



Operation Manual

DB Manager. Menu Editor

03.50

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The following notation is used in the manual:

- Screen form field labels are shown in *italics*.
- Screen form button labels are shown in square brackets, such as [Approve].
- Sequences for selecting user menu items are shown using arrows as follows: "Issuing → Contracts Input & Update".
- Sequences for selecting system menu items are shown using arrows as follows: "Database → Change password".
- Key combinations in DB Manager are shown in angular brackets, for example <Ctrl>+<F3>.
- Variables that differ for each local instance, for example, directory and file names, as well as file paths, are shown in angular brackets; for example, <OWS_HOME>.

Warnings and information messages are indicated as follows:



Warnings about potentially hazardous situations or actions.



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

1 Editing the user menu

This section contains basic definitions and describes how to edit the user menu.



Note that for DB Manager applications, it is forbidden to edit the structure of the standard menu folder (edit user menu groups and items) provided with the system. This menu folder is called "OpenWay".

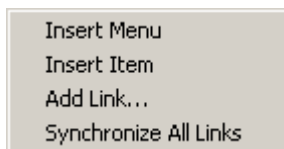
1.1 Menu folder

A menu folder is an element of the user menu hierarchy and may contain subordinate menu folders, menu items and links to menu folders and/or items that are contained in other sections of the user menu.

The  icon indicates a menu folder.

1.1.1 Adding a new menu folder

To add a new menu folder, right-click in the right section of the "Menu Tree" user menu window and select "Insert Menu" from the context menu.

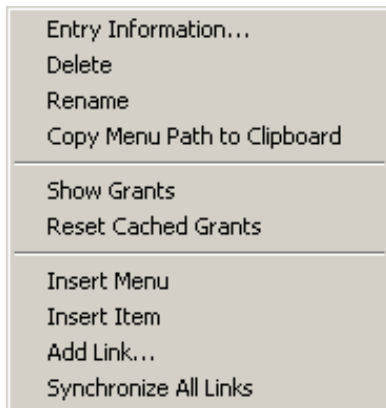


Context menu for adding new user menu folders or items

A new menu folder named "New Menu" will be added to the user menu.

1.1.2 Menu folder parameters

To access information about a menu folder's parameters, right-click on the name of the folder. A context menu will be displayed.



Context menu for a folder

Context menu commands:

- "Entry Information" – get information about the folder's place in the user menu's hierarchy and about the date and time the folder was created and last modified.
- "Delete" – delete the menu folder.
- "Rename" – rename the menu folder.
- "Copy Menu Path to Clipboard" – copy the menu folder path to the clipboard.
- "Show Grants" – show what privileges are necessary to access the menu folder.



Note that if the same menu folder is accessed more than once during one DB Manager session, this command returns cached rather than actual data.

- "Reset Cached Grants" – clear data about required access privileges that was cached after the "Show Grants" command was executed.

1.1.3 Renaming a menu folder

To rename a menu folder, right-click on its name and select "Rename" from the context menu.

1.1.4 Deleting a menu folder

To delete a menu folder, right-click on its name and select "Delete" from the context menu.



Be careful when deleting menu folders, since this may make system resources inaccessible to users.

1.2 Menu item

A menu item is an element of the user menu hierarchy. A menu item is used to start a particular sequence of actions executed by DB Manager.

1.2.1 Adding a new menu item

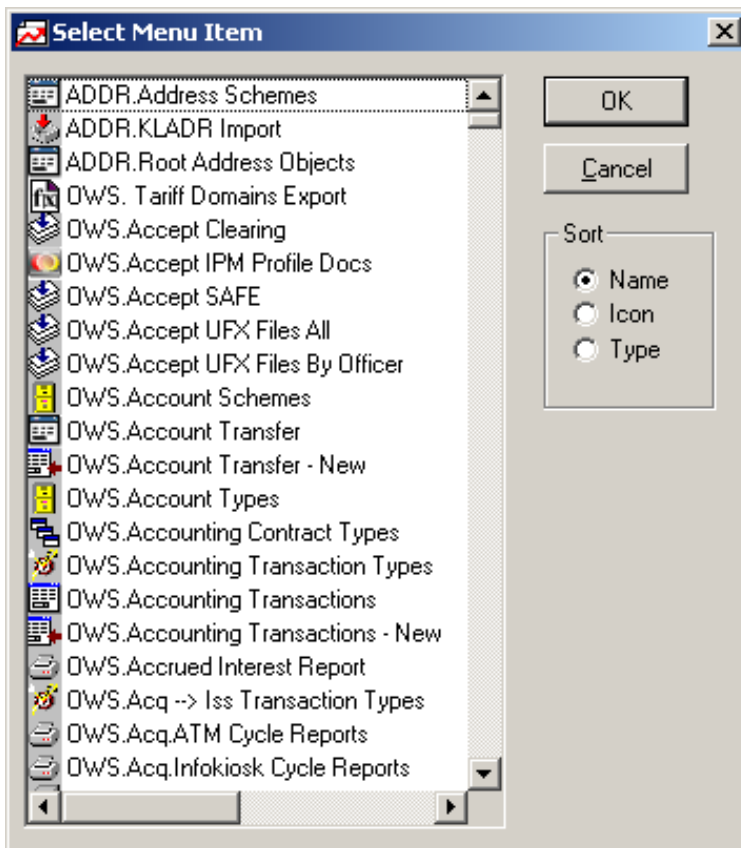
To add a new menu item, right-click in the right section of the user menu window and select "Insert Item" from the context menu that appears.

The "Select Menu Item" window will open. This window contains a list of menu item definitions created in DB Manager.

The list can be sorted using the *Sort* radio buttons:

- *Name* – by name.
- *Icon* – by the icon that is used to indicate the item in the user menu.
- *Type* – by type.

Select the required definition from the list and click [OK]. A new menu item will be added



List of DB Manager menu item definitions

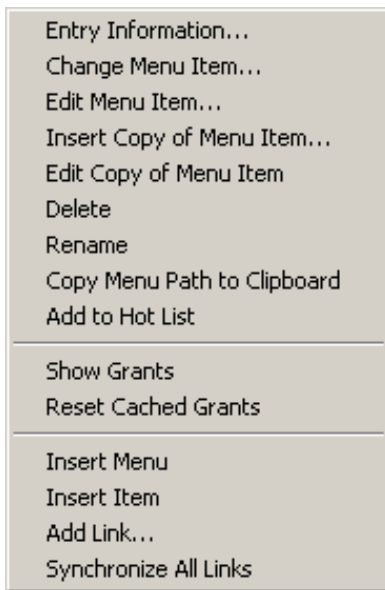
To add a menu item with a new definition, you must first add the new menu item definition to the list (see "[Creating a new definition](#)").

1.2.2 Renaming a menu item

Menu items are renamed in the same way as menu folders (see "[Renaming a menu folder](#)").

1.2.3 Deleting a menu item

To delete a menu item, right-click on its name and select "Delete" from the context menu.



Context menu of an item



Be careful when deleting menu items since this may make certain system resources unavailable to the user. Note that deleting a menu item from the user menu does not delete the item's definition from the list of definitions.

1.2.4 Adding menu items to a hot list

To add a menu item to a hot list, right-click on its name and select "Add to Hot List" from the context menu.


The name of this menu item will be displayed at the top of the list that opens when the "Hot Items" item is selected from the system menu, and a corresponding button will appear on the toolbar.

A menu item can be called quickly either by selecting the item from the "Hot Items" drop-down list or by clicking its button on the toolbar.

For more information on changing the order of menu items in the "Hot Items" list and deleting them from this list, see the "System Menu" section of the document "DB Manager Manual".

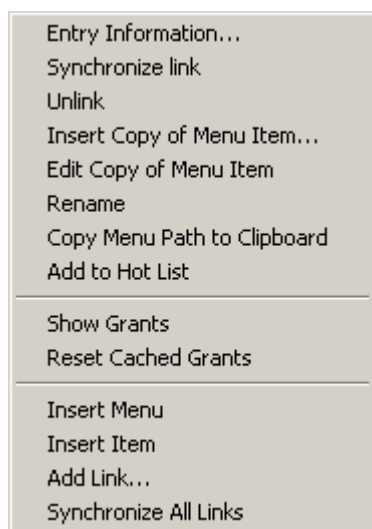
1.3 Link

To configure the user menu to suit their individual needs, users can create links to menu folders and items.

A link means is created by adding a copy of a menu folder item to the user menu. Links are indicated by the  icon added to the menu folder icon or menu item icon.

Links make it possible to regroup menu items according to a user's needs without changing the structure of the menu supplied by OpenWay.

The user menu may change after system upgrade or upgrade of the menu itself (see "[Importing and exporting the user menu](#)"). For changes in the user menu resulting from an upgrade to be reflected in links, select "Synchronize All Links" from a link's context menu.



Context menu of a link

1.3.1 Adding a new link

To add a new link, right-click in the right section of the "Menu Tree" user menu window and select "Add Link" from the context menu.

The "Select Menu" window will open, showing the user menu tree. In this window, select the menu folder or item to which a link is required and click [OK].

1.3.2 Renaming a link

If a link to a menu folder must be renamed, this link should first be unlinked from the menu element it refers to. To do so, right-click the link and select "Unlink" from the context menu that opens. If this isn't done, the old name of the link will be restored when "Synchronize All Links" is selected from the context menu.

When a link to a menu folder is renamed, the links contained in the menu group to the menu elements are retained.

1.3.3 Deleting a link

To delete a link, right-click its name and select "Unlink" from the context menu.

This will break the connection between the link and the element to which it refers. The link may now be deleted in the same way that is used to delete a menu item (see "[Deleting a menu item](#)").

1.3.4 Adding links to a hot list

Links are added to a hot list in the same way as described in the section "[Adding menu items to a hot list](#)".

2 Working with Menu Editor

This section describes the principles of working with Menu Editor.



Note that for DB Manager applications, it is forbidden to edit the structure of the standard menu folder (edit user menu groups and items) provided with the system. This menu folder is called "OpenWay".

2.1 Starting Menu Editor



Menu Editor is a DB Manager tool that can be used to create and edit menu items and menu item definitions.

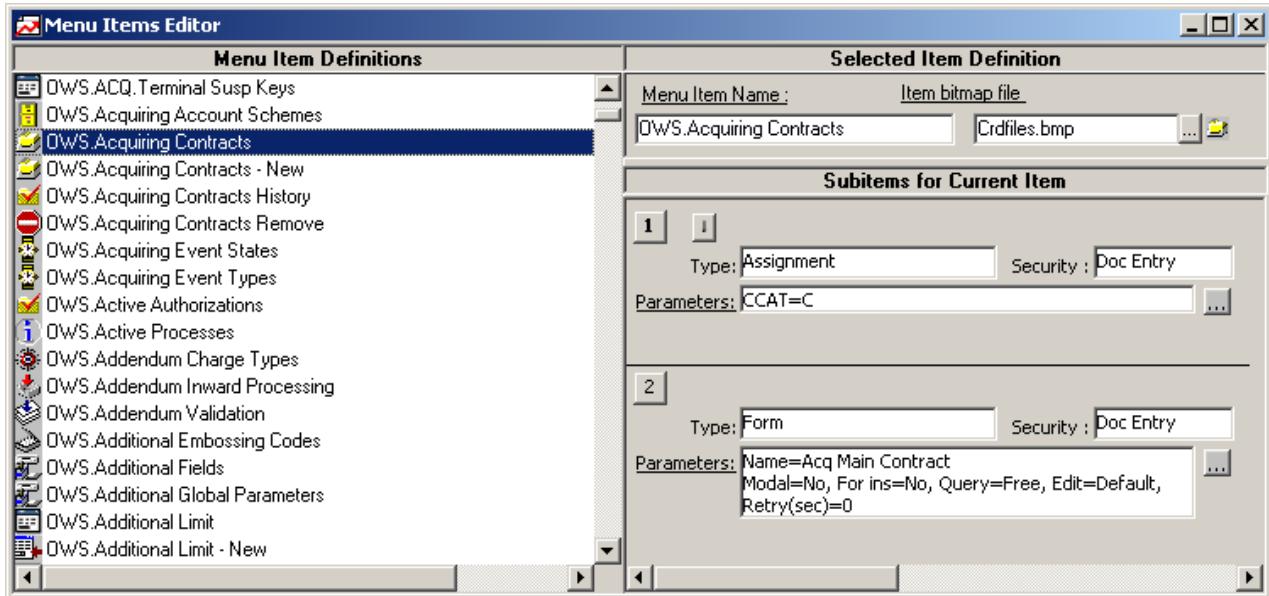
There are two ways of starting Menu Editor:

- By selecting "Database => Menu Items" from the system menu (pressing the <F7> key).
- By right-clicking on a menu item in the right section of the user menu and then selecting "Edit Menu Item" from the context menu.

