Acquiring Module
User Manual

Contents

Introduction

The WAY4™ acquiring module is used to enter and process client and contract data needed by the acquirer to work with merchants and bank offices and to perform client service operations.

This document is intended for WAY4™ users, bank and/or processing centre employees responsible for everyday operation of the Acquiring module. It contains information about the basic operations for entering and processing data on acquirer clients, client contracts, client devices, and slips.

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

- Documents.
- Merchant Statements.
- DB Manager Manual.
- Issuing Module User Manual.
- Card and PIN Production.
- Products and Contract Subtypes.
- WAY4™ Accounting Schemes.
- WAY4™ Service Packages.
- Standing Payment Orders.
- Interchange Routing.
- WAY4™ Transaction Switch. Platform Overview.
- WAY4™ NetServer.
- POS Terminal Network Management.
- ATM Controller.
- Alert Notification Messaging (supplied with the corresponding module).
- WAY4™ Dictionaries.
- Terminal Key Management.
- WAY4™ Client and Contract Classifiers.
- Advanced Applications R2.
- Importing and Exporting Advanced Applications R2 (XML Format).
- WAY4™ UFX Interchange.
- UFX Host-to-Host Interchange.
- Usage Limiters.
- Financial Institutions.

The following conventions are used throughout this document:

- Field labels in screen forms are typed in *italics*.
- Button labels used in screen forms are placed in square brackets, such as [Approve].
- Menu selection sequences are shown with the use of arrows, such as Acquiring → Acquiring Contracts → Client.
- Item selection sequences, in the system menu, are shown with the use of different arrows such as Database => Change password.
- Keys and key combinations used while working with DB Manager are shown in angular brackets, like <Ctrl>+<F3>.
- Variable values like directory and file names and paths to them that may change from computer to computer are also shown in angular brackets, like <OWS_HOME>.
- Warnings of possible erroneous actions are accompanied by the  sign.
- Messages marked with the  sign contain information about important features, additional facilities or the optimal use of certain functions of the system.

Chapter 1. Defining Acquirer Parameters

Information about the procedure for registering financial institutions in WAY4, and about rules for interbranch and partner bank interchange is provided in the documents "Financial Institutions" and "Interchange Routing".

Financial institutions directly performing acquirer functions and financial institutions acting as partner banks providing interfaces to different payment systems can be registered in WAY4. Parameters for the interaction of participants in acquiring settlments with different bank and payment networks (systems) are defined in WAY4 in the "Bank Acquiring Parameters" dictionary (menu item "Full → Configuration Setup → Main Tables → Bank Acquiring Parameters").

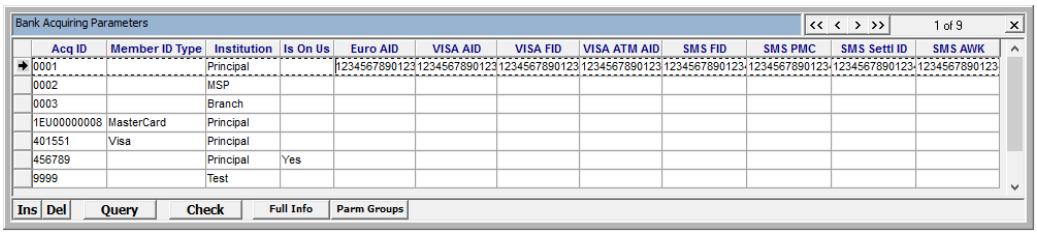

Fig. 1. Form for configuring the interaction of settlement participant banks

A record is added to the "Bank Acquiring Parameters" form by clicking the [Ins] button. A record contains the following fields:

- *Acq ID* – settlement participant's identifier; the value in this field must match the value in the *Bank Code* field of the "Financial Institutions" table or the value in the *Member* field of the "BIN Table" table.
- *Member ID Type* – type of settlement participant in the context of conditions for interaction with the sponsor bank (H2H, Device H2H, transmission of information to a payment system); this field is used to define parameters for file exchange in the clearing process.

  A group of parameters for file exchange in a specific network (corresponding to the type set in the *Member ID Type* field) is selected in the "Parm Groups for Bank Acquiring Parameters" form opened with the [Parm Groups] button. Parameters sets are configured in the "NW Groups" form (menu item "Full → Configuration Setup → Main Tables → NW Groups").
- *Institution* – name of the financial institution (sponsor bank) used when searching for routing contracts.
- *Is On Us* – field with a drop-down list:
  - "Yes" – participant (*Acq ID*) devices are registered in WAY4 (the appropriate contracts are searched for in the financial institution specified in the *Institution* field).
  - "No" – there is no information in WAY4 about the devices of a third-party system (*Acq ID*) with which Host-to-Host communication is set up (for example, Device H2H).

- The *VISA AID*, *VISA FID*, *VISA ATM AID*, *SMS FID*, *SMS Settl ID*, *SMS PMC* and *SMS AWK* fields are filled in according to identifiers assigned to the financial institution by payment systems.

  The *Euro AID* field remains for backward compatibility.

Parameters for online communication with other payment systems can be defined using various tags in the *Additional Parms* field of the "Full Info for Bank Acquiring Parameters" opened by clicking the [Full Info] button.

To ensure transactions for banks not registered in the "Bank Acquiring Parameters" form are processed correctly, it is recommended to define a set of parameters that will be used by default in this situation. To do so, add a record with the "default" value in the *Acq ID* field.

Chapter 2. Entering Client and Contract Data Manually

This section describes user actions for entering database (DB) data on acquirer bank clients and the contracts created for each client.

A "client" is the term used in the WAY4™ acquiring module and in this document to describe a merchant or a bank office executing a cash transaction.

To enter data on new clients and contracts, select the "Acquiring → Acquiring Contracts" user menu group.

Before entering data, the user must make sure that the required financial institution and client type appear in the status line. If the user has been granted the privilege of working with several financial institutions and various client types, the necessary values may be set through the "Acquiring → Acquiring Contracts → Set Client Type" user menu item.

Creating New Clients

A new client can be created in the database in one of the following ways:

- By selecting the item "Acquiring → Acquiring Contracts → Client – New (Corporate)" from the user menu.

  This will display the "Client – New (Corporate)" form (see Fig. 2).

- By selecting the item "Acquiring → Acquiring Contracts → Clients (Corporate)" from the user menu.

  This will display the "Clients (Corporate)" form (see Fig. 5) with a list of clients registered in WAY4. To add a new client, click the [Ins] button and then use the [Client -Edit] button to open the "Client-Edit for …" form containing the same set of fields as the "Client – New (Corporate)" form (see Fig. 2).

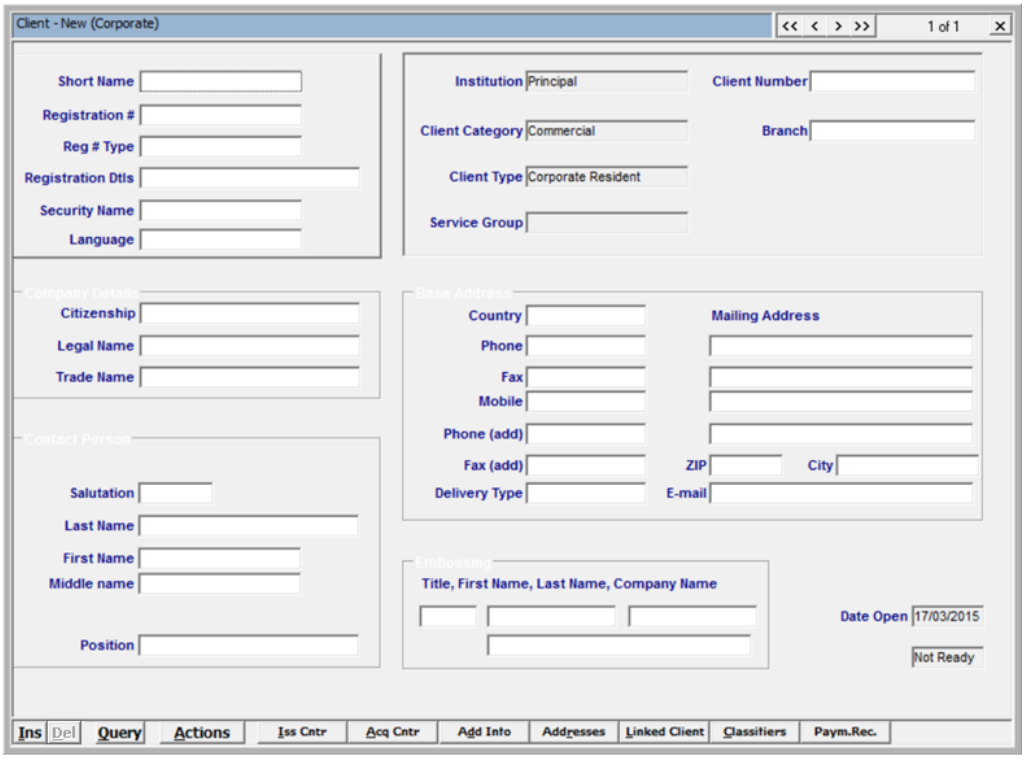

Fig. 2. Form for entering new client data

The user fills the editable fields of this form with data from the merchant application and agreement in accordance with the policies of the acquirer bank.

The fields of this form are filled as follows:

- *Short Name* is the field used in WAY4™ to facilitate the client search from the list of registered clients.
- *Registration #* field contains the identifier of the client record in the DB. This may be the number of the merchant agreement or the merchant's individual taxpayer number.

  ⚠ It is strongly recommended that the value entered into the *Registration #* field be unique within the financial institution.
- *Reg # Type* field is used to indicate the data source used to create the client registration number.
- *Registration Dtls* field is used to enter detailed information about the client.
- *Security Name* contains the secret word used to identify the client over the phone or in similar situations.
- *Language* is the field for selecting a language out of the list of languages registered in the system (see the "Full → Configuration Setup → Client Classifiers → Languages" dictionary). If the names of operations have been translated into another language in the system, client statements will be generated in that language if it is selected from this drop-down list (for details refer the document "Documents").

- *Citizenship* contains a drop-down list to specify the client's citizenship (see the "Full → Configuration Setup → Main Tables → Country Table" dictionary).
- *Legal Name* field is used to enter the company's official name.
- *Trade Name* field is used to enter the company's trademark.
- In the *Contact Person* group of fields, data is entered on the merchant company employee serving as the contact person for the acquirer bank.
  - *Salutation* is the field used to make a selection out of the list of client salutations (see the "Full → Configuration Setup → Client Classifiers → Client Salutations" dictionary).
  - *Last Name* is the last name of the contact person.
  - *First Name* is the first name of the contact person.
  - *Middle Name* is the middle name or patronymic of the contact person.
  - *Position* is the job title of the contact person.
- *Client Number* field is used to enter the unique identifier of the client record in the RBS database.
- *Branch* is the field for selecting, from a drop-down list, the bank branch where the client will receive account statements (see the "Merchant statements" document).
- *Base Address* group of fields is used for entering the client's principal address.
  - *Country* contains a drop-down list of countries registered in WAY4 (see the "Full → Configuration Setup → Main Tables → Country Table" dictionary). It should be noted that only countries with the "Yes" value in the *Use In Bank* field of the "Country Table" dictionary can be selected in the *Country* field of the client record.
  - *Phone*, *Fax*, *Mobile*, *Phone (add)* and *Fax (add)* fields are used for entering voice and fax telephone numbers.
  - The four lines labeled *Mailing Address* are used for entering the client's mailing address. Certain banks require the use of structured addresses when entering data, checking data integrity and generating reports. Four separate address fields make structured addresses possible. For instance, the following format may be used:
    - Address Line 1 – any content.
    - Address Line 2 – street name.
    - Address Line 3 – building number.
    - Address Line 4 – office number.
  - *ZIP* field is used to enter the ZIP code or postal index.
  - *City* field is used to indicate the city, town or village.
  - *E-mail* field is for entering the client's e-mail address.

  - *Delivery Type* field is used to indicate the delivery method for reports, issued cards, PIN envelopes, etc. For instance, it may indicate delivery by mail, courier, e-mail, and other means. The value entered in this field may be used as additional criteria for dividing the files in batch reports.

- *Date Open* is the date the client record was created.
- *Service Group* is used to enter an additional client classification (see the list of registered client groups in the "Full → DB Administrator Utilities → Users & Grants → Service Groups" dictionary). This field may be used to configure various data filters. For instance, VIP clients may be grouped separately by an additional classification.
- For acquiring module clients, the fields of the *Embossing* group are left blank.

The [Add Info] button of the "Client – New (Corporate)" form is used to enter additional information about a client (see the section "Additional Client Data").

The [Addresses] button of the "Client – New (Corporate)" form is used to enter additional client addresses (see the section "Additional Client Addresses").

The [Linked Client] Button of the "Client – New (Corporate)" form is used to specify this clients links with other clients registered in the database (see the section "Linked Clients").

The [Acq Contr] button of the "Client – New (Corporate)" form is used to enter information about this client's account contracts (see the section "Creating New Accounting Contracts").

The [Iss Contr] button of the "Client – New (Corporate)" form is used to open the form to modify parameters of issuing module account contracts belonging to this client (see the section "Entering New Contracts for Corporations (Legal Persons)" of the document "Issuing Module. User Manual").

This functionality is available if the acquirer also issues its own cards.

After filling in the form's fields with the required values, click the [Actions] button and select the "Check" item from the context menu. When this button is clicked, a procedure will be executed to verify the specified client data. This procedure includes standard checking of the uniqueness of the client number entered in the *Registration #* field and may include additional custom procedures for verifying the data entered in the form's fields.

Custom procedures for verifying data specified when registering a client are configured by the WAY4™ vendor.

If all required data were entered correctly, the corresponding message will be displayed on the screen (see Fig. 3), and the status of this client's record will be "Ready", indicating that this client's record is available in WAY4™.

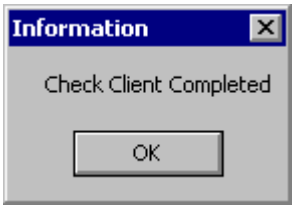

Fig. 3. Message that client data were specified correctly

If any client data were specified incorrectly, or data were not specified in mandatory fields, the corresponding error message will be displayed (see Fig. 4).

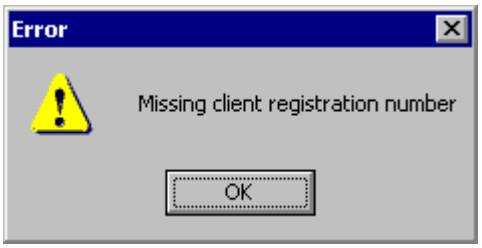

Fig. 4. Message that client data were specified incorrectly

Editing Client Information

To change information about a client, select the user menu item "Acquiring → Acquiring Contracts → Clients (Corporate)".

The "Clients (Corporate)" form (see Fig. 5) will be displayed, containing a list of clients registered in WAY4.

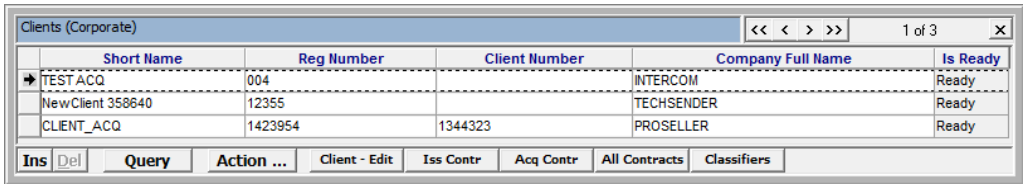

Fig. 5. List of clients (Corporate)

The field values of a selected record can be edited in the "Clients (Corporate)" form. Data for a selected client can also be changed in the "Client-Edit for …" form opened with the [Client - Edit] button. The "Client-Edit for …" form contains the same set of fields as the "Client – New (Corporate)" form that is used to create a record for a new client (see Fig. 2).

Client Classifiers

To work with client classifiers, forms are used that are called from the form for entering client data.

The form for entering client data can be opened in one of two ways:

- In the mode for creating a new record (see Fig. 2 in the section "Creating New Clients"). In this mode, the form is called by the menu item "Acquiring → Acquiring Contracts → Client – New (Corporate)".
- In the mode for editing an existing record. In this mode, the form can be called by selecting the required record in the "Clients – Corporate" form

opened by the menu item "OpenWay → Acquiring → Acquiring Contracts → Clients (Corporate).

To view information about classifiers assigned to a client, use the [Classifiers] button to open the "Classifiers for…" form. The "Classifiers for…" form is described in the section "Viewing Client and/or Contract Classifier Data" of the document "WAY4™ Client and Contract Classifiers".

A classifier is assigned using the "Set Classifier" context menu item called by the [Actions] button. Assigning classifiers is described in the section "Manually Changing Classifier Values" of the document "WAY4™ Client and Contract Classifiers".

Additional Client Data

To enter additional client data, click the [Add Info] button in the "Client – New (Corporate)" form (see Fig. 2 in the section "Creating New Clients"). This will display the "Add Info for <client name>" form (see Fig. 6).

