

# Acquiring Advanced Applications R2

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# Introduction

This document is intended for WAY4™ system administrators, bank or processing centre employees who are responsible for the operation of the Advanced Applications R2 module. It describes general principles of the module design and configuration, as well as the basic rules for entering and processing applications.

While working with this document, it is recommended that users refer to the following resources from the OpenWay documentation series:

- DB Manager Manual
- Products and Contract Subtypes
- Form Builder
- WAY4™ Dictionaries
- Issuing Module User Manual
- Acquiring Module User Manual
- WAY4™ Advanced Tariff Management
- Advanced Applications R2 XML Format
- WAY4™ Client and Contract Classifiers
- Advanced Applications Module (workflow configuration)

The following conventions are used throughout this document:

- Field labels in screen forms are displayed in *italics*.
- Names of screen form buttons are shown in square brackets, such as [Approve]
- Menu selection sequences are given using arrows, as in "Full → Issuing → Contracts Input & Update".
- Key combinations in DB Manager are shown in angular brackets, for example <Ctrl>+<F3>.
- Warnings that there is a risk of making an incorrect action are marked with the  sign.
- Messages marked with the  sign contain information about important features, additional facilities, or the optimal use of certain system functions.

## Module Purpose

The WAY4™ Advanced Applications R2 module is designed for the following purposes:

- To import applications from files or enter them manually in order to create clients, as well as main contracts and subcontracts without direct user access to database tables containing client and contract information. The Advanced Applications module also allows processing of applications to create groups of related contracts (contract trees). Import is performed from XML format files (see the document "Advanced Applications R2 XML Format").
- To import applications from files or manually enter them in order to modify client and contract parameters; such applications make it possible to assign another Product to a contract (see the document "Products and Contract Subtypes"), to change a contract's credit limit, reissue bank cards, change client address data, etc. Import is performed from XML format files (see the document "Advanced Applications R2 XML Format").
- To manage standing payment orders, usage limiters, Events and additional addresses.
- To manage application workflow (see the document "Advanced Applications Module (workflow configuration)") according to the financial institution's policies.

## Operating Principles

The operation of the Advanced Applications module is based on special database tables.

Client applications are entered manually, imported from files or through the WAY4U integration platform and are then registered as applications to be processed in the ADV\_APPL table.

The Advanced Applications module makes it possible to register and process applications that can further be used to modify data in client, contract, usage limiter, standing payment order, Event, additional addresses and plastics tables (data format is described in more detail in the document "Advanced Applications R2 XML Format"). Only a limited number of usage limiter and standing payment order parameters can be modified using applications.

For each application, additional information can be specified in the special APPL\_INFO table. Additional information is stored with the data type specified in the APPL\_INFO table. The information can be used according to the bank's regulations to process applications, for example, for client credit scoring (see the section "Application Additional Information Classifiers "Application Info Types"" of the document "Advanced Applications Module (workflow configuration)").

Procedures for processing applications (workflow) according to bank regulations are created during configuration of the Advanced Applications module (see the document "Advanced Applications Module (workflow configuration)").

After an application has been created by entering it manually or importing it from a file, the system selects the workflow sequence (strategy) for processing the case. Selection is made according to the application parameter values. An application is processed in stages, according to the selected workflow strategy (see the document "Advanced Applications Module (workflow configuration)").

At each stage of the workflow, a user "captures" the application and becomes the person responsible for that application. From this moment, all other users are prohibited access to the application until it moves to the next workflow stage.

During application processing by the Advanced Applications module all changes in data are reflected this module's tables, without affecting other tables of the system (clients, contracts, documents).

Data from Advanced Applications module tables is transferred directly to tables of other system modules for the creation of contracts, clients, etc. after the application is accepted (see the section "Accepting Applications").

When an application has been processed, it is given the "Posted" status, after which the application is filtered from the list of applications to be processed.

## Creating Applications

### **General Principles**

Forms for working with clients and contracts using applications are organised as described below:

- Forms for viewing client records and all objects related to them (contracts, addresses, etc.).
- Forms for viewing contracts grouped by type (account and card contracts for issuing, account and device contracts for acquiring) and objects related to these records (credit limits, usage limiters, etc.).

The [Application] button is available in object forms. Clicking this button creates an application to work with the object (see the section "Application Form"). An application can be used to change the selected client or contract record's data, add or change information about related objects. In the application form, the user can select the required application type on which the composition of input information depends.

The list of addresses shown in the "Addresses" form can be viewed in client and contract forms. This form is opened by clicking the [Addresses] button. The [Application] button in the "Addresses" form is used to create a special type of application for changing information about a selected address. For more information using applications to work with addresses, see the section "Address".

An application to create a new client is opened by selecting a special item ("New Client") in the user menu. An application is created with a type predefined during setup.

Different types of application are built according to different schemes. An application scheme makes it possible to set the main object (client or contract) for which the application is intended and a hierarchy of related objects.

A scheme consists of sections, contains a main section (for entering data about the main object) and set of subordinate sections organised in a hierarchy. Each section is used to enter information about a system object (client, contract, address, etc.). A scheme may consist of one section

Later, when the user creates a selected type of application (according to a scheme), an object structure for entering information about each object will be created automatically.

Example of a hierarchical object structure:

- Client record (main object).
  - Account contract.
    - ◆ Address.
    - ◆ Card contract.

When working with an application, it is possible to enter information about a number of objects, even if a special section has not been created for them. Forms for working with these objects are available from the form of the parent object – client ("Client Info") or contract ("Contract Info"). The following is a list of such objects:

- Classifier (client or contract classifier).
- Credit limit – for contract only.
- Instalment Limit – for contract only.
- Event – for contract only.
- Usage (usage limiter) – for contract only.
- Tariff – for contract only.
- Order (payment order) – for contract only.
- Address.
- Affiliation (affiliated client).
- Parameter.
- Contract. This section is available if the parent object is an account contract. The [Subs] button is used to go to subcontract forms.
- Card Info (bank card). This section is available if the parent object is a card contract. The [Card Info] button is used to go to subcontract forms.
- Device. This section is available if the parent object is an acquiring module contract.

After entry, applications are available for processing in other screen forms (see "Application Workflow").

### **Selecting a Financial Institution and Client Type**

Before starting to create applications, the user should ensure that the required financial institution and client type are set. To set these parameters, in the user menu select "Advanced Applications R2 Cardholder Input & Update by Applications → Set Client Type" (or "Advanced Applications R2 → Merchant Input & Update by Applications → Set Client Type").

### **Application Form**

The application form, regardless of the application object, contains the following fields:

- Name of the application type according to which the application was created (in the left-hand upper part of the screen).
- *Fin Institution* – financial institution to which the application belongs.
- *Application Date* – application creation date.
- *Client/Contract* – object for which the application is intended.
- *Branch* – branch of the bank that accepted the client application; the list of branches is created in the "Branches" table (Full → Configuration Setup → Main Tables → Branches).
- *Action* – action executed with the object as the result of processing the application.
- *Product Category* – product category (Issuing/Acquiring).

- *Appl Reg Number* – application registration number. The field must contain a number unique within the financial institution branch; the length may be from 1 to 64 digits. If this field is not filled in, WAY4 will fill it in automatically.

Fig. 1. Application form

The [Actions] button of the form is used to open a context menu containing the following items:

- "Check" – calls the procedure for verifying the selected application's data.
- "Approve" – approve the application.

The form's [Delete] button is used to delete a created application record.

The set of buttons for working with objects that are available in the application form depends on the scheme used (the form will show buttons for objects whose sections are explicitly added to the scheme). The application shown in Fig. 1 contains the [Client] button for entering client information and the [Contract] button for entering contract information.

Clicking a button opens a child form for entering information about the corresponding object (in Fig. 2 – for a client).

Fig. 2. Form for entering client information

In this form, buttons may be available for working with related objects (addresses, classifiers, etc.) according to the application scheme. For a number of objects, the corresponding buttons will always be available in the parent object's (client or contract) form. The list of these objects is given in "General Principles".

### Clearing Application Object Fields

When working with an application, it may be necessary to clear several fields of the object for which the application is being created (see the section "Operations with Application Objects"). To do so, click the [Clear Fields] button located in the lower part of the application entry form. The form "<Object Type> Fields to Clear" (see Fig. 3) will open as a result.



| Object Type | Field Name      |
|-------------|-----------------|
| Contract    | Comment Text    |
| Contract    | RBS Number      |
| Contract    | [Dropdown Menu] |

Ins Del Query

Fig. 3. Form for specifying object fields to be cleared

**i** If there is no [Clear Fields] button in the application entry form, an application cannot be used to clear fields for objects of this type.

This form makes it possible to specify the names of fields to be cleared for the object for which the application is being created.

This form contains the following fields:

- *Object Type* – the type of object to which the application will be applied (see the section "Operations with Application Objects").
- *Field Name* – the object field to be cleared. The list of names available in the list depends on the selected object type, and on system settings.

To add the name of a field to be cleared, click the [Ins] button and fill in the record's *Field Name* field. To delete a record, click [Del].

During application processing, it is possible to view the object fields to be deleted using this application. The [Clear Fields] button, available in the following forms is used to do so:

- Processing imported applications (see Fig. 35 in the section "Loaded Applications").
- Monitoring application workflow (see Fig. 39 in the section "Monitoring Application Workflow").
- Processing approved applications (see Fig. 44 in the section "Processing Approved Applications").
- Processing declined applications (see Fig. 47 in the section "Processing Declined Applications").

## Creating Applications

Applications for working with acquiring module clients and contracts are entered using the menu group "Advanced Applications R2 → Merchant Input & Update by Applications".

This menu group contains the following items:

- "Set Client Type" – select the financial institution and client type.
- "New Merchant" – register an application to create a new merchant record.
- "Merchants" – list of merchants. Used to select the required merchant record and enter an application for working with this record (including with related objects – addresses, classifiers, etc.).

- "Acquiring Contracts" – list of contracts. Used to select the required contract record and enter an application for working with this record (including with related objects – addresses, classifiers, etc.).
- "Device Contracts" – list of device contracts. Used to select the required device contract record and enter an application for working with this record (including with related objects – credit limit, classifiers, etc.).
- "Loaded Applications" – work with the list of loaded applications.
- "Approval Applications" – process approved applications.
- "Declined Applications" – work with declined applications.
- "Applications Monitoring" – application processing monitoring.

## Applications for Working with Acquiring Module Client Records

Application forms to work with acquiring module client records are accessed in the following ways:

1. To create an application to add a new merchant record, select the user menu item "Advanced Applications R2 → Merchant Input & Update by Applications → New Merchant".

The "New Merchant" form for creating an application will open (see Fig. 4).

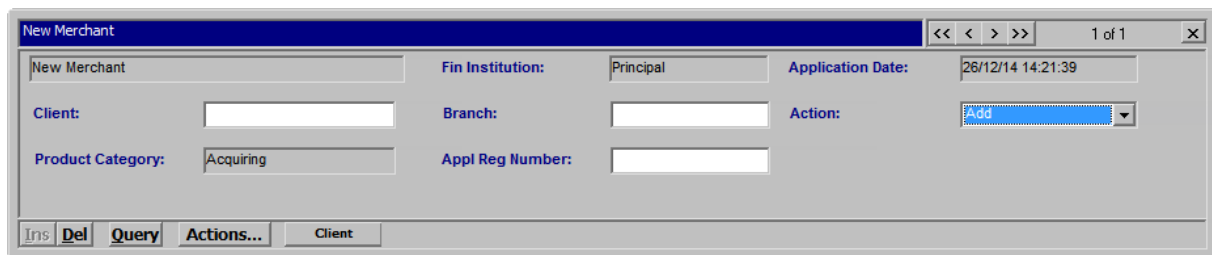


Fig. 4. Applications for working with a merchant record


Form fields and principles for working with the form are described in the section "Application Form".

2. To create an application to make changes to a merchant or its related objects (including contracts), select the user menu item "Advanced Applications R2 → Merchant Input & Update by Applications → Merchants". The "Merchants" form will open, for viewing data about clients and creating applications (see Fig. 5).

Fig. 5. Acquiring module client

To create an application to work for the selected client record, click the [Application] button. The "Create New Application" form will open (see Fig. 6). Select the required application type in the *Application Type* field.

Fig. 6. Selecting an application type

 The list in the *Application Type* field will show application types that meet the following conditions: *Product Category* = "Acquiring", *Object For Type* = "Client" (see the section "Application Schemes" of the document "Advanced Applications Module (workflow configuration)").

After selecting an application type, click the [Proceed] button. A form identical to the "New Merchant" form shown in Fig. 4 will open.

3. To create an application to change a client address, select the user menu item "Advanced Applications R2 → Merchant Input & Update by Applications → Merchants". The "Merchants" form (see Fig. 5) for viewing merchant data

and creating applications will open. Click the [Addresses] button in this form to open the [Addresses] form (see Fig. 7) with a list of merchant addresses.

Fig. 7. Merchant addresses

Click the [Application] button in this form. An address change application form will open, identical to the form shown in Fig. 6. Click the [Address] button in this form to open a form to enter merchant address data. When entering address data, observe the rules for creating acquiring module clients, set forth in the section "Creating New Clients" of the document "Acquiring Module". More detailed information about working with addresses is provided in the section "Address" of the current document.

Depending on the application scheme, the form for creating an application (see Fig. 4) will contain buttons for opening forms to work with objects (acquiring module client and objects related to it). Forms for entering application object data are described in the corresponding sections. The form may contain the following buttons:

- [Client] – (see the section "Acquiring Client (Client)").
- [Contract] – (see the section "Acquiring Contract (Contract)").
- [Classifier] – client or contract classifier (see the section "Classifier").
- [Parameter] – client or contract parameter (see the section "Client or Contract Custom Parameter (Parameter)").
- [Extra Info] – additional information for a client record (see the section "Additional Information (ExtraInfo)").
- [Address] – client address (see the section "Address").
- [Affiliation] – affiliated client (see the section "Affiliated Client (Affiliation)").


## Applications for Acquiring Module Contracts

1. To create an application to change an existing contract (and its related objects), select the menu item "Advanced Applications R2 → Merchant Input

& Update by Applications → Acquiring Contracts" or "Advanced Applications R2 → Cardholder Input & Update by Applications → Device Contracts". The "Acquiring Contracts" form (see Fig. 8) or "Device Contracts" form (see Fig. 9) will open for viewing contract data and creating applications.

Fig. 8. Acquiring module contract

Fig. 9. Device contract

 The contract form can also be opened when opening a client form (see Fig. 5 in the section "Applications for Working with Acquiring Module Client Records").

To create an application for the selected contract record, click the [Applications] button. The "Create New Application" form will open (see Fig. 21). Select the required application type in the *Application Type* field.




The "Create New Application" dialog box contains the following fields:

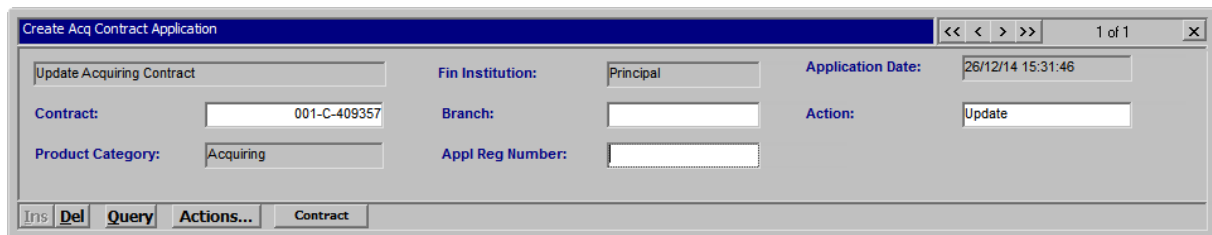
- Fin Institution:** Principal
- Product Category:** Acquiring
- Reg Number:** (empty field)
- Application Type:** Update Acquiring Contract

Buttons at the bottom right: Cancel, Proceed

Fig. 10. Selecting an application type

 The list in the *Application Type* field shows application types that meet the following conditions: *Product Category* = "Acquiring", *Object For Type* = "Contract" (see the section "Application Schemes" of the document "Advanced Applications Module (workflow configuration)").