2.2 Menu Editor window

The Menu Editor window contains three sections:

- "Menu Item Definitions" – list of menu item definitions created in the system, in alphabetic order.
- "Selected Item Definition" – parameters of the currently selected menu item: its name and the name of its icon file.
- "Subitems for Current Item" – a list of the current menu item definition's subitems, showing their parameters. Sections with subitem parameters are separated from each other by horizontal lines. The left upper corner of each section contains a box with the subitem's serial number; the number of the currently selected subitem is shown in bold. To navigate between subitems, click their numbers. The  (move up) and  (move down) buttons change the order for running subitems.



Menu Editor window

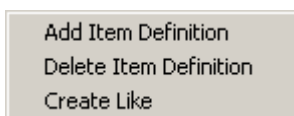
2.3 Changing the list of menu item definitions

2.3.1 Creating a new definition

There are two ways to add a menu item definition to the list created in the system:

- By creating a new menu item definition.
- By copying an existing menu item definition.

To create a new menu item definition, select "Items Editor => Insert Item Definition" from the system menu (<Alt>+<I>) or right-click in the Menu Editor section that contains the list of item definitions and select "Add Item Definition" from the context menu.



Context menu for editing the list of DB Manager menu items

A new definition named "New Item" will be added to the list. This definition does not contain any subitems.

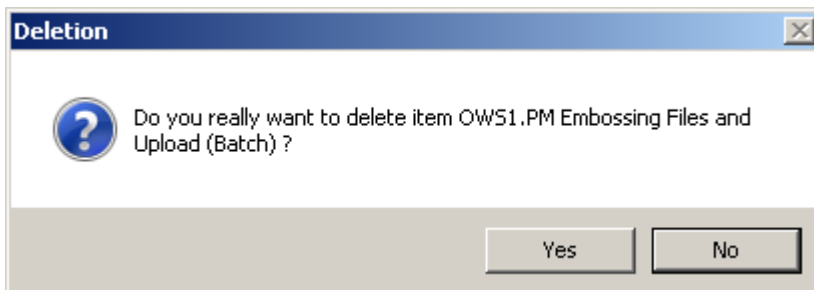
To copy an existing menu item definition, right-click on the one to be copied and select "Create Like" from the context menu.

A definition whose parameters and list of subitems match those of the original menu item definition will be added to the list.

2.3.2 Deleting a definition from the list

To delete a menu item definition, click on its name in the list and select "Items Editor => Delete Item" from the system menu (<Alt>+<D>). It is also possible to right-click and select "Delete Item Definition" from the context menu that opens.

To confirm deletion of the menu item definition, click [OK] in the "Deletion" window that appears.



Dialog window for confirming the deletion of a menu item definition



Before deleting a menu item definition from the list, make sure that no menu items have been created on its basis and that the definition is not associated with an existing menu item (see the section "Search by Reference (the "Dependencies" window)" section of the document "DB Manager Manual"). Otherwise, the menu item definition cannot be deleted.



Deletion of menu item definitions may have serious consequences and make system resources inaccessible to the user.

2.4 Editing menu item definitions

2.4.1 Renaming a menu item definition

To rename a menu item definition, select the desired definition by clicking on it in the list. Edit its name in the *Menu Item Name* field of the "Selected Item Definition" section of the Menu Editor window.




Note that after renaming a menu item definition, the corresponding changes must be made in all menu item subitems (see [""Menu Item" type"](#)) that have the changed definition name as a parameter.

The "OWS" prefix in a name indicates that this is a menu item definition supplied by OpenWay. Menu item definitions with this prefix may be updated during a system upgrade (see the section ["Importing and exporting the user menu"](#)). Accordingly, users are prohibited from editing these definitions, and if

changes are necessary, new menu item definitions should be created (without the "OWS" prefix) which will not be updated when the system is upgraded.

2.4.2 Changing menu item icons

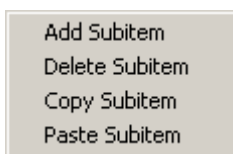
To set an icon for a menu item, in the *Item bitmap file* field specify the name of the graphic file that contains the icon (if the file is located in the default directory) or click the  button to the right of the field and select the name and path of the graphic file. By default, these files are stored in the directory "<OWS_Home>\Client\Shared\Bmp".

2.5 Changing the list of menu item definition subitems

2.5.1 Creating a new subitem

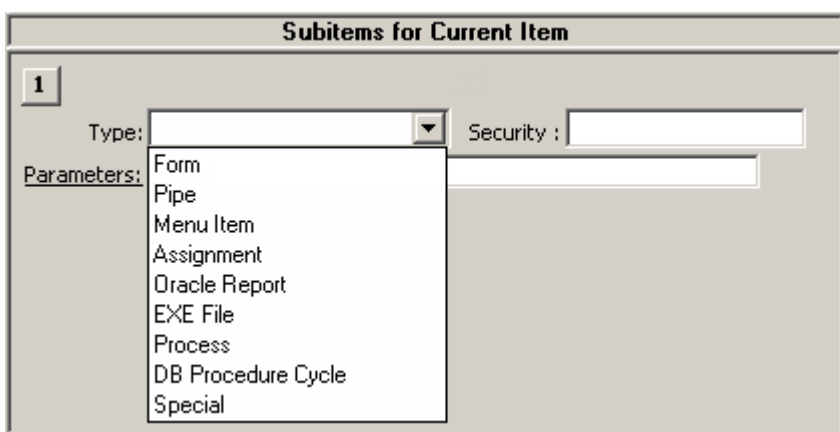
To create a new definition subitem, click on the the definition to be edited and then select "Items Editor => Add Subitem" from the system menu or press <Ctrl>+<I>. It is also possible to right-click inside the section with the list of subitems for the currently selected definition and select "Add Subitem"

from the context menu or click the  [Insert Subitem] button on the toolbar.



Context menu for editing the list of subitems

A new subitem will be added to the section with the list of subitems.



Adding a new menu subitem

After a new subitem has been added, select its type from the drop-down list in the *Type* field and fill in parameter fields. These fields depend on the subitem's type (see "[Editing menu subitems](#)").

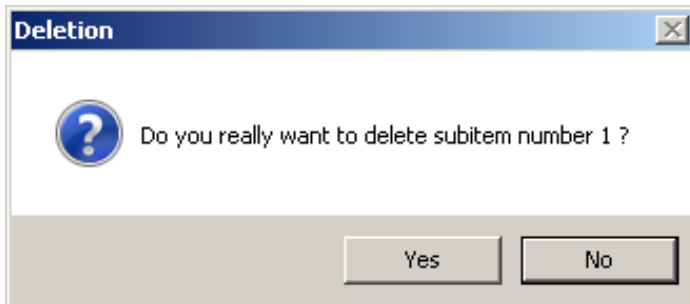
2.5.2 Deleting subitems

To delete a subitem, select it by clicking on any of its fields or on the box with the subitem's number and then select "Items Editor => Delete Subitem" from the system menu (<Ctrl>+<D>). It is also possible to right-click on the subitem and select "Delete Subitem" from the context menu that opens, or use the



[Delete Subitem] button on the toolbar.

To confirm deletion of the subitem, click [Yes] in the "Deletion" window.



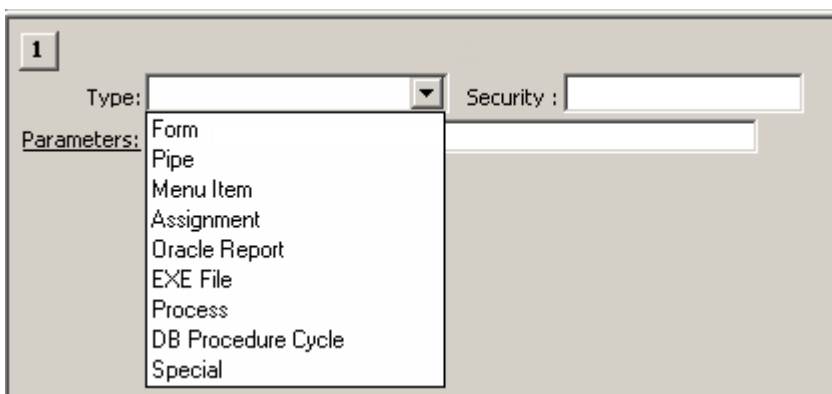
Confirmation dialog window that appears when deleting a menu subitem



Note that deletion of menu subitems may have serious consequences, and make certain system resources inaccessible to the user.

2.6 Editing menu subitems

Select a subitem type from the drop-down list of the *Type* field in the "Subitems for Current Item" form.

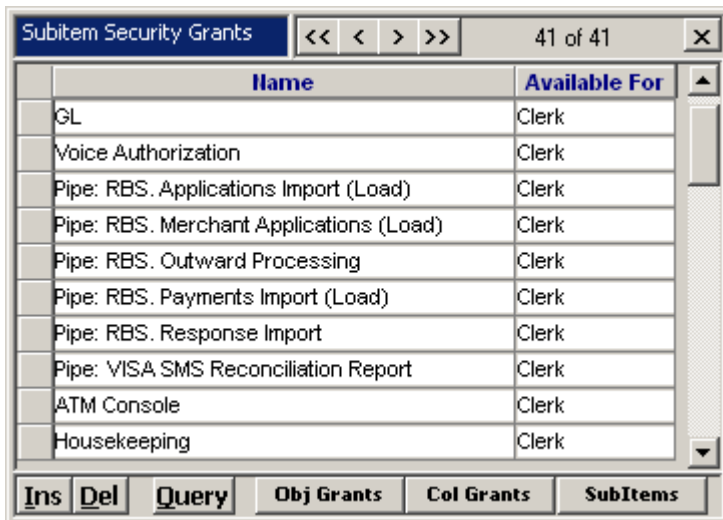


Selecting a menu subitem type



Be careful when changing a menu subitem type as parameter values are reset and there is no "undo" option.

User privileges to run this menu subitem are specified in the *Security* field. These privileges are defined in a form for granting access privileges for menu item definition subitems.



Name	Available For
GL	Clerk
Voice Authorization	Clerk
Pipe: RBS. Applications Import (Load)	Clerk
Pipe: RBS. Merchant Applications (Load)	Clerk
Pipe: RBS. Outward Processing	Clerk
Pipe: RBS. Payments Import (Load)	Clerk
Pipe: RBS. Response Import	Clerk
Pipe: VISA SMS Reconciliation Report	Clerk
ATM Console	Clerk
Housekeeping	Clerk

Form for setting access privileges for a menu subitem

The following subitem types exist in DB Manager:

- "Form" – open windows for viewing and editing data.
- "Pipe" – start C pipes.
- "Menu Item" – run a menu item available in the system.
- "Assignment" – assign values to local constants for the current DB Manager session.
- "Oracle Report" – launch Oracle Report Generator.
- "EXE File" – launch an operating system executable file on a client workstation.
- "Process" – launch a stored procedure executed by the database server.
- "DB Procedure Cycle" – execute a specified database stored procedure on all table rows that match specified conditions.
- "Special" – execute a special program module on a client workstation.

