



Operation Manual

Advanced Applications R2

03.50.30

20.07.2020

Contents

1.	Module Purpose	7
2.	Operating Principles	8
3.	Creating Applications	9
3.1	General Principles	9
3.2	Selecting a Financial Institution and Client Type	11
3.3	Application Form	11
3.4	Clearing Application Object Fields	13
3.5	Creating Applications	15
3.5.1	Applications for Working with Acquiring Module Client Records	15
3.5.2	Applications for Acquiring Module Contracts	20
3.5.3	Forms for Application Objects	25
4.	Application Workflow	57
4.1	Loaded Applications	57
4.2	Actions for Application Processing	60
4.2.1	Checking Applications	61
4.2.2	Approving Applications	62
4.2.3	Forwarding Applications	63

4.2.4	Declining Applications	64
4.3	Accepting Applications	65
4.4	Monitoring Application Workflow	67
4.5	Processing Approved Applications	71
4.6	Processing applications imported by web services or import pipes	73
4.7	Processing Declined Applications	74
5.	Importing and Exporting Applications	77
5.1	Importing Applications	77
5.2	Exporting Applications	79
5.3	Exporting XML Response Files	80
5.4	Monitoring File Processing	80
6.	Operations with Application Objects	82
7.	Application Workflow Scheme	95
8.	Processing Applications with no Workflow	98
9.	Working with Applications in an HA Secondary Node	100
10.	Tags used in application processing	102
10.1	Use of Standard Application Tags (UFX Tags) when Processing Applications	106
10.1.1	Parameters that affect processing applications for any object type	106

10.1.2	Parameters that affect processing applications for a certain object type	107
10.2	Managing Custom Tags when Processing Applications	119
10.2.1	Example of adding tags using an application to create a client record	120
10.2.2	Example of using the "TAG=Y;" control structure	122
10.2.3	Example of using the "TAGS_TO_REMOVE" control structure	125

This document is intended for Way4™ system administrators, bank or processing center 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.

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

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

The following notation is used in the document:

- Field labels in screen forms are shown in *italics*.
- Key combinations are shown in angular brackets, for example, <Ctrl>+<F3>.
- Names of screen form buttons and tabs are shown in square brackets, for example, [Approve].
- Sequences for selecting user menu items or context menu items are shown using arrows as follows: "Issuing → Contracts Input & Update".
- Sequences for selecting system menu items are shown using arrows as follows: Database => Change password.
- Variables that differ for each local instance, such as directory and file names, as well as file paths are shown in angular brackets, as in <OWS_HOME>.

Warnings and information are marked as follows:



Warnings about potentially hazardous situations or actions.



Messages with information about important features, additional options, or the best use of certain system functions.

1. 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 "XML Applications (R2)").
- To import applications from files or manually enter them in order to modify client and contract parameters. These 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 "XML Applications (R2)").
- 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.

2. 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 "XML Applications (R2)"). 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 workflow stage a user "captures" the application and becomes its responsible officer. From this moment, all other users are prohibited to 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.

3. Creating Applications

3.1 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.
- Card Info (bank card). This section is available if the parent object is a card contract.
- 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](#)").

3.2 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, select the menu item "Advanced Applications R2 Cardholder Input & Update by Applications → Set Client Type" (or "Advanced Applications R2 → Merchant Input & Update by Applications → Set Client Type").

3.3 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.

Application form

The [Actions...] button 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 [Del] 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 the figure 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 (client in the figure below).



The screenshot shows a client information entry form with the following sections:

- Client Info** (Header)
- Identification** (Group):
 - Short Name
 - Registration #
 - Reg # Type
- Registration Dtls** (Group):
 - Social Security #
 - Security Name
 - Language
- Client Details** (Group):
 - Gender
 - Salutation / suffix
 - Last Name
 - First Name
 - Middle Name
 - Birth Name
 - Marital Status
 - Citizenship
 - Date of Birth: 00/00/0000
 - Place of Birth
 - Position
 - Company Name
 - Trade Name
 - Individual Number
 - Date Open: 00/00/0000
- Buttons** (Bottom):
 - Ins
 - Del
 - Query**
 - Base Addr
 - Address
 - Classifier
 - Parameter
 - Affiliation
 - Clear Fields

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 the section "[General Principles](#)".

3.4 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" will open as a result.

Object Type	Field Name
Contract	Comment Text
Contract	RBS Number
Contract	

Ins **Del** **Query**

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.

The form's 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 the [*Del*] button.

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 the section "[Loaded Applications](#)").
- Monitoring application workflow (see the section "[Monitoring Application Workflow](#)").
- Processing approved applications (see the section "[Processing Approved Applications](#)").
- Processing declined applications (see the section "[Processing Declined Applications](#)").

3.5 Creating Applications

To enter an application for working with acquiring module clients and contracts, select the menu group "Advanced Applications R2 → Merchant Input & Update by Applications".

This group contains the following menu items:

- "Set Client Type" – select the financial institution and client type.
- "New Merchant" – create an application to create a new merchant record.
- "Merchants" – list of merchants. Used to select the required merchant record and input 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 input 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 input an application for working with this record (including with related objects – credit limit, classifiers, etc.).
- "Loaded Applications" – work with the list of imported applications.
- "Approval Applications" – process approved applications.
- "Declined Applications" – work with declined applications.
- "Applications Monitoring" – monitoring application processing.

3.5.1 Applications for Working with Acquiring Module Client Records

Forms of applications for working with acquiring module client records are accessed in the following ways:

1. To create an application to add the record of a new merchant, 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.

New Merchant

New Merchant	Fin Institution:	Principal	Application Date:	26/12/14 14:21:39
Client:	Branch:	Action:	Add	
Product Category:	Acquiring	Appl Reg Number:		

Ins Del Query Actions... Client

Application for working with a merchant record

The form's fields and principles for working with the form are described in the section "[Application Form](#)".

2. To create an application to change the merchant record or its related objects (including contracts), select the user menu item "Advanced Applications R2 → Merchant Input & Update by Applications → Merchants".

The "Merchants" form for viewing client data and creating applications will open.

MERCHANTS

Short Name <input type="text" value="TEST MERCHANT"/>	Institution <input type="text" value="Principal"/>	Client Number <input type="text" value="170871455"/>		
Registration # <input type="text" value="22334455"/>	Client Category <input type="text" value="Commercial"/>	Branch <input type="text"/>		
Reg # Type <input type="text" value="Agreement"/>	Client Type <input type="text" value="Merchant Resident"/>	Service Group <input type="text"/>		
Registration Dtls <input type="text"/>				
Security Name <input type="text"/>				
Language <input type="text" value="ENGLISH"/>				
Company Details				
Citizenship <input type="text"/>	Country <input type="text" value="United Kingdom"/>	Mailing Address <input type="text"/>		
Legal Name <input type="text" value="Test Company"/>	Phone <input type="text"/>	<input type="text"/>		
Trade Name <input type="text" value="Test Company"/>	Fax <input type="text"/>	<input type="text"/>		
Mobile <input type="text"/>	Phone (add) <input type="text"/>	<input type="text"/>		
Delivery Type <input type="text"/>	Fax (add) <input type="text"/>	ZIP <input type="text"/> City <input type="text" value="London"/>		
Salutation <input type="text" value="MR"/>	E-mail <input type="text" value="tclient@domain.com"/>			
Last Name <input type="text" value="Merchant"/>				
First Name <input type="text" value="Client"/>	Embossing			
Middle Name <input type="text"/>	Title, First Name, Last Name, Company Name			
Position <input type="text" value="Manager"/>	MR <input type="text"/>	MERCHANT <input type="text"/>	TEST <input type="text"/>	Date Open <input type="text" value="16/01/2013"/>
			COMPANY <input type="text"/>	Ready <input type="text"/>

Buttons: Ins | Del | Query | Application | Iss Cntr | Acq Cntr | Add Info | Addresses | Linked Client

Acquiring module client

To create an application for working with the selected client record in the acquiring module, click the [Application] button. The "Create New Application" form will open. In the *Application Type* field of this form, select the required application type.

The screenshot shows a Windows-style dialog box titled "Create New Application". It contains four input fields: "Fin Institution" with the value "Principal", "Product Category" with the value "Acquiring", "Reg Number" which is empty, and "Application Type" with the value "Update Merchant". At the bottom of the dialog are two buttons: "Cancel" and "Proceed".

Selecting an application type



In the list available in the *Application Type* field, application types will be shown 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 [figure](#) will open.

3. To create an application to change a merchant address, select the user menu item "Advanced Applications R2 → Merchant Input & Update by Applications → Merchants". The "Merchants" form for viewing merchant data and creating applications will open (see [figure](#)). Click the [Addresses] button in this form to open the "Addresses for <name of client>" form with the list of merchant addresses.

Addresses for WILLIAM SMITH

Type: Statement	Country: United Kingdom	ZIP: 322223	Activated: Is Active: Yes
Name: WILLIAM SMITH	State:	City: London	Date From: 08/12/2013
Use Addr:	Municipality:	Date To: 01/02/2019	
Delivery:	Mail Lines		
Language: ENGLISH	Line 1: Abbey Road	Fax:	
Salutation: MR	Line 2:	Fax (h):	
First Name: William	Line 3:	Phone:	
Last Name: Smith	Line 4:	Phone (h):	
Birth Name:	Add Info:	Phone (mob):	
	E-Mail:	Ready	
	URL:		
<input type="button" value="Ins"/> <input type="button" value="Del"/> <input type="button" value="Query"/> <input type="button" value="Application"/>			

Merchant address

Click the [Application] button in this form. An address change application form will be displayed, similar to the form shown in [figure](#). Click the [Address] button in this form to open a form for entering merchant address data. When entering data about an address, observe the rules for registering the acquiring module clients, set forth in the "Acquiring Module". More detailed information about working with addresses is provided in the "[Address](#)" section of the current document.

Depending on the application scheme, the form for creating an application (see [figure](#)) contains buttons for opening forms to work with objects (acquiring module client and objects related to it). Data input forms for application objects are described in the corresponding sections. The form may contain the following buttons:

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

3.5.2 Applications for Acquiring Module Contracts

1. To create an application to change an existing contract (and its related objects), 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 [figure](#)) or "Device Contracts" form (see [figure](#)), for viewing contract data and creating applications will open.

Acquiring Contracts

Contract #	001-C-409357	Principal	Merchant Resident	<< < > >>	1 of 2	X
Client	TEST MERCHANT	RBS #, Member ID				
Contract Name	Test Acc Contract 2	Settlement Type	- Available RUR	0,00		
Product	Test Acq Product	Usage Scenario	Main and Own			
Acnt Scheme	001-Default Retail Scheme	Liab Contract		Liab Category		
Type	001-Corporate Client Account	Comment				
Service	001-Acq Accounting Commercial	SIC Code				
Report Type		Card Acceptor ID				
		Open/Close	01/10/2012	00/00/0000	Status	Account OK
				Approval	Ready	
<input type="button" value="Ins"/> <input type="button" value="Del"/> <input type="button" value="Query"/> <input type="button" value="Application"/> <input type="button" value="Client"/> <input type="button" value="Accounts"/> <input type="button" value="Subs"/> <input type="button" value="Balance"/> <input type="button" value="Serv Cards"/> <input type="button" value="Pers.Usage"/> <input type="button" value="Swch Usage"/> <input type="button" value="Dn/Oft Usage"/> <input type="button" value="Devices"/> <input type="button" value="ATM Retail"/> <input type="button" value="Address"/> <input type="button" value="AddParms"/> <input type="button" value="Att Clients"/> <input type="button" value="Classifiers"/>						

Acquiring module contract

Device Contracts

Identification		<< < > >> 2 of 148 X	
Terminal ID	00000002	Client	TEST ACQ
Device Name	TEST IMPRINTER RETAIL	Comment	
Product Settings		Risk Parameters	
Product		Risk Scheme	
Type	001-Our Imprinter	Floor Limit Factor	1,000
Service	001-Imprinter Retail USD+Local	Usage Scenario	
Opened/Closed 28/11/2009 00/00/0000		SIC Code	5992 Florists
		Card Acceptor ID	
Status	Device OK	Ready	
<input type="button" value="Ins"/> <input type="button" value="Del"/> <input type="button" value="Query"/> <input type="button" value="Application"/> <input type="button" value="Client"/> <input type="button" value="Imprinter"/> <input type="button" value="Serv Cards"/> <input type="button" value="Parms"/> <input type="button" value="Pers.Usage"/> <input type="button" value="Swch Usage"/> <input type="button" value="Dn/Ott Usage"/> <input type="button" value="Address"/> <input type="button" value="SubDevices"/>			

Device contract



A contract form can also be opened when a client form is opened (see [figure](#) in the section "Applications for Working with Acquiring Module Client Records").

To create an application for working with the selected contract record, click the [Application] button. The "Create New Application" form will open. In the *Application Type* field of this form, select the required application type.

Create New Application

Fin Institution:	Principal
Product Category:	Acquiring
Reg Number:	
Application Type:	Update Acquiring Contract
[Cancel] [Proceed]	

Selecting an application type



In the list available in the *Application Type* field, application types will be shown 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.

Create Acq Contract Application

Update Acquiring Contract	Fin Institution:	Principal	Application Date:	26/12/14 15:31:46
Contract:	001-C-409357	Branch:	Action:	Update
Product Category:	Acquiring	Appl Reg Number:		
[Ins] [Del] [Query] [Actions...] [Contract]				

Application for working with an acquiring contract record

The form's fields and principles for working with the form are described in the section "[Application Form](#)".

2. 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 [figure](#)) or "Device Contracts" form (see [figure](#)), for viewing contract data and creating applications will open. Click the [Address] button in this form to open the "Address for <name of client>" form with the list of contract addresses.

Contract addresses

Click the [Application] button in this form. An address change application form will be displayed. Click the [Address] button in this form to open a form for entering contract address data. When entering data about an address, observe the rules for registering contracts, set forth in the document "Acquiring Module". More detailed information about working with addresses is provided in the "[Address](#)" section of the current document.

Depending on the application scheme used, the form for creating an application (see [figure](#)) contains buttons to open forms for working with objects (contract and its related objects). Data input forms for application objects 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](#)").
- [ExtraInfo] – additional information for a contract (see the section "[Additional Information](#)").
- [Affiliation] – affiliated client (see the section "[Affiliated Client](#)").
- [Usage] – usage limiter (see the section "[Usage Limiters](#)").
- [Pers Order] – standing payment order (see the section "[Payment Order](#)").
- [Tariff] – tariff (see the section "[Tariff](#)").

 The tariff management module is not included in the basic configuration of Way4 and is provided according to an additional agreement with OpenWay.

