WAY4™ CB Gate Setup (iRouter)

Contents

Introduction

This document is intended for WAY4 CB Gate administrators (bank or processing centre employees) responsible for installing and configuring the product on the WAY4™ Transaction Switch platform with the iRouter component.

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

- "WAY4™ CB Gate", (CB_Gate_Function_Specification.pdf).

- "STIP Balance File Formats", (STIP_Balance_Format.pdf).

- "WAY4™ CB Gate Operation", (CB_Gate_Operation.pdf).

- "Installing and Configuring WAY4™ Transaction Switch Platform-Based Solutions" (Transaction_Switch_Setup.pdf).

- "Events", (Events.pdf).

- "Balance Types", (Balance_types.pdf).

- "WAY4™ Service Packages", (Service_Packages.pdf).

- "Working with Stop Lists", (stop_list.pdf).

- "WAY4™ Client and Contract Classifiers", (Contract_and_Client_Classifiers.pdf).

- "Documents", (Documents.pdf).

- "Usage Limiters" (Usage_Limiters.pdf).

The following notation is used throughout the document:

- Field labels in screen forms are shown in *italics*.

- Button labels used in screen forms are shown in square brackets, as in [Approve].

- User menu item selection sequences are shown with arrows, as follows: "Issuing → Contracts Input & Update".

- System menu item selection sequences are shown with arrows, as follows: "Database => Change password".

- Key combinations used when working with DB Manager are shown in angular brackets, for example <Ctrl>+<F3>.

- The names of directories, files and file paths that vary for each local instance of the program are also displayed in angular brackets, like <OWS_HOME>.

- Warnings about potentially hazardous situations or actions are marked with the ⚠ sign.

- Messages marked with the 🛈 sign contain information about important features, additional options, or the best use of certain system functions.

Chapter 1. Overview

WAY4 CB Gate provides issuers an online interface between WAY4 and the core banking system (CBS) to check for available funds when making card transactions. If the CBS is unavailable, Stand-In Processing (STIP) mode can be used. In this case, an authorisation request may be approved based on data loaded earlier to WAY4 from the CBS.

CB Gate places the task of balance checking on the CBS. When an authorisation request comes in, WAY4 is used to check control values, card status, and contract usage limiters. Then a request is sent to the CBS to check that the client's account contains the required funds, and depending on the response, the transaction is either permitted or declined.

WAY4 CB Gate allows bank clients to make card transactions within the limits of an account contract's balance. This makes it possible for clients to control their funds and lower the risk of overdraft.

WAY4 CB Gate makes it possible to calculate fees and transmit them to the CBS when posting authorisations.

A more detailed description of the solution's architecture is provided in the functional specification "WAY4™ CB Gate".

Chapter 2. Installation and Setup

Procedure for installing and setting up WAY4 CB Gate:

- Configuring WAY4 Transaction Switch.

- Configuring WAY4 CB Gate.

- Additional Functionality: configuring substitution of acquirer ID in messages (ISO8583 standard, field 32) sent to the CBS, settings required to process authorisation requests in STIP mode and to send authorisation notifications with guaranteed delivery using the Store-and-Forward (SaF) queue.

Configuring WAY4 Transaction Switch (TS) Services

WAY4 Transaction Switch main configuration parameters, and specifics of setting up rules for routing between services are described in the section "Configuration" of the document "Installing and Configuring WAY4™ Transaction Switch Platform-Based Solutions".

The following WAY4 Transaction Switch parameters are key for WAY4 CB Gate:

- IRouter – software component responsible for smart processing and routing of authorization requests, in particular, with a check of amounts available in the CBS and in STIP mode.

- WAY4H2HCBSAdapter – software component responsible for interaction between the IRouter service and the CBS.

- WAY4H2HCBSSAF – software component responsible for sending the CBS notifications about authorizations that were made in STIP mode using the "Store and Forward" (SAF) mechanism.

In this case, WAY4H2HCBSAdapter acts as the client, and the CBS as the server. The network connection with the CBS is set up in the WAY4H2HCBSAdapter.s.xml configuration file. In particular, the IP address of the server on which the CBS operates and the number of the port it listens on must be specified as attributes of the <transport> element:

```
...
<appComponent>

        <transport

                xsi:type="ExternalClient"

                host="?????"

                port="12345"

        >
...

</appComponent>
...
```

Additional settings for services (in IRouter.s.xml, WAY4H2HCBSSAF.s.xml and WAY4H2HCBSAdapter.s.xml configuration files) are not required. If they be

changed, it is recommended to consult OpenWay specialists.Configuring WAY4 CB Gate

WAY4 CB Gate is set up by doing the following:

- Configuring a Domain.