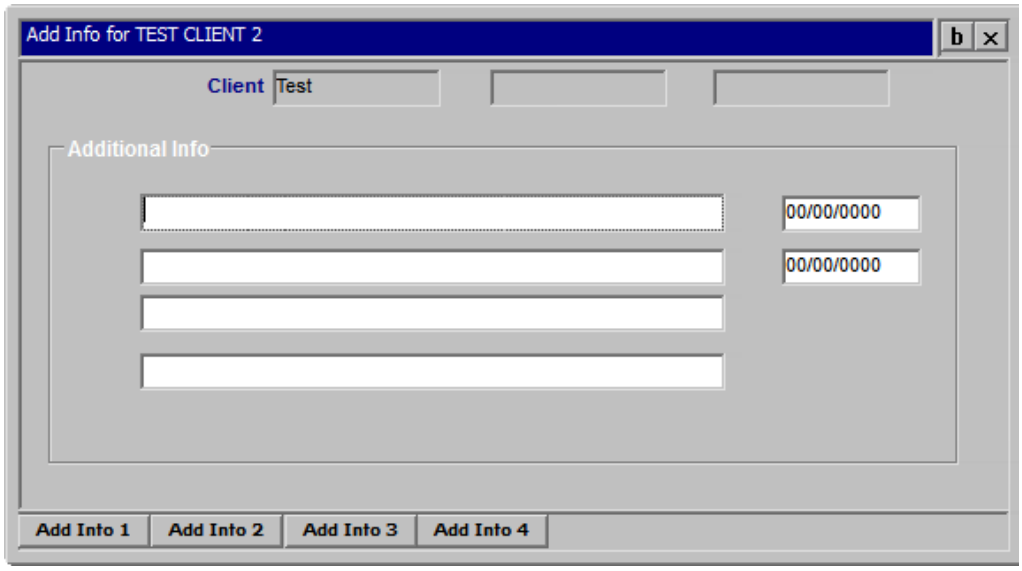

Fig. 6. Form for entering additional client data

The *Additional Info* group of fields of this form has four text fields and two date fields.The buttons [Add Info 1], [Add Info 2], [Add Info 3], [Add Info 4], are used to open "Add Info for <client name>" forms (see Fig. 7) used to enter and edit tags. Data entered using the [Add Info 1] button will be shown in the first field of the "Add Info for <client name> form (see Fig. 6), etc.

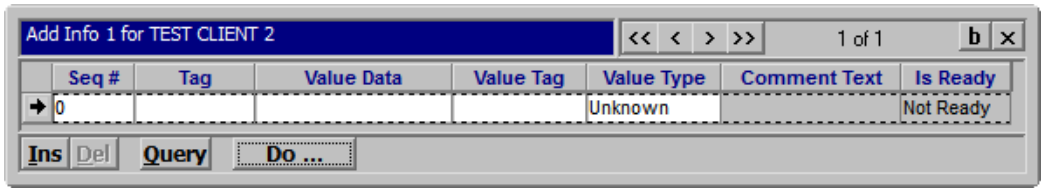

Fig. 7. Form for entering and editing tags

This form contains the following fields:

- *Seq #* - the order in which tags will be shown in the list in the special form for viewing tags.

- *Tag* – tag name.
- *Value Data* – tag value.
- *Value Tag*:
  - When tag parameters are entered in the "Tagged Data" form, the "Tag Present" value must be selected in the Value Tag field for tag parameters to be saved correctly. After saving data, tag parameters will be shown in the corresponding field of the higher-ranking form.
  - When the "Tag Absent" value is selected in this field, the record of this tag will be deleted from the "Add Info" field, as well as form the corresponding field of the higher-ranking form, after changes are saved.
- The *Value Type* field is used to specify the value type of the tag entered in the *Value Data* field:
  - "Unknown" – in this case the tag value type is not specified; it is mandatory to enter a value in the *Value Data* field.
  - "CheckBox" – in this case, it is not required to fill in the *Value Data* field.
  - "String" – string value.
  - "Counter" – the tag value is entered as a whole number (from 0 to 9).
  - "Tag" – the tag value is entered as one character (usually, either "Y" or "N").
  - "Money" – numeric value.
  - "Currency" – numeric currency code.
  - "List" – the tag value can be set as a list of values. In initial manual configuration, the comma-delimited list of values is specified in the *Value Data* field. After saving data, each tag value with the "List" type is shown in the "Add Info" form as a separate record.
- A description (decryption) of the tag should be entered in the *Comment Text* field.
- *Is Ready* – tag status after confirmation of changes.

The [Do…] button is used to call a context menu containing the following items:

- [Check] – check tag parameters.
- [Save Tags] – save tag parameters.

Additional Client Addresses

To enter additional client addresses, click the [Addresses] button in the "Client – New (Corporate)" form (see Fig. 2 in the section "Creating New Clients") This will display the "Addresses for <client name>" form (see Fig. 8).

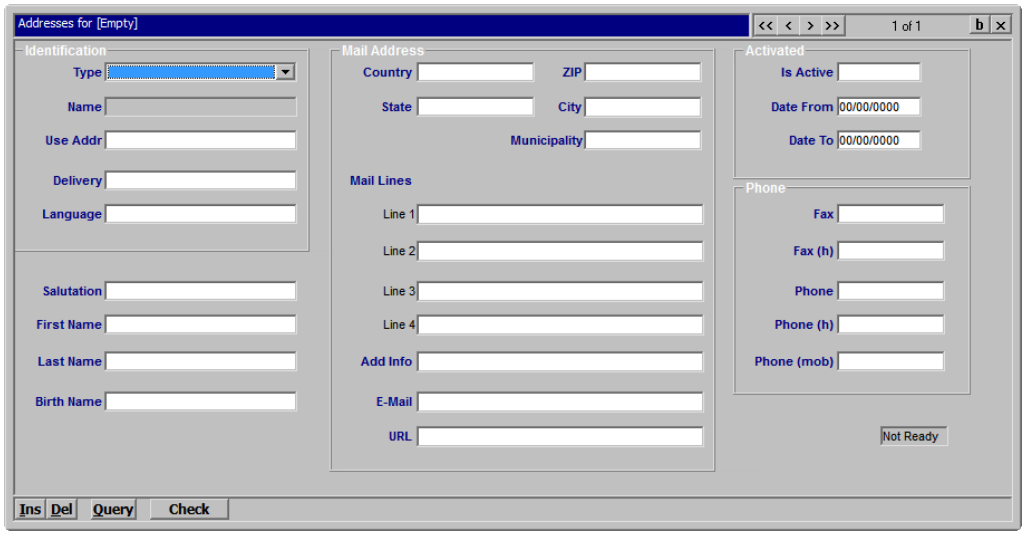

Fig. 8. Form for entering additional client addresses

For information about rules for searching for an active address, see the section "Address Search" of the document "WAY4™ Dictionaries".

Linked Clients

In WAY4, linked clients can be set (both for clients and contracts).

- The [Linked Client] button in the "Client – New (Corporate)" form (see Fig. 2 in the section "Creating New Clients") is used to specify that the client is related to other clients registered in the database. For instance, the linked clients mechanism can be used to specify that a merchant is related to an agent client searching new merchants for an acquiring bank. Clicking this button opens the "Linked Clients for…" form (see Fig. 9).
- The [Aff Clients] button of the "Acquiring Contracts – New" form (see Fig. 13 in the section "Creating New Accounting Contracts") is used to delete this contract's link with other clients registered in the database. The linked clients mechanism can be used, for example, t o specify this acquirer's contacts. When this button is clicked, a form will be displayed similar to that shown in (see Fig. 9).

Clicking the [Linked Client] button will open the "Linked Clients for <name of client>" form (see Fig. 9).

Fig. 9. Form for specifying linked clients

The form contains the following fields:

- *Creation Date* – date and time of client link registration
- *Linked Client* – drop-down list of clients registered in the system; used to select a client to whom the current client or contract is linked

- *Link Type* – drop-down list of registered link types (to see the list of link types registered in the system, select "Full → Configuration Setup → Client Classifiers → Linked Client Types")
- *Affiliation Source Reg Number* – the number of the external document (for example, a power-of-attorney) based on which this link is established.
- *Linked to Client* – if this form was opened from the "Client – New (Corporate)" form (see Fig. 2 in the section "Creating New Clients"), this field will show the name of the client specified in the "Client – New (Corporate)" form.
- *Linked to Contract* – if this form was opened from the "Acquiring Contracts – New" form (see Fig. 13 in the section "Creating New Accounting Contracts"), this field will show the number of the contract specified in the "Acquiring Contracts – New" form.
- *Is for sub* – if this form was opened from the "Acquiring Contracts – New" form (see Fig. 13 in the section "Creating New Accounting Contracts"), it can be specified in this field whether the link with the client will be used for this contract's sub-contracts.
- The effective period of the link is specified in the *Date From* and *Date To* fields.
- *Is Active* – shows whether the link is active; if the field contains "Yes", the link is active, if "No", the link is inactive.
- *Comment* – additional client link data.

The [Linked Client] button in the form is used to view information on the client specified in the *Linked Client* field of the form.

The [Client] button is used to open the form for viewing data on the client whose name is specified in the *Linked to Client* field.

The [Contract] button is used to open the form for viewing data on the contract whose name is specified in the *Linked to Contract* field.

Acquiring Module Contract Hierarchy

The following four contract types are used with the WAY4™ acquiring module:

- The accounting contract, used to keep track of fund activity in contract accounts and device accounts created by the subcontracts of that accounting contract.
- The device contract, used to register transactions, keep track of fund activity and generate card authorisation requests.
- The ATM Retail contract linked to device contracts (ATM and POS contracts) to support additional online operations and prepaid services on these devices.
- Service card contracts used to authorize service cards.

WAY4™ allows users to create subcontracts, or child contracts subordinated to parent contracts, which may be used to build contract hierarchies.

It is recommended that the following contract hierarchy structures be used:

- The two-level scheme with an accounting contract as the main contract and device contract/contracts as its subcontract/subcontracts (see Fig. 10).

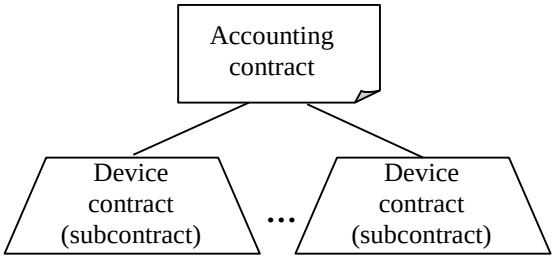

Fig. 10. Device contracts subordinated to an accounting main contact

  The two-level scheme is normally used when creating contracts for small and medium-size merchant organisations. In this case, the merchant (service provider) for whom the accounting contract is created receives account statements and presentment amounts.

- The three-level scheme includes a main accounting contract with child accounting subcontracts, and device contracts subordinated to the accounting subcontracts (see Fig. 11).

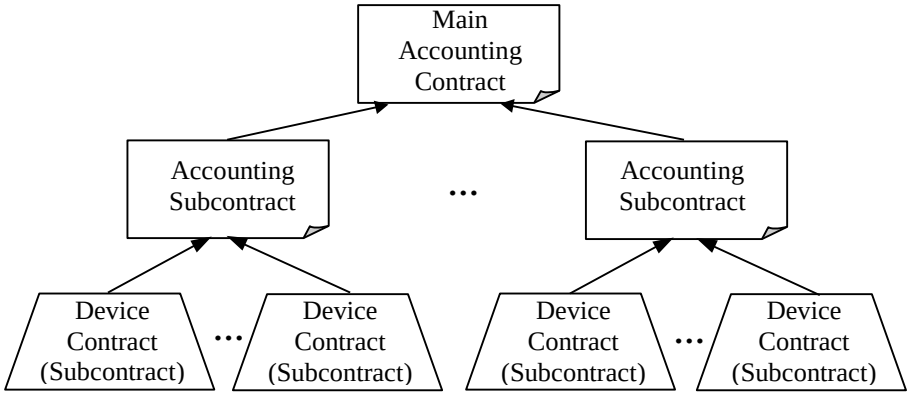

Fig. 11. An accounting main contract with accounting subcontracts and device contracts subordinated to them

  The three-level scheme may be used for large merchant organisations with retail networks. In this case, presentment amounts go to the head organisation for which the main accounting contract was created, while account statements may go to either the head organization or the individual merchants for which the accounting subcontracts were created.

An acquiring module contract hierarchy may use the following types of structure:

- "Main/Sub" – hierarchy in which the main accounting contract is at the top and subordinate accounting subcontracts and device contracts are below it (see Fig. 10 and Fig. 11). In this case, one Accounting Scheme is used for the entire contract tree.

- "Liability" – hierarchy of accounting contracts using different Accounting Schemes (see Fig. 12). The following relation types may be set for these contracts:
  - "Affiliated" – Product parameters available when opening a merchant accounting contract depend on parameters of the Product for the main accounting contract of the entire merchant network.
  - "Only Check Balance" – transactions at any merchant in the network are monitored with usage limiters set for the entire network in the main accounting contract.
  - "Reporting" – used to gather statistics about the activity of contracts in the tree; these statistics are required to generate "nonfinancial" reports, for example, to gather statistics for transactions made using cards at all merchants in the network.
  - "Full Liability" – includes the characteristics of all the aformementioned relation types.

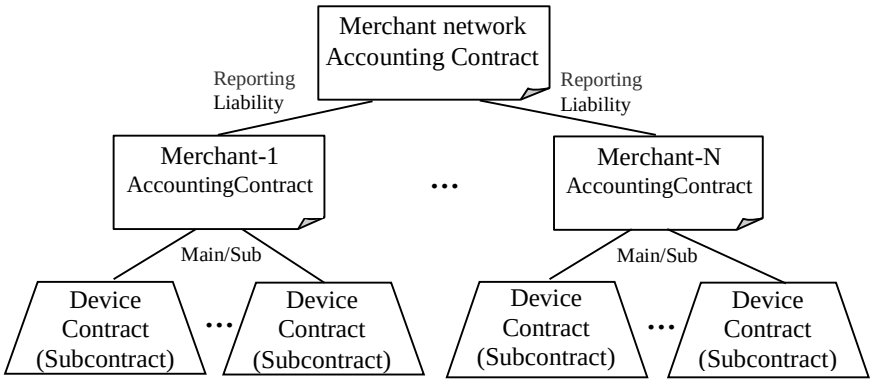

Fig. 12. Example of a Liability relation beween accounting contracts with the ability to generate non-financial (statistic) reports for the entire merchant network

Note that the following restrictions affect setup of hierarchies between contracts:

- Only accounting contracts can use a "Liability" hierarchy.
- An accounting contract may have only one parent contract with a particular relation type: either "Main/Sub" or one of the "Liability" types.

Creating New Accounting Contracts

New accounting contracts may be created in the following way:

- After all new client data have been entered, click the [Acq Cntr] button of the "Client – New (Corporate)" form (see Fig. 2 in the section "Creating New Clients") and then click the [Ins] button in the "Acquiring Contracts" form that appears.
- Select the "Acquiring → Acquiring Contracts → Acquiring Contracts – New" user menu item and then select the name of a registered client from the list that opens in the *Client* field.

- If a new accounting contract is being added to the already existing contract of a client, the contract is created by clicking the [Ins] button in the "Acquiring Contracts" form.

This will open the "Acquiring Contracts - New" form (see Fig. 13).

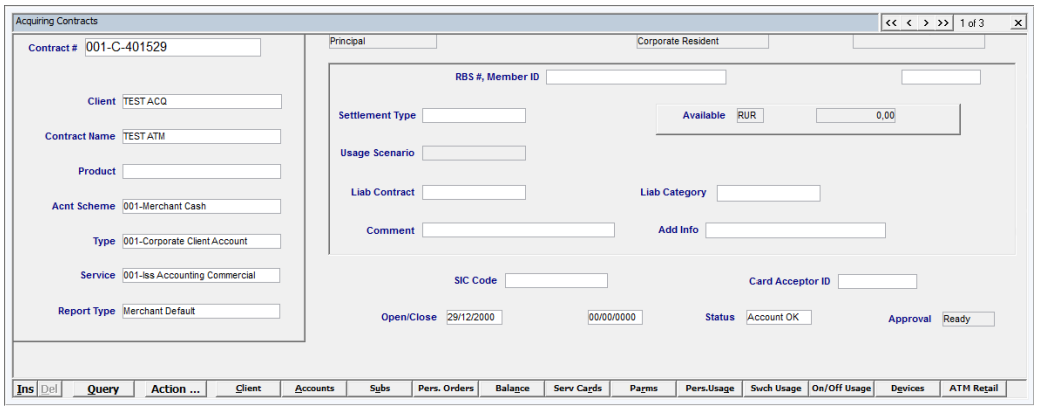

Fig. 13. Form for entering information about an accounting contract

The editable fields of this form are filled in with data from a client's application or an agreement signed with a merchant organization, according to the acquirer bank's policies.

The following recommendations should be followed when filling the fields of this form:

- The value entered into the *Contract #* field is the accounting contract number, unique to the system. Depending on the selected contract subtype (see the "Contract Types and Subtypes" section of "Products and Contract Subtypes" document), the contract may receive its number in one of the following ways:
  - Automatically upon contract approval.
  - Manual entry.
- The name of the client for whom the contract is created may be selected from drop-down list of clients registered in the system in the *Client* field.
- The *Contract Name* field contains the name that will be subsequently used to search for this contract among the contracts registered in WAY4™.
- The *Product* field is used to choose the Product name from a drop-down list of products registered for the corresponding financial institution and client type.