2.6.1 "Form" item

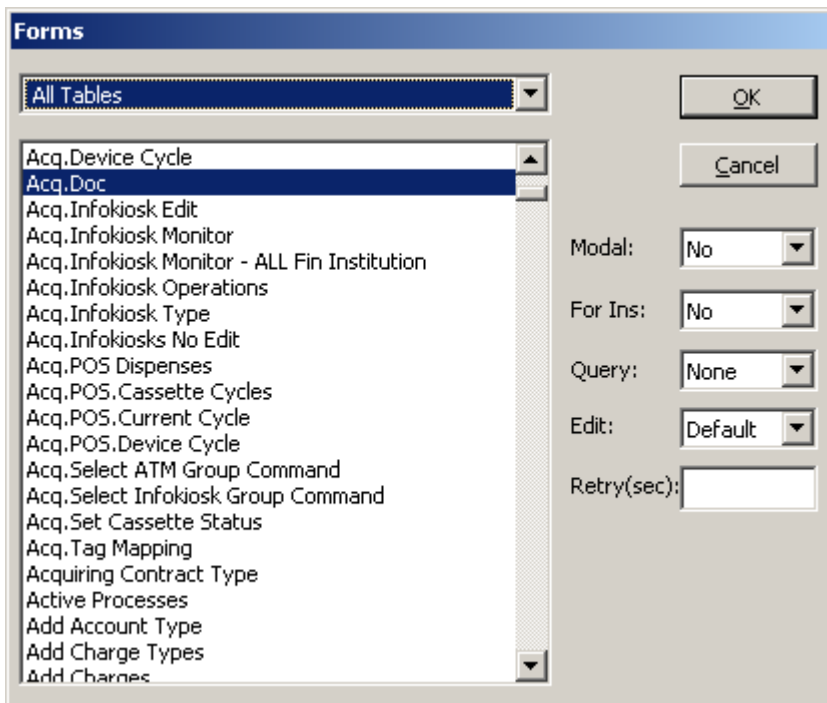
When a "Form" type subitem is executed, the specified form is displayed on the screen. The parameters of subitems of this type are specified in the following fields of the "Forms" form:

- *Form name* – selected from the list of forms in the left part of the window. The list contains forms registered in Way4 (see the section "Starting Form Builder" of the document "DB Manager. Form Builder").
- *Modal* – property for blocking data input in other open forms. If "Yes" is specified in this field, when the form is opened, data can be entered and modified in this form only. It will not be possible to enter and modify data in all other forms.
- *For Ins* – "Yes" means that the form can only be used to add new records. When the form is opened, data will not be read from the database.
- *Retry(sec)* – time interval with which data will automatically be read from the database. If no value is specified, data will only be read when the form is opened or when the user performs other actions which cause data to be refreshed.
- *Query* – query data for the specified form (see the section "Entering and Editing Data" of the document "DB Manager Manual"):

- "None" – the query window will not open when this form is opened.
- "Free" – queries can be made using custom criteria, or according to a saved query.
- "Prepared" – a query can only be made using a saved query.
- *Edit* – if "Default" is specified, the form's fields will be edited with consideration of form field editing parameters (see the section "Column Parameters" and "Field Parameter" of the document "DB Manager. Form Builder"). If "No edit" is specified, it will not be possible to edit form fields.



Note that even if in Form Editor in the parameters of a child form on the "Links" ("Details") tab the value "Default" is specified for the "Edit" field, and the "Editable" check box is selected in column parameters of this child form, but "No Edit" is specified the parameters of the "Edit" field in the main menu item's settings, the child form will not be editable.



Parameters for the "Form" subitem type

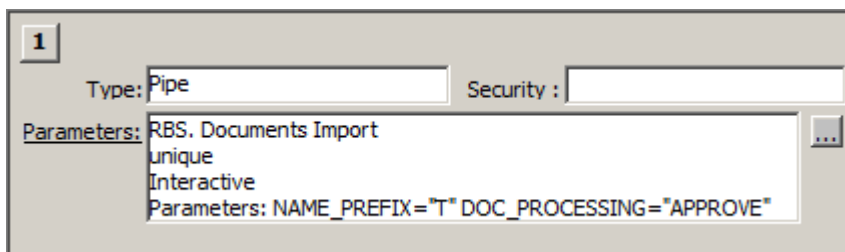


Note that if "Prepared" is set in the *Query* field but there are no saved queries for this form (see the section "Entering and Editing Data" of the document "DB Manager Manual"), it will not be possible to run the menu item (open the form) and the following error message will be displayed: "Saved queries are absent".


2.6.2 "Pipe" type

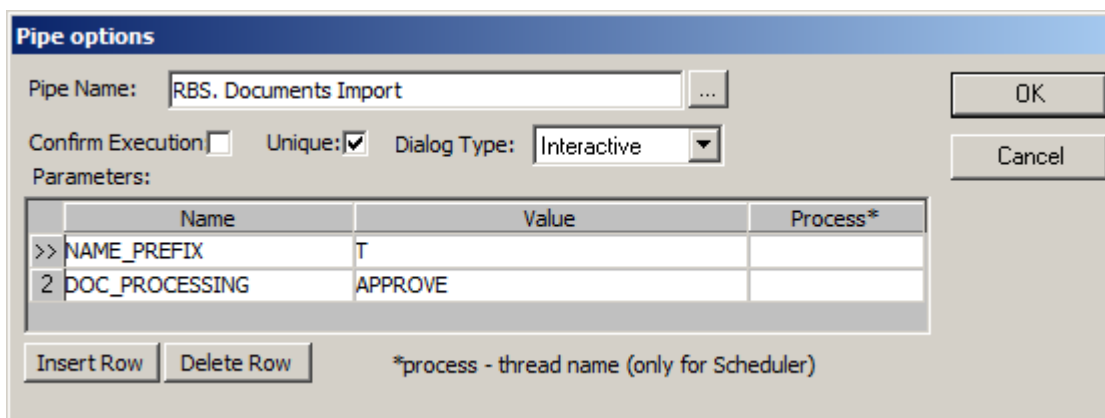
2.6.2.1 Subitem parameters

When a "Pipe" type subitem is executed, a C pipe is started. Subitem parameters are shown in the *Parameters* field.



Parameters for the "Pipe" subitem type


The values of these parameters can be changed in the "Pipe options" dialog window, opened by clicking the  button to the right of the *Parameters* field.



Name	Value	Process*
NAME_PREFIX	T	
DOC_PROCESSING	APPROVE	

Window to enter parameters for the "Pipe" subitem type

"Pipe options" window fields:

- *Pipe Name* – field for specifying the pipe name; to display the list of pipe names, click the  button.
- *Confirm Execution* – if this checkbox is selected, a prompt to confirm pipe execution is displayed before the pipe is started; in case of a negative response, the pipe is not started.
- *Unique* – if this checkbox is selected, the pipe can be executed only on one workstation and during just one DB Manager session at a time.
- *Dialog Type* – a pipe can be executed in one of the following three modes:
 - "Interactive" – the pipe execution process is shown in a corresponding dialog box.
 - "Errors only" – the dialog box only shows errors that occur during execution of the pipe.
 - "Silent" – during execution of the pipe, only the progress bar is displayed, with logging to the process log. Auxiliary dialog windows (for example, the file selection window, window confirming the execution of various actions) are not displayed.

- *Parameters* – field group for specifying pipe parameters. Each pipe has a unique set of parameters and parameter values. Click [Insert Row] to add a parameter to the set or [Delete Row] to delete a selected parameter.
- *Name* – pipe parameter name.
- *Value* – parameter value.
- *Process** – this field is used in parallel mode when Scheduler is used to start the pipe (see the document "Scheduler R2"). The mode is only used for pipes that import and export data from files and is used to improve performance when executing a large number of operations of the same type. In this case, process identifiers are specified in the *Process** field. The number of different identifiers is the number of parallel processes. Pipe parameters for which the same value is specified in the *Process** field belong to the same process. Parameters for which the *Process** field is not filled in are common to all processes.



If Oracle RAC (Real Application Clusters) are used, pipes can be started in a Way4 Cards database server node that differs from the node in which DB Manager is running. For this to be possible, set the pipe parameter "ALTERNATIVE_CONNECT_STRING" and define the parameter value in one of the following ways:

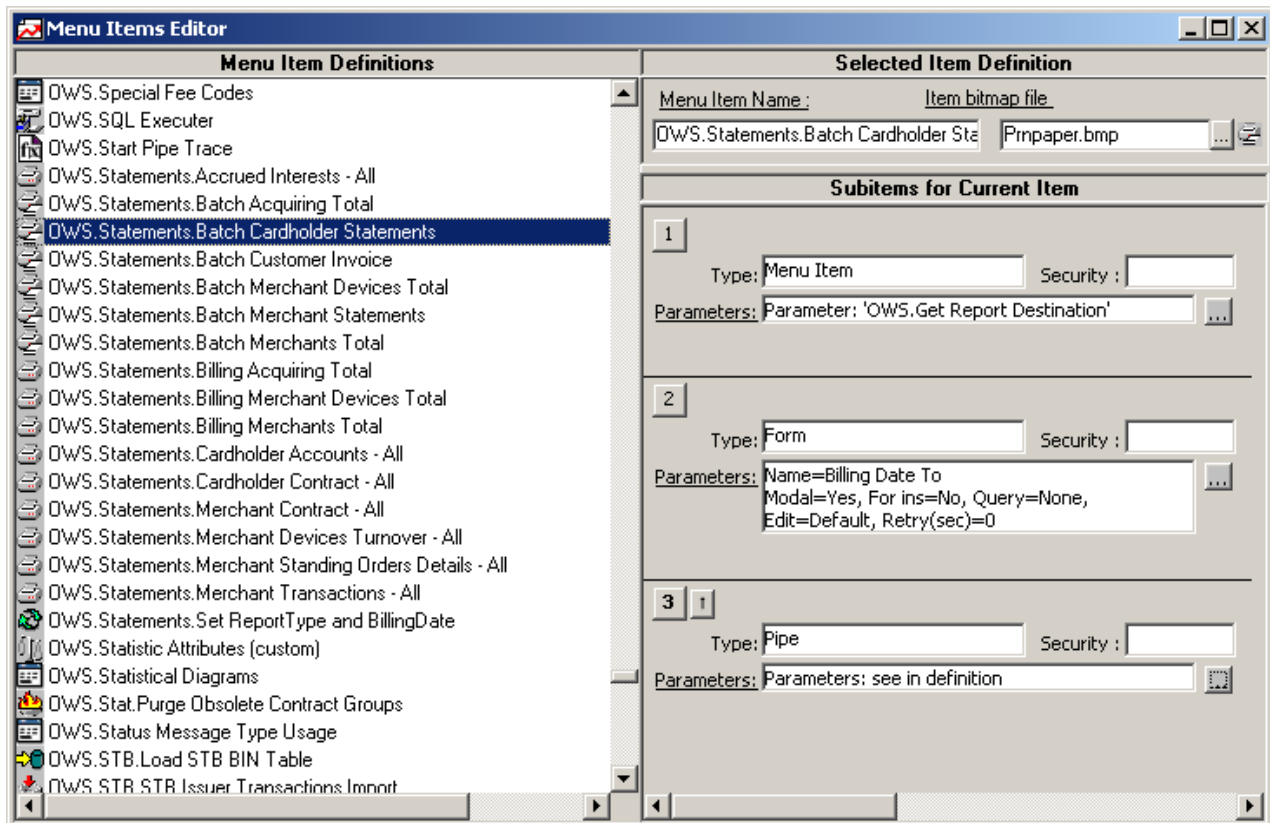
- "DBQ=<TNS Name>" – ODBC driver connect string. For example, "ALTERNATIVE_CONNECT_STRING=DBQ=Test_TNS".
- "@<Parameter Name>@", where <Parameter Name> is the name of the configuration parameter whose value must be used. The parameter name must be specified in capital letters and enclosed in "@" characters. The configuration parameter is searched for in the "db.ini" or "dbm.ini" files. Example: the parameter "SECOND_CONNECT_STRING=DBQ=My_TNS" is set in the "db.ini" file, so in the "Pipe options" window, so the parameter "ALTERNATIVE_CONNECT_STRING=@SECOND_CONNECT_STRING@" should be specified for the pipe. As a result, the string "DBQ=My_TNS" will be used as the connect string.

2.6.2.2 Example of "Exe Executer" pipe use

This pipe ensures repeated execution of a specified procedure for processing information of the same type when there is a large volume of initial data. In particular, the system allows batch generation of a large numbers of similar reports. In this case, the initial data for each cycle of the procedure is the contract for which the report is being generated .