- Configuring Transaction Message Types.

- Configuring an Authentication Type.

- Configuring Routing of Transaction Messages for the CBS.

- Registering Authorisation Procedures.

- Registering Message Channels.

- Configuring Contracts of Transactions Authorised in the CBS.

- Configuring Service Packages for Processing Transactions in the CBS.

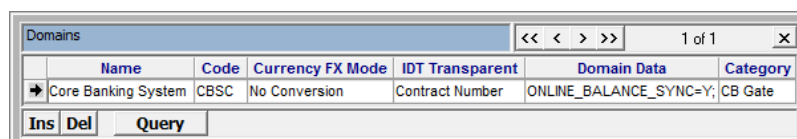- Configuring Sending Card Status Change Messages to the CBS.

Configuring a Domain

A domain is configured in the "Domains" form, menu item "CB Gate → Configuration → Domains".

A domain is a set of rules for interacting with a certain CBS: rules for FX conversion of transaction amounts, PAN masking, synchronising STIP balances.

If the user is a processing centre, the number of domains must match the number of CBS with which the processing centre communicates.

Example of domain setup:

Domains				<< < > >>	1 of 1	×
Name	**Code**	**Currency FX Mode**	**IDT Transparent**	**Domain Data**		**Category**
→ Core Banking System	CBSC	No Conversion	Contract Number	ONLINE_BALANCE_SYNC=Y;		CB Gate
Ins Del	Query					

Fig. 1. Domain configuration

The "Domains" form contains the following fields:

- *Name* – domain name.

- *Code* – domain code that will be used to identify, for example, a card contract's relation with the corresponding CBS.

- *Currency FX Mode* – rule for FX conversion of a transaction (Settlement Amount):

  - "No Conversion" – no conversion, the settlement amount is sent to WAY4H2HCBSAdapter unchanged.

  - "To Domain Currency" – conversion to the domain currency. The settlement amount will be sent to WAY4H2HCBSAdapter in the domain currency. This option is used, for example, when the CBS only supports one currency. The domain currency must be specified in the *Domain Data* field, in the value of the DOMAIN_CURR tag. For example, DOMAIN_CURR=840.

  - "To Contract Currency" – conversion to the contract currency. The settlement amount will be converted to the card contract's currency.

- *IDT Transparent* – PAN substitution rule:

  ▪ "Contract Number" – indicates that when sending a transaction message to the CBS, the number of the contract in WAY4 (Contract Number) will be transmitted in field 102.

  ▪ "Self CBS Number" – indicates that when sending a transaction message to the CBS, the number of the card contract in the banking system (RBS_NUMBER) will be transmitted in field 102.

  ▪ "Billing CBS Number" – if transactions are made with a subordinate card contract, when sending a transaction message to the CBS, the number of the higher-ranking account contract in the banking system will be sent in field 102. Therefore, all messages in the SaF queue that were generated for transactions made with any card contract will be under one higher-ranking account contract.

- *Domain Data* – rule for online synchronization of STIP balances (see the section "STIP Settings in the Domain").

Configuring Transaction Message Types that are Processed

To set up routing of transaction messages depending on their type, possible message types must have been registered in the "Message Types" form, menu item "CB Gate → Configuration → Message Types".

Message Types			‹‹ ‹ › ›› 1 of 4 ✕
Name	**Code**	**Dr Cr**	**Msg Rules**
➔ ATM	0719	Debit	
Balance Inquiry	BQ	None	
Cash	0717	Debit	
Retail	0515	Debit	
Ins Del	Query		

Fig. 2. Message types that are processed

"Message Types" form fields:

- *Name* – message type name.

- *Code* – transaction message code. The value is the code of the corresponding transaction type, set in the *Trans Type IDT* field of the "Transactions - All" form ("Full → Configuration Setup → Transaction Types → Transactions - All").

- *Dr Cr* – transaction direction (Credit, Debit, None).

- *Msg Rules* – additional parameters in the form of tags (see the section "Tags Used when Posting Documents" of the document "Documents").