After selecting an application type, click the [Proceed] button to open the "Create Acq Contract Application" form (see Fig. 11).



The "Create Acq Contract Application" form contains the following fields and controls:

- Update Acquiring Contract** (text field)
- Contract:** 001-C-409357
- Product Category:** Acquiring
- Fin Institution:** Principal
- Branch:** (empty field)
- Appl Reg Number:** (empty field)
- Application Date:** 26/12/14 15:31:46
- Action:** Update

Buttons at the bottom: Ins, Del, Query, Actions..., Contract

Fig. 11. Application for working with an acquiring contract record

Form fields and principles for working with the form are described in the section "Application Form".

- To create an application to change a contract address, select the user menu item "Advanced Applications R2 → Merchant Input & Update by Applications → Acquiring Contracts" or "Advanced Applications R2 → Cardholder Input & Update by Applications → Device Contracts". The "Acquiring Contracts" form (see Fig. 8) or "Device Contracts" form (see Fig. 9) will open for viewing contract data and creating applications. Click the [Addresses] button in this form to open the [Addresses] form (see Fig. 12) with a list of contract addresses.

Fig. 12. Contract addresses

Click the [Applications] button in this form. An address change application form will be shown. Click the [Address] button in this form to open a form for entering contract address data. When entering address data, observe the rules for creating contracts, set forth in the section "Creating New Accounting Contracts" of the document "Acquiring Module". More detailed information about working with addresses is provided in the section "Address" of the current document.

Depending on the application scheme, the form for creating an application will contain buttons for opening forms to work with objects (contract and objects related to it). Forms for entering application object data are described in the corresponding sections. The form may contain the following buttons:

- [Address] – contract address (see the section "Address").
- [Event] – Event (see the section "Event").
- [Sub Contract] – contract (see the section "Acquiring Contract (Contract)").
- [ExtraInfo] – additional information for a contract (see the section "Additional Information (ExtraInfo)").
- [Affiliation] – affiliated client (see the section "Affiliated Client (Affiliation)").
- [Usage] – usage limiter (see the section "Usage Limiters (Usage)").
- [Pers Order] – payment order (see the section "Payment Order (Order)").
- [Tariff] – tariff (see the section "Tariff (Tariff)").



The tariff management module is not included in the WAY4 basic configuration and is provided according to an additional agreement with the WAY4 vendor.

- [Classifier] – client or contract classifier (see the section "Classifier").
- [Parameter] – client or contract parameter (see the section "Client or Contract Custom Parameter (Parameter)").
- [Status] – contract status (see the section "Contract Status (Status)").
- [Device] – (see the section "Acquiring Contract (Contract)").

## Forms for Application Objects

Work with application object properties is performed in the corresponding forms.

### Acquiring Client (Client)

Clicking the [Client] button in the application form (see "Application Form") opens the "Client Info" form (see Fig. 13).

Fig. 13. Working with merchant data

Click the [Base Addr] button in the "Client Info" form (see Fig. 13) to open the "Base Address" child form for entering data about the client's main address (see Fig. 14).

Fig. 14. Form for entering data about a merchant's main address

The [Clear Fields] button of the "Client Info" form (see Fig. 13) and the "Base Address" form (see Fig. 14) is used to set the list of object fields (client record and main client address) to be cleared using an application (see "Clearing Application Object Fields").

When entering application data, observe the rules for creating clients and contracts, set forth in the section "Creating New Clients" of the document "Acquiring Module".

The set of buttons in the "Client Info" form (see Fig. 13) used to enter data about subordinate objects depends on the application scheme. The form may contain the following buttons:

- [BaseAddr] – main address.
- [Contract] – (see the section "Acquiring Contract (Contract)").
- [Classifier] – client or contract classifier (see the section "Classifier").
- [Address] – client address (see the section "Address").



- [Affiliation] – affiliated client (see the section "Affiliated Client (Affiliation)").

### Acquiring Contract (Contract)

Clicking the [Contract] or [Device] button in the application form (see the section "Application Form") or the parent object's form opens the "Contract Info" form (see Fig. 15).

Fig. 15. Form for working with applications to modify acquiring module contract records

This form contains the following fields:

- *Date Open* – the contract opening date; by default, this field contains the current banking date.
- *Date Expire* – the contract expiry date.
- *Comment* – field for entering additional information about the contract.


The *Client* field group contains client data and includes the following fields:

- *Service Group* – service group of the client or contract; this value is selected from a drop-down list (Full → DB Administrator Utilities → Users & Grants → Service Groups).
- *Client Category* – client category (the list of registered client categories is found in the Client Category field of the "Full → Configuration Setup → Client Classifiers → Client Types" form). Specify the "Commercial" value.
- *Client Type* – client type (the list of registered client types is found in the Name field of the "Full → Configuration Setup → Client Classifiers → Client Types" form).
- *Client* – name of the client registered in the database.


The *Contract Identification* field group contains information about the contract to which the application belongs and includes the following fields:

- *Contract Number* – contract number.
- *Contract Name* – contract name.
- *Bank Code* – payment system member ID assigned to the acquirer.
- in the *Card Acceptor ID* field used to enter the Merchant ID, specify a number containing no more than 15 digits that is unique to the processing system.

- in the *SIC Code* field, from the drop-down list, select the merchant category corresponding to the type of business. This list is created on the basis of the "SIC Group" dictionary (Full → Configuration Setup → Main Tables → SIC Groups).
- The *Bank Account Number* field is usually used in one of the following ways:
  - to specify the number of the settlement account in the bank system.
  - to specify data required for custom accounting numeration. The *Product* field group contains information about the contract category and contract Product:
- *Product Category* – filled in automatically.
- *Contract Category* – contract category; this field can have one of the following values:
  - "Account" – accounting contracts.
  - "Device" – device contracts.
- *Parent Contract* – a higher-ranking contract in the hierarchy; when this field is filled in, the *Parent Product* field will contain a value corresponding to the name of the Product for this contract.

 If this form was opened from the higher-ranking contract form, information about the higher-ranking contract will be automatically entered in the *Parent Contract* field of the "Contract Info" form (see Fig. 15).

- *Parent Product* – the Product for the higher-ranking contract in the hierarchy (when the *Parent Contract* field is filled in, this field is filled in automatically).
- *Product* – drop-down list to specify the Product for the contract. When a value is entered in this field, the [Actions] → "Set Prod." command becomes unavailable.

 The [Actions] → "Set Prod." command can also be used to fill in the *Product* field by specifying a Product code.

The [Clear Fields] button is used to set the list of object fields (contract records) to be deleted using an application (see "Clearing Application Object Fields").

Clicking the [Actions] button opens a context menu with the following items:

- "Set Prod" – select a Product by specifying its code (described further on in this section).
- "Delete" – delete a record.
- "Add Device" – add another device contract on the same level of the object hierarchy as the current contract. For this command to be available, specify the "MULTIPLE" tag in the specific section of the application scheme (see the section "Application Schemes" of the document "Advanced Applications Module (workflow configuration)").

Clicking the [Set Prod.] button opens the "Select Product by Codes" form (see Fig. 16).

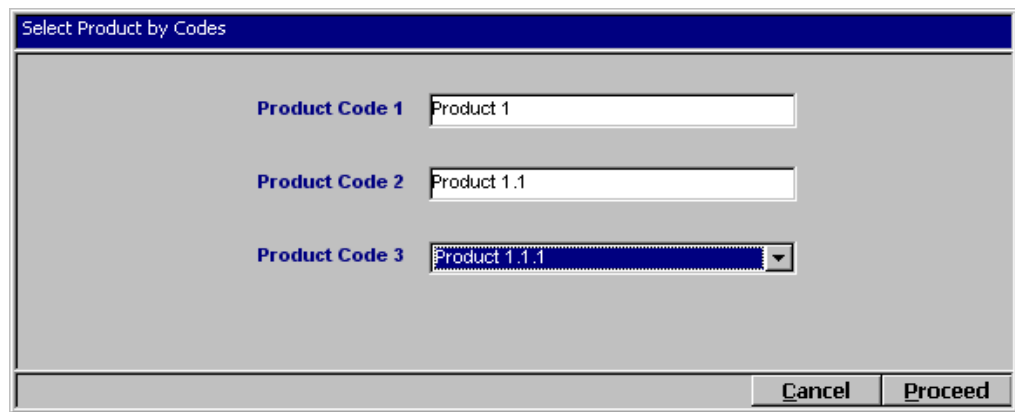


Fig. 16. Form for selecting a Product by code

**i** A Product is selected by specifying its code if a large number of Products is registered in the system. When selecting a Product by code, only those Products for which a code is specified will be shown in the list, meaning codes are used to filter the list of Products.

To select a Product by code, codes must have been set earlier for Products used when entering applications. The list of Product codes is organized as a hierarchy with three (or fewer) levels. For information on setting Product codes, see the section "Product Codes" of the document "Advanced Applications Module (workflow configuration)".

The "Select Product by Codes" form (see Fig. 16) contains the following:

- *Product Code 1* – field for selecting the Product code of the top level of the hierarchy.
- *Product Code 2* – field for selecting the Product code of the second level of the hierarchy (in this field, Product codes are shown that are subordinate to the code specified in the *Product Code 1* field).
- *Product Code 3* – field for selecting the Product code of the third (lowest) level of the hierarchy (in this field, Product codes are shown that are subordinate to the code specified in the *Product Code 2* field).

"Select Product by Codes" form fields (see Fig. 16) should be filled in beginning with the *Product Code 1* field (top level of the hierarchy) and then, if required, specifying values in the *Product Code 2* and *Product Code 3*

When the [Proceed] button in the "Select Product by Codes" form (see Fig. 16) is clicked, input data will be checked and then information about the Product that was found according to the specified code will be entered in the *Product* field of the "Contract Info" form (see Fig. 15). A Product will be searched for according to the code of the lowest hierarchy level whose data is entered in the fields of the "Select Product by Codes" form (see Fig. 16).

Product codes are set in the "Appl Product Codes" form (Advanced Applications R2 → Setup → Application Product Codes). A more detailed description of Product code configuration is provided in the section "Product Codes" of the document "Advanced Applications Module (workflow configuration)".

Clicking the [Terminal] button in the "Contract Info" form (see Fig. 15) opens the "Terminal Information" form (see Fig. 17).

Fig. 17. Form for entering device information

The "Terminal Information form (see Fig. 17) contains the following fields:

- *Category* – filled in automatically depending on the value of the "Contract Info" (see Fig. 15) form's *Product* field.
- *Device Type* – drop-down list to select the device type (values in this field are selected from lists set using the "ATM Types", "POS Types" and "Imprinter Types" items of the menu group "Full → Configuration Setup → Merchant Device Setup").
- *Location* – geographical location of the device.
- *Transaction Class* – financial transaction type. The following values can be selected from the drop-down list:
  - "Cash" – cash dispensing.
  - "Retail" – retail transaction.
  - "Unique" – casino transaction, etc.
- *Default Curr* – defines the default currency for transactions on this device.
- *GMT Offset* – specifies the difference between the time zones in which the device and NetServer are located.
- *Cut-Off Time* – specifies the time (in 24-hour format) until which authorisation requests on this device are registered with the current banking date. NetServer system time is used without consideration for the difference between the time zones in which the device and NetServer are located.
- The *Interval* group of fields specifies the time when the device operates.
  - *Time From* – start time of operation.
  - *Time To* – end time of operation; when a value in this field is entered that precedes the value in the *Time From* field, nocturnal hours are included in the device's operation time interval. Time must be specified in 24-hour format. NetServer system time is used (see the document "WAY4 NetServer") without consideration for the difference between the time zones in which the device and NetServer are located; voice authorisation on this device is only possible in the time interval defined by these fields.
- *Interval* – field to specify the time interval for device operation. This field must contain a string of 7 digits that are either "0" or "1", where the position of the digit indicates the day of the week (starting with Monday), and the value – whether the device is permitted to work with the system ("0" – prohibited, "1" – permitted). In addition, a time interval can be specified separating it from the mandatory string with a semicolon (";"). For example

"1111100;09:00-13:00;14:00-20:00" means that the device can work any day of the week from 9:00-13:00 and from 14:00-20:00. If the device's time of operation is not specified, it can work with the system at any time. Instead of a character string, a "W" or "H" can be specified in the *Working Time* field. The "W" character indicates that this user can access the system only on days defined by the business calendar as working days. The "H" character indicates that access is only possible on non-working days.

- The *Device Config* field group is used to set the device configuration and contains the following fields:
  - *Serial Number* – payment terminal serial number.
  - *Configuration* – identifier of the configuration used by the ATM.
  - *Socket* – (for ATM configuration) – specifies a mnemonic connection name unique within the system (for example if the TCP/IP protocol is used, enter the port number).
  - *X\_25 Address* – network address of the ATM in X.25.
  - *Global Limit* – specifies the maximum number of banknotes the ATM may dispense for one transaction. Its value depends on the technical characteristics of the ATM's banknote dispenser.
  - *Enh Parameters* – device enhanced configuration parameters.
  - *Device URL* – device URL address.
  - *Denom Dictionary* – drop-down list of ATM denominations.
  - *MAC Status* – specify the condition for checking the message authentication code (MAC).
    - ◆ "Mandatory" – request from the terminal is refused if the MAC is missing from the message.
    - ◆ "Optional" – the MAC is not mandatory in terminal requests.
    - ◆ "None" – request from terminal is refused if the message contains a MAC.
  - *PIN Prevalidation* – PIN validation in payment terminals, PIN prevalidation in ATMs:
    - ◆ "Mandatory" – mandatory.
    - ◆ "Optional" – optional.
    - ◆ "None" – none.
  - *Status* – select the device status. The following values are possible:
    - ◆ "OK" – the device is in service.
    - ◆ "Not Configured" – the device is not in service.

An empty value in the *Status* field corresponds to the value "Not Configured".

Clicking the [Parms] button in the "Contract Info" form (see Fig. 15) opens the "Override Device Parms" form (see Fig. 18) used to set values of device parameters for specific payment systems. Work with this form in the same way as described in the section "Device Parameters" of the document "Acquiring Module. User Manual".

Fig. 18. Form for entering device parameters

Depending on the application scheme, the "Contract Info" form (see Fig. 15) contains buttons for opening forms to work with objects (with the contract and its related objects). The form can contain the following buttons:

- [Address] – contract address (see the section "Address").
- [Classifier] – client or contract classifier (see the section "Classifier").
- [Event] – Event (see the section "Event").
- [Tariff] – tariff (see the section "Tariff (Tariff)").



The Advanced Tariff Management module is not included in the WAY4 base configuration and is supplied by additional agreement with the WAY4 vendor.

- [Device] – device contract (see the section "Acquiring Contract (Contract)").
- [Affiliation] – affiliated client (see the section "Affiliated Client (Affiliation)").
- "Usage" – usage limiter (see the section "Usage Limiters (Usage)").
- [Parms] – device parameters (see the section "Acquiring Contract (Contract)").
- [Card Info] – bank card (see the section "Card Info").
- [Terminal] – terminal data (this button is only available in device contract forms)

## Classifier

Clicking the [Classifier] button in an application form (see the section "Application Form") opens the "Classifier" form (see Fig. 19).

