

Operation Manual

WAY4 Advanced Tariff Management

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The WAY4 Tariffs module is used to enhance the way users set up Products. The module allows Product numeric parameters such as interest rates, fees, and transaction number and amount limiters to be stored in a separate location, which simplifies Product setup and management.

This document is intended for WAY4™ system administrators responsible for system setup and contains information on the setup and use of tariffs.

While working with this document, it is recommended that users refer to the following reference material from WAY4 documentation series:

- WAY4™ Products: Service Packages
- WAY4™ Products. Accounting Schemes
- Usage Limiters
- Preferred Counterparties
- Instalment Loans in WAY4™
- Events
- Products and Contract Subtypes
- WAY4 Client and Contract Classifiers

The following notation is used in this document:

- Field labels in screen forms are shown in *italics*.
- Button labels used in screen forms are shown in square brackets, such as [Approve].
- Sequences for selecting user menu items are shown using arrows, such as Issuing → Contracts Input & Update.
- Sequences for selecting system menu items are shown using different arrows, such as Database => Change password.
- Key combinations used while working with WAY4 DB Manager are shown in angular brackets, such as <Ctrl>+<F3>.
- The names of directories and/or files 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.



1 WAY4 Tariffs

The WAY4 Tariffs module enhances the way users set up Products.

The standard approach to Product setup means that a new Service Package and/or Accounting Scheme must be set up if at least one of its numeric parameters (fee, interest rate, etc.) in a new Product is different from an existing one. On the other hand, if different Service Packages and Accounting Schemes have the same numeric parameters and these parameters need to be changed, they must each be changed and approved separately. So Product setup may take a substantial amount of time.

WAY4 Tariffs allows banks to save time and avoid extra system workload while performing these tasks. The module provides efficiency in cases where, for example, users set up a deposit Product with a floating interest rate that depends on the account balance, or a custom grace period or a lower interest rate for VIP clients using a credit Product.

In the system, a tariff is a set of Product parameters and their numeric values. When tariffs are used, it is not necessary to set up and store numeric values of parameters within the Product. WAY4 Tariffs allows Product numeric parameters such as interest rates, fees, or transaction amount and number limiters to be stored in a separate location. A Product only defines a set of standard contract parameters, and the system uses tariffs assigned to a contract to obtain their numeric values.

Each tariff has a specific type selected from the list of tariff types registered in the system. Each tariff type has a role that determines how the tariff type is used. For example, a tariff type may be used to set up the rules for calculating fees, interest rates, or usage limiters.

Tariffs are grouped into tariff domains. In a tariff domain, users specify numeric values for each tariff in the domain and the effective and expiration date of tariff numeric values. If a tariff's numeric values are not specified for the date when it will be used, the system uses the default values. Necessary numeric values from the Service, account template or usage limiter are used in this case depending on the tariff role.

A contract can only use tariffs from a tariff domain assigned to the contract. A tariff domain can be set up for a contract individually, assigned to it by an Event, linked to a contract through a Product, a Service Package, an Accounting Scheme, or a financial institution. Generally, to use tariffs, the corresponding Product components (Services, account templates, usage limiters) must contain a link to the tariff types registered in the selected domain.

A tariff domain may be assigned using contract custom parameters (for more information, see the section "



Tariff Plans").

When a transaction is performed, the system searches for a tariff within the domains assigned to the contract according to their priority (personal tariff domain; domain assigned by Event; domain selected in a Product; domain selected in a Service Package; domain selected in an Accounting Scheme; domain selected in a financial institution). When the system finds the necessary tariff, it stops the search and uses the numeric values of that tariff.

The FROM_AUTH=SERVICE; tag can be set in a Service (or in a transaction subtype). If authorisation was made on a Service for which this tag is specified (or with the corresponding transaction type), the financial document for this operation will be posted with parameters inherited from this Service. If a tariff was used when posting an authorisation (see the section "Tariff Types in Services"), a tariff will not be searched for when posting the financial document – the same tariff will be used as for authorisation (i.e. parameters will be inherited from the corresponding tariff).

Assignment of a tariff domain to a contract and tariff selection can be configured depending on classifiers set for the client and contract (see the section "Executing Actions Depending on Classifier Values" of the document "WAY4 Client and Contract Classifiers").

Below are two important features of tariff use in the system:

• Tariffs assigned to different Products. A diagram of their use is shown in Fig. 1.

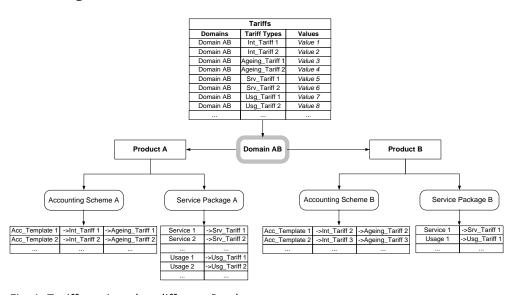


Fig. 1. Tariffs assigned to different Products

Different Products ("Product A" and "Product B" in the figure) have the same numeric parameters specified in the tariff domain "Domain AB" and assigned to both Products. If the numeric parameters of the Products need to be changed, this



is done centrally in the domain "Domain AB", and it is not necessary to approve the changes in the Products.

• Personal tariff domains. A diagram of their use is shown in Fig. 2.

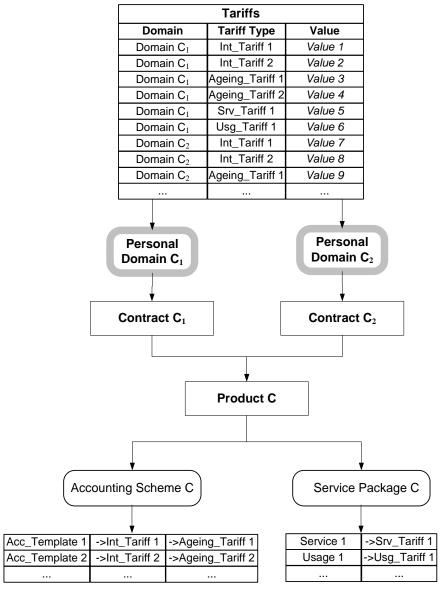


Fig. 2. Use of personal tariff domains

Numeric parameters of the Product "Product C" that are different for contracts "Contract C_1 " and "Contract C_2 " are specified in personal tariff domains "Personal Domain C_1 " and "Personal Domain C_2 ". If tariff numeric parameters change, it is not necessary to approve the changes in Product components.



2 Tariff Setup

2.1 Tariff Types

To set up tariffs, it is first necessary to register tariff types in the system. Each tariff type has a role that determines how the tariff type is used. For example, a tariff type may be used to set up the rules for calculating fees, interest rates, or usage limiters. A tariff type is a separate record in the TARIFF_GROUP table. When a Product is set up, users may select a tariff type, depending on its role, in Services, account templates or usage limiters (see "Selecting Tariff Types").

To register tariff types, select the "Tariffs \rightarrow Tariff Types & Tariff Domains \rightarrow Tariff Types" user menu item.

As a result, the "Tariff Types" form will be displayed (see Fig. 3).

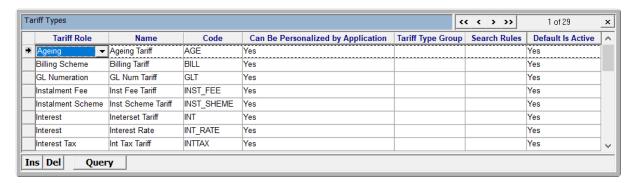


Fig. 3. Form for registering tariff types

To add a tariff type, click the [Ins] button in the form and fill in the following fields:

- *Tariff Role* determines where the tariff type is used. The field can take on the following values:
 - "Service" used to set up fee calculation rules in Services
 - "Service Limit" used to set up Services for calculating the maximum and minimum transaction amount, to specify account balance limitations (e.g. when a deposit Product with a floating interest rate is set up), and to specify limitations related to Events that open or close when the value of a specific balance type changes.
 - "Service Value Days" used to set up the following:
 - Value Days and Expiry Days fields in Services (see the description of the fields in the section "Full Information about a Service" of the document "WAY4™ Service Packages).
 - ◆ Calculation of contract functional dates (see the document "Contract Functional Dates").



- "Interest" used to set up interest rates in account templates
- "Interest Tax" used during setup of tariffs with the "Interest" role to specify interest rates of the financial gain tax for gain received in the form of deposit interest or saving on loan interest. For more details on system setup for the use of this tariff type, see the section "Charging a Tax on Income Gained from Deposit Interest".

Note that to use this tariff type, tag "TAX_MODE = <value>;" must be specified in the *Apply Rules* field of the "Tariff for <name of tariff domain>" form (see Fig. 5 in section "Tariffs"). Also, tag "INTEREST_TAX = <code of a tariff type with the "Interest Tax" role>;" must be specified for tariffs with the "Interest" role using tariffs with the "Interest Tax" role. For a detailed tag description, see section "Tags used when working with tariffs" of the document "Setup Tags".

- "Ageing" used to set up due normalisation parameters in account templates and, for instance, to calculate minimum payments during credit Product setup.
- "Usage" used to set up usage limiter parameters.
- "Billing Scheme" used to set up billing cycle parameters.
- "GL Numeration" used during account template setup to specify GL account numbers.
- "Instalment Scheme" used to set up parameters of instalment schemes that generate instalment plans.
- "Instalment Fee" used to set up instalment loan fee parameters.
- "Threshold" used to set up various threshold values.
- "Conversion" used to redefine account currency and/or configure a hidden surcharge for the bank FX rate (FX Rate Markup).
- "Redefinition" used to redefine a fee contract/contract account or interest contract.
- *Name* tariff type name
- Code tariff type code

The combination of *Tariff Role* and *Code* field values must be unique. For example, there must not be two tariff types with the same code and different roles. Uniqueness is checked in searching for a tariff when performing operations in WAY4 and when using applications to import tariffs.



- Can Be Personalised by Application field that specifies the possibility to create personal tariffs of this type using the Advanced Application module:
 - "Yes" (used by default) creating personal tariff is allowed.
 - "No" creating personal tariff is not available.
- Tariff Type Group selected from a list of tariff type groups. Groups are set up in the form "Tariffs \rightarrow Tariff Types & Tariff Domains \rightarrow Tariff Groups".
- Search Rules used to specify additional tagged parameters (see the section "Tags used when working with tariffs" of the document "Setup Tags").
- *Default Is Active* indicates if it is mandatory to use a tariff of this type:
 - By default, "Yes" is specified in the field if a tariff with this type is not found when posting a transaction using a Service (set in the Service, usage limiter), the transaction is posted according to parameters set in the Service/limiter.
 - The "N" value can be used for tariff types with the "Service", "Service Limit" or "Usage" roles. In this case, if a tariff with this tariff type is not found when posting a transaction using a Service (in the Service, usage limiter), the following occurs:
 - ◆ For tariffs with the "Service" or "Service Limit" role a Service will not be found for the transaction (depending on the value of the Service Package's *Use Def Service* parameter, a transaction can be rejected or posted to a dispute contract's accounts).
 - ◆ For tariffs with the "Usage" role, the limiter is not activated i.e. when posting a transaction, the limiter will not be analysed.

2.2 Tariff Domains

Tariffs are grouped into tariff domains. In a tariff domain, users specify numeric values for each tariff in the domain and the effective and expiration dates of tariff numeric values. Therefore, a tariff domain is a set of tariffs, their numeric values and effective periods.

Several tariffs with the same role but different numeric values may be registered within a single domain (for instance, two tariff types used to specify interest rates for the loan account "Cl Loan" and the overdue loan account "Cl OVD").

Each tariff domain is a separate record in the TARIFF_DOMAIN table. Tariffs included in a domain are stored in the TARIFF table, and their numeric values are stored in the TARIFF_DATA table.



During Product setup, users can select a registered tariff domain in a Product, a Service Package or an Accounting Scheme or assign it by Event.

Domains and tariffs in domains are separated into the following categories:

- Global domain standard domain set in the Product. Used for grouping standard tariffs.
- Template domain template domain whose tariffs are the basis for the creation of personal tariffs for a separate contract. Used for grouping template tariffs.
- Personal domain domain for grouping individual tariffs on the contract level. A personal domain exists on the contract level (by default). Personal tariffs are created using applications on the basis of a template or standard tariff. Personal domains can also be created manually.

To register tariff domains, select the "Tariffs \rightarrow Tariff Types & Tariff Domains \rightarrow Tariff Domains" user menu item.

As a result, the "Tariff Domains" form will be displayed (see Fig. 4).



Fig. 4. Form for registering tariff domains

To add a tariff domain, click the [Ins] button in the form and fill in the following fields:

- Name tariff domain name
- Code tariff domain code
- Apply Rules used to specify additional tagged parameters (see the section "Tags used when working with tariffs" of the document "Setup Tags").
- Category domain category (mandatory field).
 - "Global" standard domain.
 - "Template" template

The form also contains the following control buttons:

- The [Actions...] button may contain the following context menu items:
 - The "Duplicate" command makes it possible to copy a domain with all its tariffs (without tariff numeric values).



• The "Duplicate with Data" command makes it possible to copy a domain with all its tariffs and tariff numeric values.

Numeric values that have the "Ready" status are copied with this status.

- The "Check" command checks that the mandatory *Category* field has been filled in for this domain.
- The "Approve" button approves the domain. The command is available for "Template" tariff domains. For more information, see the section "Configuring Personal Tariff Domains".

The "Duplicate" and "Approve" commands are available for "Template" tariff domains. The "Duplicate" and "Duplicate with Data" commands are available for "Global" domains.

Copying (Duplicate, Duplicate with Data) is possible for domains and for subdomains ([Sub Domains] button).

- [Tariff] opens the form containing the tariff types included in a domain.
 The form is used to add and delete tariff types to/from a selected tariff domain (see "Tariffs").
- [Preferred] opens the form for configuring a list of preferred contractors on the tariff domain level (see the Preferred Contractors Administrator Manual). Therefore, the tariffs included in this domain will only be effective for transactions that meet the specified conditions.
- [Sub Domains] opens the form for configuring subordinate tariff domains for this tariff domain. In this case, tariff domains form a hierarchy, which, for instance, allows them to be grouped by function.
- The [Actions] and [Appr Actions] buttons are used with the "Loyalty" module. This module is supplied according to a separate agreement with the WAY4™ vendor.

2.2.1 Tariffs

To add a tariff in a registered tariff domain, click the [Tariff] button in the "Tariff Domains" form (see Fig. 4 in section "Tariff Domains").

As a result, the "Tariff for <name of tariff domain>" form (see Fig. 5) will be displayed.



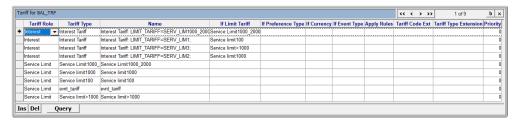


Fig. 5. Form for including tariff types in a domain

This form contains the following fields:

- Tariff Role drop-down list of tariff roles
- *Tariff Type* drop-down list of tariff types registered for the selected role (see "Tariff Types").
- Name business description of the tariff.
- If Limit Tariff drop-down list of tariff types (see "Tariff Types") with the "Service Limit" role registered in the system. If the field is filled in, the account balance limit (for example, for a tariff with the "Interest" role) or document amount limit (for example with the "Service" or "Service Limit" role) is taken into consideration during tariff use. For example, the field is used during setup of a deposit Product with a floating interest rate (for more details on system setup, see item 5.1 in section "Examples of Tariff Use") or to set up charging a fee that depends on the transaction amount (see item 3 in the section "Examples of Tariff Use").
- If Preference Type drop-down list of preference types registered in the system (see the Preferred Contractors Administrator Manual). The tariff will only be effective for contractors of the specified type.
- If Currency drop-down list of currencies registered in WAY4 with the "Yes" value in the Use in Bank field. If this field is filled in, the tariff will be applied only if the currency specified in this field corresponds with the currency in which the tariff is being searched for. By default, the currency specified in this field is compared with the document's Settlement Currency.
- If Event Type drop-down list of Event types registered in WAY4. If this field is filled in, the tariff will only be valid while the specified Event is active (while the Event is open).
- Apply Rules contains tags defining additional rules for using tariffs (see the section "Tags used when working with tariffs" of the document "Setup Tags").
- Tariff Code Ext- tariff's unique identifier in the tariff domain. Used when
 importing tariff data (the field is used for unique identification of a tariff in
 a domain; in particular makes it possible to differentiate tariffs with the
 same tariff type), and also when using applications to create personal tariff



- domains based on template or standard domains. This field is mandatory for tariffs of all categories (template, standard, personal).
- Priority the field makes it possible to set a tariff's priority when selecting tariff that meets other conditions. The value is a number (0, 1, etc.) and a larger value indicates a higher priority. For example, if there are several tariffs of the same type that have different lists of preferred counterparties, without this tag if the transaction meets several conditions (Preferred), the necessary tariff will be selected according to the first condition (Preferred) that is met. The field is used starting from version 03.48.30.07, instead of the PRIOR tag set for the tariff.

2.2.2 Tags for Working with Tariffs

When working with tariffs in WAY4, tags set in the *Apply Rules* field of the tariff and tariff domain and in the tariff type's *Search Rules* field can be used (see the section "Tags used when working with tariffs" of the document "Setup Tags"). In addition, the following tags are used when working with tariffs:

- "LIMIT_TARIFF = <tariff type code>;" tag for using a tariff with the "Service Limit" role when working with balance types.
 - The tag is specified in the *Posting Details* field of the "Balance Types" form when setting up a balance type (see the section "Registering Balance Types" of the document "Balance Types").
 - "Open/Close" must be specified in the *Is State* field for this balance type.
 - An Event type must be registered, specifying the corresponding balance type code as the code.
 - Tariff numeric values with the specified code and the "Service Limit" role set limits affecting the opening or closing of Events related to a change in the balance type value.
 - When the threshold specified in the tariff is reached an Event opens with the code corresponding to the balance type.
- "INT_RATE_MODE = <value>;" tag for specifying a rule for selecting an interest rate using tariffs with the "Service Limit" role. The tag is specified in the *Template Details* field of account templates (see section "Complete Properties of Account Scheme Templates" in the WAY4™ Products. Accounting Scheme Administrator Manual). The tag takes on the following values:
 - "MIN" an interest rate is selected according to the minimum account balance over a billing cycle
 - "MAX" an interest rate is selected according to the maximum account balance over a billing cycle



 "AVG" – an interest rate is selected according to the average account balance over a billing cycle

2.2.3 Tariff Numeric Values

To specify tariff numeric values, use the following menu items:

 The menu item "Tariffs → Tariff Data Input by Tariff" – when this menu item is executed, the "Tariff Data Input by Tariff" form opens. This form contains a list of all tariffs registered in the system (see Fig. 6).

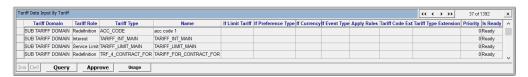


Fig. 6. Grid form of registered tariffs

This form contains the following fields:

- *Tariff Domain* contains the domain in which this tariff is included.
- Tariff Role, Tariff Type, Name, If Limit Tariff, If Preference Type, Apply Rules these fields are the same as the fields in the form for including tariffs in a domain (see Fig. 5 in the section "Tariffs").
- *Is Ready* this field shows whether changes made to the tariff have been activated. The "Ready" value is set after tariff numeric values have been approved successfully. The "Closed" value is specified if numeric values are no longer active.

To set tariff numeric values, use the button to call the child form. Note that the button label depends on the tariff role.

If on the date the tariff is used its numeric values are not specified, the system uses default values. In this case, depending on the role of the tariff, the corresponding numeric values from the Service, account template or usage limiter will be used.

After changing tariff numeric values, click the [Approve] button to open a context menu containing the items [Approve Current] and [Approve All]:

The menu item [Approve Current] is used to activate a selected tariff.
 When this item is executed, the "Date From – To" form (see Fig. 7) will appear on the screen.