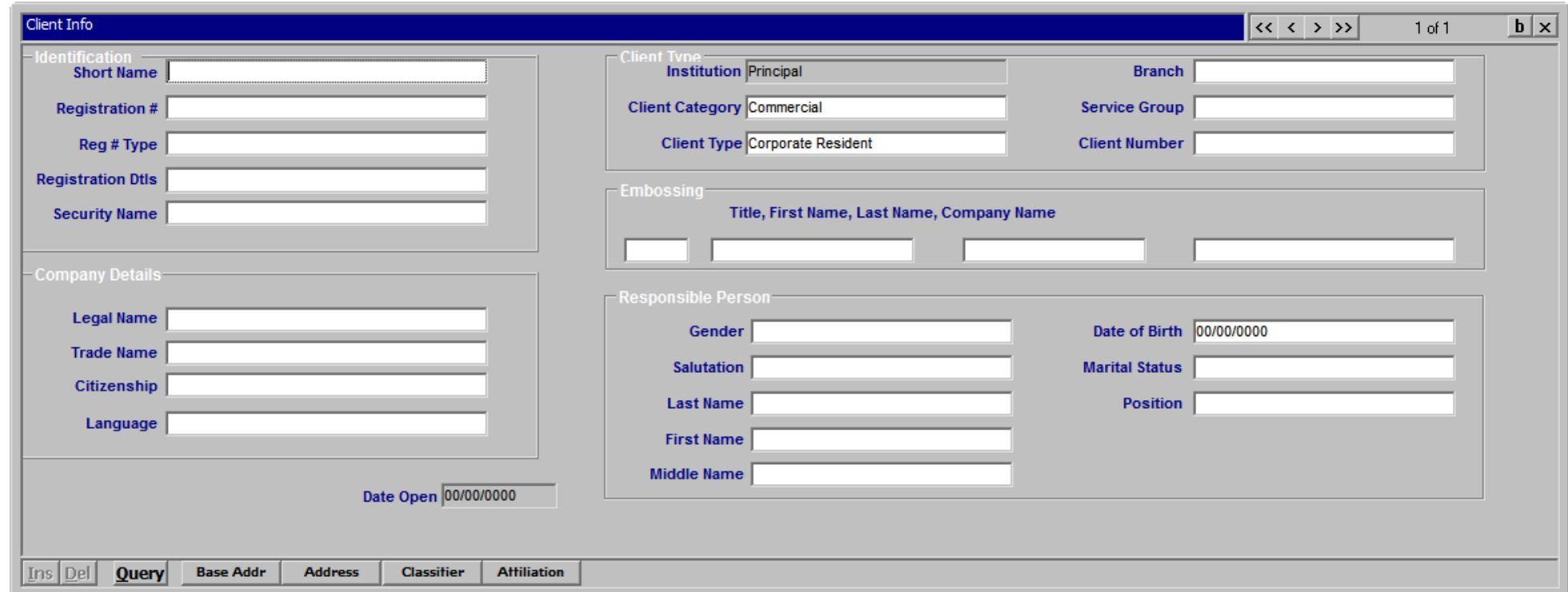
- [Classifier] – client or contract (see the section "[Classifier](#)").
- [Parameter] – client or contract parameter (see the section "[Client or Contract Custom Parameter](#)").
- [Status] – contract status (see the section "[Contract Status](#)").
- [Device] – device (see the section "[Acquiring Contract](#)").

3.5.3 Forms for Application Objects

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

3.5.3.1 Acquiring Client

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



The screenshot shows the "Client Info" form with the following sections:

- Identification:** Short Name, Registration #, Reg # Type, Registration Dtls, Security Name.
- Client Type:** Institution (Principal), Branch, Client Category (Commercial), Service Group, Client Type (Corporate Resident), Client Number.
- Embossing:** Title, First Name, Last Name, Company Name.
- Company Details:** Legal Name, Trade Name, Citizenship, Language.
- Responsible Person:** Gender, Date of Birth (00/00/0000), Salutation, Marital Status, Last Name, First Name, Middle Name, Position.
- Date Open:** 00/00/0000.

At the bottom, there are buttons: Ins, Del, Query, Base Addr, Address, Classifier, Affiliation.

Working with merchant data

The [Base Addr] button is used to open the "Base Address" subform to enter main address data of the client.



Form for entering merchant main address data

The [Clear Fields] button in the "Client Info" forms (see [figure](#)) and the "Base Address" button (see [figure](#)) are used to set lists of object fields (client record and client main address fields) that are to be cleared using applications (see "[Clearing Application Object Fields](#)").

When entering application data, observe the rules for registering clients and contracts, set forth in the document "Acquiring Module".

The set of buttons in the "Client Info" form (see [figure](#)) for entering data about subordinate objects depends on the application scheme used. The form may contain the following buttons:

- [BaseAddr] – main address.
- [Contract] – contracts (see the section "[Acquiring Contract](#)").
- [Classifier] – client or contract (see the section "[Classifier](#)").
- [Address] – client address (see the section "[Address](#)").
- [Affiliation] – affiliated client (see the section "[Affiliated Client](#)").

3.5.3.2 Acquiring Contract

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

Contract Info

Client		Contract Identification			
Financial Inst.	Principal	Contract Number	001-C-269074	Card Acceptor ID	
Branch		Contract Name	Test Acquiring Contract	SIC Code	
Service Group		Bank Code		Bank Account Number	
Client Category	Commercial	Product		Date Open	02/11/2012
Client Type	Corporate Resident	Product Category	Acquiring	Date Expire	00/00/0000
Client		Contract Category	Account	Comment	
		Parent Contract			
		Parent Product			
		Product	Test Acq Product		
<input type="button" value="Query"/> <input type="button" value="Actions..."/> <input type="button" value="Address"/> <input type="button" value="Classiflier"/> <input type="button" value="Pers Order"/> <input type="button" value="Event"/> <input type="button" value="Tariff"/> <input type="button" value="Usage"/> <input type="button" value="Affiliation"/> <input type="button" value="Parms"/> <input type="button" value="Device"/> <input type="button" value="Clear Fields"/>					

Form for working with applications to modify acquiring module contract records

The form's fields:

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

The *Client* field group contains client data:

- *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, see the *Client Category* field of the form "Full → Configuration Setup → Client Classifiers → Client Types"). Specify the "Commercial" value.
- *Client Type* – client type (the list of registered client types, see the *Name* field of the form "Full → Configuration Setup → Client Classifiers → Client Types").
- *Client* – name of the client registered in the database.

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

- *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 data on the contract category and Product for the contract:

- *Product Category* – filled in automatically.
- *Contract Category* – contract category:
 - "Account" – account contracts.
 - "Device" – device contracts.
- *Parent Contract* – the higher-ranking contract in the hierarchy; when the parent contract is selected in this field, a value corresponding to the name of the Product for this contract is specified in the *Parent Product* field.

 If this form was opened from a higher-ranking contract's form, information about the higher-ranking contract will automatically be entered in the *Parent Contract* field of the "Contract Info" form (see [figure](#)).

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

 The *Product* field can be filled in with a Product code by the [Actions] → "Set Prod." command.

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

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

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

The [Set Prod.] button is used to open the "Select Product by Codes" form.

Select Product by Codes

Product Code 1	Product 1
Product Code 2	Product 1.1
Product Code 3	Product 1.1.1

Cancel **Proceed**

Form for selecting Product by code



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 Product codes setup, see the section "Product Codes" of the document "Advanced Applications Module (workflow configuration)".

"Select Product by Codes" form fields:

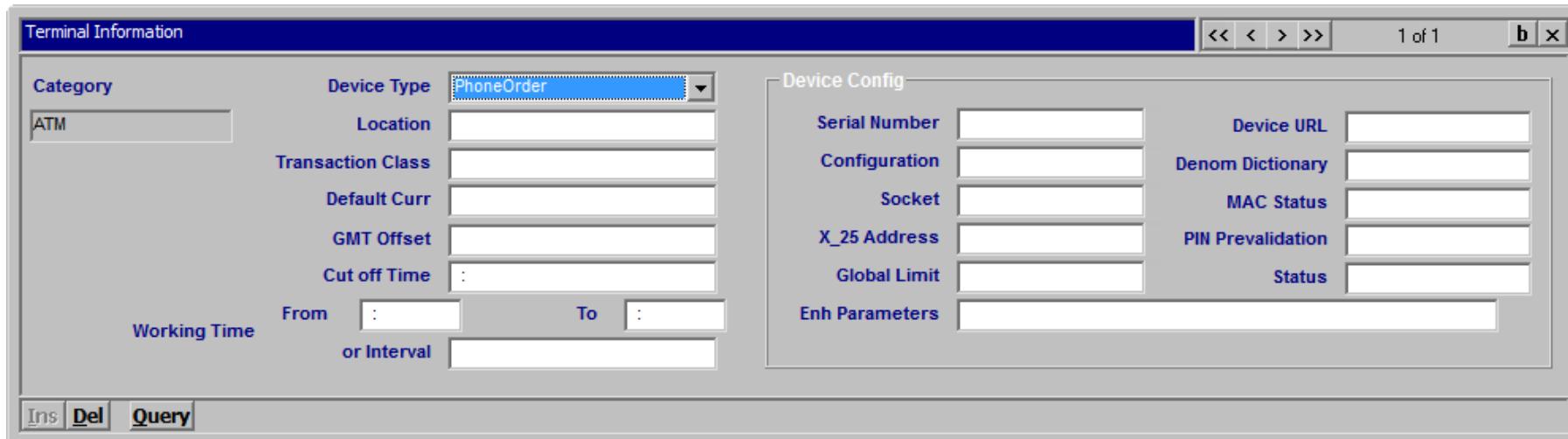
- *Product Code 1* – field for selecting the Product code of the top level of the hierarchy.
- *Product Code 2* – field for selecting the Product code of the second level of the hierarchy (in this field, Product codes are shown that are subordinate to the code specified in the *Product Code 1* field).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

The form fields 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* fields.

Clicking the [Proceed] button causes input data to 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 [figure](#)). 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 [figure](#)).

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

The [Terminal] button in the "Contract Info" form (see [figure](#)) is used to open the "Terminal Information" form.



Category		Device Config	
ATM	Device Type: PhoneOrder	Serial Number	Device URL
	Location	Configuration	Denom Dictionary
	Transaction Class	Socket	MAC Status
	Default Curr	X_25 Address	PIN Prevalidation
	GMT Offset	Global Limit	Status
	Cut off Time	Enh Parameters	
Working Time	From : 03.05.30	To : 20.07.2020	
	or Interval		
Ins		Del	
Query			

Form for entering device information

The form's fields:

- *Category* – filled in automatically depending on the value of the "Contract Info" form's *Product* field (see [figure](#)).

- *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 disbursement.
 - "Retail" – retail transaction.
 - "Unique" – casino transaction, etc.
- *Default Curr* – currency in which transactions are made on this device.
- *GMT Offset* – difference between time zones in which the device and NetServer located.
- *Cut-Off Time* – time (in 24-hour format) until which authorization requests for this device are registered with the current banking date. Time is determined according to the system clock of NetServer through which the device communicates with Way4 without considering the difference between the time zones of the device and POS controller.
- 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 authorization 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, except Saturday and Sunday, 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:

- *Serial Number* – payment terminal serial number.
- *Configuration* – identifier of the ATM's configuration.
- *Socket* – a mnemonic connection name unique within the system (for example if the TCP/IP protocol is used, enter the port number). Used to configure an ATM.
- *X_25 Address* – network address of the ATM in X.25.
- *Global Limit* – 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* – type of ATM denominations (see the subsection "ATM Denominations Dictionary" of the section "Customising ATM Controller Dictionaries" in the document "ATM Controller").
- *MAC Status* – condition for verifying message authentication codes (MAC):
 - "Mandatory" – requests from the terminal are rejected if they don't contain MAC.
 - "Optional" – requests from the terminal don't have to contain MAC.
 - "None" – requests from the terminal are rejected if they contain MAC.
- *PIN Prevalidation* – PIN validation in payment terminals, PIN prevalidation in ATMs:
 - "Mandatory" – mandatory.
 - "Optional" – optional.
 - "None" – none.
- *Status* – device status:
 - "OK" – the device is in service.
 - "Not Configured" – the device is out of service.An empty value in the *Status* field corresponds to the value "Not Configured".

Clicking the [Parms] button in the "Contract Info" form (see [figure](#)) opens the "Override Device Params" form (see [figure](#)) that is used to set values of device parameters for specific payment systems. Work with this form in the same way as described in the document "Acquiring Module".

For Channel	Card Acceptor ID	Merchant Name	City	Country	SIC Code	Device State	Device URL	Add Info
→ MasterCard (ECCF)								

Ins **Del** **Query**

Form for entering device parameters

Depending on the application scheme, the "Contract Info" form (see [figure](#)) contains buttons to open forms for working with objects (with a contract and objects related to it). The form may contain the following buttons:

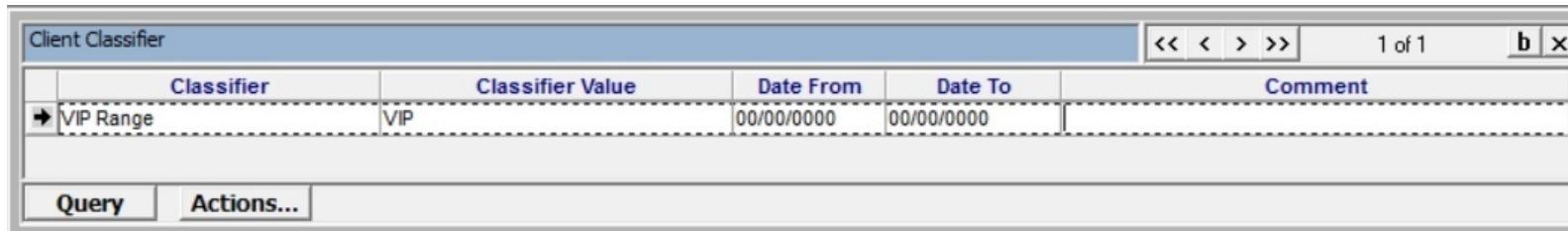
- [Address] – contract address (see the section "[Address](#)").
- [Classifier] – client or contract (see the section "[Classifier](#)").
- [Event] – Event (see the section "[Event](#)").
- [Tariff] – tariff (see the section "[Tariff](#)").

i The tariff management module is not included in the basic configuration of Way4 and is provided according to an additional agreement with OpenWay.

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

3.5.3.3 Classifier

Clicking the [Classifier] button in an application form (see the section "[Application Form](#)") or in the parent object's form opens the "Classifier" form.



Classifier	Classifier Value	Date From	Date To	Comment
VIP Range	VIP	00/00/0000	00/00/0000	

Query **Actions...**

Form for entering a classifier

The form is used to enter or update classifier data (Add Or Update) or to cancel planned changes in classifier values (Disable).

The form's 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, execute [Actions] → "Delete".

If an application is designated for disabling future classifiers, the *Classifier*, *Classifier Value*, and *Date From* fields must be filled in for each classifier. The *Date To* field must be set if it was set for the classifier when it was created.