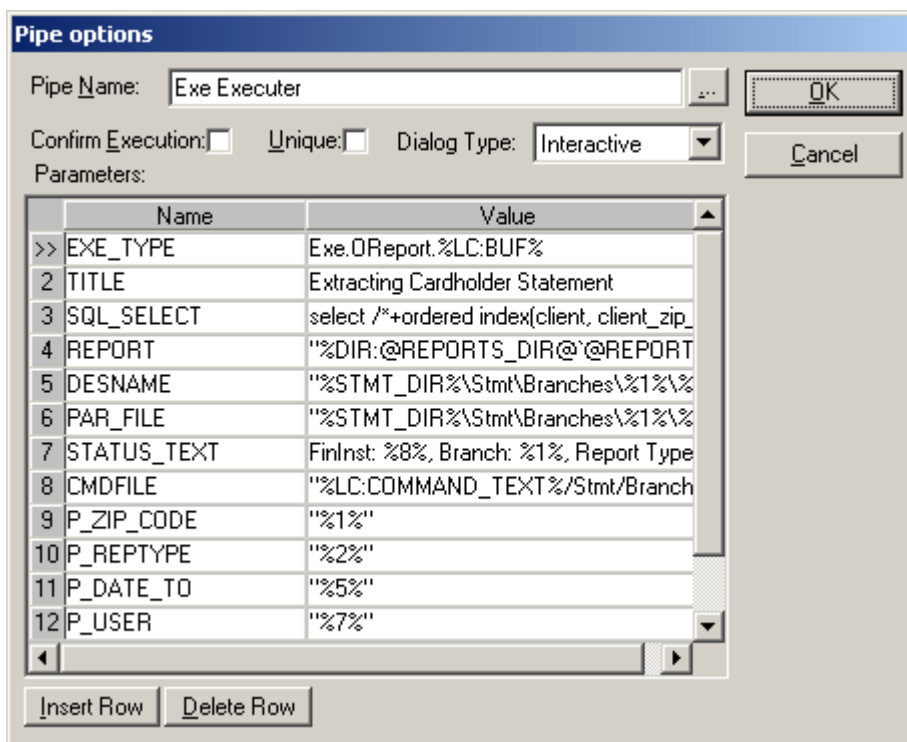
For example, the "Full → Customer Support → Statement → Cardholder Batch Statements → Batch Cardholder Statements" menu item starts the batch procedure for generating statements for the accounts of all card contracts.

This menu item has three subitems.



Window for editing the "Batch Cardholder Statements" menu item

The window with parameters for the "Exe Executer" pipe run by this menu item is shown in the figure.



"Pipe options" window for the "Exe Executer" pipe

The pipe has the following mandatory parameters within this menu item:

- EXE_TYPE – name of the section in the DB.INI or DBM.INI file, containing the run parameters of the Oracle Reports system.
- TITLE – title of the progress indicator that appears on the screen during execution of the procedure.
- SQL_SELECT – database query for each returned row of which Oracle Reports will be called. The query text may contain several lines. To enter them, use the mouse to move the border of the row up or down.
- REPORT – report template file name.
- DESNAME – report file name.
- P_ZIP_CODE, P_REPTYPE, P_DATE_TO, P_USER, P_F_I, P_LANGUAGE – values of parameters used for setting query conditions for reports produced by the Oracle Reports system.
- PAR_FILE – name of the Oracle Reports parameter file for the workstation on which the pipe is run.
- CMDFILE – name of the Oracle Reports parameter file for the report server.
- STATUS_TEXT – text in the progress indicator that appears on the screen while each task is being generated.

In entering all parameter values, substitutions of DB Manager environment variables and values returned from an SQL_SELECT query can be used. Environment variables are accessed according to their names (for example, "%STMT_DIR%") and query results according to the number of the field in the query (for example, "%8%").

The value of the EXE_TYPE parameter is the name of the section in DB.INI or DBM.INI configuration files which contains various Oracle Reports system parameters.

Example 1. Configuration file section content:

```
[Exe.OREport.Local]
PAR_FILE=%STMT_DIR%\report.cfg
NOT_INCLUDE_TO_PAR_FILE=USERID;CMDFILE;BACKGROUND;BATCH
EXE_NAME=rwr60.exe
USERID=%OWN_CONNECT%
CMDFILE="%SPEC:PAR_FILE%"
BATCH=NO
BACKGROUND=NO
MODE=character
DESTYPE=file
DESFORMAT=wide
PRINTJOB=no
PARAMFORM=no
RECURSIVE_LOAD=NO
DESNAME="%STMT_DIR%\report.txt"
P_OWNER=@OWS_OWNER@
Example 2. Configuration file section content:
[Exe.OREport.Server]
PAR_FILE=%STMT_DIR%\report.cfg
NOT_INCLUDE_TO_PAR_FILE=USERID;CMDFILE;BACKGROUND;BATCH;SERVER
EXE_NAME=rwcli60.exe
USERID=%OWN_CONNECT%
CMDFILE="%SPEC:PAR_FILE%"
BATCH=YES
BACKGROUND=YES
SERVER=
MODE=character
DESTYPE=file
DESFORMAT=wide
PRINTJOB=no
PARAMFORM=no
RECURSIVE_LOAD=NO
DESNAME=%STMT_DIR%\report.txt
P_OWNER=@OWS_OWNER@
```

Oracle Reports system parameters in the configuration file section:

- PAR_FILE – name of the Oracle Reports system parameter file.
- NOT_INCLUDE_TO_PAR_FILE – list of Oracle Reports system parameters specified in the subitem, which must not be included in the parameter file.
- EXE_NAME – name of the Oracle Reports executable file. The value of this parameter depends on the Oracle Reports version. For instance, for Oracle Reports version 10G, these parameters are as follows:
 - "rwr60.exe" – local execution of a task and completion of work.
 - "rwcli60.exe" – transfer a task to Oracle Reports Server for execution.

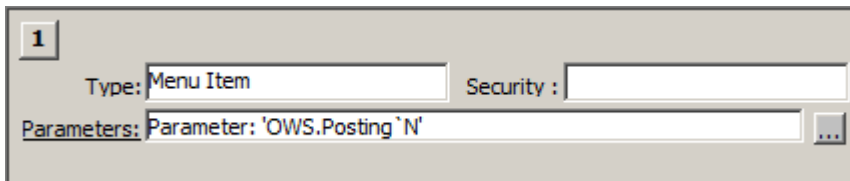
For other Oracle Reports versions, .exe filenames may be different.

The remaining strings are put into in the Oracle Reports system parameter file, whose name is specified in the pipe's parameters.



Parameter values set in the section of the DB.INI or DBM.INI configuration file can be redefined in the parameters of the menu (pipe) subitem.

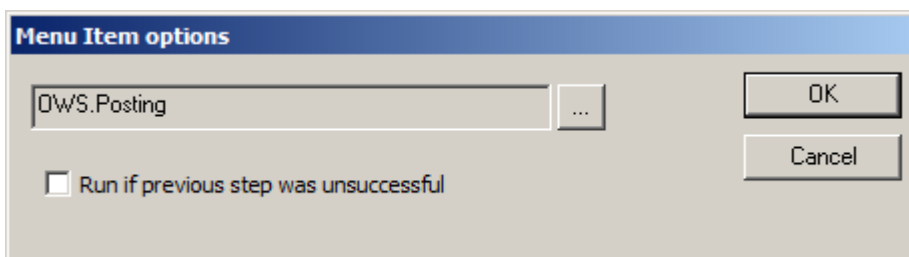
2.6.3 "Menu Item" type

When a subitem of this type is executed, actions specified in the corresponding menu item definition are performed. The name of the menu item definition being run is displayed in the *Parameters* field.



"Menu Item" subitem type

To set a menu item definition, click the  button to the right of the *Parameters* field. This will open the "Menu Item options" dialog window. In this window, click the  button again, and select a menu item definition from the list.



Dialog window for setting the parameters of a "Menu Item" subitem type

If the *Run if previous step was unsuccessful* checkbox is selected, this menu item definition will be executed if errors in business logic occurred during execution of the preceding subitem. This mechanism is used for handling exceptions that violate the order of executing menu subitems defined in this menu item. Such an exception may be, for example, the absence of an imported file in a certain directory.

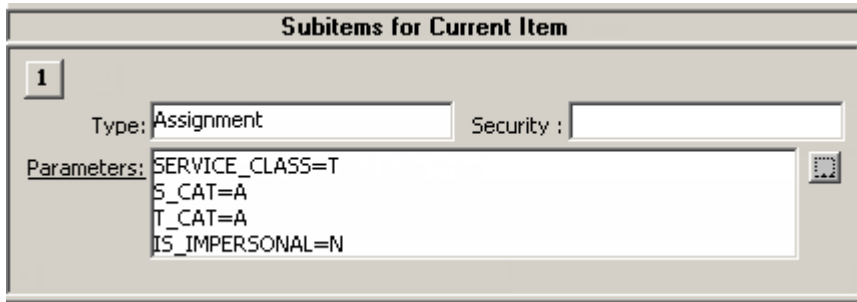
If system errors occur (for example, an SQL Error), the menu item specified in the "Menu Item options" window will not be executed.



It recommended to use the checkbox only for the "Scheduler Flag", "Scheduler Waiting File", "Execute SQL" and "Java_Pipe" menu subitem types.

2.6.4 "Assignment" type

When a subitem of this type is executed, it changes the values of local constants for the current DB Manager session. Values assigned to local constants are shown in the *Parameters* field.



Subitems for Current Item


1

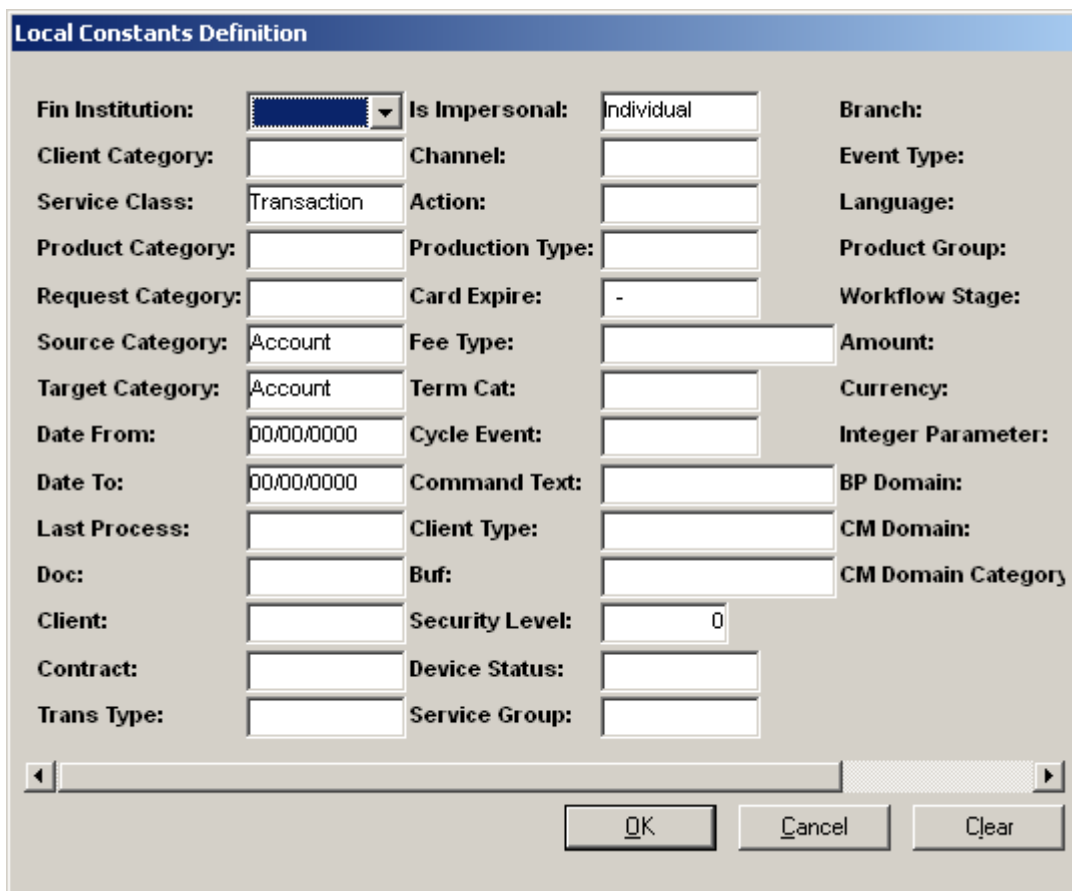
Type: Security :

Parameters:

Parameters for the "Assignment" subitem type

Values are assigned to local constants in the fields of the "Local Constants Definition" dialog window.