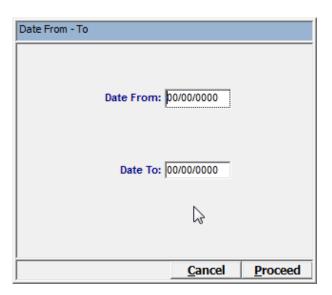


Fig. 7. Form for specifying a tariff's term of validity

In the *Date From* and *Date To* fields of this form, specify the corresponding start and end banking dates of the tariff numeric value's term of validity.

After filling in this form's fields, click the [Proceed] button to activate the tariff.

If the date specified in the *Date From* field is earlier than the current banking date, an error message "Tariff cannot be applied from past date" will be displayed on the screen. If the date specified in the *Date From* field is equal to the current banking date, the error message "Global Tariff cannot be applied from current date" will be displayed.

If the *Date To* field is not filled in, tariff numeric values will be activated when the date specified in the *Date From* field arrives and will remain active until they are deactivated by other mechanisms. If the terms of validity of one tariff type's numeric values overlap, the system will use the most recently activated numeric values as a common term.

Tariff numeric values activated with a future date (with a *Date From* date later than the current banking date) can be cancelled by clicking the [Cancel] button in the form for a tariff's numeric values (for example, in the "Usage for <...>" form, see Fig. 18 in the section "Tariffs with the "Usage" Role"). The record's status will change from "Ready" to "Closed".

To activate all registered tariffs, select the menu item [Approve All], When this menu item is executed, the following message will be displayed on the screen "Do you want to execute 'Approve All' action for all records?".
 To confirm activation of all tariffs, click the [Yes] button. The "Date From – To" form will be displayed (see Fig. 7). Further, the procedure for activating all registered tariffs is the same as that for activating a selected tariff.



 The menu item "Tariffs → Tariff Data Input by Domain List" – when this menu item is executed, the form "Tariff Data Input by Domain List" opens, see Fig. 8. This form contains a general list of all tariff domains registered in the system (the form displays top-level tariff domains and subordinate tariff domains).

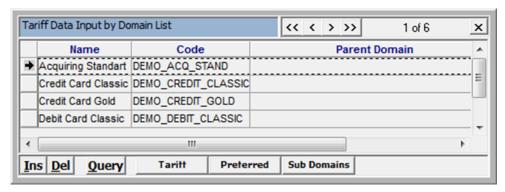


Fig. 8. Grid form with a general list of tariff domains registered in the system

The functions of form fields and control buttons are the same as those of similar fields and buttons in the "Tariff Domains" form (see Fig. 4 in section "Tariff Domains").

The *Parent Domain* field shows the top-level domain for subordinate domains.

Clicking the [Tariff] button opens the "Tariff for <name of tariff domain>" form. It contains tariffs included in the selected domain. This form is similar to the "Tariff Data Input by Tariff" form (see Fig. 6).

Further, the procedure for entering numeric values and activating tariffs is similar to the procedure executed in the "Tariff Data Input by Tariff" form. Tariffs are activated within a particular tariff domain.

 "Tariffs → Tariff Data Input by Domain Tree" – when this menu item is executed, the "Tariff Data Input by Domain Tree" form opens. This form contains a list of all top-level tariff domains registered in the system (see Fig. 9).

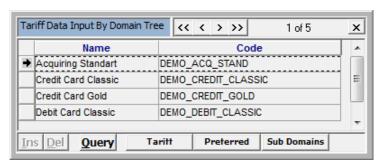


Fig. 9. Grid form of registered tariff domains



The functions of form fields and control buttons are the same as those of similar fields and buttons in the "Tariff Domains" form (see Fig. 4 in section "Tariff Domains").

Clicking the [Tariff] button opens the "Tariff for <name of tariff domain>" form. It contains tariffs included in the selected domain. This form is similar to the "Tariff Data Input by Tariff" form (see Fig. 6).

Further, the procedure for entering numeric values and activating tariffs is similar to the procedure executed in the "Tariff Data Input by Tariff" form. Tariffs are activated within a particular tariff domain.

Changes to numeric values of tariffs included in a subordinate domain and their activation are made in the form for subordinate domains (Tariff for <name of tariff domain> \rightarrow [Sub Domains] \rightarrow [Tariff]).

2.2.3.1 Tariffs with the "Service" Role

To specify numeric values of tariffs used to set up fee calculation rules in Services (see section "Fee" in the WAY4™ Products: Service Packages Administrator Manual), select a tariff with the value "Service" in the *Tariff Role* field in the "Tariff Data Input by Tariff" form (see Fig. 6 in section "Tariff Numeric Values") and click the [Fee Data] button.

As a result, the "Fee Data for <...>" form (see Fig. 10) will be displayed.



Fig. 10. Form for configuring fee calculation parameters

This form contains the following fields:

- Date From tariff's effective date; the field cannot be edited and is filled in automatically after tariff approval
- FX Rate Type currency conversion rate type. The possible values are "Middle" (middle rate) and "Buy/Sell" (buying/selling rate).
- *Currency* fee currency
- Fee Min minimum fee amount that will be charged regardless of a transaction amount
- Fee Max maximum transaction fee amount
- Fee Base additional fee whose charge is mandatory and not depending on a fee rate



- Fee Rate Pcnt fee rate (see a description of the Fee % field in the section "Tariff" of the WAY4™ Products: Service Packages Administrator Manual)
- Incr Pcnt percentage added to authorisation and clearing amounts sent to the issuer; the field is usually used for surcharging, which increases a transaction amount by an amount debited from the cardholder account and added to the acquiring bank's revenue.

The percentage in the *Fee Rate Pcnt* and *Incr Pcnt* fields can be set with accuracy to three decimal places.

- *Apply Mode* determines how tariff numeric values are used:
 - "From Tariff" numeric values from the tariff will be used
 - "Skip" this tariff will not be used. A search is made for a tariff among other available tariffs, and if the search is not successful, numeric values will be taken from the Service for which the tariff is used.
- *Is Ready* shows whether the tariff numeric values are active

2.2.3.2 Tariffs with the "Conversion" Role

Tariffs with the "Conversion" role are used in configuring multi-currency acquiring Products. This solution requires a separate licence (Multi-Currency Pricing) and additional settings. For more information, contact WAY4 Customer Support.

Tariffs with the "Conversion" role can be used:

- To redefine the currency for recording a transaction. This setting makes it possible for merchants to:
 - Be reimbursed in a currency that differs from the transaction settlement currency (redefinition of "Merchant Current" account currency).
 - Offer clients the ability to choose the currency for payment when making a transaction (redefinition of "Merchant Receivable" account currency).
- To set up FX rate markup. This markup is a hidden merchant fee.

An FX markup can be used, for example when the transaction currency does not match the Merchant Receivable account currency, or when the Merchant Receivable account currency doesn't match the Merchant Current account currency.

An FX rate markup is applied to an amount that has already been converted. The interface shows the FX rate (GL_TRACE) including the markup.

A special tariff type with the "Conversion" role must be created for setup (see Fig. 11).



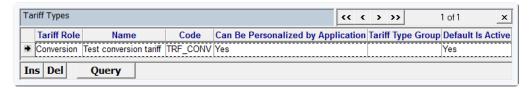


Fig. 11. Tariff Types form

This tariff should be selected in the "Tariff Data Input by Tariff" form (see Fig. 12). Clicking the [Conversion] button in the "Tariff Data Input by Tariff" form opens the "Conversion for <...>" form (see Fig. 12).



Fig. 12. Form for configuring parameters to redefine FX rules

The following fields are used in this form:

- FX Rate Type FX rate type ("Middle" or "Buy/Sell"). The field is used for configuring markups.
- *Currency* currency that redefines the transaction currency when posting a transaction using a Service.
- *Markup Rate* a markup (as a percentage) to the FX rate is set in this field (for example, 0,2).

The way the markup is applied depends on the direction of fund activity:

- When debiting an account, the markup is added to the calculated amount.
- When crediting an account, the markup is subtracted from the calculated amount.
- Apply Mode determines the rule for applying tariff numeric values:
 - "From Tariff" numeric values will be taken from the tariff.
 - "Skip" this tariff will not be used. A search is made for a tariff among other available tariffs and if a tariff is not found, numeric values will be taken from the Service for which the tariff is used.



This tariff type is specified in the corresponding main Service (this functionality is not used for Custom Fees) using the FX_TARIFF=<tariff type code>; tag. For more information about settings, contact WAY4 Customer Support.

2.2.3.3 Tariffs with the "Service Limit" Role

Tariffs with the "Service Limit" role can be used for the following:

- To select a Service depending on a transaction amount (i.e. to determine the maximum and minimum amount of a transaction for a Service) in this case a tariff with the "Service Limit" role is specified directly in the *Limit Tariff* field in the Service (see the section "Tariff Types in Services"). When setting up threshold values in this case, note that in matching, the transaction amount must be **greater than or equal to** the minimum permitted amount (Min Amount) and **less than or equal to** the maximum permitted amount. The *Min Amount* and *Max Amount* fields are set according to the scheme described in examples 1 and 2 of this section.
- To assign a tariff depending on set boundaries in this case a tariff with the "Service Limit" role is specified in the *If Limit Tariff* field of the corresponding tariff (see the section "Tariffs"). For example:
 - A tariff is assigned (fee charged) depending on the transaction amount (*Fee Tariff* is selected for the Service). See item 3 in the section "Examples of Tariff Use". I.e. in this case, set thresholds do not affect selection of a Service to process the transaction.
 - A tariff is assigned depending on an account's balance amount. This approach is used, for example, when setting up a deposit Product with a floating interest rate (for more information about system settings, see item 1 in the section "Examples of Tariff Use").
 - To set limits affecting the opening or closing of Events related to a change in a balance type value.

When setting up threshold values in this case, note that when matching, the amount must be **greater than or equal to** the minimum permitted amount (Min Amount) and **less than** the maximum permitted amount. See items 1 and 3 in the section "Examples of Tariff Use".

When setting up a tariff with the "Service Limit" role for a contract, use one of the aforementioned ways to set this tariff. I.e. the same tariff should not be simultaneously set in the Service and in the *If Limit Tariff* field for another tariff of this contract.

 Tariffs with the "Service Limit" role can be used to set a classifier according to a balance type accrued for a period. See the section "Setup for Defining



- a Classifier according to a Balance Type Value" of the document "Balance Types".
- Tariffs with the "Service Limit" role can be used to open/close Events when changing a balance type value (see the description for the LIMIT_TARIFF tag).

When setting up threshold values for balance types (i.e. in the two last cases described above), note that when matching, the balance amount must be **greater than or equal to** the minimum permitted amount (Min Amount) and **less than or equal to** the maximum permitted amount (Max Amount).

To specify tariff numeric values, select in the "Tariff Data Input by Tariff" form (see Fig. 6 in section "Tariff Numeric Values") a tariff with the "Service Limit" value in the *Tariff Role* field and click the [Limit Data] button.

As a result, the "Limit Data for <...>" form (see Fig. 13) will be displayed.

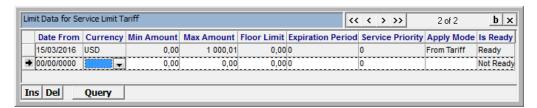


Fig. 13. Form for configuring the maximum and minimum transaction amount

This form contains the following fields:

- Date From tariff's effective date; the field cannot be edited and is filled in automatically after tariff approval
- Currency limiter currency
- Min Amount minimum allowed transaction amount or account balance or minimum threshold value of an Event related to balance type value changes. A zero value in the field means that there are no limitations.
- Max Amount maximum allowed transaction amount or account balance, or maximum threshold value of an Event related to balance type value changes. A zero value in the field means that there are no limitations.

Rules for setting thresholds for a tariff with the "Service Limit" role set in a Service in the *Limit Tariff* field: in matching, the transaction amount must **be greater than or equal to the** minimum amount and **less than or equal to** the maximum amount.

Example 1. If two Services must be set so that Service 1 is used for amounts from 0 to 1000 and Service 2 for amounts from 1000.01, threshold amounts in the corresponding tariffs with the "Service Limit" role are set as follows:



- Tariff 1 Min Amount =0, Max Amount =1000.
- Tariff 2 *Min Amount* =1000.01, *Max Amount* =0.

Example 2. If it is necessary to use different Services for amounts of 0-999.99 and 1000 and further, two tariffs must be set up with the following threshold amounts:

- Tariff 1 *Min Amount* =0, *Max Amount* =999.99.
- Tariff 2 Min Amount =1000, Max Amount =0.

Rules for setting thresholds for a tariff with the "Service Limit" role set in another tariff's *If Limit Tariff* field; see item 1 in the section "Examples of Tariff Use".

- *Floor Limit* maximum amount of a transaction that can be made without authorisation.
- Expiration Period number of days between the transaction date and the document posting date, during which the document can be posted with this Service. For more information, see the description of the Expiry Period field in the "Transaction Parameters" section of the document "WAY4™ Service Packages".
- *Service Priority* specifies which tariff should be selected if the transaction satisfies several tariff records with the "Service Limit" role.
- *Apply Mode* determines how tariff numeric values are used:
 - "From Tariff" numeric values from the tariff will be used
 - "Skip" this tariff will not be used. A search is made for a tariff among other available tariffs, and if the search is not successful, numeric values will be taken from the Service for which the tariff is used.
 - "Inactive" makes it possible to deactivate (disable) the Service for which this tariff is set. I.e. when searching for a Service for a transaction, a Service with this tariff will not be considered.
- Is Ready shows whether the tariff numeric values are active.

2.2.3.4 Tariffs with the "Service Value Days" Role

To specify numeric values of tariffs with the value "Service Value Days" in the *Tariff Role* field, select the necessary tariff in the "Tariff Data Input by Tariff" form (see Fig. 6 in section "Tariff Numeric Values") and click the [Value Days] button.

As a result, the "Value Days for <...>" form (see Fig. 14) will be displayed.



Fig. 14. Form for configuring tariffs with the "Service Value Days" role

This form contains the following fields:

- *Date From* tariff's effective date; the field cannot be edited and is filled in automatically after tariff approval
- Value Days if the Service's Value Days field is redefined, the transaction payment time shift in days is set in this field (see a description of the Value Days field in section "Posting" of the WAY4™ Products: Service Packages Administrator Manual). In setup for calculation of contract functional dates, the period for calculating the date is set in this field (see the section "Configuring Rules for Calculating Functional Dates" of the document "Contract Functional Dates").
- *Apply Mode* determines how tariff numeric values are used:
 - "From Tariff" numeric values from the tariff will be used
 - "Skip" this tariff will not be used. A search is made for a tariff among other available tariffs, and if the search is not successful, numeric values will be taken from the Service for which the tariff is used.
- Is Ready shows whether the tariff numeric values are active

2.2.3.5 Tariffs with the "Interest" Role

To specify numeric values of tariffs used in account templates to set up interest rates, select in the "Tariff Data Input by Tariff" form (see Fig. 6 in section "Tariff Numeric Values") a tariff with the "Interest" value in the *Tariff Role* field and click the [Interest Data] button.

As a result, the "Interest Data for <...>" form (see Fig. 15) will be displayed.

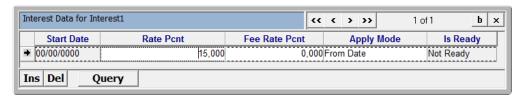


Fig. 15. Form for configuring interest rates

This form contains the following fields:

• Start Date – tariff's effective date; the field cannot be edited and is filled in automatically after tariff approval



- Rate Pcnt interest rate
- Fee Rate Pcnt fee rate charged from the revenue in the form of deposit account interest (see a description of the Interest Fee Rate field in section "Interest Properties" of the WAY4™ Products. Accounting Schemes Administrator Manual)

The percentage in the *Rate Pcnt* and *Fee Rate Pcnt* fields can be set with accuracy to three decimal places.

- *Apply Mode* determines how tariff numeric values are used:
 - "From Start Billing" tariff numeric values that are effective on the date of opening the last day of a billing cycle will apply to the entire billing cycle. If account balance limiters are set for the tariff, an interest rate is selected according to the limiters and the account balance on the date of last day of the billing cycle. opening the lf "INT_RATE_MODE=<value>;" (see the section "Tags used when working with tariffs" of the document "Setup Tags") is set for the tariff, an interest rate will be defined when closing a billing cycle, based on the account balance that is calculated according to INT RATE MODE rules.

The "From Start Billing" mode cannot be used for tariffs with a floating interest rate if the INT_RATE_MODE tag is not used in an account template. That is, for tariffs with a floating rate, the "From Start Billing" mode can only be used with the INT_RATE_MODE tag.

- "From Date" numeric values from the tariff will be used. Interest for the account balance at the end of a billing cycle is accrued at the daily interest rate. If account balance limiters are set for the tariff, an interest rate is selected according to the limiters. If the tag "INT_RATE_MODE=<value>;" (see the section "Tags used when working with tariffs" of the document "Setup Tags") is set for the tariff, its value also determines what interest rate will be selected. Therefore, the total interest amount is a sum total of each day's interest at the corresponding interest rate.
- "Skip" this tariff will not be used. A search is made for a tariff among other available tariffs, and if the search is not successful, numeric values will be taken from the account template for which the tariff is used.
- Is Ready shows whether the tariff numeric values are active

For tariffs with a floating interest rate, recalculation of the rate depending on the account balance is only performed when the "Contracts – Daily Update" procedure is executed. When approving a contract or executing the "Apply



Account Scheme Changes" procedure in the middle of the day, an interest rate linked to a change in an account balance will not be changed.

To recalculate (revise) a rate only on a certain contract functional date (for example, on Due Date), specify the INT_RESET_DATE=<date code> tag (for example INT_RESET_DATE=DUE_DATE;) in the account template. The tag only works if a tariff with the "Interest" role is used in the account template.

If "From Start Billing" is set in the *Apply Mode* field in a tariff, the INT_RESET_DATE=DUE_DATE; tag in the account template redefines the tariff's setting (i.e. the rate is reviewed on the specified functional date (Due Date)).

2.2.3.6 Tariffs with the "Interest Tax" Role

To specify numeric values of tariffs used to charge the financial gain tax, select in the "Tariff Data Input by Tariff" form (see Fig. 6 in section "Tariff Numeric Values") a tariff with the "Interest Tax" value in the *Tariff Role* field and click the [Interest Tax] button.

As a result, the "Interest Tax for <...>" form (see Fig. 16) will be displayed.

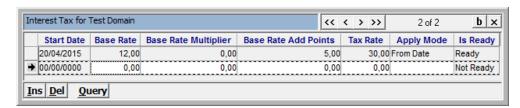


Fig. 16. Form for configuring an additional interest fee for keeping financial gain

This form contains the following fields:

- *Start Date* tariff's effective date; the field cannot be edited and is filled in automatically after tariff approval
- Base Rate base rate for calculating the threshold value of the financial gain tax rate. For instance, the field may contain the refinancing rate of the Central (National) Bank of the country.
- Base Rate Multiplier factor by which the base rate must be multiplied to calculate the threshold value over which the financial gain tax is charged
- Base Rate Add Points percentage that must be added to the base rate to calculate the threshold value over which the financial gain tax is charged
- Tax Rate tax rate
- Apply Mode determines how tariff numeric values are used:
 - "From Start Billing" numeric values from the tariff will be used. Interest for the account balance at the end of the current billing cycle will be accrued at the last interest rate activated in the current billing cycle. If account balance limiters are set for the tariff, an interest rate is selected



according to the limiters. If the tag "INT_RATE_MODE = <value>;" (see the section "Tags used when working with tariffs" of the document "Setup Tags") is set for the tariff, its value also determines what interest rate will be selected.