To disable an active classifier, specify its name in the *Classifier* field, leave the *Value* field empty, and if necessary, fill in the classifier's Date From and Date To fields (these fields are used to search for a classifier).

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

3.5.3.4 Client or Contract Custom Parameter

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

The screenshot shows a software interface titled "Contract Parameter". At the top, there is a toolbar with buttons for navigating between records and deleting them. The main area displays a single record in a table format. The columns are labeled "Parameter" and "Value". The "Parameter" column contains "Classifier Parameter" and the "Value" column contains "ai". Below the table, there are two buttons: "Query" and "Actions...".

Parameter	Value
Classifier Parameter	ai

Form for entering contract parameters

The form's 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 command [Actions] → "Insert More"; to delete a record, execute [Actions] → "Delete".

3.5.3.5 Address

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

Client Address

Address Identification		Delivery Type	1 of 1
Address Type	<input type="text"/>	<input type="text"/>	b x
Valid From	<input type="text"/> 00/00/0000	To	<input type="text"/> 00/00/0000
Country	<input type="text"/>	Branch	<input type="text"/>
State	<input type="text"/>	First Name	<input type="text"/>
City	<input type="text"/>	Last Name	<input type="text"/>
Address ZIP	<input type="text"/>	Language	<input type="text"/>
Address Line 1	<input type="text"/>	Phone	<input type="text"/>
Address Line 2	<input type="text"/>	Home Phone	<input type="text"/>
Address Line 3	<input type="text"/>	Mobile Phone	<input type="text"/>
Address Line 4	<input type="text"/>	Fax	<input type="text"/>
Municipality Code	<input type="text"/>	Home Fax	<input type="text"/>
Address Location	<input type="text"/>	E Mail	<input type="text"/> Date from 00/00/0000
		URL	<input type="text"/> Date to 00/00/0000
Add Info <input type="text"/>			
Query		Actions...	

Form for entering client address data

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

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

The values of *Date from* and *Date 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* and *Date 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, clicking the [Address] form in an application form (see the section "[Application Form](#)") or in the parent object form opens the "Address Info" form. The form is used to specify an address to be excluded from the list of addresses used for a client or contract.

The screenshot shows a Windows-style application window titled "Address Info". At the top, there is a toolbar with buttons for navigating between records and a button labeled "b" followed by a close button. The main area contains three input fields: "Address Type" (a dropdown menu), "Valid From" (containing the value "00/00/0000"), and "Valid To" (containing the value "00/00/0000"). Below these fields is a row of buttons: "Ins" (highlighted in blue), "Del" (disabled), and "Query".

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

The form's fields:

- *Address Type* – drop-down list to select the address type.
- The *Valid From* and *Valid 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* and *Valid To* fields, since for one client or contract, several address records of the same type may exist that are valid at different times.

The [Del] button is used to delete a record.

3.5.3.6 Additional Information

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

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

The screenshot shows a software window titled 'Extra Info'. At the top, there are navigation buttons: '<< < > >>' and '1 of 1'. Below the title bar is a toolbar with a bold button ('b') and a close button ('x'). The main area contains a table with two columns: 'Add Info Type' and 'Add Info Value'. The 'Add Info Type' column has a dropdown menu with the option 'Instalment' selected. The 'Add Info Value' column is empty. At the bottom of the form are two buttons: 'Query' and 'Actions...'. The 'Actions...' button is highlighted.

Form for entering extra info

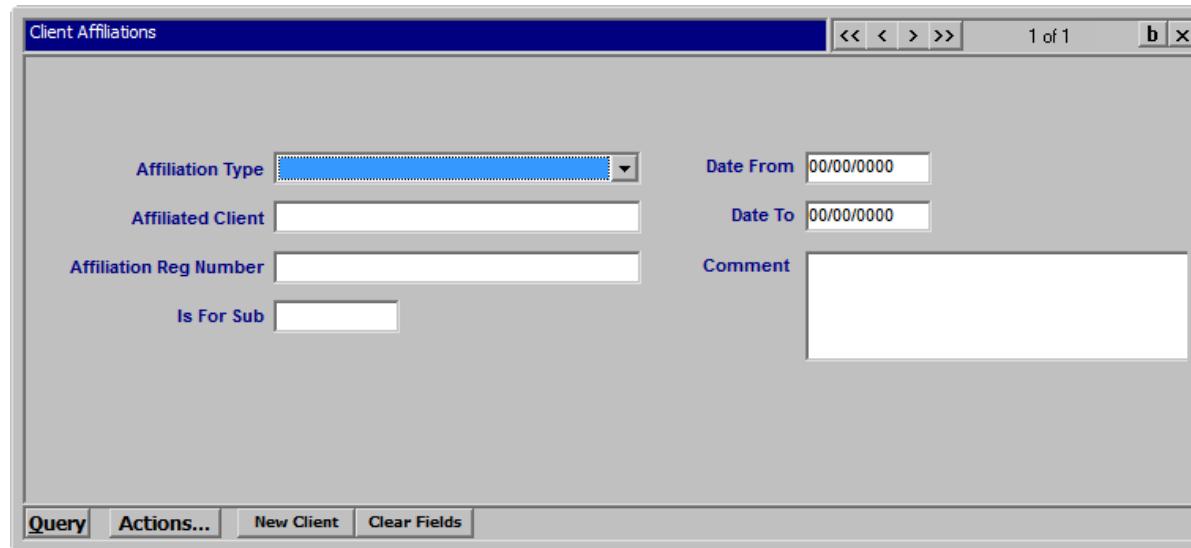
The form's fields:

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

3.5.3.7 Affiliated Client

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



The screenshot shows a Windows application window titled "Client Affiliations". At the top right, there are navigation buttons: <<, <, >, >>, and a search icon. Below the title bar, it says "1 of 1". The main area contains several input fields: "Affiliation Type" (a dropdown menu), "Date From" (a date picker set to "00/00/0000"), "Affiliated Client" (a dropdown menu), "Date To" (a date picker set to "00/00/0000"), "Affiliation Reg Number" (a text input field), "Comment" (a large text area), and "Is For Sub" (a dropdown menu). At the bottom, there are buttons for "Query", "Actions...", "New Client", and "Clear Fields".

Form for entering affiliated client data

The form's 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:
 - "Yes" – use for subcontracts.
 - "No" – do not use for subcontracts.
- The *Date From* and *Date To* fields specify the calendar dates from and to which this setting is valid.
- *Comment* – comments.

The [Clear Fields] button is opens the to set the list of object fields (client relation) 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, execute [Actions] → "Delete".

3.5.3.8 Card Info

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

Card Information		
<i>Branch From</i>	<i>Prod Type</i>	<i>Comment</i>
<i>Branch To</i>	<i>Prod Event</i>	<i>Add Info</i>
<i>Order Number</i>	<i>Chip Scheme</i>	
	<i>Card Expire</i>	
	<i>Card Number</i>	
<input type="button" value="Ins"/> <input type="button" value="Del"/> <input type="button" value="Query"/>		

Form for entering bankcard data

The form's fields:

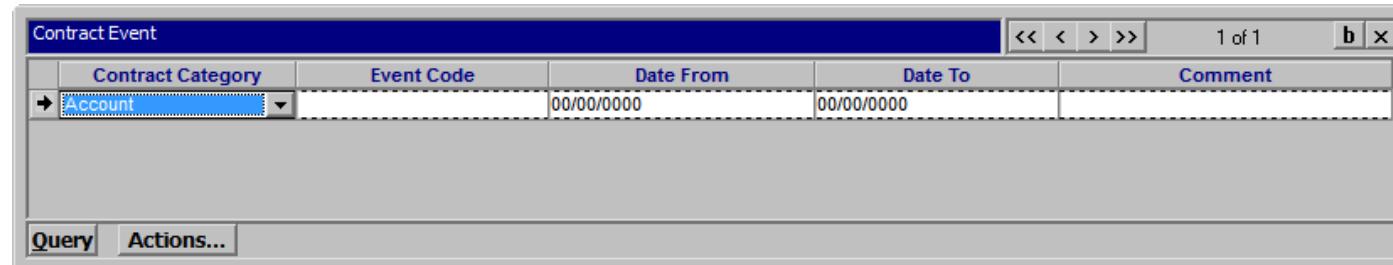
- *Branch From*, *Branch To* – fields for specifying the code of the financial institution. The *Branch From* field specifies the financial institution in which the card will be issued, and the *Branch To* field specifies the financial institution to which the card will be delivered after issuing.
- *Order Number* – number of the order to produce the card.
- *Prod Type* – drop-down list to specify the card production type:
 - "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 according to special agreement with OpenWay).

- "Replace CVV" – issue a plastic card with a new CVV.
- "Reorder PIN" – issue a new PIN.
- "Replace Add Params" – 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].

3.5.3.9 Event

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



Contract Category	Event Code	Date From	Date To	Comment
→ Account		00/00/0000	00/00/0000	

Query **Actions...**

Form for entering Event data

The form's fields:

- *Contract Category* – contract category:
 - "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.

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

3.5.3.10 Payment Order

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

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

Contract Personal Order

Active

Date From Date To

Order

Code

Payment Type

Counterparty or by code

Financial Properties

Target Amount Min Amount

Amount Currency Max Amount

Amount Event

Amount Percent

Date Event

Date Event Day

Target

Target Number

Member ID

Target Spc

Transaction Details

Order Details 1

Order Details 2

Query **Actions...** **Counterparty** **Clear Fields**

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. An action type is set in the *Action Type* field of the "Appl Type" form when configuring an application (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 the following values:

- "ActivatePersonal" ("ActivateIndividual") – an inherited 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 global parameter is "R".
- "ActivateStandard" – when this value is specified, a standing payment order is redefined according to the parameters of the template payment order created on the Account Scheme level for this contract. Moreover, only the *Code* field will be available for filling in in the "Contract Personal Order" form (see [figure](#)).
- "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 [figure](#)).

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 (payment order) to be cleared using an 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".

The [Counterparty] button is used to open the "Counterparty for Order" form that is used to enter payment participant parameters.

Form for entering payment participant data

The form's 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 the 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* – tag fields used for entering additional information about the correspondent account, for example, the payment participant's taxpayer ID, etc.

The [Del] button is used to delete a record of the payment participant.

The [Clear Fields] button is used to set the list of object fields (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 [figure](#)) used to enter payment participant details, as well as the subordinate form "Party Information".

Party Type	Account Number	Account Member Id
→ Payee		
Payee Bank		
Payee Corresp. Bank		

<< < > >> 1 of 3 b x

Ins
Del
Query
Info
Clear Fields

Party Information b x

Category <input type="text"/>	Address	Country <input type="text"/>
Residence <input type="text"/>	City <input type="text"/>	In English <input type="text"/>
Name <input type="text"/>	Postal Code <input type="text"/>	<input type="text"/>
Name in English <input type="text"/>	Municip. Code <input type="text"/>	<input type="text"/>
Birth/Registration Date <input type="text" value="00/00/0000"/>	Location <input type="text"/>	<input type="text"/>
Birth/Registration Place <input type="text"/>	Line 1 <input type="text"/>	<input type="text"/>
Registration Type <input type="text"/>	Line 2 <input type="text"/>	<input type="text"/>
Registration Number <input type="text"/>	Line 3 <input type="text"/>	<input type="text"/>
Registration Details <input type="text"/>	Line 4 <input type="text"/>	<input type="text"/>
Tax Position <input type="text"/>		
Individual Tax Number <input type="text"/>		

Form for entering payment participant details

-  For one payment participant, several records with details can be registered. For example, transaction target details (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 "Parties for Order" form (see [figure](#)) are used to specify the payment participant's bank account number and bank identifier.

Payment participant details for each record are entered in the subordinate form "Party Information" (see [figure](#)).

The form's 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).
- *Line 1* – first line of the address; this can be any text in the local language.
- *Line 2* – second line of the address, the street name in the local language.
- *Line 3* – third line of the address, the building number in the local language.
- *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*, *Line1*, *Line 2*, *Line 3*, *Line 4* fields, with the values in English.

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

3.5.3.11 Contract Status

Clicking the [Status] button in an application form (see the section "[Application Form](#)") opens the "Contract Status" form.

The screenshot shows a software window titled "Contract Status". At the top, there are navigation buttons: <<, <, >, >>, and "1 of 1". To the right of these are bold and close buttons. The main area contains three input fields: "Contract Category" with the value "Account", "Contract Status" which is empty, and "Comment" which is also empty. At the bottom left of the form area is a "Query" button.

Form for entering contract status data

The form's fields:

- *Contract Category* – contract category:
 - "Device" – device contracts.

i The "Device" value is only used to work with acquiring module applications.(see [Applications for Acquiring Module Contracts](#))..

- "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.

3.5.3.12 Device Parameters (DeviceParms)

The "DeviceParms" application object type is used for creating applications to delete records about redefinition of device parameters on various channels.

A record with *Code* = "DEVICE_PARMS" and *Application Object Type* = "Device Parameters" (Advanced Applications R2 → Setup → Appl Section Type) must be preliminarily created in workflow settings.

To create an application to delete a record about redefinition of device parameters, open the "Acquiring Contracts" form (see [figure](#)) or the "Device Contracts" form (see [figure](#)) and click the [Application] button. The "Create New Application" form will open (see [figure](#)). In this form's *Application Type* field, select the appropriate application type (delete device parameters).

In the application form (see the section "[Application Form](#)"), click the [Parms] button. In the "Device Params" form that opens, specify the names of channels for which a record about redefinition of device parameters must be deleted (add channels using the [Ins] button).

The screenshot shows two stacked application forms. The top form is titled 'Create Acq Contract Application' and contains fields for 'Contract' (001-C-006810), 'Product Category' (Acquiring), 'Fin Institution' (Principal), 'Branch', 'Appl Reg Number', and 'Action' (Delete). The bottom form is titled 'Device Params' and has a dropdown menu 'For Channel' with 'AMEX' selected. Both forms have standard navigation buttons (Ins, Del, Query, Actions...) at the bottom.

