Packages, etc.).

5.1.3 Form for Viewing Entries Generated for a Document

The "Srvc /Fee..." form (Full →Documents Input & Update →Doc - General Form → All Docs →[Srvc / Fees]) is used to view entries generated for a document (entries generated for document Source contract and Target contract accounts), see Fig. 20.



Service Class	Curr	Amount	Dr Account Number	Dr Contract	Dr Fee Code	Cr Account Number	Cr Contract	Cr Fee Code	Result Fee Code	Trans Role
Transaction	USD	7.00	001C-CR-USD-DEPOSIT-840	401550	0370	001B-CL_FEE-C-FEE-P-840	001-CLIENT_FEE			G_R=FEE_E_R=F>
Transaction	USD	700.00	001C-CR-USD-DEPOSIT-840	401550	0370	001B-TELLER-DEP-P-840	001-TELLER			G_R=BASE_E_R=E

Fig. 20. "Srvc/Fee" form

The [Dr Service] and/or [Cr Service] buttons are used to view Service parameters of the debited and credited contracts, respectively, that were used when processing the document and generating entries.

5.2 Automatic Creation of Documents

5.2.1 Online Documents

Online documents in WAY4 are documents that are created when the following types of messages are received:

- Online transaction messages received from payment systems.
- Online transaction messages received from acquirer devices.
- Online transaction messages received from other channels (processing systems of other banks (affiliated banks)).

Receiving these messages will result in the creation of financial or authorization documents.

5.2.2 Clearing Documents

The following are considered clearing documents:

- Documents created when the issuer loads clearing files containing card transaction messages.

- Documents created when clearing files containing settlement data are loaded into WAY4.
- Interbank documents (fee collection and fund disbursement).
- Dispute documents including interbank documents.
- Administrative messages about mutual settlement results (detailed position data).

5.2.3 Internal System Documents

Documents created as a result of executing internal system processes are as follows:

- Documents for transfer of funds between accounts, created according to standing payment orders registered for the corresponding accounts.
- Documents generated during Event processing.
- Documents created when usage limiters are activated causing a fee to be charged.
- Documents showing the charge of non-transaction fees (see the section "Non-transaction Fee Types"); for example, for issuing cards, annual service fees, etc.



When a card is issued, the document related to the fee charged is generated when data is loaded from the production system.

- Documents generated when processing other documents.

5.3 Creating Batch Documents Manually

Batch documents are created manually using the menu group "Full → Documents Input & Update → Batch Documents".

Batch documents can be entered by message category (see the section "Message Category") in the following stages:

- Create a document corresponding to the batch header.
- Create documents corresponding to the batch messages, for instance, single merchant slips or single payments to card contract accounts.

This menu group enables the following types of batch documents to be created:

- Batches of payments to card contract accounts.
- Batches of fixed amount charges and free amount charges.
- Batches of transaction slips.

For more details about creating batch payments or fee charges, see the "Issuing Module" manual.

For details about creating transaction slip batches, see the "Acquiring Module" manual.

5.4 Creating Single Documents Manually

Single documents are manually created using the menu group "Full →Documents Input & Update →Single Document".

5.4.1 Payment Orders to Transfer Amounts between Accounts

5.4.1.1 Account Transfers

Account transfers are the technical transfers that can be used in singular events to adjust incorrect flows in accounts.

Note that when posting a document for which an account transfer is generated, certain standard checks are not made that are supposed to be made in standard transactions, namely:

- Interbranch routing settings are not checked.
- Services are not checked. I.e. it is not checked whether such transfer is permitted/prohibited.
- The contract status (the Is Valid field value for the contract status "Vaild"/"Invalid") is not checked, and the Approval field value (IS_READY) for the contract is not checked. I.e. it is not checked whether posting of the financial documents for a contract is allowed, whether a contract has been approved for which an account transfer is generated.
- A correct entry description is not generated for an analytic transfer and GL-transfer through Message Dictionary. In a client statement or account statement, a transaction will be shown without description.
- When such document is posted, checks for and actions with a contract are not made that are usually made when document is posted. Interest is not accrued and normalization is not called, etc.

To create a payment order to transfer amounts from one account to another within the same financial institution, select the "Account Transfer - New" or the "Account Transfer" menu item and click [Ins].

This opens the "Account Transfer – New"/"Account Transfer" form (see Fig. 21).

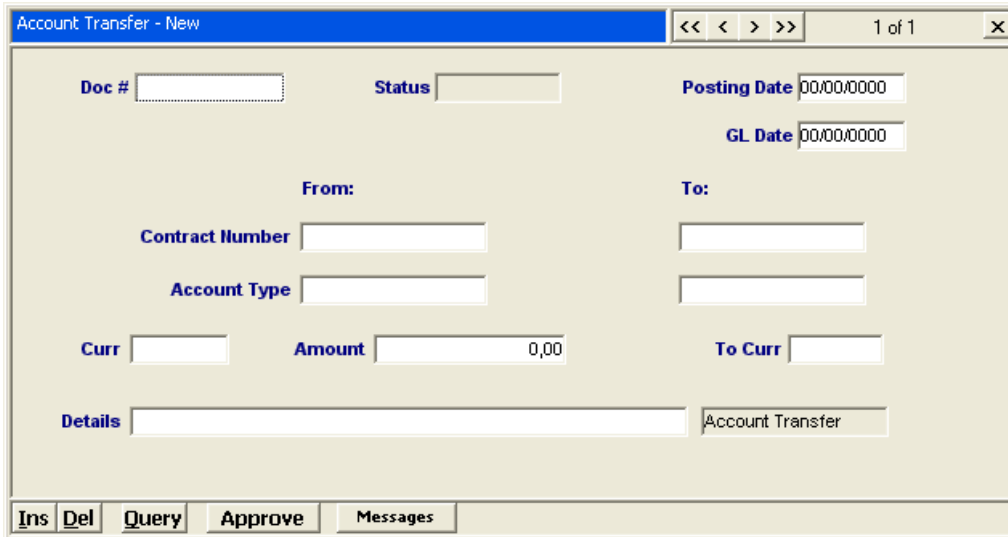


Fig. 21. Form creating a document to transfer an amount between accounts belonging to the same financial institution

The following fields are available in the form:

- *From* and *To* fields:
 - *Contract Number* – funds will be transferred from and to this contract number.
 - *Account Type* – funds will be transferred from and to this account type.
- *Curr* – drop-down list specifying the currency of the account from which the money will be transferred.
- *To Curr* – drop-down list specifying the currency of the account to which the money will be transferred.
- *Amount* – transferred amount in the currency of the account from which the money will be transferred.
- *Details* – optional field specifying additional transaction information.
- *Posting Date* – date of document posting to contract accounts; after approval, the default value is the current banking date.
- *GL Date* – General Ledger posting date; used to create correcting transfers that will be posted by the closed banking date; in the "Doc General" form (see Fig. 1 in the section "Document Overview") the date will be shown in the *FX Settl Date* field of the current document record (see the section "Document Amounts and Currencies").

After specifying the field values, click on [Approve].

If an error occurs during document validation, a message will be displayed. Analyze the process log to find out why the error occurred (see the section "Typical Problems in Posting").

Documents created as a result of the above actions have the Service Class parameter value of "Account Transfer".



For accounts participating in due normalization, the SKIP_DUE; tag can be set in ADD_INFO field of an adjustment entry. This tag makes it possible to not add an adjustment amount to the amount intended for transfer within normalization.

5.4.1.2 Accounting Transaction

Accounting Transactions are used if operations must be entered manually on a regular basis; for example:

- Crediting a balance to a specific account/debiting a balance from a specific account
- Manual corrections resulting from a dispute cycle
- Returning fees to a merchant/cardholder, etc.

When Accounting Transactions are used:

- In the form (see Fig. 22), the transaction type is specified where the default corresponding accounts are defined for the subtype (they can be redefined in the form, see below).
- An additional Service Package can be created for these operations and it can be activated for the main Service Package.

In this approach:

- The correct Entry Description is generated for subsidiary GL entries and GL entries using the "Message Dictionary". I.e. operations are registered correctly in the context of accounting and are correctly shown, for example, in a statement for a client or in an account statement.
- Base rules are checked: the transaction (Service) is allowed/not allowed, interbranch routing settings are checked, contract status, etc.
- It becomes possible to configure a custom fee for the operation
- The number of human errors when entering data is reduced.

Accounting Transactions are made between accounts (contracts) one of which is not registered in WAY4 for the current financial institution.

Documents for an Accounting Transaction are entered using the menu item "Accounting Transaction - New" or the "Accounting Transaction" transaction item and then clicking the [Ins] button.

This will open the "Get Transaction Type" form (see Fig. 22). Select the transaction type: "Credit Account" or "Debit Account".

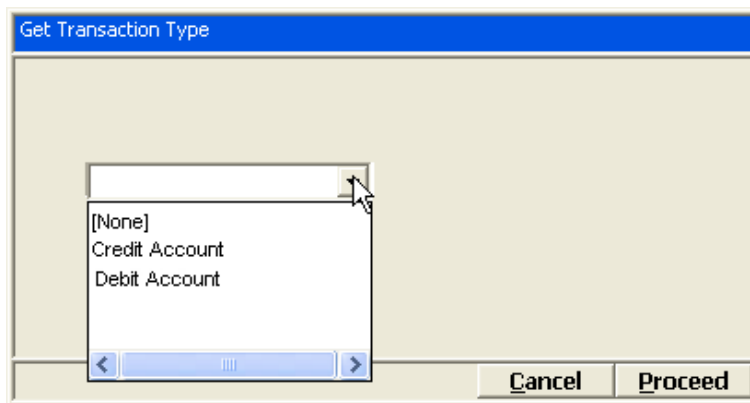


Fig. 22. Box for selecting the transaction type

Select the transaction type and click on [Proceed] to display the "Accounting Transaction - New"/"Accounting Transaction" form (see Fig. 23).

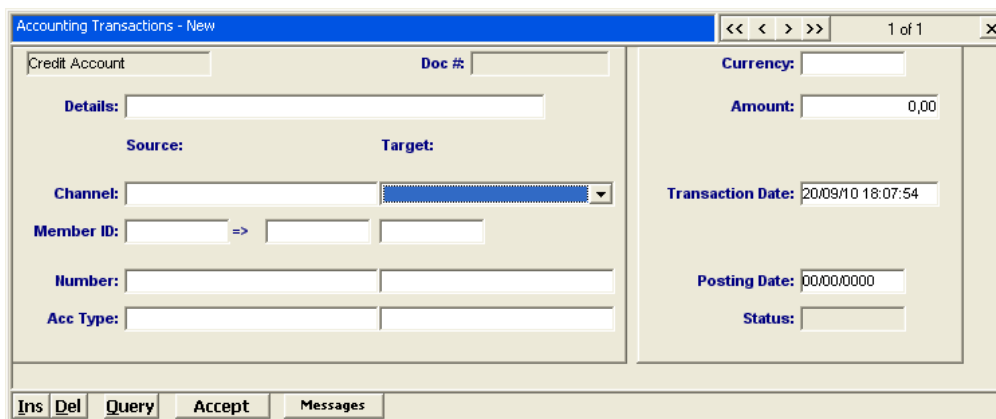


Fig. 23. Form for creating a document to transfer an amount between accounts belonging to different financial institutions

The following fields are available in the form:

- *Details* – optional field to specify additional transaction information.
- *Channel* – message channel name.
- Source:
 - *Source Member ID* – document source identification number in the respective message channel (to make transfers from accounts of the other financial institution).
 - *Rec Member ID* – document target identification number generated in WAY4 according to the source message channel regulations (to make transfers from accounts of the other financial institution).
- Target:

- *Target Member ID* – document target identification number in the respective message channel (to make transfers to accounts of the other financial institution).
- *Number* – source/target contract number created in the system.
- *Acc Type* – drop-down list specifying the type of account in the source/target contract.
- *Currency* – currency of the current financial institution's account.
- *Amount* – transferred amount specified in the current financial institution's account currency
- *Transaction Date* – calendar date of the transaction;
- *Posting Date* – banking date of the document posting on the contract accounts; after approval, the default value is the current banking date

After specifying the field values, click [Approve].

If an error occurs during document validation, the corresponding message will be displayed. Analyze the process log to find the cause of the error (see the section "Typical Problems in Posting").

The value of the parameter Service Class = "Transaction" for documents created as a result of executing the above actions.

5.4.2 Authorization Documents

Authorization documents may be created when needed as follows: select the user menu item "Authorization - New" or "Authorization", then click on [Ins].

This will display the "Authorization – New"/"Authorization" form (see Fig. 24).

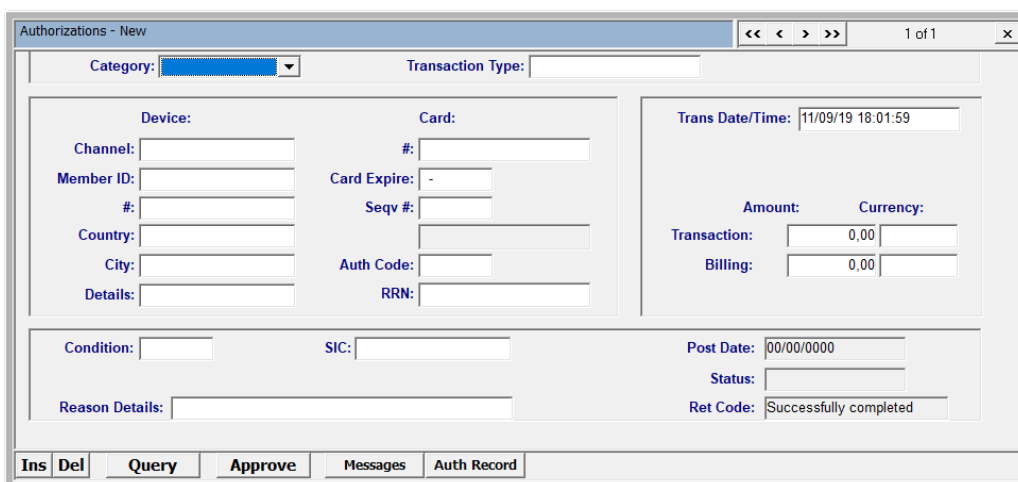


Fig. 24. Form for creating an authorization document

Specify the values of the following fields in the form:

- *Device* group
 - *Channel* – name of the message channel.
 - *Member ID* – identifier of the acquiring bank.
 - *#* – (Source Number) number of the acquirer device.
 - *Country, City* – country and the city names where the acquirer device is located.
 - *Details* – merchant name.
- *Card* group of fields
 - *#* – (Target Number) is the number of the bank card.
 - *Card Expire* – the expiry date of the card.
 - *Seqv #* – the sequence number of the card (if it is a Mastercard card).
 - *Country* – issuer's country of registration. The field is filled in automatically when processing documents for transactions for which this field must be filled in.
- *Conditions* – transaction conditions (see "Transaction Conditions"). *SIC* – code specifying the type of the point of sale (SIC/MCC) in accordance with the type of business.
- *Transaction* – amount and currency of the transaction.
- *Billing* – amount and currency blocked on the cardholder account; the amount may be specified in a currency used by the financial institution. If this currency differs from the account currency, currency conversion will occur when defining the amount to be blocked.

After specifying the field values, click on [Accept].

If an error occurs during document validation, a message is displayed. Analyze the process log to find the cause of the error (see the section "Typical Problems in Posting").

5.4.3 Document to Change Credit Limit



To change a credit limit for an issuing contract, it is recommended to enter an application to change the credit limit (see the section "Credit Limit (Limit)" of the document "Advanced Applications R2").

Documents to change a credit limit can be entered manually using the menu group "Full → Documents Input & Update → Single Documents → Credit Limits - Deprecated": menu item "Credit Limit – New" or the item "Credit Limit" and subsequently clicking the [Ins] button.

For more information on creating documents to change a credit limit, see the section "Changing the Credit Limit through a Document" of the "Issuing Module" document.

5.4.4 Document to Change Additional Credit Limit

Documents to change an additional credit limit for an issuing contract can be entered using the menu group: "Full → Documents Input & Update → Single Documents → Credit Limits – Depreciated": menu item "Additional Limit – New" or "Additional Limit" and subsequently clicking the [Ins] button.



To change an additional credit limit for an issuing contract, it is recommended to enter an application to change the credit limit (see the section "Credit Limit (Limit)" of the document "Advanced Applications R2").

5.4.5 Member Docs

Interbank documents (Fee Collection and Fund Disbursement) are created using the menu item "Member Docs – New" or the item "Member Docs" and subsequently clicking the [Ins] button.

For more information on creating interbank documents, see the document "Processing Interbank Documents in WAY4™").

5.4.6 Special Fund Transfer Documents

Create documents on special correcting entries such as those used for interest accrual by selecting the "Special Transfers" menu item.

This menu item allows creating the following types of documents:

- "Interest Transfer"
- "Interest Fee Transfer" – collects fees from calculated interest.
- "Revenue/Expense Transfer" – calculates interest daily.

To create the above documents use the form (see Fig. 21 in the section "Account Transfers") and the procedure described in the subheading "Account Transfer".



For an adjustment document for interest accrual (Interest Transfer), the account type code of the account to which interest was accrued must be specified in the *Details* field (the account type code of the account from which funds must be transferred using this adjustment document).

Documents created as a result of the above actions have a Service Class parameter value corresponding to the type of account transfer, such as "Interests", "Interest Fee" or "Rev/Exp".

5.5 Manually Creating Matching Documents

To create a matching document, use the "Doc-Brief form (see Fig. 25) opened from the "All Docs" or "Doc – Search" grid form. After selecting the required record in the table (the record of the document for which it is necessary to create a matching document) click [Doc – Brief].