Fig. 19. Form for entering a classifier

This form contains the following fields:

- *Classifier* – drop-down list to select a classifier name ("Full → Configuration Setup → Common Handbooks → User Classifiers").
- *Classifier Value* – field for selecting a classifier value.
- *Date From* and *Date To* – fields for setting a classifier's effective period.
- *Comment* – comment field.

To add a new record in this form, execute the command [Actions] → "Insert More"; to delete a record, the command [Actions] → "Delete".

Working with client and contract classifiers is described in more detail in the document "WAY4™ Client and Contract Classifiers".

### **Client or Contract Custom Parameter (Parameter)**

Clicking the [Parameter] button in the application form (see the section "Application Form") or in the parent object's form opens the "Contract Parameter" form (see Fig. 20)

| Parameter            | Value |
|----------------------|-------|
| Classifier Parameter | ai    |

Fig. 20. Form for entering contract parameters

The form contains the following fields:

- *Parameter* – drop-down list to select a contract parameter name ("Full → Configuration Setup → Common Handbooks → Contract Parameters Setup").
- *Value* – field for selecting a parameter value.

To add a new record in this form, execute the [Actions] → "Insert More" command. To delete a record, execute [Actions] → "Delete".

## Address

Clicking the [Address] button in the application form (see the section "Application Form") or in the parent object's form opens the "Address" form (see Fig. 21).

Fig. 21. Form for entering client address data

To add a new record in this form, execute the command [Actions] → "Insert More"; to delete a record, the command [Actions] → "Delete".

The [Clear Fields] button is used to set the list of record fields (of the client address) to be cleared using an application (see "Clearing Application Object Fields").

The values of *Date From – To* fields together with the value of the *Address type* field are used to identify the address record to which changes must be made as a result of processing the application. It is necessary to specify values in the *Date From – To* fields, since for one client or contract, several address records of the same type may exist that are valid at different times.

If the section of the application for working with the address is used to disable the address, a form opens that is used to specify an address to be excluded from the list of addresses used for a client or contract (see Fig. 22).

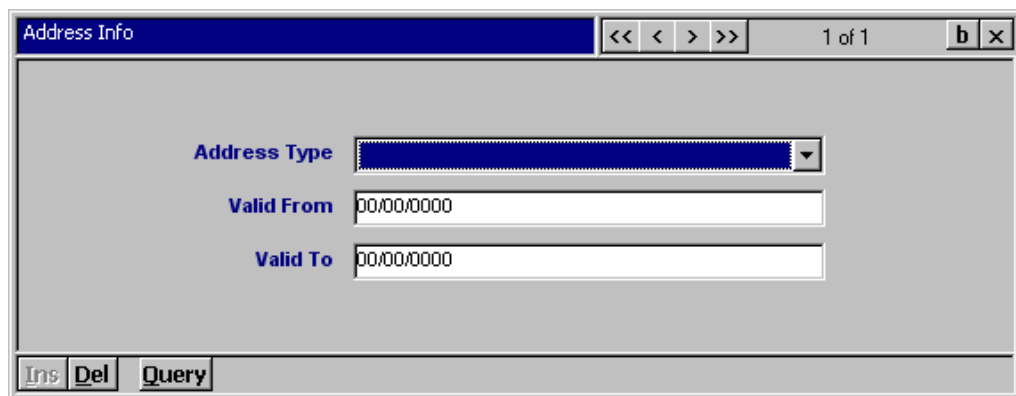


Fig. 22. Form for selecting an address to be excluded from the list of addresses in use

This form contains the following fields:

- *Address Type* – drop-down list to select the address type.
- The *Valid From – To* fields are used to specify the time interval in which the address is valid. These values of these fields, together with the value of the *Address type* field are used to identify the address record to which changes must be made as a result of processing the application. It is necessary to specify values in the *Valid From – To* fields, since for one client or contract, several address records of the same type may exist that are valid at different times.

To delete a record, click the [Del] button.

## Additional Information (ExtraInfo)

The "ExtraInfo" object type is used to enter information whose data type is defined by custom settings.

Clicking the [Extra Info] button in the application form (see the section "Application Form") or in the parent object's form opens the "Extra Info" form (see Fig. 23).



Fig. 23. Form for entering extra info

This form contains the following fields:

- *Add Info Type* – drop-down list to select the type of additional information (see the section "Application Additional Information Classifiers (Application Info Types)" of the document "Advanced Applications Module (workflow configuration)").
- *Add Info Value* – used to enter additional information.

To add a new record, execute the command [Actions] → "Insert More"; to delete a record, the command [Actions] → "Delete".

## Affiliated Client (Affiliation)

Clicking the [Affiliation] button in the application form (see the section "Application Form") or in the parent object's form opens the "Client Affiliations" form (see Fig. 24).

Fig. 24. Form for entering affiliated client data

This form contains the following fields:

- *Affiliation Type* – drop-down list that is defined in the "Linked Client Types" list ("Full → Configuration Setup → Client Classifiers → Linked Client Types").
- *Affiliated Client* – drop-down list of clients registered in the system, used to specify the client with which this client or contract is affiliated.
- *Affiliation Reg Number* – affiliation registration number.
- *Is For Sub* – drop-down list to specify the action with the client record according to application processing results; the following values are possible:

- "Yes" – use for sub-contracts.
- "No" – do not use for sub-contracts.
- The *Date From* and *Date To* fields specify the calendar start and end dates of this setting.
- *Is Active* – marker that client affiliation is active; if the "Yes" value is specified, the affiliation is active, if "No" is specified, the affiliation is inactive.
- *Comment* – comments.

The [Clear Fields] button is used to set the list of object fields (of a client affiliation) to be cleared using an application (see "Clearing Application Object Fields").

The [New Client] button is used to open a form in which information can be entered about a new client. This new client record will be created when processing the current application and will be specified as an affiliated client record.

To add a new record in this form, execute the command [Actions] → "Insert More"; to delete a record, the command [Actions] → "Delete".

## Card Info

Clicking the [Card Info] button in the application form (see the section "Application Form") or in the parent object's form opens the "Card Information" form (see Fig. 25).

The screenshot shows a window titled "Card Information". Inside, there are three columns of input fields. The first column has "Branch From", "Branch To", and "Order Number". The second column has "Prod Type", "Prod Event", "Chip Scheme", "Card Expire" (with a dash in the field), and "Card Number". The third column has "Comment" and "Add Info". At the bottom of the window, there are three buttons: "Ins", "Del", and "Query".

Fig. 25. Form for entering card data

This form contains the following fields:

- *Branch From*, *Branch To* – fields for specifying the code of the financial institution. The *Branch From* field specifies the financial institution in which the card will be issued, and the *Branch To* field specifies the financial institution to which the card will be delivered after issuing.
- *Order Number* – number of the order to produce the card.
- *Prod Type* – drop-down list to specify the card production type. One of the following values may be selected in this field:
  - "Replace All" – issue a new plastic card and print a PIN mailer; for example, when issuing a new card or reissuing a lost one.

- "Replace Plastic" – issue a plastic card only; for example, when reissuing a card that has expired.
  - "Replace PIN" – reprint PIN mailer (only possible by special agreement with the system vendor).
  - "Replace CVV" – issue a plastic card with a new CVV.
  - "Reorder PIN" – issue a new PIN.
  - "Replace Add Parms" – issue additional plastic card parameters; for example, a one-time password list.
  - "Chip Data Only" – issue smart card data for already existing magnetic stripe data and PIN.
- *Prod Event* – Event connected with card production type.
  - *Chip Scheme* – parameter scheme for smart cards.
  - *Card Expire* – card expiry date.
  - *Comment* – comments.
  - *Add Info* – additional information.

To add a new record in this field, click the [Ins] button; to delete a record, click [Del].

## Event

Clicking the [Event] button in the application form (see the section "Application Form") or in the parent object's form opens the "Contract Event " form (see Fig. 26).

Fig. 26. Form for entering Event data

To add new record in this form, execute the command [Actions] → "Insert More"; to delete a record, the command [Actions] → "Delete".

This form contains the following fields:

- *Contract Category* – contract category; this field can have one of the following values:
  - "Card" – card contracts.
  - "Account" – account contracts.
- *Event Code* – Event code.
- The *Date From* and *Date To* fields specify the calendar dates from and to which this setting is valid.
- *Comment* – additional description of Event.

## Instalment Plan (Instalment)

Clicking the [Instalment] button in the application form (see the section "Application Form") or in the parent object's form opens the "Instalment" form (see Fig. 27).

Fig. 27. Creating an instalment plan



The WAY4 Instalments module is not included in the basic WAY4 configuration and is supplied according to an additional agreement with the WAY4 vendor.

If an application is intended for creating (Add), changing (Update) or closing (Close) a plan, the form will contain the following fields:

- *Instalment Scheme Code* – scheme code.
- *Instalment Options* – instalment plan option.
- *Instalment Plan IDT* – the original plan's identifier. The field can be filled in when working with applications to change or close an instalment plan. The field is mandatory.
- *Doc IDT* – document identifier. The field can be filled in and is mandatory if the application is intended to create an instalment plan for a transaction (document).
- *Balance Type Code* – balance type code. The field can be filled in and is mandatory if the application is intended to create an instalment plan for a contract balance
- *Partial Amount* – amount for which an instalment plan will be created. The field is filled in if the application is intended to create an instalment plan for a contract balance when the plan must be created for part of the balance amount. If the field is not filled in (i.e. "0" is specified in the field), the plan will be calculated for the full amount of the balance.
- *Portion Amount* – amount of an instalment in an instalment plan. Either *Portion Amount* or *Or Tenor* is filled in.
- *Or Tenor* – number of instalment periods.
- *Free Period* – number of periods during which only the principal is due.
- *Payment Holidays* – the number of periods by which payment is deferred.

- *Add Info* – additional information.

Fig. 28. Early repayment/payment holidays

If an application is used for early repayment or granting payment holidays for a plan, the form will contain the following fields (see Fig. 28):

- *Instalment Plan IDT* – the original plan's identifier. This field is mandatory.
  - *Early Repayment Type* – early repayment type: "Partial" or "Full". The field is available when working with applications for early repayment.
  - *Partial Amount* – partial payment amount. The field is available when working with applications for early repayment.
  - *Date From* – payment date. The field is available when working with applications for early repayment.
  - *Payment Holidays* – number deferred payment periods (number of billing cycles). The field is available when working with applications for payment holidays.
  - *Holidays Fee Mode* – procedure to charge a fee for payment holidays. The field is available when working with applications for payment holidays:
    - "All in first payment" – the entire fee charged for these payment holidays will be charged in the first payment after the payment holidays end.
    - "Every Period" – during the payment holidays the fee will be charged according to the instalment plan.
    - "No Fee" – no fee will be charged during the payment holidays.
  - *Recalculate Flag* – field for selecting the name of the parameter (*Tenor* or *Portion Size*) whose current value (value in the current instalment scheme) will be used when calculating a new instalment plan.
  - *Add Info* – additional information.
- Instalment loans are described in more detail in the document "Instalment Loans in WAY4™". Each activity with an instalment plan is described in the corresponding section:
- Create (Add) – "Creating an Instalment Plan for a Balance", "Creating an Instalment Plan for a Transaction".


- Change (Update) – "Modifying an Instalment Plan".
- Early Repayment – "Partial Repayment", "Full Repayment".
- Payment Holidays – "Granting Payment Holidays".
- Close – "Closing an Instalment Plan".

## Payment Order (Order)

Clicking the [Pers Order] button in the application form (see the section "Application Form") or in the parent object's form opens the "Contract Personal Order" form (see Fig. 29).

When entering data in this form, follow the procedures for creation of standing payment orders described in the document "Standing Payment Orders".

Fig. 29. Form for entering payment order data

 The application section for working with a payment order can be used to execute various actions with a template payment order. This value is set when configuring an application scheme (see the section "Configuring Application Schemes" of the document "Advanced Applications Module (workflow configuration)"). For applications to create or modify a standing payment order, the *Action Type* field can contain one of the following values:

- "ActivateIndividual" – an individual payment order will be redefined according to application parameters; the payment order will become active for this contract. Several payment orders with the same template can be created for a contract. This is possible if the value of the APPL\_ORDER\_INDIVIDUAL parameter is "Y".
- "ActivatePersonal" – an inherited payment order will be redefined according to application parameters; the payment order will become active for this contract.
- "ActivateStandard" – when this value is specified, a standing payment order is redefined according to the parameters of the template payment order created on the Accounting Scheme level for this contract. Moreover, only the *Code* field will be available for filling in in the "Contract Personal Order" form (see Fig. 29).

- "Disable" – the standing payment order is deactivated after processing and accepting the application. Moreover, only the *Code* field will be available for filling in in the "Contract Personal Order" form (see Fig. 29).

If the form for working with a payment order is opened from the parent object's (contract's) form (i.e. a section for it was not created in advance in the application scheme with the value specified in the *Action Type* field), the "ActivatePersonal" value will be used by default.

The [Clear Fields] button is used to set the list of object fields (of the payment order) that are to be cleared using the application (see "Clearing Application Object Fields").

To add a new record in this form, execute the command [Actions] → "Insert More"; to delete a record, execute [Actions] → "Delete".

Clicking the [Counterparty] button opens the "Counterparty for Order" form (see Fig. 30), used to enter payment participant parameters.

Fig. 30. Form for entering payment participant data

This form contains the following fields:


- *Payment Type* – drop-down list to specify the payment type. This list is determined by the "Payment on Account Type" dictionary ("Full → Configuration Setup → Transaction Types → Payment on Account Types").
- *Code* – standing payment order code.
- *Name* – name of payment participant.
- *Member ID* – participant bank identifier value.
- *Contract Number* – the RBS number of the payment participant contract (for example, client settlement account in the bank).
- *Receiver Details 1*, *Receiver Details 2* – fields used for entering additional information about the correspondent account, for example, the payment participant's taxpayer ID, etc.

To delete a payment participant record, click [Del].

The [Clear Fields] button is used to set a list of object fields (the payment participant according to the payment order) to be cleared using an application (see "Clearing Application Object Fields").

Clicking the [Parties] button opens the "Parties for Order" form (see Fig. 31) used to enter payment participant requisites, as well as the subordinate form "Party Information".

Fig. 31. Form for entering payment participant requisites

 For one payment participant, several records with requisites can be registered. For example, transaction target requisites (of the payment recipient or payment sender) are usually registered using three records:

- A record with the "Payee" value in the *Party Type* field – the payment participant.
- A record with the "Payee Bank" value in the *Party Type* field – the payment participant's bank.
- A record with the "Payee Corresp. Bank" value in the *Party Type* field – the payment participant's correspondent bank.

The *Account Number* and *Account Member Id* fields of the "Payment Receiver Parties for Order" form (see Fig. 31) are used to specify the payment participant's bank account number and bank identifier.

Payment participant requisites for each record are entered in the subordinate form "Party Information" (see Fig. 31). This form contains the following fields:

- *Category* –client type:
  - Private – individual.
  - Commercial – legal entity.
  - Accountant – bank division.
- *Residence* – residence status:
  - Resident – permanent resident.
  - Non-Resident – not a permanent resident.
- *Name* – name of the payment participant.
- *Name in English* – name of the payment participant in English.
- *Birth/Registration Date* – client date of birth.