"Device Params" form

During application processing, the following error messages are possible:

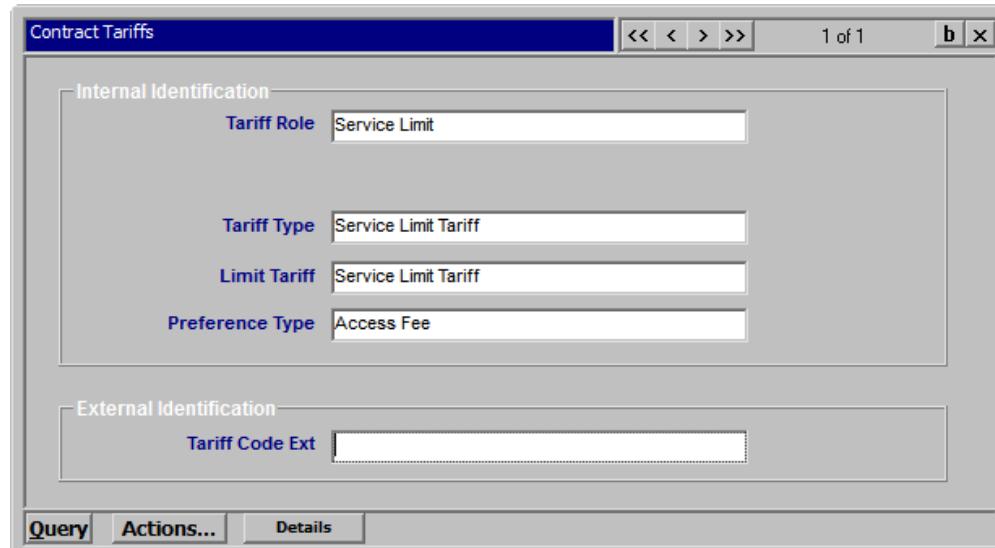
- "Channel not present" – if a channel for the device parameter is not specified in the application.
- "Device parameter: <Channel name> is not defined for the contract" – if a parameter for the channel specified in the application is not present in the device contract's parameters.

- "Inherited Device Parameter: <Channel name> cannot be deleted" – when an attempt is made to delete a parameter from a device contract if this parameter was created in an acquiring contract and inherited by the device contract (i.e. *Is_inherited* = "Y" is set for the device contract).

3.5.3.13 Tariff

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

 The tariff management module is not included in the basic configuration of Way4 and is provided according to an additional agreement with OpenWay.



The screenshot shows the 'Contract Tariffs' form interface. At the top, there is a header bar with the title 'Contract Tariffs', navigation buttons (<<, <, >, >>), and a status indicator '1 of 1'. Below the header, there are two main sections: 'Internal Identification' and 'External Identification'. The 'Internal Identification' section contains four fields: 'Tariff Role' (Service Limit), 'Tariff Type' (Service Limit Tariff), 'Limit Tariff' (Service Limit Tariff), and 'Preference Type' (Access Fee). The 'External Identification' section contains one field: 'Tariff Code Ext'. At the bottom of the form, there are three buttons: 'Query', 'Actions...', and 'Details'.

Form for entering tariff data

The form's fields:

- *Tariff Role* – tariff role; this field determines the area in which 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).
- *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.

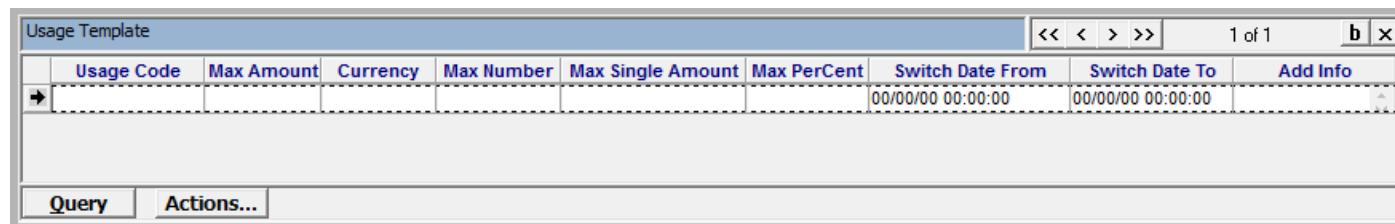
To add a new record in this form, execute the command [Actions] → "Insert More"; to delete a record, execute [Actions] → "Delete".

The [Details] button is used to open the "Details for..." form. This form's fields vary depending on the value of the *Tariff Role* field in the "Contract Tariffs" form (see [figure](#)). For more information on entering data for tariffs with various roles, see the document "WAY4 Advanced Tariff Management".

-  For a tariff to be created, it is mandatory for the *Tariff Type* and *Tariff Code Ext* fields to be filled in and at least one field in the form for entering tariff data. Otherwise, the tariff will not be created. When processing an application the message "Tariff data in application <application number> is empty. Tariff will be ignored" will appear. If this system behavior does not comply with business requirements, contact Customer Support to change the application processing procedure.

3.5.3.14 Usage Limiters

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



Usage Code	Max Amount	Currency	Max Number	Max Single Amount	Max PerCent	Switch Date From	Switch Date To	Add Info
						00/00/00 00:00:00	00/00/00 00:00:00	

Form for entering usage limiter information

The form's 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.

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

-  The section of an application used to work with usage limiters can be used to perform various actions with an inherited usage limiter. An action type is set in the *Action Type* field of the "Appl Type" form when configuring an application (see the section "Configuring Application Schemes" of the document "Advanced Applications Module (workflow configuration)"). For applications to create or modify usage limiters, the *Action Type* field can contain 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".

4. 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 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. (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.

Workflow strategy settings determine which actions are available for applications at various workflow stages (see the section "Workflow Strategies" of the document "Advanced Applications Module (workflow configuration)").

4.1 Loaded Applications

To access forms working with loaded applications, the following menu items are used:

- "Advanced Applications R2 → Cardholder Input & Update → Loaded Applications" – for the issuing module applications.
- "Advanced Applications R2 → Merchant Input & Update → Loaded Applications" – for the acquiring module applications.

This command opens the "Loaded Applications" form.

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 Info	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 Info	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 Info	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	475615654545	29/05/14 14:45:25	New Cardholder	Credit Limit		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					

List of imported applications

The 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 "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, with the exception 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.

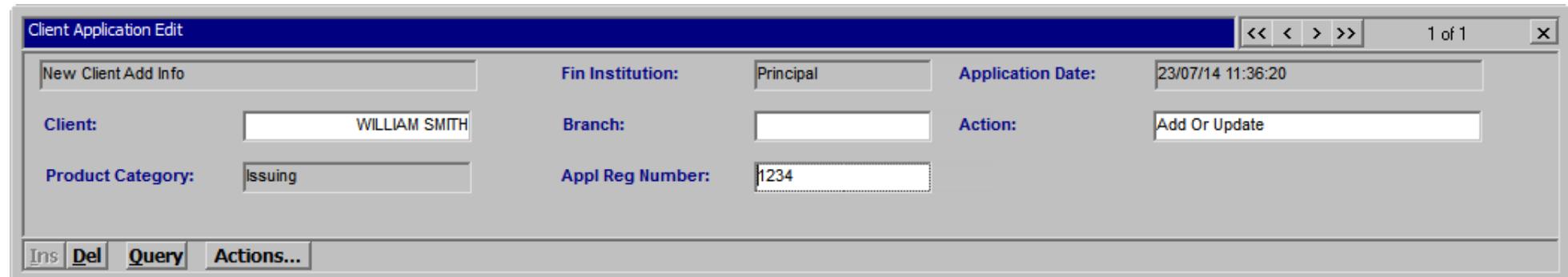
- When a record is selected that in the *Officer* field contains a value corresponding to the current user, the [Actions...] button appears. Clicking the button opens the following context menu items:
 - "Capture" – opens an application form in editing mode.
 - "Release" – calls a procedure to delete 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, that is, on the value in the *Object Type* field.

To select applications for processing from the "Loaded Applications" form, 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, the user is not active or the user does not have sufficient privileges to "capture" the application, when an attempt is made to change to this mode, a window with the corresponding error message 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.



Client Application Edit

New Client Add Info	Fin Institution:	Principal	Application Date:	23/07/14 11:36:20
Client: WILLIAM SMITH	Branch:		Action:	Add Or Update
Product Category: Issuing	Appl Reg Number:	1234		
<input type="button" value="Ins"/> <input type="button" value="Del"/> <input type="button" value="Query"/> <input type="button" value="Actions..."/>				

Form for manually processing an application

In the "Application Edit" form the set of buttons used to open application forms in editing mode depends on the selected application's object type, that is 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 determine which actions are available for applications at various workflow stages (see the section "Workflow Strategies" of the document "Advanced Applications Module (workflow configuration)"). 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](#)").
- "Decline" – decline an application (see the section "[Declining Applications](#)").
- "Forward" – redirect application (see the section "[Forwarding Applications](#)").

4.2 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, forwarding and declining an application) 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 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 forms:

- In the list of loaded applications (see the section "[Loaded Applications](#)").
- In the list of approved applications waiting for processing (see the section "[Processing Approved Applications](#)").
- In the list of declined applications (see 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".

The "capture" activity for an application can be unavailable if the strategy is configured incorrectly (the step doesn't include this activity) or user privileges are insufficient. Possible error messages:

- "Current user is not active or is undefined in the domain" – current user is not active.
- "Edit activity is not found" – current user does not have privileges for this activity or the activity was not found in this strategy step.

If "capture" activity for the application is configured in the strategy step, the earlier activity (with the smaller identifier) will be performed.

4.2.1 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 forms:

- In forms for entering applications (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).

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.

The uniqueness of the loaded application is checked at the "check" stage. If an earlier approved application for the same action and object as in the application being checked is found as a result of checking (*Posting Status* = "Waiting"), the application being checked will be declined (*Posting Status* = "Declined") with the corresponding error message.

-  The uniqueness of the loaded application is checked if the APPL_CHECK_UNIQUE_OBJECT global parameter is set to "Y" (default value). Otherwise (when the parameter's value is "N"), the uniqueness will not be checked.
- In the current version of Way4, a check for uniqueness of applications to add a new record (*Action Type* = "Add") is made with the following object types (*Object Type*): "Client", "Contract", "Officer", "OfficerGroup", "ClientAuthMethod", "ContractAuthMethod", "Preferred", "PaymentReceiver", "ClientAddress", "ContractAddress", and "ContractCounterparty".

4.2.2 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 forms:

- In forms for entering applications (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.

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 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.

The uniqueness of the loaded application is checked at the "approve" stage. If an earlier approved application for the same action and object as in the application being checked is found as a result of checking (*Posting Status* = "Waiting"), the application being checked will be declined (*Posting Status* = "Declined") with the corresponding error message.

- i The uniqueness of the loaded application is checked if the APPL_CHECK_UNIQUE_OBJECT global parameter is set to "Y" (default value). Otherwise (when the parameter's value is "N"), the uniqueness will not be checked.
In the current version of Way4, a check for uniqueness of applications to add a new record (*Action Type* = "Add") is made with the following object types (*Object Type*): "Client", "Contract", "Officer", "OfficerGroup", "ClientAuthMethod", "ContractAuthMethod", "Preferred", "PaymentReceiver", "ClientAddress", "ContractAddress", and "ContractCounterparty".

- i 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](#)").

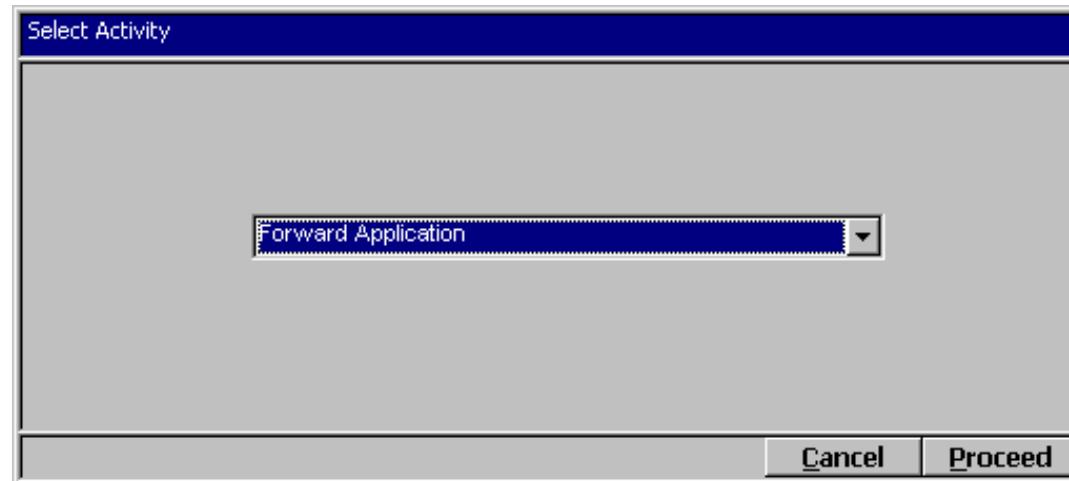
4.2.3 Forwarding Applications

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 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.

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" dialogue window. Select the action to forward the application and click the [Proceed] button for this action to be executed.



Dialogue window for forwarding an application



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)".

4.2.4 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.

-  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.

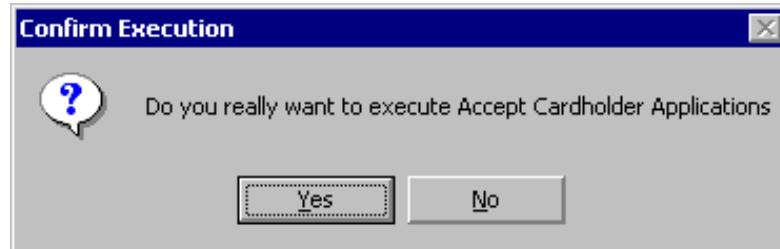
4.3 Accepting Applications

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 menu item:

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



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 menu item "Full → Process Log → Process Log".

- i** 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. To register a contract according to the subordinate application, accept the subordinate application.

- i** The process for accepting applications can be executed in parallel. This functionality is used when a large number of applications must be accepted. The menu group "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 (Full → Configuration Setup → Main Tables → Process Parameters), see the document "Running 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)").

4.4 Monitoring Application Workflow

Users with administrator privileges monitor application workflow by selecting the user menu items:

- For "workflow" mode:
 - "Advanced Applications R2 → Issuing Applications Monitoring" – for issuing module applications.
 - "Advanced Applications R2 → Acquiring Applications Monitoring" – for acquiring module applications.
- For "no workflow" mode:
 - Advanced Applications R2 → Applications No Workflow → Applications Monitoring (No WF).

The "Issuing Applications Monitoring" and "Acquiring Applications Monitoring" forms of the issuing and acquiring modules have the same set of fields and contain information on application parameters of all financial institutions in Way4 (see [figure](#)).