Configuring an Authentication Type

Authentication types are configured in the "Authentication Types" form, menu item "CB Gate → Configuration → Authentication Types" (see Fig. 3):

Authentication Types		‹‹ ‹ › ›› 1 of 7 ✕
Name	**Code**	**Auth Type Category**	**Is Ready**
Normal Card (Default account)	00	Auth Scheme	Ready
Ins Del	Query	Edit	Parms	Domains

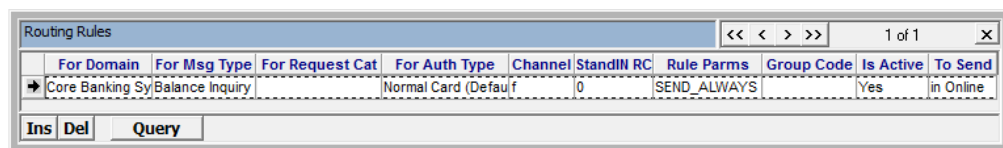*Fig. 3. Configuring the code to authenticate an account type*

If a bankcard was processed in the Visa network and when making a transaction, the client selected the option to choose an account, his selection will be shown in an ISO8583 message in field 03 ("Processing code"), in positions 3 and 4 (for example, field 03: 304000 – balance request for "Universal" account type). The authorisation service doesn't change this value. A check is made in the IRouter Service that this account type is supported. Then a search is made in WAY4 for contracts with this account type.

"Authentication Types" form fields:

- *Name* – name of authentication type.

- *Code* – authentication type code: possible values: "00", "10", "20", "30" and "40".

- *Auth Type Category* – authentication type category.

- *Is Ready* – indicates whether the authentication type has been approved:

  ▪ "Ready" – changes have been approved.

  ▪ "Not Ready" – changes have not been approved.

Configuring Routing of Transaction Messages for the CBS

Routing of transaction messages for the CBS is configured in the "Routing Rules" form, menu item "CB Gate → Configuration → Routing Rules". Configure a routing rule, for example (see Fig. 4):

	For Domain	For Msg Type	For Request Cat	For Auth Type	Channel	StandIN RC	Rule Parms	Group Code	Is Active	To Send
→	Core Banking Sy	Balance Inquiry		Normal Card (Defau	f	0	SEND_ALWAYS		Yes	in Online

Routing Rules   << < > >>   1 of 1   ✕

Ins | Del   Query

Fig. 4. Rule for routing transaction messages for the CBS

A message is routed according to rules set in the fields *For Domain*, *For Msg Type*, *For Request Cat*, *For Auth Type*. The H2H routing service specified in the *Channel* field will be selected for these data.

"Routing Rules" form fields:

- *For Domain* – name of the domain for which the rule is used.

- *For Msg Type* – name of the message type for which the rule is used.

- *For Request Cat* – category of message for which the rule is used.

- *For Auth Type* – name of the authentication type for which the rule is used. If no value is set, any authentication type can be used.

- *Channel* – code of the H2H message service for the CBS. The field's value must correspond to the message channel setup and the code of the H2H service in the TS configuration (see **Error! Reference source not found.**).

- *To Send*

  ▪ "in Online" – all authorisation messages (Request and Advice) will be sent to the CBS online. If there is no connection with the CBS, messages will be sent to the SaF queue.

  "in Online" is the default value (if the field is empty).

  ▪ "Never Send" – authorisation messages will not be sent to the CBS.

- ▪ "as SAF Advice" – all authorisation messages (Request and Advice) will be sent to the SaF queue. This value is not recommended. NetServer automatically performs a similar action in real time when there is a peak load on WAY4H2HCBSAdapter.

- *StandIN RC* – code of the response to an authorisation message if there is no connection with the CBS. If the response code value is "00", the transaction can be permitted.

- *Rule Parms* – rule for processing a transaction message using the SaF queue (see the section "Use of the SaF Queue for Processing a New Authorisation Request")

- *Group Code* – reserved for forward compatibility.

- *Is Active* – indicates whether the rule is active.

Registering Authorisation Procedures

To register authorisation procedures, manually execute the following scripts (ows_home\opt\cb_gate directory):

- opt_cb_gate_b.sql

- opt_cb_gate_s.sql

⚠ When installing the scripts listed below, custom settings made earlier in these scripts must be considered:

- cust/cust_add_serv.sql

- cust/cust_auth_bal_str.sql

- cust/cust_auth_end_request.sql

- cust/cust_auth_get_av.sql

- cust/cust_check_contract.sql.