This window is opened by clicking the  button.



Local Constants Definition

Fin Institution:	<input type="text"/>	Is Impersonal:	<input type="text" value="Individual"/>	Branch:	
Client Category:	<input type="text"/>	Channel:	<input type="text"/>	Event Type:	
Service Class:	<input type="text" value="Transaction"/>	Action:	<input type="text"/>	Language:	
Product Category:	<input type="text"/>	Production Type:	<input type="text"/>	Product Group:	
Request Category:	<input type="text"/>	Card Expire:	<input type="text" value="-"/>	Workflow Stage:	
Source Category:	<input type="text" value="Account"/>	Fee Type:	<input type="text"/>	Amount:	
Target Category:	<input type="text" value="Account"/>	Term Cat:	<input type="text"/>	Currency:	
Date From:	<input type="text" value="00/00/0000"/>	Cycle Event:	<input type="text"/>	Integer Parameter:	
Date To:	<input type="text" value="00/00/0000"/>	Command Text:	<input type="text"/>	BP Domain:	
Last Process:	<input type="text"/>	Client Type:	<input type="text"/>	CM Domain:	
Doc:	<input type="text"/>	Buf:	<input type="text"/>	CM Domain Category:	
Client:	<input type="text"/>	Security Level:	<input type="text" value="0"/>		
Contract:	<input type="text"/>	Device Status:	<input type="text"/>		
Trans Type:	<input type="text"/>	Service Group:	<input type="text"/>		


OK Cancel Clear

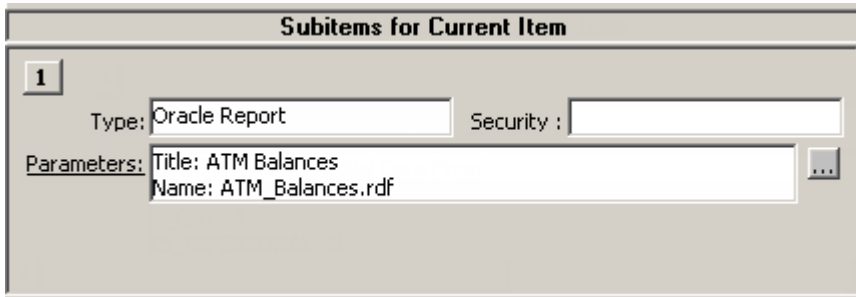
Dialog window for setting the values of local constants

Values of local constants are selected from a list or are entered using the keyboard. An empty field in the window means that this menu subitem does not affect the value of the corresponding local constant. To delete a value from a field in the "Local Constants Definition" window, select the field and click the [Clear] button.

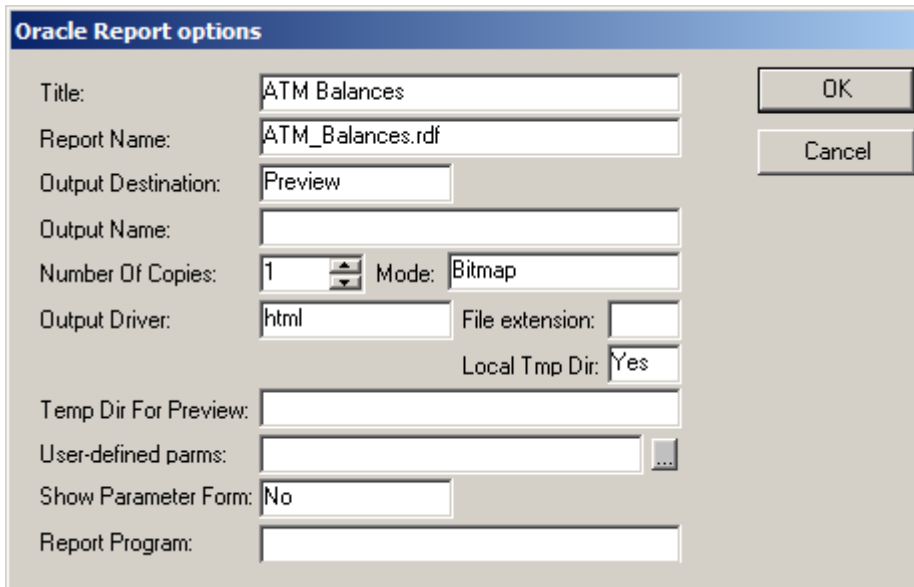
This subitem type does not allow for setting local constant values to NULL. To set a value to NULL, use the "Special: Execute SQL" subitem type: (see "[Special](#)" type).

2.6.5 "Oracle Report" type

Executing a subitem of this type starts Oracle Report Generator, which generates a report using the specified Oracle Report Definition file (see the section "Report Generation Principles" of the document "DB Manager Manual"). The parameters of this menu subitem are displayed in the *Parameters* field. These parameters may be edited in the "Oracle Report options" dialog window. This dialog window is opened by clicking the  button to the right of the *Parameters* field.



Parameters for the "Oracle Report" subitem type



Dialog window for setting "Oracle Report" menu subitem type parameters

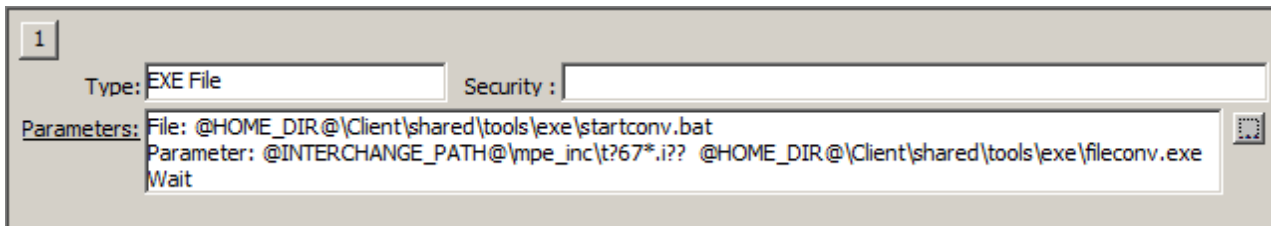
The "Oracle Report options" dialog window has the following fields for specifying module parameters:

- *Title* – report title that will be shown on each page of the report.
- *Report Name* – the name of the report, selected from a list.
- *Output Destination* – drop-down list for specifying the type of device to which the report will be sent:
 - Screen – computer screen (it is recommended that Preview mode be used in this case).
 - File – to a file. In this case the *Output Name* field must contain the name of the file and its path in the following format: "%STMT_DIR%\<filename>", where STMT_DIR is the name of the environment variable indicating the directory in which the file will be saved. The value of STMT_DIR may be specified in the db.ini file or by selecting "Database=> Configure" in the system menu.
 - Printer – to a printer.


- Mail – by email. In this case, MAPI (Messaging Application Programming Interface) support must be installed on the computer and the *Output Name* field must contain the email address of the report recipient.
- Sysout – not used. Reserved for future versions.
- Cache – not used. Reserved for future versions.
- Preview – to a computer screen.
- Local File – not used. Reserved for future versions.
- *Output Name* – name of the device to which the report will be sent (filename, email address, printer name, etc).
- *Number Of Copies* – number of copies created.
- *Output Driver* – drop-down list for selecting the report file format:
 - dflt – printer description file used by Oracle Reports, additionally the names of other Oracle printer description files, such as "wide" or "wide180" may be added manually.
 - PDF – Adobe Acrobat files.
 - HTML – Hypertext Markup Language files.
 - RTF (added manually) – Rich Text Format files.
 - DELIMITED – delimited text format, entered manually for Oracle Report version 10G and later on the condition that "text only" (character) format is specified in the *Mode* field. The type of delimiter, for example DELIMITER=tab, must be specified in the *User-defined parms* field.
- *Mode* – drop-down list for selecting the format of report data:
 - Bitmap – text and graphics.
 - Character – text only.
- *Local Tmp Dir* – when the "Y" value is selected, a report will be stored in the standard temporary file directory <OWS_TEMP>; when the "N" value is selected, the directory specified in the *Temp Dir For Preview* field will be used.
- *Temp Dir For Preview* – temporary file directory for storing a report file used for viewing on the computer screen; this field is used when the "N" value is specified in the *Local Tmp Dir* field.
- *File Extension* – file extension.
- *User-defined parms* – custom parameters.
- *Show Parameter Form* – when "Y" is specified, before generating a report, a form that is built into the report and used for entering report parameters will be displayed on the screen.
- *Report Program* – name of the Oracle Report generator; this field is used if a report is generated without a report server.

2.6.6 "EXE File" type

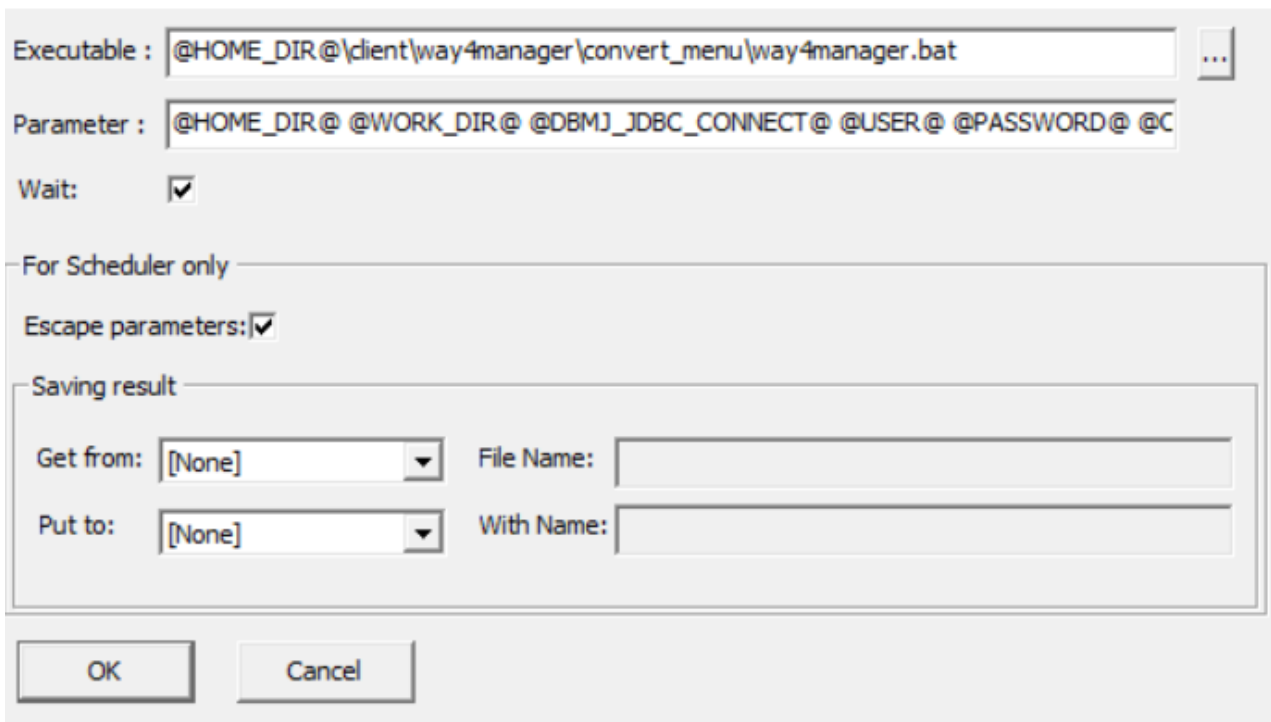
When a subitem of this type is executed, it launches an MS Windows executable file on the user's workstation. The name of the "*.exe" file and its startup parameters are specified in the *Parameters* field.



Parameters for an "EXE File" subitem type


The name of the file being launched and startup parameters are entered after clicking the  button to open the "Select Executable" dialog window.