Issuing Applications Monitoring															<<	<	>	>>	2 of 10	X
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	Outward Status						
Principal		56	29/08/16 15:34:02	Contract	Update	Contract		401550 5952		Manual Entry Application Strategy	Declining Step	Declined	29/08/16 15:34:36	Rejected						
Principal	Main Office	4045558861636	14/02/14 15:31:21	Client	Add	Client				Manual Entry Application Strategy	Supervisor	Waiting	00/00/00 00:00:00	Waiting						
Principal		4045543691631	14/02/14 15:05:18	Client	Add				ADMIN_EV	Manual Entry Application Strategy	Manual entry step	Loaded	00/00/00 00:00:00	Waiting						
Principal		4045536391620	14/02/14 14:53:47	Client	Add				ADMIN_EV	Manual Entry Application Strategy	Manual entry step	Loaded	00/00/00 00:00:00	Waiting						
Principal	Main Office	4045521211609	14/02/14 13:57:44	Client	Add	Client				Manual Entry Application Strategy	Closing Step	Posted	14/02/14 14:37:12	Processed						
Principal		363636	11/02/14 14:58:35	Client	Add					Manual Entry Application Strategy	Manual entry step	Loaded	00/00/00 00:00:00	Waiting						
Principal		998877	11/02/14 12:42:53	Client	Add					Manual Entry Application Strategy	Manual entry step	Loaded	00/00/00 00:00:00	Waiting						
Principal			25/10/12 16:55:26	Usage Limiter	Activate P Contract			401550 6827		Online Load Application Strategy	Declining Step	Declined	00/00/00 00:00:00	Rejected						
Principal			25/10/12 16:54:39	Usage Limiter	Activate P Contract			401550 6827		Online Load Application Strategy	Declining Step	Declined	00/00/00 00:00:00	Rejected						
Principal			15/10/12 11:08:55	Contract	Update	Contract		401550 3157		Online Load Application Strategy	Declining Step	Declined	00/00/00 00:00:00	Rejected						

Form for monitoring issuing application workflow

Form's fields indicating the current application state:

- *WF Strategy* – workflow strategy (see the section "Workflow Strategies" of the document "Advanced Applications Module (workflow configuration)").
- *WF Step* – current workflow stage of the application.
- *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* – status 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 form may contain the following buttons to open subordinate forms:

- [History] – opens a form with the history of this application's workflow stages.

Activity History for 555							<<	<	>	>>	1 of 1	b	x
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					
Query													

History of actions with the application

- [Load Errors] – opens a form with information about errors that occurred when importing this application. The value in the *Error Status* field 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 loading the application has been eliminated.
 - "Skipped" – the error that occurred when loading the application should be skipped.

Load Errors for 134554							<<	<	>	>>	3 of 4	b	x
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>>							

Ins **Del** **Query**

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. For more information about clearing object fields, see "[Clearing Application Object Fields](#)".

Clear Fields Log for TESTAPP_ADD_CLIENT_20111011_1				<<	<	>	>>	1 of 2	b	x	
	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							
Ins Del Query											

List of fields to be cleared

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

System Messages						<<	<	>	>>	1 of 5	b	x
ID	Message Title	Type	Date	Object Type	Object ID							
→ 502084	Release after decline result: IAdv 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							

List of system messages for an application

- [DeviceParms] – opens the form with a list of channels for which records about redefinition of device parameters must be deleted (available for applications with Application Type = "DeviceParms" only).

The screenshot shows a software window titled "Device Params for 92145807621380". At the top right are navigation buttons: <<, <, >, >>, and a bold "b" button. To the right of the buttons is the text "1 of 1" and a close "x" button. Below the title bar is a table with a single row. The row has a header "For Channel" and a data cell containing "MC". There is also a small arrow icon pointing right before the "MC" text. At the bottom of the window are two buttons: "Query" and "Clear Fields".

List of channels for which records about redefinition of device parameters must be deleted

4.5 Processing Approved Applications

To access forms working with approved applications, the following menu items are used:

- "Advanced Applications R2 → Cardholder Input & Update → Approval Applications" – for the issuing module applications.
- "Advanced Applications R2 → Merchant Input & Update → Approval Applications" – for the acquiring module applications.

These items open the "Approval Applications" form.

The screenshot shows a software window titled "Approval Applications". At the top right are navigation buttons: <<, <, >, >>, and a bold "b" button. To the right of the buttons is the text "1 of 1" and a close "x" button. Below the title bar is a table with multiple columns. The columns are labeled: Financial Inst., Branch, Reg Number, Input Date, Appl Type, Object, Action, For Client, For Contract, Officer, WF Stage, WF Strategy, and Posting Date. A single row of data is displayed in the table. The data includes: Financial Inst. (Principal), Branch (Main Office), Reg Number (50135132201314), Input Date (29/05/14 14:47:14), Appl Type (New Cardholder), Object (Credit Limit), Action (Update), For Client (001-P-077063), Officer (empty), WF Stage (Accepting Step), WF Strategy (Manual Entry Application), and Posting Date (00/00/00 00:00:00). At the bottom of the window are several buttons: Ins, Del, Query, Capture, Limit, History, Load Errors, and Proc Mess.

List of approved applications

The 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 this form are the same as the buttons and fields in the form for monitoring application workflow (see 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. Clicking the button opens 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, that is, on the value in the *Object Type* field.

To select an application for processing, in the "Approval Applications" 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.

The screenshot shows the "Client Application Edit" window. At the top, it displays "New Client Add Info". Below this, there are several input fields and dropdown menus:

- Fin Institution:** Principal
- Application Date:** 23/07/14 11:36:20
- Client:** WILLIAM SMITH
- Branch:** (empty)
- Action:** Add Or Update
- Product Category:** Issuing
- Appl Reg Number:** 1234

At the bottom of the window, there are buttons for **Ins**, **Del**, **Query**, and **Actions...**.

Form for manually processing an application

In the "Application Edit" form the set of buttons used to open application forms in editing mode depends on the selected application's object type, that is 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 determine which actions are available for applications at various workflow stages (see the section "Workflow Strategies" of the document "Advanced Applications Module (workflow configuration)"). 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](#)").
- "Decline" – decline an application (see the section "[Declining Applications](#)").
- "Accept" – accept an application (see the section "[Accepting Applications](#)").
- "Forward" – redirect 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](#)").

4.6 Processing applications imported by web services or import pipes

Forms for applications imported using web services or import pipes, are accessed through the following menu items:

- "Advanced Applications R2 → Imported & Loaded XML Applications Management → Issuing XML Applications" – for the issuing module applications.
- "Advanced Applications R2 → Imported & Loaded XML Applications Management → Acquiring XML Applications" – for the acquiring module applications.

The "XML Applications" form will open.

Issuing XML Applications														<<	<	>	>>	1 of 1	X
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_0665	26/12/16 13:02:44	Client	Add	Client			SUPERUSER	File Import Application Strategy	Declining Step	Declined	07/02/17 15:13:55						
Ins Del Query Actions... Client Sub Appl History Load Errors Clear Fields																			

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](#)").

4.7 Processing Declined Applications

To access forms working with declined applications, the following menu items are used:

- "Advanced Applications R2 → Cardholder Input & Update → Declined Applications" – for the issuing module applications.
- "Advanced Applications R2 → Merchant Input & Update → Declined Applications" – for the acquiring module applications.

These commands will open the "Declined Application" form.

Declined Applications														<<	<	>	>>	1 of 20	X
Financial Inst.	Branch	Reg Number	Input Date	Appl Type	Object	Action	For Client	For Contract	Officer	WF Strategy	WF Stage	Posting Date							
Principal			26/12/14 14:21:39	New Merchant	Client	Add			SUPERUSER			00/00/00 00:00:00							
Principal		3044488430377	13/02/13 13:34:03		Contract Add	Add		001-C-561827			CLOSE	00/00/00 00:00:00							
Principal		4010500291082	10/01/14 13:53:48	New parameters	Usage Limite	Activate Per		001-C-809267			CLOSE	10/01/14 13:53:49							
Principal		4010357571072	10/01/14 09:55:57		Customer Cle	Add Or Upd	WILLIAM SMITH				CLOSE	10/01/14 09:55:57							
Principal		4010357431067	10/01/14 09:55:43		Customer Cle	Add Or Upd	WILLIAM SMITH				CLOSE	10/01/14 09:55:43							
Ins Del Query Actions... Contract History Load Errors Proc Mess																			

List of declined applications

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

- The "Declined" value 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 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. Clicking the button opens 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, that is, on the value in the *Object Type* field.

To select an application for processing, in the "Declined Applications" form, 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 the section "[Processing Approved Applications](#)").

In the "Application Edit" form (see 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, that is 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 corresponding action from the context menu (see the section "[Actions for Application Processing](#)").

Workflow strategy settings determine which actions are available for applications at various workflow stages (see the section "Workflow Strategies" of the document "Advanced Applications Module (workflow configuration)"). 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" – redirect application (see the section "[Forwarding Applications](#)").

5. Importing and Exporting Applications

In the Advanced Applications module, applications can be imported and exported in and from XML files. Applications can be imported and exported in "workflow" and "no workflow" modes.

5.1 Importing Applications

XML files can be created by an external system according to client applications and by the Advanced Applications R2 module operating in another Way4 instance. A description of imported file format is given in document "XML Applications (R2)".

Imported files must be put in standard file exchange directories (see the section "Structure of File Exchange Directories" of the document "CBS Interface").

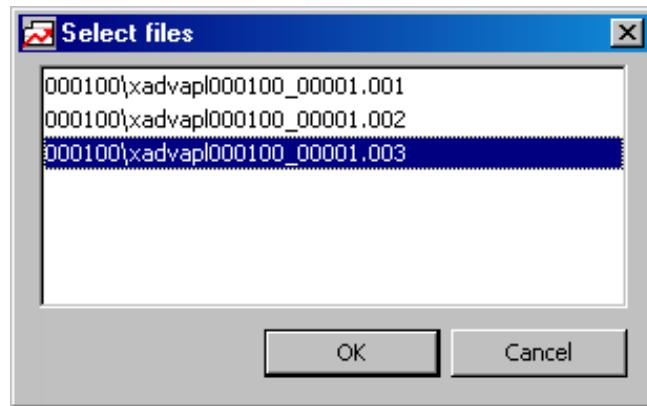
To import files in the Advanced Applications R2 module in "workflow" mode, use the following menu items:

- "Advanced Applications R2 → Application Processing → Issuing XML Application Import" – import issuing module applications.
- "Advanced Applications R2 → Application Processing → Acquiring XML Application Import" – import acquiring module applications.

To import files in the Advanced Applications R2 module in "no workflow" mode, use the following menu items:

- "Advanced Applications R2 → Applications No Workflow → Issuing Application Import (No WF)" – import issuing module applications.
- "Advanced Applications R2 → Applications No Workflow → Acquiring Application Import (No WF)" – import acquiring module applications.

After these menu items are started, a dialogue window for selecting files to be imported will be displayed.

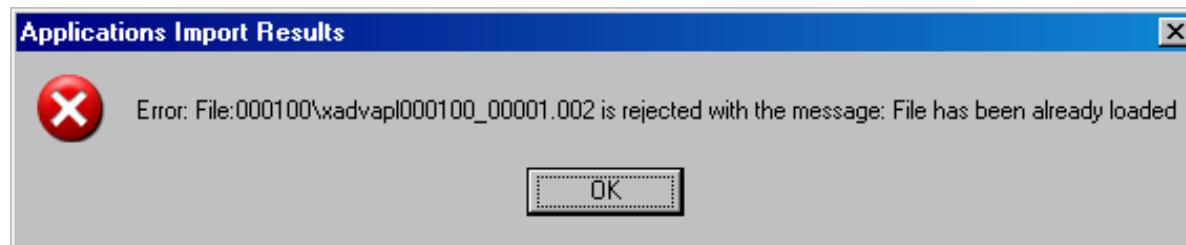


Dialogue window to select imported files

Files may be selected for import from this list by holding the <Ctrl> key and clicking on the desired files.

After the required files have been selected, click the [OK] button.

If the selected file has already been imported, an error message will be displayed.



A message about an attempt to import a file that has been already imported

For an application imported from a file, Way4 automatically determines the following parameters:

- strategy scheme and workflow strategy
- strategy step.

Selection is made according to the application parameter values and workflow settings (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 "Structure of File Exchange Directories" in the document "CBS Interface"). This file contains information about applications that were not imported for any reasons. A response file format is described in the section "File Formats" of the document "XML Applications (R2)".

 Note that application can be imported in deferred response generation mode using the "DEFERRED_RESPONSE = Y" parameter of the "XML Applications Import" pipe (for more information, see the section ""XML Applications Import" Pipe Parameters" of the document "XML Applications (R2)"). In deferred import of applications, a response file is not generated.

Application can also be imported to the Advanced Applications R2 module using the WAY4U integration platform.

5.2 Exporting Applications

The "XML Applications Export" pipe is used to export applications from the Advanced Applications module and can be called with different parameters from the following user menu items:

- "Advanced Applications R2 → Application Processing → Applications Export" – pipe is used if an application must be exported at a particular workflow stage. The required workflow stage must be specified in pipe parameters.
- "Advanced Applications R2 → Applications No Workflow → Applications Export (No WF)" – pipe is used when it is necessary to export applications in "no workflow" mode. For this pipe, the corresponding parameter is used to enable the "no workflow" mode for processing applications.

As a result of export, all applications are grouped into files according to the receiving financial institutions. Exported files are put in standard file exchange directories (see the section "Structure of File Exchange Directories" of the document "CBS Interface").

The pipe parameters and format for files exported from the Advanced Applications module is described in the document "XML Applications (R2)".

5.3 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 menu items:

- "Advanced Applications R2 → Application Processing → XML Applications Response" and "Advanced Applications R2 → Application Processing → XML Applications Overall Response" – for "workflow" mode.
- "Advanced Applications R2 → Applications No Workflow → Applications Response (No WF)" – for "no workflow" mode.

For information on generation of XML response files, as well as the format of these files, see the document "XML Applications (R2)".

5.4 Monitoring File Processing

To view the statuses of import and export files, use the menu item "Advanced Applications R2 → Application Processing → Response Files Monitoring".

The "Appl Response Files Monitoring" form will open.

Response Files Monitoring				<<	<	>	>>	245 of 382	X
	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\xadval000100_01005.005	000100\xadval000100_01005.005	RXADVAPL000100_01005.005	17/11/11 19:06:28					
	Rxadvapl000100_00018.018		Rxadvapl000100_00018.018	17/11/11 19:00:53					
	000100\xadval000100_00018.018	000100\xadval000100_00018.018		17/11/11 19:00:50					
	000100\xadval000100_00017.018	000100\xadval000100_00017.018	RXADVAPL000100_00017.018	17/11/11 19:00:23					
	000100\xadval000100_00716.004	000100\xadval000100_00716.004	RXADVAPL000100_00716.004	17/11/11 18:59:09					
	Rxadvapl000100_09910.018		Rxadvapl000100_09910.018	17/11/11 17:26:36					
→	000100\xadval000100_09910.018	000100\xadval000100_09910.018		17/11/11 17:26:35					
	000100\xadval000100_00160.004	000100\xadval000100_00160.004	RXADVAPL000100_00160.004	17/11/11 17:24:57					
	Rxadvapl000100_00123.018		Rxadvapl000100_00123.018	17/11/11 17:24:21					

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, 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 in the *File Status* field 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.

6. Operations with Application Objects

The table shows permitted operations with application objects. Operations whose names are marked with the "*" symbol are only supported by pipes and are not accessible in the module's screen forms.

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

The "Migrate" action is only used for first migration before starting to use Way4.