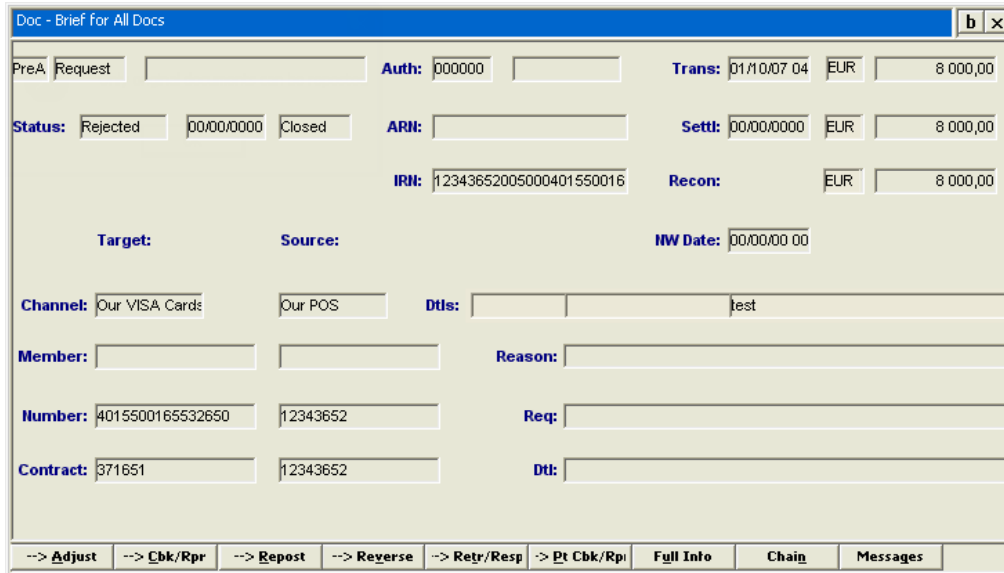


Fig. 25. "Doc – Brief" form for working with a document

Several control buttons are provided in the form to create and open documents matching the current document:

[→Adjust] creation of an adjustment document (see the section "Creating a Reversal and an Adjustment").

[→Repost] reposting of a document (see the section "Reposting a Document").

[→Reverse] creation of a reversal document (see the section "Creating a Reversal and an Adjustment").

The buttons [→Cbk/Rpr], [→Retr/Resp], [→Pt cbk/Rpr] are used to create dispute documents (see the section "Creating a Dispute Document").

5.5.1 Creating a Reversal and an Adjustment

Reversal and adjustment documents are created when it is necessary to cancel or to change results of a transaction linked to a document registered in the system.

To create a reversal document, click the [→Reverse] button in the "Doc – Brief" form; to create an adjustment, click the [→Adjust] button.

Note that an adjustment can only be created for a document:

- With the "Fin" value of the *Is Authorization* parameter and the "Transaction" value of the "Service Class" parameter. Otherwise, the

following error message is generated: "Only reverse allowed for this document".

and

- With the "Posted" or "Decline Service" status.

A reversal document can be created for documents with the "Posted" status and the "Misc", "Credit Limit, or "Additional Credit Limit" value of the "Service Class" parameter. In all other cases, the system will interrupt reversal creation and generate the following error message (see Fig. 26).

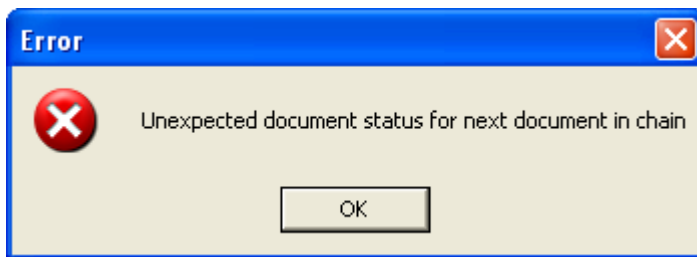


Fig. 26. Error message during attempt to create a reversal document

If second attempt is made to create to create a reversal/adjustment document when it already exists but has not yet been posted to contract accounts, the system will inform the user with a message (see Fig. 27) and open the form of the existing reversal/adjustment document.

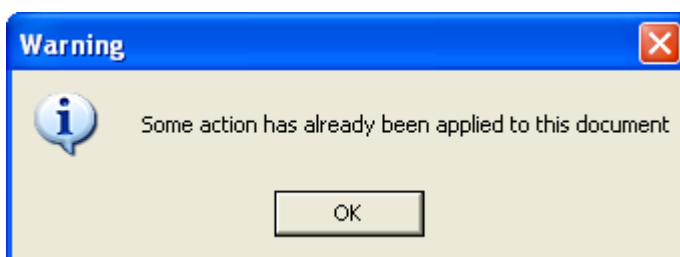


Fig. 27. Warning that the document has already been created

If the document is successfully created, a message is displayed (see Fig. 28) and then the "→Reverse for ..." form for a reversal document (see Fig. 29) or the "→Adjust for ..." form for an adjustment (see Fig. 30).

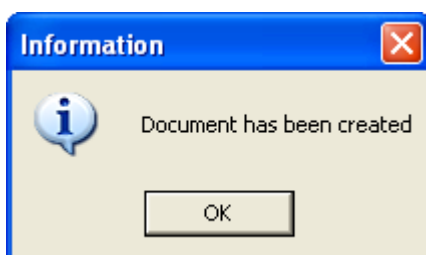


Fig. 28. Message that the document has been created

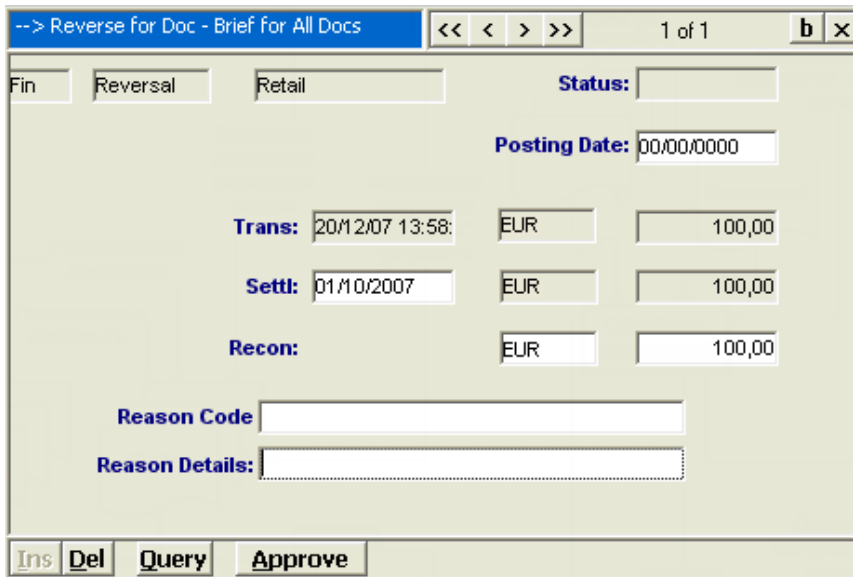


Fig. 29. Reversal document form

The reason the document was created can be specified in the *Reason Details* field of the form for a reversal document.



Note that if a contract's financial institution is changed, a Misc fee may be reversed (unlike a regular transaction) if there is a similar fee in the new financial institution's Service Package. If the Service is not present in the Package for the new financial institution, an error message is generated ("Service not found"). When a contract's Service Package is changed within the same financial institution, transactions and Misc fees are reversed using the original Services.



Starting from version 03.49.30, when a reversal document is created for an adjustment document (i.e. when reversing an adjustment) the reversal document is considered to be a reversal of the original transaction and to get the reversal amount, the document chain is analysed. Before version 03.49.30, the amount from the adjustment document was used as the reversal document amount.

Example.

- Before version 03.49.30:
 - Advice document for 1000 USD
 - Adjustment document for 300 USD
 - A Reversal document for the adjustment document is created for 300 USD
 - The resulting amount of the transaction posted to the account was 400 USD since during the "Accept Documents" procedure the reversal

document (Reversal 300 USD) was considered by WAY4 as a partial reversal and was transformed from a "Reversal" into an "Adjustment".

- Starting from version 03.49.30:
 - Advice document for 1000 USD
 - Adjustment document for 300 USD
 - The amount of the Reversal document for the adjustment document is calculated as the remaining amount from the Advice document; i.e. 700 USD

The resulting amount of the transaction posted to the account is 0 USD.

When an adjustment document is created, the financial properties of the transaction can be modified (see Fig. 30).

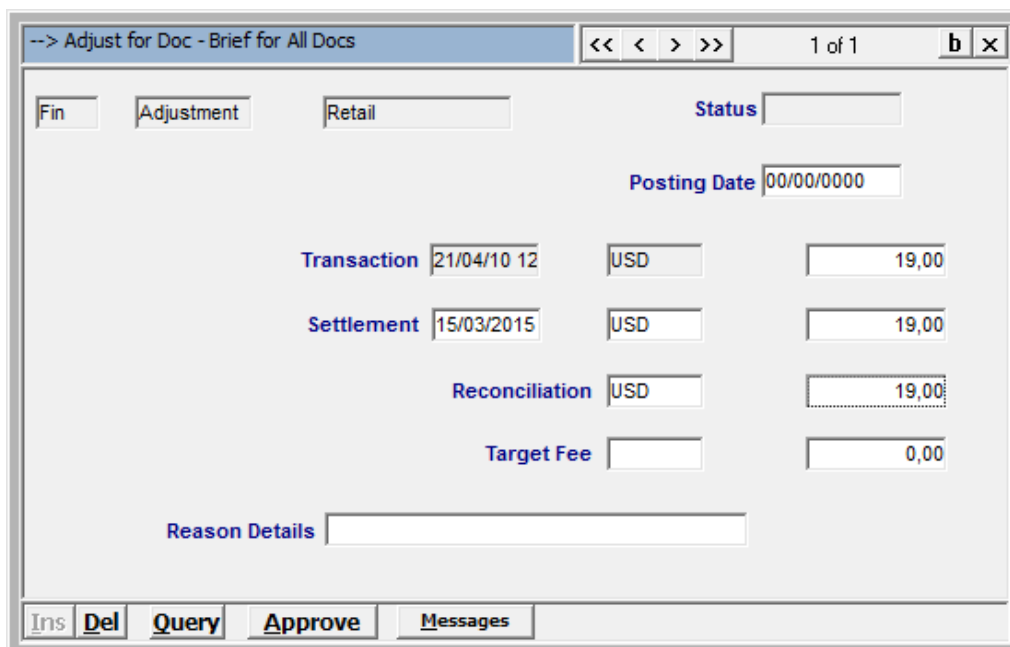


Fig. 30. Adjustment document form



Note that in creating an adjustment financial document, the adjustment difference amount (the amount for which the original document must be adjusted) needs to be specified in the corresponding field of the *Settlement* group and *Transaction* group. For instance, if it is necessary to send a counterparty a presentment of USD 40 instead of USD 100, specify USD 60 in the adjustment document.



When an adjustment must be made for a document that has already been exported to the payment system, an adjustment document for the adjustment

amount is generated and exported. If the document that is to be adjusted has not yet been exported, an adjustment document is generated for the adjustment amount, and the original document and adjustment document are exported to the payment system.



Note that when creating an adjustment **authorization** document, the new (adjusted) transaction amount should be specified in the corresponding field of the *Settlement* group and *Transaction* group.



Particularities of generating adjustment documents to be exported to the payment system on the VISA SMS channel:

- When specifying the adjustment amount, both positive and negative numbers can be used. Moreover, the direction of funds for the adjustment document depends on the "direction" of the original transaction.
- For an original debit transaction (the target contract is debited):
 - ◆ To decrease the original transaction amount, a positive value must be specified for the adjustment amount in the adjustment document. When generating a macrotransaction for the new adjusted amount, this amount will be subtracted from the amount of the original document.
 - ◆ To increase the original transaction amount, a negative value must be specified for the adjustment amount in the adjustment document. When generating a macrotransaction for the new adjusted amount, this amount will be added to the amount of the original document.



If the error "Increasing adjustment not configured for this channel" occurs, the tag "EN_CREDIT_ADJUSTMNT;" for the corresponding message type must be set in the *Message Details* field of the "Msg Types..." form (Full → Configuration Setup → Transaction Types → Transactions - All → [Msg Types]).

- For an original credit transaction (the target contract is credited):
 - ◆ To decrease the original transaction amount, a positive value must be specified in the adjustment document as the adjustment amount. When a macrotransaction is generated for the new correct amount, this amount will be subtracted from the amount of the original document.
 - ◆ To increase the original transaction amount, a negative value must be specified in the adjustment document as the adjustment amount.

When a macrotransaction is generated for the new correct amount, this amount will be added to the amount of the original document.



The adjustment amount should be specified in the corresponding field of the *Transaction*, *Settlement*, and *Reconciliation* groups. An example is given in Fig. 31.

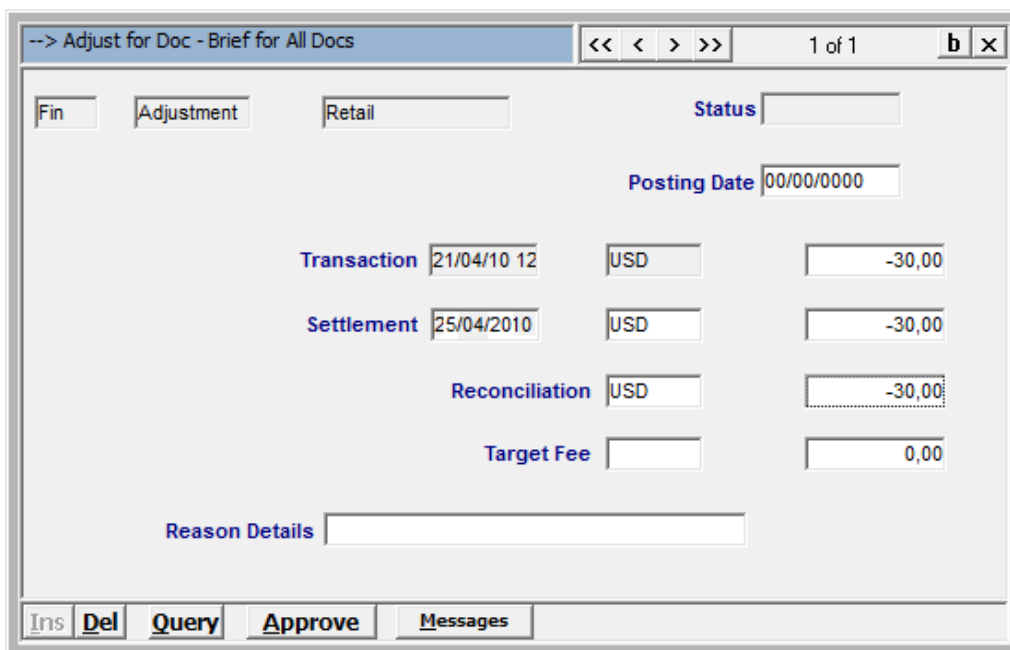


Fig. 31. Example of filling in the fields of an adjustment document for sending on the VISA SMS channel

If a reversal or adjustment has been created in error, click the [Del] button in the created document form (see Fig. 30) to delete the document record and then click [Yes] in the dialog box to confirm deletion (see Fig. 32).

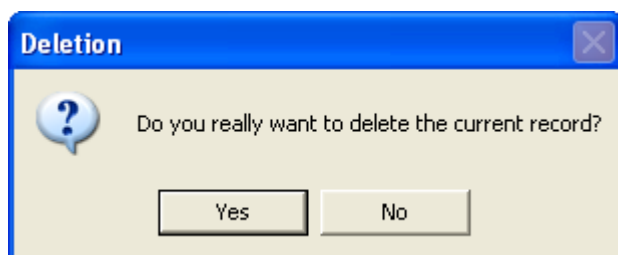


Fig. 32. Request to confirm deletion of the document

After filling in the form, click [Approve]. The system will validate document data. If it is correct, the document will get the "Waiting" status, i.e. the document becomes ready for acceptance (see the section "Document Processing" in the document "Daily Procedures").



A reversal/adjustment document can be created as a dispute document. The "Reconc" field group and the *Reason Code* field is used to do so (for more information, see the section "Creating a Dispute Document" of the "WAY4™ Dispute Management" document).

5.5.2 Creating a Dispute Document

These documents are created during dispute cycles.

For more details about creating dispute documents, see the section "Creating a Dispute Document" in the "WAY4™ Dispute Management" document.

5.5.3 Reposting a Document

During reposting, a new document is created as a copy of the original document. Creating and accepting this new document will reverse the results of all transactions that are linked to the original document.

Note that only initial financial documents with the "Posted" status can be reposted:

- If users attempt to repost a secondary document (for example, a chargeback), the following error message will be generated (see Fig. 33).

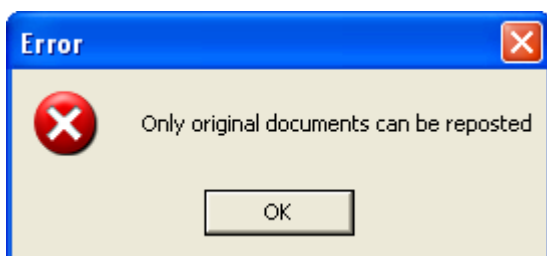


Fig. 33. Error message when an attempt is made to repost a secondary document

- If an attempt is made to repost an authorization document, an error message will be generated (see Fig. 34).

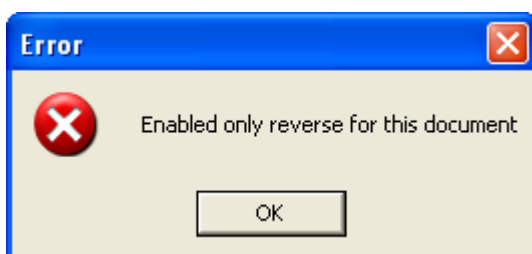
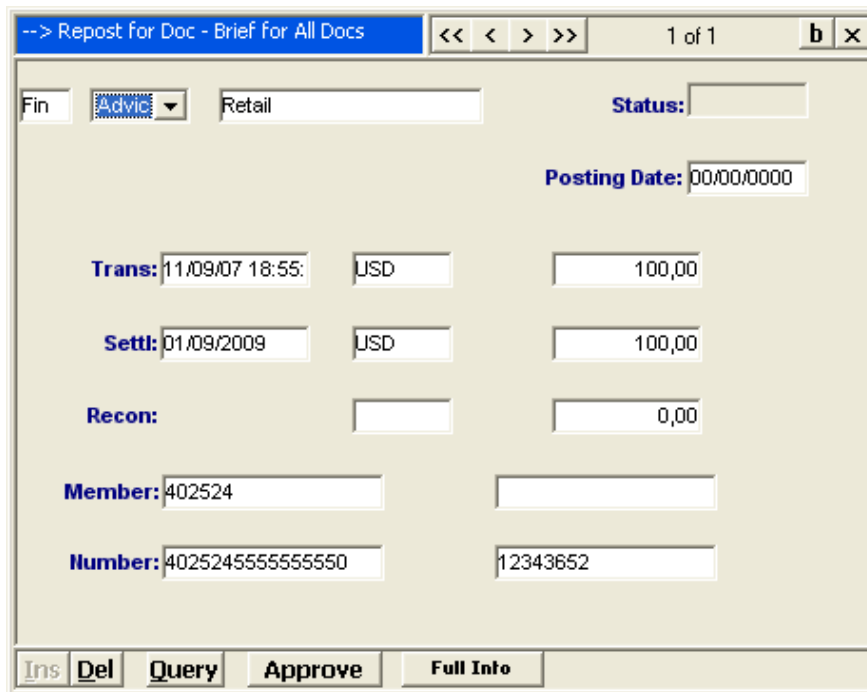


Fig. 34. Error message when an attempt is made to repost an authorization document

- If an attempt is made to repost a document with a status other than "Posted", the document creation process will be interrupted and an error message will be generated (see Fig. 26).