Select Executable



Window for selecting an executable file

This window contains the following fields:

- *Executable* – the executable file's name and path. To change the name of the executable file, click the  button and select the required name in the standard MS Windows "Select File" window.
- *Parameter* – file startup parameters.
Database environment variables can be used in the *Executable* and *Parameter* fields when specifying a filepath.
- *Wait* – if this checkbox is selected, the next menu subitems will only be executed after the program started by this subitem is completed.

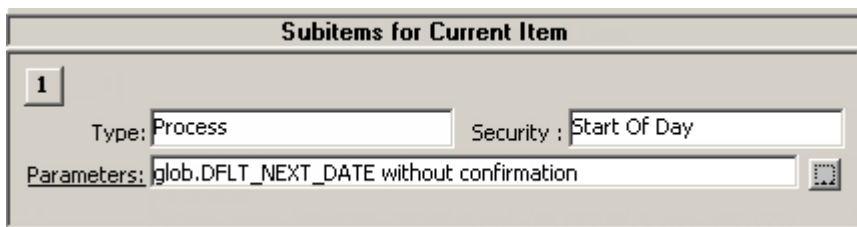
The following fields are only mandatory if Scheduler is used to start the menu item pipes:

- *Escape parameters* – escape double quotes if they are used in executable file startup parameters.
- *Get from* – field specifying where to get information about the results of the program's operation:
- "Return Code" – from the program's return code.


- "Output Stream" – from the program's standard output stream.
- "Error Flow" – from the program's error output stream.
- "File" – from a file; when this value is specified, the *File Name* field in the form can be edited. A filename should be specified in this field.
- "None" – information about the results of the program's operation is not required
- *Put to* – specifies where to save information about the results of the program's operation:
- "Local Constant" – to a local constant whose name should be specified in the *With Name* field.
- "Program Context" – to a DB Manager internal constant whose name should be specified in the *With Name* field.

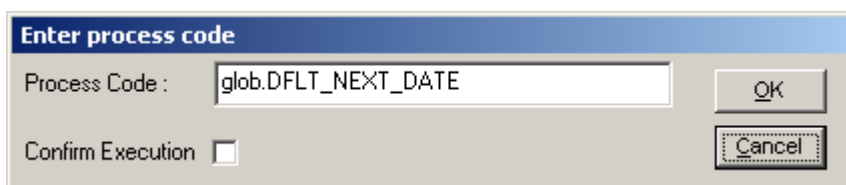
2.6.7 "Process" type

Executing a subitem of this type launches a stored database procedure. The name of the procedure is specified in the *Name* field of the menu subitem's parameters.



Parameters for the "Process" subitem type


The name of the stored procedure is entered after clicking the  button that opens the "Enter process code" window.

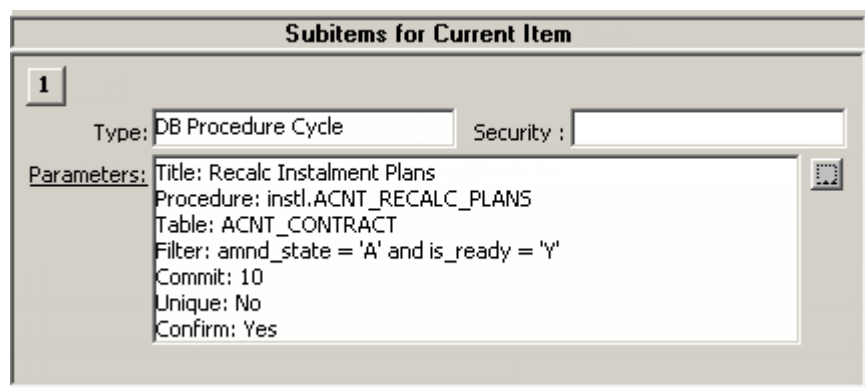


Window for entering the name of a database stored procedure

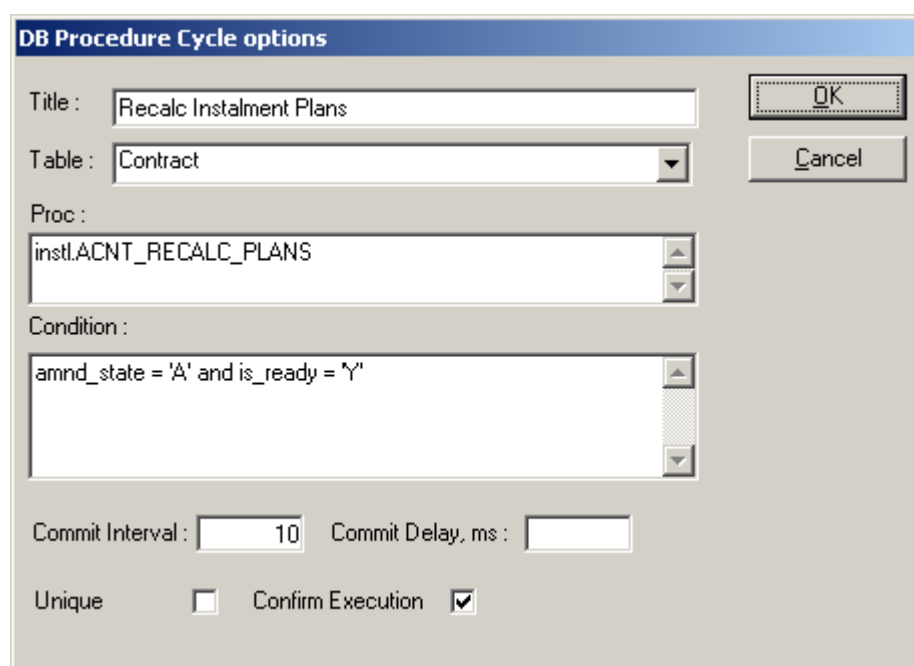
The procedure's name is entered in this window's *Process Code* field. When the *Confirm Execution* checkbox is selected, before starting the procedure, a confirmation prompt for executing the procedure will be displayed.

2.6.8 "DB Procedure Cycle" type

Executing a subitem of this type launches a stored database procedure for all table rows that meet the conditions described in the subitem. To set subitem parameters, click the  button in the parameters window to open the "DB Procedure Cycle options" dialog window.



Parameters for the "DB Procedure Cycle" menu subitem



Window for setting "DB Procedure Cycle" subitem parameters

The window to enter parameters for the "DB Procedure Cycle" subitem type contains the following fields:


- *Title* – operation name.
- *Table* – name of the database table from which data is selected.
- *Proc* – name of the database stored procedure.
- *Condition* – sampling condition.
- *Commit Interval* – number of records processed in one transaction. The recommended range of values is from 10 to 1000.
- *Commit Delay, ms* – delay in milliseconds after each execution of a COMMIT statement, to reduce the load on the database server
- *Unique* – when this checkbox is selected, the process can be simultaneously executed on only one workstation and using only one DB Manager session.
- *Confirm Execution* – if this checkbox is selected, before the operation is started, a prompt to confirm execution of the operation will displayed. If the answer is negative, execution of the menu item is terminated.

2.6.9 "Special" type

The "Special" subitem type and parameters for its execution are entered in the *Parameters* field.



Parameters for the "Special" subitem type

The type of module is selected and its execution parameters set in the "Special parameters" dialog windows opened by clicking the  button.



Be careful when changing the parameters of a "Special" subitem type as changing the module type not only changes a subitem's previously set parameters but also makes it impossible to "undo" the operation.

The following "Special" subitem exist in Way4:

- "DB Copy" – only for use by OpenWay employees.
- "DBM Java Class" – ability to launch certain external Java applications, the set of which is determined by OpenWay. This option is only for use by OpenWay employees.
- "Execute SQL" – execution of SQL expressions.

Special parameters

Special Type : Execute SQL

Parameters :

SQL (begins with @ for file name; for example: @mysql.sql) :

```

declare
Message dtype.ErrorMessage %Type;
begin
Message := dwh_mapping.CLASSIFY_DWD_PRODUCT;
end;

```

Result File :

File Type : [None] ☒ With Headers

Encoding: ANSI ☐ as Condition

Decimal Separator (for Scheduler only) :

Window to set parameters for a "Special" subitem's "Execute SQL" module

The window to set this module's parameters contains the following fields:

- SQL – field for entering an SQL expression.
- Either one SQL expression or a PL\SQL block (according to PL\SQL syntax) can be set in this field.



Note that to add comments to an SQL expression, it is necessary to use the construction `"/<comment> */"`, where `<comment>` is the comment text.

- An expression in this field may come from a file. If the complete path to the file is not specified, the system will first look for it in the "<OWS_WORK>\Client\Shared\Scripts" directory and then in the "<OWS_HOME>\Client\Shared\Scripts directory".
- *Result File* – field for entering the name of the file in which selected data is placed. If this field is left empty, the data is sent to the screen.
- When specifying a filepath, references to database environment variables can be used.
- If the value in this field begins with "SELECT", the corresponding SQL query is executed. It returns a filename with path, in which references to database environment variables may be used.
- *File Type* – drop-down list for selecting the format of the file to which the result set will be placed:
 - "Comma-Separated" – text format with commas as separators
 - "Excel5", "XLSX" – MS Excel formats
 - "HTML"

- "PSR" – PowerBuilder format
- "Tab-Separated" – text format with tabulation characters as separators.
- *With Headers* – when this checkbox is selected, the file with the result set will include database table field headers.
- *Encoding* – field to specify the encoding of the file with the result set; the value in this field can be entered manually or selected from the following list:
 - "UTF-8" (default value)
 - ANSI.
- *as Condition* – this checkbox is used for logical branching of a menu item depending on the results of executing an SQL expression.

If this checkbox is selected, the menu subitem following the current one must have the "Menu Item" type and the *Run if previous step was unsuccessful* checkbox selected.

If the SQL expression returns "Y" (if the SQL field contains the string "? :='Y'"), this subitem (with the "Menu Item" type and the *Run if previous step was unsuccessful* checkbox selected) will not be run and the subitem following it will be run. If the SQL expression returns "N" (if the string "? :='N'"), this subitem (with the "Menu Item" subtype and the *Run if previous step was unsuccessful* checkbox selected) will be skipped and the subitems following it as well.



It is recommended to select the *as Condition* checkbox if the order for executing menu subitems must be changed when exceptions occur, for example, if a contract is in the "Not Ready" status when the daily closing procedure is run.

- *Decimal Separator (for Scheduler only)* – field to select a decimal separator for exporting the result of an SQL expression to a file. By default, a period is used as a separator. The field is only used when working with Scheduler (see the document "Scheduler Operation Manual").
- "Execute SQL File" – execute an SQL program written to a file. The module is not used in the current version, and remains for backward compatibility. To run programs in SQL, it is recommended to use "Execute SQL".
- "Form" – not used in the current version and remains for backward compatibility. A special subitem type is used for access to forms.
- "HSM Security Officer Screen" – opens the window for accessing Host Security Module hardware (see "Host Security Module 8000. Operations and Installations Manual" and "Host Security Module 8000. Programmer's Manual" documents).
- "Housekeeping" – archive data from database tables (see the document "Housekeeping").