ℹ In WAY4, it is possible to work with a client balance that is processed in the CBS without using custom procedures (in particular, cust_check_contract and cust_auth_get_av). This functionality can be enabled in a card Product's settings (menu item "Full → Configuration Setup → Products → Product Definition → Products") by setting the tag CBS_CH=<channel_code >; (see "Registering Message Channels") in the *Custom Data* field.

Registering Message Channels

To set up rules for processing transaction information, in the WAY4 DB, register the channel for interacting with the CBS with the "f" code. Setup is performed in the "Message Channels" form, menu item "Full → Configuration Setup → Main Tables → Message Channels":

Message Channels		<< < > >>		33 of 36	×
Name	**Code**	**Is On Us**	**Contra Channel**	^	
CBS	f	Yes		v	
Ins Del Query					

Fig. 5. Message channel setup

The value in the *Code* field must match the code that is specified in the corresponding TS configuration routing rule (Routing.s.xml):

```
<appComponent xsi:type="RoutingService">

…

<rule sourceService="IRouter" protocol="iss_fp" tags="TCH:f"
targetAddress="WAY4H2HCBS" name="To CBS"/>

…

</appComponent>
```

Configuring Contracts of Transactions Authorised in the CBS

As soon as the IRouter service determines that it is necessary to contact the CBS for authorisation of a transaction message, a route for it is searched for in the WAY4 database. A search is made for the domain to which card contracts belong and its routing rule.

Therefore, for card contracts used for transactions that are authorised in the CBS, the following must be specified ("Issuing → Contracts Input & Update → Issuing Contracts (Private) → [Cards]"):

- In the *RBS #* field – the number that identifies the client's account in the RBS.

- In the *Member ID* field – the code of the domain that was created earlier (see "Configuring a Domain").

When registering card contracts that are subordinate to a higher-ranking contract according to a "Main/Sub" type, these values are automatically inherited from the higher-ranking account contract.

Fig. 6. Configuring client contracts

Configuring Service Packages for Processing Transactions in the CBS

If custom procedures are used to work with a client balance that is maintained in the CBS (see "Registering Authorisation Procedures"), it is necessary to configure a Service Package allowing the authorisation of certain transactions in the CBS.

Specify the tag CHANNEL=f; in the *Special Parms* field of the corresponding Service Package's "Private Card Service Packs" form ("Full → Configuration Setup → Products → Issuing Private Products → Private Card Service Packs"). The letter "f" corresponds to the WAY4H2HCBSAdapter channel code (see "Registering Message Channels"), for example:

- *Name* – "001-Our Priv VISA"

- *Contract Type* – "Our VISA Cards"

- *Special Parms* – "CHANNEL=f;"

- *Is Ready* – "Ready"

Fig. 7. Service Package for processing transactions authorised in the CBS

Configuring Sending Card Status Change Messages to the CBS

If a message about a change in card status must be sent to the CBS, set up an Event that causes the card to be put in a stop list. Online notifications can be sent when a card is put in a stop list (see the document "WAY4™ Stop Lists").

Notifications about putting a card in a stop list are sent to the CBS using the DBFileUpdate service that operates on the TS platform. Example of the DBFileUpdate.s.xml configuration file:

```xml
<service address="DBFileUpdate" autoStarted="false" xmlns:xsi="
http://www.w3.org/2001/XMLSchema-
instance" xsi:noNamespaceSchemaLocation="../../temp/ts-
config.xsd">

  <appComponent

  xsi:type="DBAdapter"

  >

<script class="com.openwaygroup.ts.iso8583.h2h.impl.dbadapter.
stoplist.Service"/>

  <poller maxParallelRequests="1"

          pollingInterval="60000"

          maxCursorSize="500"

          maxInjectionSpeed="300"

          maxWorkers="2"

          workersPerNode="1">

<script class="com.openwaygroup.ts.iso8583.h2h.impl.dbadapter.
stoplist.FileUpdatePoller"/>

  </poller>

  </appComponent>

  <dependency service="WAY4DB"/>

</service>
```

In the Routing.s.xml configuration file, configure a routing rule, for example, that appears as follows:

```xml
<appComponent xsi:type="RoutingService">

…

<rule sourceService="IRouter" protocol="iss_fp" tags="TCH:f"
targetAddress="WAY4H2HCBS" name="To CBS"/>

…

</appComponent>
```

Set the global parameter STOPLIST_TS_CHANNELS to "f" (WAY4H2HCBSAdapter channel code, see "Registering Message Channels"). Global parameters are set up in the "Additional Global Parameters" form, menu item "Full → Configuration Setup → Main Tables → Additional Global Parameters".