- *Birth/Registration Place* – client place of birth.
- *Registration Type* – source of information for specifying the client number (passport, for example).
- *Registration Number* – information used for client identification (for example, passport number).
- *Registration Details* – additional client information.
- *Tax Position* – code of reason for paying taxes.
- *Individual Tax Number* – taxpayer ID.
- *Country* – drop-down list of countries registered in the system (see the dictionary in "Full → Configuration Setup → Main Tables → Country Table").
- *City* – city.
- *Postal Code* – postal (ZIP) code.
- *Municipality Code* – OKATO code (for the Russian Federation).
- *Address Line 1* – first line of the address; this can be any text in the local language.
- *Address Line 2* – second line of the address, the street name (in the local language and in English).
- *Address Line 3* – third line of the address, the building number (in the local language and in English).
- *Address Line 4* – fourth line of the address, the apartment number (in the local language).
- The *In English* field group contains the same fields as the *City*, *Address Line 1*, *Address Line 2*, *Address Line 3*, *Address Line 4* fields, with the values in English.

The [Clear Fields] button of the "Parties for Order" form (see Fig. 31) is used to set the list of object fields (records with payment participant requisites) to be cleared using an application (see "Clearing Application Object Fields").

## Contract Status (Status)

Clicking the [Status] button in the application form (see the section "Application Form") or in the parent object's form opens the "Contract Status" form (see Fig. 32).

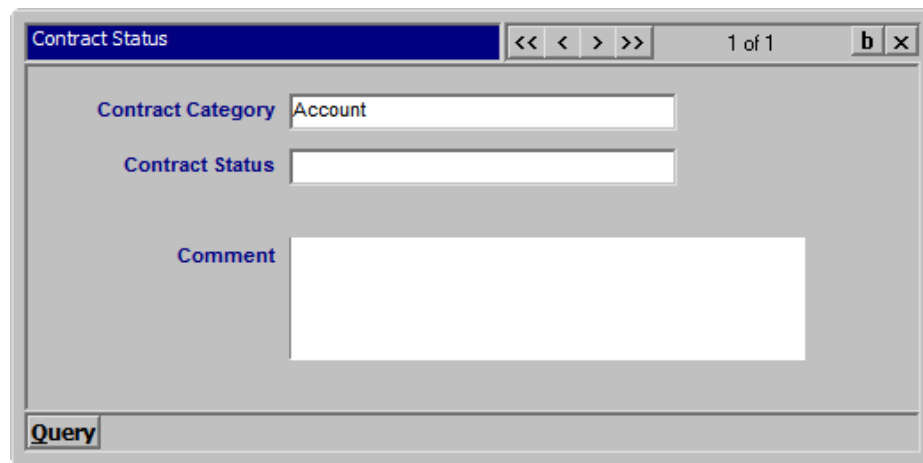



Fig. 32. Form for entering contract status data

This form contains the following fields:

- *Contract Category*— contract category; this field can have one of the following values:
  - "Device" – device contracts.  
 The "Device" value is only used to work with acquiring module applications (see the section "Acquiring Contract (Contract)").
  - "Card" – card contracts.
  - "Account" – account contracts.
- *Contract Status* – contract status (possible contract statuses are configured using the menu item "Full → Configuration Setup → Contract Types → Contract Statuses").
- *Comment* – comments.

## Tariff (Tariff)

Clicking the [Tariff] button in the in the application form (see the section "Application Form") or in the parent object's form opens the "Contract Tariffs" form (see Fig. 33).


 The Advanced Tariff Management module is not included in the WAY4 basic configuration and is supplied by a separate agreement with the WAY4 vendor.

Fig. 33. Form for entering tariff data

This form contains the following fields:

- *Tariff Role* – the tariff role; this field determines where the tariff type will be used. The possible values of this field are described in the document "WAY4™ Advanced Tariff Management".
- *Tariff Type* – drop-down list of tariff types registered for the selected role (Tariffs → Tariff Types & Tariff Domains → Tariff Types).
- *Limit Tariff* – drop-down list for selecting registered tariff types with the "Service Limit" role (Tariffs → Tariff Types & Tariff Domains → Tariff Types).
- *If Preference Type* – drop-down list for selecting registered counterparty categories (see the document "Preferred Counterparties").
- *Tariff Code Ext* – the identifier of the tariff in external systems.

To add a new record in this form, execute the command [Actions] → "Insert More"; to delete a record, execute [Actions] → "Delete".

Clicking the [Details] button opens the "Details for Tariff Data" form. This form's fields vary depending on the value of the *Tariff Role* field in the "Tariff Data" form (see Fig. 33). For more information on entering data for tariffs with various roles, see the document "WAY4™ Advanced Tariff Management".

## Usage Limiters (Usage)


Clicking the [Usage] button in the application form (see the section "Application Form") or in the parent object's form opens the "Usage Template" form (see Fig. 34).

Fig. 34. Form for entering usage limiter information

To add a new record in this form, execute the command [Actions] → "Insert More"; to delete a record, the command [Actions] → "Delete".

This form contains the following fields:

- *Usage Code* – limiter template code.
- *MaxAmount* – maximum total amount of transactions for a given period.
- *Currency* – currency used to calculate the threshold value of the maximum total amount of transactions (*MaxAmount*) and maximum amount of a single transaction (*MaxSingleAmount*).
- *MaxNumber* – maximum number of transactions for the limiter's effective period.
- *MaxSingleAmount* – maximum amount of a single transaction. A null value in this field indicated that no limits are established.
- *MaxPercent* – a numerical value that specifies the maximum allowed transaction amount, calculated as a percentage of the available funds (Amount Available) of the corresponding balance type, or as a percentage of the contract's credit limit.
- *Switch Date From* – the date from which the changes in parameters take effect;
- *Switch Date To* – the end date of the period during which the limiter's modified parameters are effective.
- *Add Info* – additional information.

 The section of an application used to work with usage limiters can be used to perform various actions with an inherited usage limiter. This value is set when configuring an application scheme (see the section "Configuring Application Schemes" of the document "Advanced Applications Module (workflow configuration)"). For applications to create or modify a usage limiter, the *Action Type* field can contain one of the following values:

- "Activate Personal" – a limiter with the code specified in the *Usage Code* field will be modified according to application parameters. This limiter is inherited from a Service Package and it receives the Is Active = "Override" status.
- "Activate Standard" – when this value is specified, parameters of the limiter inherited from the Service Package with the code whose value corresponds to that specified in the application's *Usage Code* field will be restored; if this limiter was deactivated (Is Active = "Deactivated"), it will be activated (Is Active = "Activated"), if these limiter's parameters were modified (Is Active = "Override"), the original parameters will be restored, and the limiter will be given the Is Active = "Activated" status.
- "Disable" – when this value is specified, if the application was processed, the contract usage limiter with the code corresponding to the value specified in the application's *Usage Code* field will be deactivated.
- "Enable" - when this value is specified, if the application was processed, the contract usage limiter (disabled earlier) with the code corresponding to the value specified in the application's *Usage Code* field will be activated.

If the form for working with a usage limiter is opened from the parent object's (contract's) form (a section was not created for it in advance in the application scheme with the specified value in the *Action Type* field), the "ActivatePersonal" value will be used by default.

For more information about usage limiters, see the document "Usage Limiters".

## Application Workflow

Application processing in the Advanced Applications module is separated into stages and includes the entry of necessary data, the checking of data and execution of actions for sending the application to the required stage of the workflow strategy.

The system selects a workflow strategy after an application is entered manually or imported from a file. This selection is made according to application parameters (see the section "Application Parameters" of the document "Advanced Applications Module (workflow configuration)").

After manual entry or import from a file, actions are executed for processing the application (see the section "Actions for Application Processing"). After all workflow stages required by the strategy are completed, an application must be accepted for the corresponding changes to be entered in the database: registration of new clients and new contracts, changes in client and contract parameters, etc. (see the section "Accepting Applications").

After processing of an application is completed, it is assigned the closed status ("Posting Status = Posted"), after which it is filtered from the list of applications to be processed.

The actions for processing an application at various workflow stages are determined by workflow strategy settings (see the section "Workflow Strategies" of the document "Advanced Applications Module (workflow configuration)").

### Loaded Applications

To access forms for working with imported applications, select the user menu item "Advanced Applications R2 → Cardholder Input & Update → Loaded Applications" for issuing module applications or "Advanced Applications R2 → Merchant Input & Update → Loaded Applications" for acquiring module applications.

This command opens the "Loaded Applications" form (see Fig. 35).

| Loaded Applications |             |                |                   |                         |                           |        |                 |              |           |                   |                          | << < > >>         | 70 of 72 | X |
|---------------------|-------------|----------------|-------------------|-------------------------|---------------------------|--------|-----------------|--------------|-----------|-------------------|--------------------------|-------------------|----------|---|
| Financial Inst.     | Branch      | Reg Number     | Input Date        | Appl Type               | Object                    | Action | For Client      | For Contract | Officer   | WF Stage          | WF Strategy              | Posting Date      |          |   |
| Principal           |             |                | 26/11/14 14:42:05 | New Cardholder          | Credit Limit              | Update |                 |              | SUPERUSER |                   |                          | 00/00/00 00:00:00 |          |   |
| Principal           |             |                | 26/11/14 14:41:35 | New Cardholder          | Credit Limit              | Update |                 |              | SUPERUSER |                   |                          | 00/00/00 00:00:00 |          |   |
| Principal           |             |                | 26/11/14 14:40:02 | New Cardholder          | Credit Limit              | Update |                 |              | SUPERUSER |                   |                          | 00/00/00 00:00:00 |          |   |
| Principal           |             |                | 25/11/14 17:46:40 | New Cardholder          | Credit Limit              | Update |                 |              | SUPERUSER |                   |                          | 00/00/00 00:00:00 |          |   |
| Principal           |             |                | 25/11/14 16:45:31 | New Cardholder          | Credit Limit              | Update |                 |              | SUPERUSER |                   |                          | 00/00/00 00:00:00 |          |   |
| Principal           |             |                | 25/11/14 16:36:12 | New Cardholder          | Credit Limit              | Update |                 |              | SUPERUSER |                   |                          | 00/00/00 00:00:00 |          |   |
| Principal           |             |                | 25/11/14 16:32:20 | New Limit               | Contract                  | Update |                 | 001-P-389278 | SUPERUSER |                   |                          | 00/00/00 00:00:00 |          |   |
| Principal           | Main Office |                | 25/11/14 16:31:05 | New Cardholder          | Credit Limit              | Update | TEST CARDHOLDER |              | SUPERUSER |                   |                          | 00/00/00 00:00:00 |          |   |
| Principal           |             |                | 25/11/14 15:11:52 | New Cardholder          | Credit Limit              | Update | WILLIAM SMITH   |              | SUPERUSER |                   |                          | 00/00/00 00:00:00 |          |   |
| Principal           |             |                | 25/11/14 15:11:14 | New Cardholder          | Credit Limit              | Update |                 |              | SUPERUSER |                   |                          | 00/00/00 00:00:00 |          |   |
| Principal           |             |                | 25/11/14 13:18:10 | New Cardholder          | Credit Limit              | Update |                 |              | SUPERUSER |                   |                          | 00/00/00 00:00:00 |          |   |
| Principal           | Main Office | 322456         | 23/07/14 11:44:02 |                         | Client Add Inf Add        |        | WILLIAM SMITH   |              |           | Manual entry step | Manual Entry Application | 00/00/00 00:00:00 |          |   |
| Principal           | Main Office | 444444         | 23/07/14 11:37:10 | New Client Add Info     | Client Add Inf Add Or Upd |        | WILLIAM SMITH   |              |           | Manual entry step | Manual Entry Application | 00/00/00 00:00:00 |          |   |
| Principal           |             | 1234           | 23/07/14 11:36:20 | New Client Add Info     | Client Add Inf Add Or Upd |        | WILLIAM SMITH   |              | SUPERUSER | Manual entry step | Manual Entry Application | 00/00/00 00:00:00 |          |   |
| Principal           | Main Office |                | 17/07/14 15:23:28 |                         | Credit Limit              | Update |                 |              | SUPERUSER |                   |                          | 00/00/00 00:00:00 |          |   |
| Principal           |             |                | 14/07/14 10:45:26 | New Cardholder          | Credit Limit              | Update |                 |              | SUPERUSER |                   |                          | 00/00/00 00:00:00 |          |   |
| Principal           | Main Office | 50135132201314 | 29/05/14 14:47:14 | New Cardholder          | Credit Limit              | Update |                 | 001-P-077063 | SUPERUSER | Manual entry step | Manual Entry Application | 00/00/00 00:00:00 |          |   |
| Principal           |             | 15647984561    | 29/05/14 14:46:51 | New Cardholder          | Credit Limit              | Update | WILLIAM SMITH   |              | SUPERUSER |                   |                          | 00/00/00 00:00:00 |          |   |
| Principal           |             |                | 29/05/14 14:45:56 | New Cardholder          | Credit Limit              | Update |                 |              | SUPERUSER |                   |                          | 00/00/00 00:00:00 |          |   |
| Principal           | Main Office | 475615854545   | 29/05/14 14:45:25 | New Cardholder          | Credit Limit              | Update | Test Client 1   |              | SUPERUSER |                   |                          | 00/00/00 00:00:00 |          |   |
| Principal           |             |                | 26/05/14 15:03:59 | Change Contract Address | Contract Add              |        |                 | 001-P-795581 | SUPERUSER |                   |                          | 00/00/00 00:00:00 |          |   |

Fig. 35. List of imported applications

This form contains a list of all applications for the current financial institution and current client category that meet the following conditions:

- The value of the *Posting Status* field is "Loaded".
- The *Officer* field with information about the application's owner contains an empty value or value corresponding to the current user.

The set of buttons and fields in these forms is identical to the set of buttons in the form for monitoring application processing (see Fig. 39 in the section "Monitoring Application Workflow"), with the exception of additional buttons:

- When a record is selected containing an empty value in the *Officer* field
  - "Capture" – opens an application form in editing mode.
  - "Release" – calls a procedure for deleting references to an application's owner from an application; this procedure makes it possible for other users to process the application. When the "Release" menu item is selected, the "Adv Application Released" message will be displayed, after which the link to the owner will be deleted from the application. To continue working, click [OK] in the message.

The set of buttons used to open application forms in viewing mode depends on the selected application's object type (i.e. on the value in the *Object Type* field).

To select applications for processing from the "Loaded Applications" table (see Fig. 35), move the cursor to the row corresponding to the required application, click the [Capture] button (or the [Actions...] button with subsequent selection of the "Capture" menu item).

If the application is at a workflow stage that does not permit manual editing, when an attempt is made to change to this mode, a window with the message "Edit of this application is not allowed" will appear. Close this window by clicking [OK].

If the application is at a workflow stage that allows manual editing, when changing to editing mode, the "Application Edit" form used to manually process an application will be displayed (see Fig. 36).

Fig. 36. Form for manually editing an application

In the "Application Edit" form (see Fig. 45) the set of buttons used to open application forms in editing mode depends on the selected application's object type (on the value in the *Object Type* field). In the application form, it is possible to enter and modify data entered earlier, according to the rules of the application's current workflow stage (except for data in the *Date* and *Object* columns).

To execute actions for processing an application, click the [Actions...] button and select the action from the context menu.

Workflow strategy settings (see the section "Workflow Strategies" of the document "Advanced Applications Module (workflow configuration)") determine which actions are available for applications at various workflow stages. The following context menu items may be available:

- [Check] – check an application (see the section "Checking Applications").
- [Approve] – approve an application (see the section "Approving Applications").

- [Decline] – decline an application (see the section "Declining Applications").
- [Forward] – forward an application (see the section "Forwarding Applications").