Special parameters

Special Type : Housekeeping OK

Parameters :

Table: ACCOUNT

To Path: %ARCHIVE_DATA%

From:

Select Condition: id in (
select /*+ use_hash(c) index_ffs(c contract_cat
from account a, acnt_contract c
where
a.account_number is null
and a.current_balance = 0
and a.alter_account is null
-- id in (contract_contract_cat_id

Operation: Save And Remove

Commit Interval: 1000

Commit Delay (ms): 100

Database hint: /*+ use_nl(account) index(account pk_account) *

☒ Count records before operation

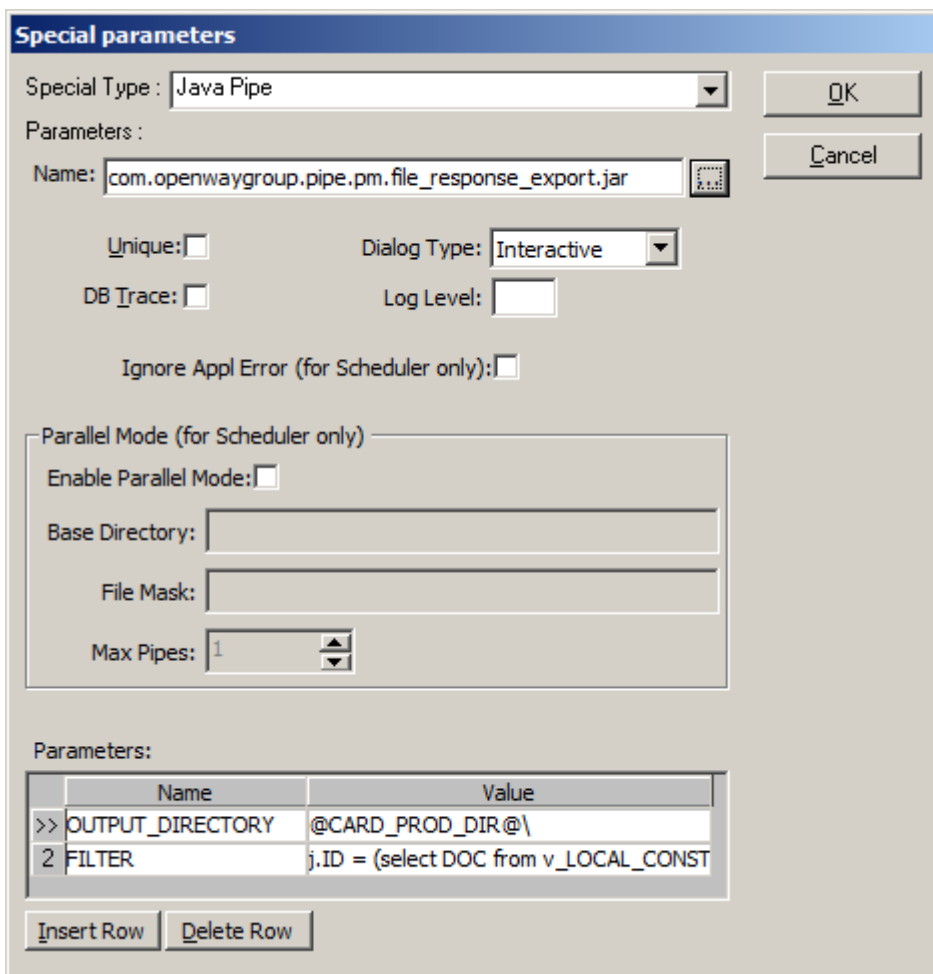
Cancel

Window to set parameters for a "Special" subitem "Housekeeping" module

The window to set this module's parameters contains the following fields:

- *Table* – name of the database table that is being processed.
- *To Path* – path to the directory containing archived data files.
- *From* – field containing the query source (FROM) of the SELECT statement. This field can be used to redefine the content of the *Table* field and to create embedded queries.
- *Select Condition* – field determining the condition for selecting data from a database table (WHERE condition of a SELECT statement).
- *Operation* – field with a drop-down list to specify the operation to be executed with the database table being processed.
- *Save* – save the selected data in an external file.
- *Recover* – load records into a table from an external file.
- *Purge Saved* – delete records from a table that are saved in an external file.
- *Save And Remove* – save a selection in an external file and delete the saved data from a database table.
- *Commit Interval* – number of records deleted in one transaction. The recommended range is between 10 and 1000.
- *Commit Delay (ms)* – delay, in milliseconds, after each execution of the COMMIT statement. Used to reduce the load on the database server.
- *Database hint* – optimizing condition for a SELECT statement.

- *Count records before operation* – if this checkbox is selected, records to be saved will be counted during execution of "Save" and "Remove" commands before each execution of the SELECT statement.
- Intranet – not used in the current version but remains for backward compatibility.
- Issuer File Message – opens the "Issuer File Message" window.
The parameters of the module are specified using semicolons (;) as delimiters in the *Parameters* field of the window for setting parameters. For instance:
COMSERVER_ID=999;CHANNEL=VISA VIP;TIMEOUT=40;
where:
 - COMSERVER_ID is the three-digit number of the communication server to which requests will be sent.
 - "CHANNEL" – name of the channel used to send requests to the payment system channel (in the example, this is Visa).
 - TIMEOUT is the time, in seconds, for the system to wait for a response from the communication server.
- "Java Pipe" starts Java pipes.



Special parameters

Special Type : Java Pipe OK Cancel

Parameters :

Name: com.openwaygroup.pipe.pm.file_response_export.jar

Unique: ☐ Dialog Type: Interactive

DB Trace: ☐ Log Level:

Ignore Appl Error (for Scheduler only): ☐

Parallel Mode (for Scheduler only)

Enable Parallel Mode: ☐

Base Directory:

File Mask:

Max Pipes: 1


Parameters:

	Name	Value
>>	OUTPUT_DIRECTORY	@CARD_PROD_DIR@\'
2	FILTER	j.ID = (select DOC from v_LOCAL_CONST

Insert Row Delete Row

Window to set parameters for the "Java Pipe" module of the "Special" subitem

The window to set this module's parameters contains the following fields:

- *Name* – drop-down list of pipe names; to display the list of pipe names, click the  button.
- *Unique* – if the checkbox is selected, only one instance of the pipe may be executed at a given time (on a single workstation and during a single DB Manager session).
- *DB Trace* – if the checkbox is selected, the Oracle Trace component will be started on the database server.
- *Dialog Type* – the pipe can be executed in one of three modes:
 - "Interactive" – the pipe execution process is shown in a corresponding dialog box.
 - "Errors Only" – the dialog box only shows errors that occur during execution of the pipe.
 - "Silent" – during execution of the pipe, only the progress bar is displayed, with logging to the process log. Auxiliary dialog windows (for example, the file selection window, window for confirming various actions) are not displayed.
- *Log Level* – determines the logging level. The following values can be specified:
 - "20" – only information about errors is saved.
 - "30" – main information about transaction execution is saved.
 - "40" – more detailed information about transaction execution is saved.
 - "50" – debugging data is saved.
 - "60" – recurring information is saved, e.g. specific SQL requests or results of checking database connections.



It is recommended to specify "30" for production systems and "50" during acceptance testing.

- *Parameters* – pipe parameters. Each module has a unique set of parameters and their values. Click [Insert Row] to add a parameter to the set or [Delete Row] to delete a selected parameter.




If Oracle RAC (Real Application Clusters) are used, it is possible to run Java pipes in a Way4 Cards database server node that differs from the node in which DB Manager is running. For this to be possible, set the pipe parameter "ALTERNATIVE_JDBC_CONNECT" and define the parameter value in one of the following ways:

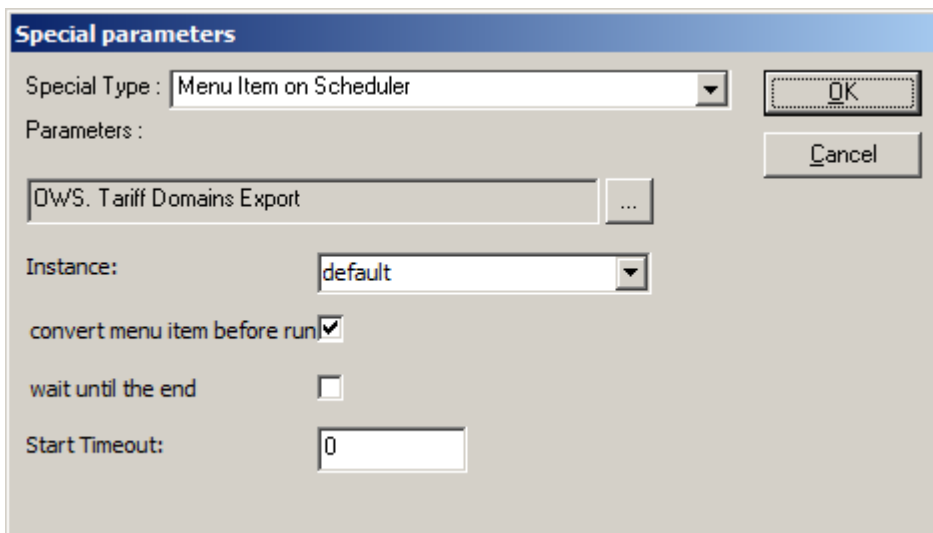
- "jdbc:oracle:thin:@<Host>:<Port>:<SID>" – JDBC connect string. For example, "ALTERNATIVE_JDBC_CONNECT=jdbc:oracle:thin:@prodhost:1521:prod".
- @<Parameter Name>@, where <Parameter Name> is the name of the configuration parameter whose value must be used as the JDBC connect string. The parameter name must be specified in capital letters and enclosed in "@" characters. The configuration parameter is searched for in the "db.ini" or "dbm.ini" files. Example: the parameter "SECOND_JDBC_CONNECT=jdbc:oracle:thin:@prodhost:1521:prod" is set in the "db.ini" file, so in the "Special Parameters" window for the pipe, set the parameter "ALTERNATIVE_JDBC_CONNECT=@SECOND_JDBC_CONNECT@". As a result, the string "jdbc:oracle:thin:@prodhost:1521:prod" will be used as the connect string.

The following fields are only mandatory if Scheduler is used to start Java pipes:

- *Ignore Appl Error (For Scheduler Only)* – when this checkbox is selected, errors in business logic that occur during the pipe's operation will be ignored.

If the checkbox is not selected and during Java pipe operation logical errors occurred that were saved to the process log (i.e. the corresponding record in the "Process Log" form has the "Closed" status, and "Error" is specified in the *Error Level* field), the next menu subitem with the "Menu Item" type and *Run if previous step was unsuccessful* checkbox selected will be run.

- *Enable Parallel Mode* – when this checkbox is selected, parallel mode is enabled, when several copies of the pipe are run simultaneously. This mode is only used for pipes that import data from files and is used to improve performance when executing a large number of operations of the same type.
- *Base Directory* – directory from which files are imported; to select a directory, click the  button. This field can only be edited if the *Enable Parallel Mode* checkbox is selected.
- *File Mask* – regular expression (mask) for a file name; "*" (any number of characters) and "?" (any character) can be used. This field can only be edited if the *Enable Parallel Mode* checkbox is selected.
- *Max Pipes* – maximum number of pipe instances that can be run simultaneously. This field can only be edited if the *Enable Parallel Mode* checkbox is selected.
- "Luhn Calculator" – calculate a Luhn digit for a number entered by the user. This module is used without parameters.
- "Map Applet" – reserved for use in future versions and not available in the current version.
- "Menu Item" – not used in the current version but remains for backward compatibility. To run a menu item, use a special subitem type.
- "Menu Item on Scheduler" – runs a menu item using Scheduler.




The screenshot shows a dialog box titled "Special parameters". It contains the following fields and controls:

- Special Type:** A dropdown menu set to "Menu Item on Scheduler".
- Parameters:** A text field containing "OWS. Tariff Domains Export" with a browse button (three dots) to its right.
- Instance:** A dropdown menu set to "default".
- convert menu item before run:** A checked checkbox.
- wait until the end:** An unchecked checkbox.
- Start Timeout:** A text field containing "0".
- Buttons:** "OK" and "Cancel" buttons are located in the top right corner.

Window to set parameters for the "Menu Item on Scheduler" module of the "Special" subitem

The window to set this module's parameters contains the following fields:

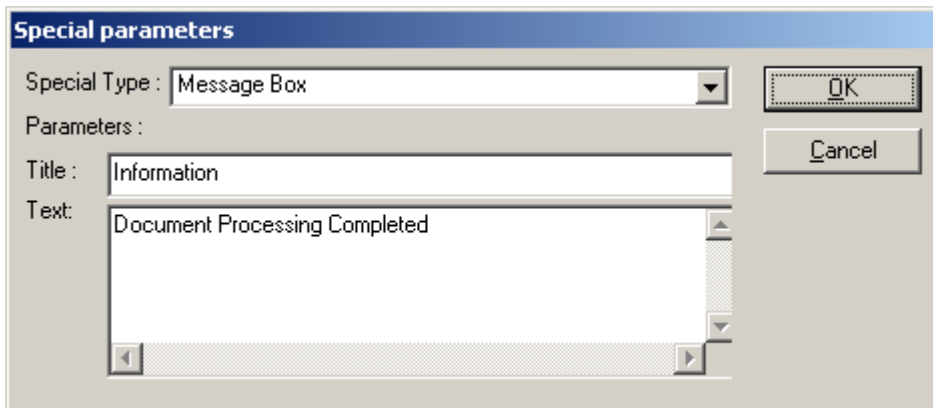
- In the first field, click the  button and select a menu item definition from the list.
- *Instance* – drop-down list to select the name of the Scheduler instance (for more information, see the document "Scheduler R2").