Custom procedures should also manually be loaded (ows_home\opt\cbg_sl directory):

- opt_cbg_sl_s.sql

- opt_cbg_sl_b.sql

⚠ When installing the scripts listed below, custom settings made earlier in these scripts must be considered:

- cust_contr_st_ch.sql

- cust_evnt_close.sql

- cust_evnt_post.sql
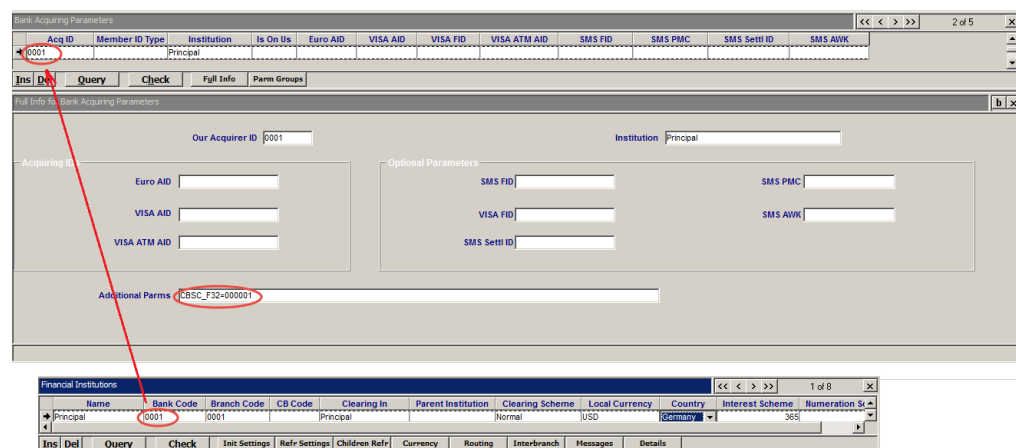
Additional Functionality

The section describes settings for WAY4 CB Gate additional functionality.

Substitution of Acquirer ID

If necessary, the following settings can be used to substitute acquirer ID in messages (ISO8583, field 32) sent to the CBS.

Set parameters for online communications with the CBS for the WAY4H2HCBSAdapter service. Determine the acquirer that will be specified in field 32 of the ISO8583 message. To do so, in the *Acq ID* field of the "Bank Acquiring Parameters" form (menu item "Full → Configuration Setup → Main Tables → Bank Acquiring Parameters") for the "Principal" financial institution, specify the value of the financial institution's *Bank Code* field, for example, "Principal", from the "Financial Institutions" table (menu item "Full → Configuration Setup → Main Tables → Financial Institutions"). Use the [Full Info] button to open the "Full Info for Bank Acquiring Parameters" form. In the *Additional Parms* field, add the tag "CBSC_F32=000001" ("CBSC" as "Acquiring member") (see Fig. 8).

Fig. 8. Settings for online communication with the CBS

To specify the TS adapter's link with the main financial institution, the configuration file of the WAY4H2HCBSAdapter service must contain the following parameters:

```
<ask_acquirer_params name_for_aid ="CBSC_F32"/>
```

Configuring STIP

The following settings are required to support Stand-In Processing (STIP).

STIP Settings in the Domain

Rules for synchronising STIP balances are configured using tags in the Data Domain field of the "Domains" form see Fig. 1).

The rule for online synchronisation of STIP balances is defined using the ONLINE_BALANCE_SYNC tag:

- ONLINE_BALANCE_SYNC=N; – the STIP balance is not sent in the online response from the CBS (field 54).

- ONLINE_BALANCE_SYNC=Y; – the STIP balance will be sent in the online response from the CBS (field 54);

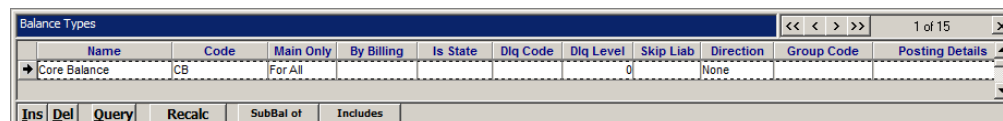 The default value is ONLINE_BALANCE_SYNC=Y;.

The SKIP_TRN_REF_CHCK; tag is used to define the rule for importing STIP balances from the CBS to WAY4. If the file imported to WAY4 does not contain the identifier of the last authorisation message (LastAuthId) for a contract, when the SKIP_TRN_REF_CHCK; is set, transactions recorded in WAY4 for this contract are not matched.