When the document has been successfully created, the system will display a message and the "→Repost for ..." form (see Fig. 35) will open.

Any document parameters can be edited in this form. To change a parameter not shown in the form, click [Full Info] to open the "Full Info for ..." form.



The form is titled "--> Repost for Doc - Brief for All Docs". It contains several input fields and buttons. At the top, there are navigation buttons: "<< < > >>" and "1 of 1". Below these, there are fields for "Fin" (set to "Fin"), "Acct" (set to "Retail"), and "Status". A "Posting Date" field is set to "00/00/0000". There are three rows of transaction data: "Trans:" with date "11/09/07 18:55", currency "USD", and amount "100,00"; "Settl:" with date "01/09/2009", currency "USD", and amount "100,00"; and "Recon:" with an empty field and amount "0,00". Below these are "Member:" (402524) and "Number:" (402524555555550). At the bottom, there are buttons: "Ins", "Del", "Query", "Approve", and "Full Info".

Fig. 35. Form for reposting a contract account document

If a document has been created in error, click [Del] in the form of the reposted document (see Fig. 35) to delete the document record and then click [Yes] in the corresponding dialog box to confirm deletion.

After filling in the form, click [Approve]. The system will validate the document data. If the data is correct, the document status will get the "Waiting" status, i.e. the document is ready for acceptance (see the section "Document Processing" in the document "Daily Procedures").

5.5.4 Viewing Linked Document Chains

To view linked documents, use the form "Chain for All Docs" (see Fig. 36) opened by clicking the [Chain] button in the "All Docs" form (see Fig. 14 in the section "Main Forms for Working with Documents") or in the "Doc – Brief" form (see Fig. 1 in the section "Manually Creating Matching Documents").



Created	Doc ID	Previous Doc ID	Source Number	Target Number	A/F Category	Trans Type	Curri Trans	Amount	Trans Date	ins	Deta	S Chan	T Chan	RRH	Acq Ref Number	IRH
16/04/07	1461	1443	99999999	4025247640997	Fin Advice	Retail 2Prs	EUR	5,00	09/02/07	00	(TEST OM)VISA	Our VIS			7400000604010000000001	
16/04/07	1443	1441	4025247640997	99999999	Fin Advice	Retail Cbk	EUR	5,00	09/02/07	00	(TEST OM)Our VIS	Our VIS			7400000604010000000000	
16/04/07	1441		99999999	4025247640997	Fin Advice	Retail	EUR	5,00	09/02/07	00	(TEST OM)VISA	Our VIS			7400000604010000	

At the bottom of the table, there are buttons: "Query", "Original Data", "Doc - Brief", "Errors", "Full Info", "t-transaction", and "Auth Record".

Fig. 36. Document chain

This form shows the chain of linked documents. To determine the sequence of documents in the chain, use the *Doc ID* and *Previous Doc ID* fields – Fig. 36.

Clicking the [Original Data] button opens the form containing the selected document's data, located in the ORIGINAL_DOC table (original data received from the payment system on the basis of which the document was created; or data generated on the basis of the document and exported to the payment system).

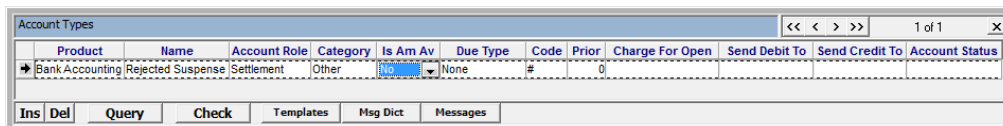
5.6 Working with Financial Documents Rejected by a Payment System

The mode for working with financial documents rejected by a payment system is determined by the global parameter FINANCIAL_REJECTS.

The mode for processing rejected documents for all payment systems is enabled when the value of the FINANCIAL_REJECTS parameter is "Y":

In this mode, work with rejected financial documents is performed as follows:

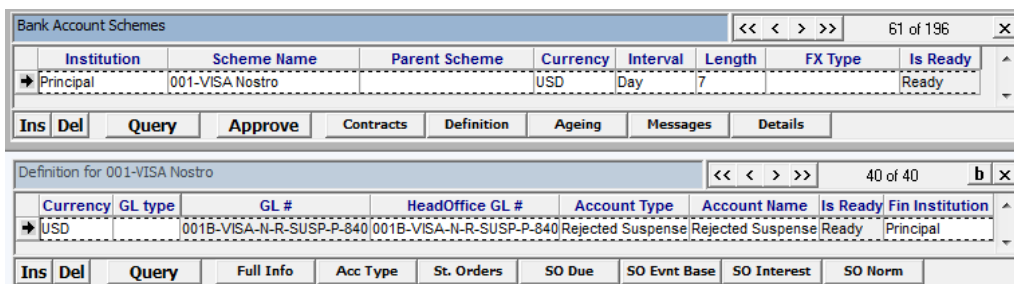
- Before importing payment system files, the following special setup is necessary:
 - Configure a "Rejected Suspense" account type in the form "Full → Configuration Setup → Accounting Setup → Account Types", see Fig. 37.



Product	Name	Account Role	Category	Is Am Av	Due Type	Code	Prior	Charge For Open	Send Debit To	Send Credit To	Account Status
Bank Accounting	Rejected Suspense	Settlement	Other	None		#	0				

Fig. 37. Configuring a "Rejected Suspense" account type

- Configure account templates with the "Rejected Suspense" type for bank contract account schemes (001-<payment system name> Nostro) for the required currencies, see Fig. 38.



Institution	Scheme Name	Parent Scheme	Currency	Interval	Length	FX Type	Is Ready
Principal	001-VISA Nostro		USD	Day	7		Ready

Currency	GL type	GL #	HeadOffice GL #	Account Type	Account Name	Is Ready	Fin Institution
USD	001B-VISA-N-R-SUSP-P-840	001B-VISA-N-R-SUSP-P-840	Rejected Suspense	Rejected Suspense	Ready		Principal

Fig. 38. Configuring account schemes with the "Rejected Suspense" type

- Check that the "Rejected Suspense" accounts for the corresponding currencies to show the amounts of documents rejected by payment

systems appeared for the "001-<payment system name> Nostro" contract.

- Configure two new transaction types (and the corresponding transaction subtypes), see Fig. 39:
 - ♦ "Rejected Item Fin" – payment system document rejecting the financial document.
 - ♦ "Rejected Fixing" – internal document fixing the payment system rejection document after resending the rejected document.

Transactions - All											<< < > >>			62 of 331		x			
Service Class	Source	Target	Name	DR/CR	Previous	Chain Type	Is Authorized	s Required	Category	RBS Code	RBS Rev Code	Dispute Class							
Transaction	Account	Account	Rejected Item Fin	Debit		Annex	Never	No	Settlement SRM	sr		Rejected Item							
Transaction	Account	Account	Rejected Item	None		Original	Never	No	Settlement SR	sr		Rejected Item							
Transaction	Account	Account	Rejected Fixing	Debit	Rejected Item Fin	Chargeback	Never	Yes	Settlement SRF	srf		Rejected Item							
!!!																			
Ins Del		Query		Actions...		SubTypes		Msg Types		Reasons		Requirements		Msg Dict					
SubTypes for Rejected Item Fin														<< < > >>			1 of 1		b x
Source Cat	Target Cat	Source Type	Target Type	Source Acc Type	Target Acc Type	Triggered Event	Fee Algorithm Options			Name									
Account	Account	Nostro	Nostro	Outg Suspense	Rejected Suspense					Rejected Item Fin									
Ins Del		Query																	
SubTypes for Rejected Fixing														<< < > >>			1 of 1		b x
Source Cat	Target Cat	Source Type	Target Type	Source Acc Type	Target Acc Type	Triggered Event	Fee Algorithm Options			Name									
Account	Account	Nostro	Nostro	Rejected Suspense	Outg Suspense					Rejected Fixing									
Ins Del		Query																	

Fig. 39. Configuring transaction types

- Configure message types for VISA, MasterCard, AMEX, and UnionPay in the form "Full → Configuration Setup → Transaction Types → Message Types - All" (see Fig. 40):
 - For payment system rejection documents (Rejected Item Fin).
 - For documents fixing payment system rejection documents (Rejected Fixing).

Message Types - All									
						<< < > >>		15 of 15	
Channel	Name	Code	Category	Is Authorization	Trans Type	Msg Details	Service Class	Format Code	
MasterCard (ECCF)	Rejected Batch	1644690E1	Advice	Fin	Rejected Batch		Transaction		
AMEX	Rejected File	RJP-----	Advice	Fin	Rejected File		Transaction		
MasterCard (ECCF)	Rejected File	1644691E25	Advice	Fin	Rejected File		Transaction		
MasterCard (IPM)	Rejected File	1644699	Advice	Fin	Rejected File		Transaction		
VISA	Rejected Fixing	01F	Advice	Fin	Rejected Fixing	OUT_ST=C;	Transaction		
AMEX	Rejected Fixing	RmR-----	Advice	Fin	Rejected Fixing	OUT_ST=C;	Transaction		
MasterCard (IPM)	Rejected Fixing	164469100F	Advice	Fin	Rejected Fixing	OUT_ST=C;	Transaction		
Union Card	Rejected Item	1644691CR	Advice	Fin	Rejected Item		Transaction		
VISA	Rejected Item	01I	Advice	Fin	Rejected Item		Transaction		
AMEX	Rejected Item	RJP-----	Advice	Fin	Rejected Item		Transaction		
MasterCard (IPM)	Rejected Item	164469100	Advice	Fin	Rejected Item		Transaction		
MasterCard (ECCF)	Rejected Item	1644691E23	Advice	Fin	Rejected Item		Transaction		
AMEX	Rejected Item Fin	RmP-----	Advice	Fin	Rejected Item Fin		Transaction		
MasterCard (IPM)	Rejected Item Fin	164469100R	Advice	Fin	Rejected Item Fin		Transaction		
VISA	Rejected Item Fin	01R	Advice	Fin	Rejected Item Fin		Transaction		

Fig. 40. Configuring message types

- Import payment system files. Import is performed as usual (see the section "Processing Incoming Transactions" of the documents "MasterCard Interchange Interface" and "VISA Interchange Interface").
- When the "Accept clearing" procedure is executed during daily procedures:
 - Based on an imported file, rejection financial documents are created:
 - ♦ For each rejection document, a link in the *Previous Message* field (DOC_PREV_ID) is specified to the original rejected financial document.
 - ♦ The message type of the rejection document changes from non-financial to financial (for example, for VISA, from "01I" to "01R").
 - The rejected financial document is assigned the "Rejected" status (Outward Status).
- According to the results of processing rejection documents (see the section "Document Acceptance") entries are made between "Rejected Suspense" and "Outgoing Suspense" accounts.
- Rejected financial documents are resent in the form "Documents - Resend Rejected" (Full → Documents Input & Update → Documents Troubleshooting → Documents - Resend Rejected), see Fig. 41:
 - The [Resend] button is used to resend the same original document. The button is used if the document's main parameters did not change. Document parameters such as *IRD* and *ARN* may be changed (without changing routing settings). The Outward Status of the original document changes from "Rejected" to "To be Sent".
 - The [Repost] button is used to create a new original document. This method is used if routing settings are changed. The Outward Status of the new document is set to "To be Sent".

The tag REPOSTED_DOC=<new document's ID>; is specified in the original document's add_data field. For a new document, the tag REPOST_DOC=<original document's ID>; is specified in its add_data field.

As a result of resending the document, a fixing document for the reversal financial document is automatically created and processed.

Documents - Resend Rejected								<< >>		1 of 8300		X
	Amendment Date	Source Code	S Channel	T Channel	Is Auth	Request Category	Trans Type	S Reg Num	Ret Ref Number			
→	15/12/15 12:26:33			Our VISA CarFin	Fin	Advice	ContractDue Mi			□		
	15/12/15 12:26:32			Internal	Fin	Advice	OVD					
	15/12/15 12:26:29			Our VISA CarFin	Fin	Advice	ContractDue Mi					
	15/12/15 12:26:28	PAYFACC	Internal	Our VISA CarFin	Fin	Advice	Payment From C					
	15/12/15 12:26:28	PAYCARDSEC	Internal	Our VISA CarFin	Fin	Advice	Payment To Sec					
	15/12/15 12:26:28				Auth	Advice	Credit Limit					
	15/12/15 12:26:27			Our VISA CarFin	Fin	Advice	Card Production					
	15/12/15 12:26:27				Auth	Advice	Credit Limit					
	14/12/15 20:12:55			Internal	Fin	Advice	OVD					
	14/12/15 20:12:55			Our VISA CarFin	Fin	Advice	ContractDue Mi					
	14/12/15 20:12:52			Our VISA CarFin	Fin	Advice	ContractDue Mi					
	14/12/15 20:12:50	PAYCARDSEC	Internal	Our VISA CarFin	Fin	Advice	Payment To Sec					
	14/12/15 20:12:50	PAYFACC	Internal	Our VISA CarFin	Fin	Advice	Payment From C					
⏮ <input type="text" value="111"/> ⏭												
Ins	Del	Query	Resend ...	Errors	M-transaction	Doc - Brief	Previous	Next	Full Info			

Fig. 41. Non-transaction Fee Types Documents – Resend Rejected" form

6 Posting Documents and Solving Typical Problems

6.1 Posting Documents in WAY4

The procedure used by WAY4 to post documents (see Fig. 42 and Fig. 43) is executed in a number of stages and depends on the document type (authorization or financial) as well as how it was created (automatically or manually).

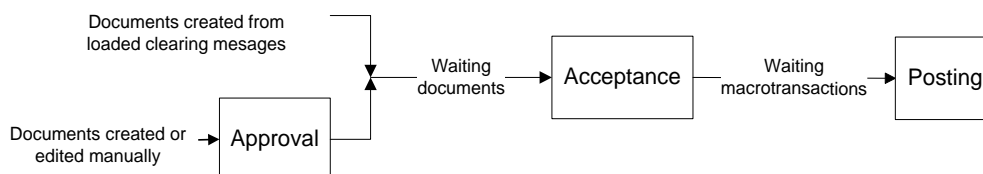


Fig. 42 Processing procedure for financial documents

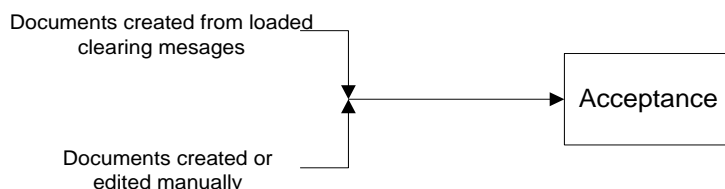


Fig. 43. Authorization documents processing procedure

For a number of accounts in WAY4, balances and turnover are updated simultaneously when a transaction is posted to the account. These accounts include all issuing contract accounts as well as bank contract and acquiring contract accounts with one of the following properties: accounts with a "Yes" value of the *Is Am Av* parameter, accounts with a template in which an Event is configured, accounts with a specific priority (*Priority* field). Balances and turnover for other accounts are updated when the "Apply Buffered Balance" procedure is executed. This procedure is run:

- Automatically during daily document processing procedures
- Using the menu item "Full → Daily Procedures → Document Processing Step by Step → Apply Buffered Balance"

6.1.1 Document Approval

This stage of document posting is applied to manually created or modified financial documents and includes:

- Validation of transaction key properties: transaction type, service class, transaction amount and currency, document posting date.
- Search for the document source and target contracts in the system.

- Check if the transaction can be carried out: searching for the document source Service and target Service, that will define rules for posting the transaction amount to contract accounts and define how fees are paid.
- Updating the document: changing the document status; when the secondary or reversal documents are approved, the status of the previous documents in the sequence is changed.

To start the document approval procedure, click on [Approve] in the created or modified document form.

If this stage is completed successfully, the document status becomes "Waiting", meaning it can be processed further.

If the document cannot be approved, an error message will appear and the document status will become "Decline" or "Decline Service".

To analyze the cause of the error, click on [Messages] in the rejected document's form. The "Messages for ..." form will appear, containing messages created by the system during document processing. Messages showing an "Error" value in the *Type* field describe the cause of error (see the section "Typical Problems in Posting").

6.1.2 Document Acceptance

This stage is applied to processed documents created by the system, both manually and as a result of loading transaction data from payment systems or other external sources.

All stages of document approval are included in document acceptance (see the section "Document Approval"). Furthermore, the system creates macrotransactions for financial documents for posting to contract accounts, and blocks amounts on the contract accounts for authorization documents.

The number of macrotransactions created through posting the financial document depends on whether the contracts belong to the same financial institution or to different ones.

If the both contracts involved in the transaction belong to the same financial institution, WAY4 creates a single macrotransaction.

This scheme is applied in situations when the transaction is executed with "our" (belonging to the financial institution registered in WAY4) card on "our" device (see Fig. 44), and when "our" card is used on a device belonging to another member of the payment system, or when a card issued by another member of the payment system is used on "our" device.

If a card or device belonging to another member of the payment system is involved in the transaction, its counterpart is represented by the Interchange Routing

contract of the corresponding payment system (see the document "Interchange Routing").