### **Actions for Application Processing**

Workflow actions cause changes in application status (Posting Status), that, depending on workflow settings (see the document "Advanced Applications Module (workflow configuration)"), transfer an application to another workflow stage.

At the stage of manually entering applications that is executed in application input forms (see the section "Creating Applications", actions for checking and approving applications are always available.

The availability of actions for processing an application at consecutive workflow stages (checking, approving differing from, forwarding and declining an applications) is determined by workflow strategy settings (see the section "Workflow Strategies" of the document "Advanced Applications Module (workflow configuration)").

Applications at a stage differing from manual entry are processed in a form for manual processing of applications (see Fig. 45 in the section "Processing Approved Applications"), opened by clicking the [Capture] button (or by clicking the [Actions...] button and selecting the "Capture" menu item) in the following windows:

- In the list of loaded applications (see Fig. 35 in the section "Loaded Applications").
- In the list of approved applications waiting to be processed (see Fig. 44 in the section "Processing Approved Applications")
- In the list of declined applications (see Fig. 47 in the section "Processing Declined Applications").

At each workflow stage a user "captures" the application and becomes its responsible officer. From this moment, other users are denied access to this application until an action is executed with the application (in standard workflow settings, until it is moved to the next workflow stage), or until the officer "frees" the application. When an action is executed with an application, the *Officer* field of the application is cleared and the application is "freed".

### **Checking Applications**

This function is used to check the correctness and completeness of application data. The function is available to the user in the following windows:

- In application input forms (see the section "Creating Applications").
- Depending on workflow strategy settings (see the section "Workflow Strategies" of the document "Advanced Applications Module (workflow configuration)"), the function may be available in the form for manually processing applications.

To check an application use the "Check" item of the context menu opened by clicking the [Actions] button of the application entry form. The system will display a message according to the check results.



Application status does not change as the result of a check. In standard workflow settings, during execution of a check, the workflow stage does not change.

### **Approving Applications**

This function is used to check the correctness of application data and to transfer the application to the next workflow stage according to workflow strategy settings.

The function is available to the user in the following windows:

- In application input forms (see the section "Creating Applications").
- Depending on workflow strategy settings (see the section "Workflow Strategies" of the document "Advanced Applications Module (workflow configuration)"), the function may be available in the form for manually processing applications.

To approve an application and send it to the next stage of the workflow strategy, use the "Approve" item of the context menu opened by clicking the [Actions] button of the application input or processing form.

For standard workflow configurations:

- If execution of this action is successful, the application will be sent to the next workflow stage and will be given the status "Waiting" ("Posting Status = Waiting"), which means the application will be processed when it is accepted (see the section "Accepting Applications").

If the application does not contain full and correct information, the action will result in the application being declined; i.e., it will get the "Declined" status (see "Declining Applications").

The link to the responsible officer will be deleted from the application, allowing another user to process the application at the next workflow stage.

It is possible to manage the mode in which Products, Account Schemes and Service Packages statuses are checked during the approval process for applications imported to the Advanced Applications module by the XML Applications Import pipe. The APPL\_ALLOW\_NOT\_READY global parameter allows the status-checking mode to be switched on/off. To switch off the status-checking mode, set the APPL\_ALLOW\_NOT\_READY global parameter to "Y" (the default value is "N"). At the application acceptance stage, the WAY4 checks the status of Products, Account Schemes and Service Packages regardless of this parameter's value.

Information about the processing of all approved applications is shown in the form for monitoring application workflow (see the section "Monitoring Application Workflow").

### **Forwarding Applications**

This function is used to forward an application to a specific stage of the current workflow strategy or to the first stage of another strategy. The application's Posting Status does not change as a result of the application being forwarded. After an application is forwarded, actions for processing can automatically be applied to it.

Depending on workflow strategy configurations (see the section "Workflow Strategies" of the document "Advanced Applications Module (workflow

configuration))), this function may be available to the user in the form for manually processing applications.

To forward an application, use the "Forward" item of the context menu opened by clicking the [Actions...] button of the application processing form.

This command will open the "Select Activity" dialog window (see Fig. 37). Select the action to forward the application and click the [Proceed] button for this action to be executed.

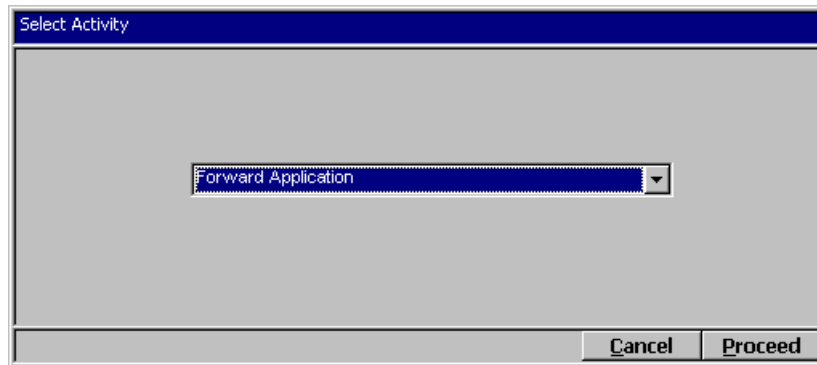


Fig. 37. Dialog window for forwarding an application

**i** Configuration of actions to forward applications (the workflow stage to which an application is sent when the action is executed, the workflow strategy to the first stage of which the application is sent, etc.) is described in the sections "Workflow Activities" and "Workflow Strategies" of the document "Advanced Applications Module (workflow configuration)".

### Declining Applications

This function is used to decline applications.

Depending on workflow strategy settings (see the section "Workflow Strategies" of the document "Advanced Applications Module (workflow configuration)"), this function is available to the user in the form for manually processing applications.

**i** Depending on workflow strategy settings (see the section "Workflow Strategies" of the document "Advanced Applications Module (workflow configuration)"), the system can decline an application based on analysis of application data.

To decline an application, use the "Decline" item of the context menu opened by clicking the [Actions...] button of the application processing form.

After an application is declined, the link to the responsible officer will be deleted from it, making it possible for another user to continue processing the application. After an application is declined, it will have the status "Declined" (Posting Status = Declined).

Applications with the "Declined" status cannot be reprocessed without changing their status. The status of a declined application is changed and other actions to edit the application are executed in the "Declined Applications" form (see the section "Processing Declined Applications"), where all declined applications of the respective type are displayed.

## Accepting Applications

After an application has completed all stages in the workflow strategy, it must be accepted in order for the corresponding changes to be entered in the database: creation of new clients and new contracts, changes in contract and client parameters, etc.

To accept processed applications, select the appropriate user menu item:

- "Advanced Applications R2 → Application Processing → Issuing Application – Accept" – accepts processed applications from the issuing module.
- "Advanced Applications R2 → Application Processing → Acquiring Application – Accept" – accepts processed applications from the acquiring module.

Before starting the procedure to accept a processed application, the system generates a request for the user to confirm execution of the procedure (see Fig. 38).

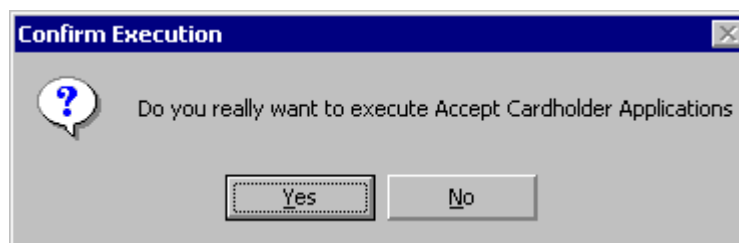



Fig. 38. Request to confirm execution of the procedure to accept processed applications


The system will run the procedure after user confirmation.

The results of the procedure are available for analysis by selecting the user menu item "Full → Process Log → Process Log".

 A subordinate application can be accepted separately. To do so, in the ADD\_DATA field of the subordinate application, specify the SPLIT tag in the following format:

```
SPLIT=Y;
```

As a result, when the procedure to accept the parent and subordinate application is executed, only the contract for the higher-ranking application is registered in the database, and the subordinate application as a separate application gets a link to the registered contract.

 The process for accepting applications can be executed in parallel. This functionality is used if a large number of applications must be accepted (the menu group "OpenWay → Advanced Applications R2 → Application Processing → Parallel Accept" contains menu items allowing issuing and acquiring applications to be accepted in parallel).

Configuration of parallel execution must be set up in advance ("OpenWay → Full → Configuration Setup → Main Tables → Process Parameters"), see the document "Running WAY4™ Processes in Parallel".

It is possible to accept a specific application. This functionality may be available in the form for manually processing an application according to workflow settings (see the section "Workflow Strategies" of the document "Advanced Applications Module (workflow configuration)").

## Monitoring Application Workflow

Users with administrator privileges monitor Issuing and Acquiring application workflow by selecting the user menu groups "Advanced Applications R2 → Issuing Applications Monitoring" and "Advanced Applications R2 → Acquiring Applications Monitoring" respectively.

The form with a list of registered applications (see Fig. 39) contains information on application parameters for all financial institutions in the system.

| Application Monitoring |             |                |                   |                       |             |            |                     |              |           |                |                   |                | << < > >>                |   | 7 of 807 | X |
|------------------------|-------------|----------------|-------------------|-----------------------|-------------|------------|---------------------|--------------|-----------|----------------|-------------------|----------------|--------------------------|---|----------|---|
| Financial Inst.        | Branch      | Reg Number     | Input Date        | Appl Type             | Object      | Action     | For Client          | For Contract | Officer   | Posting Status | Posting Date      | WF Stage       | WF Strategy              | ^ |          |   |
| Principal              | Main Office |                | 14/06/17 18:19:07 | Add Preferred         | Preferred   | Add        |                     | 001-P-071660 | SUPERUSER | Loaded         | 00/00/00 00:00:00 |                |                          |   |          |   |
| Principal              | Main Office |                | 14/06/17 16:48:41 | Create New Cardholder | Client      | Add        |                     |              | SUPERUSER | Loaded         | 00/00/00 00:00:00 |                |                          |   |          |   |
| Principal              |             |                | 14/06/17 14:20:41 | Create New Cardholder | Client      | Add Or Up  |                     |              | SUPERUSER | Loaded         | 00/00/00 00:00:00 |                |                          |   |          |   |
| Principal              |             |                | 14/06/17 13:02:30 | Create New Cardholder | Client      | Add Or Up  |                     |              | SUPERUSER | Loaded         | 00/00/00 00:00:00 |                |                          |   |          |   |
| Principal              |             |                | 14/06/17 12:31:10 | Create New Cardholder | Client      | Add Or Up  |                     |              | SUPERUSER | Loaded         | 00/00/00 00:00:00 |                |                          |   |          |   |
| Principal              |             |                | 13/06/17 11:29:03 | Create New Cardholder | Client      | Add Or Up  |                     |              | SUPERUSER | Loaded         | 00/00/00 00:00:00 |                |                          |   |          |   |
| Principal              |             |                | 13/06/17 11:23:26 | Create New Cardholder | Client      | Add Or Up  |                     |              | SUPERUSER | Loaded         | 00/00/00 00:00:00 |                |                          |   |          |   |
| Principal              | Main Office |                | 09/06/17 16:58:35 | Add Tariff            | Tariff      | Add        |                     | 001-P-071660 | SUPERUSER | Loaded         | 00/00/00 00:00:00 |                |                          |   |          |   |
| Principal              | Main Office | 71605301818760 | 09/06/17 14:41:20 | Add Sub Contract      | Contract    | Add        |                     | 001-P-071660 |           | Declined       | 14/06/17 17:39:06 | Declining Step | Manual Entry Application |   |          |   |
| Principal              |             |                | 09/06/17 14:33:21 | Create New Cardholder | Client      | Add Or Up  |                     |              | SUPERUSER | Loaded         | 00/00/00 00:00:00 |                |                          |   |          |   |
| Principal              |             |                | 09/06/17 12:38:04 | Create New Cardholder | Client      | Add Or Up  |                     |              | SUPERUSER | Loaded         | 00/00/00 00:00:00 |                |                          |   |          |   |
| Principal              |             |                | 08/06/17 12:44:27 | Create New Cardholder | Client      | Add Or Up  |                     |              | SUPERUSER | Loaded         | 00/00/00 00:00:00 |                |                          |   |          |   |
| Principal              |             |                | 08/06/17 12:23:12 | Create New Cardholder | Client      | Add Or Up  |                     |              | SUPERUSER | Loaded         | 00/00/00 00:00:00 |                |                          |   |          |   |
| Principal              | Main Office | AA_XML_03_002  | 06/06/17 16:53:09 |                       | Client      | Update     | ClientShortNameR1_U |              |           | Posted         | 06/06/17 16:53:23 | Closing Step   | Online Load Application  | v |          |   |
| Inrs                   | Del         | Query          | Client            | Contract              | SubContract | Extra Info | History             | Load Errors  | Proc Mess |                |                   |                |                          |   |          |   |

Fig. 39. Monitoring application workflow

This form contains the following fields indicating the current state and application:

- **WF Strategy** – workflow strategy (see the document "Advanced Applications Module (workflow configuration)").
- **WF Stage** – current workflow stage of the application (see the document "Advanced Applications Module (workflow configuration)").
- **Posting Status** – workflow stage status:
  - "Loaded" – the application is registered in the Advanced Applications module but no actions have been taken to process it.
  - "Waiting" – the application has been approved and sent to the next stage of the workflow strategy.
  - "Posted" – the application has been successfully processed and posted.
  - "Declined" – the application has been declined by the user or the system at a workflow stage.
- **Posting Date** – date, when the application status has been changed to "Posted" or "Declined".
- **Officer** – officer responsible for the application at the given workflow stage.
- **Outward Status** – information on the success of exporting the application.
  - "Waiting" – the application was entered manually or imported from a file and is not intended for export.
  - "Processed" – the application passed the Accept procedure and is ready to be exported.
  - "To be Sent" – the "XML Applications Overall Response" pipe sets this status when beginning to export response files. If errors occur during operation of the pipe, the "To be Sent" status of an application changes to "Processed".

- "Sent" – the "XML Applications Overall Response" pipe sets this status after it has finished exporting response files.
- "Rejected" – the application was rejected by a user or WAY4 at a workflow stages.

The set of buttons in the "Applications Monitoring" form depends on the type of application selected from the list. The "Applications Monitoring" form may contain the following buttons to open child forms:

- [History] – opens a form with the history of this application's workflow stages (see Fig. 40).

| ID  | Activity Date     | Is System | Performed By | Activity                   | Result | Comment Text | Move from Step | Move to Step   |
|-----|-------------------|-----------|--------------|----------------------------|--------|--------------|----------------|----------------|
| 501 | 25/07/11 17:12:49 | Yes       |              | System Decline Application |        |              | Online Load    | Declining Step |

Fig. 40. Viewing the history of actions with the application.