- "From Date" numeric values from the tariff will be used. Interest for the account balance at the end of a billing cycle is accrued at the daily interest rate. If account balance limiters are set for the tariff, an interest rate is selected according to the limiters. If the tag "INT_RATE_MODE = <value>;" (see the section "Tags used when working with tariffs" of the document "Setup Tags") is set for the tariff, its value also determines what interest rate will be selected. Therefore, the total interest amount is a sum total of each day's interest at the corresponding interest rate.
- "Skip" this tariff will not be used. A search is made for a tariff among other available tariffs, and if the search is not successful, numeric values will be taken from the account template for which the tariff is used.
- Is Ready shows whether the tariff numeric values are active

Numeric values of tariffs with the "Interest Tax" role can only be used if the "TAX_MODE = <value>;" tag is specified (see the section "Tags used when working with tariffs" of the document "Setup Tags").

Note that by default, the *Apply Rules* field value for a tariff with the "Interest Tax" role is determined by the *Apply Rules* field value for a tariff with the "Interest" role. I.e. when a contract has an active tariff with the "Interest" role and the "From Start Billing" value in the *Apply Rules* field, this value will redefine the "From Date" value in the *Apply Rules* field for the tariff with the "Interest Tax" role. For its own rule for applying numeric values to be used for a tariff with the "Interest Tax" role, set the TAX_APPLY_MODE=OWN; tag in the tariff with the "Interest Tax" role.

2.2.3.7 Tariffs with the "Ageing" Role

To specify numeric values of tariffs used in account templates to set up due normalisation parameters (see section "Due Properties" in the WAY4™ Products. Accounting Schemes Administrator Manual), select a tariff with the value "Ageing" in the *Tariff Role* field in the "Tariff Data Input by Tariff" form (see Fig. 6 in section "Tariff Numeric Values") and click the [Ageing Data] button.

As a result, the "Ageing Data for <...>" form (see Fig. 17) will be displayed.



Fig. 17. Form for configuring due normalisation parameters

This form contains the following fields:

- Start Date tariff's effective date; the field cannot be edited and is filled in automatically after tariff approval
- Due Period used to determine the date of normalisation (corresponds to the Due Period field)
- *Grace Period* used to specify the delay before generating a due normalisation accounting entry (corresponds to the *Grace Period* field)
- Repayment Pcnt percentage that must be transferred to the account specified in the Due Template field of the account template (corresponds to the Repayment Percent field)
- Min Repayment if the account balance (or the account balance multiplied by the value of the Repayment Pcnt field) is less than the value specified in the Min Repayment field, funds are not transferred to the account specified in the Due Template field of the account template
- *Min Rq Repayment* minimum amount that must be transferred to the account specified in the *Due Template* field of the account template (corresponds to the *Min Rq Repayment* field)
- Apply Mode determines how tariff numeric values are used:
 - "From Tariff" numeric values from the tariff will be used
 - "Skip" this tariff will not be used. A search is made for a tariff among other available tariffs, and if the search is not successful, numeric values will be taken from the account template for which the tariff is used.
- Is Ready shows whether the tariff numeric values are active

2.2.3.8 Tariffs with the "Usage" Role

To specify numeric values of tariffs used to set up usage limiter parameters (see the Usage Limiters Administrator Manual), select a tariff with the value "Usage" in the *Tariff Role* field in the "Tariff Data Input by Tariff" form (see Fig. 6 in section "Tariff Numeric Values") and click the [Usage] button.

As a result, the "Usage for <...>" form (see Fig. 18) will be displayed.



Fig. 18. Form for configuring usage limiter parameters

This form contains the following fields:

- *Start Date* tariff's effective date; the field cannot be edited and is filled in automatically after tariff approval
- *Apply Mode* determines how tariff numeric values are used:
 - "Active" numeric values from the tariff will be used
 - "Skip" numeric values from the usage limiter template for which the tariff is used will be used
 - "Inactive" makes it possible to deactivate (turn off) the limiter for which this tariff is set.
- Max Number maximum allowed number of transactions
- Max Amount maximum allowed total transaction amount for a specified period
- Max Amount Pcnt maximum allowed transaction amount as a percentage
 of the amount available of the contract's corresponding balance type or
 credit limit (corresponds to the Max Pcnt field)
- *Max Single Amount* maximum allowed amount of a single transaction. A zero value in the field means that there are no limitations.
- Max Trn Amount maximum transaction amount to which usage limiters are applied (corresponds to the Max Trans Amount field)
- Min Trn Amount minimum transaction amount to which usage limiters are applied
- Currency usage limiter currency
- *Is Ready* shows whether the tariff numeric values are active

Tariffs with the "Usage" role can be set with the current date. To do so, set the tag in the tariff's *Apply Rules* field. When the tag is set, if the tariff's numeric parameters change in the middle of the day, they will be applied immediately after approval. I.e. new transactions on the current day are posted using the new parameters.

2.2.3.9 Tariffs with the "Billing Scheme" Role

To specify numeric values of tariffs used in Accounting Schemes to set up billing cycle parameters, select in the "Tariff Data Input by Tariff" form (see Fig. 6 in



section "Tariff Numeric Values") a tariff with the "Billing Scheme" value in the *Tariff Role* field and click the [Billing Sch] button.

As a result, the "Billing Sch <...>" form (see Fig. 19) will be displayed.

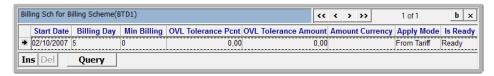


Fig. 19. Form for configuring parameters

This form contains the following fields:

- Start Date tariff's effective date; the field cannot be edited and is filled in automatically after tariff approval
- *Billing Day* shift of billing cycle end date (see a description of the *Billing Day* field in section "Billing Day" of the WAY4™ Products. Accounting Schemes Administrator Manual).
- Min Billing minimum number of days in a billing cycle
- OVL Tolerance Pcnt percentage of the contract's credit limit; if the balance
 of the overdraft account (OVL) at the end of a billing cycle exceeds this
 value, the Event with the "OVL_BILLING" predefined code is automatically
 opened.
- OVL Tolerance Amount threshold value of the overdraft account (OVL) balance; if the balance of the overdraft account (OVL) at the end of a billing cycle exceeds this value, the Event with the "OVL_BILLING" predefined code is automatically opened.
- Amount Currency currency of the amount specified in the OVL Tolerance Amount field.
- *Apply Mode* determines how tariff numeric values are used; may take on the following values:
 - "From Tariff" numeric values from the tariff will be used
 - "Skip" this tariff will not be used. A search is made for a tariff among other available tariffs, and if the search is not successful, numeric values will be taken from the Accounting Scheme for which the tariff is used.
- Is Ready shows whether the tariff numeric values are active

Note that when numeric values of a tariff with the "Billing Scheme" role are changed in the middle of a billing cycle, the new values will be used for calculation in the next billing cycle.



2.2.3.10 Tariffs with the "GL Numeration" Role

To specify numeric values of tariffs used in account templates to specify GL account numbers, select in the "Tariff Data Input by Tariff" form (see Fig. 6 in section "Tariff Numeric Values") a tariff with the "GL Numeration" value in the *Tariff Role* field and click the [GL] button.

As a result, the "GL for <...>" form (see Fig. 20) will be displayed.

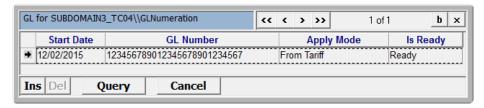


Fig. 20. Form for specifying GL account numbers

This form contains the following fields:

- Start Date tariff's effective date; the field cannot be edited and is filled in automatically after tariff approval
- GL Number GL account number used for General Ledger accounting of contract accounts generated using this template
- Apply Mode determines how tariff numeric values are used:
 - "From Tariff" numeric values from the tariff will be used
 - "Skip" this tariff will not be used. A search is made for a tariff among other available tariffs, and if the search is not successful, numeric values will be taken from the account template for which the tariff is used.
- Is Ready shows whether the tariff numeric values are active

When a contract's Product is changed, if the new Product contains new settings that differ from the old ones for a Product tariff domain containing "GL Numeration" tariffs, GL account numbers are automatically changed.

When an account number is changed using the Advanced Tariff Management module, entries linked with the change in the number are made at the end of the "Contracts – Daily Update" procedure for the contract. I.e. all entries generated by the "Contracts – Daily Update" procedure (fees, transfers by payment orders, normalized entries, etc.), will be made on old accounts and then the balance will be transferred to the new account number.

2.2.3.11 Tariffs with the "Redefinition" Role

A tariff with the "Redefinition" role is used to redefine a fee contract/contract account or interest contract (see the section "Redefining Contract and Contract



Accounts" of the document "Products and Contract Subtypes"). A contract number or contract account number is specified as tariff numeric values.

To specify numeric values of tariffs with the "Redefinition" role, in the "Tariff Data Input by Tariff" form (see Fig. 6 in the section "Tariff Numeric Values") select a tariff that has the "Redefinition" value in the *Tariff Role* field and click on the [Redefinition] button.



Fig. 21. Form to set up a contract number / account code

This form contains the following fields:

- Start Date tariff's effective date; the field cannot be edited and is filled in automatically when approving the tariff.
- *Code* used to specify a contract number or account code.
- *Apply Mode* determines how tariff numeric values are used:
 - "From Tariff" numeric values from the tariff will be used
 - "Skip" this tariff will not be used. A search is made for a tariff among other available tariffs, and if the search is not successful, numeric values will be taken from the Service/account template for which the tariff is used.
- *Is Ready* shows whether the tariff numeric values are active.

Tariffs with the "Redefinition" role don't set tariffs and are not imported/exported using pipes.

Note that a tariff with the "Redefinition" role can only be used to create a personal tariff for bank contracts; for client contracts, tariffs with the "Redefinition" role are not used to create personal tariffs.

2.2.3.12 Tariffs with the "Instalment Scheme" Role

To specify numeric values of tariff used to set up parameters of instalment schemes that generate instalment plans (see section "Instalment Scheme" in the Instalment Loans in WAY4™ Administrator Manual), select in the "Tariff Data Input



by Tariff" form (see Fig. 6 in section "Tariff Numeric Values") a tariff with the "Instalment Scheme" value in the *Tariff Role* field and click the [Inst Data] button.

As a result, the "Inst Data for <...>" form (see Fig. 22) will be displayed.



Fig. 22. Form for specifying instalment scheme parameters

This form contains the following fields:

- Start Date tariff's effective date; the field cannot be edited and is filled in automatically after tariff approval
- Currency currency in which limitations of an initial transaction amount and an instalment amount are specified
- Min Deal Amount minimum amount of an initial transaction
- Max Deal Amount maximum amount of an initial transaction
- *Min Inst Amount* minimum amount of an instalment in an instalment plan
- Max Inst Amount maximum amount of an instalment in an instalment plan
- Due Mode mode of calculation of the due date of each instalment in an instalment plan; the field contains a time unit for calculating the interval between the date when an instalment is made due and its due date:
 - "Billing" the interval is measured in billing cycles; this is a default value
 - "Month" the interval is measured in calendar months
 - "Working Day" the interval is measured in business days
 - "Day" the interval is measured in calendar days
 - "Fixed day of month" a fixed day of a month is used as a due date
 - "Custom" the due date is determined by a custom procedure
- *Due Period* time interval between the date an instalment is made due and its due date in time units specified in the *Due Mode* field
- Tenor Default default number of instalment months
- Min Tenor minimum number of instalment months
- Max Tenor maximum number of instalment months
- *Plan Shift* number of periods by which an instalment plan is shifted (number of periods during which the principal will not become effective). If a tariff is used to set numeric values for an instalment scheme, and this



field is not filled in (the field contains the "0" value), the *Plan Shift* parameter set in the instalment scheme will be used.

- Free Period the number of instalments for which no remuneration is accrued or payable. I.e. only the principal amount is effective in these periods.
- Special Params special parameters of the instalment scheme (see a description of the Special Parms field in section "Instalment Plan" of the Instalment Loans in WAY4™ Administrator Manual)

Parameters in the *Special Parms* field expand the set of tags specified in the corresponding instalment scheme (i.e. the *Special Parms* field in the scheme is added to, not redefined).

- Apply Mode determines how tariff numeric values are used:
 - "From Tariff" numeric values from the tariff will be used
 - "Skip" this tariff will not be used. A search is made for a tariff among other available tariffs, and if the search is not successful, numeric values will be taken from the instalment scheme for which the tariff is used.
- *Is Ready* shows whether the tariff numeric values are active

2.2.3.13 Tariffs with the "Instalment Fee" Role

To specify numeric values of tariff used to set up parameters of instalment loan fees (see section "Fee Parameters and Repayment Methods" in the Instalment Loans in WAY4™ Administrator Manual), select in the "Tariff Data Input by Tariff" form (see Fig. 6 in section "Tariff Numeric Values") a tariff with the "Instalment Fee" value in the *Tariff Role* field and click the [Inst Fee] button.

As a result, the "Inst Fee for <...>" form (see Fig. 23) will be displayed.



Fig. 23. Form for specifying loan fee parameters

This form contains the following fields:

- Start Date tariff's effective date; the field cannot be edited and is filled in automatically after tariff approval
- Fee Min minimum fee amount
- Fee Max maximum fee amount
- Fee Base base fee amount



 Fee Rate Pcnt – fee percentage, i.e. a transaction amount percentage or an annual loan percentage depending on the selected calculation method (see a description of the Fee Rate field in the "Fee Parameters and Repayment Methods" in the Instalment Loans in WAY4™ Administrator Manual)

The percentage in the *Fee Rate Pcnt* field can be set with accuracy to three decimal places.

• Free Period Rate – reduced interest rate for the Free Period period. By default, no fee is charged for the Free Period period. See the section "Configuring Instalment Schemes" of the document "Instalment Loans in WAY4".

By default, the size of all instalment portions (including portions for the *Free Period* period) will be the same. The fee amount will differ (it will be calculated based on the rate for a specific portion). For instalment portions for a *Free Period* period to differ from the other portions in a plan, the FREE_PERIOD_OWN_AMOUNT tag should be set in the *Special Parms* for the instalment scheme.

The FREE_PERIOD_OWN_AMOUNT tag cannot be used for fees calculated on the basis of a daily interest rate ("Interest" using the parameter MONTHLY_INTEREST, "Interest 365" etc.).

A reduced interest rate can be defined for an instalment scheme (INST_IRATE_FREE tag in an instalment scheme; see the document "Instalments Setup Tags") or for a specific document (RATE_FREE tag in a document; see the section "Tags used when processing documents" of the document "Setup Tags").

- Apply Rules field for entering additional tagged parameters.
- *Apply Mode* determines how tariff numeric values are used:
 - "From Tariff" numeric values from the tariff will be used
 - "Skip" this tariff will not be used. A search is made for a tariff among other available tariffs, and if the search is not successful, numeric values from the instalment scheme for which the tariff is used will be used.
- *Is Ready* shows whether the tariff numeric values are active



2.2.3.14 Tariffs with the "Threshold" Role

2.2.3.14.1 Hidden Additional Authorisation Limit

Tariffs with the "Threshold" role are used to set up a hidden additional authorisation limit. A hidden limit is set as a percentage of a contract's credit limit. The maximum amount of the hidden limit can be restricted.

To set up this tariff, configure a tariff type with the "Threshold" role and the predefined code OVL_THRESHOLD (see Fig. 24).

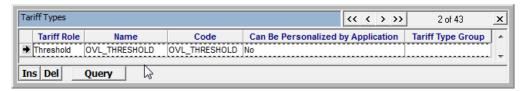


Fig. 24. Tariff type for setting up a hidden additional authorisation limit

To set tariff numeric values, select the required tariff in the "Tariff Data Input by Tariff" form (see Fig. 6 in the section "Tariff Numeric Values") and click the [Threshold] button.

The "Threshold for <tariff name>" form will open (see Fig. 25).



Fig. 25. Form for setting a hidden additional authorisation limit

This form contains the following fields:

- Start Date date the tariff becomes effective; this field cannot be edited and is filled in automatically when tariffs are activated (approved).
- Threshold Amount maximum amount of the hidden limit.
- Currency currency of the amount set in the Threshold Amount field.
- Threshold Percentage size of the hidden authorisation limit. A hidden limit is set as a percentage of a contract's credit limit.
- Apply Mode- determines the rule for applying tariff numeric values:
 - "From Tariff" numeric values will be taken from the tariff.
 - "Skip" this tariff will not be used. A search is made for a tariff among other available tariffs, and if the search is not successful numeric values will be taken from the Service for which this tariff is used.
- *Is Ready* indicates whether the tariff numeric values are active.



To use a hidden authorisation limit set using a tariff, the tariff domain that includes this tariff must be specified on the Product or contract level.

A hidden authorisation limit set up using a tariff does not increase the contract's amount available shown in the interface (for example, in customer service workbench).

A hidden authorisation limit (i.e. a tariff with the predefined code OVL_THRESHOLD) can be applied depending on transaction conditions, i.e. depending on document parameters (including depending on a document's tagged parameters). Different hidden authorisation limits can be configured for different transaction types (for example, "Cash" and "Retail") and different merchant categories (MCC), etc.

- Criteria determining documents for which this hidden authorisation limit can be used are configured for counterparties (see the document "Preferred Counterparties):
 - Dependence on a document's tagged parameters is configured for a counterparty using the *Doc Tag Name* and *Doc Tag Value* fields (a search will be made for the specified tag and its value in the document's *Add Data* and *Reason Details* fields).
 - Different transaction types are set up for a counterparty using the SIC field in which the appropriate SIC group can be specified (for example "Cash").
- The counterparty category is set in the tariff's *If Preference Type* field.

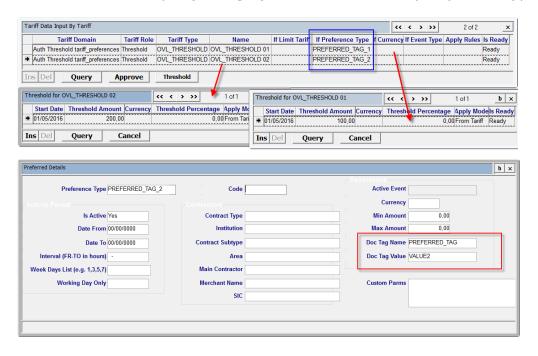


Fig. 26. Configuring the use of different hidden authorisation limits depending on document tags



When a search is made for a tariff with the OVL_THRESHOLD code, the level of a search for the personal tariff can be limited to the current contract level. To do so, for the tariff type with the OVL_THRESHOLD code, set the PERS_DOMAIN_LEVEL=CURRENT; tag in the *Search Rules* field (by default, this field is not shown in the form.

If the tag is set, a search will be made as follows:

- 1. Search on the personal domain level
- 2. Search on the higher-ranking contract's personal domain level is skipped
- 3. Search on the Product domain level
- 4. Search on the Service Package domain level
- Search on the Account Scheme domain level
- 6. Search on the financial institution domain level

2.2.3.14.2 Reclassifying Delinquency

Tariffs with the "Threshold" role can be used to reclassify delinquency, for example, in the following cases:

- Delinquency ageing if the amount of debt due in the current billing cycle (Current Due) or the amount in the "oldest" delinquency account (Past Due) is less than the amount set in the tariff, when the due date or date of "ageing" overdue debt arrives, funds will not be transferred to the next delinquency account. To do so, the following is required:
 - Set up a separate tariff type with the "Threshold" role (in our example, with the code MIN_AGEING), see Fig. 27.
 - Specify tariff numeric values. To do so, select the required tariff in the "Tariff Data Input by Tariff" form (see Fig. 6 in the section "Tariff Numeric Values") and click the [Threshold] button. The "Threshold for <tariff name>" form will open, identical to the form in Fig. 25 of the section "Hidden Additional Authorisation Limit". Fill in the following fields in the form:
 - ◆ In the *Threshold Amount* field, specify the amount with which the delinquent amount will be compared.
 - ♦ Currency currency of the amount set in the Threshold Amount field.
 - ◆ See the section "Hidden Additional Authorisation Limit" for the procedure to fill in the *Apply Mode* field.

In the *Template Details* of the corresponding account template, specify this tariff type's code as the value of the MIN_DUE tag (in our example, MIN_DUE=MIN_AGEING;).