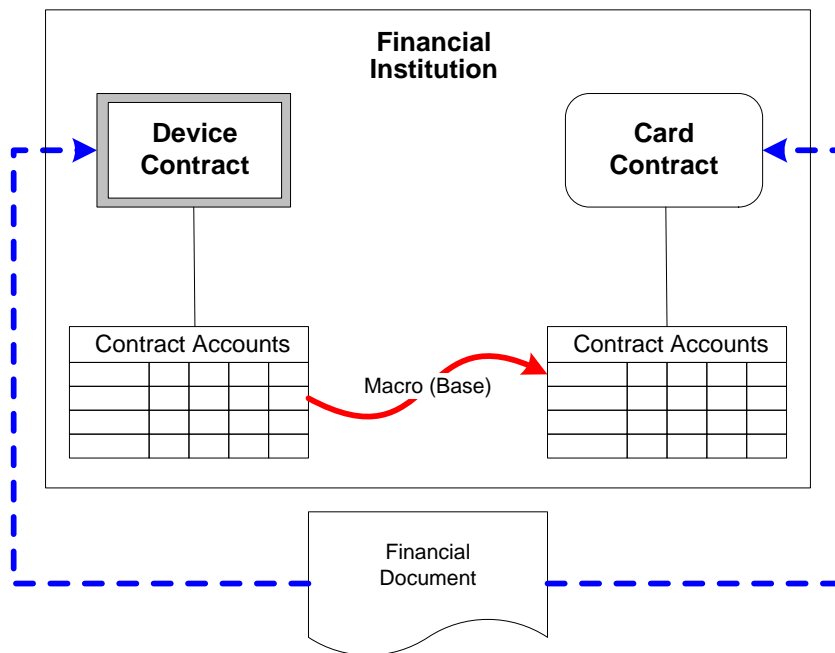


Fig. 44 The macrotransaction created for contracts of the same financial institution

If one of the two contracts involved in the card transaction belongs to a branch (affiliated bank) and the other, to the clearing centre (head office), WAY4 creates two macrotransactions (see Fig. 45).

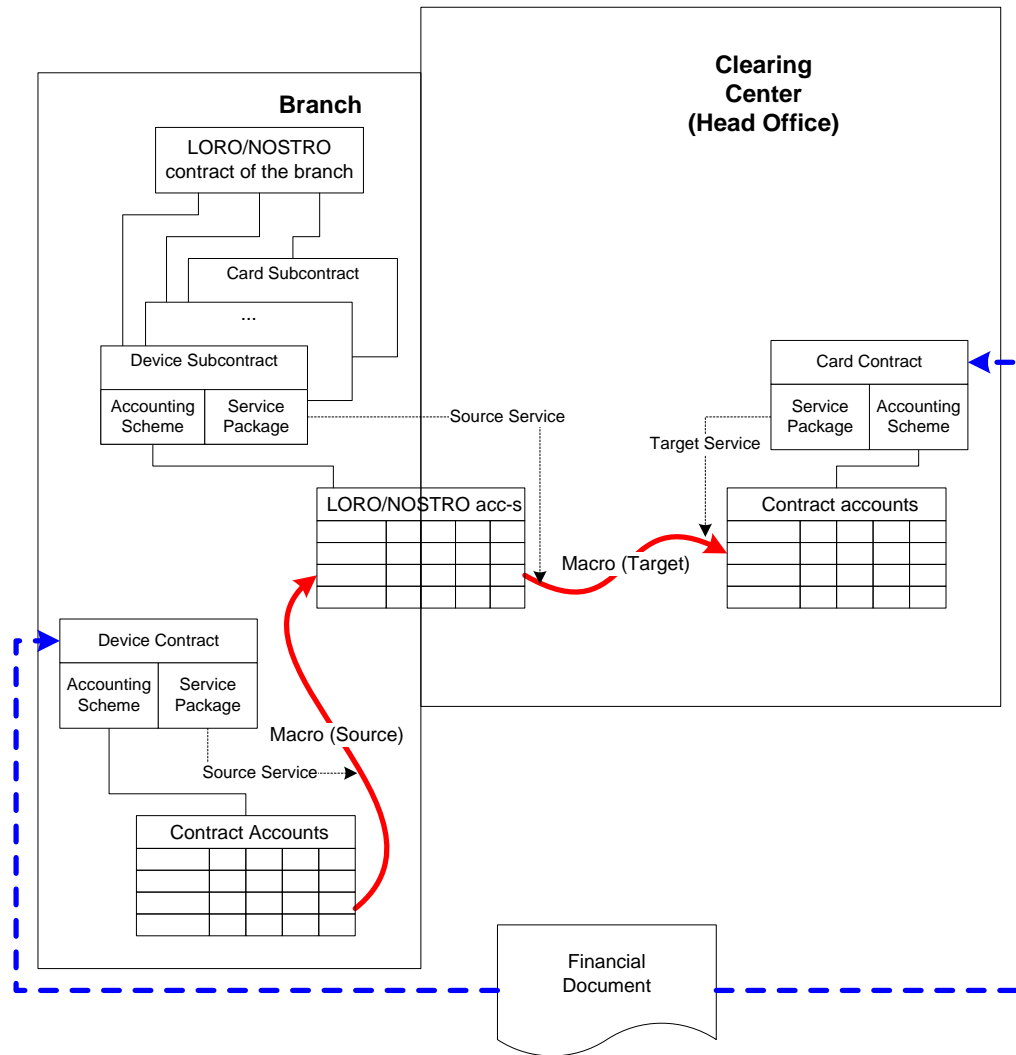


Fig. 45. Macrotransactions created to deal with the Branch (affiliated bank)

If both contracts involved in the card transaction belong to different branches (affiliated banks) using the clearing centre (head office) as the transit financial institution, WAY4 applies what is called a two-level clearing scheme (see Fig. 46).

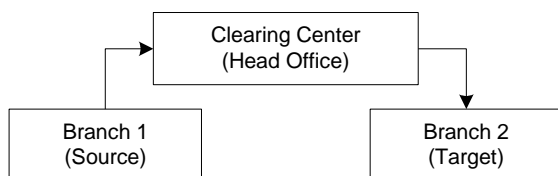


Fig. 46. Two-level clearing scheme

In this case, WAY4 creates three macrotransactions during acceptance of a financial document (see Fig. 47).

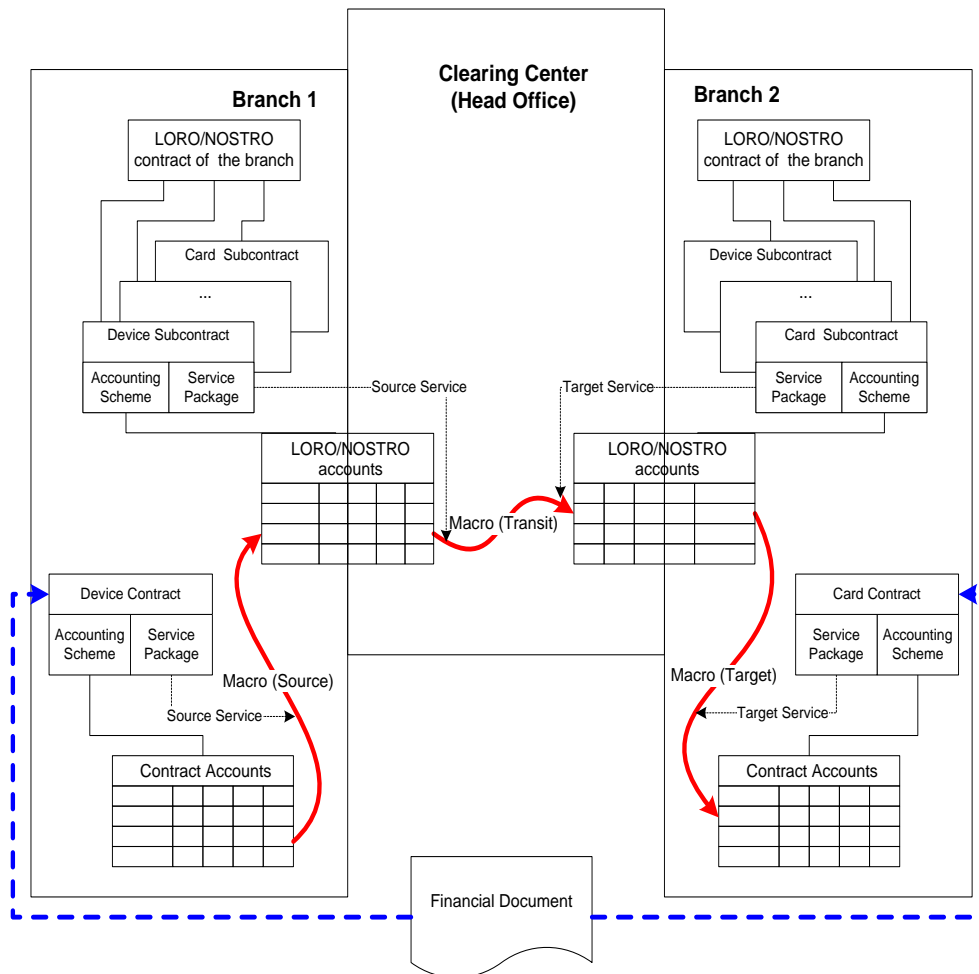


Fig. 47. Macrotransactions created to carry out an inter-branch card transaction

In a more complicated situation when two branches of different agent banks carry out a transaction, WAY4 applies a multi-level clearing scheme (see Fig. 48).

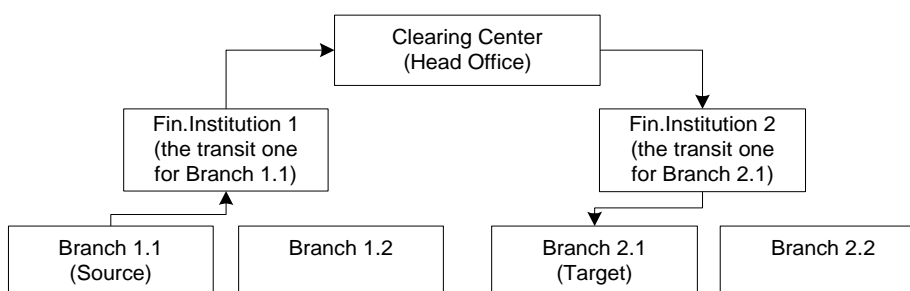


Fig. 48. Multi-level clearing scheme

Therefore, acceptance of a financial document can create:

- A single macrotransaction (base) – if the transaction contractors are contracts of the same financial institution.

- Two macrotransactions (source and target) – if the transaction contractors are contracts of two financial institutions subordinated to the same centre (office).
- Three macrotransactions (source, target and transit) – if the transaction contractors are contracts of two financial institutions subordinated to different centres (offices) and communicating via a transit financial institution.
- Five macrotransactions (source, target and three transits) – if the transaction contractors are contracts of two financial institutions subordinated to different centres (offices) and communicating via three transit financial institutions.

Details on Interbranch Routing during document processing may be found in section "Interbranch Transactions" of the document "Financial Institutions".

The document acceptance procedure is started along with execution of daily procedures (see section "Document Processing" of the document "Daily Procedures") or when you click on [Accept] to manually create an authorization document (see the section "Authorization Documents").

6.2 Checking the Status of Smart Card Cryptograms

Before accepting incoming clearing documents, the status of smart card cryptograms is checked by executing the following menu item:

- "EMV Smart Cards → Documents → Crypto Validation - Single Doc" – for a specific document.
- "EMV Smart Cards → Documents → Cryptogram Validation - All" – for all documents.

This menu item (the pipe com.openwaygroup.pipe.cryptogram_validation.jar) can be enabled in daily procedures. See the document "Daily Procedures").

The global parameter ACCEPT_AFTER_CRYPT_VALIDATION with the "Y" value allows incoming clearing documents to be processed only after the status of smart card cryptograms has been checked. See the section "ACCEPT_AFTER_CRYPT_VALIDATION" of the document "WAY4™ Global Parameters".

6.3 Posting "When Available" and "When Credit" Documents

Financial documents for transaction types with a *Category* parameter value of "When Available" and "When Credit" (see the section "Category") are posted according to the following rules.

Initial processing is performed using the document processing procedure ([Full → Daily Procedures → Document Processing](#)).

If the necessary amount is not available on the contract's accounts, the financial document after posting will take on these statuses: *Posting Status* = "Processed", *Outward Status* = "Waiting", and the transaction amount will be blocked on the contract account with a corresponding decrease in the amount available. As a result, after replenishment the amount available in the cardholder's account will be the replenishment amount minus the amount blocked on the account.

This amount is unblocked and entries for the document are posted using the "Renew When Available Docs" procedure ([Full → Daily Procedures → Document Processing Step by Step → Renew When Available Docs](#)). In batch processing of documents, this process isn't performed automatically. It is recommended to run this menu item according to the frequency that is set for these documents.



Note that document processing of this type is only possible within a set time interval from the document creation date. The time interval is set by the value of the parameter *Expiry Period* of the Service for which the document is processed. If the interval is exceeded, the document will be rejected (*Posting Status* = "Closed") and a corresponding message received, and funds on the contract accounts will be unblocked. An event with a predefined code will be invoked (see section "Opening Events" of the document "Events").

If it is necessary to manually unblock funds blocked when posting these kinds of documents, use the user menu path "Full → DB Administrator Utilities → Special Contract Utilities → Cancel When Available Docs".

As a result, the screen will display a table grid with a list of financial documents that block funds in contract accounts (see Fig. 49).

Cancel When Available Docs						<< < > >>		1 of 1		X	
Target Number		Trans Type		Trans Details		Trans Curr		Trans Amount		Posting Status	
→ 2479300079300000		Card Fee Yearly				USD		20,00		Processed	
Ins Del		Query		Cancel W/A		Errors		Full Info		Auth Record	

Fig. 49. List of financial documents that block funds on contract accounts

To unblock funds on accounts, select the desired document in the grid and click on the [Cancel W/A] button. As a result, the document will take on Posting Status = "Closed", and funds will be unblocked; that is, the amount will not be withdrawn from the contract account.

6.4 Properties of Miscellaneous Fees (Non-transaction Fees)

Miscellaneous non-transaction fees (see the section "Non-transaction Fee Types") can be charged automatically in WAY4 (see "Automatic Creation of Documents") or manually (see the section "Creating Batch Documents Manually").

The way documents for miscellaneous fees with parameter Category = "When Available" are posted depends on the value of global parameter "BLOCK_IF_AVAILABLE_FEE" (see document "WAY4™ Global Parameters").

When this parameter is set to "N" (No), the system waits to post financial documents when there are not enough funds available on the contract. The document takes on a *Posting Status* = "Waiting", *Outward Status* = "Waiting".

The document and fee are posted only after the necessary amount is replenished in the contract accounts. When "N" is set in parameter "BLOCK_IF_AVAILABLE_FEE", the system can wait indefinitely to post the document for the miscellaneous fee if the cardholder withdraws the funds before the daily procedure for document posting that would have posted the waiting document for the miscellaneous fee.

If parameter "BLOCK_IF_AVAILABLE_FEE" is set as "Y" (Yes), miscellaneous fees with parameter Category = "When Available" will be posted according to rules described in heading "Posting "When Available" and "When Credit" Documents", the same as financial documents with other Service Class parameters.

Misc fees can be configured with a zero value to resolve various technical tasks. For example, when reissuing a card, a Misc fee for a specified card production Event only can be created. In this case, to optimize system operation, it is possible to disable generation of documents for these fees that do not require funds to be debited from a contract. This is done using the global parameter SKIP_ZERO_FEE_DOC with the "Y" value. The global parameter can be refined by the same tag in a financial institution. To enable this feature for the corresponding transaction subtypes, set the tag SKIP_ZERO_FEE_DOC=Y;.



These settings can be used to optimize system performance when processing documents if there is a large number of Misc fees with zero values and a small number of non-zero Misc fees. Conversely, if there is a small number of

Misc fees with zero values and a large number with non-zero values, these settings might actually increase fee processing time.

6.5 Posting Macrotransactions

This is the last stage in the financial document posting procedure. It includes posting of the macrotransaction to contract accounts, which creates Journal Entries, Subsidiary GL Entries and GL Entries. This stage also creates additional macrotransactions for account normalization and their posting.

For more details see the "WAY4 Accounting" document.

6.5.1 Structure of a Macrotransaction

Normally a macrotransaction is created when a financial document is accepted as an instruction to carry out posting or postings to contract accounts. WAY4 can also automatically create *Secondary* macrotransactions resulting from posting of other macrotransactions, or *Single* macrotransactions caused by an event, for instance, an entry for interest accrual on an account at the end of a billing cycle (see the section "Macrotransaction Types").

Therefore, the structure of a macrotransaction is defined by the information required for posting. The general structure of a macrotransaction is represented in Fig. 50.

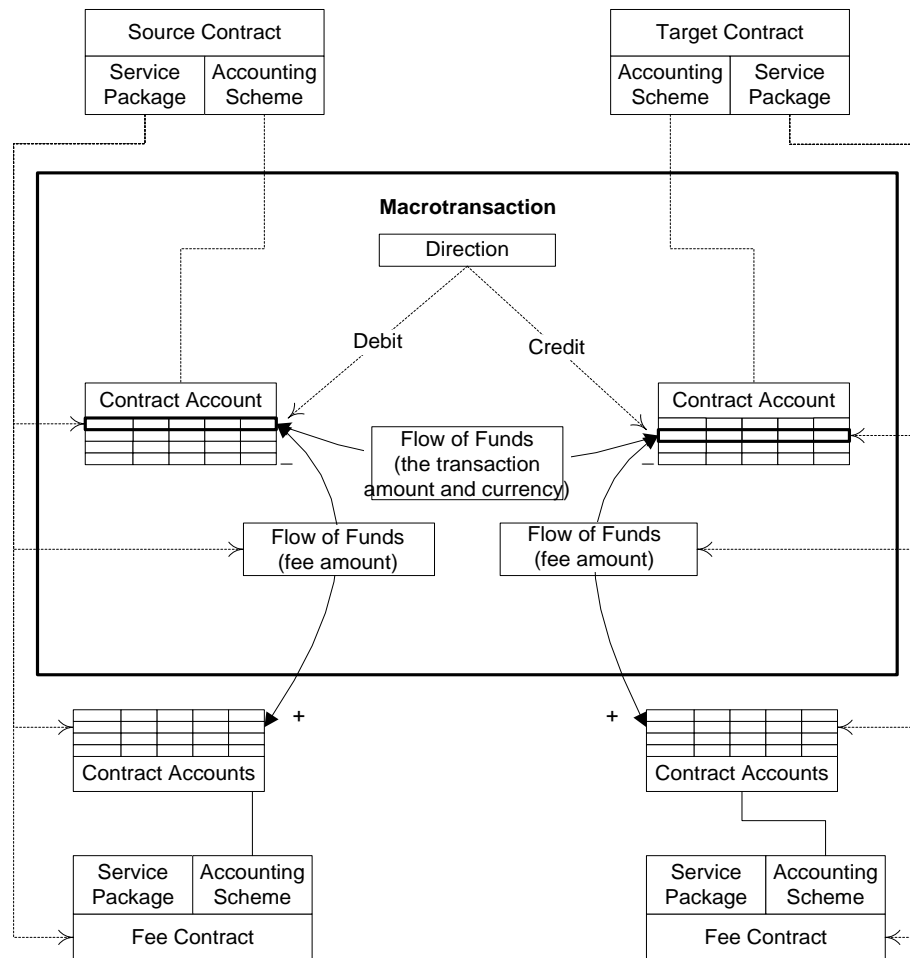


Fig. 50. General structure of a macrotransaction

Normally a macrotransaction record specifies:

- Direction of the flow of funds:
 - "Debit" value with a positive macrotransaction amount indicates that the funds are transferred from the transaction data target contract to the transaction data source contract.
 - "Credit" value with a positive macrotransaction amount indicates that the funds are transferred from the transaction data source contract to the transaction data target contract.
 - "None" value is used in macrotransactions resulting in entries related only to fee collection.