  ⚠ Keep in mind that after choosing the product and clicking the [Approve] button, the system automatically fills in the *Acnt Scheme*, *Type*, *Service* fields according to the parameters of the selected product.

  If no product is indicated in the *Product* field, the following fields must be filled:

  - The *Acnt Scheme* field is used to enter the name of the contract's Accounting Scheme (see the "Accounting Schemes" section of the "WAY4™ Accounting Schemes" document). This field is filled with a

selection from the list of Accounting Schemes registered in the system for the corresponding financial institutions and client categories.

- The *Type* field allows users to select the subtype of the accounting contract from the list of subtypes.
- The *Service* Field is used to enter the name of the Service Package to which the selected subtype belongs (see the "WAY4™ Service Packages" document).
- The *Report Type* field is used to indicate the set of WAY4™ reports configured through the "Full → Configuration Setup → Client Classifiers → Client Report Types" menu item.

- The *RBS #* field is used to specify the number of a settlement account in the bank system so that when a new account contract is registered, the number of the corresponding account from the bank system is set in this field. When contracts subordinate to a higher-ranking contract in a "Main/Sub" hierarchy are registered, the *RBS #* value is automatically inherited from the higher-ranking contract. For subcontracts in a "Liability" hierarchy, the *RBS #* value from a higher-ranking contract is not inherited.

  For backward compatibility, the *RBS #* field can store data required for custom account numeration.
- The *Member Id* field should contain the identifier of a payment system member assigned to the acquirer bank.
- *Comment* is the field for entering any additional information about the contract.
- *Settlement Type* – this field is reserved for future use.
- If this contract has a higher-ranking contract in the "Liability" hierarchy, the following fields are filled in:
  - In the *Liab Contract* field, the higher-ranking contract in the "Liability" field is selected from a drop-down list of all contracts registered in the database.
  - *Liab Category* – drop-down list of the type of link between this contract and the higher-ranking one in the Liability hierarchy ("Full Liability", "Affiliated", "Reporting" or "Only Check Balance").

 In the acquiring module, the "Liability" hierarchy is applied, for example, when issuing service cards for creating groups of devices that are serviced with one service card (see the section "Creating New Service Card Contracts").

- In the *SIC Code* field, select from the list a merchant category corresponding to its business profile; the list is generated on basis of the SIC Group dictionary (see section ""SIC Group" Dictionary" in the "WAY4™ Dictionaries Administrator Manual").
- In the *Card Acceptor ID* field used to enter a Merchant ID, specify a value consisting of no more than 15 characters (printable ASCII characters) and unique within the processing centre.

- *Open* is the opening date of the contract. Its default value is the current banking date.
- *Close* is the closing date of the contract.
- *Status* is the status of the contract, which defines whether any operations involving this contract and all its subcontracts may be performed (when this contract is a parent of other contracts). An accounting acquiring contract may have one of the following statuses:
  - "Account OK" means that the contract is active.
  - "Account Closed" is the status of a closed contract.
  - "Account Decline". When a contract has this status, any authorisations performed through devices subordinated to it will be declined.

The [Client] button of the "Acquiring Contracts – New" form (see Fig. 13) is used to open the form for entering data about a client to which this contract is linked (see the section "Creating New Clients").

The [Accounts] button is used to open the "Accounts for <contract name>" form used to view contract account data, including for working with standing payment orders (see "Standing Payment Orders").

The [Pers. Orders] button is used to open the "Pers. Orders for <name of current contract>" form with information about this contract's payment orders.

The [Subs] button is used to enter accounting sub-contracts (see the section "Creating Accounting Subcontracts").

The [Balance] button is used to open forms for viewing an account contract balance.

The [Serv Cards] button is used to work with service cards (see the section "Creating New Service Card Contracts").

The [Parms] button is used to view contract parameters and to redefine the values of these parameters according to the specifics of a particular payment system. When the main contract is approved, the values of these parameters are inherited by all subcontracts that don't have corresponding parameters of their own (see the section "Device Parameters").

The [Pers.Usage], [Svch Usage], and [On/Off Usage] buttons are used to work with usage limiters (see the section "Usage Limiters").

The [Devices] button is used to work with device contracts (see the section "Creating New Device Contracts").

The [ATM Retail] button is used to work with ATM Retail contracts (see the section "Creating New ATM Retail Contracts").

The [Address] button is used to work with contract addresses. A similar window is shown in Fig. 8 in the section "Additional Client Addresses".

The [AddParms] button is used to work with additional contract parameters (see the section "Additional Contract Parameters").

The [Aff Clients] button is used to work with linked clients (see the section "Linked Clients").

The [Classifiers] button is used to open the "Classifiers for…" form, used to view classifiers assigned to a contract. Working with this form is described in the section "Viewing Client and/or Contract Classifier Data" of the document "WAY4™ Client and Contract Classifiers".

The [Liab Main] button is used to open the "Liab Main for <name of current contract>" form with information about the main contract in a liability hierarchy.

The [Liab Sub] button is used to open the "Liab Sub for <name of current contract>" form with information about a subcontract in a liability hierarchy.

The [Liab Device] button is used to open the "Liab Device for <name of current contract>" form with information about a subordinate device contract in a liability hierarchy.

The [Contract Parms] button is used to open the "Contract Parm for <contract number>" form for managing contract custom parameters (see "Contract Custom Parameters").

The [Action…] button is used to call a context menu containing the following items:

- "Approve" – activate a contract (including a "Main/Sub" or "Liability" subcontract hierarchy).

  If the contract is approved successfully (contract parameters are validated on all levels of the hierarchy), a confirmation message appears on the screen (see Fig. 14) and "Ready" appears in the *Approval* field of the "Acq Contr …" form.

Fig. 14. Message about the successful registration of the changes of contract information

If incorrect or incomplete data have been entered, approval of the contract is interrupted and an error message (see Fig. 15) appears on the screen. The *Approval* field of the "Acq Contr …" form will contain "Not Ready".

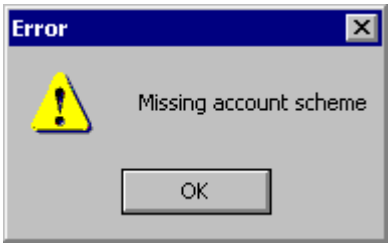

Fig. 15. Example of an error message notifying of the incompleteness of the input contract data

More details on the errors that occur during contract approval may be found in the Process Log, accessible through the Full → Process Log → Last Process" user menu item. When this menu item is selected, the "Last Process" form containing information about the performance of the latest

process in WAY4™ comes up on the screen (see the "Process Log" section of the "DB manager User Manual" document).

- "Set Client Classifier", "Set Contract Classifier" – open the form used to enter client/contract classifiers. Assigning classifiers is described in the section "Manually Changing Classifier Values" of the document "WAY4™ Client and Contract Classifiers".
- "Create Order by Template" – create a payment order according to a template. For more information about manual creation of inherited orders, see the section "Parameters of Inherited Standing Paymet Orders Created on the Basis of a Template" of the document "Standing Payment Orders".

Creating Accounting Subcontracts

WAY4™ allows users to create subcontracts for accounting contracts registered in the database and subsequently to generate contract hierarchies.

Hierarchies may be used, among other things, for corporate clients where the main accounting contract is created for a merchant organisation as a whole and subcontracts are created for its departments and stores.

To create an accounting subcontract, click the [Subs] button in the "Acquiring Contracts – New" form (see Fig. 13 in the section "Creating New Accounting Contracts"). This will open the "Subs for …" form (see Fig. 16) used to create accounting subcontracts. The form is analogous to the main contract form, and the values of its uneditable fields are defined by the parameters of the higher-ranking contract, among other factors.

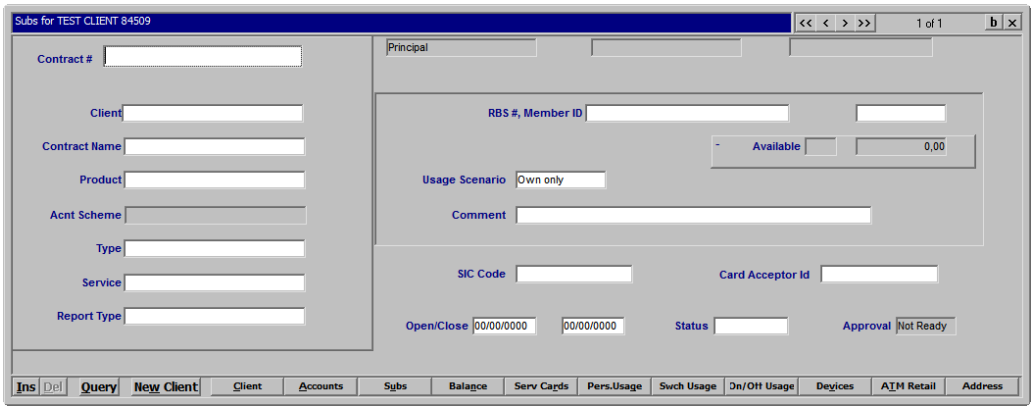

Fig. 16. Form for entering subcontract data

The editable fields of this form are filled on the basis of data supplied in the merchant application and/or an agreement, according to the rules of the acquirer bank.

After entering data in the accounting subcontract form, click the [Action…] button in the main accounting contract form and in the context menu that opens, select the "Approve" item to approve the contract hierarchy.

To enter data necessary to create device contracts registered in the WAY4 "Acq Cntr …" form as subcontracts of an organisation's accounting contracts, click the [Devices] button (see "Additional Contract Parameters").

Keep in mind that a device contract may be created as a subcontract of an accounting subcontract. To do this, click the [Devices] button in the form of the corresponding accounting subcontract.

Standing Payment Orders

General Standing Payment Orders

In the acquiring module, standing payment orders are used, for example, to create daily documents that will transfer the settlement amounts paid by card issuers to the merchant, from the merchant's contract accounts to the merchant's settlement accounts. General standing payment orders are used to perform these tasks. This type of order is created on the Accounting Scheme level and documents are generated for all contracts using this Accounting Scheme. For information on setup of general standing payment orders, see the sections "Parameters of General/Template Standing Payment Orders" and "Retail Payments" of the document "Standing Payment Orders".

Standing payment orders for retail payments in the acquiring module are set up separately for all "Merchant Current" accounts in different currencies.

To view the parameters of general payment orders for a contract, do as follows:

- Click the [Accounts] button in the contract form (see Fig. 11 in the section "Creating New Accounting Contracts"). The "Accounts for <contract name>" form will open, see Fig. 17. This form is described in the section "Viewing Contract Account Data" in the document "WAY4™ Accounting".
- Click the [Gen. Orders] button in the "Accounts for <contract name>" form. The "Gen. Orders for <account name>" form will open, showing general standing payment orders for the contract.

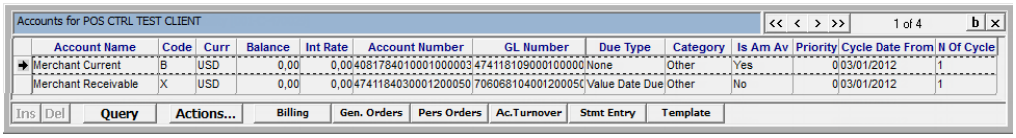

Fig. 17. Information about contract accounts

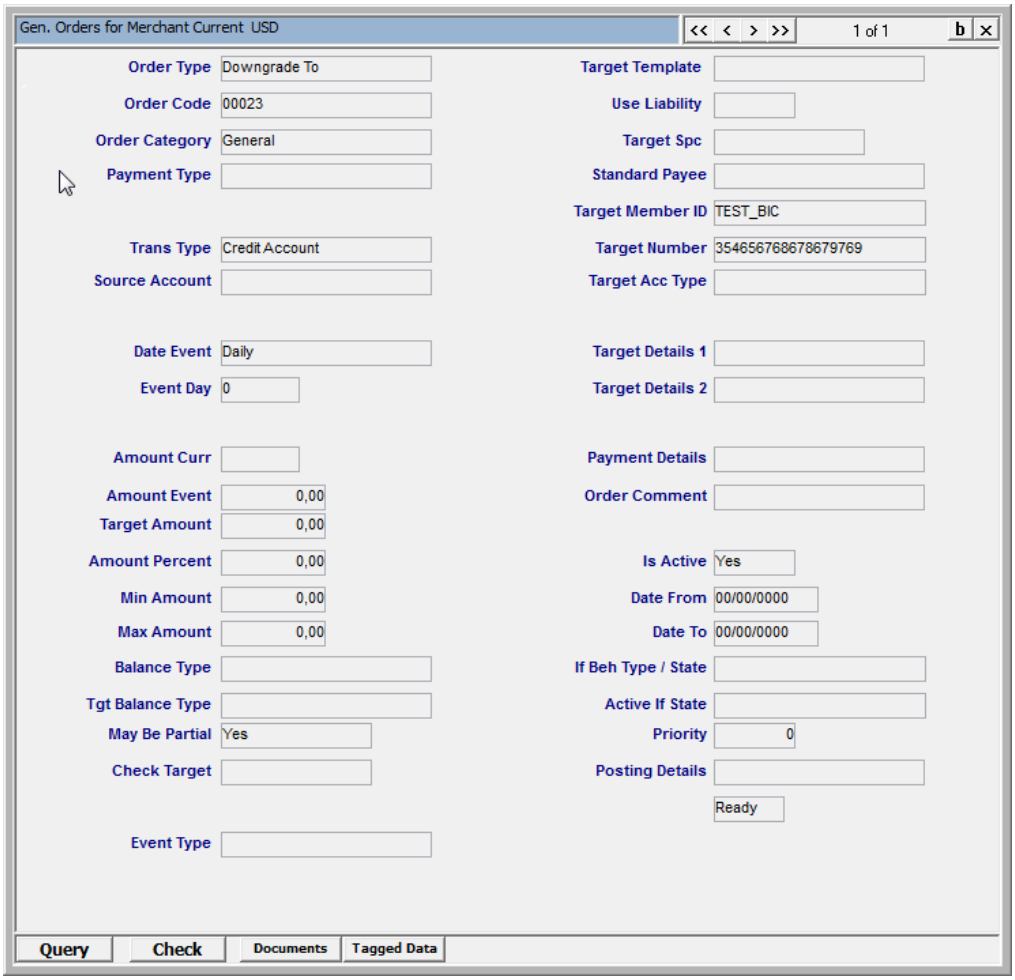

Fig. 18. General standing payment order

BIC Table

The "RBS Bank Identification Codes" grid form is used to identify the correspondence account of the bank where the settlement account of a merchant is registered. When entries are added to this form, they are automatically included in the RBS BIN group, which allows the system to determine the routing contract when processing a document created from a payment order (see the "Configuring BIN Groups" section of the "Interchange Routing" document).

The grid form is invoked by selecting the "Full → Configuration Setup → Routing → RBS Bank Identification Codes" user menu item (see Fig. 19).

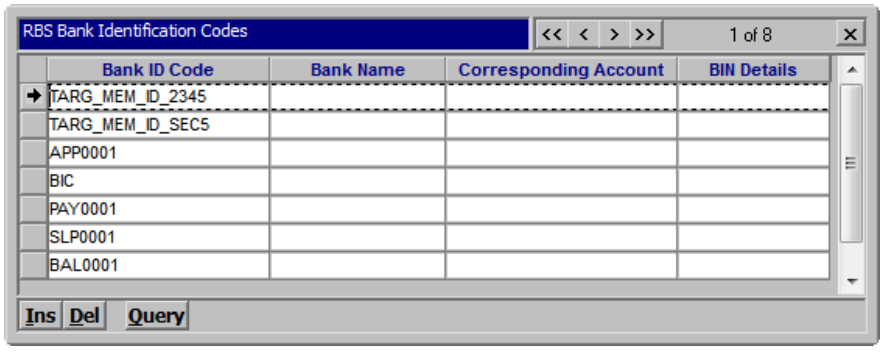

Fig. 19. BIC Table

The rows of the grid form that contain values with APP, PAY, SLP and BAL prefixes are used when working with the other modules of the system.

To work with payment orders, enter the bank's Bank Identification Code (BIC) after clicking the [Ins] button to insert a row into the grid form.

After entering the BIC of a bank, fill in the following fields:

- The BIC is entered in the *Bank ID Code* field, according to the current rules.
- In the *Bank Name* field, enter the name of the bank.
- In the *Corresponding Account* field, enter the number of the correspondence account of the recipient's bank associated with the recipient's account.
- The BIN Details field is used to enter additional information about a BIN table record.

Additional Contract Parameters

To enter additional contract parameters used to send information to payment systems, click the [AddParms] button in the "Acquiring Contracts – New" form (see Fig. 13 in the section "Creating New Accounting Contracts"). The "AddParms for…" form will open (see Fig. 20).