The amount set with a tariff is compared with the account balance (in the account for payment due, or in the oldest delinquency account, depending on the account in which the MIN_DUE tag is set). If the account balance is less than the amount set in the tariff, funds are not moved to the next delinquency account. Funds are not moved only if there are zero balances in accounts with a higher delinquency level than the current account. For more information, see the description of the tag in the section "Tags used when working with tariffs" of the document "Setup Tags".

Ageing conditions can be set up using the MIN_TOTAL_DUE=<code of a tariff type with the "Threshold" role> in an account scheme. In this case, the amount set in the tariff is compared with the TOTAL_DUE balance amount. If the TOTAL_DUE balance amount is less than the amount set with the tariff, funds are not moved to the next delinquency account. If the MIN_DUE tag is used in the account template, the MIN_TOTAL_DUE tag is ignored.

- Correction of the delinquency level (return to the previous delinquency level) – if after loan debt is paid the amount in the corresponding delinquency account (Past Due) is less than the amount set in the tariff, this amount will be transferred (returned) to the previous delinquency account or to the account for recording payment due. In this case, do as follows:
 - Configure a separate tariff type (in our example, with the code MIN RE AGEING), see Fig. 27.
 - Specify tariff numeric values. To do so, select the required tariff in the "Tariff Data Input by Tariff" form (see Fig. 6 in the section "Tariff Numeric Values") and click the [Threshold] button. The "Threshold for <tariff name>" form will open, similar to the form in Fig. 25 of the section "Hidden Additional Authorisation Limit". Fill in the following fields in the form:
 - ♦ In the *Threshold Amount* field, specify the amount with which the amount in the delinquency account after payment will be compared.
 - ♦ Currency currency of the amount set in the Threshold Amount field.
 - ◆ See the section "Hidden Additional Authorisation Limit" for the procedure to fill in the *Apply Mode* field.
 - In the *Template Details* field of the corresponding account template, specify this tariff type's code as the value of the WAIVED_PD tag (in our example, WAIVED PD=MIN RE AGEING;).



By default, delinquency is reclassified if a delinquency account's balance is less than the amount set in the tariff. For delinquency to be reclassified if the delinquency account's balance is less than or equal to the amount specified in the tariff, set the global parameter WAIVED_PD_MODE with the "<=" value, or the tag WAIVED_PD_MODE=<=; in the financial institution.By default, delinquency is reclassified for "Past Due" accounts (accounts whose templates specify the PAST_DUE balance type). For accounts recording debt for the current billing cycle (Current Due) to participate in reclassification of delinquency, specify the WAIVED_PD; tag in the *Posting Details* field of the corresponding balance type (the balance type set in the Current Due account). For example, in a balance type with the DUE code.

Reclassification starts from the "oldest" delinquency account and delinquency accounts are reclassified one after another. If the amount in an account is under the specified limit, the amount is transferred to the previous delinquency account, etc.. Reclassification stops when a delinquency account with an amount exceeding the specified limit is reached.

When reclassifying delinquency if a contract has no account to which funds can be transferred (to "raise" funds), an account is opened automatically according to Accounting Scheme settings. This situation is possible after migration of old contracts.



Fig. 27. Tariff types for setting up the minimum amount of delinquency

For both cases, balance types must be set up with the codes OVD_01, ..., OVD_XX, included in the "Past Due" balance type, with the *Dlq Level* parameter set for them (see the document "Balance Types" and the section "Configuring the "DLQ_LEVEL" System Classifier" in the document "WAY4 Client and Contract Classifiers").

2.2.3.14.3 Grace Period for Loan Interest, Interest Fees

Tariffs with the "Threshold" role can be used to set up a grace period for paying interest and/or fees charged on accrued interest (Interest Fee Rate) at the end of a billing cycle.

Interest and/or an interest fee amount are not due if the interest/fee amount is less than the value specified in the tariff or less than the percentage of the contract's credit limit, specified in the tariff.



For this setup, create tariff types with the "Threshold" role and specify the codes of these tariffs as the values of the INT_TOLERANCE (to set up a grace period for payment of interest) and INT_FEE_TOLERANCE (to set up a grace period for payment of fees on accrued interest) tags in the account template.

To specify tariff numeric values, select the required tariff in the "Tariff Data Input by Tariff" form (see Fig. 6 in the section "Tariff Numeric Values") and click the [Threshold] button.

The "Threshold for <tariff name>" form will open, similar to the form in Fig. 25 of the section "Hidden Additional Authorisation Limit".

Fill in the following fields in the form:

- Threshold Amount if the interest/fee amount is less than the amount set in this form, payment will not be due.
- Currency currency of the amount set in the Threshold Amount field.
- Threshold Percentage if the interest/fee amount is less than the percentage of the contract's credit limit specified in this field, payment will not be due.
- See the section "Hidden Additional Authorisation Limit" for the procedure to fill in the *Apply Mode* field.

2.2.3.14.4 Redefining Payment Order Parameters

A tariff with the "Threshold" role can be used to redefine the following parameters of a template standing payment order: *Amount Percent, Min Amount, Max Amount, Amount Event, Target Amount.*

Settings are made as follows:

- To redefine each parameter (see above), a separate type of tariff with the "Threshold" role and a separate code is set up.
- Tariff numeric values are configured. To do so, select the required tariff in the "Tariff Data Input by Tariff" form (see Fig. 6 in the section "Tariff Numeric Values") and click the [Threshold] button. The "Threshold for <tariff name>" form will open. This form is the same as the form shown in Fig. 25 of the section "Hidden Additional Authorisation Limit". Fill in the form's fields, noting the following:
 - The Amount Percent field of an order is redefined in the tariff's Threshold Percentage field.
 - The *Min Amount, Max Amount, Amount Event,* and *Target Amount* fields of an order are redefined in the tariff's *Threshold Amount* field.
- Specify the tariff type code as the tag value in the *Posting Details* field of the corresponding order template:



- The code of the tariff type redefining the order's *Amount Percent* field is specified as the value of the ORDER PCNT PARM tag.
- The code of the tariff type redefining the order's *Min Amount* field is specified as the value of the ORDER MIN PARM tag.
- The code of the tariff type redefining the order's *Max Amount* field is specified as the value of the ORDER_MAX_PARM tag.
- The code of the tariff type redefining the order's *Amount Event* field is specified as the value of the ORDER_AMNT_PARM tag.
- The code of the tariff type redefining the order's *Target Amount* field is specified as the value of the ORDER_TGT_AMNT_PARM tag.

2.2.3.14.5 Configuring Prepaid Card Top-Up

When topping up (crediting) a prepaid card, it is necessary to ensure that the topup did not exceed the card's maximum allowed balance. To do so, the following settings must be made:

- Configure a separate tariff type with the "Threshold" role (with an arbitrary code):
 - In the tariff's *Threshold Amount* field specify the maximum allowed balance for the card>
 - Currency currency of the amount set in the Threshold Amount field.
 - The procedure for filling in the *Apply Mode* field is described in the section "Hidden Additional Authorisation Limit".
- Make the following settings in the Service that will be used when topping up the card:
 - Specify this tariff type using the LIMIT_AMOUNT=<tariff type code>; tag.
 - Specify the TOTAL_BAL_TYPE=AVAILABLE; tag.
 - Specify the TOTAL_BAL_TYPE_SIGN=+; tag for the balance amount to be taken with the corresponding sign (with "+" for a positive balance and with "-" for a negative balance).

When the operation is performed, the amount of the operation (settlement amount) is added to the card balance (balance with the AVAILABLE code) and compared with the maximum allowed balance set with the tariff. If the balance type is greater than the amount set in the tariff, the transaction is declined.

If ONLINE_CREDIT_PENDING=Y is used, for top-up transactions the FROM_AUTH=SERVICE tag must be set in the Service for top-up to exclude repeat checks of a balance when posting a financial document.



When ONLINE_CREDIT_PENDING=Y and the FROM_AUTH=SERVICE: tag are used, specify the value "May be" for the *Is Authorized* parameter for the corresponding transaction type (Full \rightarrow Configuration Setup \rightarrow Transaction Types \rightarrow Transaction – ALL).

2.2.3.14.6 Configuring Instalment Limits

Tariffs with the "Threshold" role can be used to configure limits on creating instalment plans for a contract.

For this setup, configure a tariff type with the "Threshold" role and codes corresponding to limit type codes in the "Instalment Limit Types" form (Instalments \rightarrow Instalment Configuration \rightarrow Instalment Scheme Groups \rightarrow Instalment Limit Types).

When setting up "Active Plans Count" limits use tariff types with the "Technical" role. See the section "Tariffs with the "Technical" Role".

For tariffs configured for personal limiters (with "Yes" in the *Personal* field), specify "Yes" in the *Can be personalized by Application* field.

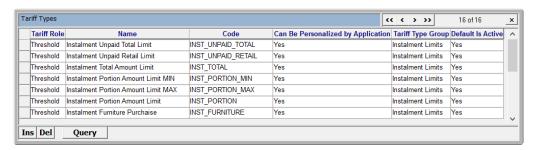


Fig. 28. "Tariff Types" form

To set tariff numeric values, select the required tariff in the "Tariff Data Input by Tariff" form (see Fig. 6 in the section "Tariff Numeric Values") and click the [Threshold] button.

The "Threshold for <tariff name>" form will be displayed. This form is the same as the form in Fig. 25 in the section "Hidden Additional Authorisation Limit".

Fill in the form's fields:

- Threshold Amount if a tariff is created for a limit on an instalment plan amount, the limit amount is specified in this field. If the tariff is created to limit the number of active plans, specify the number of plans in this field.
- Currency currency of the amount specified in the Threshold Amount field.
- The procedure for filling in the *Apply Mode* field is described in the section "Hidden Additional Authorisation Limit".



2.2.3.14.7 Client Notification when the Debit Amount Exceeds the Authorisation Amount

Tariffs with the "Threshold" role are used to set up sending additional notifications to a client if a financial document's amount exceeds the amount blocked by the authorisation. For example, if the FX rates applied on the authorisation date and debit date differ.

The tariff makes it possible to set the allowed difference between a financial document's amount and authorisation amount for which no notification is sent. An Event with the predefined code AMOUNT_ALERT is used to set SMS notifications.

If the difference between amounts is exceeded, an Event opens and a notification is sent.

To set up this tariff, configure a tariff type with the "Threshold" role and the predefined code AMOUNT_ALERT, see Fig. 29

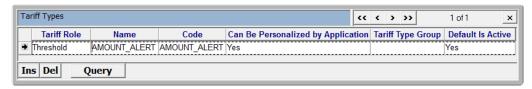


Fig. 29. "Tariff Types" form

To set tariff numeric values, select the required tariff in the "Tariff Data Input by Tariff" form (see Fig. 6 in the section "Tariff Numeric Values") and click the "Threshold" button.

The "Threshold for <tariff name>" form will be displayed, Fig. 30.

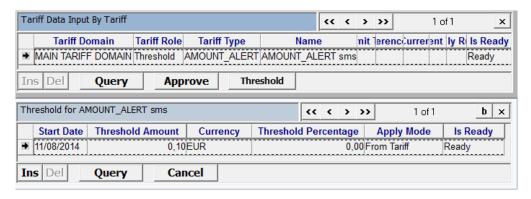


Fig. 30. Form for setting the allowed difference between a financial document's amount and authorisation amount for which no notification is sent

Fill in the following fields of the "Threshold for <tariff name>" form:

• In the tariff's *Threshold Amount* field, specify the maximum allowed amount of the difference between a financial document's amount and authorisation amount for which no notification will be sent.



- Currency currency of the amount set in the Threshold Amount field.
- Threshold Percentage the difference, as a percentage, between a financial document's amount and authorisation amount for which no notification will be sent.
- The procedure for filling in the *Apply Mode* field is described in the section "Hidden Additional Authorisation Limit".

In setup, either the *Threshold Amount* or *Threshold Percentage* field is filled in.

2.2.3.14.8 Balance Limit for Closing a Contract

A tariff with the "Threshold" role can be used during the contract closing procedure. In general, a contract is not closed if the contract has balances that are not empty (see the description of the CLOSE_IF_EMPTY tag in the section "Tags used when working with Events" of the document "Setup Tags").

The tariff makes it possible to set a balance amount for which the contract is closed. I.e. if the balance amount is less than the amount set in the tariff, the contract will be closed.

To set up this tariff, configure a tariff type with the "Threshold" role and an arbitrary code. In Fig. 31 this is a tariff with the CLOSE_CONTRACT code.

The code of this tariff type is specified using the CLOSE_IF_EMPTY_LIMIT tag in the Event type used to close the contract (see the section "Tags used when working with Events" of the document "Setup Tags").

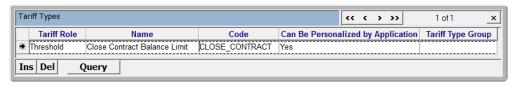


Fig. 31. "Tariff Types" form

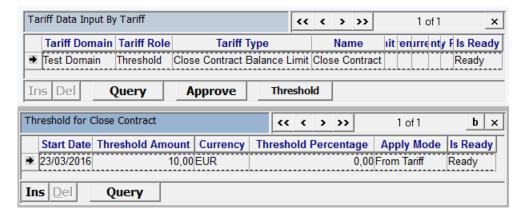


Fig. 32. Form for setting the maximum allowed balance amount for which the contract will be closed



Fill in the following fields in the "Threshold for <tariff name>" form:

- In the tariff's *Threshold Amount* field, specify the maximum allowed balance amount for which the contract will be closed.
- Currency currency of the amount in the Threshold Amount field.
- The procedure for filling in the *Apply Mode* field is described in the section "Hidden Additional Authorisation Limit".

2.2.3.14.9 Contract credit limit

A tariff with the "Threshold" role can be used to define a credit limit's lower and upper boundaries, as well as a default credit limit.

A credit limit's lower and upper boundaries set using tariffs are checked when setting a credit limit (when posting a document to set a credit limit). The default limit defined in the tariff is set when a contract is created. Limits are not checked subsequent times the contract is approved.

Setup is performed as follows:

- The CR_LIMIT_TRF=<code>; tag must be set for Products whose limits have to be defined by tariffs. For example, CR_LIMIT_TRF=CR_LIMIT;.
 - When the tag is set, a search is made for tariffs with the MIN_<code>, MAX_<code>, DEF_<code> codes. In our example with the MIN_CR_LIMIT, MAX CR LIMIT, DEF CR LIMIT codes.
- Configure tariff types with the "Threshold" role with the following codes:
 - MIN_<code> code of the tariff type determining the credit limit's lower boundary.
 - MAX_<code> code of the tariff type determining the credit limit's upper boundary.
 - DEF_<code> code of the tariff type determining the default credit limit.
- The limit amount is set in tariff fields:
 - The limit amount is specified in the Threshold Amount field.
 - The currency of the amount in the *Threshold Amount* field is specified in the *Currency* field.

If the CR_LIMIT_TRF tag is specified in a Product, limit boundaries (and a default value) are not specified in a Product and are not used. When searching for tariffs, if a tariff was not found (or the value in the tariff that was found is equal to zero), the corresponding limit value is considered equal to zero (i.e. there are no limits in this situation).



If Tariff Plans are used to assign tariffs, a credit limit should only be set after the appropriate Tariff Plan has been assigned to the contract.

If tariffs are used to set limits, a Product's *Min Credit Limit, Max Credit Limit, Default Credit Limit* fields should be left empty. When a Product with the CR_LIMIT_TRF tag is approved, a check is made and an error message is generated if the *Min Credit Limit, Max Credit Limit, Default Credit Limit* fields are filled in.

2.2.3.14.10 Selecting an interest rate for an account depending on card turnover in a billing cycle

A tariff with the "Threshold" role and tariffs with the "Interest" role are used to select an interest rate for contract payments, depending on turnover for Retail transactions with this contract's cards.

Example:

For card turnover up to 300 USD, a zero interest rate is used. If turnover exceeds 300 USD, a 1% interest rate is used.

In this example, the following tariffs must be configured (see Fig. 33):

- A tariff with the "Threshold" role is used to set up a threshold for account turnover.
- Two tariffs with the "Interest" role to specify tariff rates depending on the turnover threshold.

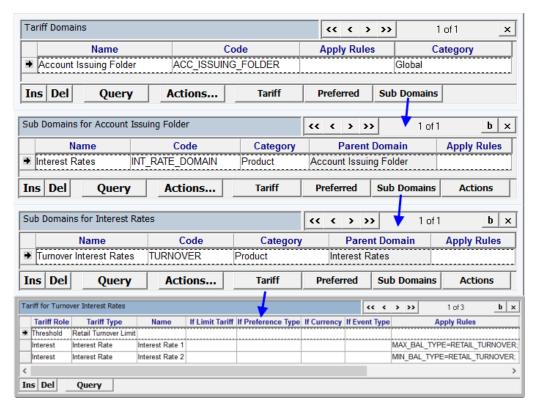


Fig. 33. Tariffs with the "Threshold" and "Interest" roles to define an interest rate depending on turnover



General setup scheme:

1. Set up a balance type to accumulate turnover with the required value in the *History Mode* field (the frequency of zeroing out a balance). In the example in Fig. 34, this is a balance type with the RETAIL_TURNOVER code.



Fig. 34. Balance type to accumulate turnover

2. Specify this balance type in the appropriate Services using the BAL_TYPE tag (see the example in Fig. 35).



Fig. 35. Specifying a balance type in Services

To set up such Services, it is recommended to register an additional Service Package with Services duplicating the Services of the main Package. The priorities of these Services must be higher than the priorities of the same Services from the main Package.

3. Set up a tariff type with the "Threshold" role with an arbitrary code (for example, with the RETAIL code, see Fig. 36).

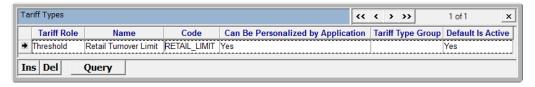


Fig. 36. Tariff type with the "Threshold" role to set thresholds

4. Using this tariff type, configure a tariff with numeric parameters specifying a threshold for Retail transaction turnover (see Fig. 37): the threshold used in the example is 300 USD. For turnover up to 300 USD, one interest rate is applied, and for turnover above 300 USD, another interest rate is applied (conditions and rates are set using tariffs with the "Interest" role).



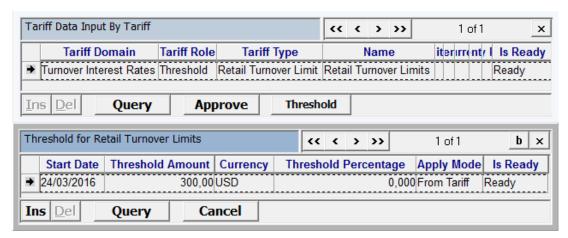


Fig. 37. Threshold for Retail transaction turnover

- 5. Configure two tariffs with the "Interest" role to specify an interest rate (to define interest rates, an existing tariff type can be used, or a separate tariff type can be created; the "Interest Rate" tariff type is used in the example):
 - A tariff with a zero rate for cases when Retail transaction turnover in a billing period is less than 300 USD is configured using the following settings:
 - ◆ Using the MAX_BAL_TYPE=RETAIL_TURNOVER; tag in the *Apply Rules* field. This tag makes it possible to use the interest rate specified in the tariff when Retail transaction turnover is less than a threshold value (according to the balance type specified in the tag value).
 - Using the LIMIT_AMOUNT=<code of a tariff type with the "Threshold" role that contains the threshold value for turnover>; tag in the Apply Rules field. In the example, this is the LIMIT_AMOUN=RETAIL_LIMIT; tag.



Fig. 38. Rate for turnover less than the specified threshold

- A tariff with a 1% rate for cases when Retail transaction turnover in a billing cycle is no less than 300 USD is configured using the following settings:
 - ◆ Using the MIN_BAL_TYPE=RETAIL_TURNOVER; tag in the *Apply Rules* field. This tag makes it possible to use the interest rate specified in the



tariff when Retail transaction turnover is greater than or equal to the threshold value (according to the balance type specified in the tag value).