If the transaction amount is negative, the direction above is reversed to:

- The opposite transaction data source contract accounts and target contract accounts on which the entry will be made; the accounts are specified in accordance with the Accounting Schemes.

- The opposite amount and the flow of funds direction corresponding to the collection of the transaction fee from the source contract (S Fee) and the target contract (T Fee); the amount and the direction are specified in the Service Packages of the contracts; a positive fee amount indicates that the funds are transferred to the accounts of the bank fee contracts whereas a negative amount means that the funds are transferred to the accounts of the source/target contracts.

Specified in the source/target contract's Service parameters are the contract account to transfer the transaction amount as well as the fee contract, its account and the fee amount. WAY4 selects the Service according to the transaction type at the stage of document acceptance.

Note that the flow of funds (Amount) resulting from the macrotransaction (see Fig. 50) is represented as just one posting to contract accounts when the source contract account currency is the same as the target contract account currency and the transaction currency is the same as the financial institution's local currency.

If the currencies are different, the flow of funds will be represented by a number of postings to contract accounts depending on the currency conversion (see the section "Entries during Currency Conversion").

6.5.1.1 Entries during Currency Conversion

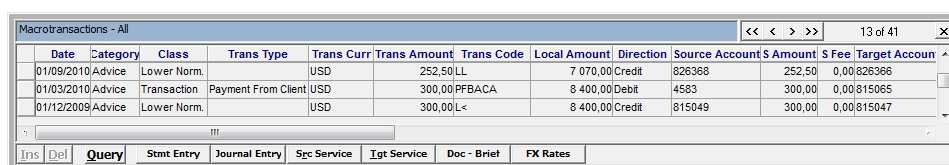
Tracing (posting to contract accounts) during currency conversion will take place in the system during document posting of transactions in the event that the contractor account's currency differs from the fee collection currency indicated in the corresponding Service (see the "WAY4™ Service Packages" document).

For more details on posting to accounts during conversion operations see the document "WAY4 Accounting".

For details on WAY4 system configuration for currency conversion, as well as posting to accounts during conversion operations see the section "Currency Conversion in WAY4" of the document "Currency Conversion".

6.5.2 Macrotransaction Properties

Macrotransaction properties are displayed in the "Macrotransactions - All" grid form (see Fig. 51) listing all the macrotransactions created in the system. To open the form, choose the path "Full → General Ledger → Macrotransactions – All" in the user menu.



Date	Category	Class	Trans Type	Trans Curr	Trans Amount	Trans Code	Local Amount	Direction	Source Account	S Amount	S Fee	Target Account
01/09/2010	Advice	Lower Norm.		USD	252,50	LL	7 070,00	Credit	626368	252,50	0,00	626366
01/03/2010	Advice	Transaction	Payment From Client	USD	300,00	PFBACA	8 400,00	Debit	4583	300,00	0,00	815065
01/12/2009	Advice	Lower Norm.		USD	300,00	L<	8 400,00	Credit	815049	300,00	0,00	815047

Fig. 51. List of macrotransactions created in WAY4

To display the macrotransactions and their properties set for the specific document, click the [M-trans] button in the "All Docs" grid form (Full →Documents Input & Update →Doc - General Form →All Docs).

A macrotransaction has the following properties:

- *Date* – (Posting Date) banking date when the macrotransaction was posted to the contract accounts; in a reversal macrotransaction the date is always equal to the original macrotransaction Posting Date.
- *CI Institution* – macrotransaction's financial institution; fund transfers resulting from the macrotransaction are made on accounts created in this financial institution. By default, this field is only shown in the form with the list of macrotransactions for a particular document.
- *Status* – macrotransaction's status:
 - "Waiting" – status assigned to a macrotransaction at the moment of its creation.
 - "Posted" – status of a macrotransaction after it is posted.
 - "InActive" –status of a macrotransaction after its reversal (after the respective reversal macrotransaction is posted).
 - "Closed" – status of the reversal macrotransaction after it is posted.
 - "Decline" – the macrotransaction was declined during processing.
- "Entry Type" - the macrotransaction type:
 - "Base" – macrotransaction carried out between contract accounts in the same financial institution.
 - "Transit" – macrotransaction carried out between routing contract accounts.
 - "Source" – macrotransaction carried out between the source contract (a card or a device contract) account and routing contract account.
 - "Target" – macrotransaction carried out between the routing contract account and the target contract (a card or a device contract) account.
- *Category* – request category for the source document:
 - "Advice" – transaction completion advice.
 - "Reversal" – transaction reversal advice.
 - "Request" – request to execute an operation.
 - "Adjustment" – notification of partial cancellation of a transaction.

- "Part Advice" – notification of partial chargeback or partial representment.
- *Class* – transaction type (see the section "Service Class").
- *Trans Curr* – macrotransaction currency; the value is usually the source document's settlement currency.
- *Trans Amount* – macrotransaction amount.
- *Local Amount* – macrotransaction amount specified in the financial institution's local currency.
- *Direction* – direction of the flow of funds (see the section "Structure of a Macrotransaction").
- *Source Account* – account of the source contract of the transaction data.
- *S Amount* – transaction amount specified in the currency of the source contract account.
- *S Fee* – source contract fee amount specified in the currency of the source contract account.
- *Target Account* – account of the target contract of the transaction data.
- *T Amount* – transaction amount specified in currency of the target contract account.
- *T Fee* – target contract fee amount specified in the currency of the target contract account.
- *Source Code* – field is reserved for compatibility purposes with previous versions.
- *Target Code* – field is reserved for compatibility purposes with previous versions.
- *Trans Code* – code of the transaction subtype (see the section "Entry Codes" of the document "WAY4 Accounting").
- *Local Date* (GL Date) – date when the macrotransaction was posted to the General Ledger accounts; the value can differ from the *Date* field value in case of a reversal macrotransaction as well as depending on values of the "POST_DUE", "INTEREST_IN_CYCLE" and "INTEREST_DELAY" global parameters (see the document "WAY4™ Global Parameters").
- *S Service* – rules for posting transaction data (the Service) of the source contract.
- *T Service* – rules for posting transaction data (the Service) of the target contract.

- *FX Seq N* – for macrotransactions that during processing of which currency conversion is performed, the value is specified which corresponds to the value in the *Seqv N* field of the "FX History for <name of currency> table for the FX rate value used during conversion.
- *Record ID* – macrotransaction identifier.
- *Parent Mtr* – the identifier of the main macrotransaction; this is specified for a secondary macrotransaction (for example, connected with limit normalization).
- *Portion* – the identifier of the process within which the macrotransaction was processed; this is specified for parallel macrotransaction processing.
- *Posting DB Date* – this field contains the macrotransaction processing date in the WAY4 database.

Clicking the [FX Rates] button in the "Macrotransactions – All" form for a macrotransaction that during the processing of which currency conversion was performed opens a form containing the entire list of FX rates effective at the time of the macrotransaction's posting, including the rate used for conversion (all values are shown for rates, with the exception of the *CB Rate* value). These rates have one *Seqv N* field value.

6.5.3 Macrotransaction Types

The following classification of macrotransactions exists in the system (see Fig. 52).

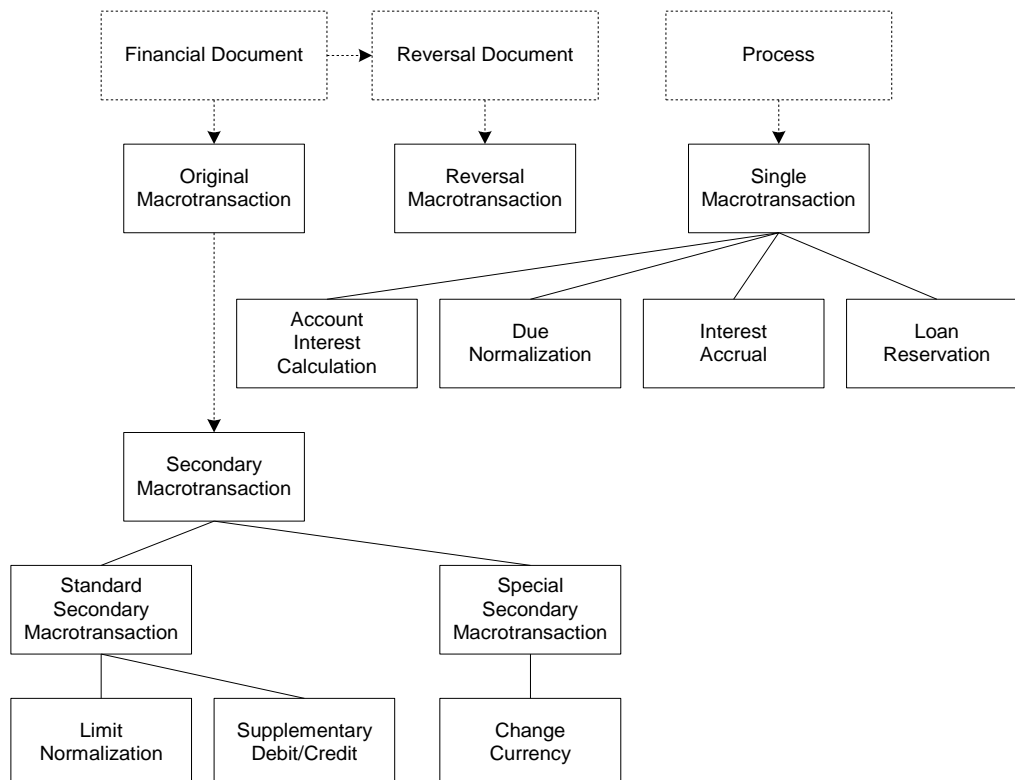


Fig. 52. Classification of macrotransactions

6.5.3.1 Original Macrotransactions

WAY4 creates these macrotransactions upon acceptance of financial documents.

The *Service Class* property value in macrotransactions of this type may be "Transaction", "Account Transfer" or "Misc" (Miscellaneous).

Macrotransactions of the "Misc" *Service Class* are used to carry out transactions related to fee collection, e.g. to issue a banking card, to get the state of balance, etc. The fee contract and its account are specified in properties of the source contract Service.

6.5.3.2 Reversal Macrotransactions

WAY4 creates such macrotransactions when accepting reversal documents.

The *Category* property value in macrotransactions of this type is "Reversal" (see the section "Macrotransaction Properties").

6.5.3.3 Secondary Macrotransactions

WAY4 creates secondary macrotransactions when the remaining macrotransactions are posted. They fall into standard and special ones.

Standard secondary macrotransactions include:

- *Limit Normalization of Accounts* – transaction to transfer an amount from one account to another when the credit (Lower Normalization) or debit

(Upper Normalization) balance of the account goes beyond the specified level.

WAY4 creates these macrotransactions for accounts where the balance limits (low limit amount or upper limit amount) are specified and when the accounts for fund transfer (low limit template, upper limit template) are specified. These parameters are determined on the account template level or in the properties of the account itself. By default, the balance limits of the accounts are equal to the balance limits of their templates. Normally, they only differ in the "CI Loan" account.

The Service Class property value in macrotransactions of this type may be "Lower Norm", "Upper Norm" or "Upper Limit Special".

- *Supplementary Debit/Credit* – transaction to carry out funds transfer between the following special accounts: Supplementary Debit Acc and Supplementary Credit Acc (these settings are used for paying interest accrued on a loan). The transaction can only be carried out to credit accounts where the special accounts are specified in their templates.

Service Class property value in macrotransactions of this type is "Rev/Exp".

The special secondary macrotransaction is represented with:

Change Currency – the macrotransaction is used to withdraw the transaction amount in the transaction currency from the card account.

For more details see the section "Calculating the Debited Amount (USE_TRANS_AMOUNT tag)" in the document "Financial Institutions".

The value of the *Service Class* property in Change Currency macrotransactions is "Account Transfer".

6.5.3.4 Single Macrotransactions

WAY4 creates single macrotransactions as a result of executing certain processes with no creation of financial documents.

The single macrotransactions include:

- *Account interest accrual* – a transaction to transfer an amount from one account to another for interest accrual. The interest calculation parameters are specified in the *Interest Properties* group of fields in the account template.

The *Service Class* property value in the macrotransaction type is "Interests".

- *Due Normalization (Ageing)* – transaction to transfer an amount from one account to another within the time limits specified in the *Ageing* group of fields in the account template.

The value of the *Service Class* property in the macrotransaction type may be "Due Norm" or "Due Special".

- *Interest Accrual* – transaction carried out for daily calculation of loan interest; the transaction transfers the amount from the bank future revenue account to the bank account of the cardholder interest accrual.

The *Service Class* property value in the macrotransaction type is "Rev/Exp".

- *Loan Reservation* – a transaction to transfer an amount from the bank reservation contract account to a bank or cardholder account in order to make loan reserves.

The *Service Class* property value in the macrotransaction type is "Reserve for Bad Debts".

6.5.4 Defining Contract Accounts for Created Macrotransactions

Contract accounts used with created macrotransactions are defined as follows:

6.5.4.1 Accounts for Transaction Amount Entries

Accounts for transaction amount entries are generally specified according to the contractor contract's Services.

In the event that the contract's Service Package does not contain the corresponding Service, accounts are specified according to the value of the "Use Default" parameter of the Service Package: either the contract's dispute account will be used, or in its absence, the dispute account of the dispute contract, or an account of a type defined by the transaction subtype (see the "Use Def Service" section in the "WAY4™ Service Packages" document).

In processing interbranch documents, routing schemes may be used to define a set of accounts for entries (see section "Configuring Interbranch Routing" of the document "Financial Institutions").

6.5.4.2 Fee Entry Accounts

The bank contract and its fee entry account will be specified by default for the Service Package and may be redefined on the Service level. The contractor contract account used in the fee entry is the same account that is specified in the Service describing this operation and used in the transaction amount entry (see the "WAY4™ Service Packages" document).

6.5.4.3 Interest Accrual Entry Accounts

The bank contract for interest accrual is specified on the Accounting Schemes level and can be redefined on the account template level; the bank contract's account is specified on the account template level (see the "WAY4™ Accounting Schemes" document).

6.5.4.4 Normalization Entry Accounts

Contract accounts for due normalization and limit normalization entries are specified in the templates of the corresponding accounts (see the "Accounting Schemes" section of the "WAY4™ Accounting Schemes" document).

6.5.4.5 Reserving Entry Accounts

The bank contract used for accruing loan reserves and its entry account are specified in Reserving Schemes (Full → Configuration Setup → Behavior Scoring Setup → Reserving Schemes). The Reserving Scheme enables users to indicate as the reserve entry account the client contract whose account will be used to accrue reserves.

6.5.4.6 Currency Conversion Entry Accounts

Accounts for currency conversion entries are specified by conversion schemes, additional conversion types and global parameters (see the section "Currency Conversion in WAY4" of the document "Currency Conversion").

6.5.4.7 Accounts for Entries Involving Interactions with the Off-balance Accounting Subsystem

Contract accounts for entries involving interactions with the off-balance accounting subsystem are specified in the templates of the accounts and by global parameters (see the "Accounting Schemes" section of the "WAY4™ Accounting Schemes" document).

6.5.5 Running Macrotransaction Posting Processes in Parallel for Complex Contract Hierarchies

Paralleling macrotransactions in WAY4 is standard (see the document "Running WAY4™ Processes in Parallel"). This section describes settings for running macrotransaction posting processes in parallel for complex contract hierarchies (large Main/Sub hierarchies, complex corporate (Liability) hierarchies, multicurrency contracts). For these cases, do the following:

- In the "Contract Parameters Setup" form (Full → Configuration Setup → Common Handbooks → Contract Parameters Setup), configure a custom contract parameter as follows:
 - In the *Code* field, specify the SEPARATE_POSTING value.
 - Set the "String" value for the *Value Type* field.
 - In the *Value Location* field, specify the "Contract" value (or "Product" if certain Products can be mapped with the tag and the parameter does not have to be analysed for the contract).
 - If the "Contract" value is specified in the *Value Location* field, specify the "Ext Data" value in the *Location Field* field.

- In the *Hierarchy Level* field, specify the "Billing Level Only" value.
- In the *Check Product* field, the "Yes" value can be specified if the tag must be checked not only in contract parameters but in Product parameters as well.
- Use this parameter to map the corresponding contracts/Products to optimise macrotransaction posting processes.

See the section "Contract and Client Custom Parameters" of the document "WAY4 Client and Contract Classifiers".

With this setup, data that are being processed are automatically distributed by threads based on `m_transaction.hash_id` (if it is filled in) or in the standard way based on block number, if `m_transaction.hash_id` is not filled in. Distribution of data between parallel threads can be redefined using the `HASH_EXPR` parameter of the "Posting" process.

If the `SEPARATE_POSTING` parameter is not set or its value is "Y", `hash_id` is filled in automatically. To disable automatic filling in of `hash_id` set `SEPARATE_POSTING` to "N" for the Product/contract.



If settings are enabled to run macrotransaction processing in parallel for complex hierarchies and the `HASH_EXPR` parameter is not set (i.e. the default value is used), to restore the previous behaviour (data is distributed based on block number, not by `m_transaction.hash_id`) set the `HASH_EXPR` parameter of the "Posting" process to the value `dbms_rowid.ROWID_BLOCK_NUMBER(m_transaction.rowid)`. For more information, see the document "Running WAY4™ Processes in Parallel".

6.6 Posting Documents with a Dispute Contract

A dispute contract is a bank contract whose accounts are used to show transactions for which errors were detected when posting documents for these transactions. Examples of using a dispute contract as a target contract:

- A target contract for an incoming message received on payment system channels could not be found in the database.
- For an incoming document generated according to a message from a payment system channel, a Service for the target contract could not be found or an incorrect account for posting the document is specified in the Service. The target contract (card contract) does not have a dispute account.

- An incoming presentment (first, second, or reversal) could not be posted correctly due to a document matching error. The target contract (card contract) does not have a dispute account.

A dispute contract is set in a financial institution ("Full → Configuration Setup → Accounting Setup → Institution Specifications").