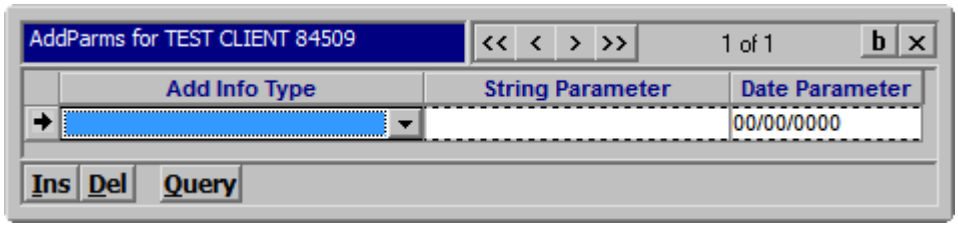

Fig. 20. Form for entering additional contract parameters

This form contains the following fields:

- *Add Info Type* – type of additional information, selected from the "Device Parms Add Info Types" handbook (OpenWay → Full → Configuration Setup → Merchant Device Setup → Device Parms Add Info Types).
- *String Parameter* – field with selection from a list intended to enter the parameter value.
- *Date Parameter* – field to specify the parameter in date format.

Creating New Device Contracts

The acquiring module is used for working with the following device types:

- An imprinter is a device used to transfer data embossed on a card to a sales slip with the use of carbon paper.
- A Point-of-Service (POS) terminal is a device used to read data from the magnetic strip or microchip of a bank card, enter data from a keypad, print checks and have bank cards authorised by their acquirer banks or processing centres via communications lines.

- An Automatic Teller Machine (ATM) is a device used to dispense cash, read data from the magnetic strip or microchip of a bank card, have bank cards authorised by their acquirer banks or processing centres via communications lines and print out information on transactions and available balances. Certain types of ATMs have cash-in functionality.
- An information kiosk is a self-service device connected to a communication channel to authorise bankcards, allowing cardholders to pay for services, make transfers, and receive balance information. Some types of information kiosks allow cardholders to credit their accounts.

In WAY4™, device contracts may exist only as subcontracts of accounting contracts.

New device contracts are created in the "Device for …" form (see Fig. 21) opened by clicking the [Devices] button in the accounting contract form (see Fig. 13 in the section "Creating New Accounting Contracts").

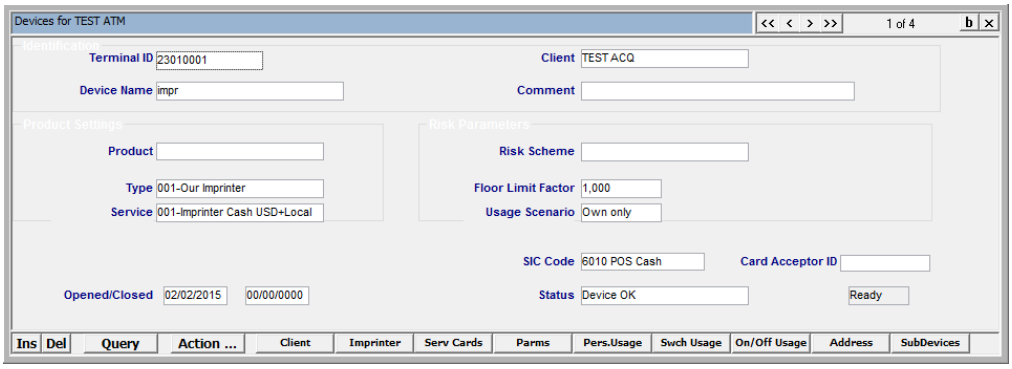

Fig. 21. Form for entering device contract data

When filling the fields of this form, the following recommendations should be observed:

- The *Terminal ID* field is filled according to the following rules:
  - When an imprinter contract is created, the Imprinter Plate Number is entered in the field as an array of symbols. The length of the array must not exceed 8 symbols.
  - When a POS terminal contract is created, the field is filled with an array of 8 symbols unique within the *Terminal ID* field values.
  - When an ATM contract is created, the field is usually filled with an array of 8 digits unique within the *Terminal ID* field values. Certain ATM models may use Latin letters as the first 3 symbols of their IDs.

  If the value if the *Terminal ID* field is not specified, when approving the contract, the value will be generated automatically according to the parameters of the contract subtype indicated in the *Type* field of the *Product Settings* field group (see below).

  In WAY4 transactions can be processed when performing operations at POS terminals with the same identification codes (with Terminal IDs that are not unique). In this case, the following parameters are used to identify a terminal device:

- Terminal ID (TID) – device identifier.
- Merchant ID (MID) – merchant identifier.
- Acquirer Member ID (MBR) – code of the financial institution acquiring the device (it is assumed that the combination of MID and TID is unique for each MBR).

Rules for using these parameters as key attributes when searching for the required contract on the acquirer side are defined by the settings of the controller interacting with the corresponding terminal device. In the controller configuration, a mask for matching is specified that determines which of the MBR, MID, TID attributes must be used to search for a device contract. By default, a search is made by TID. This functionality is currently used for the Device H2H channel. For support on other channels, contact the WAY4 vendor.

- In the *Product* field, enter the name of a Product registered in the system for device subcontracts of accounting contracts.

  Within the WAY4™ environment, there is no need to indicate any contract subtype in the *Type* field or Service Package in the *Service* field for the contract when the name of a Product is present in the *Product* field.

  If the *Product* field is left blank, the following two fields must be filled in:

  - A device contract subtype must be selected from the drop-down list in the *Type* field.
  - A Service Package registered in the system must be selected from the drop-down list in the *Service* field.

  When the device contract subtype has been indicated, the [ATM], [POS], [Infokiosk], or [Imprinter] button appears in the form, according to the terminal category for the specified subtype. These buttons are used to configure the appropriate device (see the "Configuring Devices" section).

- The following should be entered in the fields of the *Risk Parameters* group:
  - In the *Risk Scheme* field, select the required risk scheme from the list.
  - In the *Floor Limit Factor* field, specify the multiplier of the "Floor Limit" parameter indicated in the device contract services configurations; usually, this value equals 1.00.
  - In the *Usage Scenario* field, indicate the accounting algorithm for authorisation limiters. The values have the following meaning:
    - The "Main and Own" value means that the system recognises limiters set for both the subcontract and its parent contract.
    - The "Own only" value means that the system recognises limiters set for only this contract.
- In the drop-down list of the *SIC Code* field, select the merchant category according to the type of business: this list is generated on the basis of the "SIC Group" dictionary (see the section "SIC Group Dictionary" of the document "WAY4™ Dictionaries". Note that only a merchant category with

a "Yes" value in the *Use In Bank* field of "SIC Group" dictionary may be specified in the *SIC Code* field.

When entering a new ATM device contract, the code corresponding to the "Financial Institution" SIC group (Full → Configuration Setup → Main Tables → SIC Groups) must be specified in the *SIC Code* field. Otherwise, an attempt to approve the contract will terminate with the error "Invalid SIC Group Code – [Terminal ID]".

- In the *Card Acceptor ID* field used to enter a Merchant ID, specify a value consisting of no more than 15 characters (printable ASCII characters).
- *Status* – device contract status:
  - "Device OK" – contract is active.
  - "Device Closed" – status assigned to a contract when it is closed.

After the fields of this form have been filled in, the device must be configured (see "Configuring Devices").

The [Action…] button opens a context menu with the following items:

- "Approve" – activate the contract (including the hierarchy of subcontracts and higher ranking parent contracts).

  If the contract is approved successfully, a confirmation message to this effect comes up on the screen and "Ready" appears in the *Approval* field of forms for contracts grouped in the hierarchy.

  If incorrect data have been entered, contract approval is interrupted and an error message is output. The value of the *Approval* field will remain "Not Ready".

  More details on the errors occurring during contract approval may be found in the Process Log, which is accessible through the "Full → Process Log → Last Process" user menu item. When this menu item is selected, the "Last Process" form containing information about the performance of the latest process in WAY4™ comes up on the screen (see the "Process Log" section of the "DB manager User Manual" document).
- "Copy ATM Retail" – creation of ATM Retail contracts linked with the current device, based on ATM Retail contracts registered earlier for a different device. After selecting this menu item, specify the number of the device contract (ATM Retail parameters) whose data must be copied.

Configuring Devices

Devices are configured in the forms opened by clicking the [Imprinter], [POS], [Infokiosk], or [ATM] button in the "Devices for <client name>" form (see Fig. 21 in the section "Creating New Device Contracts"). The button appears after the device contract subtype is selected in the Type field.

The fields of the form for configuring devices are described in the "Configuring Imprinter", "Configuring POS Terminals", "Configuring Information Kiosks", and "Configuring ATM" sections.

Configuring Imprinters

The form for configuring imprinters (see Fig. 22) is invoked by clicking the [Imprinter] button in the form of the device contract (see Fig. 21 in section "Creating New Device Contracts").

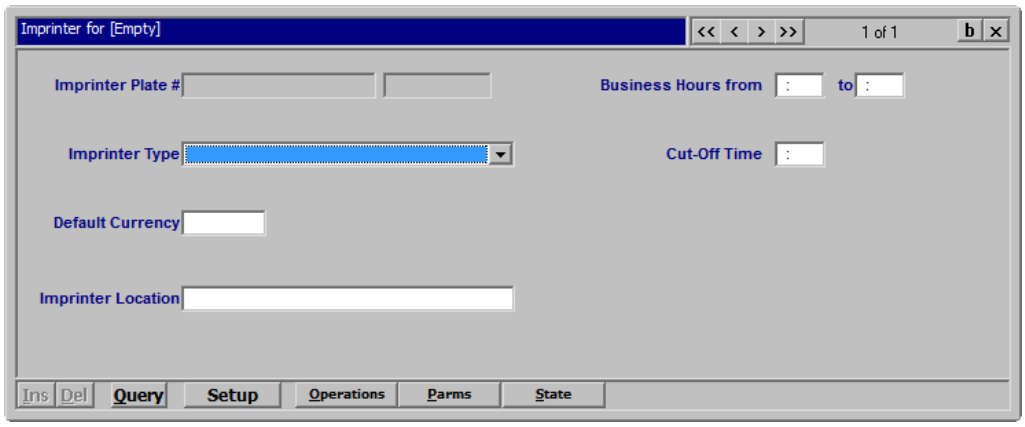

Fig. 22. Form for configuring imprinters

When this form is opened, the "State for…" form automatically opens, showing information about the device status

The fields of the imprinter configuration form are used as follows:

- In the *Imprinter Type* field, the type of imprinter must be indicated by selecting one of the following values:
  - "Standard" indicates that a standard imprinter is used.
  - "MailOrder" indicates that the imprinter is used for mail orders.
  - "PhoneOrder" indicates that the imprinter is used for telephone orders.
- The *Default Currency* field is used to indicate the default currency of transactions involving this imprinter.
- In the *Imprinter Location* field, the geographical location of the imprinter is indicated.
- The *Business Hours* field is used to indicate the business hours when the imprinter is used in 24-hour format. The imprinter business hours are set by the system clock of the message server through which the voice authorisation device interacts with WAY4™, without accounting for the time zone difference. Voice authorisation is possible for transactions performed with this device only within the time interval indicated in the following fields:
  - *from* – the time work begins.
  - *to* – the time work ends. If the hour indicated in this field precedes that indicated in the *from* field, night hours are included in the work time interval.
- In the *Cut-Off Time* field, the time in 24-hour format before which the authorizations of transactions involving this device are registered under the current banking date. The time is set by the system clock of the message

server used by the device for communicating with WAY4™, without accounting for the time zone difference.

This functionality should be used if the device is located in a time zone different from that of the acquirer bank or if it is required by the bank's accounting rules.

The value shown in the *Cut-Off Time* field will only be considered if the value of the global parameter USE_CUT_OFF_TIME is "Y" (see the section "Acquiring Parameters" of the document "WAY4 Global Parameters").The [Parms] button is used to open the form used to enter imprinter parameters (see the section "Configuring Devices").

The [State] button is used to open the form showing the device status. Only two values are used for imprinters:

- "OK" – the imprinter is in service.
- "Not Configured" – the device is out of service.

The [Operations] button is used to open the form containing information about the operations permitted for the device. When a new device is created, this list of operations must be filled in by clicking the [Setup] button in the imprinter configuration form and selecting the "Fill Default" context menu item. Operations may be deleted from this list and become unavailable for the device. The original list may be restored by selecting the "Fill Default" item after clicking the [Setup] button.

To activate an imprinter contract, in the higher-ranking account contract, click the [Action…] button and select the "Approve" menu item.

After all data have been entered, the changes must be approved and the contract hierarchy activated by clicking the [Approve] button in the form of the main accounting contract.

Configuring POS Terminals

The form for configuring POS terminals (see Fig. 23) is opened by clicking the [POS] button in the device contract form (see Fig. 21 in section "Creating New Device Contracts").

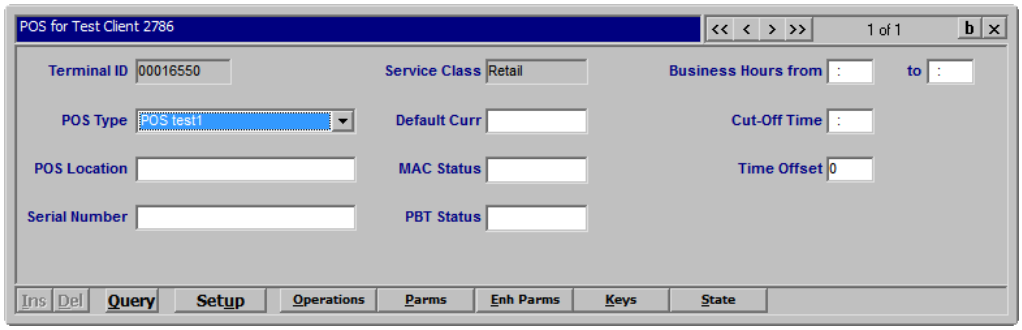

Fig. 23. Form for configuring POS terminals

The fields of this form are used as follows:

- In the *POS Type* indicate the POS terminal type, corresponding to a type registered in WAY4 (see the "POS Types Dictionary" section of the "POS Network Management" document).
- In the *POS Location* field, indicate the geographical location of the POS terminal.
- The *Serial Number* field is used to enter the serial number of the device. This field is optional.
- The *Default Currency* field is used to indicate the default currency of operations performed through the terminal. This field must be filled if the terminal software or the interaction protocol between the terminal and POS controller does not send data on transaction currency to the processing centre.
- In the *MAC Status* field, set the conditions for the verification of message authentication codes (MAC). These conditions are as follows:
  - "Mandatory" indicates that requests from the terminal will be rejected if they do not contain message authentication codes (MAC).
  - "Optional" indicates that the presence of message authentication codes in messages is optional.
  - "None" indicates that requests from the terminal are rejected if they contain message authentication codes.
- In the *PBT Status* field, conditions for processing PIN-Based Transactions (PBT) should be indicated:
  - "Mandatory" indicates that requests from the terminal are rejected if they do not contain PIN blocks.
  - "Optional" indicates that the presence of PIN blocks in messages is optional.
  - "None" indicates that requests from the terminal are rejected if they contain PIN blocks.

  The value of this field can be redefined depending on transaction conditions using the DEV tag (Subfield YYYY, see the document " Acquiring Module Terminal Device Attribute Setup ") by the parameter that is specified as redefining for the corresponding device type. For more information, see the section "Mandatory PIN Mode" of the document "POS Network Management".
- The *Business Hours* field is used to indicate the business hours when the terminal is used in 24-hour format. The terminal business hours are set by the system clock of the POS controller through which this device communicates with WAY4™ (see the "POS Network Management" document), without accounting for the time zone difference. Authorisation is only possible for transactions performed through this device within the time interval indicated in the following fields:
  - *from* – the time work begins.

  - *to* – the time work ends. If the hour indicated in this field precedes that indicated in the *from* field, night hours are included in the work time interval.

- In the *Cut-Off Time* field, the moment is indicated in the 24-hour format, before which the authorisations of transactions involving this device are registered under the current banking date. The time is set by the system clock of the POS controller used by the device for communicating with WAY4™, without accounting for the time zone difference.

  This functionality should be used if the device is located in a time zone different from that of the acquirer bank or if it is required by the bank's accounting rules.

  The value shown in the *Cut-Off Time* field will only be considered if the value of the global parameter USE_CUT_OFF_TIME is "Y" (see the section "Acquiring parameters" of the document "WAY4™ Global Parameters").

  It is not recommended to use the *Cut-Off Time* field when the value of the WAIT_BATCH_UPLOAD global parameter is "Y".

- The *Time Offset* field is used for indicating time difference between the zones where the device and POS controller are located.

The [State] button is used to open the form showing the device status. The following values are used for POS terminals:

- "OK" indicates that the terminal is in service
- "Information" indicates that the POS terminal is in service but the statuses of one or more its system devices are "Warning".
- "Warning" indicates that the POS terminal is in service but the statuses of one or more its system devices contain "Error".
- "Not Configured' indicates that the device is out of service.
- "Error" indicates that the device is out of service due to an error.

To set the "OK" status for a POS terminal, in the POS terminal configuration form click the [Setup] button and select "Set to OK" in the context menu.

The [Parms] button is used to configure POS terminals (see the "Configuring Devices" section).

The [Enh Parms] button is used to set the additional parameters of a POS terminal (see "Additional Device Parameters").

The form for entering the cryptographic keys of a POS terminal is invoked by clicking the [Keys] button (see "Entering POS Terminal Cryptographic Keys").

The [Operations] button is used to set up operations permitted for the POS terminal (see the section "Configuring Permitted Operations for POS Terminals" of the document "Managing the POS Terminal Network"). When a new device is created, this list of operations must be filled in by clicking the [Setup] button in the POS terminal configuration form and selecting the

"Check and Fill" context menu item. Operations may be deleted from the list and become unavailable for the device. The original list may be restored by clicking the [Setup] button in the POS terminal configuration form and selecting the "Check and Fill" context menu item.