File samples a located in the following directories:

- <OWS_HOME>\manuals\<language>\Application_management\file_samples\issuing – for the issuing module.
- <OWS_HOME>\manuals\<language>\Application_management\file_samples\acquiring – for the acquiring module.

Table of permitted operations with application objects

Object Type	Action types permitted for this type object	Key aggregate of the UFX application	File examples
Client	Add AddOrUpdate Update	<Data>/<Client>	Issuing: <ul style="list-style-type: none"> • xadvapl000100_00001.001 – Add Client • xadvapl000100_00002.001 – Update Client added by xadvapl000100_00001.001 • xadvapl000100_00003.001 – AddOrUpdate Client

Object Type	Action types permitted for this type object	Key aggregate of the UFX application	File examples
ClientAddInfo	Add AddOrUpdate	<Data>/<AppInfo>	<p>Issuing:</p> <ul style="list-style-type: none"> • xadvapl000100_00004.001 – Add ClientAddInfo for client added by xadvapl000100_00001.001 • xadvapl000100_00005.001 – AddOrUpdate ClientAddInfo
ClientAddress	Add AddOrUpdate Update Enable Disable	<Data>/<Address>	<p>Issuing:</p> <ul style="list-style-type: none"> • xadvapl000100_00006.001 – Add ClientAddress for client added by xadvapl000100_00001.001 • xadvapl000100_00007.001 – Update ClientAddress added by xadvapl000100_00006.001 • xadvapl000100_00008.001 – AddOrUpdate ClientAddress • xadvapl000100_00020.001 – Enable ClientAddress • xadvapl000100_00009.001 – Disable ClientAddress
ClientAffiliation	AddOrUpdate Disable	<Data>/<AffiliationClient>	<p>Issuing:</p> <ul style="list-style-type: none"> • xadvapl000100_00010.001 – Add Client • xadvapl000100_00011.001 – AddOrUpdate linked client added by xadvapl000100_00010.001 to client from xadvapl000100_00001.001 • xadvapl000100_00012.001 – Disable ClientAffiliation • xadvapl000100_00016.001 – Add ClientAffiliation with new client • xadvapl000100_00017.001 – Add two clients and affiliation link between them
ClientContract	Add	<Data>/<ClientContract>	<p>Acquiring:</p> <ul style="list-style-type: none"> • xadvapl000100_00001.003 – Add ClientContract

Object Type	Action types permitted for this type object	Key aggregate of the UFX application	File examples
ClientAuthMethod	Add AddOrUpdate Disable	<Data>/<AuthMethod>	<p>Issuing:</p> <ul style="list-style-type: none"> • xadvapl000100_00013.001 – Add ClientAuthMethod for client added by xadvapl000100_00001.001 • xadvapl000100_00014.001 – AddOrUpdate ClientAuthMethod • xadvapl000100_00018.001 – Disable ClientAuthMethod
ClientClassifier	AddOrUpdate Disable	<Data>/ <CustomerClassifiers>	
ClientParameter	AddOrUpdate Disable	<Data>/ <CustomerParameters>	<p>Issuing:</p> <ul style="list-style-type: none"> • xadvapl000100_00019.001 – Set ClientParameter • xadvapl000100_00021.001 – Disable ClientParameter <p>Acquiring:</p> <p>xadvapl000100_00021.001 – Disable ClientParameter</p>

Object Type	Action types permitted for this type object	Key aggregate of the UFX application	File examples
Card	Add Update Lock Unlock Migrate* Renewal*	<Data>/<ProduceCard>	<p>Issuing:</p> <ul style="list-style-type: none"> • xadvapl000100_00003.002 – Migrate Card – contract&plastic – for contract added by xadvapl000100_00001.002 • xadvapl000100_00004.002 – Add Card – contract&plastic – for contract added by xadvapl000100_00001.002 • xadvapl000100_00005.002 – Lock Card • xadvapl000100_00006.002 – Unlock Card • xadvapl000100_00007.002 – Renewal Card (update existing card_info record) • xadvapl000100_00008.002 – Reissue Card – instead lost • xadvapl000100_00009.002 – Erase PIN • xadvapl000100_00052.002 – Reissue Card, plastic only

Object Type	Action types permitted for this type object	Key aggregate of the UFX application	File examples
Contract	Add Update ClearPINAttempts * Migrate*	<Data>/<Contract>	<p>Issuing:</p> <ul style="list-style-type: none"> • xadvapl000100_00001.002 – Add Contract for client added by xadvapl000100_00001.001 • xadvapl000100_00002.002 – Update Contract • xadvapl000100_00043.002 – Add subcontract for client • xadvapl000100_00047.002 – Move one contract to another existing client • xadvapl000100_00048.002 – Move whole contract tree (including parents) to another existing client • xadvapl000100_00049.002 – Move contract and its sub-contracts to another existing client • xadvapl000100_00050.002 – Create client and move one existing contract to created client • xadvapl000100_00054.002 – Update contract with changing financial institution • xadvapl000100_00046.002 – Clear PIN Attempts <p>Acquiring:</p> <ul style="list-style-type: none"> • xadvapl000100_00002.003 – Add Imprinter contract for acquiring contract added by xadvapl000100_00001.003 • xadvapl000100_00003.003 – Add POS contract • xadvapl000100_00004.003 – Add ATM contract • xadvapl000100_00005.003 – Add override device parms to ATM added by xadvapl000100_00004.003 • xadvapl000100_00006.003 – Add ATM Retail contract for client added by xadvapl000100_00001.003 and ATM added by xadvapl000100_00004.003 • xadvapl000100_00007.003 – Add Acquirung contract with DeviceDocParms • xadvapl000100_00008.003 – Update DeviceDocParms in Acquirung contract • xadvapl000100_00009.003 – Add Acquirung contract and Device with DeviceDocParms

Object Type	Action types permitted for this type object	Key aggregate of the UFX application	File examples
ContractAddInfo	Add AddOrUpdate	<Data>/<AppInfo>	<p>Issuing:</p> <ul style="list-style-type: none"> • xadvapl000100_00030.002 – Add ContractAddInfo for contract added by xadvapl000100_00001.002 • xadvapl000100_00031.002 – Update ContractAddInfo
ContractAddress	Add AddOrUpdate Update Enable Disable	<Data>/<Address>	<p>Issuing:</p> <ul style="list-style-type: none"> • xadvapl000100_00010.002 – Add ContractAddress for contract added by xadvapl000100_00003.002 • xadvapl000100_00011.002 – AddOrUpdate ContractAddress • xadvapl000100_00012.002 – Update ContractAddress • xadvapl000100_00013.002 – Disable ContractAddress • xadvapl000100_00056.002 – Enable ContractAddress
ContractAffiliation	AddOrUpdate Disable	<Data>/<AffiliationClient>	<p>Issuing:</p> <ul style="list-style-type: none"> • xadvapl000100_00014.002 – AddOrUpdate ContractAffiliation – Add linked client from application xadvapl000100_00014.002 for contract from xadvapl000100_00003.002 • xadvapl000100_00015.002 – Disable ContractAffiliation • xadvapl000100_00044.002 – Add ContractAffiliation with new client

Object Type	Action types permitted for this type object	Key aggregate of the UFX application	File examples
ContractAuthMethod	Add AddOrUpdate Disable	<Data>/<AuthMethod>	<p>Issuing:</p> <ul style="list-style-type: none"> • xadvapl000100_00016.002 – Add ContractAuthMethod for contract added by xadvapl000100_00003.002 • xadvapl000100_00017.002 – AddOrUpdate ContractAuthMethod • xadvapl000100_00053.002 – Disable ContractAuthMethod
ContractClassifier	AddOrUpdate Disable	<Data>/<CustomerClassifiers>	<p>Issuing:</p> <ul style="list-style-type: none"> • xadvapl000100_00011.015 – Disable ContractClassifier for future dates
ContractParameter	AddOrUpdate Disable	<Data>/<CustomerParameters>	<p>Issuing:</p> <ul style="list-style-type: none"> • xadvapl000100_00055.002 – Set ContractParameter • xadvapl000100_00058.002 – Disable ContractParameter <p>Acquiring:</p> <p>xadvapl000100_00058.002 – Disable ContractParameter</p>
CustomerAuthMethod	Add AddOrUpdate Disable	<Data>/<AuthMethod>	

Object Type	Action types permitted for this type object	Key aggregate of the UFX application	File examples
Order	ActivatePersonal ActivateIndividual ActivateStandard Disable	<Data>/<StandOrder>	<p>Issuing:</p> <ul style="list-style-type: none"> • xadvapl000100_00018.002 – Activate Personal Order for contract added by xadvapl000100_00001.002 • xadvapl000100_00019.002 – Disable Order
Preferred	Add AddOrUpdate Disable	<Data>/<Preferred>	<p>Issuing:</p> <ul style="list-style-type: none"> • xadvapl000100_00020.002 – Add Preferred for contract added by xadvapl000100_00003.002 • xadvapl000100_00021.002 – AddOrUpdate Preferred • xadvapl000100_00022.002 – Disable Preferred
PaymentReceiver	Add AddOrUpdate Update	<Data>/<PaymentReceiver>	<p>Issuing:</p> <ul style="list-style-type: none"> • xadvapl000100_00006.027 – AddOrUpdate individual payment receiver for client • xadvapl000100_00007.027 – Add individual payment receiver for client • xadvapl000100_00008.027 – Update individual payment receiver for client
ClientCounterparty	Add AddOrUpdate Update	<Data>/<Counterparty>	<p>Issuing:</p> <ul style="list-style-type: none"> • xadvapl000100_00007.031 – Add ClientCounterparty

Object Type	Action types permitted for this type object	Key aggregate of the UFX application	File examples
ContractCounterparty	Add AddOrUpdate Update	<Data>/<Counterparty>	<p>Issuing:</p> <ul style="list-style-type: none"> • xadvapl000100_00005.031 – Add ContractCounterparty
Relation	Update	<Data>/<CardRelation>	<p>Issuing:</p> <ul style="list-style-type: none"> • xadvapl000100_00006.004 – Add client and issuing contract to use it as base contract in relation • xadvapl000100_00007.004 – Add Related Card added by xadvapl000100_00004.002 to base contract added by xadvapl000100_00006.004 • xadvapl000100_00008.004 – Update Relation

Object Type	Action types permitted for this type object	Key aggregate of the UFX application	File examples
Instalment	Add Update Activate EarlyRepayment CancelEarlyRepayment PaymentHolidays Close	<Data>/<Instalment> <Data>/ <InstalmentEarlyRepayment> <Data>/ <InstalmentPaymentHolidays>	<p>Issuing:</p> <ul style="list-style-type: none"> • xadvapl000100_00005.033 – Add instalment by transaction • xadvapl000100_00006.033 – Update instalment • xadvapl000100_00007.033 – Add instalment • xadvapl000100_00008.033 – Partial EarlyRepayment instalment with KeepInstalmentNumber recalculation • xadvapl000100_00010.033 – Partial EarlyRepayment instalment with KeepInstalmentAmount recalculation • xadvapl000100_00012.033 – Full EarlyRepayment instalment • xadvapl000100_00014.033 – PaymentHolidays instalment • xadvapl000100_00015.033 – Close instalment

Object Type	Action types permitted for this type object	Key aggregate of the UFX application	File examples
Tariff	Add	<Data>/<Tariffs>	<p>Issuing:</p> <ul style="list-style-type: none"> • xadvapl000100_00032.002 – Add Billing Tariff for contract added by xadvapl000100_00003.002 • xadvapl000100_00033.002 – Add Instalment Fee Tariff • xadvapl000100_00034.002 – Add Instalment Tariff • xadvapl000100_00035.002 – Add Interest Tariff • xadvapl000100_00036.002 – Add Interest Tax Tariff • xadvapl000100_00037.002 – Add Service Limit Tariff • xadvapl000100_00038.002 – Add Service Tariff • xadvapl000100_00039.002 – Add Service VD Tariff • xadvapl000100_00040.002 – Add Usage Limit Tariff • xadvapl000100_00041.002 – Add Ageing Tariff
Usage	ActivatePersonal ActivateStandard Enable Disable AddIndividual	<Data>/<Usage>	<p>Issuing:</p> <ul style="list-style-type: none"> • xadvapl000100_00023.002 – ActivatePersonal Usage for contract added by xadvapl000100_00003.002 • xadvapl000100_00024.002 – ActivatePersonal Usage set maxnumber=99999999 to imitate setting max usage value • xadvapl000100_00025.002 – ActivateStandard Usage with parm ResetCurrentCounters=Y • xadvapl000100_00026.002 – Disable Usage • xadvapl000100_00051.002 – AddIndividual Usage overriding template parameters

Object Type	Action types permitted for this type object	Key aggregate of the UFX application	File examples
CustomerClassifier	AddOrUpdate Disable	<Data>/<CustomerClassifiers>	<p>Issuing:</p> <ul style="list-style-type: none"> • xadvapl000100_00015.001 – AddOrUpdate CustomerClassifier for client added by xadvapl000100_00001.001 • xadvapl000100_00057.001 – Disable CustomerClassifier with code INS_ASSIST for contract added by xadvapl000100_00001.001
CustomerIdentifier	AddOrUpdate Disable	<Data>/<CustomerIdentifiers>	Reserved for system use.
Event	Add Disable	<Data>/<QueEvent>	<p>Issuing:</p> <ul style="list-style-type: none"> • xadvapl000100_00027.002 – Add Event for contract added by xadvapl000100_00003.002
Limit	Update Disable	<Data>/<SetLimit>	<p>Issuing:</p> <ul style="list-style-type: none"> • xadvapl000100_00028.002 – Update Limit for contract added by xadvapl000100_00003.002 • xadvapl000100_00045.002 – Set temporary Limit for contract • xadvapl000100_00019.030 – Disable temporary Limit in future
InstalmentLimit	Update	<Data>/<SetInstalmentLimit>	<p>Issuing:</p> <ul style="list-style-type: none"> • xadvapl000100_00001.033 – Update InstalmentLimit