The BIN table is used to search for a target financial institution (i.e. for the appropriate dispute contract).

A transaction is recorded in the dispute account for the main dispute contract's subcontract.



A dispute subcontract is searched for without mandatory conditions on the contra channel (*Contra Channel* field; "Full → Configuration Setup → Main Tables → Message Channels"). For example, for a transaction with an unknown card from the "Visa" channel, the following search is made:

- A search is made for a dispute subcontract with the "Card" category and contract subtype for which the "Our Visa Card" channel is set.
- If this subcontract is not found, a search is made for any dispute subcontract with the "Card" category.

6.7 Typical Problems in Posting Documents

To solve problems in posting documents, it is recommended that users analyze the messages generated by the system upon document approval and acceptance. To display these messages, select the document in the list of existing documents; for example, like that in the "Doc - Search" grid form ("Full → Documents Input & Update → Docs - Search") (see Fig. 16 in the section "Main Forms for Working with Documents"), and click [Doc-Brief], then click [Message] in the "Doc-Brief" form.

For more details about messages created during document processing and possible actions, see the section "WAY4 Messages During Document Processing".

7 Changing Statuses during Document Processing

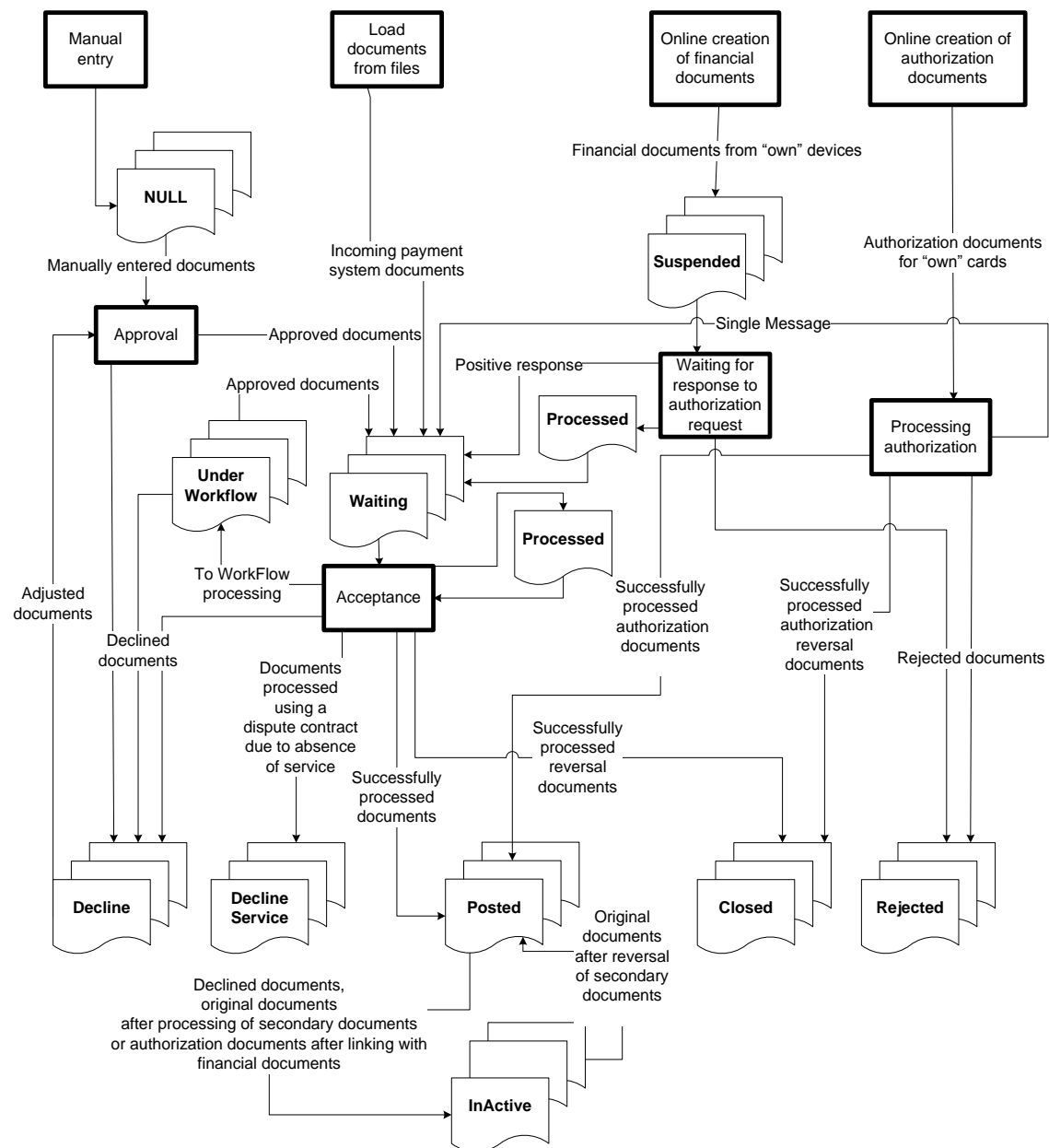


Fig. 53. Changing statuses during document processing

8 WAY4 Messages During Document Processing

The format of error messages in WAY4 is as follows:

'<prefix>"<prefix>':<error code>','<text of the error message>','<response code>'.

Error message prefixes contain additional information about the process executed when the error occurred. For example, "AUTH" is the message prefix for an error that occurred while processing authorization documents.

The error codes consist of an error ID ("E" – an error message, "W" – a warning message; "I" – an information message) and a number.

8.1.1 AUTH.AFF:E011

Message Text

Message text comes from the affiliated bank's system.

Response Code

Response code is taken from the document.

Message Description

Refusal of authorization received in response to authorization request sent to affiliated bank.

8.1.2 AUTH.AFF:W011

Message Text

Message text comes from the affiliated bank's system.

Response Code

Response code is taken from the document.

Message Description

In response to an authorization request sent to the affiliated bank's system, a nonzero response code has been received (for example, partial payment is permitted).

8.1.3 AUTH.ADD_SERVICE:E01

Message Text

"Not supported message type".

Response Code

57

Message Description

The system does not support the creation of adjustments for additional online operations. Authorization request declined.

8.1.4 AUTH.ADD_SERVICE:E02

Message Text

"Service not on file".

Response Code

57

Message Description

The code of the additional online operation specified in the authorization message is absent in the "Additional Online Operations" reference book. Authorization request declined.

8.1.5 AUTH.ADD_SERVICE:E03

Message Text

"Card is reissuing. PIN Change disabled".

Message Code

57

Message Description

During card reissue it is not possible to change the PIN. Authorization request declined.

8.1.6 AUTH.AFF:E001

Message Text

"Routing for source not found".

Response Code

3

Message Description

Authorization request declined since the Source Member ID is absent from the document or the specified ID is not registered in the system (BIN table).

8.1.7 AUTH.CHECK_PREV_AUTH:E11

Message Text

"Matched doc has another type".

Response Code

95

Message Description

During search for authorization document it was determined that the authorization document has another Service Class. The documents could not be matched.

8.1.8 AUTH.CHECK_PREV_AUTH:E21

Message Text

"Matched by RRN but auth code mismatched".

Response code

95

Message Description

During search for authorization document according to RRN it was determined that the Auth Code of the documents to be matched does not correspond. The documents could not be matched.

8.1.9 AUTH.DOC:E01

Message Text

"StandIn Start RC".

Message Description

The response code "on entry" of the authorization message received from the Stand-In system during synchronization with the production system.

8.1.10 AUTH.DOC:E02

Message Text

"Stand in RC".

Message Description

The response code according to the results of processing the authorization message received from the Stand-In system during synchronization with the production system.

8.1.11 AUTH.GET_BLK_AMNT:E01

Message Text

"Invalid Currency".

Response Code

12

Message Description

Currency code specified in the authorization message was not found in the system reference book.

8.1.12 AUTH.GET_S_T:E001

Message Text

"Card number not on file"

Message Code

14

Message Description

The card contract is not registered in the system for the card number specified in the authorization message. Authorization request declined.

8.1.13 AUTH.GET_ST:E002

Message Text

"Device ID is not on file".

Response code

3

Message Description

The device contact is not registered in the system for the device ID specified in the authorization request. Authorization request declined.

8.1.14 AUTH.GET_ST:E004

Message Text

"Transaction restricted for this card".

Response Code

Taken from stop list.

Message Description

This card is registered in a stop list. Authorization request declined.

8.1.15 AUTH.GET_TGT:E006

Message Text

"No such Account".

Response Code

Depends on relation type code.

Message Description

For this card contract no related card was found with the relation type code specified in the authorization message. Authorization request declined.

8.1.16 AUTH.GET_TGT:E01

Message Text

"<Contract for> not found".

Response Code

14

Message Description

The contract for which the operation was requested is not registered in the system.

8.1.17 AUTH.GET_TGT:W006

Message Text

"Used default spc for foreign authorization".

Response Code

0

Message Text

For the card contract no related contract was found with the relation type code specified in the authorization message. Authorization made on the main card contract.

8.1.18 AUTH.POST_AUTH:E010

Message Text

"Transaction not allowed".

Response Code

57

Message Description

The transaction type specified in the message is not registered in the system. Authorization declined.

8.1.19 AUTH.POST_AUTH:E011

Message Text

"Service not allowed for this card".

Message Description

The Service for this transaction was not found in the system. Authorization declined.

8.1.20 AUTH.POST_AUTH:E012

Message Text

"Amount too small".

Response Code

13

Message Description

After calculating the transaction amount in the contract currency and calculating the fee amount for the transaction, the transaction sum amount exceeded the transaction amount.

8.1.21 AUTH.POST_AUTH:E013

Message Text

"Required amount is absent".

Response code

13

Message Description

In the authorization request for "Purchase with cash back" the purchase amount is absent. Authorization declined.

8.1.22 AUTH.POST_AUTH:E014

Message Text

"CashBack is disabled".

Response Code

457

Message Description

The request for "Purchase with cash back" is declined since the Service for this transaction is not registered in the system.

8.1.23 AUTH.POST_AUTH:E015

Message Text

"Available Amount too small".

Response Code

51

Message Description

The message is generated when processing an authorization request for a transaction with the possibility of partial payment if the account balance is not sufficient to cover the sum amount of the transaction (after calculating the transaction amount in the contract currency and calculating the amount of the fee).

8.1.24 AUTH.POST_AUTH:E015

Message Text

"Service declined for this card".

Response Code

57, or taken from the Service's "RC" tag.

Message Description

The transaction is prohibited by the Service's configuration.

8.1.25 AUTH.POST_AUTH:W87

Message Text

"Purchase only".

Response Code

87

Message Description

Only purchase is permitted for an authorization request for purchase with cash back.

8.1.26 AUTH.PUT_FIN:E001

Message Text

"Check Fin Doc Result"

Message Description

Financial document created as a result of an SMS message (Single Message System) failed check.

8.1.27 AUTH.PUT_REQUEST:E001

Message Text

"Duplicate advice".

Response Code

94

Message Description

After successful processing of an authorization request from a payment system a repeat request to execute the transaction is received (possibly the response message sent to the payment system was lost). The repeat request is ignored.

8.1.28 AUTH.PUT_REQUEST:E002

Message Text

"Advice Start Code is not zero".

Message Description

Notification has been received that the payment system made a decision for WAY4 and denied the request.

8.1.29 AUTH.REQUEST:E001

Message Text

"Authorization was already reversed or matched".

Response Code

0

Message Description

Request to cancel an authorization request was declined as the authorization request has already been cancelled.

8.1.30 AUTH.REQUEST:E002

Message Text

"Original document not found for reversal".

Message Code

95

Message Description

During processing of reversal document the original (to be reversed) authorization document was not found.

8.1.31 AUTH.REQUEST:E003

Message Text

"Inward RC".

Response Code

Comes from external system.

Message Description

The request did not pass checking on NetServer.

8.1.32 AUTH.REQUEST:E006

Message Text

"Not supported message type."

Response Code

57

Message Description

The message code for this information channel, transaction type and request category was not found in the system dictionary (see "Message Types").

8.1.33 AUTH.REQUEST:E007

Message Text

"Order not on file".

Response Code

57

Message Description

The standing payment order code was not found.

8.1.34 AUTH.REQUEST:E008

Message Text

"Contract not found".

Response Code

14

Message Description

The contract specified in the authorization request is not registered in the system.

8.1.35 AUTH.REQUEST:E014

Message Text

"Invalid order".

Message Description

A document for this standing payment order was not generated due to an error in the payment order.

8.1.36 AUTH.REQUEST:E015

Message Text

"Invalid Order Doc".

Message Description

The document created according to the standing payment order failed the check.

8.1.37 AUTH.REQUEST:E016

Message Text

"Internal Error. Empty Order Doc".

Response Code

57

Message Description

A serious error in the configuration of the standing payment order.

8.1.38 AUTH.TIMEOUT:F001

Message Text

"Timeout detected".

Response Code

96

Message Description

Time permitted to process the authorization request has been exceeded.

8.1.39 AUTH.TRANSIT:E

Message Description

An error occurred while searching for the routing contract when sending a message to the affiliate bank or external banking system when the corresponding card contract is registered.

8.1.40 AUTH:W10

Message Text

"Amount changed"

Response Code

10

Message Description

Notification that the transaction amount has changed (when making partial payment).

8.1.41 BLK.REQUEST:E021

Message Text

"Not sufficient funds available in purse".

Response Code

51

Message Description

Insufficient funds on special balance.

8.1.42 CHANGE_PIN:E01

Message Text

"Not supported in StandIn mode".

Response Code

5

Message Description

Authorization request to change PIN was received in Stand-In mode. PIN change in Stand-In mode is not possible.

8.1.43 CHECK_ATN:E01

Message Text

"ATN not found"

Response Code

5

Message Description

Authentic Tracking Number (security value for 3-D Secure transactions) not found.

8.1.44 CHECK_PIN_LIKE:E001

Message Text

"Allowed %% check attempts exceeded"

Message Description

The maximum number of PIN2 attempts has been exceeded.

8.1.45 CHECK_PIN_LIKE:E002

Message Text

"%% check failed"

Message Description

PIN2 was entered incorrectly.

8.1.46 CHECK_PREV_AUTH:E001

Message Text

"Original document not posted yet (processed) and will be closed"

Response Code

0

Message Description

When a secondary authorization request is received (for example, cancellation of authorization, the first request for the affiliated bank has not yet been processed. The first request will not be processed.

8.1.47 CHECK_PREV_AUTH:E002

Message Text

"Original document not found for reversal"

Response Code

95

Message Description

During reversal document processing, the original (to be reversed) document is not found.

8.1.48 CHECK_PREV_AUTH:E003

Message Text

"Wrong transaction amount".

Response Code

13

Message Description

When a secondary request for transaction reversal is received, it is found that the amount in the secondary request does not correspond to that in the original. The secondary request is declined.

8.1.49 CHCK.AUTH:E01

Message Text

"Card is in stop list".

Response Code

The substituting value is taken from the stop list.

Message Description

The card is in the stop list on the transaction date. The transaction date is determined from the communication server system clock.

The system declines documents of a transaction made with "our" card. If the transaction was made with a "foreign" card, the document is posted on the dispute contract accounts.

Recommended Actions

If the document of a transaction made with a "foreign" card complies with its corresponding payment system regulations (VISA Operating Regulations Part II/MC Chargeback Guide), a dispute document can be created.

8.1.50 CHCK.AUTH:E04

Message Text

"Inward presentment must be authorized".

Response Code

95

Message Description

The system failed to find the authorization document of the inward presentment for the transaction that must be authorized. An example of such a transaction is "ATM Cash".

8.1.51 CHCK.AUTH:E06

Message Text

"Voice authorization not found"

Response Code

95

Message Description

The system cannot find voice authorization data for the transaction made on a merchant device.

The message could result from a wrong authorization code from the merchant.

Document posting results depends on the value of the "DECLINE_NON_AUTHORIZED" global parameter (see document "WAY4™ Global Parameters").

8.1.52 CHCK.AUTH:E07

Message Text

"Unauthorized transaction exceeds floor limit and declined".

Response Code

95

Message Description

The message indicates that the amount of the transaction made on the merchant imprinter exceeds the floor limit specified in the device's Service Package.

The document was declined during posting.

The message could result from a missing authorization code from the merchant or a violation of floor limit transaction rules by the merchant.

The message is created if the "DECLINE_NON_AUTHORIZED" global parameter value is "Y" (see document "WAY4™ Global Parameters").

8.1.53 CHCK.AUTH:E10

Message Text

"Invalid capture currency".

Response Code

13

Message Description

The financial document currency differs from the authorization document currency.

8.1.54 CHCK.AUTH:E11

Message Text

"Invalid capture amount".

Response Code

13

Message Description

The transaction amount in the document differs from the authorized amount by more than the acceptable value. The message is only created for documents of transactions made on "our" devices.

8.1.55 CHCK.AUTH:E12

Message Text

"Invalid capture amount for cash/Unique"

Response Code

13

Message Description

The transaction amount in the document differs from the amount authorized for a "Cash" or "Unique" transaction made on an external device.

8.1.56 CHCK.AUTH:E13

Message Text

"Authorization trans amount is not matched to presentment trans amount"

Response Code

13

Message Description

This message warns that the difference between the presentment transaction amount and the authorization transaction amount exceeds the value of global parameter "AUTH_AMOUNT_DIFF_PCNT" (see document "WAY4™ Global Parameters").

8.1.57 CHCK.AUTH:W05

Message Text

"Unauthorized inward presentment".

Response Code

101

Message Description

The system failed to find the inward presentment authorization document for the transaction where the *Is Authorized* property value is "Maybe". The message could result from wrong references in the incoming document.

Recommended Actions

Search for the authorization document manually.

If you find the corresponding authorization document having the "Posted" status, reverse it.

8.1.58 CHCK.AUTH:W06

Message Text

"Unauthorized inward presentment exceeded floor limit"

Response Code

101

Message Description

This message warns that an authorization document has not been found for the posted financial document; at the same time, the transaction amount exceeds the floor limit.

8.1.59 CHCK.AUTH:W08

Message Text

"Unauthorized transaction exceeds floor limit".

Response Code

101

Message Description

The amount of the transaction made on the merchant imprinter exceeds the floor limit.

The message could result from a missing authorization code from the merchant or violation of the floor limit transaction rules by the merchant.

The message is created if the "DECLINE_NON_AUTHORIZED" global parameter value is "N" (see document "WAY4™ Global Parameters").