To activate a POS contract, in the higher-ranking accounting contract form, click the [Action…] button and select the "Approve" menu item.

To process transactions in WAY4, a payment terminal contract must be in the "Ready" state (*Approval* field) regardless of the parent contract's state. If after the parent contract has been approved, the payment terminal remains in the "Not Ready" state, all attempts to make transactions on the corresponding device will be rejected.

The contracts of "virtual" terminals used in WAY4 to interpret transactions made on self-sevice channels (for example, WAY4 banking) are an exception. If such a contract is in the "Not Ready" state for a reason not related to a change in the Service Package, Accounting Scheme or contract current, transactions with this contract will be permitted.

Entering POS Terminal Cryptographic Keys

The [Keys] button in the POS terminal configuration form (see Fig. 23 in the section "Configuring POS Terminals") is used to open the "Keys for <POS terminal name>" form (see Fig. 24). The form is used for entering the cryptographic keys of POS terminals.

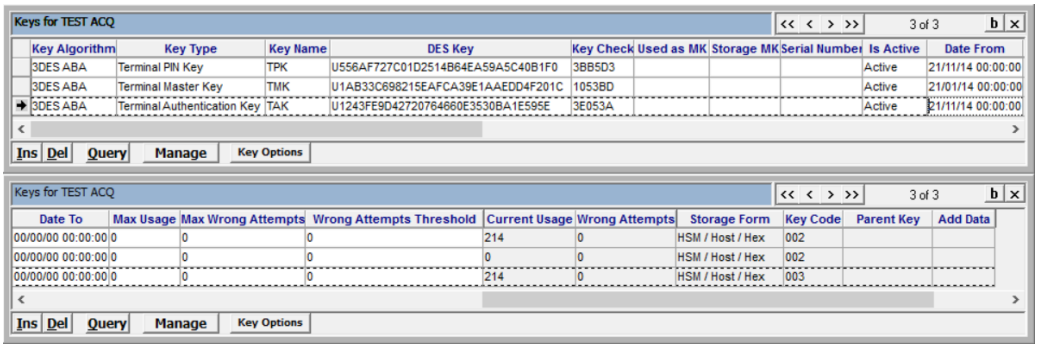

Fig. 24. Form for entering the cryptographic keys of POS terminals

In this form, records for the following key types must be created (for detailed information about the keys see the "Terminal Key Management" document):

- TMK (Terminal Master Key) is the key used to encrypt all the other keys of the device.
- TPK (Terminal PIN Key) is the key used to decrypt PIN blocks.
- TAK (Terminal Authentication Key) is the key used to generate and check the authenticity of transaction messages signatures through MAC (Message Authentication Code).

Form fields must be filled as follows:

- The encryption algorithm must be indicated in the *Key Algorithm* field.

  The 3DES ABA algorithm is used for POS terminal keys.

- In the *Key Type* field, indicate the key type.
- In the *Key Name* field, enter the name of the key.
- The *DES Key* and *DES Key Check* fields are used to store encrypted keys and their checksums.

  These fields can be filled in manually if a key was generated in an encryption device using console commands. These fields may also be filled in automatically if a key was generated by clicking the [Manage] button.
- The value in the *Used as MK* field indicates whether or not the key is the master key.
- The *Storage MK* field contains the name of the master key used to encrypt the given key.
- The *Serial Number* field specifies the key identifier determining its serial number among keys of the same type.
- The *Is Active* field is used to indicate whether the key is active.
- The *Date From* and *Date To* fields are used to indicate the key validity period. After the date in the *Date To* field, the key is considered expired and must be replaced.
- In the *Max Usage* field the maximum number of times the key may be used is indicated. After the key has been used the indicated number of times, it is considered expired and must be replaced.
- The *Max Wrong Attempts* field specifies the number of attempts to incorrectly use the key, after which it is blocked.
- The *Wrong Attempts Threshold* field specifies the number of attempts to incorrectly use the key after which an alert of such is made.
- The *Current Usage* field contains the current value of this key's usage counter.
- The *Wrong Attempts* field contains the counter for attempts to incorrectly use the key.
- The *Storage Form* field contains information about the form for storing the key in the database.
- The *Key Code* field contains the *Key Type* value shown in the form specified in the *Storage Form* field.
- The *Parent Key* key field contains a link to the parent key.
- The *Add Data* field contains additional data.
- The [Manage] button is used to automatically generate a key with an encryption device. When it is clicked, the "DES Management Mode" form for key generation is shown). Key management is described in the document "Generating and Storing POS Keys".

Configuring ATMs

The form for configuring ATMs (see Fig. 25) is opened by clicking the [ATM] button in the device contract form (see Fig. 21 in section "Creating New Device Contracts").

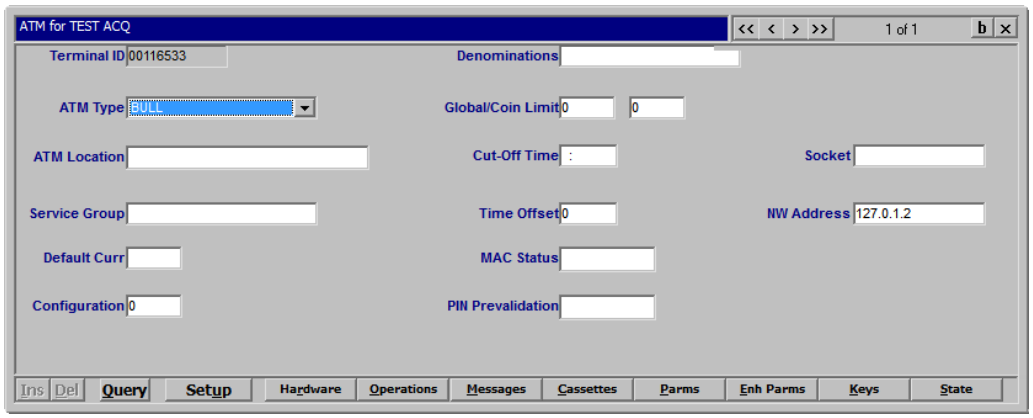

Fig. 25. Form for configuring ATMs

When this form is opened, the "State for…" form showing information about the device status automatically opens.

The ATM configuration form contains the following fields:

- In the *ATM Type* field, enter the ATM type registered in WAY4 (see the "ATM Types Dictionary" section of the "ATM Controller" document).
- In the *ATM Location* field, indicate the geographical location of the ATM.
- *Service Group* – drop-down list to select the name of a service group; the field may be used:
  - For additional classification of devices, to filter the list of devices in forms.
  - To indicate the service contract (if one has been configured for the service group) that may be considered the target of alert notifications on ATM status messages if a notification system has been configured. If no service contract has been configured for the service group or the *Service Group* field is left blank, the ATM contract becomes the notification target. The service contract is indicated in the *Service Contract* field of the table found at "Full → DB Administrator Utilities → Users & Grants → Service Groups" (see the "Configuring Standard Notifications" section of the "Alert Notification Messaging" document).
- The *Default Curr* field is used for defining the currency of operations involving the device. This field must be filled if the ATM software does not send transaction currency data to the processing centre.
- In the *Configuration* field, enter the identifier of the ATM configuration.
- The *Denominations* field is used to select the ATM's cash denominations from a list (see the "ATM Denominations Dictionary" section of the "ATM Controller" document).

- The *Global/Coin Limit* field defines the number of banknotes/coins the ATM may dispense during one operation. Its value depends on the technical design of the ATM's banknote dispenser.
- In the *Cut-Off Time* field, the time in 24-hour format before which the authorisations for transactions involving the ATM are registered under the current banking date. The time is set by the system clock of the ATM controller used by the device for communicating with WAY4™ system (see the "ATM Controller" document), without accounting for time zone difference.

This functionality should be used if the device is located in a different time zone than the acquiring bank, or pursuant to the bank's accounting requirements.

The value shown in the Cut-Off Time field will only be considered if the value of the USE_CUT_OFF_TIME parameter is "Y" (see the section "Acquiring parameters" in the document "WAY4™ Global Parameters").

- The *Time Offset* field is used to indicate time zone difference between the locations of the ATM and ATM controller.
- In the *MAC Status* field set the conditions for verification of message authentication codes, which are as follows:
  - "Mandatory" – message authentication code verification is mandatory.
  - "None" – no verification of message authentication code.
- In the *PIN Prevalidation* field, "None" must always be entered.
- The *Working Time* field determines time intervals during which the ATM operates (incoming requests are processed). Sequence numbers of days of the week (or number ranges) and time intervals during which the ATM can operate are specified in this field Instead of sequence numbers of days of the week, "W" and/or "H" can also be specified in the *Working Time* field. "W" means that the ATM only operates on days defined by the business calendar as working days (see the section "Business Calendar" of the document "WAY™ Dictionaries"). "H" indicates that the ATM operates on non-working days.

  Examples of possible values for the *Working Time* field:
  - "0900-2000;" – operations are permitted daily from 09:00 to 20:00.
  - "W:0900-2000;" – operations are permitted on working days from 09:00 to 20:00.
  - "H:0900-2000;" – operations are permitted on holidays/weekends from 09:00 to 20:00.
  - "1-3:0900-2000;" – operations are permitted from the first to the third day of the week (inclusively) from 09:00 to 20:00.
  - "4:0900-2000;" – operations are permitted on the fourth day of the week from 09:00 to 20:00.

An empty *Working Time* value indicates there are no time restrictions for the ATM's operation.

- In the *Socket* field, enter a mnemonic connection name unique within the system. For instance, when using the Motorola protocol adapter, enter a value in the YYYxxx format, where YYY is the internal address of the node+1 and xxx is the number of the protocol adapter. If the TCP/IP protocol is used, enter the port number.
- The *NW Address* field is used to indicate the network address of the ATM in an X.25 or TCP/IP network. For ATMs connected via TCP/IP protocol the presence of their network address in this field is mandatory.

The [State] button in the "ATM for…" (see Fig. 25) is used to open the form showing information about the device's state.

The *Status* field of this form shows the status of the device. The following status values are used for ATMs:

- "OK" indicates that the ATM is in service.
- "Information" indicates that the ATM is in service but one or more of its system devices have a "Warning" status.
- "Warning" indicates that the ATM is in service but one or more of its system devices have an "Error" status.
- "Not Configured' indicates that the device is out of service.
- "Error" indicates that the device is out of service due to an error.

The *Online* field of this form shows if the bank is connected ("Yes") or not connected "No" with the host.

The *Online Service* field of this form shows the identifier of the node processing messages and the name of the channel/service with which the connection is established.

To set the "OK" status for an ATM in the ATM configuration form, click the [Setup] button and select "Set to OK" in the context menu.

The [Hardware] button in the "ATM for …" form (see Fig. 25) is used to open the "Hardware for…" form (see Fig. 26) used to work with ATM components (see the section ATM Components (Hardware) of the document "ATM Monitoring").

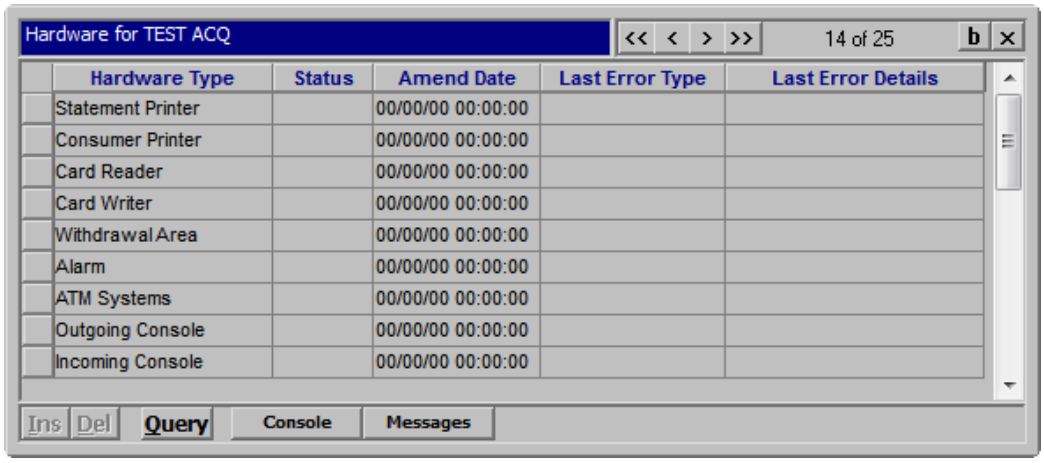

Fig. 26. Form for working with ATM components (hardware)

When a new device is created, the list of ATM components is filled in by clicking the [Setup] button in the "ATM for …" form (see Fig. 25) and selecting the context menu item "Check and Fill". Components can be deleted from this list. To restore the original list, select the "Check and Fill" item after clicking the [Setup] button.

For an ATM to assume the required status, select the row in the form and click the [Console] button. This will bring the "Console for <device name>" form to the screen (see Fig. 27).

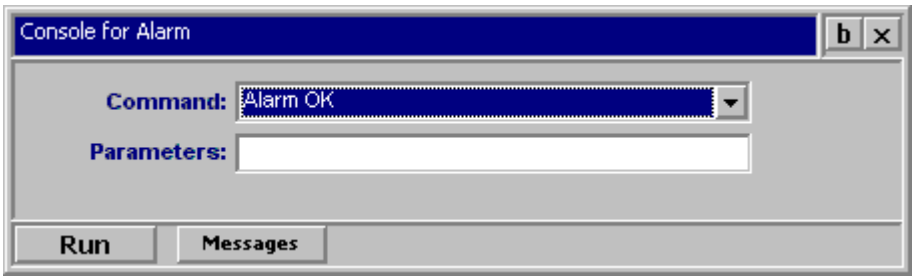

Fig. 27. Form for assigning statuses to ATM hardware components.

ATM management is described in more detail in the section "Changing ATM Status and Managing ATMs" of the document "ATM Monitoring".

The [Operations] button of the "ATM for …" form (see Fig. 25) is used to configure the allowed operations for ATMs (see the "Setting up the Executable Range of ATM Operations" section of the "ATM Controller" document). When a new device is created, this list of operations must be filled in by clicking the [Setup] button in the ATM configuration form and selecting the "Check and Fill" context menu item.Operations may be removed from the list and become unavailable for the ATM. The original list of allowed operations may be restored by clicking the [Setup] button and selecting the "Check and Fill" context menu item.

The [Parms] button is used for configuring ATMs (see "Device Parameters").

The [Enh Parms] button is used to set additional ATM parameters (see the section "Additional Device Parameters").

The [Cassettes] button is used to invoke the form containing information about the cassettes included in an ATM' s configuration (see the section "Currency Cassette Status" of the document "ATM Monitoring").

The [Cash In] button is used to invoke the form containing information about the cash accepting devices included in the ATM's configuration.

The [Keys] button is used to invoke the form for entering the ATM's cryptographic keys (see "Entering ATM Cryptographic Keys").

To activate an ATM contract, click the [Action…] button in the higher-ranking accounting contract and select the "Approve" menu item.

Entering ATM Cryptographic Keys

The [Keys] button in the ATM configuration form (see Fig. 25 in the section "Configuring ATMs") is used to open the "Keys for <ATM name>" form (see Fig. 28) used for entering ATM cryptographic key data.

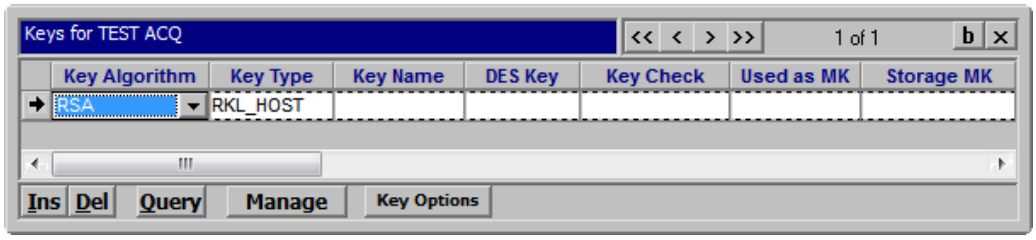

Fig. 28. Form for entering ATM cryptographic keys

In this form, entries must be created for the TMK (Terminal Master Key) – this is the key used to encrypt other device keys (for more details see the document "Terminal Key Management").

When filling the fields of this form, the same rules apply as for entering POS terminal cryptographic keys (see "Entering POS Terminal Cryptographic Keys").

Configuring Information Kiosks

The form for configuring information kiosks (see Fig. 29) is opened through by clicking the [Infokiosk] button in the device contract form (see Fig. 21 in section "Creating New Device Contracts").