◆ Using the LIMIT_AMOUNT=<code of the tariff type with the "Threshold" role that contains a threshold value for turnover>; tag in the *Apply Rules* field. In the example, this is the LIMIT AMOUN=RETAIL LIMIT; tag.

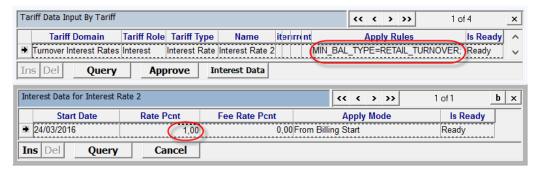


Fig. 39. Rate for turnover that exceeds the specified threshold

When the "From Start Billing" value is selected in the *Apply Mode* field, the interest rate is applied from the beginning of the billing cycle (this is required so that interest for the entire cycle is accrued according to the rate selected at the end of the cycle).

6. A tariff type with the "Interest" role is set in the account template. In the example, this is the "Interest Rate" tariff type (see Fig. 40).

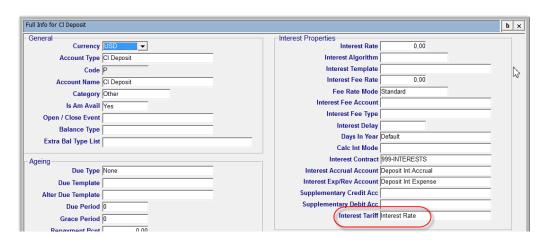


Fig. 40. Rate for turnover exceeding the specified threshold

For additional information about settings, contact the WAY4 vendor.

2.2.3.15 Tariffs with the "Technical" Role

Tariffs with the "Technical" role are used to resolve the following tasks:



- To log tagged parameters that are registered in the "Contract Parameters Setup" form (see the description of the "Tariff" value in the *Mirror To* field in the section "Contract and Client Custom Parameters" of the document "WAY4 Client and Contract Classifiers"). That is, in this case, tag changes are logged in the history of changes to a tariff with the "Technical" role.
- To set up "Active Plans Count" instalment limits. See the description of settings below.

The WAY4 Instalments module (module for managing instalment loans) is not included in the basic configuration of WAY4 and is supplied according to an additional agreement with the WAY4™ vendor. See the document "Instalment Loans in WAY4™".

For this setup, create tariff types with the "Technical" role and codes corresponding to the codes for "Active Plans Count" limits (see the form "Instalment Limit Types"; "Instalments →Instalment Configuration →Instalment Scheme Groups →Instalment Limit Types"), see Fig. 41.

For tariffs set up for personal limits (with "Yes" in the *Personal* field), specify "Yes" in the *Can Be personalized by Application* field.

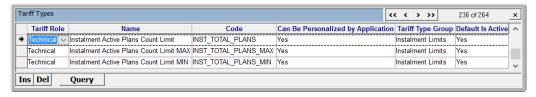


Fig. 41. "Tariff Types" form, configuring tariff types with the "Technical" role

To set tariff numeric values, select the required tariff in the "Tariff Data Input by Tariff" form (see Fig. 6 in the section "Tariff Numeric Values") and click the "Threshold" button.

The "Technical for <tariff name>" form will be displayed, see Fig. 42.

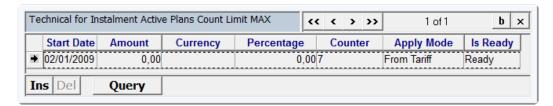


Fig. 42. "Technical for <tariff name>" form

Fill in the form's fields:

- Counter the number of plans is specified in this field.
- The procedure for filling in the Apply Mode field is described in the section "Hidden Additional Authorisation Limit".



2.3 Configuring Personal Tariff Domains

A personal set of tariffs can be set up in the system for a specific contract. For example, a personal set of tariffs can be used to serve VIP clients or when working with merchants as card acquiring fee rates, settlement periods and other parameters usually differ for each merchant.

Personal tariffs can be created in the following ways:

- Based on a tariff from a template personal domain ("Template" domain) by using the Advanced Applications module. See the section "Personal Tariff based on a Template Tariff"
- Based on a tariff from a standard tariff domain, by using the Advanced Applications module. See the section "Personal Tariff based on a Template Tariff".

When creating a personal tariff using the application module, it is highly recommended to use a template personal tariff domain as a basis.

• Manually. See the section "Manually Creating/Editing Personal Tariffs".

Creation (manual/by pipes) of personal tariffs that are based on the "Tariff" value of the *Mirror To* or *Value Location* field is prohibited (see the section "Contract and Client Custom Parameters" of the "WAY4™ Client and Contract Classifiers" document). Personal tariffs related to these parameters are created/changed automatically when the corresponding parameter is set/changed.

• Automatically changed/created when a contract parameter with "Tariff" in the *Mirror To* or *Value Location* field is set or changed. See the section "Contract Parameters Setup" Form" of the document "WAY4 Client and Contract Classifiers".

2.3.1 Personal Tariff based on a Template Tariff

The Advanced Applications module is used to create a personal tariff based on a tariff from a template domain.

Changes in template tariffs are inherited by personal tariffs created on the basis of these templates.

To configure a template set of tariffs, do as follows:

 Register a separate tariff domain with the "Template" value of the Category field in the "Tariff Domains" form.



A domain hierarchy may be set up in which a top-level domain is used for grouping template personal domains and has "Global" in the *Category* field. In this case, a personal sub-domain (sub-domains) should be created for the domain. Personal sub-domains are assigned the "Template" value in the *Category* field.

- Add tariffs to the created template domain (or sub-domain) (tariffs are added in standard mode, see the section "Tariffs"). Numeric values of tariffs are not set. Sub-domain tariffs will be used as templates for configuring numeric values of tariffs on the level of separate contracts.
- Execute the [Actions] → "Approve" command in the form for the template domain to check the fields are correctly filled in.

The "Approve" command is used:

• When creating a template domain – to check the *Tariff Code Ext* field of tariffs in the domain (this field is mandatory) and to check the uniqueness of this field's values.

If the WAY4™ Advanced Applications R1 module is used to create personal tariffs using applications, in addition to the *Tariff Code Ext* field, the *Tariff Code* field must be filled in.

• Further, the "Approve" command is used to synchronize the changed data of template tariffs with the data of personal tariffs created **earlier** on the basis of these templates.

After selecting the "Approve" command, data will be synchronized in the Contracts Daily Update procedure or when the "Apply Products Changes" procedure is started manually (Full \rightarrow Configuration Setup \rightarrow Apply Products Changes) for all contracts with this template personal domain.

Note that by default, template tariffs are not synchronized. To enable value synchronization, set the of the global parameter SYNC PERSONAL TARIFFS to "Y". If the parameter is not set (or set to "N"), performed. lf synchronization value is not SYNC_PERSONAL_TARIFFS is "Y", synchronization may be disabled in the Product using the tag SYNC_PERSONAL_TARIFFS=N;.

A personal tariff is also synchronized with a template when approving a specific personal tariff linked with a template tariff by the *Tariff Code Ext* field (see the section "Manually Creating/Editing Personal Tariffs").

For a tariff included in a tariff domain with the "Template" value, the [Check] button is additionally present in the "Tariff for <name of tariff domain>"



form. This button starts the check of the *Tariff Type*, *Tariff Role* and *Tariff Code Ext* fields of the tariff.

- The "Check" command for a selected tariff.
- The "Check All" command for all tariffs of this sub-domain.
- In the form of the corresponding Product, in the Pers Tariff Domain Template field, specify the personal tariff template domain.

Tariffs of this template domain can be further used to create personal tariffs for contracts by using the Advanced Applications module (for contracts created on the basis of this Product). Numeric values of personal tariffs created on the basis of template tariffs are also imported using applications.

Numeric values for personal tariffs can be manually edited in a contract (see the section "Manually Creating/Editing Personal Tariffs").

When importing tariff numeric values using applications, a search is made for a tariff by the *Tariff Code Ext* field as follows:

- First, the tariff is searched for in the personal domain. If the tariff is found, data are imported.
- If a personal tariff is not found, a search is made for the tariff in the template domain set in the corresponding Product. If the tariff is found, it is copied to the personal domain and data are imported.

A tariff is search for with consideration of the template domain hierarchy. I.e. if a template domain is specified in the Product, the tariff will be searched for starting from this domain and upward along the entire domain hierarchy.

• If the tariff is not found in the template domain, a search is made for the tariff in available standard domains (Global). If the tariff is found, it is copied to the personal domain and data are imported.

2.3.2 Personal Tariff based on a Standard Tariff

The Advanced Applications module is used to create a personal tariff based on a tariff from a standard domain.

A personal tariff created on the basis of a tariff from a standard domain is not linked with a source tariff. For example, if the data of a standard tariff are deleted or changed, these changes do not affect the personal tariff.



A personal tariff can be created on the basis of a tariff from a standard domain if this domain is used by the contract (the domain is set on the level of the Product, Service Package, financial institution, assigned by an Event, etc.), and:

- A template personal domain is not set in the Product.
- If a template personal domain is specified in the Product, the corresponding mode for creating personal tariffs based on standard domains must be set using the ALLOW_TRF_PERS parameter, see below.

If a template personal domain and standard domain are set on the Product level, personal tariffs can be created for the contract on the basis of a tariff from a standard domain or on the basis of a template personal domain. In this case, the ALLOW_TRF_PERS tag or ALLOW_TRF_PERS global parameter can be used to regulate the mode for creating personal tariffs. This tag is set on the Product level in the *Custom Data* field.

- When the value is "G" (default value), personal tariffs can be created on the basis of template domain and standard domain tariffs.
- When the value is "T", personal tariffs can only be created on the basis of template domain tariffs.

Numeric values of personal tariffs created on the basis of standard tariffs are imported using applications.

Numeric values of personal tariffs can be edited manually on the contract level (see the section "Manually Creating/Editing Personal Tariffs").

When importing tariff numeric values using applications, a search is made for a tariff by the *Tariff Code Ext* field as follows:

- First, the tariff is searched for in the personal domain. If the tariff is found, data are imported.
- If a personal tariff is not found, a search is made for the tariff in the template domain set in the corresponding Product. If the tariff is found, it is copied to the personal domain and data are imported.

A tariff is search for with consideration of the template domain hierarchy. I.e. if a template domain is specified in the Product, the tariff will be searched for starting from this domain and upward along the entire domain hierarchy.

• If the tariff is not found in the template domain, a search is made for the tariff in available standard domains (Global). If the tariff is found, it is copied to the personal domain and data are imported.



2.3.3 Manually Creating/Editing Personal Tariffs

Personal tariffs for a contract can be added/edited manually as follows:

 Execute the menu item "Tariffs → Tariff for Contracts (Edit Personal)". The "Tariff for Contracts" form with a list of contracts registered in WAY4 will open (see Fig. 43).



Fig. 43. Grid form containing a list of contracts

• If the contract does not have personal tariffs, the [New Pers Trf] button will be shown in the form. Clicking this button automatically creates a personal tariff domain for the contract and opens the "New Pers Trf for <client name>" form used to enter tariffs in the personal domain (see Fig. 44).

Note that a personal tariff domain is created for a contract even if personal tariffs will not be set.

If personal tariffs have already been set up for a contract (a personal domain has been created), this form shows the [Edit Pers Trf] button instead of the [New Prs Trf] button. The [Edit Pers Trf] button is used to view and edit existing personal tariffs.



Fig. 44. Personal tariff domain form

This form contains the following fields:

Name – personal tariff domain name



Note that the name of a personal tariff domain is always the same as the contract number.

- Parent Domain parent domain (higher-ranking contract tariff domain).
- To enter/edit data for personal tariffs, click on the [Tariffs] button in the "New Pers Trf for..." form. The "Tariffs for <name of personal tariff domain>" form will open (see Fig. 45).

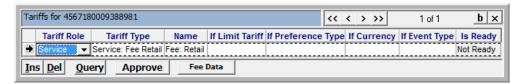


Fig. 45. Form for configuring personal tariff domains

The "Tariffs for..." form shows a contract's personal tariffs created manually or on the basis of template or standard domain tariffs.

For personal tariffs created on the basis of template domain tariffs, the "Tariffs for..." form cannot be used to edit tariff parameters. Parameters of these personal tariffs are synchronized with the parameters of the corresponding template tariff. I.e. changes in these personal tariffs in the "Tariffs for..." form will be lost in synchronization. Numeric values can be changed manually in the "Tariffs for <name of personal tariff domain>" form.

To create a tariff, do as follows:

- In the "Tariffs for..." form, the [Ins] button is used to manually create a personal tariff.
- For a created personal tariff, set numeric values for this contract.
 Numeric values of tariffs are set in the same way as values of group tariff domains (see the section "Tariff Domains").
- Click on the [Approve] button to activate the tariff.

When activating a personal tariff (using the [Approve] button) in the "Date From – To" field (see Fig. 7 in the section "Tariff Numeric Values") the current banking date can be specified in the *Date From* field.

When activating a personal tariff, the *Tariff Code Ext* field is checked for uniqueness within the personal domain.

If the value of the *Tariff Code Ext* field of an added personal tariff matches the value of the template tariff's *Tariff Code Ext* value, when the personal tariff is activated, it will be synchronized with the template



tariff. Synchronization is performed when the global parameter SYNC_PERSONAL_TARIFFS=Y. If the *Tariff Role* field is filled in for the personal tariff but the value does not match the template *Tariff Role* field value, synchronization is not performed and the personal tariff gets the "Not Ready" status.

A personal tariff can be created in the "Active Trf for..." from ("Tariffs \rightarrow Tariff for Contracts (Edit Personal) \rightarrow [Active Trf]") using the [Personalize] button, see the section "Viewing Contract Tariff Domains".

2.4 Entering Tariff Numeric Values from the Current Date

It is not generally possible to enter tariff numeric values from the current banking date. If the current date is entered in the "Date From – To" form when entering tariff numeric values with the menu items "Tariffs →Tariff Data Input by Tariff", "Tariffs →Tariff Data Input by Domain List" and "Tariffs →Tariff Data Input by Domain Tree" (see Fig. 7 in the section "Tariff Numeric Values"), an error message will be displayed.

Tariff numeric values can be entered from the current banking date by using the special menu item "Tariffs \rightarrow Troubleshooting \rightarrow Tariff Data Input From Current Date". The "Tariff Data Input From CurrDate" form will open, similar to the "Tariff Data Input by Tariff" form. Numeric values are entered in the same way as in the "Tariff Data Input by Tariff". After entering numeric values and clicking the [Approve] button, the "Date From – To" form will open (see Fig. 7 in the section "Tariff Numeric Values"), in which the *Date From* field is filled in with the current banking date.

The menu item "Tariff Data Input From Current Date" should only be used in exceptional cases, for example, when there is an urgent need to enter restrictions in order to avoid mass fraudulent transactions. Care must be taken when using this menu item, as changes in tariff numeric values in the middle of a banking day are an emergency measure that may have unpredictable consequences.



3 Using Tariffs During Product Setup

To use tariffs during Product setup, proceed as follows:

- Select a tariff type registered in the system (see "Selecting Tariff Types")
- Select a tariff domain registered in the system (see "Selecting Tariff Domains")

Note that to use tariffs, the corresponding Product components (Services, account templates, usage limiters) must contain a link to the tariff types registered in the selected domain.

When a transaction is performed, the system searches for a tariff domain for the contract in the following order:

- Personal tariff domain
- Tariff domain assigned to a contract by Event
- Tariff domain selected in a Product
- Tariff domain selected in a Service Package
- Tariff domain selected in an Accounting Scheme
- Tariff domain selected in a financial institution

For a tariff domain hierarchy, a tariff is searched for in the following way: for example, a certain tariff is specified in the Product; when searching for the tariff, a search is first made for data in this domain, if the tariff is not found, a search is made on the next level of the domain hierarchy, and so on, up to the hierarchy's main tariff domain. Then a transfer is made to the tariff domain set in the Service Package.

A contract's personal tariff domain has the highest priority.

When the system finds the first tariff, it stops the search and uses the found numeric values of the tariff.

3.1 Selecting Tariff Types

During Product Setup, tariff types registered in the system can be selected in Services, account templates and usage limiters.

3.1.1 Tariff Types in Services

To select tariff types for a Service, use the "Full Info for <name of Service>" form (see Fig. 46).



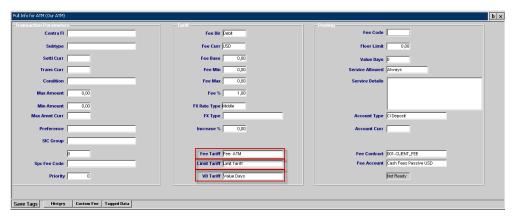


Fig. 46. Selecting a tariff type for a Service

The following fields are used in the form to select tariff types:

- Fee Tariff drop-down list of registered tariff types with the "Service" role (see "Tariff Types")
- Limit Tariff drop-down list of registered tariff types with the "Service Limit" role (see "Tariffs with the "Service Limit" Role")
- *VD Tariff* drop-down list of registered tariff types with the "Service Value Days" role (see "Tariff Types")

3.1.2 Tariff Types in Accounting Schemes

To select tariff types for an Accounting Scheme, use the "Details for <name of Accounting Scheme>" form (see Fig. 47).

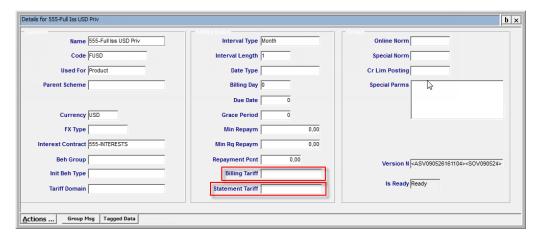


Fig. 47. Selecting a tariff type for an Accounting Scheme

The *Billing Tariff* field in the form is a drop-down list of registered tariff types with the "Billing Scheme" role (see "Tariff Types").

Note that when numeric values of a tariff with the "Billing Scheme" role are changed in the middle of a billing cycle, the new values will be used for calculation in the next billing cycle.



The *Statement Tariff* field in the form is a drop-down list of registered tariff types with the "Ageing" role (see "Tariff Types").

3.1.3 Tariff Types in Account Templates

To select tariff types in an account template, use the "Full Info for <name of account template>" form (see Fig. 48).

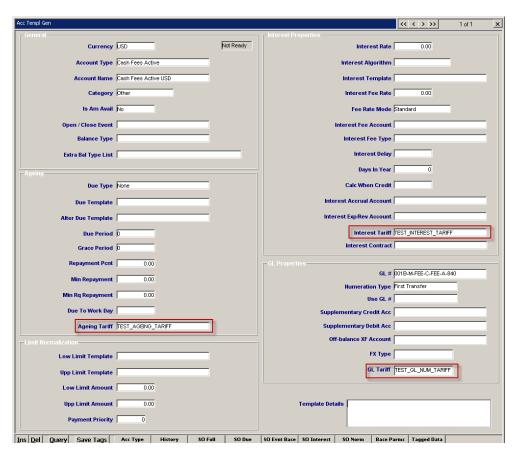


Fig. 48. Selecting a tariff type in an account template

The following fields are used in the form to select tariff types:

- Ageing Tariff drop-down list of registered tariff types with the "Ageing" role (see "Tariff Types")
- Interest Tariff drop-down list of registered tariff types with the "Interest" role (see "Tariff Types")
- GL Tariff drop-down list of registered tariff types with the "GL Numeration" role (see "Tariff Types")

3.1.4 Tariff Types in Usage Limiters

To select tariff types in usage limiters, click the [Details] button in the "Usage for <name of Service Package>" or "Pers.Usage for <name of contract>" form.

As a result, the "Details for <...>" form (see Fig. 49) will be displayed.