- [Load Errors] – opens a form with information about errors that occurred when importing this application (see Fig. 41). The value in the *Error Status* column of this form can be edited. This field may contain the following values:
  - "Waiting" – an error occurred when importing the application from the file. An application with this value in the *Error Status* field is not processed further. For its further processing to be possible, the "Checked" or "Skipped" value must be set in the *Error Status* field.
  - "Checked" – the error that occurred when importing the application has been eliminated.
  - "Skipped" – the error that occurred when importing the application should be skipped.

| Date              | Officer   | Field Group | Field Name  | Field Value | Error Status | Error Message                           |
|-------------------|-----------|-------------|-------------|-------------|--------------|---|
| 27/12/11 17:16:02 | SUPERUSER |             |             |             | Waiting      | TariffType: Not matched value <<INSTS>> |
| 27/12/11 17:16:02 | SUPERUSER |             |             |             | Waiting      | Currency: Not matched value <<EUR>>     |
| 27/12/11 17:16:02 | SUPERUSER | Tariff      | CURR        | EUR         | Waiting      | Currency: Not matched value <<EUR>>     |
| 27/12/11 17:16:02 | SUPERUSER | Tariff      | TARIFF_TYPE | INSTS       | Waiting      | TariffType: Not matched value <<INSTS>> |

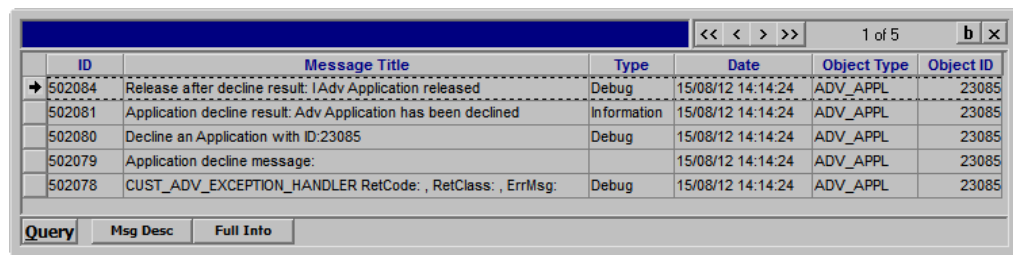
Fig. 41. Viewing information about errors when loading this application.

- [Clear Fields] – opens a form with information about the object fields whose values will be set to null using this application (see Fig. 42); For more information about clearing object fields, see "Clearing Application Object Fields".

| Date              | Officer   | Object Type | Field Name    |
|-------------------|-----------|-------------|---------------|
| 11/10/11 17:44:05 | SUPERUSER | Client      | Security Name |
| 11/10/11 17:44:05 | SUPERUSER | Client      | Middle Name   |

Fig. 42. Viewing the list of fields to be cleared

- [Proc Mess] – opens the form for viewing the list of all system messages generated when processing this application (see Fig. 43).



| ID     | Message Title   | Type        | Date              | Object Type | Object ID |
|--------|---|-------------|-------------------|-------------|-----------|
| 502084 | Release after decline result: Adv Application released        | Debug       | 15/08/12 14:14:24 | ADV_APPL    | 23085     |
| 502081 | Application decline result: Adv Application has been declined | Information | 15/08/12 14:14:24 | ADV_APPL    | 23085     |
| 502080 | Decline an Application with ID:23085                          | Debug       | 15/08/12 14:14:24 | ADV_APPL    | 23085     |
| 502079 | Application decline message:                                  |             | 15/08/12 14:14:24 | ADV_APPL    | 23085     |
| 502078 | CUST_ADV_EXCEPTION_HANDLER RetCode: , RetClass: , ErrMsg:     | Debug       | 15/08/12 14:14:24 | ADV_APPL    | 23085     |

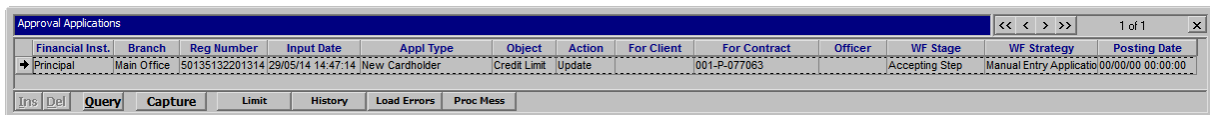
Query    Msg Desc    Full Info

Fig. 43. Viewing system messages for an application

## Processing Approved Applications

To access forms for working with approved applications, use the user menu item "Advanced Applications R2 → Cardholder Input & Update → Approval Applications" when working with issuing module applications or "Advanced Applications R2 → Merchant Input & Update → Approval Applications" when working with acquiring module applications.

These items open the "Approval Applications" (see Fig. 44) or "Acquiring Application – Approval" form.



| Financial Inst. | Branch      | Reg Number     | Input Date        | Appl Type      | Object       | Action | For Client | For Contract | Officer | WF Stage       | WF Strategy             | Posting Date      |
|-----------------|-------------|----------------|-------------------|----------------|--------------|--------|------------|--------------|---------|----------------|-------------------------|-------------------|
| Principal       | Main Office | 50135132201314 | 29/05/14 14:47:14 | New Cardholder | Credit Limit | Update |            | 001-P-077053 |         | Accepting Step | Manual Entry Applicatio | 00/00/00 00:00:00 |

Ins Del Query Capture Limit History Load Errors Proc Mess

Fig. 44. List of approved applications

This form contains a list of all applications for the current financial institution and the current client category meeting the following conditions:

- The value of the *Posting Status* field is "Waiting".
- The *Officer* field contains an empty value or a value corresponding to the current user.

Buttons and fields in these forms are the same as the buttons and fields in the form for monitoring application workflow (see Fig. 39 in the section "Monitoring Application Workflow"), except for the presence of additional buttons:

- When a record is selected that contains a null value in the *Officer* field, the [Capture] button used to open the application form in editing mode appears.
- When a record is selected that in the *Officer* field contains a value corresponding to the current user, the [Actions...] button appears, containing the following context menu items:
  - "Capture" – opens the application form in editing mode.
  - "Release" – calls a procedure to delete links to the officer from the application; this procedure allows the application to become available for processing by other users. When the "Release" menu item is selected, the message "Adv Application Released" will appear on the screen, after which the link to the officer is deleted from the application. Click [OK] in the message window to continue.

The set of buttons used to open application forms in view mode depends on the selected application's object type (the value in the *Object Type* field).

To select an application for processing, in the "Approval Applications" (see Fig. 44) form, move the cursor to the row corresponding to the required

application and click the [Capture] button (or click the [Actions...] button and select the "Capture" menu item).

If the application is at a workflow stage that does not permit manual editing, when an attempt is made to change to this mode, a window with the message "Edit of this application is not allowed" will appear. Close this window by clicking [OK].

If the application is at a workflow stage that allows manual editing, when changing to editing mode, the "Application Edit" form used to manually process an application will be displayed (see Fig. 45).


Fig. 45. Form for manually processing an application

In the "Application Edit" form (see Fig. 45) the set of buttons used to open application forms in editing mode depends on the selected application's object type (on the value in the *Object Type* field). In the application form, it is possible to enter and modify data entered earlier, according to the rules of the application's current workflow stage (except for data in the *Date* and *Object* columns).

To execute actions for processing an application, click the [Actions...] button and select the action from the context menu (see the section "Actions for Application Processing").

Workflow strategy settings (see the section "Workflow Strategies" of the document "Advanced Applications Module (workflow configuration)") determine which actions are available for applications at various workflow stages. The following context menu items may be available:

- "Check" – check an application (see the section "Checking Applications").
- "Approve" – approve an application (see the section "Approving Applications").
- "Decline" – decline an application (see the section "Declining Applications").
- "Accept" – accept an application (see the section "Accepting Applications").
- "Forward" – forward an application (see the section "Forwarding Applications").

 Note that registered subordinate applications are located at the same workflow stage as the parent application and move simultaneously with the parent application through workflow strategy stages up to and including application acceptance (see the section "Accepting Applications").



## Processing Applications Imported by Web Services or Import Pipes ("XML Applications Import")

To access forms for working with applications imported by web services or import pipes, use the menu item "OpenWay → Advanced Applications R2 → Imported & Loaded XML Applications Management → Issuing XML Applications" when working with issuing module applications or "OpenWay → Advanced Applications R2 → Imported & Loaded XML Applications Management → Acquiring XML Applications" when working with acquiring applications.

The "XML Applications" form will open (see Fig. 46).

| Financial Inst. | Branch      | Reg Number | Input Date        | Object | Action | Object For | Object For Client | Object For Contract | Officer   | WF Strategy                      | WF Step        | Posting Status | Posting Date      |
|-----------------|-------------|------------|-------------------|--------|--------|------------|-------------------|---------------------|-----------|----------------------------------|----------------|----------------|-------------------|
| Principal       | Main Office | 31.6661    | 26/12/16 13:02:44 | Client | Add    | Client     |                   |                     | SUPERUSER | File Import Application Strategy | Declining Step | Declined       | 07/02/17 15:13:55 |

Fig. 46. List of applications imported by web services or import pipes

This form contains a list of all applications for a selected financial institution and client category meeting the following conditions:

- The *Posting Status* field contains a value other than "Posted".
- The *Officer* field contains an empty value or a value corresponding to the current user.

The buttons and fields in this form are the same as those in the form for working with approved applications (see the description in the section "Processing Approved Applications").

### Processing Declined Applications

To access forms for processing declined applications, use the user menu item "Advanced Applications R2 → Cardholder Input & Update → Declined Applications" when working with Issuing Module applications, or "Advanced Applications R2 → Merchant Input & Update → Declined Applications" when working with Acquiring Module applications.

These commands will open the "Declined Application" form (see Fig. 47).

| Financial Inst. | Branch      | Reg Number    | Input Date        | Appl Type      | Object                    | Action        | For Client | For Contract | Officer   | WF Strategy | WF Stage | Posting Date      |
|-----------------|-------------|---------------|-------------------|----------------|---------------------------|---------------|------------|--------------|-----------|-------------|----------|-------------------|
| Principal       | Main Office | 3044488430377 | 13/02/13 13:34:03 | New Merchant   | Client                    | Add           |            | 001-C-561827 | SUPERUSER |             |          | 00/00/00 00:00:00 |
| Principal       |             | 4010500291082 | 10/01/14 13:53:48 | New parameters | Contract AddAdd           |               |            | 001-C-809267 |           |             | CLOSE    | 00/00/00 00:00:00 |
| Principal       |             | 4010357571072 | 10/01/14 09:55:57 |                | Usage Limite/Activate Per |               |            |              |           |             | CLOSE    | 10/01/14 13:53:49 |
| Principal       |             | 4010357431067 | 10/01/14 09:55:43 |                | Customer CteAdd Or Upd    | WILLIAM SMITH |            |              |           |             | CLOSE    | 10/01/14 09:55:57 |
| Principal       |             |               |                   |                | Customer CteAdd Or Upd    | WILLIAM SMITH |            |              |           |             | CLOSE    | 10/01/14 09:55:43 |

Fig. 47. List of declined applications

These forms contain a list of all applications for the current financial institution and current client category that meet the following conditions:

- "Declined" status in the *Posting Status* field.
- Empty value in the *Officer* field or a value corresponding to the current user.

Buttons and fields in these forms are the same as the buttons and fields in the form for monitoring application workflow (see Fig. 39 in the section "Monitoring Application Workflow"), except for the presence of additional buttons:



- When a record is selected that contains a null value in the *Officer* field, the [Capture] button used to open the application form in editing mode appears in the form.
- When a record is selected that in the *Officer* field contains a value corresponding to the current user, the [Actions...] button appears in the form. This button opens a context menu with the following items:
  - "Capture" – opens the application form in editing mode.
  - "Release" – calls a procedure to delete links to the officer from the application; this procedure allows the application to become available for processing by other users. When the "Release" menu item is selected, the message "Adv Application Released" will appear on the screen, after which the link to the officer is deleted from the application. Click [OK] in the message window to continue.

The set of buttons used to open application forms in view mode depends on the selected application's object type (the value in the *Object Type* field).

To select an application for processing, in the "Declined Applications" form (see Fig. 47), move the cursor to the row corresponding to the required application and click the [Capture] button (or click the [Actions...] button and select the "Capture" menu item).

If the application is at a workflow stage that does not permit manual editing, when an attempt is made to change to this mode, a window with the message "Edit of this application is not allowed" will appear. Close this window by clicking [OK].

If the application is at a workflow stage that allows manual editing, when changing to editing mode, the "Application Edit" form used to manually process an application will be displayed (see Fig. 45 in the section "Processing Approved Applications").

In the "Application Edit" form (see Fig. 45 in the section "Processing Approved Applications") the set of buttons used to open application forms in editing mode depends on the selected application's object type (on the value in the *Object Type* field). In the application form, it is possible to enter and modify data entered earlier, according to the rules of the application's current workflow stage (except for data in the *Date* and *Object* columns).

To execute actions for processing an application, click the [Actions...] button and select the action from the context menu (see the section "Actions for Application Processing").

Workflow strategy settings (see the section "Workflow Strategies" of the document "Advanced Applications Module (workflow configuration)") determine which actions are available for applications at various workflow stages. The following items may be available in the context menu:

- "Check" – check an application (see the section "Checking Applications").
- "Approve" – approve an application (see the section "Approving Applications").
- "Forward" – forward an application (see the section "Forwarding Applications").

## Importing and Exporting Applications

Applications may be imported and exported in the Advanced Applications module using the menu group "OpenWay → Advanced Applications R2 → Application Processing".

### Importing Applications

It is possible to import application data to the Advanced Applications module from XML files. These files may be created by an external system on the basis of client applications, or by another Advanced Applications module working within another WAY4 instance

The format of imported files is described in the document "Advanced Applications R2 XML Format". Imported files must be stored in standard file exchange directories (see the section "The RBS Interchange Directory Tree" in the document "CBS Interface").

To import files to the Advanced Applications module, select one of the following user menu items:

- OpenWay → Advanced Applications R2 → Application Processing → Issuing XML Applications import – imports Issuing Module applications from XML files.
- OpenWay → Advanced Applications R2 → Application Processing → Acquiring XML Applications import – imports Acquiring Module applications from XML files.

After these menu items are started, a dialog window for selecting files to be imported will appear (see Fig. 48).

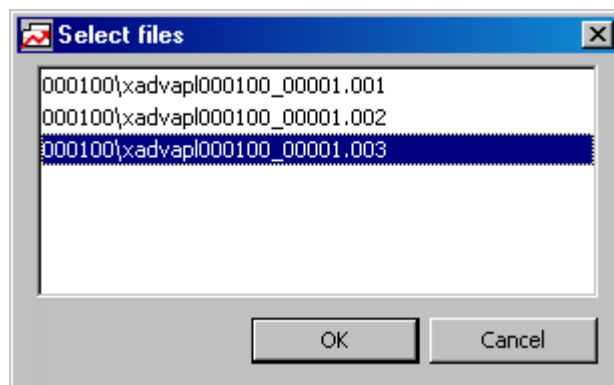


Fig. 48. Dialog window for selecting files to be imported

Select the desired file by clicking on the file name while pressing the <Ctrl> button.

After selecting the required file, click [OK].

If the selected file has already been imported, a window with the corresponding message will appear (see Fig. 49).

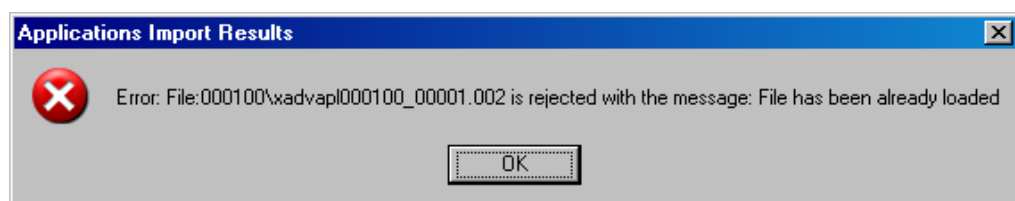



Fig. 49. Message that the selected file has already been imported

For applications imported from a file, the system automatically determines the following parameters:

- Workflow strategy scheme and strategy
- Step.

This selection is made according to application parameter values and workflow configurations (see the document "Advanced Applications Module (workflow configuration)").

According to the results of importing the file, the Advanced Applications module generates a response file that is placed by the system in the standard outgoing file directory (see the section "The RBS Interchange Directory Tree" in the document "CBS Interface"). This file contains information about applications that for some reason were not imported. The format of response files is described in the document "Advanced Applications R2 XML Format".