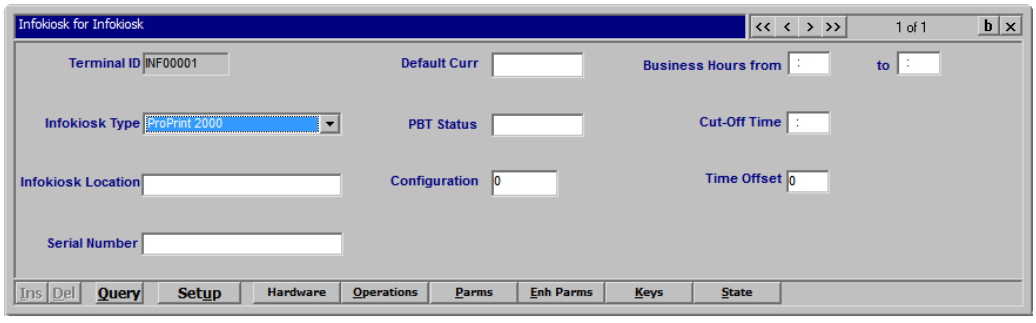

Fig. 29. Form for configuring information kiosks

When this form opens, the form "State for…" form showing information about the device status will open automatically.

Buttons and fields used in the kiosk configuration for (except for the [Hardware] button) are used the same way as buttons and fields in the form for configuring POS terminals (see the section "Configuring POS Terminals").

The [Hardware] button is used to open the form containing a list of information kiosk components (as in the form shown in Fig. 26 in the section "Configuring POS Terminals").

The [State] button is used to open the form showing device status. The following values are used for information kiosks:

- "OK" indicates that the kiosk is in service.
- "Information" indicates that the kiosk is in service but one or more of its system devices have a "Warning" status.
- "Warning" indicates that the kiosk is in service but one or more of its system devices have an "Error" status.
- "Not Configured' indicates that the kiosk is out of service.
- "Error" indicates that the kiosk is out of service due to an error.

To set the "OK" status for a kiosk, in the kiosk configuration form click the [Setup] button and select the "Set to OK" context menu item.

To activate a kiosk contract, in the form of the higher-ranking accounting contract, click the [Action…] button and select the "Approve" menu item.

Device Parameters

Device parameters are specified as follows:

- Parameters *Sic Code* and *Card Acceptor ID* are specified in the corresponding fields of forms for configuring acquiring contracts.
- Parameters *Merchant Name (43.s1)*, *Location (43.s2)*, *Country*, *State*, *ZIP*, and *City* are specified in the corresponding fields of the "Address for …" form (see Fig. 30) opened by clicking the [Address] button in the form for configuring the corresponding contract. Field *Type* of the form must contain "Address for Payment Scheme".
  - *Country* – country name according to the "Country Table" dictionary (see the section "Configuring Country Areas" of the document "WAY4™ Dictionaries"). This field is mandatory. Note that only a country with the "Yes" value in the *Use In Bank* field of "Country Table" dictionary may be specified in the *Country* field.
  - *ZIP* – postal (ZIP) code. The value may not exceed 10 characters (printable ASCII characters). This field is mandatory.
  - *State* – state (region) code. The value may not exceed 3 characters (Latin letters, digits, and spaces are permissible).
  - *City* – city name. The value may not exceed 32 characters (Latin letters, digits, and spaces are permissible). This field is mandatory.
  - *Merchant Name (43.s1*) – merchant name. The length of the name is limited by the value of the MERCHANT_NAME_LENGTH global

parameter (see the section "Acquiring" of the document "WAY4™ Global Parameters"). Printable ASCII characters with the exception of "\", "/", and ">" are acceptable. This field is mandatory.

For an ATM contract, the name of the ATM owner and/or address at which the ATM is installed is specified as the *Merchant Name (43.s1)* value.

- *Location (43.s2)* – merchant address. The value may not exceed 40 characters (printable ASCII characters with the exception of "\", "/", and ">"). This field is mandatory

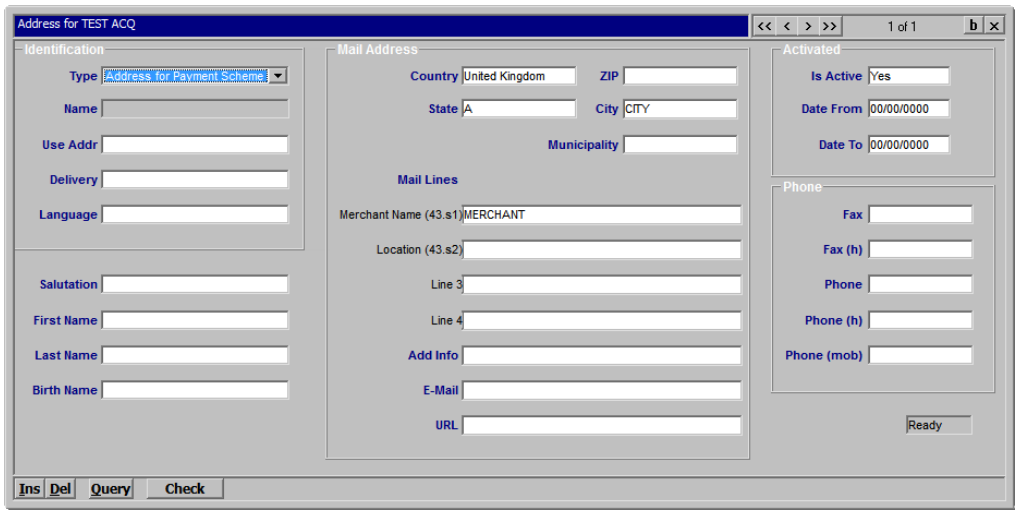

Fig. 30. Form for specifying a merchant address or a device location

Parameter values are inherited by subcontracts. If their own values are specified for subcontracts, the values will be used instead of inherited ones.

It is recommended that values be specified for main contracts and redefined for subcontracts only if it is absolutely necessary.

Entered data will be shown in the additional information field (lower field) of the "Parms for ..." form (see Fig. 31) in the following format "TRANS_LOCATION=<value of the *Location (43.s2)* field>;POSTAL_CODE=<value of the *ZIP* field>";

Device parameters are accessed through the "Parms for …" form (see Fig. 31) invoked by clicking the [Parms] button in the form for configuring the device (see Fig. 25 in the section "Configuring ATMs").

Fig. 31. Form for accessing device parameters

If icertain payment systems require setting specific device parameters shown in the "Parms for …" form, click the [Override] button in this form.

Device parameters specific to particular payment systems can be defined for the top contract and inherited by all device subcontracts after the main contract is approved (see the section "Creating New Device Contracts").

Clicking the [Overrides] button displays the "Overrides for Parms for …" form (see Fig. 32).

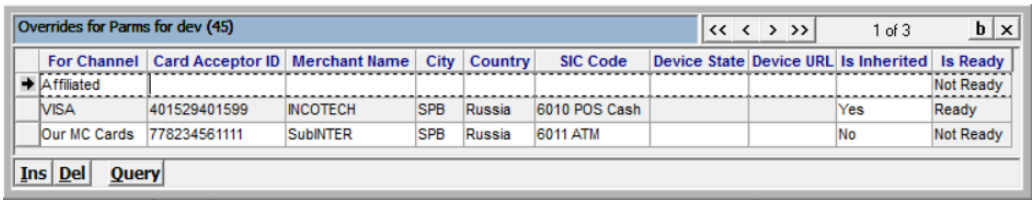

Fig. 32. The form for redefining the values of device parameters as required by certain payment systems

This form may contain a contract's own records as well as those inherited from a higher-ranking contract.

New records are added using the [Ins] button.

In the *For Channel* field, enter the name of a payment system's service channel that would require that the parameters be redefined.

When the value of the global parameter ENABLE_MERCH_NAME_VAR_LENGTH is "Y", the maximum length of the *Merchant Name* field value for the specific channel is limited by the value of the corresponding global parameter (see the section "Acquiring" of the document "WAY4™ Global Parameters").

The default values contained in the other fields are those entered in the "Parms for …" form. They should be altered as required by the payment system.

The *Is Inherited* field indicates whether parameters are inherited from the parent contract:

- "Yes" indicates that the record inherits a higher-ranking contract's parameters. If the original record is edited or deleted for the higher-ranking contract, the corresponding changes are reflected in the current record (after the main contract has been approved). Record fields with *Is Inherited*="Yes" cannot be edited.
- "No" is used to decline inheriting a higher-ranking contract's parameters. In this case, changes to the original record for the higher-ranking contract do not influence the current record after the main contract has been approved. Record fields with *Is Inherited*="No" can be edited.

Additional Device Parameters

The "Enh Parms for …" form (see Fig. 33) is used to set additional device parameters.

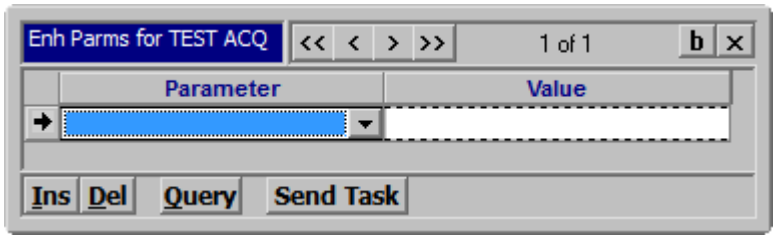

Fig. 33. Form for entering additional device parameters

This form contains the following fields:

- *Parameter* – used to enter the parameter name.
- *Value* – used to enter the parameter value.

The [Send Task] button is used in custom procedures.

Creating New ATM Retail Contracts

ATM Retail contracts are used to support additional online operations such as payments for mobile communications services, prepaid services, etc. through devices like POS terminals or ATMs.

Contracts of this kind are created as subcontracts of accounting contracts registered for mobile phone operators, providers of prepaid services, etc. When an ATM Retail contract is created, a reference must be made to the device through which the services will be dispensed. A WAY4 ATM Retail contract is referred to as a related contract because it is related to a device contract.

To create a related contract, a corresponding contract relation type must be first registered in the system. In this case, a contract relation identifies the payment target, such as a mobile phone operator or a prepaid services provider (see Fig. 34).

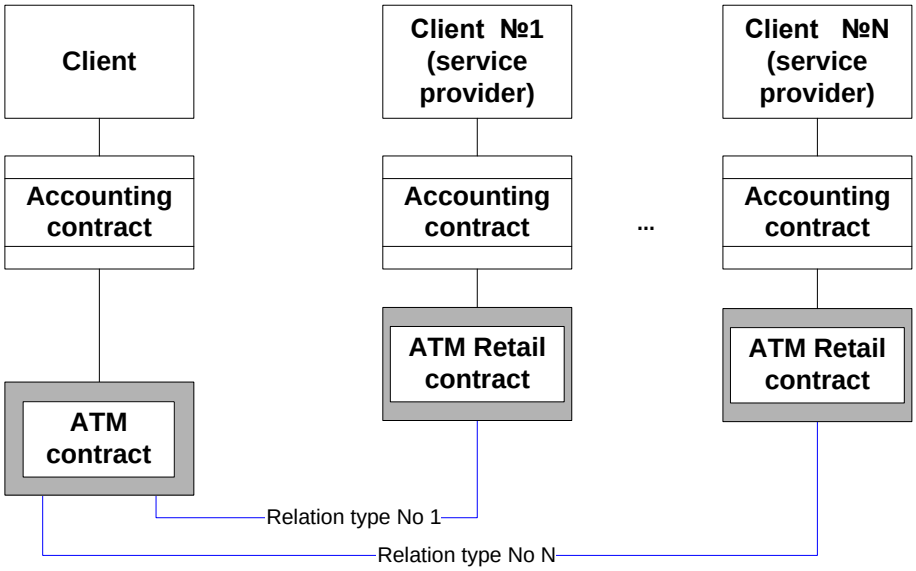

Fig. 34. Relations between ATM Retail contracts and ATM contracts

In order to register a new contract relation type, select the "Full → Configuration Setup → Accounting Setup → Contract Relations" user menu item, which will invoke the "Contract Relations" form (see Fig. 35).

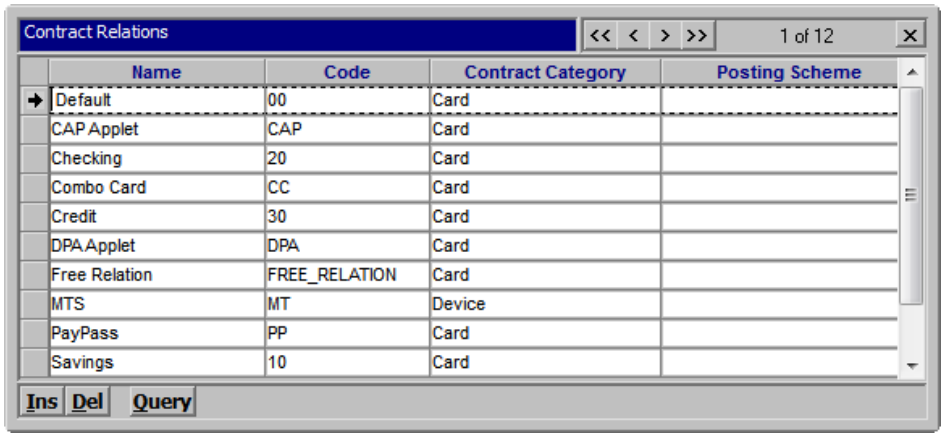

Fig. 35. Form for registering contract relation types

In this grid form, create a row by clicking the [Ins] button and fill the fields as follows:

- The *Name* field contains the name of the relation type. It is recommended that the ID of a service provider be used here.
- The *Code* field contains the code of the contract relation type. This field is optional.
- In the *Contract Category* field, select the "Device" value from the list.

To create an ATM Retail contract, click the [ATM Retail] button in the form of the accounting contract created for the provider of a certain service (see Fig. 13 in the section "Creating New Accounting Contracts"). Click the [Ins] button in the empty form that opens. This will invoke the form for creating ATM Retail contracts (see Fig. 36).

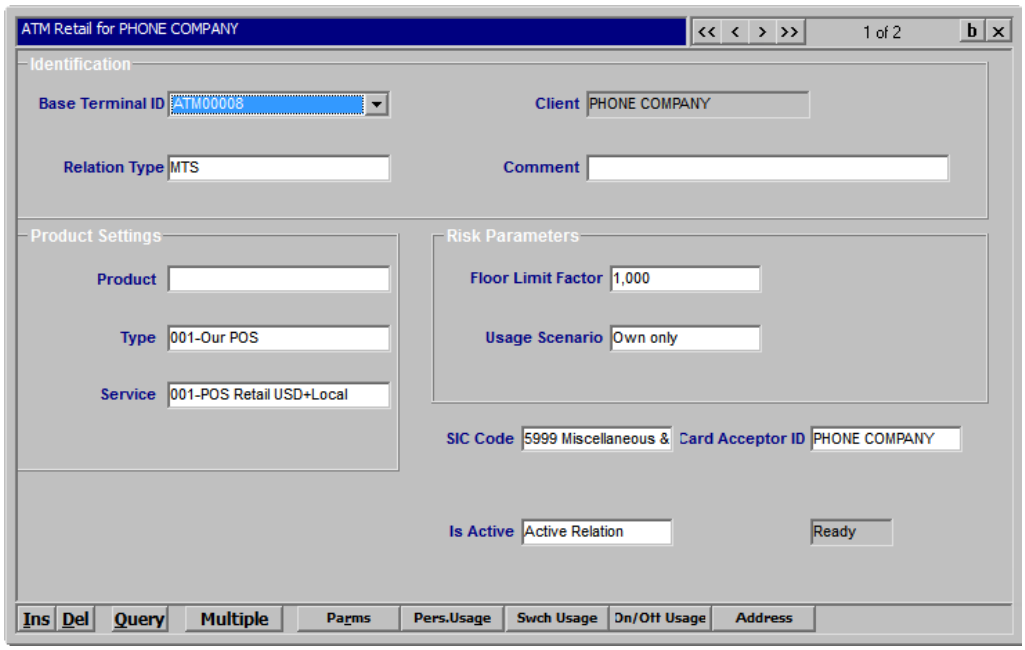

Fig. 36. Form for creating ATM Retail related contracts

This form contains the following fields:

- *Base Terminal ID* is the field that allows users to select a device ID out of the list. The created contract will be a related contract for the contract of the selected device.
- *Relation Type* is the field for selecting from a list a relation type registered in the "Contract Relations" table.
- *Comment* is the field for entering any additional information about the contract. This field is optional.
- *Product* is the field for selecting a name registered for this Product type from a list. When this field is filled, the *Type* and *Service* fields may be left blank.
- *Type* is the field for selecting the required contract subtype out of the list. It is recommended that a value corresponding to the subcontract of the POS terminal (Our POS) be entered in this field.
- *Service* is the field for selecting the contract's Service Package out of the list. It is recommended that the value corresponding to the Service Package of the retail POS terminal (POS Retail) be selected.
- *Floor Limit Factor* – this field is not used for ATM Retail contracts.
- *Usage Scenario* is the field for selecting a Usage Limiters scenario from a list. When the "Own only" value is selected, only Usage Limiters set for this contract are considered. When the "Main and Own" value is selected, the Usage Limiters set for higher-ranking contracts will be considered also.
- *SIC Code* – a drop-down list for selecting the merchant category according to type of business; this list is generated on the basis of the "SIC Group" dictionary (Full → Configuration Setup → Main Tables → SIC Groups).
- *Card Acceptor ID* – field for entering the Merchant ID. This number must contain no more than 15 digits and be unique in the processing centre.
- *Is Active* is the field used to activate the relation type selected in the *Relation Type* field. To activate the relation, the "Active Relation" value must be selected in this field. If the "Inactive Relation" value is selected, the relation between the contracts becomes deactivated and the online operation may not be performed.