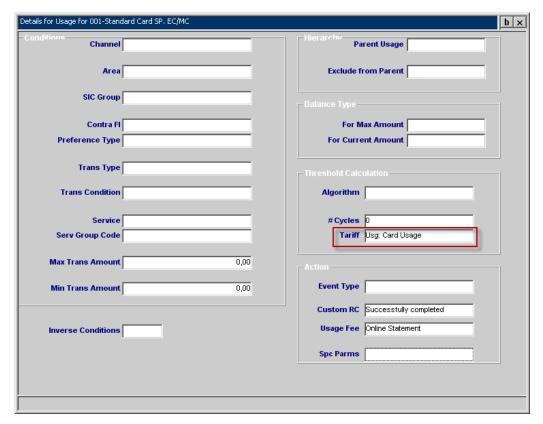


Fig. 49. Selecting a tariff type in a usage limiter

The *Tariff* field in the form is a drop-down list of registered tariff types with the "Usage" role (see "Tariff Types").

3.1.5 Tariff Types in Instalment Loans

To select tariff types in instalment schemes that generate instalment plans, select "Instalments \rightarrow Instalment Configuration \rightarrow Instalment Schemes" from the user menu.

As a result, the "Instalment Schemes" form (see Fig. 50) will be displayed.



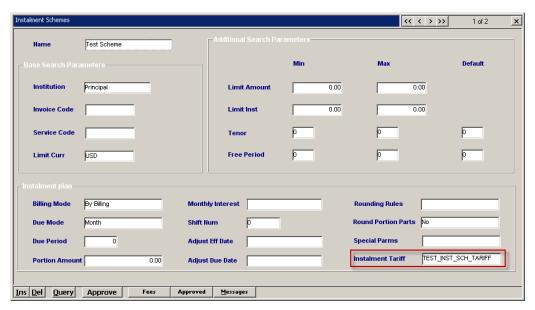


Fig. 50. Selecting a tariff type in an instalment scheme

The *Instalment Tariff* field in the form is a drop-down list of registered tariff types with the "Instalment Scheme" role (see "Tariff Types").

To select tariff types used to set up loan fee parameters, click the [Fees] button in the "Instalment Schemes" form.

As a result, the "Fees for <name of instalment scheme>" form (see Fig. 51) will be displayed.



Fig. 51. Selecting a tariff type during fee parameter setup

The *Inst Fee Tariff* field in the form is a drop-down list of registered tariff types with the "Instalment Fee" role (see "Tariff Types").

3.2 Selecting Tariff Domains

A tariff domain registered in the system can be selected in a Product, a Service Package, an Accounting Scheme, a financial institution or assigned to a contract by Event. It is also possible to set up in the system a personal set of tariffs used by a contract (see "Configuring Personal Tariff Domains").

The priority for selecting a domain from domains assigned to a contract is explained in the section "WAY4 Tariffs".

3.2.1 Tariff Domains in Products

To select a tariff domain in a Product, use the "Tariffs \rightarrow Tariff Usage Configuration \rightarrow Products" user menu item.



As a result, the "Products" form (see Fig. 52) will be displayed.



Fig. 52. Selecting a tariff domain in a Product

One of the standard tariff domains registered in the system (see "Tariff Domains") can be selected for each product in the *Tariff Domain* field of the form.

Clicking the [Full Info] button opens a form with detailed information about a Product. In this form, the personal tariff template domain can be specified in the *Pers Tariff Domain Template* field (see the section "Configuring Personal Tariff Domains").

3.2.2 Tariff Domains in Service Packages

To select a tariff domain in a Service Package, use the "Tariffs \rightarrow Tariff Usage Configuration \rightarrow Service Packs" user menu item.

As a result, the "Service Packs" form will be displayed (see Fig. 53).



Fig. 53. Selecting a tariff domain in a Service Package

One of the tariff domains registered in the system (see "Tariff Domains") can be selected for each Service Package in the *Tariff Domain* field of the form.

Note that the *Tariff Domain* field can be only filled in for main Service Packages (with the "Product" value in the *For Contracts* field, see Fig. 53). For additional Service Packages (with the "Additional" value in the *For Contracts* field) the *Tariff Domain* field is not used.

3.2.3 Tariff Domains in Accounting Schemes

To select a tariff domain in an Accounting Scheme, use the "Tariffs \rightarrow Tariff Usage Configuration \rightarrow Account Schemes" user menu item.

As a result, the "Account Schemes" form will be displayed (see Fig. 54).



Fig. 54. Selecting a tariff domain in an Accounting Scheme

One of the tariff domains registered in the system (see "Tariff Domains") can be selected for each Accounting Scheme in the *Tariff Domain* field of the form.

3.2.4 Tariff Domains in Financial Institutions

To select a tariff domain in a financial institution, use the "Tariffs →Tariff Usage Configuration →Financial Institutions" user menu item.

As a result, the "Financial Institutions" form will be displayed (see Fig. 55).

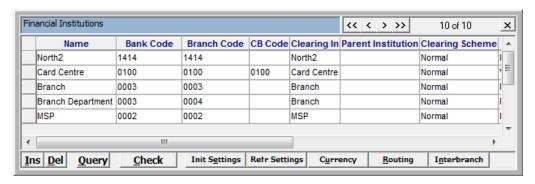


Fig. 55. Selecting a tariff domain in a financial institution

In this form, click the [Details] button. In the form with detailed information about the financial institution, one of the tariff domains registered in the system (see "Tariff Domains") can be selected for each financial institution in the *Tariff Domain* field of the form.

3.2.5 Selecting Tariff Domains by Event

In the system, a tariff domain can be assigned to a contract when a specific Event opens/closes for the contract. To do this, click the [Events] button in the "Service Packs" form (see Fig. 53 in section "Tariff Domains in Service Packages").

As a result, the "Events for <name of Service Package>" form (see Fig. 56) will be displayed.



Fig. 56. Assigning a tariff domain by Event

In the form, select one of tariff domains registered in the system (see "Tariff Domains") in the *Tariff Domain* field. For more details on filling in the form field,



see section "Activating Additional Service Packages" in the Events Administrator Manual.

3.3 Viewing Contract Tariff Domains and Active Tariffs

Clicking the [Domains] button in the "Tariff for Contracts" form (see Fig. 43 in section "Configuring Personal Tariff Domains"") will open the "Domains for <name of client>" form (see Fig. 57).



Fig. 57. Grid form containing tariff domains used by a contract

The form contains a list of tariff domains used by the selected contract. Click the [Tariffs] button to open the form containing the tariffs included in the selected domain (i.e. showing all the domain's tariffs, both active and inactive for the contract).

If no tariff domain is set up for the selected contract, a window with the error message "Tariff domain is not configured for this contract" will be displayed.

Active tariffs for a contract can be viewed by clicking the [Active Trf] button in the "Tariff for Contracts" form (see Fig. 43 in the section "Configuring Personal Tariff DomainsTariffs are selected from the common list of tariffs in a domain that are used by the contract, based on the IF_CS and IF_PARM conditions specified in tariffs' *Apply Rules* field (see Fig. 58).

In addition to tariffs that are specified explicitly (tariff types set in specific fields in an Accounting Scheme, account template, etc.), the form shows tariffs set as values of tags in an Accounting Scheme, account template, payment order, Service (for example INT_TOLERANCE=<tariff type code>;, OVL_VARIANCE=<tariff type code>;, WAIVED_PD=<tariff type code>;).



Fig. 58.Active tariffs for a contract

The form contains the following fields:



- The *Domain From* field shows where this tariff is set (Product, Service Package assigned with an Event, etc).
- Domain tariff domain.
- Role tariff role.
- Name tariff name.
- Value tariff value.
- Effective Date tariff effective date.
- "Yes" is shown in the *Personalizable* field for tariffs based on which personal tariffs can be created (see the description of the ALLOW_TRF_PERS tag). The [Personalize] value is available for these tariffs.
- "Yes" is shown in the *Has Active Data* field for tariffs with numeric values that are active on the current banking date.
- "Yes" is shown in the *Used in Cfg* for tariffs used by contracts (i.e. for tariffs set in Accounting Schemes, account templates, Services, payment orders, etc.).

[Overridden] – if on the current date a contract has several active tariffs that overlap (tariffs with the same role and type), the "Active Trf" form shows the record for the tariff with the highest priority (for example, a tariff from a domain assigned by an Event redefines a tariff from a domain selected in a Product). The [Overriden] button for this tariff is shown, which makes it possible to view redefined active tariffs.

[Template] – this button is used to view a template tariff (shown for tariffs created on the basis of a template tariff).

[Set Default] – the button is shown for individual tariffs created on the basis of global tariffs. The button makes it possible to disable a personal tariff with a specific date.

3.4 Attaching Tariff Domains by Path

Attaching tariff domains by path makes it possible to refer to another domain's tariffs from the current domain without the need for duplicating tariffs and their numeric values. This functionality allows standard tariff conditions to be set in one domain (general domain) and their use in other domains that belong to different hierarchies.

The ability to attach tariff domains by path is only available for global tariff domains. Both domains – the one being attached and the one being attached to must have the "Global" category.



Any tariff from an attached domain (general domain) can be redefined on the level of the domain to which it is attached.

When a change is made to a general tariff in an attached general domain, tariffs in all domains to which it is attached are automatically changed, except for tariffs redefined on the level of attaching domains.

The use of general tariffs makes it possible to reduce the number of configured tariff domains and to optimise changing tariff parameters.

Example:

A bank has three standard packages with favourable conditions for payroll card etariffs. For example, "SMALL", "NORMAL", and "BIG". A separate tariff domain with standard tariff conditions can be set for each of these packages. All three packages can be grouped in one top-level domain "Book of standard payroll packages".

The bank also has 1000 payroll projects. A separate payroll tariff domain can be set for each payroll project. All payroll tariff domains can be grouped in one top-level domain, for example "Book of payroll tariff domains". Neither the book, nor specific payroll tariff domains are included in the Product tariff domain hierarchy. At the same time, for example:

- 100 payroll projects have "personal" tariffs for payroll cardholders. These tariffs are configured individually in each payroll tariff domain.
- 700 payroll projects have "package" tariffs for payroll cardholders (for example, a "SMALL"/"NORMAL"/"BIG" package). In this example, each of these payroll tariff domains does not contain its own tariffs and only refers to a standard tariff domain from the Book of standard payroll packages ("SMALL", "NORMAL" or "BIG").
- 200 payroll projects have combined tariffs: some tariffs from the general "package" and some that are personal tariffs. I.e. each payroll tariff domain refers a standard tariff domain from the Book of standard payroll packages ("SMALL", "NORMAL" or "BIG"), but also contains its own tariffs (redefines some standard package conditions and adds other tariffs that are not included in the standard package).

To attach a "Book of standard payroll packages" to any tariff domain used in card Products, attachment by path can be used. To develop the correct option for attachment with consideration of the tariff model that is used, without a reduction in system performance, contact the WAY4 vendor.

Fig. 59 shows an example of possible configuration.



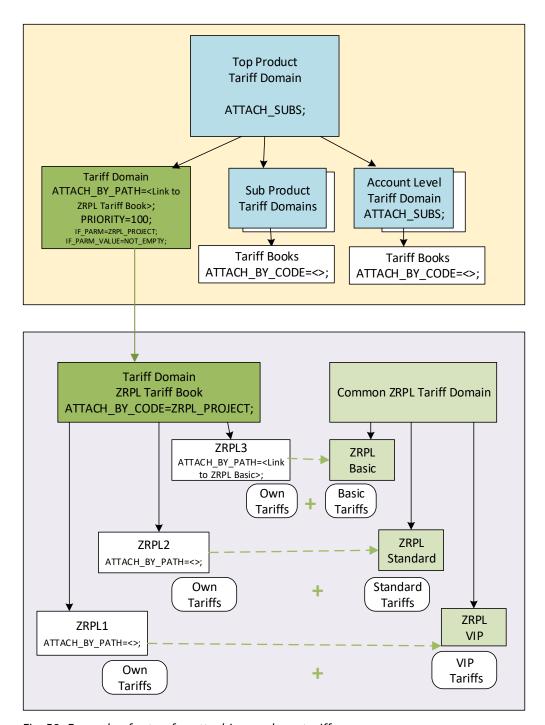


Fig. 59. Example of setup for attaching package tariffs

3.4.1 Attaching Domains

Domains are attached to other domains using the ATTACH_BY_PATH tag.

To attach a general domain, do as follows:

 On the subdomain level execute the [Actions] command → "Attach Domain by Path" (see Fig. 60). The "Set Tariff Domain" form will open (see Fig. 61).



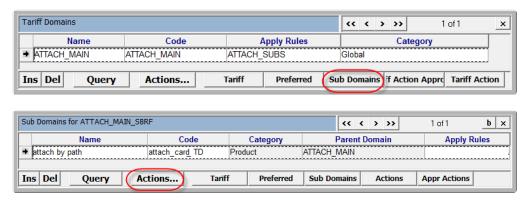


Fig. 60. Selecting a subdomain to which the domain is attached

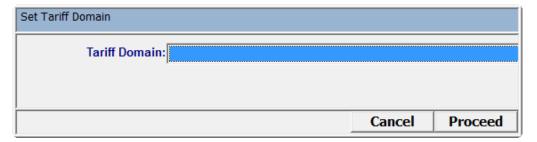


Fig. 61. "Set Tariff Domain" form

- In the *Set Tariff Domain* field of the "Set Tariff Domain" form, select the general domain to be attached and click on the [Proceed] button.
- In the subdomain record's *Apply Rules* field, the ATTACH_BY_PATH tag with the path to the attached domain is set automatically (see Fig. 62).

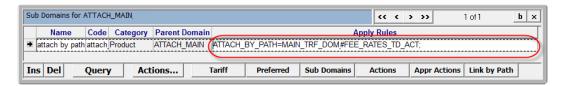


Fig. 62. Domain record with the path to the attached domain in the Apply Rules field

The attached general domain can be viewed by clicking on the [Link by Path] button in the subdomains form (see Fig. 63).

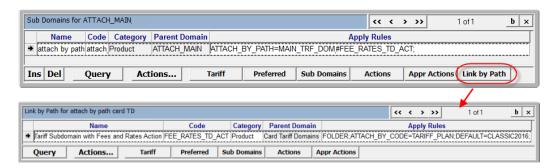


Fig. 63. Viewing the attached domain using the [Link by Path] button

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The ATTACH_BY_PATH tag can be manually set in the tariff domain's *Apply Rules* field. It can be configured in two ways:

- A path to an attached domain is set as the tag value (similarly to automatic attachment using the [Actions] command → "Attach Domain by Path"). The path to attached general domain is specified in the following format:
 - If the domain attached is a top-level domain, the attached domain's code must be specified as the tag value.
 - If the attached general domain is on the Sub level, the codes of domains from the top level to the attached domain must be specified, separated by the # symbol. For example, ATTACH_BY_PATH=STND_SALARY#SMALL;. In this example, the SMALL subdomain from the STND_SALARY domain will be attached.
- In addition to the ATTACH_BY_PATH tag, the expression ATTACH_BY_PATH_PARM=<code of custom parameter>; can be used. The corresponding custom parameter must be registered in the "Set Contract Parameters" form (see the example in Fig. 64). The parameter makes it possible to attach a general domain to a specific contract.



Fig. 64. Example of a custom parameter for attachinga general domain

This custom parameter is set in a separate contract and contains a path to attached domain. The value of the custom parameter (i.e. path to the general domain) is specified like the ATTACH_BY_PATH tag value (see the rules for generating a path above in the description for manually setting the ATTACH_BY_PATH tag). For an example of a custom parameter set in a contract that is used to attach a general domain, see Fig. 65.

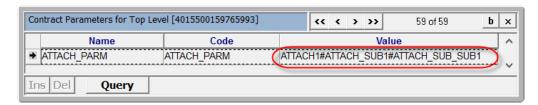


Fig. 65. Example of a custom parameter set for a contract

3.4.2 Priority in Tariff Selection when Attachment by Path Is Used

Priority for selecting a tariff:

1. When attachment by path (ATTACH_BY_PATH) and attachment of subdomains using tags ATTACH_BY_CODE (tariff plans) or ATTACH_SUBS are



simultaneously used in tariff domain. First, a search is made for tariffs in subdomains attached using the tags ATTACH_SUBS or ATTACH_BY_CODE (see step 1 in Fig. 66). If the required tariff is found, the search is stopped. If the tariff is not found, see the following paragraph.

- 2. Then a search is made for tariffs set in the domain (see step 2 in Fig. 66). If the required tariff is found, the search is stopped. If the tariff is not found, see the following paragraph.
- 3. Then a search is made for tariffs in the domain attached by the ATTACH_BY_PATH path (see step 3 in Fig. 66). If the attached domain has its own hierarchy, when the ATTACH_SUBS tag is set in the attached general domain, the tariff is first searched for in the subdomains of the attached tariff domain. Then the tariff is searched for in the attached domain, and finally, in the parent domain of the attached tariff domain.

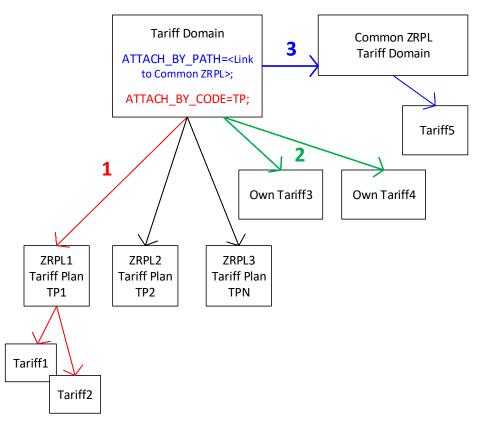


Fig. 66. Example of the order in which a tariff is searched for

Globally, the priority of the general domain depends on the priority of the domain to which it is attached. If the general domain is attached to a domain set in a Product, it will have a higher priority than the general domain attached to a domain set in an Accounting Scheme.



4 Tariff Plans

4.1 General scheme for showing a bank product with tariffs that are available for it in WAY4

WAY4 Product – a set of rules according to which a client (WAY4 contract) account and card (cards) are created and serviced: rules for moving funds between technical and accounting system accounts, rules for generating monthly payments and statements, transaction processing rules, and a set of numeric parameters.

One bank product (for example, a credit product) is shown in WAY4 as an account Product with card Products.

A bank can offer different tariffs plans within one bank product – different numeric values for Product parameters. Starting from version 03.43.40, in addition to standard settings (tariffs, tariff domains), Tariff Plans and Tariff Books are used to set tariffs for the corresponding Products in WAY4.

Tariff Plan – this is a full set of numeric parameters for a bank product that are offered to a bank client when entering into a service agreement. In WAY4, a tariff plan contains parameters for an account Product (for example, loan interest rate, grace period length, etc.), and for a card Product (card recurring fees and transaction fees, limiters, etc.).

Tariff Book – a set of Tariff Plans that have the same purpose and that are available for a specific bank product constitute a Tariff Book. Tariff Plans from the same Book have the same tariff structure.

A bank product with tariffs that are available for it in WAY4 is set up according to the following general scheme:

- One main WAY4 Product (account Product) and subordinate card Products are set up for one bank contract.
- A Tariff Book is created all possible Tariff Plans for this bank contract are specified. Technically, Tariff Book is a tariff domain with a special tag – ATTACH_BY_CODE=<code of the custom parameter managing attachment of a specific Tariff Plan to a contract >;. The custom parameter code is the Tariff Book code.

A Tariff Book is the parent for domains with Tariff Plans.

In the recommended domain hierarchy, two Tariff Books are set up (two domains): one for the card Product and one for the account Product. The codes of these Tariff Books match, i.e. in essence, these domains comprise one Tariff Book. In the example in Fig. 67 two Tariff Books with the ATTACH_BY_CODE=TP; code have been set up.



 Each Tariff Plan is shown in WAY4 as a set of tariffs from several domains that match according to their code. In the example in Fig. 67, the Tariff Plan TP1 consists of tariffs from two domains – a card domain with the TP1 code and an account domain with the TP1 code.