8.1.60 CHCK.AUTH:W16

Message Text

"Unauthorized inward presentment reported as zero floor limit"

Response Code

101

Message Description

This message warns that the processed financial document does not contain an authorization code; at the same time, the transaction amount exceeds the channel floor limit set by VISA.

8.1.61 CHCK.AUTH:W17

Message Text

"Unauthorized inward presentment reported as exceeding floor limit"

Response Code

101

Message Description

This message warns that the processed financial document does not contain an authorization code, although transactions of this type should be authorized according to VISA requirements.

8.1.62 CHCK.BASE:E01

Message Text

"Transaction not allowed".

Response Code

12

Message Description

The transaction type specified in the document must not be carried out between the contract types of the source and target contracts.

Acceptable combinations of transaction types are specified in the reference form of the transaction subtypes (see the section "Additional Parameters of Transactions").

8.1.63 CHCK.BASE:E02

Message Text

"Invalid settlement currency".

Response Code

96

Message Description

The settlement currency is not specified in the document or in the FX Scheme for the financial institution of the source contract.

The document was rejected when it was posted.

Recommended Actions

Check the settlement currency or the fee currency values in the document. If the currency was not specified in the FX Scheme of the source contract financial institution, specify it.

8.1.64 CHCK.BASE:E03

Message Text

"Invalid fee currency".

Response Code

96

Message Description

The fee currencies of the source contract financial institution and/or the target contract financial institution were not specified in the document or in the FX Scheme.

The document was rejected when it was posted.

Recommended Actions

Check the source fee currency and the target fee currency values in the document. If the fee currency is not specified in the FX Scheme, specify it.

8.1.65 CHCK.BASE:E04

Message Text

"Source service not found".

Response Code

58

Message Description

The system failed to find the source contract Service. The document was rejected when it was posted.

The system can create a message in the following situations:

- Required source contract Service is not found.
- Transaction service and subtypes are missing the information required to find the source contract account, and the source contract Accounting Scheme is missing the account template where the *Account Status* property value in the account type is "Primary".

Recommended Actions

In the first situation, create the required Service in the Service Package of the source contract.

In the second situation, specify the source contract account for posting the transaction. The account should be specified in the corresponding Service of the source contract's Service Package.

After that, repeat the document approval and acceptance procedure (see the section "Document Approval" and the section "Document Acceptance").

8.1.66 CHCK.BASE:E05

Message Text

"Source account not found".

Response Code

58

Message Description

The system fails to find the account in the source contract currency. The document was rejected when it was posted.

The contract account is determined according to the settings of the found Service. If the Service is not found and the Service Package specifies that the default account should be used, the original transactions are posted on the account where the *Account Status* property value in the account type is "Primary". The secondary transactions use the dispute account.

Recommended Actions

Check if the Service Package settings are correct and if the contract Accounting Scheme corresponds to the Service Package.

After that, repeat the document approval and acceptance procedure (see the section "Document Approval" and the section "Document Acceptance").

8.1.67 CHCK.BASE:E12

Message Text

"Routing too long".

Response Code

58

Message Description

The number of transit financial institutions in the interbranch transaction exceeds the max acceptable value – "3". The document was rejected when it was posted.

Recommended Actions

Check and correct the institution routing settings. If more than three transit financial institutions are still required for a document, contact authorized representatives of the WAY4 vendor.

8.1.68 CHCK.BASE:E010

Message Text

"Target message code not found for this channel".

Response Code

12

Message Description

Message indicates that the system has failed to find the message code corresponding to the message channel, transaction type and request category in the reference table. At the same time, the document should be sent through the payment system channel.

The document was rejected when it was posted.

Recommended Actions

Check the message code reference form (see the section "Message Types").

8.1.69 CHCK.BASE:E011

Message Text

"Target processing class not defined".

Response Code

14

Message Description

The *Processing Class* property value is not specified in the outgoing document (to be uploaded to MasterCard Europe).

The document was rejected when it was posted.

Recommended Actions

Check correctness of data in the BIN table (Full → Configuration Setup → Routing → BIN Table).

8.1.70 CHCK.BASE:E012

Message Text

"Target message code not found for affiliated channel".

Response Code

0

Message Description

WAY4 failed to find in the outgoing document the message code specified for the affiliated message channel and transaction type in the WAY4 reference table.

After the document is processed, its *Outgoing Status* becomes "Closed".

Recommended Actions

Check the WAY4 message code reference table (see the section "Message Types").

Please note that the error can be due to the affiliated channel lacking (rightly) support for receiving this kind of message. Because of this, the needed message code configuration may be missing.

8.1.71 CHCK.BASE:E018

Message Text

"Target service not found".

Response Code

57

Message Description

The target contract Service is not found.

The system can create a message in the following situations:

- Required target contract Service is not found;
- Transaction Service and subtypes are missing the information required to find the target contract account, and the target contract's Accounting Scheme is missing the account template where the *Account Status* property value in the account type is "Primary".

Recommended Actions

Create the required Service in the Service Package of the target contract and, if the document was rejected, repeat the document approval and acceptance procedures (see the section "Document Approval" and the section "Document Acceptance"); if the document was posted using the dispute contract, recreate the document (see the section "Reposting a Document") and then approve and accept the new document.

8.1.72 CHCK.BASE:E019

Message Text

"Outgoing service rules not found. Document has been declined."

Response Code

57

Message Description

The system failed to find the target contract Service required for the outgoing document uploaded to the external message channel.

Recommended Actions

To correct the error, create the required Service in the target contract Service Package and repeat the document approval and acceptance procedures (see the section "Document Approval" and the section "Document Acceptance").

8.1.73 CHCK.BASE:E024

Message Text

"Dispute transaction has not unblocked existing pending authorization".

Response Code

57

Message Description

The system failed to post the incoming payment request (presentment, representment or reversal) correctly due to an error when searching for the target contract or the target Service or while matching documents. The reasons are specified in other error messages generated when the document is posted.

At the same time, the system found an authorization with properties corresponding to the document. The authorization amount was not unblocked because the financial document was not posted properly.

8.1.74 CHCK.BASE:E034

Message Text

"Target Account not found".

Response Code

57

Message Description

The system failed to find the dispute contract account kept in the settlement currency of the document. The account is required to post an incoming document received from an external message channel.

The document was rejected when it was posted.

Recommended Actions

Correct the Accounting Scheme of the dispute contract. The scheme should contain dispute accounts in all currencies used by internal FX Schemes.

Repeat the document approval procedure (see the section "Document Approval") and acceptance (see the section "Document Acceptance").

8.1.75 CHCK.BASE:E071

Message Text

"Document will be posted from dispute contract"

Response Code

162

Message Description

The system cannot find the account specified in the Service for the operation when posting a secondary document. Therefore, the document will be posted to the dispute contract.

8.1.76 CHCK.BASE:E081

Message Text

"On-us transaction cannot be posted"

Response Code

57

Message Description

The target contract Service is not found for the document of an operation executed on "our" device with "our" card. The document is declined.

Recommended Actions

Check the target contract's Service Package configuration.

8.1.77 CHCK.BASE:E082

Message Text

"Document will be posted to dispute contract"

Response Code

162

Message Description

The system did not find the needed Service for the target contract for the inward document created from the message channel, or the Service found indicates the wrong account for document posting.

The document will be posted to the dispute contract as the target, using its dispute account.

Recommended Actions

Check why the Service is absent. More detailed information on its search can be found in the document's other messages.

Possible reasons for the error may be:

- Incorrect configuration – add the missing Services or correct the account type in the Service, then repost the document (see the section "Reposting a Document").
- Illegal transaction from the payment system – dispute documents may be created in such cases, if the outward document meets payment system regulations (VISA Operating Regulations Part II/MC Chargeback Guide).

8.1.78 CHCK.BASE:E088

Message Text

"Invalid dispute contract institution"

Response Code

96

Message Description

Parameterization error. Dispute contract required for posting not found, neither in the card contract's FI nor the head office FI.

Recommended Actions

Check the configuration of the dispute contracts.

8.1.79 CHCK.BASE:E121

Message Text

"Dispute contract not found"

Response Code

96

Message Description

The FI's dispute contract is not found when posting the financial document, for example, because the card is absent from the database.

Recommended Actions

Check the configuration for the FI's dispute contract.

8.1.80 CHCK.BASE:E218

Message Text

"Document posted by the dispute conditions"

Response Code

0

Message Description

The target contract Service for the inward financial document has parameter *Service Allowed* = "Dispute". The document is therefore posted according to the Service's conditions with a generated warning.

Recommended Actions

Analyze the parameters of this document.

8.1.81 CHCK.EN:E002

Message Text

"Batch header has not been approved".

Response Code

96

Message Description

You cannot post and accept an individual document of a batch if the batch header has not been approved and accepted. The document was rejected when it was posted.

Recommended Actions

Before accepting an individual document of a batch, execute the batch acceptance and approval.

8.1.82 CHCK.FRM:E01

Message Text

"Message code not configured".

Response Code

96

Message Description

The transaction message code is not available in the reference table. The document was rejected when it was posted.

Recommended Actions

Check if the message code is correct and if required, correct the message code reference table (see the section "Message Types") to support the code.

8.1.83 CHCK.FRM:E02

Message Text

"Transaction type missing".

Response Code

12

Message Description

The transaction type is not specified for the document where the *Service Class* property value is "Transaction". The document was rejected when it was posted.

Recommended Actions

Specify the transaction type in the document.

8.1.84 CHCK.FRM:E03

Message Text

"Invalid service class".

Response Code

12

Message Description

An invalid value is contained in the *Service Class* property in the document of the specified transaction type. The document was rejected when it was posted.

Transaction types can only be specified in the documents where the *Service Class* is "Transaction", "Miscellaneous" or "Credit Limit". If only the transaction type is specified in a document created manually, WAY4 defines the *Service Class* value from the transaction type. As for the documents created on the basis of the incoming messages, the *Service Class* and the transaction type are defined on the basis of the message code (see the section "Message Types").

The error can result from:

- Wrong value of the *Service Class* property in the "Transaction Types" form.
- An error in the data input form, for instance, because it was edited incorrectly.
- An error in the document loading process.

Recommended Actions

Check the *Service Class* field value specified for the document transaction type in the "Transaction Type" form (see the section "Transaction Types and their Parameters"). If no error is found in the field, contact representatives of the WAY4 vendor.

8.1.85 CHCK.FRM:E04

Message Text

"Transaction currency missing, but transaction amount present".

Response Code

13

Message Description

No currency is specified in the presented transaction amount. The document was rejected when it was posted.

Recommended Actions

Specify the required currency in the document and post it again.

8.1.86 CHCK.FRM:E05**Message Text**

"Settlement currency missing, but settlement amount present".

Response Code

13

No currency is specified in the presented settlement amount. The document was rejected when it was posted.

Recommended Actions

Specify the required currency in the document and post it again.

8.1.87 CHCK.FRM:E06**Message Text**

"Reconciliation currency missing, but reconciliation amount present".

Response Code

13

Message Description

No currency is specified in the presented reconciliation amount. The document was rejected when it was posted.

Recommended Actions

Specify the required currency in the document and post it again.

8.1.88 CHCK.FRM:E07**Message Text**

"Target Fee currency missing, but Fee amount present".

Response Code

13

Message Description

No currency is specified in the presented target fee contract amount. The document was rejected when it was posted.

Recommended Actions

Specify the required currency in the document and post it again.

8.1.89 CHCK.FRM:E08

Message Text

"Source Fee currency missing, but Fee amount present".

Response Code

13

Message Description

No currency is specified in the presented source fee contract amount. The document was rejected when it was posted.

Recommended Actions

Check configuration of the data input form; if using a standard form or the message was generated while executing a data loading procedure (pipe), contact WAY4 vendor representatives.

8.1.90 CHCK.FRM:E09

Message Text

"Settlement amount missing".

Response Code

13

Message Description

The settlement amount is not specified in the card transaction document. The document was rejected when it was posted.

Recommended Actions

Specify the settlement amount. If the form does not allow for this, contact WAY4 vendor representatives.

8.1.91 CHCK.FRM:E10

Message Text

"Settlement amount must be positive".

Response Code

13

Message Description

A negative settlement amount is unacceptable in the document. The document was rejected when it was posted.

Recommended Actions

The settlement amount should be a positive value in all documents except "Settlement" transaction type documents.

8.1.92 CHCK.FRM:E11

Message Text

"Transaction date missing".

Response Code

0

Message Description

The transaction date is not specified in the document. The document was rejected when it was posted.

Recommended Actions

Specify the proper transaction date in the document.

8.1.93 CHCK.FRM:E12

Message Text

"Presentment is too late".

Response Code

68

Message Description

The merchant presentment transaction date differs from the DB server system clock date by a value that exceeds the acceptable value. The document was rejected when it was posted.

Recommended Actions

The acceptable time difference between the transaction date and the current system date is 200 days by default. The value can be changed using the "LATE_PRESENTMENT" global parameter (see document "WAY4™ Global Parameters").

8.1.94 CHCK.FRM:E13

Message Text

"Posting date is too late"

Response Code

68

Message Description

The posting date of the document differs from the DB server system date by a value that exceeds a limit. The document was rejected when it was posted.

Recommended Actions

The acceptable time difference between the document posting date and the current system date is 200 days by default. The value can be changed using the "LATE_PRESENTMENT" global parameter (see document "WAY4™ Global Parameters").

8.1.95 CHCK.FRM:E14

Message Text

"Invalid <<Is Authorization> tag ".

Response Code

12

Message Description

The attribute indicating that the document belongs to the financial or authorization category is absent. The document was rejected when it was posted.

The error can result from:

- Wrong configuration of the transaction code (the "Is Authorization" value is not specified) if the Source Message Code value is defined.
- An error in the document creation form, for instance, in case it was incorrectly edited.

Recommended Actions

Check the transaction code settings and the document creation form.

8.1.96 CHCK.GEN:E01

Message Text

"Special fee code not configured"

Response Code

0

Message Description

When processing documents with a value in the Source Fee Code field, the system found that this value is not registered in the SRC_FEE_CODE table.

This field allows the Service to be additionally configured for document processing. This field may be filled by a special procedure before posting, for example, when loading documents to the system. The value given through the procedure for this field should be registered in the SRC_FEE_CODE table.

Recommended Actions

Check that the SRC_FEE_CODE table is filled in and monitor the procedure that fills in the Source Fee Code field in the document.

8.1.97 CHECK.GET_TGT:W06

Message Text

"Used default spc for foreign authorization".

Response Code

0

Message Description

For the card contract no related contract was found with the relation type code specified in the authorization message. Authorization made on the main card contract.

8.1.98 CHCK.MISC:E01

Message Text

"Target contract not found".

Response Code

14

Message Description

The system failed to find in the database the contract specified in the *Target contract number* field of the fee collection document. The document was rejected when it was posted.

Recommended Actions

Correct the document, approve it and execute the acceptance procedure again.

8.1.99 CHCK.MISC:E02

Message Text

"Transaction not allowed".

Response Code

12

Message Description

The fee type specified in the fee collection document is not allowed for the target contract. The document was rejected when it was posted.

The allowed combinations of the fee types and the contract types are listed in the reference form of the fee subtypes ("Full → Configuration Setup → Transaction Types → Fee Types → [Sub Types]").

8.1.100 CHCK.MISC:E03

Message Text

"Service not found".

Response Code

57

Message Description

The system failed to find the required Service or the target contract account of the fee collection document. The document was rejected when it was posted.

The specified fee type is not allowed for the target contract or the Service Package is not configured properly.

8.1.101 CHCK.MISC:E04

Message Text

"Invalid Fee currency".

Response Code

13

Message Description

The settlement currency and/or the fee currency are not specified in the fee collection document or are not specified in the FX scheme of the target financial institution. The document was rejected when it was posted.

Recommended Actions

Check the settlement currency and/or the fee currency in the document and make changes in the FX scheme if required.

8.1.102 CHCK.MISC:E06

Message Text

"Original doc not found for reversal"

Response Code

95

Message Description

The original document collecting the miscellaneous fee was not found for the reversing document. The reversing document was declined.

Recommended Actions

Check and correct the reference numbers in the reversal document, then post the document again.

8.1.103 CHCK.MISC.E11

Message Text

"This is not a "When Available" doc"

Message Description

Operation for unblocking funds that have been blocked after a "When Available" document has been processed is executed for a document with a different parameter (see the section "Posting "When Available" and "When Credit" Documents").

This message may occur, for example, because of an incorrect configuration in the data selected by the user when creating the form or menu item through which the operation was executed.

8.1.104 CHCK.MISC.E12

Message Text

""When available" doc closed"

Response Code

0

Message Description

This message informs the user that the "When Available" financial document and documents collecting a miscellaneous (non-transaction) fee with parameter Category = "When Available" with active global parameter "BLOCK_IF_AVAILABLE_FEE" (see the section "Posting "When Available" and "When Credit" Documents") has been reversed.

8.1.105 CHCK.MISC.E14

Message Text

"Invalid contract"

Response Code

14

Message Description

If the needed target contract is not found during procedure "Renew When Available Fees" (see "Properties of Miscellaneous Fees (Non-transaction Fees)"), it will be impossible to post the financial document, which will take on status "Closed".

8.1.106 CHCK.MISC.E15

Message Text

"Document Expired"

Response Code

54

Message Description

This message is created when processing "When Available" type documents and means that the time interval defined by the Service during which the document may be processed has been exceeded (see the section "Posting "When Available" and "When Credit" Documents").

8.1.107 CHCK.POST_CRED:E001

Message Text

"Target contract credit limit not compatible with product settings".

Response Code

51

Message Description

When the document was posted to lower the credit limit, the amount lowered exceeded the target contract's current credit limit value. The document was declined when posted.

This check occurs only for contracts where the Accounting Scheme contains a "Personal Limit" account template.

Recommended Actions

It is necessary to correct the document amount, subject it to approval and to post it again for processing and acceptance.

8.1.108 CHCK.POST_CRED:E002

Message Text

"Source contract not found".

Response Code

3

Message Description

The system failed to find in the database the contract specified in the *Source Contract Number* field of the document specifying the credit limit. The document was rejected when it was posted.

Recommended Actions

Correct the document, approve it and execute the acceptance procedure again.

8.1.109 CHCK.POST_CRED:E003

Message Text

"Target contract not found".

Response Code

14

Message Description

The system failed to find in the database the contract specified in the *Target Contract Number* field of the document. The document was rejected when it was posted.

Recommended Actions

Correct the document, approve it and execute the acceptance procedure again.

8.1.110 CHCK.POST_CRED:E005

Message Text

"Credit limits can only be added to main contracts".