The [Parms] button of this form is used to access additional parameters of the ATM Retail contract (same as the window shown in Fig. 31 in the section "Device Parameters"). After an ATM Retail device contract has been created, its parameter values can be inherited as follows:

- *SIC, Card Acceptor ID* – from the higher-ranking account contract, if the corresponding values were not specified in "ATM Retail for…" form fields.
- *Merchant Name* and *URL* – from the upper-level acquiring contract.
- *Country, City, Location, Postal Code* and *Phone* – from the related device contract.

These parameters can be redefined separately for each ATM Retail contract through the "Address for …" form accessed by clicking the [Address] button.

After changing inherited parameter values, approve the contract hierarchy containing ATM Retail contracts.

The buttons [Pers.Usage], [Swch Usage], and [On/Off Usage] are used to work with contract usage limiters (see the section "Usage Limiters").

After the "Parms for <client name>" form has been filled out, the newly created ATM Retail contract must be approved by clicking the [Approve] button in the form of the parent accounting contract.

Remember that an individual ATM Retail contract must be created in the system for each online operation supported by a device. For instance, 200 related ATM Retail contracts must be created for 100 ATMs supporting two separate online operations each, that is, 2 ATM Retail contracts for each ATM contract.

Copying ATM Retail Contract Parameters

To simplify the procedure for creating related contracts, the system allows users to copy the parameters of once created ATM Retail contracts. This allows users to create similar ATM Retail contracts for all the required ATM contracts at once.

The parameters of a created ATM Retail contract are copied by clicking the [Multiple] button in the form where the ATM Retail contract was created (see Fig. 36 in the "Creating New ATM Retail Contracts" section). This opens a window containing the list of ATM contracts in its *Copy Regime* field (see Fig. 37).

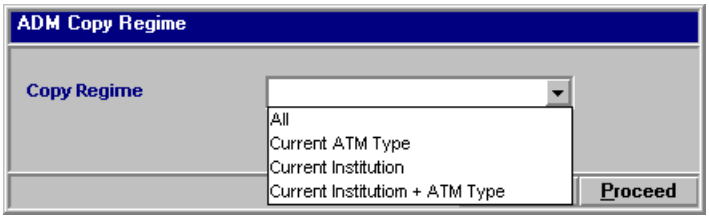

Fig. 37. List of values for copying ATM Retail contract parameters.

The selection list contains the following values:

- "All" means that the parameters of this ATM Retail contract are to be copied to the contracts of all ATMs registered in the system.
- "Current ATM Type" means that the parameters of this ATM Retail contract are to be copied to the contracts of all ATMs of the same type as the ATM whose contract is related to this contract.
- "Current Institution" means that the parameters of this ATM Retail contract are to be copied to the contracts of all ATMs registered in this financial institution.
- "Current Institution + ATM Type" means that the parameters of this ATM Retail contract are to be copied to the contracts of all ATMs of this

institution as long as they are of the same type as the ATM whose contract is related to this contract.

Having selected the required element of the list, click the [Proceed] button to start the copying procedure.

After the parameters of the ATM Retail contract have been copied, the changes must be approved by clicking the [Approve] button in the form of the parent accounting contract.

Creating New Service Card Contracts

A service card is a plastic card with a magnetic strip used to identify a user allowed to work with acquirer devices. For instance, a service card is needed to replenish ATM cassettes and perform operations for crediting cardholder accounts or returning purchases through a POS terminal.

The contract of a service card may be created as a subcontract of an accounting contract or as a subcontract of a device contract.

When the contract of a service card is a subcontract of an accounting contract, the card is valid for servicing all devices whose contracts are subcontracts of that accounting contract. If the contract of a service card is a subcontract of a device contract, the card is valid for servicing that device only.

To create a service card contract, click the [Serv Cards] button in the accounting contract form (see Fig. 13 in the section "Creating New Accounting Contracts") or in the device form (see Fig. 21 in section "Creating New Device Contracts"). Then click the [Ins] button in the "Serv Cards for <contract name>" form that opens.

This will invoke the service card contract form (see Fig. 38).

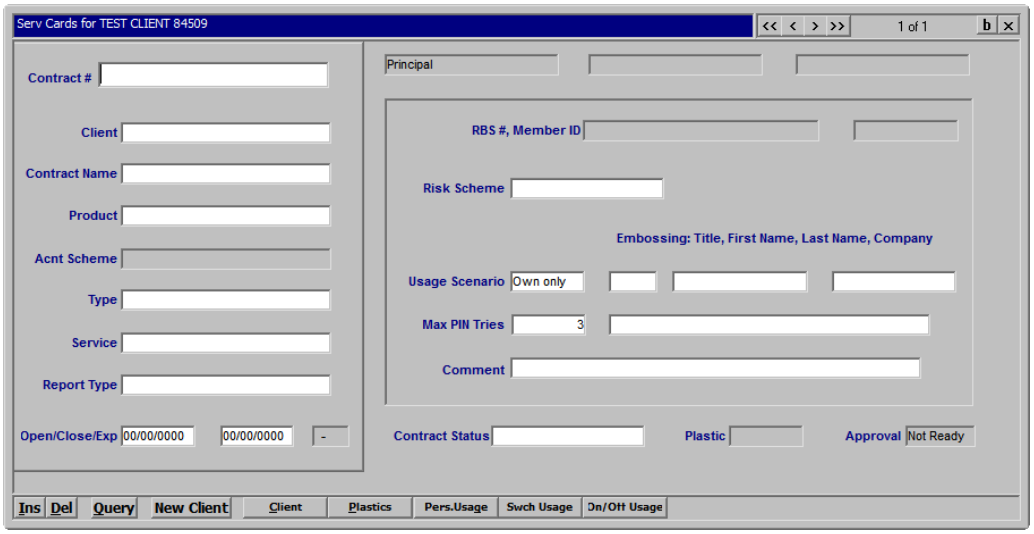

Fig. 38. Form for creating service card contracts

The editable fields of this form are filled on the basis of a client application or an agreement signed with a merchant organisation, in accordance with the policies of the acquirer bank.

The set of fields in the left-hand part of the form corresponds to the same set of fields in the accounting contract.

The right-hand part of the form contains fields belonging to the service card.

- *Risk Scheme* – risk scheme.
- *Usage Scenario* – the value of this field specifies the rule for considering limits when processing an authorization request (for more information about limiters, see "Usage Limiters"):
  - "Main and Own" – the set of limiters for the contract using this Product as well as for its main contract is checked.
  - "Own only" – only limiters set for the contract using this Product are checked.
- *Max PIN Tries* – maximum number of PIN attempts.
- *Embossing* –the fields of this group are used to enter information for embossing on the card.
- *Comment* – comments.
- *Contract Status* – status of the service card contract. The contract status affects the possibility of making operations with the card.

The [Client] button is used to open forms for viewing client data (in this case – about the service card user).

The [Plastics] button is used to open the form containing information about plastic cards that can be issued (see the section "Issuing Service Cards").

The buttons [Pers.Usage], [Swch Usage], and [On/Off Usage] are used to work with contract usage limiters (see the section "Usage Limiters").

Once all the service card contract data have been entered, to activate the contract, click the [Approve] button in the parent accounting contract form. The card will automatically be marked for issuing.

If the the contract is approved successfully, a confirmation message will appear on the screen and "Ready" appears in the *Approval* field of the "Serv Cards …" form.

If incorrect or incomplete data have been entered, approval of the contract will be interrupted and the system will generate an error message.

If several devices with separate accounting contracts must be serviced using one service card (for example, devices belonging to one branch), do as follows:

- Create a separate acquiring accounting contract (see the section "Creating New Accounting Contracts").
- Issue a service card for this contract (see the section "Issuing Service Cards").
- For all accounting contracts of devices to be serviced with one service card, create a link with this service card's accounting contract in a "Liability" hierarchy (see "Creating New Accounting Contracts"). Set the "Reporting " value in the *Liab Category* field.

Usage Limiters

In the Acquiring Module forms for configuring contracts of various types, the following buttons are used to access usage limiters:

- The [Pers. Usage] button is used to configure custom usage limiter templates (see section "Individual Templates" in the "Usage Limiters" document)
- The [Swch Usage], [On/Off Usage] buttons are used to manage all usage limiters for the contract (both with templates configured in Service Packages and custom ones on the contract level). For more information, see the section "Managing Limiters" of the document "Usage Limiters".

Contract Custom Parameters

Detailed information about working with contract and client custom parameters is provided in the section "Contract and Client Custom Parameters" of the document "WAY4™ Client and Contract Classifiers".

The "Contract Parm for <contract number>" form is used to work with acquiring module contract parameters. This form is opened by clicking on the [Contract Parm] button in the "Acquiring Contracts" form (menu item "Acquiring → Acquiring Contracts → Acquiring Contracts").

The "Contract Parm for <contract number>" form does not support work with custom parameters for tariffs or calculated parameters.

To add a new parameter, do as follows:

1. Register a custom parameter in the "Contract Parameters" form (see Fig. 39), menu item "Full → Configuration Setup → Common Handbooks → Contract Parameters".

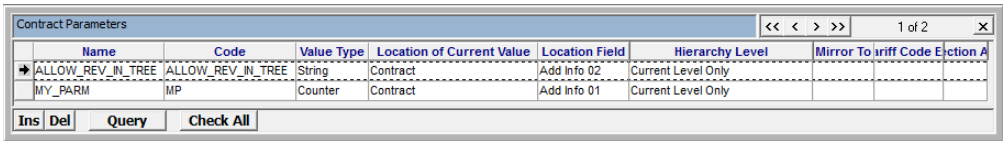

Fig. 39. Registering a contract parameter

2. Select the required contract in the "Acquiring Contracts" form (menu item "Acquiring → Acquiring Contracts → Acquiring Contracts") and click on the [Contract Parm] button.
3. In the "Contract Parm for <contract number>" form (see Fig. 40), select the parameter created earlier, and click on the [Edit] button.

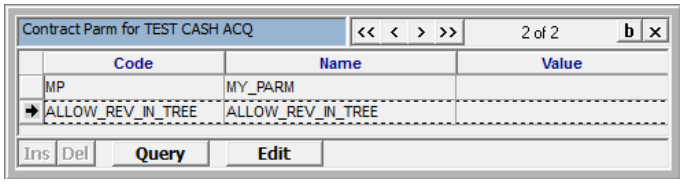

Fig. 40. List of conract parameters

4. In the *New Value* field of the "Contract Parameter – Set <data type>" form (see Fig. 41), specify the parameter value and click on the [Proceed] button to save the changes to the database.

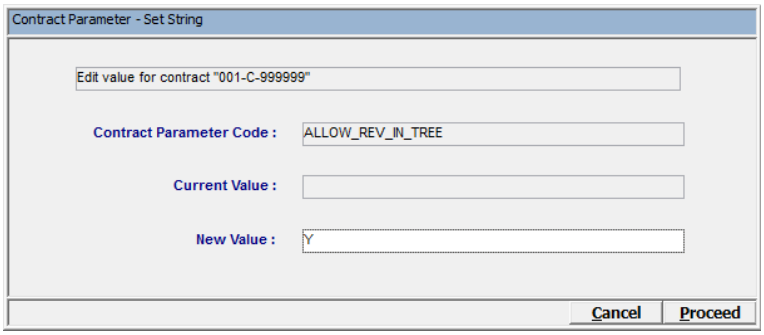

Fig. 41. Entering the value of a contract parameter

The description above uses the example of adding the ALLOW_REV_IN_TREE custom parameter. This parameter allows the same parameter of a financial institution or the same global parameter to be redefined for a certain contract (see the description of the global paramenter "ALLOW_REV_IN_TREE" in the "Acquiring" chapter of the document WAY4™ Global Parameters"). The parameter value is only analysed if contracts participating in transactions have one common main contract. If ALLOW_REV_IN_TREE="Y" is set for a contract that participated in the original transaction (Advice), this transaction can be reversed regardless of the value of this parameter for the contract participating in the reversal.

Closing Contracts

To close a contract registered in the acquiring module, do as follows:

- In the form for editing contract data, set the appropriate value in the *Contract Status* field:
  - For a main account contract or subcontract: "Account Closed".
  - For a device contract: "Device Closed".
  - For a service card contract: "Card Closed"
- In the *Closed* field, specify the contract's closing date.
- Click the [Approve] button in the form for the main contract in the hierarchy.

These actions prohibit authorisations for contracts for which the closed contract is higher up in the hierarchy, although the statuses of these contracts will remain unchanged.

On the specified closing date, when the CDU (Contracts Daily Update) procedure is performed, "Closed" will be set in the *Approval* field and operations with this contract (including the hierarchy below it) will be prohibited.

Chapter 3. Entering Sales Slips Manually

To enter sales slip packages, use the menu items in the "Full → Documents Input & Update → Batch Documents" user menu group.

It is recommended that the "Full → Documents Input & Update → Batch Documents → Merchant Batch New" menu item be used to enter new sales slips.

When this item is selected, the "Get Transaction Type" form comes up on the screen (see Fig. 42). It is used to indicate the type of the financial transaction reflected in the sales slip or slips being entered.

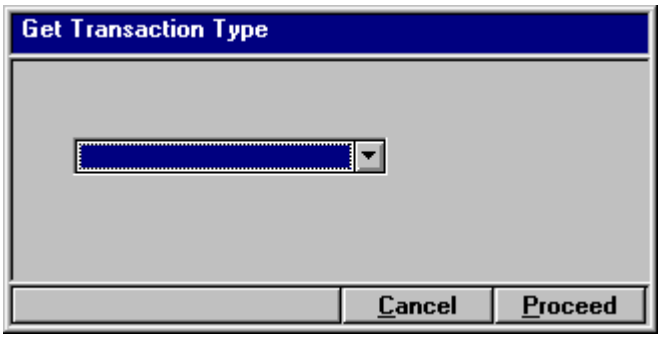

Fig. 42. Form for indicating the types of financial transactions while entering sales slips

When entering the type of a financial transaction, the following values may be selected:

- *Cash* - cash dispense transaction.
- *Credit* – the return of a purchase or other transactions crediting a cardholder's account.
- *Retail* – a retail operation.
- *Unique* –operations executed at casinos, etc.

After indicating the transaction type, click the [Proceed] button to invoke the "Merchant Batch - New" form (see Fig. 43).

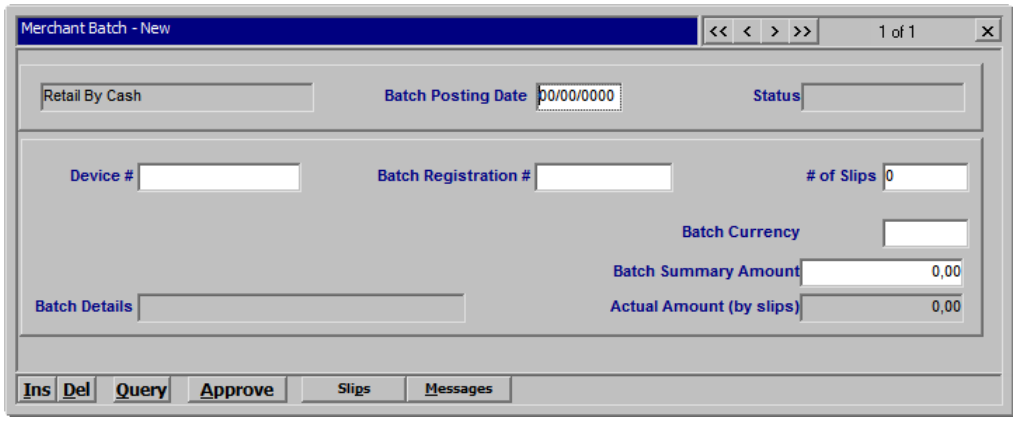

Fig. 43. Form for entering batches of sales slips

This form contains the following editable fields:

- *Batch Posting Date* is the banking date on which the accounts of the contracts are either credited or debited as the result of the transactions. If no date is indicated, the current banking date is used instead.
- *Device #* is the number of the device, which is the value entered in the *Terminal ID* field of the form of the contract of the device involved in the transaction.
- *Batch Registration #* is the registration number of the batch of sales slips. This field is optional.
- *# of Slips* is the number of sales slips in the batch.
- *Batch Currency* is the currency of the transactions in the batch.
- *Batch Summary Amount* is the total amount of all the transactions in the batch.

After the "Merchant Batch - New" grid form has been filled out, data concerning the slips in the batch should be entered. To do that, invoke the "Slips for Merchant Batch - New" form (see Fig. 44) by clicking the [Slips] button.

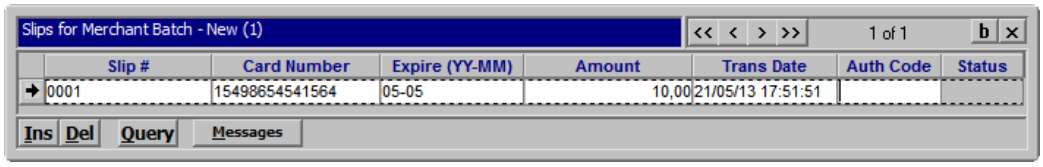

Fig. 44. Form for entering data concerning the slips in a batch

By default, there is only one row in this form. The required number of rows can be added by clicking the [Ins] button. The number of lines must be the same as the number of slips indicated in the *# of Slips* field of the "Merchant Batch - New" form.