In order for a tariff domain or group of tariff domains with the same code to form a Tariff Plan:

- The domains must belong to the same Tariff Book i.e. to Tariff Books with the same code.
- A contract parameter with the "Tariff Plan" role and a code matching the Tariff Book code must be registered in WAY4. The parameter's possible values must match the codes of Tariff Plans in the Book.
- The Product must be linked with a Tariff Book the Product is assigned the tariff domain that is the top domain for the Tariff Book (hereinafter, Product domain).
- A tariff plan from a Tariff Book is attached using a contract parameter (custom parameter – value of the tag ATTACH_BY_CODE=<Tariff Book code that is also the code of the custom parameter used to attach tariff plans>).

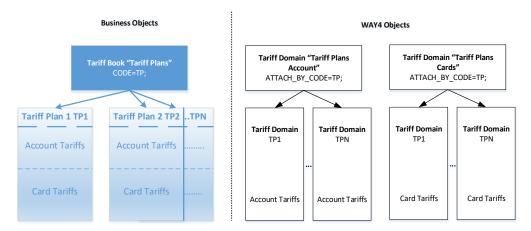


Fig. 67. Correspondence of bank product tariff plans and WAY4 Products



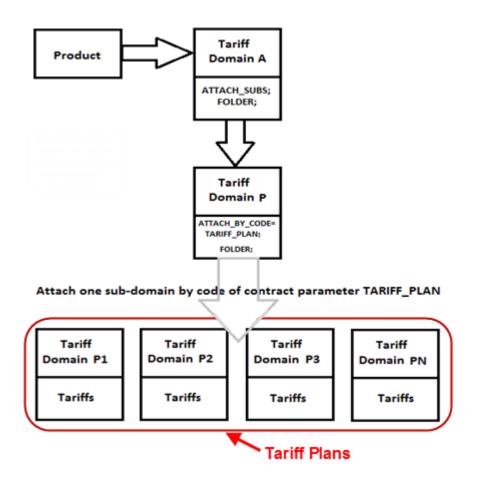


Fig. 68. Available Tariff Plans for a WAY4 Product

Several different Tariff Books can be used simultaneously for the same Product, for example:

- Book for numeric parameterization of a Product (contract).
- Book with different GL tariffs (for GL numeration).
- Book with different functional dates (payment date, date of transfer to delinquency, etc.), depending on the option that was selected when the contract was created.

Each Book has its own contract custom parameter for working with it – i.e. each Book has its own code.

4.2 Advantages of Tariff Plans

Tariff plans make it possible to optimise the process of changing tariffs for contracts. In particular:

 For contracts using one Product, different tariff plans (i.e. different tariff numeric values) can be set without the need to change the Product or the settings of individual tariff domains, or attach tariff domains by an Event.



- Changing a tariff plan in a contract or adding a new tariff plan to a Product line does not require lengthy procedures to apply Product changes to contracts.
- Several tariff books with different purposes can be used for one Product (i.e. different tariff plans from different books can be combined), making it possible to decrease the number of configured tariff domains.

4.3 Recommended tariff domain hierarchy for Tariff Plans

This chapter covers the recommended structure of tariff domains for setting up tariff plans. Tariff domain structure can be changed by WAY4 representatives according to the bank's requirements.

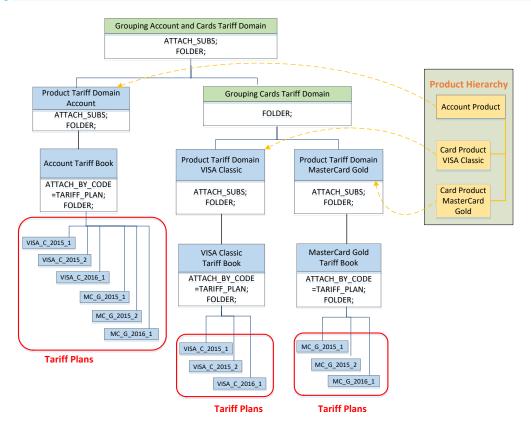


Fig. 69. Tariff domain hierarchy for tariff plans. Used for cards of a tariff plan for a card subdomain and account subdomain

Specifics for setting up a recommended domain hierarchy:

- Configure grouping domains:
 - A top-level common grouping domain ("Grouping Account and Cards Tariff Domain" in Fig. 69) is a folder and does not contain its own tariffs –



the FOLDER; tag is set for it. The ATTACH_SUBS; tag is specified in it to attach subdomains.

 A subdomain that is subordinate to the top-level domain grouping Product card subdomains ("Grouping Cards Tariff Domain" in Fig. 69) is a folder and does not contain its own tariffs – the FOLDER; tag is set for it. This domain does not contain the ATTACH_SUBS; tag.

Configure Product tariff domains:

- Separate Product domains are configured for an account and card Product. A Product domain is a folder and does not contain its own tariffs

 the FOLDER; tag is set for it. One or several second-level subdomains must be attached for a Product domain. To do so, the ATTACH_SUBS; tag is used in the Product domain.
- An account Product domain is configured as a subdomain of the top-level domain (Fig. 69).
- A card Product domain is configured for the second-level grouping subdomain (see Fig. 69).

Configuring a Tariff Book:

- Separate Tariff Books with the same codes are set up for account and card Products. In the example in Fig. Tariff Books with the TARIFF_PLAN code have been set up (see the value of the tag ATTACH_BY_CODE=TARIFF_PLAN;).
- An account Tariff Book includes all possible Tariff Plans from the corresponding card Tariff Books.
- In the recommended domain hierarchy, a Book doesn't contain it own tariffs the FOLDER; tag is set for it.

Configuring Tariff Plans:

- For a book domain, available tariff plans (subdomains) are set up, one of which will be attached to a contract using the value of a contract parameter (TARIFF_PLAN parameter in Fig. 69).
- A Tariff Plan for a card and account contract is defined by a card custom parameter. I.e., the parameter value is set in the card attaching the domain with tariffs for the card and inherited to the account contract attaching the domain with tariffs for the account contract. For more information, see the section "Inheriting a Tariff Plan from a card to an account contract".
- A Tariff Plan consists of two parts two tariff domains with the same code: with account tariffs and card tariffs.



- Tariff Plans for VISA and MasterCard cards are separate and a Tariff Plan from the MasterCard line cannot be attached to VISA contracts (this is done by setting up a domain hierarchy due to the absence of the ATTACH_SUBS; tag in the main parent domain Grouping Cards Tariff Domain).
- Absence of the ATTACH_SUBS; tag in the general parent contract (Grouping Cards Tariff Domain in Fig. 69.) makes it possible to not search card subdomains when searching for a tariff plan for an account contract. However, when searching for a tariff plan for a card, a search is made for both the card subdomain and for the account subdomain. Therefore, all tariffs in a Tariff Plan (i.e. parameters for working with the account and card Product) are available for a card, but only parameters for working with an accounting Product are available for accounting Product.
- Set up a default Tariff Plan for the contract parameter (TARIFF_PLAN in Fig. 69) it is necessary to specify the code of the default tariff plan that will be assigned to the contract when it is first approved if the parameter is missing in the contract. For more information, see the section "Configuring a default domain".

For more information, see the description of the tags in the section see the section "Tags used when working with tariffs" of the document "Setup Tags".

General setup of tariff domains, tariff types, numeric values, selection of tariff types when setting up a Product (in a Product, in Services, account templates and usage limiters) is performed in the standard procedure, see the sections "Tariff Types" and "Tariff Domains").

When a Product for a contract is changed, when approving the contract, contract parameters responsible for attaching the tariff domain are checked and synchronised with the parameters of the new Product and new tariff domains.

4.4 Managing contract custom parameters for attaching Tariff Plans

4.4.1 Scheme for using contract custom parameters

For a WAY4 Product, several available Tariff Books with different uses are set up. Each Book defines parameters for a Product's specific functionality and does not overlap with other Books (for example, a Book for numeric parameterisation of a Product and a Book with functional dates).

Each Tariff Book has its own unique code set as a value of the ATTACH_BY_CODE=<contract parameter> tag.



A contract custom parameter with the "Tariff Plan" role is set up in the "Contract Parameters Setup" form (Full \rightarrow Configuration Setup \rightarrow Common Handbooks \rightarrow Contract Parameters Setup). The custom parameter must be linked with a classifier (for example, through Mirror To=Classifier, for more information, see the section "Setting up contract custom parameters"). The list of a classifier's possible values matches the codes of available Tariff Plans from the corresponding Book.

A change in the value of a contract parameter leads to the corresponding Tariff Plan being attached to the contract. This Tariff Plan is attached to both the account contract and to the card contract (since a Tariff Plan in the recommended hierarchy consists of two domains with the same code; with account tariffs and card tariffs).

There are two ways of defining a Tariff Plan for an account and card contract:

- Method 1. The custom parameter in the account contract doesn't depend on the card's custom parameter. I.e. the parameter value is set separately in the card, attaching the domain with tariffs for the card, and separately in the account contract, attaching the domain with tariffs for the account contract.
- **Method 2.** An account contract's Tariff Plan is determined by the card's Tariff Plan. The value of the custom parameter is set in the card, attaching the domain with tariffs for the card and is inherited to the account contract, attaching the domain with tariffs for the account contract. For more information, see the section "Inheriting a Tariff Plan from a card to an account contract". A Tariff Plan can be attached depending on priorities for the values of the custom parameter. For example, when a card's Tariff Plan changes, the Tariff Plan of the main account contract only changes if the card's Tariff Plan has a higher priority than the account contract's current Plan.



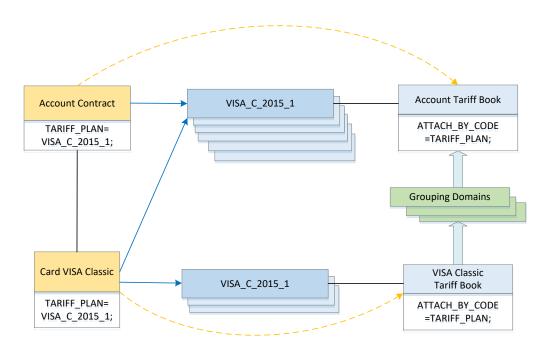


Fig. 70. Attaching tariff plans

4.4.2 Inheriting a Tariff Plan from a card to an account contract

4.4.2.1 Initial inheritance (when the contract is created)

When contracts are created, a custom parameter (Tariff Plan) can be initially inherited from the card contract to the account contract:

- For initial inheritance, the ATTACH_DEF_FROM_SUBS =<parameter code>; tag must be set in the account contract Product. For more information, see the section "".
- If a card contract was not created when an account contract was created, the account contract automatically inherits the default Tariff Plan from the Product.
- After creating a card contract (when the ATTACH_DEF_FROM_SUBS tag is set), the value of the parameter in the account contract changes accordingly.

Note that if before a card was created, a custom parameter was manually specified/changed in the account contract (with an Event or through a form), initial inheritance from the card after it is created will not take place. Global parameters can be used to set up and perform inheritance from a card (see the section "Inheritance during a contract's lifecycle").

4.4.2.2 Inheritance during a contract's lifecycle

Inheritance is possible in the following modes:



- When a Tariff Plan in a card is changed, the priority of the new Tariff Plan is compared with that of the Tariff Plan in the account contract. There are two methods for comparison:
 - According to the "STRICTLY GREATER THAN" principle. If the new Plan's priority is higher, the Tariff Plan in the account contract will be changed automatically. This method is enabled by the "Higher Priority" value of the Sub Main Inheritance Rule field for the corresponding contract parameter in the "Contract Parameters Setup" form.
 - Inheritance according to priority can be used for example if several cards are set up for an account contract and these cards can have different Tariff Plans.
 - According to the "GREATER THAN OR EQUAL TO" principle. If the priority of the new Plan is higher or the same as that of the Tariff Plan in the account contract, the account contract's Tariff Plan will be changed automatically. This method is enabled by the "Equal or higher priority" value of the Sub Main Inheritance Rule field for the corresponding contract parameter in the "Contract Parameters Setup" form.
- When a Tariff Plan is changed in a card, the Tariff Plan in the account contract always changes. To enable this mode, Tariff Plan priorities must not be set (i.e. "0" is set in the Weight Factor field for the values of the linked classifier).

If it is necessary to disable inheritance of a parameter to an account contract (regardless of whether priorities exist), make one of the following settings:

- The STOP_PARM_INH=<list of parameter codes, separated by commas>; tag in the *Custom Data* field of an account contract Product prohibits inheritance of these parameters to the account contract (contracts) created for this Product, from all its card subcontracts.
- The STOP_PARM_INH_UPP=< list of parameter codes, separated by commas >; tag in the *Custom Data* field of a card contract Product prohibits inheritance of these parameters from cards with this Product. Can be used, for example, to disable inheritance of a parameter from Supplementary cards.
- The STOP_PARM_INH_UPP=< list of parameter codes, separated by commas>; tag can be directly set in a card contract's ext_data field. The tag prohibits inheritance of the specified parameters from this card.

4.4.3 Setting up contract custom parameters

Contract custom parameters for attaching tariff plans are set up in the "Contract Parameters Setup" form (Full \rightarrow Configuration Setup \rightarrow Common Handbooks \rightarrow Contract Parameters Setup).



To register a contract custom parameter for attaching tariff plans, make the following settings in the "Contract Parameters Setup" form:

- Specify "Tariff Plan" in the Role field.
- A custom parameter must be linked with a classifier. To do so, one of the following setup methods is used:
 - Select "Classifier" in the Value Location field.
 Or
 - In the Value Location field, select "Contract", and in the Mirror To field "Classifier".

This setting (with "Contract" in the *Value Location* field) is recommended for large banks. As regards system performance, searches for the parameter on the contract level are better optimised than on the classifier level.

General information about configuring custom parameters is provided in the section "Contract Custom Parameters" of the document "WAY4™ Client and Contract Classifiers.



Fig. 71. Contract parameter setup

When a new Tariff Plan is added to a Tariff Book, the first time tariffs for this plan are approved, a search is made for a classifier with the code matching the Tariff Book code and a check is made that there is a value for the classifier with the code matching the Tariff Plan's code (i.e. matching the domain code). If no value is found, a new value is added for the classifier. Note that this addition is only made if the corresponding parameter is registered in the "Contract Parameters Setup" form and linked with the classifier through the *Mirror To* or *Value Location* field.

When the value of a classifier linked with the "Tariff Plan" custom parameter changes, a standard check of the assigned tariff domain is made (as in assigning a tariff domain according to an Event, manually, etc.). I.e. a check is made that for this contract's Product, the Tariff Book is present in the tariff domain hierarchy, the presence of this Tariff Plan in the Book is checked, etc.

4.4.4 Configuring a Default Domain

For each custom parameter set in a tariff domain (Book) as a value of the ATTACH_BY_CODE tag, a value must be specified for the Tariff Plan attached by default. I.e. it is necessary to specify the code of the default tariff subdomain that



will be assigned to a contract during approval if the parameter is missing in the contract. A default Tariff Plan is set in the Product.

When approving a Product for which a tariff domain is set, the domain tree is checked for the ATTACH_BY_CODE=<contract custom parameter code> tag in any of the hierarchy's tariff domains. The list of custom parameter codes that is found is automatically written to the Product's *Custom Data* field as the ATTACH_BY_CODE_LIST tag value. If a default value is not set for a code, the Product will not be approved.

The list of codes for custom parameters can be viewed and default domains can be specified in the "Tariff Books" form (Full \rightarrow Configuration Setup \rightarrow Products \rightarrow Product Definition \rightarrow Products \rightarrow [Full Info] \rightarrow [Tariff Books]), see Fig. 5. This form shows a list of Tariff Books that are available for a Product. A default Tariff Plan is shown for each Book.

The [Tariff Books] button is only shown if a domain with the ATTACH_BY_CODE tag is found for a Product.



Fig. 72. "Tariff Books" form for setting up default domains

The form contains the following fields:

- *Tariff Book Code* code of the Tariff Book from which the default Tariff Plan (domain) is set.
- *Tariff Book Name* name of the Tariff Book from which the default Tariff Plan (domain) is set.
- Tariff Plan Code code of the default Tariff Plan.
- *Tariff Plan Name* name of the default Tariff Plan.
- Inherit from Sub-Contract this field shows the value of the ATTACH_DEF_FROM_SUBS tag ("Y" or "N"), set in the Product.

A default domain for a custom parameter is configured using the [Change] button. When this button is clicked, the "Attach Tariff Domain" form will open (see Fig. 73).



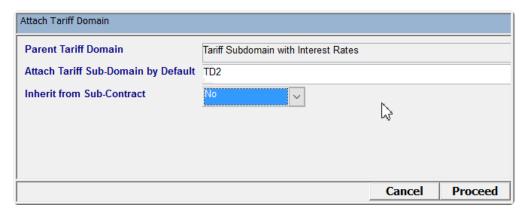


Fig. 73. "Attach Tariff Domain" form

In the Attach Tariff Sub-Domain by Default field of the "Attach Tariff Domain" form, specify the code of the corresponding subdomain (value of the Code field from the "Sub Domains" form) and click the [Proceed] button. The value of the ATTACH_DEF_FROM_SUBS tag set in the Product can be redefined in the Inherit from Sub-Contract field. After making changes, click the [Proceed] button.

When approving a contract, a check is made for contract custom parameters set in the ATTACH_BY_CODE_LIST tag in the Product. If the value of the corresponding parameter is not set for a contract, the default value from the Product will be set. If the ATTACH_DEF_FROM_SUBS tag is set in the Product, a preliminary search is made and default values are inherited from subcontracts.

Default values are shown in the "Tariff Books" form and in a Product's *Custom Data* field as tags in the format <contract parameter code/Tariff Book code >=<default domain code >;. For example, in a Product's tariff domain tree there is a domain with the ATTACH_BY_CODE=TARIFF_PLAN; tag. There must be two tags in the Product's *Custom Data* field:

ATTACH_BY_CODE_LIST=TARIFF_PLAN;TARIFF_PLAN=<default domain code>;.

When the default value for a parameter in a Product is changed, existing contracts are not affected. For all new contracts for which a value of a contract custom parameter (for example, TARIFF_PLAN) is not specified on creation, the new default value specified in the Product will be assigned.

4.5 Example of a tariff domain hierarchy with different Tariff Plans (numeric values and functional dates)

In our example, two Tariffs Books with different purposes are used for one Product:

Book for setting Product (contract) numeric parameters.



 Book with different functional dates (payment date, date of transfer to delinquency, etc.).

Each Tariff Book has its own unique code: for the date Book this is the "BILLING_TD" code (see the value of the ATTACH_BY_CODE=BILLING_TD tag), for the Book with numeric parameters – the "TARIFF_PLAN" code (see the value of the ATTACH_BY_CODE= TARIFF_PLAN tag). I.e. each Book has its own separate parameter for attaching Tariff Plans.

Note that numeric parameters are defined for both the account contract and card contract (the account contract's numeric parameters may be defined depending on the parameters of a card that was issued – the custom parameter is inherited to the account contract from the card). Contract functional dates are set specifically for an account contract.

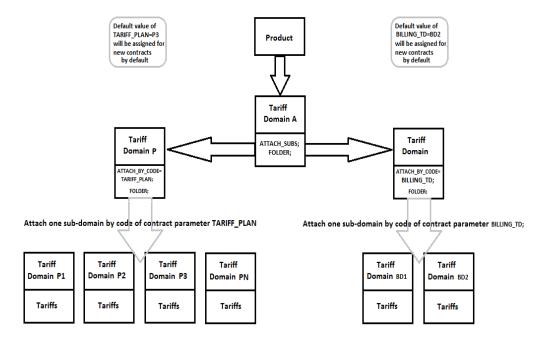


Fig. 74. Two Tariff Books with different purposes for one Product

4.6 Viewing active Tariff Plans

A contract's active tariff plans can be viewed in the "Tariff Plans" form, see Fig. 75. The form is opened by clicking the [Tariff Plans] button in the following forms:

- "Tariff for Contracts (Edit Personal)" (Tariffs → Tariff for Contracts (Edit Personal)
- "Customer Service" (Customer Service → Customer Service)



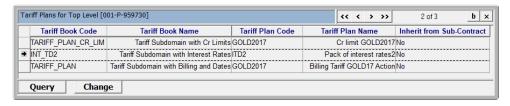


Fig. 75. "Tariff Plans" form

The form contains the following fields:

- Tariff Book Code code of the tariff book to which this tariff plan belongs.
- Tariff Book Name name of the tariff book to which this tariff plan belongs.
- Tariff Plan Code tariff plan code.
- Tariff Plan Name tariff plan name.
- *Inherit from Sub-Contract* indicates if the tariff plan is inherited from a subordinate card contract.