Response Code

12

Message Description

The credit limit value can only be transferred either form the main contract or from the subcontract of the same main contract as the subcontract for which the credit limit is specified.

Recommended Actions

Specify the respective subcontract in the document or leave the field blank to apply the default value (main contract).

8.1.111 CHCK.POST_CRED:E007

Message Text

"Trivial transaction: Source = Target".

Response Code

12

Message Description

Unacceptable transaction for changing the credit limit: the source contract is the same as the target contract. The document was rejected when it was posted.

Recommended Actions

Correct the source contract number and/or the target contract number values, approve the document and execute the acceptance procedure again.

8.1.112 CHCK.POST_CRED:E008

Message Text

"Deposit contract to be used as source not found".

Response Code

96

Message Description

The source contract is not specified in the document specifying the credit limit value and the deposit contract is not specified in WAY4 for the target contract's financial institution. The document was rejected when it was posted.

Recommended Actions

Specify the source contract in the document or configure the deposit contract of the financial institution defined by the target contract.

8.1.113 CHCK.PREV:E01

Message Text

"Previous document not found for transaction cycle".

Response Code

101

Message Description

The system failed to find the previous document in the transaction cycle.

The previous document of the secondary interbank document is not found.

The previous document is searched for in accordance with the following rules:

- IRN (Issuer Reference Number) of the original and secondary documents should be the same.
- *Source Member ID* field value or the *Target Member ID* field value of the secondary document should be the same as the corresponding field values in the specified fields of the original document.

Recommended Actions

Find the original document manually and correct values in the fields if possible.

8.1.114 CHCK.PREV:E02

Message Text

"Previous document not found for reversal".

Response Code

95.

Message Description

System failed to find the original document of the "Advice", "Part Advice", "Adjustment" or "Request" request category for the reversal document.

The document was rejected or its status became "Decline Service" when it was posted.

Recommended Actions

If the document should be accepted:

- Find the original document manually of the rejected document, correct the document properties used in matching the documents and repeat procedure of the document approval and acceptance.
- If the document status is "Decline Service", you can only solve the problem through transferring the amount (see the section "Account Transfer") from the dispute account to the account of the respective target contract.

8.1.115 CHCK.PREV:E03

Message Text

"Previous document not found for reply".

Response Code

101

Message Description

System failed to find the previous document of a document, for instance, a presentment for a chargeback.

The document was rejected or its status became "Decline Service" when it was posted.

Recommended Actions

If the document should be accepted:

- Manually find the original document of the rejected document, correct the document properties used in matching the documents and repeat document approval and acceptance.
- If the document status is "Decline Service", you can only solve the problem through transferring the amount (see the section "Account Transfer") from the dispute account to the account of the respective target contract.

8.1.116 CHCK.PREV:E04

Message Text

"Reversal declined".

Response Code

95

Message Description

The system rejected the reversal document as it failed to find the original document. It generates a message for created documents based on the messages received from "our" devices or via the affiliated message channel.

Recommended Actions

The system searches for the original document according to the rules described in the "CHCK.PREV:E02" section.

8.1.117 CHCK.PREV:E10

Message Text

"Cannot reverse history document".

Response Code

95

Message Description

It is unacceptable to reverse a document imported with the Interchange Inward/Outward History processes. The document was rejected when it was posted.

8.1.118 CHCK.PREV:E11

Message Text

"Previous doc is not posted"

Response Code

0

Message Description

While processing the reversal, the system found that the original document had not yet been posted, for example, because its posting date is later than the current date. The reversal document will retain *Posting Status* = "Waiting".

Recommended Action

The reversal document may be posted only after the original document is posted.

8.1.119 CHCK.PREV:E12

Message Text

"Nonmatching authorization found with the same authorization code"

Response Code

102

Message Description

While attempting find a matching document for the financial document during posting, the system could not find the required authorization document. However, it found an authorization with the same authorization code as the financial document. The financial document is posted, but the system generates a warning.

Recommended Actions

Check the parameters in the found authorization document.

8.1.120 CHCK.PREV:E14

Message Text

"Presentment with the same auth code"

Response Code

102

Message Description

While posting the financial document, two presentments were found with the same authorization code.

Recommended Actions

Analyze the documents, as this could be a dispute situation.

8.1.121 CHCK.PREV:E15

Message Text

"Inward reversal converted to advice".

Response Code

95

Message Description

This is a maintenance message. The system failed to find the original document of the incoming reversal document. So it converts the latter into the original document and reverses the transaction amount sign.

8.1.122 CHCK.PREV:E21

Message text

"Presentment transaction type differs from authorization transaction type"

Response code

0

Message description

When matching in the process of posting a financial document, the corresponding authorization document is found (matching by RRN was successful). However, the authorization document's transaction type differs from that of the financial document. The financial document is posted with a warning.

8.1.123 CHCK.PREV:E069

Message Text

"Cannot reverse doc which invoked interest calculation".

Response Code

57

Message Description

If document posting results in automatic calculation of the loan interest (in the "Calculate when Credit" mode), document reversal is unacceptable.

The document was rejected when it was posted.

Recommended Actions

Such a document can only be reversed using Accounting Transactions (see the section "Accounting Transaction").

8.1.124 CHCK.PREV:W01

Message Text

"Settl currency differs for reversal".

Response Code

102

Message Description

The settlement currency values are not the same in the reversal and the original documents.

Recommended Actions

Check properties of the reversal document.

8.1.125 CHCK.PREV:W02

Message Text

"Trans currency differs for reversal".

Response Code

13

Message Description

The transaction currency values are not the same in the reversal and the original documents.

Recommended Actions

Check properties of the reversal document.

8.1.126 CHCK.PREV:W03

Message Text

"Invalid amount for reversal".

Response Code

102

Message Description

The amount of the reversal document specified in the settlement currency is not equal to the respective amount in the original document.

Recommended Actions

Check properties of the reversal document.

8.1.127 CHCK.PREV:W04

Message Text

"Reversal converted to adjustment".

Response Code

0

Message Description

The transaction amount values in the reversal and original documents are not the same. The system converts the reversal document into the adjustment document.

8.1.128 CHCK.PREV:W05

Message Text

"Replaced amount more than original"

Response Code

103

Message Description

The amount of the adjustment document specified in the settlement currency is more than the corresponding amount in the original document.

Recommended Actions

Check properties of the adjustment document.

8.1.129 CHCK.ROUTING:E01

Message Text

"Interbranch routing not found".

Response Code

58

Message Description

The system was supposed to post the document to contract accounts belonging to different financial institutions but it fails to find the routing.

The situation can emerge when the routing for an external channel of a financial institution refers to the Interchange Routing contract of another financial institution, but the corresponding Interbranch Routing is not specified. The document was rejected when it was posted.

Recommended Actions

Correct settings of the Interchange Routing and/or the Interbranch Routing.

8.1.130 CHCK.ROUTING:E02

Message Text

"Invalid Routing for <...>

Message Description

The required Service for the Interbranch Routing contract was not found.

Recommended Actions

Make the necessary corrections in the Interbranch Routing configuration.

8.1.131 CHCK.ROUTING:E03

Message Text

"Interbranch accounts not found".

Response Code

58

Message Description

Neither the source contract account nor the target contract account are specified in the Interbranch routing. The document was rejected when it was posted.

Recommended Actions

Correct the setting of the Interbranch Routing.

8.1.132 CHCK.ROUTING:E10

Message Text

"Invalid settlement currency".

Response Code

96

Message Description

The settlement currency is not specified in the interbranch transaction document and in the FX scheme of the financial institution referred to by the macrotransaction. The system selects the currency according to the document currency and the interbranch routing configuration. The document was rejected when it was posted.

Recommended Actions

Check values of the settlement currency and correct the FX scheme if required.

8.1.133 CHCK.ROUTING:E11

Message Text

"Invalid Routing (Source)"

Response Code

96

Message Description

The message is an indicator of an error in the interbranch routing configuration.

The error can emerge in the following situations:

- The system failed to find the Service for the interbranch routing contract. In this case, the system rejects the document if the "DEFAULT_INST_ROUTING" global parameter value is "N". Otherwise the system posts the document using the default accounts specified in the Interbranch Routing configuration (there is no message generated). In any case, check settings of the Service Packages of the Interbranch Routing contracts.

8.1.134 CHCK.ROUTING:E21

Message Text

"Routing contract <...> does not contain account <...>

Message Description

There is an error in the Interbranch Routing configuration.

The required account could not be found in the routing contract.

Recommended Actions

Make changes to the Interbranch Routing configuration.

8.1.135 CHCK.S_T:E01

Message Text

"Source number missing".

Response Code

3

Message Description

The source contract identifier is missing (in a source document, it is normally the device number or the account number).

8.1.136 CHCK.S_T:E02

Message Text

"Receiving Member ID missing".

Response Code

3

Message Description

The system failed to find the transaction data target ID for the incoming document.

Recommended Actions

Check correctness of the incoming file, used to receive the message that led to creation of the document.

8.1.137 CHCK.S_T:E03

Message Text

"Target number missing".

Response Code

30

Message Description

The target contract identifier is not specified in the document (in a source document, it is normally the card number or the account number).

8.1.138 CHCK.S_T:E05

Message Text

"Invalid card parms"

Response Code

14

Message Description

Unacceptable card contract parameter; for example, a Luhn Digit value, the primary account number (PAN), or an unacceptable transaction type for a bankcard used to electronically swipe data. The validation is only carried out for outgoing card documents.

Recommended Actions

If an error occurs when a document is created, specify the correct card number in the *Target Number* field.

8.1.139 CHCK.S_T:E06

Message Text

"No Source contract found".

Response Code

3

Message Description

The system failed to find the source contract of the transaction. The document was rejected when it was posted.

The system searches for the source contract as follows:

- For secondary or reversal documents: if the previous document is found; contract is searched for using properties of the previous document.
- For interbank documents: contract is searched for using the *Source Member ID* or the *Target Member ID* field values depending on which channel is external.
- For documents where the source channel is represented with "our" card channel: contract's source number is the same as the number stored in the database.
- For documents where the source channel is represented with affiliated or external channels: the source contract is searched for using the Source Member ID or Rec Member ID and the source channel; in this situation the message can be followed by a number of messages explaining what caused the error during the search for the source contract.

Recommended Actions

Check correctness of the corresponding field values in the document and execute the document approval and acceptance procedure again.

8.1.140 CHCK.S_T:E07

Message Text

"Can not send doc to source channel".

Response Code

14

Message Description

When an external message channel is used, the channels of the transaction source and target contracts are the same, i.e., the document received from the payment

system should be sent back according to the routing rules to the same payment system which is unacceptable.

The document is posted in the dispute cycle.

Recommended Actions

The dispute document can be created if it is provided by the payment system regulations.

8.1.141 CHCK.S_T:E10

Message Text

"Source institution missing".

Response Code

3

Message Description

The financial institution or the contract subtype is not specified in the source contract.

Or, the "Clearing In" property value is not specified in the financial institution of the source contract.

Recommended Actions

Check the configuration of the source contract and/or of the financial institution.

8.1.142 CHCK.S_T:E08

Message Text

"No target contract found".

Response Code

14

Message Description

The system fails to find the transaction's target contract.

The document was rejected or posted using the dispute contract. The dispute contract can only be used to post incoming documents of the payment systems; in this situation the system creates an additional message (see "CHCK.S_T:E09").

For the documents where the source channel is a channel belonging to "our" cards, the system searches for the target contract as follows:

- For secondary or reversal documents if the previous document is found: contract is searched for using the previous document properties.

- For all other documents: contract is searched for using the target number and target channel (as it is specified). If the database stores the contract where the number is the same as the target number, the contract is used as the target contract. If such a contract is not available, the target contract is searched for in the BIN table.

Searching the BIN table is based on the bank card number and Transaction Condition. If more than one record is found in the BIN table, the respective BIN group priority value is applied (Full → Configuration Setup → Routing → BIN Group).

8.1.143 CHCK.S_T:E09

Message Text

"Document will be posted to dispute contract".

Response Code

14

Message Description

The document will be posted using the dispute contract as the target contract.

The message is created when the system fails to find the target contract for the incoming document received through payment system channels.

For a document where the source channel is not "our" card channel, the system searches for the target contract as follows:

- For secondary or reversal documents if the previous document is found: contract is searched for using the previous document properties.
- For the interbank documents: the target contract is searched for using the target number or the target member ID.
- For all other documents: the target contract is searched for using the target number and target channel (is it is specified). If the database stores the contract where the number is the same as the target number, the contract is used as the target contract. If such a contract is not available, the target contract is searched in the BIN table.
- A search in the BIN dictionary is made by bankcard number (Target Number) with consideration of transaction conditions and by the identifier of the recipient for the corresponding channel (Target Member ID). If more than one record is found in the BIN table, the corresponding BIN group priority value is applied (Full → Configuration Setup → Routing → BIN Group).

8.1.144 CHCK.S_T:E11

Message Text

"Source institution missing".

Response Code

3

Message Description

The FI or contract subtype is not indicated for the source contract.

Another possible scenario is that the "Clearing In" parameter is not indicated for the source contract's FI.

Recommended Actions

Check the configuration of the source contract and/or the financial institution.

8.1.145 CHCK.S_T:E009

Message Text

"Card BIN not on file".

Response Code

14

Message Description

The system fails to find the BIN of the interbank document's card number in the BIN table. The document was rejected when it was posted.

The system finds the BIN of the card number based on the target contract identifier (Target Number) in the BIN table (Full → Configuration Setup → Routing → BIN Table) for the source or target channel (external).

The system searches for the BIN table using the card number. If more than one record is found in the BIN table, the respective BIN group priority value is applied (Full → Configuration Setup → Routing → BIN Group).

Recommended Actions

Check if the card number is correct in the document and update the BIN table if required.

8.1.146 CHCK.S_T:E059

Message Text

"Card with our BIN not on file".

Response Code

14

Message Description

WAY4 failed to find card contract for the specified card number in the database; however, the card number falls within the range of "our" numbers as configured in contract subtypes.

Recommended Actions

If an error occurs when a document is created, specify the correct card number in the *Target Number* field. If the error is caused by a document from an external payment system, a dispute document can be created if it is provided by regulations of the payment system.

8.1.147 CHCK.S_T:W059

Message Text

"There is no Card with our BIN on file".

Response Code

0

Message Description

WAY4 failed to find card contract for the specified card number in the database; however, the card number falls within the range of "our" numbers as configured in contract subtypes. The corresponding contract subtype is indicated in global parameter EXCEPTION_BINS, that is, the document is sent to the target according to Interchange Routing rules (as set in the BIN table).

8.1.148 CHCK.TRANSF:E001

Message Text

"Target account not found".

Response Code

14

Message Description

The system failed to find the target contract account for the document transferring money from an account to an account. The document was rejected when it was posted.

The target contract account is searched for using the following field values in the document:

- Target Number
- Target Acc Type
- Target Account Currency (if specified)

- Settlement Currency if Target Account Currency is not specified.

The system creates the message if it fails to find the target contract, if the required account type template kept in the specified currency is not available in the Accounting Scheme of the contract, or if one of the properties used to search for the account is not specified in the document.

Recommended Actions

Check if the properties above are specified correctly.

8.1.149 CHCK.TRANSF:E002

Message Text

"Source account not found".

Response Code

3

Message Description

The system failed to find the source contract account for the document transferring money between accounts. The document was rejected when it was posted.

The account is searched for using the following field values in the document:

- Source Number
- Source Acc Type
- Settl Curr

The system creates the message if it failed to find the source contract by its identifier, the required account type template kept in the specified currency is not available in the Accounting Scheme of the source contract, or if one of the properties above is not defined in the document.

Recommended Actions

Check if the properties above were defined correctly.

8.1.150 CHCK.TRANSF:E004

Message Text

"Invalid settlement currency".

Response Code

12

Message Description

The settlement currency is not specified in the document transferring money between accounts or in the FX Scheme of the source contract's financial institution or the target contract. The document was rejected when it was posted.

Recommended Actions

Check the settlement currency value in the document and make changes in the FX scheme if required.

8.1.151 CHCK.TRANSF:E006

Message Text

"Interbranch transfer not allowed".

Response Code

12

Message Description

It is prohibited to transfer money from an account of a branch to an account of another branch.

Recommended Actions

If the transaction must be executed, create two documents (to make a transfer to and from a correspondent account) or take advantage of an accounting transaction (see the section "Accounting Transaction").

8.1.152 EXT_RESP_CODE:W001

Message Text

"Custom Response Code".

Message Description

Standard response code is changed by a custom procedure.

8.1.153 EXT_RESP_CODE:W002

Message Text

"Custom Response Code. Standard RC=%%".

Message Description Standard response code changed by custom procedure.

8.1.154 EXT_RESP_CODE:W002

Message Text

"Outward Response Code".

Message Description

Response code for NetServer response.

8.1.155 CHCK.GEN:E01

Message Text

"Special fee code not configured"

Response Code

0

Message Description

While posting the financial document, the system found that the value of parameter Source Fee Code does not correspond to the value registered in the system dictionary of the same name.

Recommended Actions

Check the configuration of the Source Fee Code dictionary or the pipe parameters used for document loading.

8.1.156 GET_ERR_LEVEL:E01

Message Text

Unknown Response code <>.

Response Code

96.

Message Description

Unknown error code. Error code is not registered in the system.

8.1.157 SET_DOC_ERROR:E01

Message Text

"Response code conflict. Old=<>, new=<>".

Message Description

Conflict of errors with the same priority.

8.1.158 SET_LIMIT_ACQ:I01

Message Text

"Usage Limiter RC"

Message Description

When checking usage limiters the response code changed. The response code is taken from the usage limiter.

8.1.159 USG.ADD_LIMIT:E003

Message Text

"Usage Limit %% Number Exceeded"

Message Code

63

Message Description

The permitted number of operations has been exceeded. Authorization is declined.

8.1.160 USG.ADD_LIMIT:E004

Message Text

"Usage Limit %% Amount Exceeded"

Response Code

61

Message Description

The permitted amount of operations has been exceeded. Authorization declined.

8.1.161 USG.ADD_LIMIT:E005

Message Text

"Usage Limit %% Exceeded"

Response Code

51

Message Description

The limiter threshold has been exceeded. Authorization declined.

8.1.162 USG.ADD_LIMIT:E006

Message Text

"Usage Limit %% Response"

Response Code

Determined in the limiter.

Message Description

The limiter threshold has been exceeded. Authorization declined.

8.1.163 USG.ADD_LIMIT:E009

Message Text

"Not sufficient funds available".

Message Code

51

Message Description

Insufficient funds to execute the transaction.