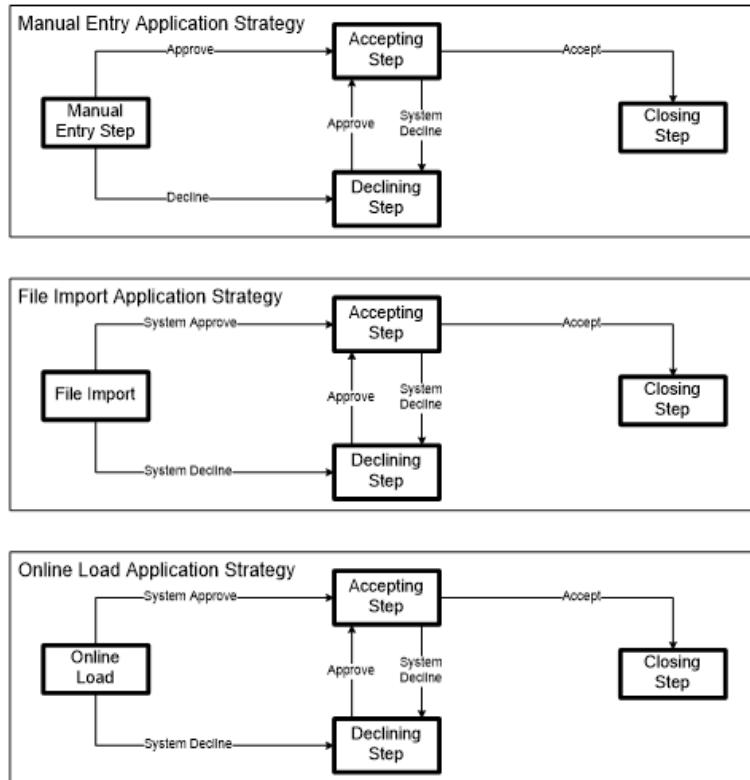
Object Type	Action types permitted for this type object	Key aggregate of the UFX application	File examples
Status	Update	<Data>/<SetStatus>	Issuing: <ul style="list-style-type: none"> • xadvapl000100_00029.002 – Update Status for contract added by xadvapl000100_00003.002
StopList	Add Delete	<Data>/<StopList>	Issuing: <ul style="list-style-type: none"> • xadvapl000100_00057.002 – Delete Card from Stop List with RequestGroup
ContractGroup	Add Update Lock Close	<Data>/<ContractGroup>	Issuing: <ul style="list-style-type: none"> • xadvapl000100_00001.035 – Add ContractGroup with owner contract from xadvapl000100_00001.002 • xadvapl000100_00002.035 – Update ContractGroup • xadvapl000100_00003.035 – Lock ContractGroup • xadvapl000100_00004.035 – Close ContractGroup
ContractGroupAffiliation	Add Update Close Delete	<Data>/<ContractGroupAffiliation>	Issuing: <ul style="list-style-type: none"> • xadvapl000100_00005.035 – Add ContractGroupAffiliation for contract group added by xadvapl000100_00001.002 • xadvapl000100_00006.035 – Update ContractGroupAffiliation • xadvapl000100_00007.035 – Close ContractGroupAffiliation • xadvapl000100_00008.035 – Delete ContractGroupAffiliation
DeviceParms	Delete	<Data>/<Contract>	

7. 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 the figures below:

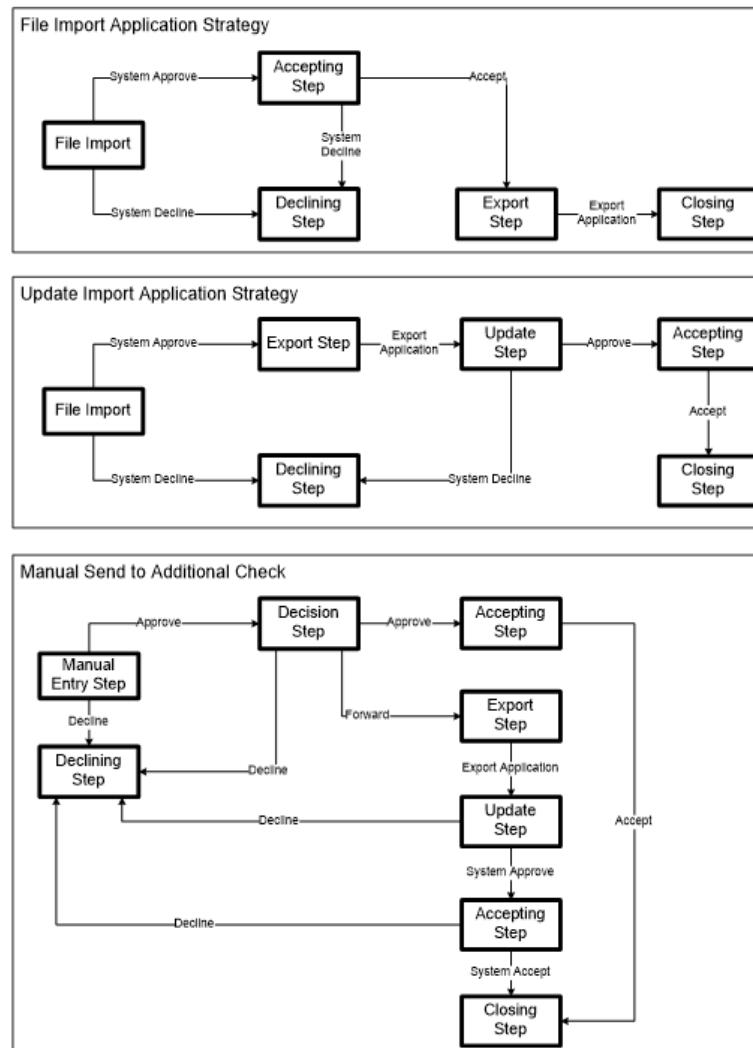
- (i) Configuration of the application workflow scheme is described in document "Advanced Applications Module (workflow configuration)".

Strategy Scheme: Application Workflow



Main application workflow schemes

Strategy Scheme: Application Workflow



Additional application workflow schemes

8. Processing Applications with no Workflow

The Advanced Applications 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. This mode assumes the creation of a report (simultaneous or deferred) on the results of application processing (see the document "XML Applications (R2)").

The Advanced Applications module in "no workflow" mode is accessed through the menu group "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](#)".
- "Applications Export (No WF)" – export applications from the Advanced Applications module.
- "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. Configuration of parallel execution must be set up in advance (Full → Configuration Setup → Main Tables → Process Parameters), see the document "[Running Processes in Parallel](#)".



At the application acceptance stage the "Advanced Applications R2 → Applications No Workflow → Issuing Applications – Accept (No WF)" and "Advanced Applications R2 → Applications No Workflow → Acquiring Applications – Accept (No WF)" menu items are used to check the status of Products, Account Schemes and Service Packages.

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 application update mode (see "[Updating Issuing Module Applications](#)").
- 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.

9. Working with Applications in an HA Secondary Node

It is possible to work with applications in an HA secondary node in two modes:

- "workflow"
- "no workflow".

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 synchronization in the primary node, the application will have the "Waiting" status and can be accepted. The user will get the message "Application is approved successfully and will be processed later". 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. Moreover:

- 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 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 "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. Functional Specification".

10. Tags used in application processing

Tags can be split into two groups:

- *Standard application tags* – UFX tags used when processing applications in XML format to manage a certain process (for example, to enable the mode for deferred acceptance of a subordinate application, to change a parent contract). Rules for using standard tags in applications are given in the section "["Use of Standard Application Tags \(UFX Tags\) when Processing Applications"](#)". UFX format offers a wide range of possibilities for managing application processing and for passing additional non-standard information about "Client" and "Contract" objects, that expand the standard set of fields and can be used in custom procedures.
- *Custom tags* – these tags can be configured for several table fields according to business requirements.

It is recommended to enter and edit tags in the fields listed in [table](#) only with applications using the special control structures "TAG=Y;" and "TAGS_TO_REMOVE". Examples of entering and editing tags are given in the section "["Managing Custom Tags when Processing Applications"](#)".

 Control structures "TAG=Y;" and "TAGS_TO_REMOVE" are not applicable when tagged data are manually entered through screen forms. An exception is manual entering of tagged data in the *Receiver Details 1* and *Receiver Details 2* fields of the "Counterparty for Order" form (see the subsection "Payment Order" of the section "Creating Applications"). When tagged data is entered in these fields, use "TAG=Y;" and "TAGS_TO_REMOVE" structures.

List of fields that support tags, to which control structures are applicable when processing applications.

Table	Field that supports storing tagged data	Can be edited using WAY4 Manager forms	Can be edited using WAY4 Web forms
CLIENT	ADD_INFO_01 ADD_INFO_02 ADD_INFO_03 ADD_INFO_04	-	+
ACNT_CONTRACT	ADD_INFO_01 ADD_INFO_02 ADD_INFO_03 ADD_INFO_04	+	+
PREFERRED	CUSTOM_PARMS	+	-
USAGE_TEMPL	USER_ADD_INFO	-	-
PAYM_REC_PARTY	ADD_DATA	-	+
APPL_INFO	ADD_INFO_01 ADD_INFO_02 ADD_INFO_03 ADD_INFO_04	+	+
PAYM_REC	RECEIVER_DETAILS_1 RECEIVER_DETAILS_2	+	+

For convenience when working in screen forms with custom tags (in all fields that support tags, tag definitions can be registered in the "Tagged Data Objects" form (Full → DB Administrator Utilities → System Utilities → Tagged Data Objects). For a detailed description of the "Tagged Data Objects" form, see the section "Tagged Data Objects" Form" in the document "Documents").

Example of a screen form for an acquiring module client (see [figure](#)). In this form, custom client tags can be viewed in the "Add Info" form that is opened by clicking the [Add Info] button.

Client - Edit for OGO SHOP

Client Details

- Short Name: OGO SHOP
- Registration #: 677890998
- Reg # Type: LICENSE
- Registration Dtls
- Security Name
- Language: ENGLISH

Institution

- Institution: Principal
- Client Number: 0999981
- Client Category: Commercial
- Client Type: Corporate Resident
- Branch: Main Office
- Service Group

Company Details

- Citizenship: Luxembourg
- Legal Name: OGO SHOP
- Trade Name: OGO SHOP

Contact Person

- Salutation: MR
- Last Name: BRUCE
- First Name: SNOWDEN
- Middle name
- Position: SHOP OWNER

Base Address

- Country
- Phone
- Fax
- Mobile
- Phone (add)
- Fax (add)
- Delivery Type
- Mailing Address
- ZIP
- City
- E-mail

Embossing

Title, First Name, Last Name, Company Name

Actions

Iss Cntr, Acq Cntr, **Add Info**, Addresses, Linked To, Linked From, Classifiers, Payees

Form for an acquiring module client

The figure below shows an example of the "Add Info" form and a subform for a custom client tag, opened with the [Add Info 1] button.

Seq #	Tag	Value Data	Value Tag	Value Type	Comment Text	Is Ready
10	WX_MODE	Y	Tag Present	Unknown		Ready
20	WX_GROUP	MERCHANTS	Tag Present	Unknown		Ready
30	WX_USER	OGO_SHOP	Tag Present	Unknown		Ready

Form for a custom client tag

- i It is not recommended to edit tagged fields listed in **table** directly in forms, even though it is possible to do so. Contracts should be entered and edited using applications (see the section "Creating Applications"). For information about editing custom tags when importing applications, see the section "[Managing Custom Tags when Processing Applications](#)".

10.1 Use of Standard Application Tags (UFX Tags) when Processing Applications

This section describes rules for using standard tags in applications – UFX tags used when processing applications in XML format to manage a certain process.

10.1.1 Parameters that affect processing applications for any object type

Name	Value	Comments	Specified in: UFX element	Specified in: Screen form
Split	"Yes"	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.	<pre><Application> <Data>...</Data> <AddData> <Split>Yes</Split> </AddData> </Application></pre>	The tag is not shown in screen forms.

Name	Value	Comments	Specified in: UFX element	Specified in: Screen form
DuplicateCount	<number of duplicates>	Used when an application (and child applications) is duplicated, for example, when several identical cards must be created.	<pre> <Application> <ObjectType>Card</ObjectType> <Data>...</Data> <AddData> <DuplicateCount>10</ DuplicateCount> </AddData> </Application> </pre>	The tag is not shown in screen forms.

10.1.2 Parameters that affect processing applications for a certain object type

Name	Value	Comments	Specified in: UFX element	Specified in: Screen form
ChangeMain	"Yes" "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".	<pre> <Application> <Data> <Contract> <AddContractInfo> <ChangeMain>Yes<ChangeMain> </AddContractInfo> </Contract> </Data> <AddData>...</AddData> </Application> </pre>	<p>After the application has been processed, the tag is shown in the <i>Add Info</i> field of the contract specified in the application.</p> <p>The tag cannot be set or manually in a screen form.</p>

Name	Value	Comments	Specified in: UFX element	Specified in: Screen form
ChangeClient	"All" "This" "Down" "AllWithLiability" "DownWithLiability"	The tag is used to choose the mode for changing a client for a contract tree by using an application: <ul style="list-style-type: none"> For contract hierarchy with the Main/Sub" relation type: <ul style="list-style-type: none"> "This" – the client will be changed for entire contract tree. "This" – the client will be changed for a contract to which the application belongs (starting from version 03.39.30). "Down" – the client will be changed for all contracts in the hierarchy that are under the contract to which the application belongs. For contract hierarchy with the Main/Sub" or "Liability" relation type: <ul style="list-style-type: none"> "AllWithLiability" – the client will be changed for entire contract tree regardless of the relation type between contracts in the hierarchy. 	<pre> <Application> <Data> <Contract> <AddContractInfo> <ChangeClient>All<ChangeClient> </AddContractInfo> </Contract> </Data> <AddData>...</AddData> </Application> </pre>	After the application has been processed, the tag is shown in the <i>Add Info</i> field of the contract specified in the application. The tag cannot be set or manually in a screen form.

Name	Value	Comments	Specified in: UFX element	Specified in: Screen form
		<ul style="list-style-type: none"> "DownWithLiability" – the client will be changed for all contracts in the hierarchy that are under the contract to which the application belongs regardless of the relation types between contracts in the hierarchy. <p>The tag is used in an application tree in which the parent application is used to create a client, and the subordinate application specifies the contract whose data are updated. The value of the tag ChangeClient = "All"/"This"/"Down"/"AllWithLiability"/"DownWithLiability" should be specified in the subordinate application used to work with the contract.</p>		

Name	Value	Comments	Specified in: UFX element	Specified in: Screen form
ChangeInstitution	<financial 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 institution will be identified.	<pre> <Application> <Data> <Contract> <AddContractInfo> <ChangeInstitution>512<ChangeInstitution> </ChangeInstitution> </AddContractInfo> </Contract> </Data> <AddData>...</AddData> </Application> </pre>	<p>After the application has been processed, the tag is shown in the <i>Add Info</i> field of the contract specified in the application.</p> <p>The tag cannot be set or manually in a screen form.</p>

Name	Value	Comments	Specified in: UFX element	Specified in: Screen form
ChangeInstitutionType	"B" "C" "N" "I"	<p>The tag determines how the financial institution will be identified when changing the institution for a contract:</p> <ul style="list-style-type: none"> • "B" – institution identified by branch_code field value (default). • "C" – institution identified by cb_code field value. • "N" – institution identified by bank_code field value. • "I" – institution identified by id field value. <p>This tag is used together with the ChangeInstitution tag allowing a financial institution to be changed for a contract.</p>	<pre> <Application> <Data> <Contract> <AddContractInfo> <ChangeInstitutionType>C<ChangeInstitutionType> </ChangeInstitutionType> </AddContractInfo> </Contract> </Data> <AddData>...</AddData> </Application> </pre>	<p>After the application has been processed, the tag is shown in the <i>Add Info</i> field of the contract specified in the application.</p> <p>The tag cannot be set or manually in a screen form.</p>

Name	Value	Comments	Specified in: UFX element	Specified in: Screen form
ResetCurrentCounters	"Yes" "No"	The tag makes it possible to reset the counter of the usage limiter to which the application belongs.	<pre> <Application> <ObjectType>Usage</ObjectType> <ActionType>ActivateStandard</ActionType> <ObjectFor>...</ObjectFor> <Data> <Usage> <AddData> <Parm> <ParmCode>ResetCurrentCounters <Value>Y</Value> </Parm> </AddData> <Usage> <Data> </Data> </Usage> </Data> </Application></pre>	After the application has been processed, the tag is shown in the <i>Add_info</i> field of the form for the corresponding object. The tag can be set or manually edited in the WAY4 Manager screen form (the "ResetCurrentCounters=Y;" string is specified in the <i>Add_Info</i> field).