To change an active tariff plan, click the [Change] button and specify the required tariff plan in the *Attach Tariff Sub-Domain* form (see the section "Manually assigning a tariff plan to a contract").

4.7 Manually assigning a tariff plan to a contract

To change a contract's active tariff plan (to change the value of a contract parameter), click the [Change] button in the "Tariff Plans" form (see Fig. 75 in the section "Viewing active Tariff Plans").

In the "Attach Tariff Domain for Contract" form that opens, specify the required tariff plan in the *Attach Tariff Sub-Domain* and click the [Proceed] button (see Fig. 76).

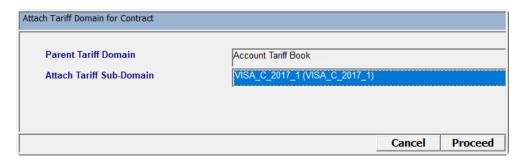


Fig. 76. "Attach Tariff Domain for Contract" form



4.8 Tags used to set up Tariff Plans

Parameter	Value	Description		
Tags set in a domain's <i>Apply Rules</i> field				
ATTACH_SUBS;		The tag allows subdomains to be attached to tariff domains (with the ability to search for tariffs down the domain hierarchy). Specify the ATTACH_SUBS; tag in a domain to which an attachment will be made. Attached domains should be created for this domain as subdomains. When searching for a tariff, the search is made not only in the domain with the ATTACH_SUBS; marker (if it is active) and up the domain hierarchy, but in subordinate domains also. Subordinate domains are attached in the order of priority specified with the PRIOR tag in the Apply Rules field of the corresponding subdomain. The ATTACH_SUBS; tag can be used together with the FOLDER; tag to exclude this domain from tariff searches. In this case, the search will be made by subdomains.		
FOLDER;		The FOLDER; tag specifies a domain is a folder containing a subdomain. A domain with the FOLDER; tag has the following characteristics: this kind of domain cannot contain tariff types (tariffs cannot be loaded to this domain or approved), The domain is not used in tariff searches (however its subordinate subdomains without the FOLDER; tag are used when searching for tariffs). The FOLDER; tag can be used together with the ATTACH_BY_CODE tag or ATTACH_SUBS tag.		
ATTACH_BY_COD E= <contract parameter code>;</contract 		The value of this contract parameter defines the code of the tariff subdomain (Tariff Plan) attached for a contract. When approving a Product, a list of all custom parameters that can manage attaching domains is generated for it. The list of parameter is registered in the ATTACH_BY_CODE_LIST tag. The ATTACH_BY_CODE tag can be used together with the FOLDER; tag to exclude this domain from the tariff search. In this case, the search will be made for subdomains only.		
Tags set in a Product's <i>Custom Data</i> field				

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<customparamet< td=""><td><subdomain code=""></subdomain></td><td colspan="3">When ATTACH_BY_CODE is used, if a custom parameter is not set, a default subdomain</td></customparamet<>	<subdomain code=""></subdomain>	When ATTACH_BY_CODE is used, if a custom parameter is not set, a default subdomain		
erCode>		code is set in this tag.		
ATTACH_DEF_FRO	<parametercode1,< td=""><td colspan="3">When approving a contract, a check is made for contract parameter values set in a</td></parametercode1,<>	When approving a contract, a check is made for contract parameter values set in a		
M_SUBS	ParameterCode2,,	Product's ATTACH_BY_CODE_LIST tag. If no value of the corresponding parameter is set		
	ParameterCodeN>	for the contract, the default value from the Product will be set. If the		
		ATTACH_DEF_FROM_SUBS tag is set in the product, a preliminary search will be made and		
		default values will be inherited from subcontracts. If a default value is already set for the		
		main contract, values will not be inherited from the subcontracts.		
		The ATTACH_DEF_FROM_SUBS tag can be set without a value; in this case, inheritance is		
		performed for all parameters set in the ATTACH_BY_CODE_LIST tag.		
STOP_PARM_INH	<parametercode1,< td=""><td>The STOP_PARM_INH=<list by="" codes,="" commas="" of="" parameter="" separated="">; tag in an account</list></td></parametercode1,<>	The STOP_PARM_INH= <list by="" codes,="" commas="" of="" parameter="" separated="">; tag in an account</list>		
	ParameterCode2,,	contract Product's <i>Custom Data</i> field prohibits these parameters from being inherited to		
	ParameterCodeN>	the account contract (contracts) created for this Product from all its subordinate card		
		contracts.		
STOP_PARM_INH_	<parametercode1,< td=""><td colspan="2">The STOP_PARM_INH_UPP=< list of parameter codes, separated by commas>; tag in a</td></parametercode1,<>	The STOP_PARM_INH_UPP=< list of parameter codes, separated by commas>; tag in a		
UPP	ParameterCode2,,	card contract Product's <i>Custom Data</i> field prohibits these parameters from being		
	ParameterCodeN>	inherited from cards with this Product. Can be used, for example, to disable inheriting a		
		parameter from Supplementary cards.		
Tags set in a contract's <i>ext_data</i> field				
STOP_PARM_INH_	<parametercode1,< td=""><td>The STOP_PARM_INH_UPP=<list by="" codes,="" commas="" of="" parameter="" separated="">; tag can be</list></td></parametercode1,<>	The STOP_PARM_INH_UPP= <list by="" codes,="" commas="" of="" parameter="" separated="">; tag can be</list>		
UPP	ParameterCode2,,	set directly in the ext_data field of a card contract. The tag prohibits inheritance of these		
	ParameterCodeN>	parameters from this card.		

4.9 Global parameters used to set up Tariff Plans

Parameter	Description
TP_SUB_MAIN_INH	When a Tariff Plan is changed in a card, the priority of the new Tariff Plan is compared with the priority of
	the Tariff Plan in the account contract according to the STRICTLY GREATER THAN principle. If the new plan's

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	priority is higher, the account contract's Tariff Plan will be changed automatically. Priority is set in the values of the classifier linked with the custom parameter. A list of custom parameters (separated by commas) for which this comparison method will be enabled is set as the global parameter's value.
TP_SUB_MAIN_INH_EQU AL	When a Tariff Plan is changed in a card, the priority of the new Tariff Plan is compared with the priority of the Tariff Plan in the account contract according to the GREATER THAN OR EQUAL TO principle. If the new plan's priority is higher than or equal to that of the account contract's plan, the account contract's Tariff Plan will be changed automatically. Priority is set in the values of the classifier linked with the custom parameter. A list of custom parameters (separated by commas) for which this comparison method will be enabled is set as the global parameter's value.

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5 Examples of Tariff Use

5.1 Setting a Tariff According to Account Balance

It is necessary to set up a deposit Product with a floating interest rate whose value depends on the account balance.

Table 1 shows the rules for selecting an interest rate according to the account balance

Table 1. Rules for selecting an interest rate according to the account balance

Account balance, USD	Interest rate, %
0 – 3000	3
3000,01 – 20000	5
Over 20000	8,5

The following configurations can be used for this (tariff type and domain names and codes may be arbitrary):

- Register a tariff type for keeping deposit interest. For this, add a record in the "Tariff Types" form and specify value "Interest" in the *Tariff Role* field, value "Interest on Deposits" in the *Name* field and value "INT_RATE_DEP_USD" in the *Code* field.
- Register three tariff types specifying account balance limitations for the low, average and high interest rates. For this, add three rows in the "Tariff Types" form and specify value "Service Limit" in the *Tariff Role* field of each. Then, specify values "Low Limit", "Middle Limit" and "High Limit" in the *Name* field of the first, second and third tariff type, respectively, and specify values "INT_LOW_USD", "INT_MIDDLE_USD" and "INT_HIGH_USD", respectively, in the *Code* field.
- Register a tariff domain. For this, add a record in the "Tariff Domains" form and specify value "Domain for Deposits" in the *Name* field and value "DEP" in the *Code* field.
- Add the following tariffs to the registered tariff domain:
 - Three tariffs with the "Interest" role. For this, add three rows in the "Tariff for Domain for Deposits" form and specify value "Interest" in the Tariff Role field and value "Interest on Deposits" in the Tariff Type field of each row. Then, select values "Low Limit", "Middle Limit" and "High Limit" in the If Limit Tariff field of the first, second and third tariff, respectively.



• Three tariffs with the "Service Limit" role. For this, add three rows in the "Tariff for Domain for Deposits" form, specify value "Service Limit" in the Tariff Role field of each row and select value "Low Limit", "Middle Limit" and "High Limit" in the Tariff Type field of the first, second and third tariff, respectively.

Note that when a tariff with the "Service Limit" role is set in the *If Limit Tariff* field of another tariff, this tariff (tariff with the "Service Limit" role) should not be set in the Service for this Product.

The results of adding tariffs in the domain "Domain for Deposits" are shown in Fig. 77.

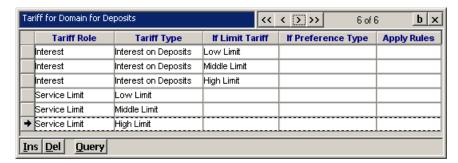


Fig. 77. Adding tariffs in the domain "Domain for Deposits"

Specify and activate tariff numeric values.

In our example, numeric values are set in the parameters of a tariff with the "Service Limit" role, which is specified in the *If Limit Tariff* field of another tariff. Numeric values of a tariff for setting boundaries shown in Table 1 are set as follows:

For the tariff "Low Limit":



Fig. 78. Numeric values of the "Low Limit" tariff

• For the tariff "Middle Limit":



Fig. 79. Numeric values of the "Middle Limit" tariff



For the tariff "High Limit":

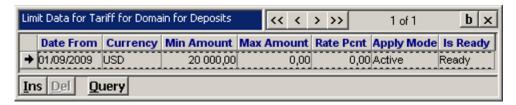


Fig. 80. Numeric values of the "High Limit" tariff

Note that rules for filling in the *Min Amount* and *Max Amount* fields in a tariff with the "Service Limit" role depend on where this tariff will be set – in the Service or in the *If Limit Tariff* field of another tariff.

In our example, a tariff with the "Service Limit" role is set in the *If Limit Tariff* field. The *Min Amount* and *Max Amount* fields of "Low Limit", "Middle Limit" and "High Limit" fields are filled in according to Table 1, given that the checked amount must be **greater than or equal to** the minimum allowed amount and **less than** the maximum allowed amount.

See the section "Tariffs with the "Service Limit" Role" for rules to specify limits for a tariff with the "Service Limit" role.

• For the tariff "Interest on Deposits" with value "Low Limit" specified in the *If Limit Tariff* field:



Fig. 81. Numeric values of the "Interest on Deposits" tariff

- For the tariff "Interest on Deposits" with value "Middle Limit" in the *If Limit Tariff* field, specify value "5" in the *Rate Pcnt* field (see Fig. 81).
- For the tariff "Interest on Deposits" with value "Middle Limit" in the *If Limit Tariff* field, specify value "8.5" in the *Rate Pcnt* field (see Fig. 81).
- Select the tariff domain "Domain for Deposits" in the deposit Product, and select the tariff "Interest on Deposits" in the deposit account template.

With this setup, the system daily analyses the account balance and selects an interest rate according to the range in which the account balance falls. The total interest amount is a sum total of each day's interest at the corresponding rate.



5.2 Charging a Tax on Income Gained from Deposit Interest

It is necessary to set up charging a tax on income gained from deposit interest. The Central Bank of Russia's refinancing rate is 12%. The rouble deposit interest rate is 19%. The tax rate is 30%. The tax is charged if a deposit interest amount exceeds the interest amount calculated for rouble deposits at the rate of the Central Bank of Russia's refinancing rate plus 5%.

The following configurations can be used for this (tariff type and domain names and codes may be arbitrary):

- Register a tariff type for keeping deposit interest. For this, add a record in the "Tariff Types" form and specify value "Interest" in the *Tariff Role* field, value "Interest on Deposits" in the *Name* field and value "INT RATE DEP RUR" in the *Code* field.
- Register a tariff type for keeping the tax. For this, add a record in the "Tariff Types" form and specify value "Interest" in the *Tariff Role* field, value "Interest Tax" in the *Name* field and value "TAX_RUR" in the *Code* field.
- Register a tariff domain. For this, add a record in the "Tariff Domains" form and specify value "Int Tax for Deposits" in the *Name* field and value "TAX_DEP" in the *Code* field.
- Add the following tariffs in the registered tariff domain:
 - A tariff with the "Interest" role. For this, add a row in the "Tariff for Int Tax for Deposits" form and specify value "Interest" in the *Tariff Role* field, value "Interest on Deposits" in the *Tariff Type* field, and tag "INTEREST_TAX=TAX_RUR;" in the *Apply Rules* field.
 - A tariff with the "Interest Tax" role. For this, add a row in the "Tariff for Int Tax for Deposits" form and specify value "Interest Tax" in the *Tariff Role* field, value "Deposit Tax RUR" in the *Tariff Type* field, and tag "TAX_MODE=DT;" in the *Apply Rules* field.

The results of adding tariffs in the domain "Int Tax for Deposits" are shown in Fig. 82.



Fig. 82. Adding tariffs in the "Int Tax for Deposits" domain

• Specify and activate tariff numeric values.



For the tariff "Interest on Deposits":



Fig. 83. Deposit interest

For the tariff "Deposit Tax RUR":

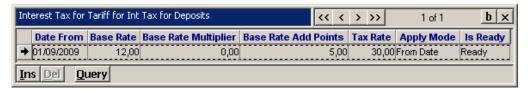


Fig. 84. Numeric values used to charge the tax

• Select the tariff domain "Int Tax for Deposits" in the deposit Product, and select the tariff "Interest on Deposits" in the deposit account template.

With this setup, the system will accrue interest to the deposit account at the rate of 19%. A financial gain tax at the rate of 30% will be charged to the deposit interest amount equalling 2% (19%-(12%+5%)=2%).

5.3 Setup of Fees Depending on a Document Amount

Setup of fees depending on a document amount (for example, when a transaction is made for an amount from 15 to 29.99 EUR charge a fee of 1 EUR, from 30 to 44.99 – 2 EUR, etc.). I.e. the tariff that will be used depends on the amount of a single transaction. The following settings may be used to do so:

 Use a tariff with the "Service Limit" role (see the section "Tariffs with the "Service Limit" Role") to set up ranges (maximum and minimum transaction amount).

Note that rules for filling in the *Min Amount Max Amount* fields in a tariff with the "Service Limit" role depend on where this tariff will be set – in a Service or in the *If Limit Tariff* field of another tariff. In our example, a tariff with the "Service Limit" role is set in the *If Limit* Tariff field. The *Min Amount Max Amount* fields are filled in so that when checked, the amount is **greater than or equal to** the minimum permitted amount and **less than** the maximum permitted amount.

Rules for specifying limits for a tariff with the "Service Limit" role set in a Service are described in the section "Tariffs with the "Service Limit" Role".



- The amount of the document for analysis (for example, the document's Transaction Amount or Settlement Amount) is set using the BASE_AMOUNT_TYPE tag in a tariff with the "Service Limit" role. By default, Settlement Amount is analysed.
- A tariff with the "Service Limit" role is set in the *If Limit Tariff* field for the corresponding tariff with the "Service" role.
- A tariff with the "Service" role is set in the *Fee Tariff* field in the Service.

Note that when a tariff with the "Service Limit" role is set in the *If Limit Tariff* field of another tariff, this tariff (tariff with the "Service Limit" role) should not be set in the Service for this Product.

5.4 Setup of Individual Tariff Domains

It is necessary to set up a Product used by merchants that only have different card service fees and deadlines of reimbursement by the acquiring bank.

Table 2 shows tariff numeric values for each merchant.

Table 2. Merchant tariffs

	Card service fee, %	Reimbursement deadline, days
Merchant A	0,2	1
(TEST MERCH A)		
Merchant B	0,35	3
(TEST MERCH B)		

The following configurations can be used for this (tariff type and domain names and codes may be arbitrary):

- Register a tariff type for keeping card service fees. For this, add a record in the "Tariff Types" form and specify value "Service" in the *Tariff Role* field, value "Acq Fee" in the *Name* field and value "ACQ_FEE" in the *Code* field.
- Register a tariff type for keeping deadlines of reimbursement by the acquiring bank. For this, add a record in the "Tariff Types" form and specify value "Service Value Days" in the *Tariff Role* field, value "Acq Value Days" in the *Name* field and value "ACQ_VD" in the *Code* field.
- Specify and activate tariff numeric values for the acquiring contract of merchant TEST MERCH A. For this, proceed as follows:
 - In the "Tariff for Contracts" form, select the acquiring contract of merchant "TEST MERCH A" and click the [Own Tarrifs] button.



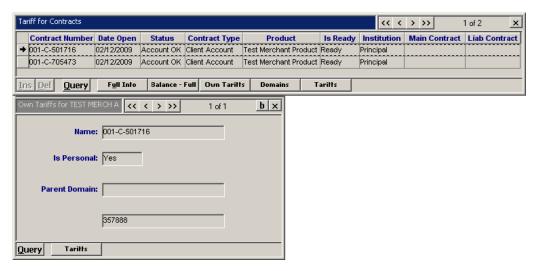


Fig. 85. Individual tariff domain for an acquiring contract

• In the "Own Tariffs for TEST MERCH A" form, click the [Tariffs] button. In the "Tariffs for <...>" form that opens, add the tariff types registered before.



Fig. 86. Including tariff types in an individual tariff domain

- Specify numeric values for each of the tariff types in the individual domain.
 - ◆ For the "Acq Fee" tariff:



Fig. 87. Card service fee charged to merchant TEST MERCH A

◆ For the "Acq Value Days" tariff:

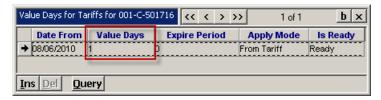


Fig. 88. Deadline of funds reimbursement to merchant TEST MERCH A by the acquiring bank



- Specify and activate tariff numeric values for the acquiring contract of merchant TEST MERCH B. The sequence of actions is the same as for merchant TEST MERCH A except for tariff numeric values:
 - ♦ For the "Acq Fee" tariff:



Fig. 89. Card service fee charged to merchant TEST MERCH B

♦ For the "Acq Value Days" tariff:

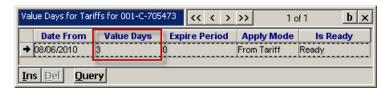


Fig. 90. Deadline of funds reimbursement to merchant TEST MERCH B by the acquiring bank

 Select the registered tariff types ("Acq Fee" and "Acq Value Days") for a Service. The Service must be specified in the Service Package of the devices registered for both merchants.

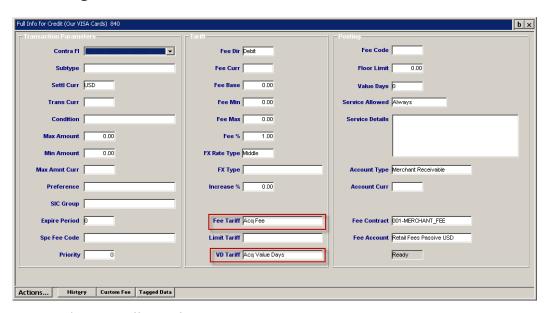


Fig. 91. Selecting tariff types for a Service

With this setup, individual numeric values of the card service fee and the deadline of reimbursement by the acquiring bank will be used when transactions are performed in the devices of the two merchants. Both merchants use the same Product. Also, it is not necessary to reactivate the Product when the tariff numeric values change. It is sufficient to change the numeric values in each merchant's individual tariff domain.