 Note that applications can be imported in deferred response mode by setting the XML Applications Import pipe parameter "DEFERRED RESPONSE=Y" (for more information, see the section ""XML Applications Import" Pipe Parameters" in the document "Advanced Applications R2 XML Format"). In deferred import, no response file is generated.

Applications can also be imported into the Advanced Applications module using the WAY4U integration platform.

### **Exporting Applications**

If an application must be exported at a particular workflow stage, select the user menu item "OpenWay → Advanced Applications R2 → Application Processing → XML Applications Export".

The pipe started by calling this menu item will export all applications from the workflow stage specified in the pipe parameters. As a result, all exported applications are grouped into files according to the receiving financial institutions. The system places the exported files in the standard file exchange directory (see the section "The RBS Interchange Directory Tree" in the document "CBS Interface").

The format for files exported from the Advanced Applications module is described in the document "Advanced Applications R2 XML Format".

### **Exporting XML Response Files**

When importing applications from XML files, the Advanced Applications module allows the creation of response files containing results of application processing for sending to the systems that sent the files.

To export XML response files, select the user menu items "OpenWay → Advanced Applications R2 → Application Processing → XML Applications Response" and "OpenWay → Advanced Applications R2 → Application Processing → XML Applications Overall Response".

For information generation of XML response files, as well as the format of such files, see the document "Advanced Applications R2 XML Format".

## Monitoring File Processing

To view the statuses of import and export files, use the user menu item "OpenWay → Advanced Applications → Application Processing → Response Files Monitoring".

The "Appl Response Files Monitoring" form will open (see Fig. 50).

| File Name                      | Received File Name             | Send File Name                 | Creation Date     |
|--------------------------------|--------------------------------|--------------------------------|-------------------|
| 000100/XADVAPL000100_00004.321 |                                | 000100/XADVAPL000100_00004.321 | 18/11/11 13:55:07 |
| 000100/XADVAPL000100_00003.321 |                                | 000100/XADVAPL000100_00003.321 | 18/11/11 13:55:06 |
| 000100/XADVAPL000100_00002.321 |                                | 000100/XADVAPL000100_00002.321 | 18/11/11 13:53:16 |
| 000100/XADVAPL000100_00001.321 |                                | 000100/XADVAPL000100_00001.321 | 18/11/11 13:53:12 |
| 000100/xadvapi000100_01005.005 | 000100/xadvapi000100_01005.005 | RXADVAPL000100_01005.005       | 17/11/11 19:06:28 |
| Rxadvapi000100_00018.018       |                                | Rxadvapi000100_00018.018       | 17/11/11 19:00:53 |
| 000100/xadvapi000100_00018.018 | 000100/xadvapi000100_00018.018 |                                | 17/11/11 19:00:50 |
| 000100/xadvapi000100_00017.018 | 000100/xadvapi000100_00017.018 | RXADVAPL000100_00017.018       | 17/11/11 19:00:23 |
| 000100/xadvapi000100_00716.004 | 000100/xadvapi000100_00716.004 | RXADVAPL000100_00716.004       | 17/11/11 18:59:09 |
| Rxadvapi000100_09910.018       |                                | Rxadvapi000100_09910.018       | 17/11/11 17:26:36 |
| 000100/xadvapi000100_09910.018 | 000100/xadvapi000100_09910.018 |                                | 17/11/11 17:26:35 |
| 000100/xadvapi000100_00160.004 | 000100/xadvapi000100_00160.004 | RXADVAPL000100_00160.004       | 17/11/11 17:24:57 |
| Rxadvapi000100_00123.018       |                                | Rxadvapi000100_00123.018       | 17/11/11 17:24:21 |

Ins Del Query RepeatResp

Fig. 50. List of response files

This form contains information about processed files and the current status of files.

The [RepeatResp] button is used for repeat preparation to export a response file. To do so, in the "Response Files Monitoring" form (see Fig. 50), select a record that has the value "Received" or "Rejected" in the *File Status* field and the "Sent" value in the *Response Status* field, and click the [RepeatResp] button. After doing so, the message "Repeat response is allowed for this file" will appear and the response file will be sent to repeat export (see the section "Exporting XML Response Files").

When a file record with the "Receiving" value is selected, the [Delete] button will be shown in the form. This button is used to delete a file that has not been fully imported. Deletion of the file allows it to be reimported. If even one application from a file was processed, deletion is impossible. In this case, when the [Delete] button is clicked, a corresponding message appears on the screen.

## Chapter 1. Operations with Application Objects

Table 1 shows a list of application objects and operations with them. The "✓" symbol indicates operations that are permitted for the object, the "0" symbol indicates operations that are not permitted for that object.

Objects and operations whose names are marked with the "\*" symbol are only supported by pipes and are not accessible in the module's screen forms.

Table 1. Table of permitted operations with application objects

| Type (Object/<br>Property) | Object              | Application Object Type<br>(type of object for<br>which the application<br>section is used) | Action |             |        |                   |                     |                   |          |                |                           |                |       |         |              |          |          |
|----------------------------|---------------------|---|--------|-------------|--------|-------------------|---------------------|-------------------|----------|----------------|---------------------------|----------------|-------|---------|--------------|----------|----------|
|                            |                     |   | Add    | AddOrUpdate | Update | Activate Personal | Activate Individual | Activate Standard | Activate | EarlyRepayment | Cancel Early<br>Repayment | PaymentHoliday | Close | Disable | Lock/ Unlock | Migrate* | Renewal* |
| Object                     | Client              | Client  | ✓      | ✓           | ✓      | 0                 | 0                   | 0                 | 0        | 0              | 0                         | 0              | 0     | 0       | 0            | 0        | 0        |
|                            | ClientAddInfo       | AddInfo   | ✓      | ✓           | 0      | 0                 | 0                   | 0                 | 0        | 0              | 0                         | 0              | 0     | 0       | 0            | 0        | 0        |
|                            | ClientAddress       | Address   | ✓      | ✓           | ✓      | 0                 | 0                   | 0                 | 0        | 0              | 0                         | 0              | 0     | ✓       | 0            | 0        | 0        |
|                            | ClientAffiliation   | Affiliation   | 0      | ✓           | 0      | 0                 | 0                   | 0                 | 0        | 0              | 0                         | 0              | 0     | ✓       | 0            | 0        | 0        |
|                            | ClientContract      | Not supported   | ✓      | 0           | 0      | 0                 | 0                   | 0                 | 0        | 0              | 0                         | 0              | 0     | 0       | 0            | 0        | 0        |
|                            | ClientAuthMethod    | AuthMethod  | ✓      | ✓           | 0      | 0                 | 0                   | 0                 | 0        | 0              | 0                         | 0              | 0     | ✓       | 0            | 0        | 0        |
|                            | ClientClassifier    | Classifier  | 0      | ✓           | 0      | 0                 | 0                   | 0                 | 0        | 0              | 0                         | 0              | 0     | 0       | 0            | 0        | 0        |
|                            | ClientParameter     | Parameter   | 0      | ✓           | 0      | 0                 | 0                   | 0                 | 0        | 0              | 0                         | 0              | 0     | 0       | 0            | 0        | 0        |
|                            | Card                | Card Info   | ✓      | 0           | ✓      | 0                 | 0                   | 0                 | 0        | 0              | 0                         | 0              | 0     | 0       | ✓            | ✓        | ✓        |
|                            | Contract            | Contract  | ✓      | 0           | ✓      | 0                 | 0                   | 0                 | 0        | 0              | 0                         | 0              | 0     | 0       | 0            | 0        | 0        |
|                            | ContractAddInfo     | AddInfo   | ✓      | ✓           | 0      | 0                 | 0                   | 0                 | 0        | 0              | 0                         | 0              | 0     | 0       | 0            | 0        | 0        |
|                            | ContractAddress     | Address   | ✓      | ✓           | ✓      | 0                 | 0                   | 0                 | 0        | 0              | 0                         | 0              | 0     | ✓       | 0            | 0        | 0        |
|                            | ContractAffiliation | Affiliation   | 0      | ✓           | 0      | 0                 | 0                   | 0                 | 0        | 0              | 0                         | 0              | 0     | ✓       | 0            | 0        | 0        |
|                            | ContractAuthMethod  | AuthMethod  | ✓      | ✓           | 0      | 0                 | 0                   | 0                 | 0        | 0              | 0                         | 0              | 0     | ✓       | 0            | 0        | 0        |
|                            | ContractClassifier  | Classifier  | 0      | ✓           | 0      | 0                 | 0                   | 0                 | 0        | 0              | 0                         | 0              | 0     | 0       | 0            | 0        | 0        |
|                            | ContractParameter   | Parameter   | 0      | ✓           | 0      | 0                 | 0                   | 0                 | 0        | 0              | 0                         | 0              | 0     | 0       | 0            | 0        | 0        |

| Type (Object/<br>Property) | Object             | Application Object Type<br>(type of object for<br>which the application<br>section is used) | Action |             |        |                   |                     |                   |          |                |                           |                |       |         |              |          |          |
|----------------------------|--------------------|---|--------|-------------|--------|-------------------|---------------------|-------------------|----------|----------------|---------------------------|----------------|-------|---------|--------------|----------|----------|
|                            |                    |   | Add    | AddOrUpdate | Update | Activate Personal | Activate Individual | Activate Standard | Activate | EarlyRepayment | Cancel Early<br>Repayment | PaymentHoliday | Close | Disable | Lock/ Unlock | Migrate* | Renewal* |
|                            | CustomerAuthMethod | AuthMethod  | ✓      | ✓           | 0      | 0                 | 0                   | 0                 | 0        | 0              | 0                         | 0              | 0     | ✓       | 0            | 0        | 0        |
|                            | Order              | Order   | 0      | 0           | 0      | ✓                 | ✓                   | ✓                 | 0        | 0              | 0                         | 0              | 0     | ✓       | 0            | 0        | 0        |
|                            | Preferred          | Preferred   | ✓      | ✓           | 0      | 0                 | 0                   | 0                 | 0        | 0              | 0                         | 0              | 0     | ✓       | 0            | 0        | 0        |
|                            | PaymentReceiver    | PaymentReceiver   | ✓      | ✓           | ✓      | 0                 | 0                   | 0                 | 0        | 0              | 0                         | 0              | 0     | 0       | 0            | 0        | 0        |
|                            | Counterparty       | Counterparty  | ✓      | ✓           | ✓      | 0                 | 0                   | 0                 | 0        | 0              | 0                         | 0              | 0     | 0       | 0            | 0        | 0        |
|                            | Relation           | Relation  | 0      | 0           | ✓      | 0                 | 0                   | 0                 | 0        | 0              | 0                         | 0              | 0     | 0       | 0            | 0        | 0        |
|                            | Instalment         | Instalment  | ✓      | 0           | ✓      | 0                 | 0                   | 0                 | ✓        | ✓              | ✓                         | ✓              | ✓     | 0       | 0            | 0        |          |
|                            | Tariff             | Tariff  | ✓      | 0           | 0      | 0                 | 0                   | 0                 | 0        | 0              | 0                         | 0              | 0     | 0       | 0            | 0        | 0        |
|                            | Usage              | Usage   | 0      | 0           | 0      | ✓                 | 0                   | ✓                 | 0        | 0              | 0                         | 0              | 0     | ✓       | 0            | 0        | 0        |
| Property                   | CustomerClassifier | Classifier  | 0      | ✓           | 0      | 0                 | 0                   | 0                 | 0        | 0              | 0                         | 0              | 0     | 0       | 0            | 0        | 0        |
|                            | CustomerIdentifier | Not supported   | 0      | ✓           | 0      | 0                 | 0                   | 0                 | 0        | 0              | 0                         | 0              | 0     | ✓       | 0            | 0        | 0        |
|                            | Event              | Event   | ✓      | 0           | 0      | 0                 | 0                   | 0                 | 0        | 0              | 0                         | 0              | 0     | 0       | 0            | 0        | 0        |
|                            | Limit              | Limit   | 0      | 0           | ✓      | 0                 | 0                   | 0                 | 0        | 0              | 0                         | 0              | 0     | 0       | 0            | 0        | 0        |
|                            | InstalmentLimit    | InstalmentLimit   | 0      | 0           | ✓      | 0                 | 0                   | 0                 | 0        | 0              | 0                         | 0              | 0     | 0       | 0            | 0        | 0        |
|                            | Status             | Status  | 0      | 0           | ✓      | 0                 | 0                   | 0                 | 0        | 0              | 0                         | 0              | 0     | 0       | 0            | 0        | 0        |

The "CustomerClassifier" and "PaymentReceiver" object types are obsolete and are used for backward compatibility.

## Chapter 2. Application Workflow Scheme

In the supplied version of the Advanced Applications module, the "Application Workflow" processing scheme is implemented. It includes strategies whose schemes are shown in shown in Fig. 51 and Fig. 52.

Configuration of the application workflow scheme is described in the document "Advanced Applications Module (workflow configuration)".