The following data must be entered in the fields of each line of the "Slips for Merchant Batch - New" form:

- In the *Card Number* field, enter the number of the bankcard.
- In the *Expire* field, enter the expiration date of the card. This field may be left blank if the transaction is completed using a card issued and acquired by the same bank.
- In the *Amount* field, enter the amount of the transaction reflected in the slip.
- In the *Trans Date* field, enter the date of the transaction.
- In the *AuthCode* field, enter the authorisation code. If the transaction amount is within the "Floor Limit" and requires no authorization, the field is not filled in.

It should be remembered that the total amount of all the entered transactions must be the same as the amount entered in the *Batch Summary Amount* field of the "Merchant Batch - New" form.

When the "Slips for Merchant Batch - New" form has been filled out, register the batch of slips by clicking the [Approve] button in the "Merchant Batch - New" form.

If the registration is successful, the slip batch and every slip in it will assume the "Waiting" status.

If incorrect data have been entered, the slip batch registration will be interrupted; the rejected slips will assume the "Decline" status and an error message will be displayed on the screen.

If a batch is rejected due to an error in its main document, click the [Messages] button of the "Merchant Batch - New" form to find out the reasons for the rejection.

If a batch is rejected due to an error in one of its slips, put the cursor on the line of the rejected slip and click the [Messages] button of the "Slips for Merchant Batch - New" form to find out the reasons for the rejection.

Chapter 4. Entering Client and Contract Information from Files

It is possible to enter into the database information about new clients and contracts from special WAY4™ format files (see document "Importing and Exporting Advanced Applications (XML Format).").

To start the procedure of importing applications from files, select the user menu item "OpenWay → Advanced Applications R2 → Application Processing → Acquiring XML Applications Import".

As a result, the window "Select Files" will be displayed with a list of files prepared for import (see Fig. 45).

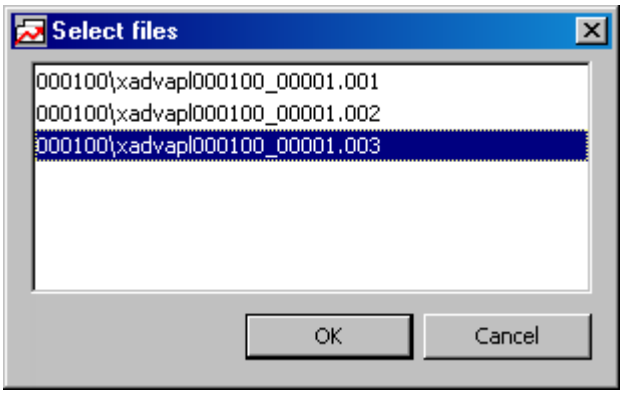

Fig. 45. List of files for import

Select files from this list by clicking on the file name while holding down the <Ctrl> key.

After selecting the required files, click [OK].

If the selected file has already been imported, an error message will be displayed (see Fig. 46).

Fig. 46. Message about an attempt to import a file that has already been loaded

Monitoring of application file processing is described in the section "Monitoring File Processing" of the document "Advanced Applications R2".

Chapter 5. Entering Sales Slips from External Files

Transaction data may be loaded into the database from special format files generated from payment documents (see the document "CBS Interface (UFX Format)").

File format and the parameters of pipes for importing documents is described in the document "WAY4™ UFX Interchange").

To import incoming documents from the banking system, use the menu group "Full → Core Banking Interface → CBS. Daily Procedures → CBS. Inward Processing". The import procedure is described in the section "Importing Documents from the CBS" of the document "CBS Interface (UFX Format)").

Analysis of the results of importing slips from external documents is described in the section "Analysing File Import Results" of " of the document "CBS Interface (UFX Format)").

Chapter 6. Issuing Service Cards

A service card is issued after its card contract is registered in the DB (see "Creating New Service Card Contracts"). Data needed to issue a service card is generated by a process called card marking.

Card marking changes the status of the card contract and creates a record in the DB, which is used when sending data for processing to the PIN Management module.

Marking Cards for Issuing

To mark a card, use the menu items in the "Acquiring → Service Card Production" user menu group.

Before marking cards, the user should make sure that the required financial institution and client category appear in the status line. If the user has been granted the privilege of working with several financial institutions, the required values are set by selecting the "Acquiring → Service Card Production → Set Financial Institution" user menu item.

To mark cards, the "Acquiring → Service Card Production → Mark/Unmark by 1 Service Card" user menu item must be selected.

This will invoke the "Mark/Unmark by 1 Service Card" grid form (see Fig. 47). Its lines represent service card contracts registered in the database.

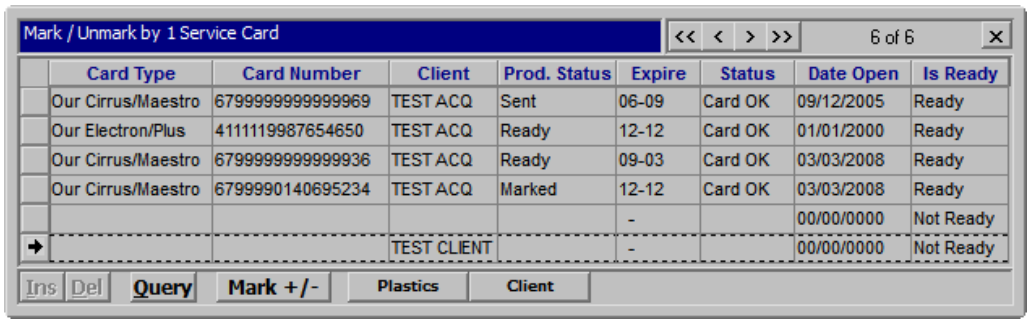

Fig. 47. The grid form for marking service cards

To mark a card, move the cursor to the line representing the needed card contract and click the [Mark +/–] button. When this is done, the parameters of the selected card contract are checked.

If for issuing a card the corresponding Service is not specified in the Service Package of the card contract, a Production Event code must be specified. This can be done in one of two ways:

- When configuring the service card contract subtype, by specifying a tag in the *Add Parms* field (see the description of the tags NEW and RENEW in the section "Tags in Products and Contract Subtypes" of the document "Products and Contract Subtypes").

- Using the global parameter CARD_PROD_ENABLED_EVENTS (see the section "Card Production" of the document "WAY4™ Global Parameters").
- If a value other than "Card OK" is found in the contract status field, card marking is cancelled and an error message appears on the screen (see Fig. 48).

Fig. 48. Error message during card marking

If the parameters check is successful, the "Marked" value appears in the *Prod. Status* field of the selected line of the form and in the field of the same name of the card contract.

When a card or cards have been marked, an entry in the "Plastics for <card_number>" form is created (see Fig. 49). This entry is used when sending data for processing to the PIN Management module.

The "Plastics for…" form is invoked by clicking the [Plastics] button in the "Mark/Unmark by 1" form or the corresponding card contract form (see the section "Creating New Service Card Contracts").

Fig. 49. An entry made in the "Plastics for…" form after the marking of a card

After a card has been marked, the default value in the *Status* field of the newly generated entry in the "Plastics for …" form is "Inactive". Certain fields of such entries may be edited after clicking the [Change] and [Update Order] buttons.

When the [Change] button is clicked, the "Production Type" form is invoked (see Fig. 50). In this form, the user may change the issuing parameters of a card.

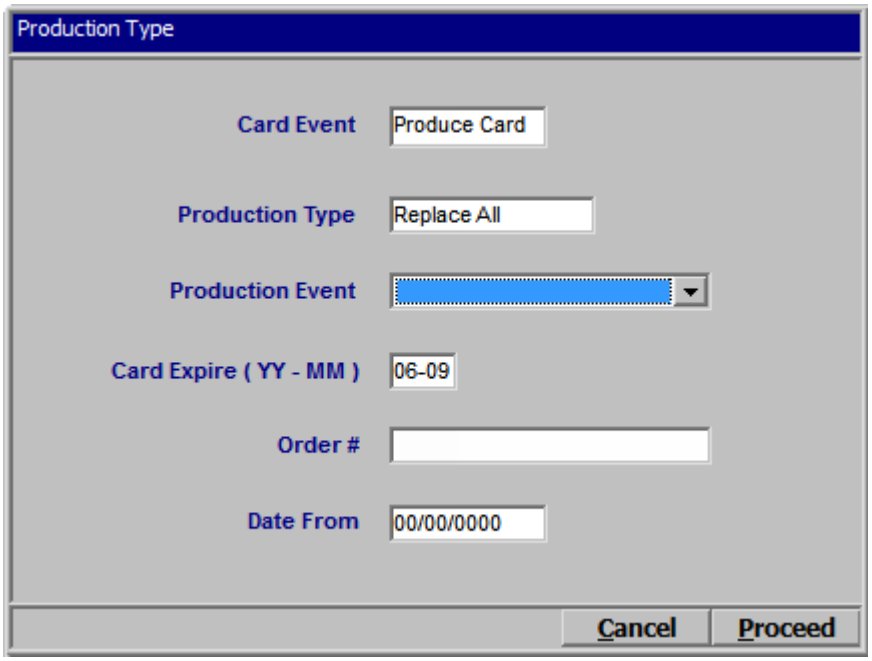

Fig. 50. The form for changing the issuing parameters of cards

The "Production Type" form allows users to change the reason for issuing a service card (*Card Event* field), the production type (*Production Type* field, the Event for production type (*Production Event* field), the card expiry date (*Card Expire* field) and to enter the card production order number in the *Order#* field.

When filling the *Production Type* field, the following values may be selected:

- "Replace All" will issue a service card and a PIN mailer when a new card is issued.
- "Replace Plastic" – issue plastic only, for example, when reissuing an expired card.
- "Replace PIN" – reprint PIN mailer (this is only possible by special agreement with the system vendor).
- "Replace CVV" – issue plastic with a new CVV.
- "Reorder PIN" – issue a new PIN.
- "Replace Add Parms" – issue additional parameters for a plastic card, for example, PIN2.
- "Chip Data Only" – calculate cryptographic values for smart cards (no PIN is generated and no PIN mailer is printed).

Clicking the [Update Order] button of the "Plastics for …" form opens the "Update Order for …" form, which is used to edit the order parameters of a service card (see Fig. 51).

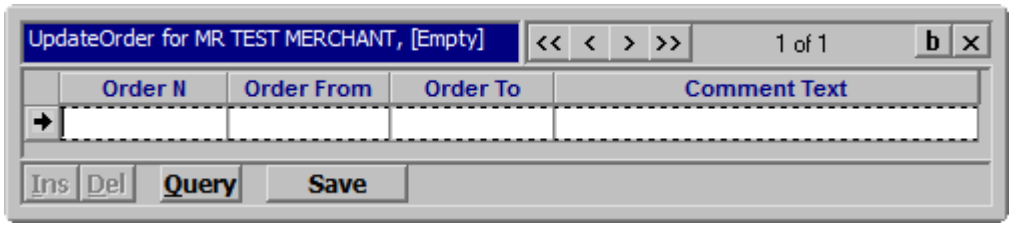

Fig. 51. The form for editing the order parameters of a service card to be issued

The following fields of this form should be filled:

- *Order N* is the card issue order number.
- *Order from* is the name of the office the order comes from.
- *Order to* is the name of the office to which the issued card and PIN mailer must be sent.
- *Comment Text* contains comments about the order.

After the issuing order parameters have been edited, click the [Save] button to save the entered values and close the form window.

It should be remembered that when users activate a card contract by clicking the [Approve] button in the form of the higher-ranking accounting contract, the card is marked automatically (see "Creating New Service Card Contracts").

To cancel card marking, put the cursor in the required row of the "Mark/Unmark by 1 Service Card" grid form and click on the [Mark +/–] button. This activity is only available if plastic for the card has not yet been issued, and *Production Status* of the application to produce the card is not "Locked" or "Ready". The "Marked" value in the *Production Status* changes to "Ready" and the corresponding record will be deleted from the "Plastics for <…>" form.

Exporting Card Data for Processing by the PIN Management Module

Data prepared by marking are exported to the PIN Management module by selecting the user menu item "Acquiring → Send/Receive Production Batches → PIN Management File Export".

After data have been exported, "Sent" will be set in the *Plastic* field of the form for card contracts whose information was sent to the PIN Management module for processing.

If data that have already been exported must be re-exported, select the user menu item "Acquiring → Send/Receive Production Batches → Resend PIN Management File".

The "Resend PIN Management File" grid form will be displayed (see Fig. 52). This form contains a list of files sent to the PIN Management module for processing.

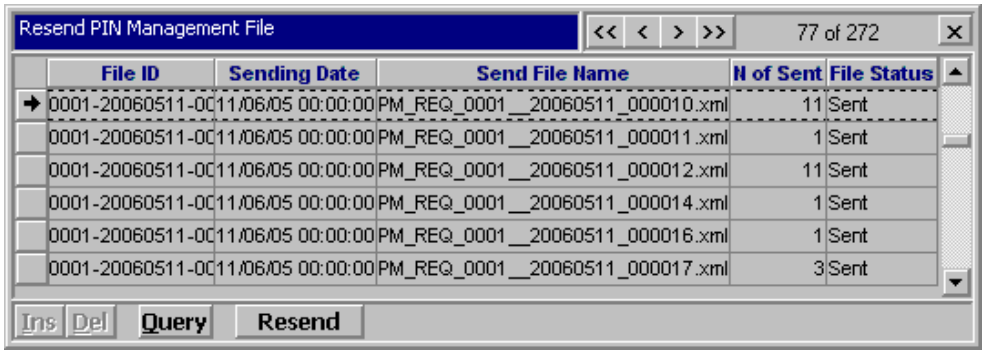

Fig. 52. Form for selecting files to be resent to the PIN Management module

In addition to fields with a sent file's parameters, this form contains the following fields:

- *N of Sent* – number of service cards whose data were exported in the corresponding file.
- *File Status* – status of an exported job file:
  - "Sending" - the job file has been prepared for sending to the PIN Management module, but has not been set.
  - "Sent" – the job file has been sent to the PIN Management module.
  - "Received" – the job file was processed by the PIN Management module and a file with the results of processing has been sent to the acquiring module.
  - "Receiving" – the job file was processed by the PIN Management module, but an error occurred during processing.
  - "Rolled Back" – processing of the file was cancelled.
  - "Refreshed" – the job file was resent.

To resend a file, put the cursor on the required row and click on the [Resend] button.

If for some reason it is necessary to cancel the results of exporting data for processing by the PIN Management module, select the user menu item "Acquiring → Send/Receive Production Batches → Undo PIN Management Files".

When this menu item is run, the "Undo PIN Management Files" form will be displayed on the screen (see Fig. 53). This form contains a list of files sent to the PIN Management module for processing.

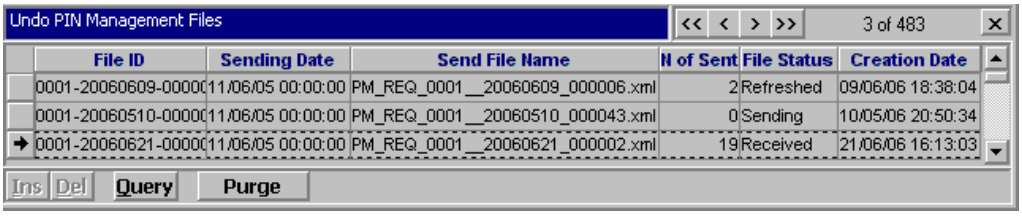

Fig. 53. List of files sent to the PIN Management module for processing

The fields in this form are the same as those in the "Resend PIN Management File" form.To cancel an exported file's jobs, put the cursor on the row corresponding to the required file and click on the [Purge] button.

After the exported file's jobs have been cancelled, the "Marked" value will be restored in the *Plastic* field of the forms for those card contracts whose card issuing jobs were cancelled.

Importing Card Data after Processing by the PIN Management Module

Service card data received after processing by the PIN Management module are imported by selecting the user menu item "Acquiring → Send/Receive Production Batches → PIN Management Response File Import".

This starts a process for importing data, during which the user should select the names of the files being imported in the "Load Files" form (see Fig. 54).

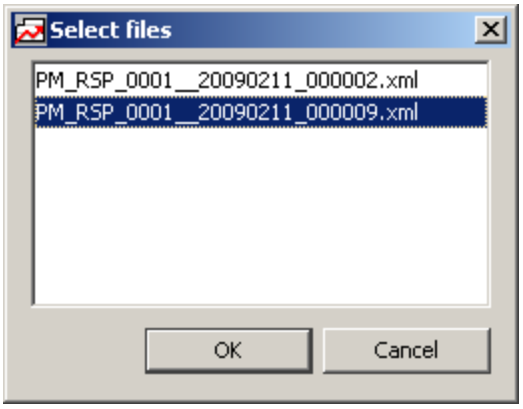

Fig. 54. Selecting files for importing data from the PIN Management module

Files for import are selected from this list by clicking on the file and pressing <Ctrl>.

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

When data are imported after processing by the PIN Management module, the "Inactive" value of the *Status* field in the "Plastics for <…>" form for cards whose data were imported will change to "Active" (if data were successfully processed in the PIN Management module) or "Decline" (if an error occurred when processing data).

After importing data from the PIN Management module, the "Sent" value in the *Plastic* field of the forms for card contracts whose information was received will change to "Ready".