Configuring a Balance Type for STIP

Register a balance type whose value will be used by STIP (if transactions are permitted when there is no connection with the CBS). The balance type is registered in the "Balance Types" handbook as follows:

- *Code* – "CB"; this value is hardcoded and cannot be changed.

- *Name* – "Core Balance"

- *Posting Details* – the field is not filled in

Setup is performed in the "Balance Types" form, menu item "CB Gate → Configuration → Balance Types" (see Fig. 9).

Balance Types										‹‹ ‹ › ››	1 of 15	✕
Name	**Code**	**Main Only**	**By Billing**	**Is State**	**Dlq Code**	**Dlq Level**	**Skip Liab**	**Direction**	**Group Code**	**Posting Details**		
→ Core Balance	CB	For All				0		None				

Ins	Del	Query	Recalc	SubBal of	Includes

Fig. 9. Configuring a balance type for STIP

The "Balance Types" form is described in detail in the section "Registering Balance Types" of the document "Balance Types".

A balance type for STIP can be redefined a specific card Product's settings. A balance type code is set in the tag STIP_BT=<BalanceTypeCode>; in the Product's *Custom Data* field (menu item "Full → Configuration Setup → Products → Product Definition → Products"). If the tag is not set, the aforementioned balance type with the "CB" code is used.

Parameters for Authorisation Queuing using SaF Technology

For CBGate to work in Stand-In authorisation mode, it is necessary to configure sending messages regarding authorisations using the SaF queue for guaranteed delivery.

SaF technology, parameters, and form fields are described in detail in the document "Store and Forward Technology".

Configure parameters for guaranteed message delivery on the SaF logical channel, menu item "Full → Acquiring → Online Logs → Logical Channels (SaF)" → [Settings], for example:

- *Direction* – "Outward"

- *Mess Type* – "0120" ("0220", "0420")

- *Attempt Limit* – "3"

- *First Interval* – "5"

- *Retry Interval* – "60"

- *RCs to Close* – "00"

- *Expiry Period* – "0"

Fig. 10. Configuring parameters for SaF

The SaF channel code should be specified in the domain settings (*Domain Data* field, see "Configuring a Domain") using the SAF_CH tag, for example, " SAF_CH =B1;".

Use of the SaF Queue for Processing a New Authorisation Request

When the connection with the CBS new authorisation is processed in following order:

- if the "SEND_ALWAYS;" tag is set in the domain settings (*Domain Data* field of the "Domains" form) or in the routing rules (*Rule Parms* field of the "Routing Rules" form), a new transaction is sent to CBS without checking the SaF queue.

- if the "SEND_ALWAYS;" tag is missing, the queue is checked in the SaF channel with code specified in the SAF_CH tag in the domain settings. The same SaF channel code must be specified in the configuration file of the SAF service for the H2H adapter ("safServiceID" parameter).

  The queue is examined within the bounds of one contract. If the SaF queue is not empty, a transaction is put in the SaF queue. A decision on a new authorisation will be taken after processing all messages in the "Waiting" status – a new authorisation will be sent if all previous messages in the queue have the "Closed" status. If the queue is empty, the authorisation request is sent to the CBS.

Configuring Limiters for Stand-in Authorisations

Limiters can be set for a specific card contact or for a Product.

Options for limiter use:

- Transaction – limiters that are checked (and counters updated) for any transactions; for those permitted by the CBS and for those permitted by CB Gate (Usage Type = Transactions, see the section "Principles of Usage Limiter Operation" of the document "Usage Limiters").

- STIP – limiters (Usage Type = STIP) that are checked (and counters updated) when all of the following conditions are met:

  - The CBS is unavailable.

  - The STIP balance is depleted (less than the transaction amount).

  - Transactions are permitted by CB Gate.

  ⓘ STIP limiters work the same way as "Overdraft" limiters (see the section "General Templates" of the document "Usage Limiters").

- Special processing mode that allows a limiter counter to be accumulated when a transaction with a balance request is made in the CBS, and in STIP mode, but thresholds are checked in STIP mode only. This makes it possible to set separate limits on transactions depending on whether there is access to the CBS. The mode can be used for "Transactions" or "Credit" limiters.

  The ability to separately accumulate counters and make checks using a limiter hierarchy, corresponding to the following conditions:

  - The parent and child limiters are the same type (*Usage Type*).