Strategy Scheme: Application Workflow

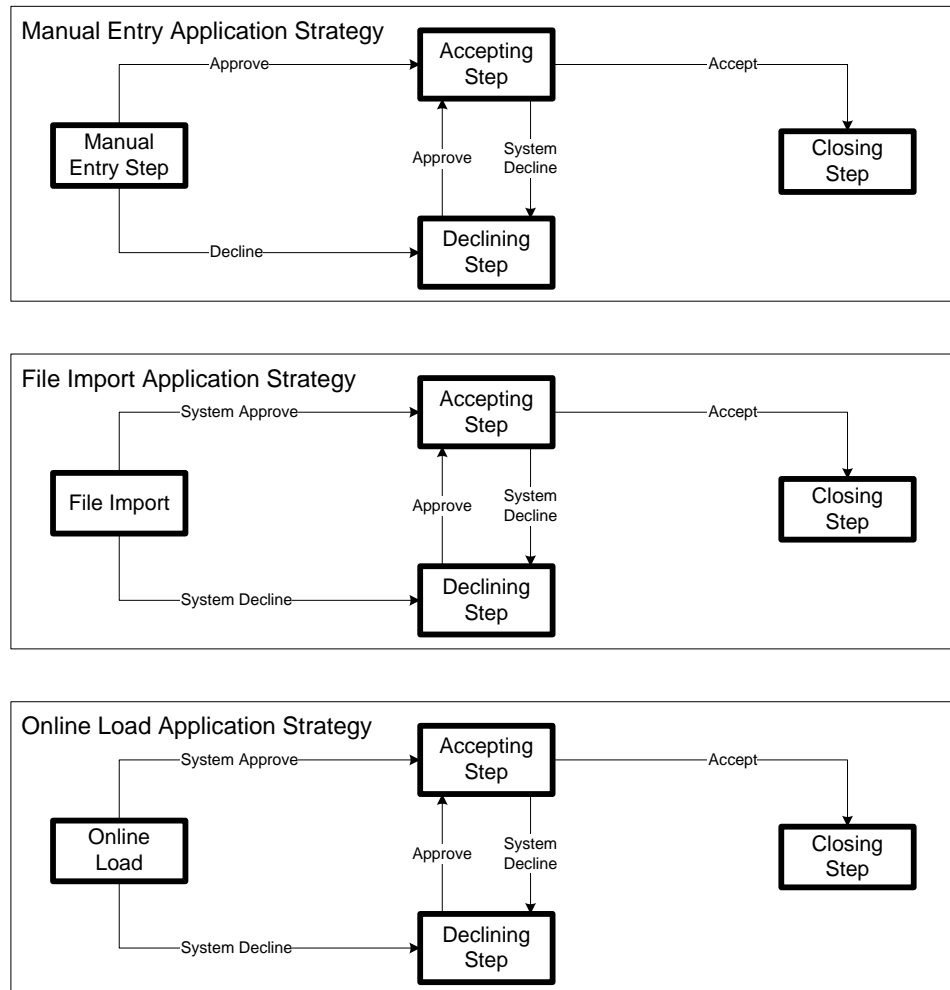


Fig. 51. Main application workflow schemes

## Strategy Scheme: Application Workflow

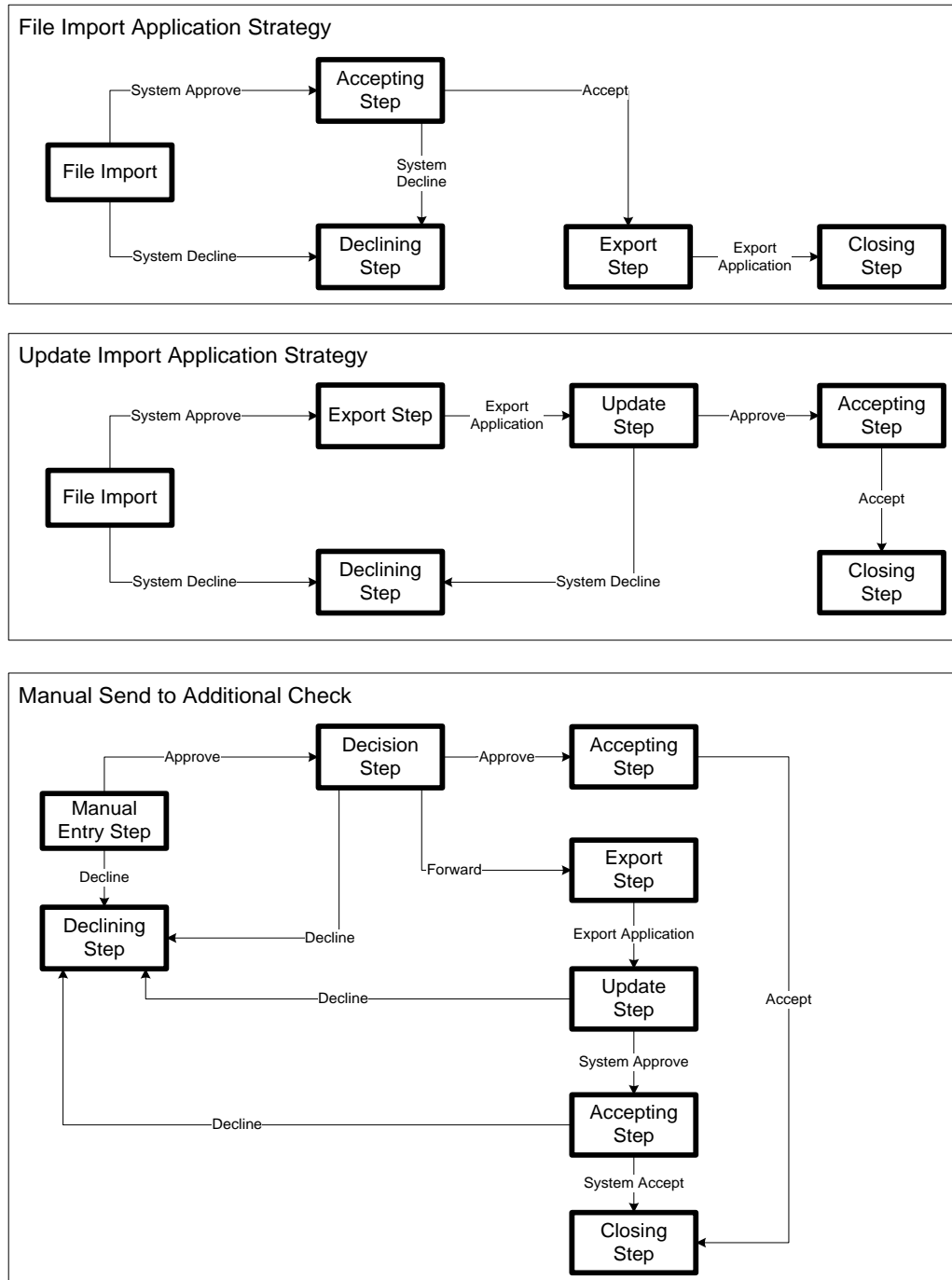


Fig. 52. Additional application workflow schemes



## Chapter 3. Processing Applications with no Workflow

The Advanced Applications R2 module has a special "no workflow" mode. In this mode, an application's lifecycle is cut to a minimum, and since workflow and its accompanying logging are not used, higher performance is obtained. Work in this mode is performed according to a scenario providing for only two stages: import and subsequent acceptance (or decline) of an application. Also, this mode supposes the creation of a report (simultaneous or deferred) on the results of application processing (see the document "Advanced Applications R2 XML Format").

The Advanced Applications R2 module in "no workflow" mode is accessed through the menu group "OpenWay → Advanced Applications R2 → Applications No Workflow", which contains the following items and menu groups:

- "Issuing Applications Import" (No WF) – import issuing module applications.
- "Issuing Applications – Accept" (No WF) – accept issuing module applications.
- "Acquiring Applications Import" (No WF) – import acquiring module applications.
- "Acquiring Applications – Accept" (No WF) – accept acquiring module applications.
- "Applications Response" (No WF) – export files with a report on application processing results.
- "Applications Monitoring (No WF)" – monitoring issuing and acquiring module application processing; performed by a user with administrator privileges. The buttons and fields in this form are the same as those in the form for monitoring application processing in "workflow" mode, but without workflow strategy and step information fields. For information about the form, see the section "Monitoring Application Workflow".
- "Parallel Accept" menu group – contains menu items making it possible to accept issuing and acquiring applications in parallel. This functionality is used when a large number of applications must be processed.

Parallel processing must have been set up ("OpenWay → Full → Configuration Setup → Main Tables → Process Parameters"), see the document "Running WAY4™ Processes in Parallel".

The "no workflow" mode is used to solve the following tasks:

- Card migration
- Automatic processing of a large number of the same type of applications according to a template that provides for export and subsequent acceptance of applications



The "no workflow" mode has the following limitations:

- Not possible to manually edit applications.
- No application approval stage (see "Approving Applications").

- All applications regardless of processing results end up at the "Close" stage of processing.
- No journal of the current application's workflow history.
- No verification of system user rights to execute actions to process applications.
- No possibility to work with applications to manage system users.

## Chapter 4. Working with Applications in an HA Secondary Node

When importing applications in an HA secondary node:

- In "no workflow" mode (see "Processing Applications with no Workflow") instead of being accepted (see "Accepting Applications"), applications are approved (see "Approving Applications"). After synchronisation in the primary node, these applications will have the "Waiting" status and can be accepted. The message "Application is approved successfully and will be processed later" will be displayed. For correct operation, the global parameter "APPL\_NON\_SAFE\_ON\_SECONDARY = APPROVE" must be set in WAY4 (the default value is "DECLINE"). Otherwise, applications will be declined (Posting Status = "Declined").
- When processing applications in the primary node (the contract was authorized in a secondary node), applications will get the "Waiting" status during an attempt to accept them. In addition:
  - When a user manually accepts a single application, WAY4 shows the warning with code 2288: "Application is skipped: The service <Service\_Name> is not active on this node "Node\_Name".
  - In batch accept of applications, WAY4 checks the number of unprocessed applications remaining and if there are any, the following message will be added to the Process Log:  
" <NotProcessedCount> from <SummaryCount> approval applications were not processed. Application contracts can be not active on this node, check "OpenWay → Distributed Processing → Configuration Setup → Primary Node Routing Check".

If there are no additional settings or when working in the "no workflow" mode, unprocessed applications can be reaccepted. The application acceptance process will only be successful after contract authorization is performed in the primary node again.

Response code 2288 can be used when setting up workflow (see the section "Service Settings" of the document "Advanced Applications Module (workflow configuration)").

Before accepting applications, it is recommended to make sure that at the present time all contracts are being processed in the current node. To perform the check, use the menu item "OpenWay → Distributed Processing → Configuration Setup → Primary Node Routing Check".

- When processing applications using workflow, when an attempt is made to accept an application (see "Accepting Applications"), the application will be approved (see "Approving Applications"). The user will get the message "Application is approved successfully and will be processed later".

For correct operation, additional settings must be made (these are standard settings and included in the default configuration):

- For errors with the code 2265 ("Accept application for <Object\_Type>" is prohibited in the secondary database"), register the activity's result (see the

section "Service Settings" of the document "Advanced Applications Module (workflow configuration)").

- This result should be added for the "Accept" action (see the section "Workflow Activities" of the document "Advanced Applications Module (workflow configuration)").
- Add a rule (see the section "Workflow Strategies" of the document "Advanced Applications Module (workflow configuration)") making it possible to approve an application if it is accepted with this result.
- If applications imported by web services in "no workflow" mode cannot be accepted immediately (contracts in the current node are unavailable, or accepting applications in a secondary HA node is not permitted):
  - Applications for urgent operations (change status, process an Event, set a classifier, rest a PIN counter) will be declined (*Posting Status* = "Declined"). The appropriate error message (response code "2288" or "2270") will be added to the response file.
  - Applications for non-urgent operations will get the "Waiting" status and will be processed during the next process for accepting applications.

For more information about the HA platform, see the document "WAY4™ HA Cluster".

## Chapter 5. Tags in Advanced Applications R2 Module

| Name         | Value                     | Description  | Specified in   |
|--------------|---------------------------|--|--|
| Split        | "Yes"<br>"No"             | Used for deferred acceptance of a subordinate application. When the value is set to "Yes", the subordinate application will be processed as an independent one.  | In UFX format, this tag is sent as:<br><pre> &lt;Application&gt;   &lt;Data&gt;...&lt;/Data&gt;   &lt;AddData&gt;     &lt;Split&gt;Yes&lt;/Split&gt;   &lt;/AddData&gt; &lt;/Application&gt; </pre>  |
| ChangeMain   | "Yes"<br>"No"             | Used to allow a parent contract to be changed with an application. If the application is intended to create a parent contract and as a subcontract add another contract earlier belonging to a different contract tree, the value of the tag should be ChangeMain = "Yes".   | In UFX format, this tag is sent as:<br><pre> &lt;Application&gt;   &lt;Data&gt;     &lt;Contract&gt;       &lt;AddContractInfo&gt;         &lt;ChangeMain&gt;Yes&lt;ChangeMain&gt;       &lt;/AddContractInfo&gt;     &lt;/Contract&gt;   &lt;/Data&gt;   &lt;AddData&gt;...&lt;/AddData&gt; &lt;/Application&gt; </pre>       |
| ChangeClient | "All"<br>"This"<br>"Down" | The tag is used to choose the mode for changing a client for a contract tree by using an application:<br><ul style="list-style-type: none"> <li>• "All" – the client will be changed for the entire contract tree</li> <li>• "This" – the client will be changed only for the contract to which the application belongs (from version 03.39.30)</li> <li>• "Down" – the client will be changed for all contract in the hierarchy that are under the contract to which the application belongs.</li> </ul> The tag is used for an application tree in which | In UFX format, this tag is stored as:<br><pre> &lt;Application&gt;   &lt;Data&gt;     &lt;Contract&gt;       &lt;AddContractInfo&gt;         &lt;ChangeClient&gt;All&lt;ChangeClient&gt;       &lt;/AddContractInfo&gt;     &lt;/Contract&gt;   &lt;/Data&gt;   &lt;AddData&gt;...&lt;/AddData&gt; &lt;/Application&gt; </pre> |

| Name                  | Value                    | Description  | Specified in  |
|-----------------------|--------------------------|--|---|
|                       |                          | the parent application is used to create a client, and the subordinate applicatoin specifies the contract whose data are being updated. The value of the tag ChangeClient = "All"/"This"/"Down" should be specified in the subordinate application used to work with the contract.   |   |
| ChangeInstitution     | <institution identifier> | The tag makes it possible to change the institution for a contract to which the application belongs. This tag is used together with the ChangeInstitutionType tag that sets how an instution will be identified.   | In UFX format, this tag is sent as:<br><pre> &lt;Application&gt;   &lt;Data&gt;     &lt;Contract&gt;       &lt;AddContractInfo&gt;         ChangeInstitution&gt;512&lt;ChangeInstitution&gt;       &lt;/AddContractInfo&gt;     &lt;/Contract&gt;   &lt;/Data&gt;   &lt;AddData&gt;...&lt;/AddData&gt; &lt;/Application&gt; </pre>              |
| ChangeInstitutionType | "B"<br>"C"<br>"N"<br>"I" | The tag determines how the financial institution will be identified when changing the instution for a contract:<br><ul style="list-style-type: none"> <li>• "B" – institution identified by branch_code field value (default).</li> <li>• "C" – institution identified by cb_code field value.</li> <li>• "N" – institution identified by bank_code value.</li> <li>• "I" – institution identified by id field value.</li> </ul> This tag is used together with the ChangeInstitution tag allowing a financial institution to be changed for a contract. | In UFX format, this tag is stored as:<br><pre> &lt;Application&gt;   &lt;Data&gt;     &lt;Contract&gt;       &lt;AddContractInfo&gt;         &lt;ChangeInstitutionType&gt;C &lt;ChangeInstitutionType&gt;       &lt;/AddContractInfo&gt;     &lt;/Contract&gt;   &lt;/Data&gt;   &lt;AddData&gt;...&lt;/AddData&gt; &lt;/Application&gt; </pre> |
| ResetCurrentCounters  | "Yes"<br>"No"            | The tag makes it possible to reset the counter of the usage limiter to which the application belongs.  | In UFX format, this tag is sent as:<br><pre> &lt;Application&gt;   &lt;Data&gt;     &lt;Usage&gt;       &lt;AddData&gt; </pre>  |

| Name                | Value                                   | Description   | Specified in   |
|---------------------|---|---|--|
|                     |   |   | <pre> &lt;ResetCurrentCounters&gt;Yes &lt;ResetCurrentCounters&gt; &lt;/AddData&gt; &lt;/Usage&gt; &lt;/Data&gt; &lt;AddData&gt;...&lt;/AddData&gt; &lt;/Application&gt; </pre>  |
| ErasePIN            | "Yes"<br>"No"                           | The tag makes it possible to clear a card's PIN by using an application.  | <p>In UFX format, this tag is sent as:</p> <pre> &lt;ProduceCard&gt; &lt;AddData&gt; &lt;Parm&gt; &lt;ParmCode&gt;ErasePIN&lt;/ParmCode&gt; &lt;Value&gt;Yes&lt;/Value&gt; &lt;/Parm&gt; &lt;/AddData&gt; &lt;/ProduceCard&gt; </pre>                                      |
| MULTIPLE            |   | The tag makes it possible to add another contract on the same object hierarchy level as the current contract.   | The tag is set in the application scheme on the level of section list settings in the ADD_DATA field.  |
| MOBILE_CONTRACT_IDT | <identification<br>scheme type<br>code> | The MOBILE_CONTRACT_IDT tag is used to synchronise the identification scheme used to search for a contract if an application was used to change the client's phone number. The new identification scheme is created for the card contract that is currently active if an application to change the client's address with the corresponding address type was create. If the tag value is not set, the default value "SMS" is used. The tag is used in the Advanced Applications R2 module. | The tag is specified in the address type in the Add Info field of the Address Types table (Full → Configuration Setup → Client Classifiers → Address Types). The code for the identification scheme type (Authentication Module → Identification Types) is set in the tag. |