Name	Value	Comments	Specified in: UFX element	Specified in: Screen form
ErasePIN	"Yes" "No"	The tag makes it possible to clear a card's PIN by using an application.	<pre><ProduceCard> <AddData> <Parm> <ParmCode>ErasePIN</ParmCode> <Value>Yes</Value> </Parm> </AddData> </ProduceCard></pre>	After the application has been processed, the tag is shown in the <i>Add Info</i> field of the form for the corresponding object. The tag can be set or manually edited in the WAY4 Manager screen form ("Card Information" form, "ErasePIN=Y;" string is specified in the <i>Add Info</i> field).

Name	Value	Comments	Specified in: UFX element	Specified in: Screen form
MOBILE_CONTRACT_IDT	<identification scheme type code>	<p>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.</p> <p>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 created.</p> <p>The code for the identification scheme type (Authentication Module → Identification Types) is set in the tag. If the tag value is not set, the default value "SMS" is used.</p>	<p>The tag is specified in the address type in the <i>Add Info</i> 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.</p>	<p>The tag is specified in the address type in the <i>Add Info</i> 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.</p>
DuplicateCount	<number of duplicates>	Used when an application (and child applications) is duplicated, for example, when several identical cards must be created.	<pre> <Application> <ObjectType>Card</ObjectType> <Data>...</Data> <AddData> <DuplicateCount>10</ DuplicateCount > </AddData> </Application> </pre>	The tag is not shown in screen forms.

Name	Value	Comments	Specified in: UFX element	Specified in: Screen form
CardInitialLock	"Yes"	When the value is "Yes", a plastic that has been created gets the "Locked" status. It is recommended to use this setting in card subtypes.	Use for applications with the "Card" or "Contract" object type ("Data/Contract/ProductionParms").	The tag is not shown in screen forms.

```

<Application>
  <ObjectType>Card</ObjectType>
  <Data>...</Data>
  <AddData>
    <CardInitialLock>Yes</
    CardInitialLock>
    </AddData>
  </Application>

```

Name	Value	Comments	Specified in: UFX element	Specified in: Screen form
ChangeServiceGroup	"Yes"	Used to enable inheritance of a client's <i>Service Group</i> to all this client's contracts. Inheritance works to clear the <i>Service Group</i> field and to fill it in.	<p>The <i>Service Group</i> field is filled in with:</p> <pre><Application> <ObjectType>Client</ObjectType> <ActionType>Update</ActionType> <Data> <Client> <ServiceGroup>TEST_SERV_GROUP</ServiceGroup> <AddInfo> <ChangeServiceGroup>Yes </ChangeServiceGroup> </AddInfo> </Client> </Data> </Application></pre> <p>To clear the <i>Service Group</i> field:</p> <pre><Application> <ObjectType>Client</ObjectType> <ActionType>Update</ActionType> <Data> <Client> <ServiceGroup>*#N</ServiceGroup> <AddInfo> <ChangeServiceGroup>Yes</ChangeServiceGroup> </AddInfo></pre>	The tag is not shown in screen forms

Name	Value	Comments	Specified in: UFX element	Specified in: Screen form
			<pre></Client> </Data> </Application></pre>	
EXPLICIT_PARMS	"Yes" "No"	<p>When the value is "Y", device parameters (DeviceParms) will be saved for an acquiring contract in the device_parms table.</p> <p>Otherwise, the <DeviceDocParms> section without the <Channel> element will be inherited by a contract without creating a record in the device_parms table.</p> <p>For device contracts, this section is always saved in the device_parms table.</p>	<pre><Contract> <DeviceInfo> <DeviceDocParms> <AddData> <Parm> <ParmCode>EXPLICIT_PARMS</ ParmCode> <Value>Y</Value> </Parm> </AddData> </DeviceDocParms> </DeviceInfo> </Contract></pre>	<p>After the application has been processed, the tag is shown in the <i>Add Info</i> field of the form for the corresponding object. The tag can be set or manually edited in the WAY4 Manager screen form (the "EXPLICIT_PARMS=Y;" string is specified in the <i>Add Info</i> field).</p>

Name	Value	Comments	Specified in: UFX element	Specified in: Screen form
ProhibitDevParmsInheritance	"Yes"	<p>When the value is "Y", all device parameters (DeviceParms) for an acquiring contract will be deleted.</p> <p>Possible messages when processing the application:</p> <ul style="list-style-type: none"> "Device Parameters overrides can only be deleted from acquiring contract" – this message appears if the tag to delete device parameters was added for a device contract, not an acquiring contract. "Device Parameters can not be set and cancelled concurrently" – this message appears if the application contains both the tag and records for creating device parameters. 	<pre> <Application> <ObjectType>Contract</ ObjectType> <ActionType>Update</ActionType> <Data> <Contract> <AddContractInfo> <ProhibitDevParmsInheritance>Yes</ ProhibitDevParmsInheritance> </AddContractInfo> </Contract> </Data> </Application> </pre>	<p>After the application has been processed, the tag is shown in the <i>Add Info</i> field of the form for the corresponding object. The tag can be set or manually edited in the WAY4 Manager screen form (the "ProhibitDevParmsInheritance = Yes;" string is specified in the <i>Add Info</i> field).</p>

10.2 Managing Custom Tags when Processing Applications

Applications must be used to enter and modify tags in fields from the "List of fields that support tags, to which control structures are applicable when processing applications" table in the section "[Tags used in application processing](#)".

When importing applications, custom tags are edited using special control structures "TAG=Y;" and "TAGS_TO_REMOVE".

10.2.1 Example of adding tags using an application to create a client record

In this example, a new client record is created with tag fields that are filled in. Tags are specified without spaces, and a semicolon ";" is used after each tag name. If this syntax is not observed, the field will be interpreted as a text field.

```
<Application>
  <RegNumber>...</RegNumber>
  <ObjectType>Client</ObjectType>
  <ActionType>Add</ActionType>
  <Data>
    <Client>
      <ClientType>...</ClientType>
      <ClientInfo>
        ...
      </ClientInfo>
      <AddInfo>
        <AddInfo01>TAG=Y;VAT_ELIGIBLE=Y;DATE_REG=20180104;</AddInfo01>
        <AddInfo02>VIP_POSITION=HEAD;</AddInfo02>
        <AddInfo03>text comment 1</AddInfo03>
        <AddInfo04>text comment 2</AddInfo04>
      </AddInfo>
    </Client>
  </Data>
</Application>
```

When this application is imported, a client record will be created for which client tagged fields are filled in: the *AddInfo01* and *AddInfo02* fields will be shown as tagged fields, and the *AddInfo03* and *AddInfo04* fields will be represented as text fields (see [figure](#)).

Add Info for XML_AA_01_short

Client	Ivan	Ivanov	XML_AA_01_num	b	x
Additional Info					
VAT_ELIGIBLE=Y;DATE_REG=20180104;			00/00/0000		
VIP_POSITION=HEAD;			00/00/0000		
text comment 1					
text comment 2					

Add Info 1	Add Info 2	Add Info 3	Add Info 4																												
Add Info 1 for XML_AA_01_short <table border="1"> <tr> <td><<</td> <td><</td> <td>></td> <td>>></td> <td>1 of 2</td> <td>b</td> <td>x</td> </tr> <tr> <th>Seq #</th> <th>Tag</th> <th>Value Data</th> <th>Value Tag</th> <th>Value Type</th> <th>Comment Text</th> <th>Is Ready</th> </tr> <tr> <td>10</td> <td>VAT_ELIGIBLE</td> <td>Y</td> <td>Tag Present</td> <td>Unknown</td> <td></td> <td>Ready</td> </tr> <tr> <td>20</td> <td>DATE_REG</td> <td>20180104</td> <td>Tag Present</td> <td>Unknown</td> <td></td> <td>Ready</td> </tr> </table>				<<	<	>	>>	1 of 2	b	x	Seq #	Tag	Value Data	Value Tag	Value Type	Comment Text	Is Ready	10	VAT_ELIGIBLE	Y	Tag Present	Unknown		Ready	20	DATE_REG	20180104	Tag Present	Unknown		Ready
<<	<	>	>>	1 of 2	b	x																									
Seq #	Tag	Value Data	Value Tag	Value Type	Comment Text	Is Ready																									
10	VAT_ELIGIBLE	Y	Tag Present	Unknown		Ready																									
20	DATE_REG	20180104	Tag Present	Unknown		Ready																									

Ins	Del	Query	Do ...
-----	-----	-------	--------

Showing data in client tagged fields

- i** When an application to add a new record is imported (*Action Type* = "Add"), it is not mandatory to use the control structure "TAG=Y;" when importing data to tagged fields. In the example above, tagged data are passed to the *AddInfo01* and *AddInfo02* fields and the structure "TAG=Y;" is only used for the *AddInfo01* field, even though data in both fields will be shown in the screen form as tags (see [figure](#)).

10.2.2 Example of using the "TAG=Y;" control structure

The "TAG=Y;" control structure is used to change tags in the fields from the "List of fields that support tags, to which control structures are applicable when processing applications" table in the section "[Tags used in application processing](#)". The structure can be used when importing an application to change a record (*Action Type* = "Update"/"AddOrUpdate").

-  When an application to add a new record is imported (*Action Type* = "Add"), it is not mandatory to use the control structure "TAG=Y;" when importing data to tagged fields.

Tags are specified without spaces, and a semicolon ";" is used after each tag name. If this syntax is not observed, the field will be interpreted as a text field:

```
TAG=Y;Tag1=Value1;...;TagN=ValueN;
```

The example below shows changing of the client record created in the example described in the section "[Example of adding tags using an application to create a client record](#)":

```
<Application>
  <RegNumber>...</RegNumber>
  <OrderDprt>0101</OrderDprt>
  <ObjectType>Client</ObjectType>
  <ActionType>Update</ActionType>
  <ObjectFor>
    <ClientIDT>
      <ClientInfo>
        <ClientNumber>...</ClientNumber>
        <ShortName>XML_AA_01_short</ShortName>
      </ClientInfo>
    </ClientIDT>
  </ObjectFor>
  <Data>
    <Client>
      ...
      <AddInfo>
        <AddInfo01>TAG=Y;VAT_ELIGIBLE=N</AddInfo01>
        <AddInfo03>new comment</AddInfo02>
      </AddInfo>
    </Client>
  </Data>
</Application>
```

As a result of import, the client record's *AddInfo01* and *AddInfo03* tagged fields will be updated. In the *AddInfo01* field, the value of one tag will change ("VAT_ELIGIBLE=Y;" will change to "VAT_ELIGIBLE=N;"). The text in the *AddInfo03* field will change (see [figure](#)).

Add Info for XML_AA_01_short

Client	Ivan	Ivanov	XML_AA_01_num	b	x
Additional Info					
VAT_ELIGIBLE=N;DATE_REG=20180104;			00/00/0000		
VIP_POSITION=HEAD;			00/00/0000		
new comment					
text comment 2					

Add Info 1 Add Info 2 Add Info 3 Add Info 4

Add Info 1 for XML_AA_01_short

Seq #	Tag	Value Data	Value Tag	Value Type	Comment Text	Is Ready
10	VAT_ELIGIBLE	N	Tag Present	Unknown		Ready
20	DATE_REG	20180104	Tag Present	Unknown		Ready

1 of 2 b x

Ins Del Query Do ...

Showing data in client tagged fields after a client record has changed



It is not recommended to change the format of data (text or tagged) that was first used when data were entered in a field that supports tags. For example, if the field was initially filled in as a text field, if data must be changed in this field, only text format can be used for data.

10.2.3 Example of using the "TAGS_TO_REMOVE" control structure

The "TAGS_TO_REMOVE" control structure is used to delete tags in the fields from the "List of fields that support tags, to which control structures are applicable when processing applications" table in the section "[Tags used in application processing](#)". This structure can be used when importing an application to change a record (*Action Type* = "Update"/"AddOrUpdate").

The "TAGS_TO_REMOVE" control structure is used in pair with the "TAG=Y;" control structure (indicator that the field contains tags). Tags are specified without spaces, and a semicolon ";" is used after each tag name. If this syntax is not observed, the field will be interpreted as a text field:

```
TAG=Y;TAGS_TO_REMOVE=Tag1;TagN;
```

This example shows changing of the client record created in the example described in the section "[Example of adding tags using an application to create a client record](#)". The "VAT_ELIGIBLE;" tag must be deleted from the *AddInfo01* tagged field:

```
<Application>
    <RegNumber>...</RegNumber>
    <OrderDprt>0101</OrderDprt>
    <ObjectType>Client</ObjectType>
    <ActionType>Update</ActionType>
    <ObjectFor>
        <ClientIDT>
            <ClientInfo>
                <ClientNumber>...</ClientNumber>
                <ShortName>XML_AA_01_short</ShortName>
            </ClientInfo>
        </ClientIDT>
    </ObjectFor>
    <Data>
        <Client>
            ...
            <AddInfo>
                <AddInfo01>TAG=Y;TAGS_TO_REMOVE=VAT_ELIGIBLE;</AddInfo01>
            </AddInfo>
        </Client>
    </Data>
</Application>
```

When this application is imported, the client tagged field *AddInfo01* will be updated. The "VAT_ELIGIBLE=Y;" tag will be deleted from the list of tags in this field (see [figure](#)).

Add Info for XML_AA_01_short

Client	Ivan	Ivanov	XML_AA_01_num
--------	------	--------	---------------

Additional Info

DATE_REG=20180104;	00/00/0000
VIP_POSITION=HEAD;	00/00/0000
text comment 1	
text comment 2	

Add Info 1 | Add Info 2 | Add Info 3 | Add Info 4

Add Info 1 for XML_AA_01_short

Seq #	Tag	Value Data	Value Tag	Value Type	Comment Text	Is Ready
10	DATE_REG	20180104	Tag Present	Unknown		Ready

1 of 1

Ins Del Query Do ...

Showing data in client tagged fields after a client record has changed