  - For the child limiter, the parameter *Processing Mode* = STIP is set.

  - For the child limiter, the parameter *Exclude From Parent* = See Parent is set.

  In this case, the parent limiter accumulates counters and can have its own thresholds that are checked. The child limiter doesn't keep counters, but in STIP mode, checks the values accumulated by the parent limiter, relative to its own counters.

  If the parameter *Exclude From Parent* = See Parent is not set for a limiter with *Processing Mode* = STIP, the limiter's value will be accumulated and checked only when transactions are made in STIP mode.

Possible setup procedure for *Usage Type* = STIP:

- Register an additional Service Package, for example, "XXX-CB STIP usages" (see the section "Configuring Additional Service Packages" of the document "WAY4™ Service Packages"). Register limiters in the additional Service Package (see Fig. 11):

Fig. 11. Configuring a limiter in an additional Service Package

This setting means that when the CBS is unavailable, after the STIP balance has been depleted, transactions for a total amount of up to 10,000 USD per month can be processed; however, each transaction may not exceed an amount of 1,000 USD.

For example, when these STIP limiter settings are used, the CBS is unavailable and the STIP balance is 500 USD:

- A transaction for 400 USD will be made without checking the STIP limiter, since the STIP balance is sufficient for the transaction to be made.

- A transaction for 1000 USD initiates a check of the STIP limiter and will be made since it meets all the limiter's conditions.

A transaction for 1100 USD initiates a check of the STIP limiter and will be rejected since the transaction amount exceeds the STIP limiter's "Max Sngl Amnt".

- Attach the Service Package "XXX-CB STIP usages" to the main Service Package set up earlier "001-Our Priv VISA" (see Fig. 12):

Fig. 12. Attaching "XXX-CB STIP usages" to the main Service Package

Sample setup of a limiter with *Processing Mode* = STIP

Register an additional Service Package, for example, "XXX-CB STIP usages" (see the section "Configuring Additional Service Packages" of the document "WAY4™ Service Packages"). In the additional Service Package, register two

limiters   with   the   same   type,   for   example:

Fig. 13. Configuring limiter hierarchy in an additional Service Package

- For the limiter "4_STIP", specify "STIP" in the *Processing Mode* field. Click the [Details] button to open the form with detailed information. In the *Parent Usage* field, specify the parent limiter's code "4_CBSandSTIP" and in the *Exclude From Parent* field, "See Parent".

  With these settings are used and the CBS is unavailable, the "4_STIP" limiter will check the "4_CBSandSTIP" parent limiter's accumulated amounts counter value relative to its own *Max Amnt* field within the time interval that is set in the *Period* field.

- Attach the Service Package "XXX-CB STIP usages" Service Package to the main Service Package "001-Our Priv VISA" that was configured earlier (see Fig. 12).

Prohibiting Authorisations for a Contract in STIP

The "STIP_STATUS" user classifier is used to prohibit processing authorisations for a certain contract in STIP mode. The code of the negative response returned to the IRouter service is set in this classifier. The "STIP_STATUS" classifier is assigned to a contract for which processing in STIP is prohibited.

The "STIP_STATUS" user classifier is set in the "User Classifiers" form, menu item "Full →Configuration Setup → Common Handbooks → User Classifiers". For example (see Fig. 14):

Fig. 14. "STIP_STATUS" user classifier

The "STIP_STATUS" classifier code is predefined and its value is specified in the *Code* field of the "User Classifiers" form.

The *Code* field of the "Values for …" form specifies the code of the negative response that will be generated in the message (ISO8583) when an attempt is made to process an authorisation for this card in STIP mode.

"User Classifiers" and "Values for …" form fields are described in the section "Configuring User Classifiers" of the document "WAY4™ Client and Contract Classifiers".

The "STIP_STATUS" user classifier is assigned to the corresponding contract. This is described in the section "Manually Changing Classifier

Values" of the document "WAY4™ Client and Contract Classifiers" (see Fig. 15, Fig. 16):

Fig. 15. Contract for which authorisations will be declined in STIP

Fig. 16. STIP_STATUS classifier value assigned to a contract

Authorisations for the card contract "6799990116048590" will be declined with RC "Do not honor" (05) when an attempt is made to process them in STIP mode.

Loading STIP Balances

ASCII format files are supported.

Pipe for Loading Balances

Balance files used during authorisation when the CBS is unavailable are loaded to WAY4 using a standard Java pipe – "com.openwaygroup.pipe.cb_gate_balance_load.jar".

The "Load Stip Balance" menu item is used to run the Java pipe ("Full → CB Gate → Runtime → Load Stip Balance").

Files with contract balances can be loaded in several parallel threads.

Java Pipe Parameters

The pipe "com.openwaygroup.pipe.cb_gate_balance_load.jar" is used with the following parameters:

Parameter	Default value	Parameter description
SOURCE_DIR	@RBS_INTERCHANGE_DIR@\IN\	Directory where loaded files should be put.
PROCESSED_DIR	@RBS_INTERCHANGE_DIR@\arch\	Directory in which text files containing information about loaded records should be put.
N_OF_PARALLEL_THREADS	4	Number of parallel threads for loading pipes.
COMMIT_INTERVAL	1000	The parameter determines the number of records loaded after which in each thread changes are committed to the WAY4 DB.
FILE_MASK	CBGB*.txt	Name of loaded file.

File Format

File format is described in the document "STIP Balance File Format" (STIP_Balance_Format.pdf).

Scheduled Loading of STIP Balances

Use WAY4 Scheduler (see the document "Scheduler R2") to load STIP balances according to a schedule, or with a certain frequency.

Chapter 3. Tags Used in CB Gate Setup

Table 1. Tags used in CB Gate setup

Name	Default value	Description
Tags set in a domain's *Domain Data* field (TD_DOMAIN.DOMAIN_DATA)		
SEND_STIP_BALANCE	N	Prohibits sending STIP balance values (balance of a contract with the "CB" code) to an acquirer bank if authorisation was performed by WAY4 in STIP mode (CBS is unavailable). Information about the balance value will only be sent to the acquirer bank if the CBS is available. The balance value (field DE55) is sent in the response message from the CBS (0210 response message). The tag is set in the "Domains" form, menu item "CB Gate → Configuration → Domains".
ONLINE_BALANCE_SYNC	Y	Rules for online synchronisation of the STIP balance: N – balance data received in the online message from the CBS will not be used to update the STIP balance. Y – the STIP balance will be sent in the online response from the CBS (field 54). The tag is set in the "Domains" form, menu item "CB Gate → Configuration → Domains".
SKIP_TRN_REF_CHCK		If the file imported to WAY4 does not contain the identifier of the last authorisation message (LastAuthId) for a contract, when the SKIP_TRN_REF_CHCK; is set, transactions recorded in WAY4 for this contract are not matched. The tag is set in the "Domains" form, menu item "CB Gate → Configuration → Domains".
DOMAIN_CURR		The domain currency code is set in the tag. The Settlement Amount will be sent to WAY4H2HCBSAdapterwith conversion to the domain currency. This functionality is used, for example, if the CBS only supports one currency. The tag is set in the "Domains" form, menu item "CB Gate → Configuration → Domains".
SUPPRESS_NEGATIVE_ADVICE		The tag excludes Advices about negative authorisations from being sent to the CBS.
SEND_ALWAYS		When the connection with the CBS is restored, a new authorisation request will be sent to the CBS without checking the SaF queue. The tag does not have a

		specific value and is set as к "SEND_ALWAYS; ".
SAF_CH		Channel code for SaF queue (according to the *Channel Id* field of the "Logical Channels (SaF)" form, menu item "Full → Acquiring → Online Logs → Logical Channels (SaF)").
Tags set in the *Rule Parms* field of transaction routing rules (TD_RT_RULE.RULE_PARMS)		
SEND_ALWAYS		Similar to the SEND_ALWAYS tag described above for domain settings (*Domain Data* field).
Tags set in the *Special Parms* field of the Service Package (SERV_PACK.AUTH_CONF_MODE)		
CHANNEL		The code of the channel with the CBS is set as the tag value (see "Registering Message Channels"). Transactions processed by a Service Package in which this tag is set will be authorised in the CBS. The tag is set in the "Private Card Service Packs" form, menu item "Full → Configuration Setup → Products → Issuing Private Products → Private Card Service Packs"
Tags set in a card Product's *Custom Data* field		
CBS_CH		The code of the channel with the CBS is set as the tag value (see "Registering Message Channels"). It is similar to the CHANNEL tag but includes support for authorisations without custom procedures (in particular, cust_auth_get_av and cust_check_contract).
STIP_BT		A balance type code whose value will be used by STIP (if transactions are permitted when there is no connection with the CBS) is set as the tag value. If the tag is not set for the corresponding card Product, a balance type with the "CB" code is used.