- *Convert menu item before run* – when this checkbox is selected, the menu item will be converted to the format used by Scheduler. It is recommended to select this checkbox.
- *Wait until the end* – when this checkbox is selected, a modal window will be displayed during execution of the menu item. This window can only be closed after the menu item has been completed.
- *Start Timeout* – timeout (in seconds) for starting a menu item with Scheduler. If the menu item was not started within this period, an error message will be displayed and execution of the menu subitem will be terminated. If "0" is specified in this field, the timeout for starting execution of the menu item will continue indefinitely.

- "Menu Upgrade" – loads a menu from an external file or saves a menu to an external file (see "[Importing and exporting the user menu](#)").

The parameters of this module are entered in the *Parameters* field. They are as follows:

- "LOAD" – load a menu.
- "DUMP" – export a menu.
- "Message Box" – display a message window on the screen.

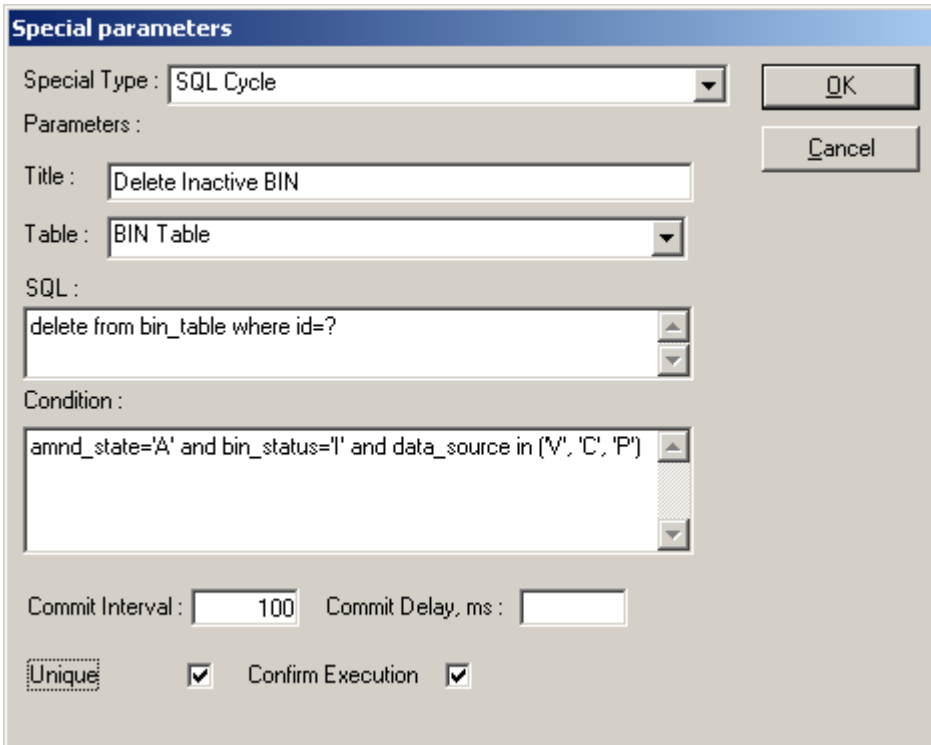


Window to set parameters for the "Message Box" module of the "Special" subitem

The window to set this module's parameters contains the following fields:

- *Title* – message window title.
- *Text* – message text, no longer than one line.
- "Message Box Confirmation" – opens a dialog window with a prompt and buttons for answering. If the answer is positive ([OK]), the next subitem is executed. If the answer is negative ([Cancel]), the execution of the current menu item is terminated. The parameters are the same as those of the Message Box module.
- "Open MDI Window" – open the MDI (Multiple Document Interface) child window with specified internal name. Only for use by OpenWay representatives.
- "Open Window" – opens a window with an specified internal name, executed as a stand-alone task. Only for use by OpenWay representatives.
- "Oracle Report" – not used in the current version but remains for backward compatibility. To launch the Oracle Report generator, it is recommended to use a special menu subitem type (see the section "Oracle Report" type").
- "PIN Management" – not used in the current version but remains for backward compatibility.

- "Pipe" – not used in the current version but remains for backward compatibility. To launch pipes, is recommended to use a special menu subitem type (see the section "Pipe" type").
- "SQL Cycle" – launches the execution of a specified SQL expression for all rows in a table that meet a certain condition.



Window to set parameters for the "SQL Cycle" module of the "Special" subtype

The window to set this module's parameters contains the following fields:

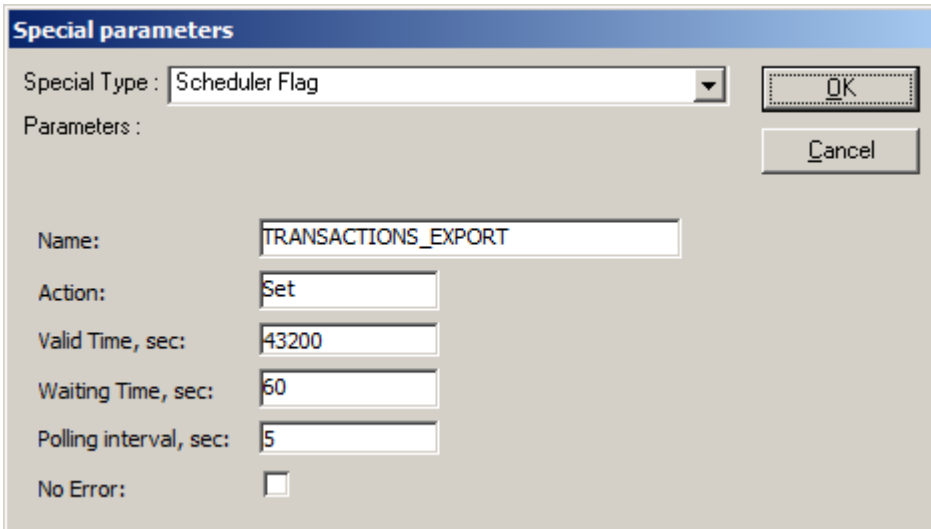
- *Title* – operation name.
- *Table* – name of the database table from which data is selected.
- *SQL* – contains the SQL expression executed for each record of the database selection. The "?" symbol is a synonym for the *ID* field of the database table from which selection is made.



Note that SQL expressions may not contain more than one "?" symbol, otherwise execution of the expression will be terminated and a window with an error message will be displayed.

- *Condition* – sampling condition.
- *Commit Interval* – number of records processed within one transaction; the recommended range is between 10 and 1000.
- *Is Unique* – when this checkbox is selected, the process may be executed on only one workstation during one DB Manager session at a time.
- *Confirm Execution* – if this checkbox is selected, before the operation is started, a prompt to confirm execution of the operation will displayed. If the answer is negative, execution of the menu item is terminated.

- "Scheduler Flag" – set or remove a special parameter (flag). This mechanism is used, for instance, to restrict access to a resource or to notify users of a specific event. This type of subitem is only used when working with Scheduler (see the document "Scheduler Operation Manual").



Window to set parameters for the "Scheduler Flag" module of the "Special" subitem

The window to set this module's parameters contains the following fields:

- *Name* – flag name.
- *Action* – action that must be performed with the flag:
 - "Set" – set the flag to "Y".
 - "Reset" – reset the flag; i.e. set it to "N".
 - "Wait" – wait until the flag's value is "Y".
 - "Lock" – set the flag to "Y" only if the flag is not set.
- *Valid Time, sec* – time interval (in seconds) during which the flag setting is valid; this field must be filled in if "Set" or "Reset" is specified in the *Action* field.
- *Waiting Time, sec* – waiting time (in seconds); this field must be filled in if "Wait" or "Lock" is specified in the *Action* field.
- *Polling Interval, sec* – database polling time interval (in seconds); this field must be filled in if "Wait" or "Lock" is specified in the *Action* field.
- *No Error* – if this checkbox is selected, "Wait" or "Lock" is specified in the *Action* field and the flag was not set to "Y" by the end of the waiting time, execution of this menu item is completed without an error message; otherwise, execution of the menu item will be terminated and the next menu subitem with the "Menu Item" type and the *Run if previous step was unsuccessful* checkbox selected will be run.



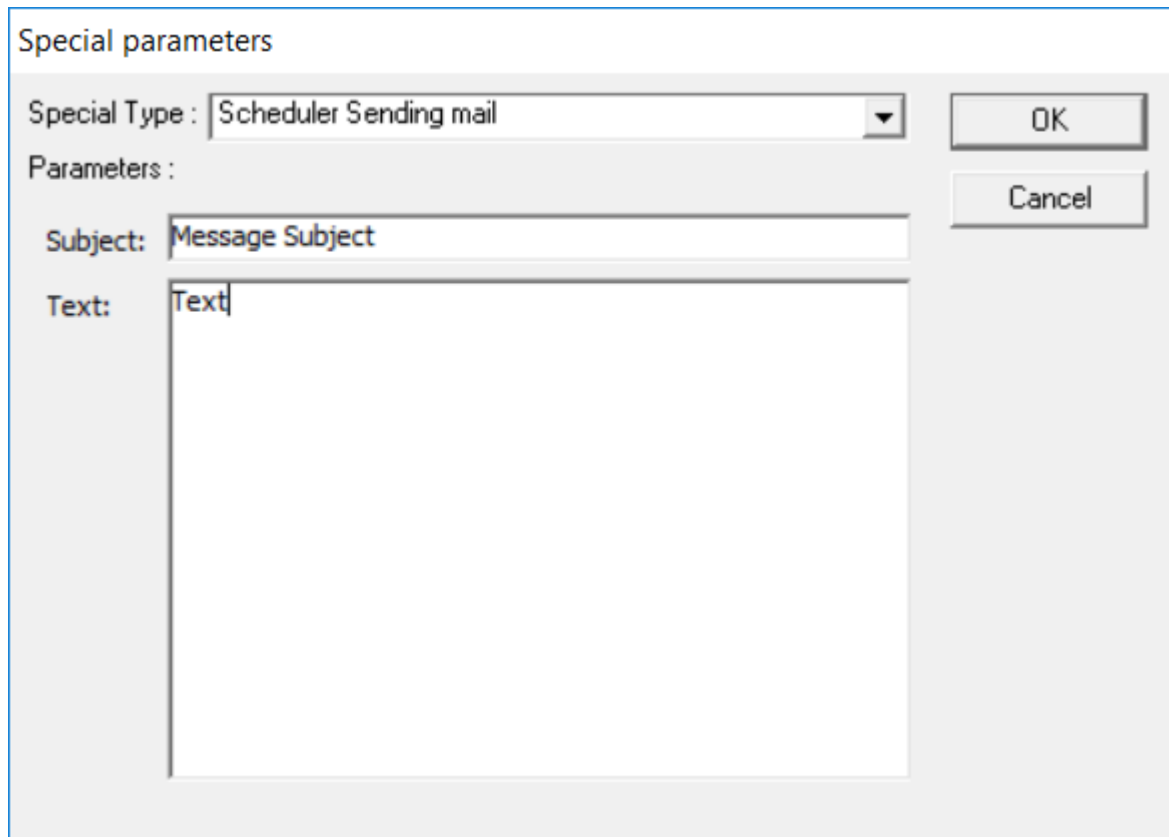
If a menu item containing a "Flag" subitem is called from another menu item, the *No Error* checkbox is selected, the *Action* field contains "Wait" or "Lock" and the flag is not set to "Y" after the waiting time expires, the next subitem of the menu that called the menu item is executed.

- "Scheduler Sending Mail" – send messages by email. This type of subitem is only used when working with Scheduler (see the document "Scheduler Operation Manual").

The address specified with the Scheduler configuration parameter "mail_address_to" is used as the recipient address (see the section "Scheduler Configuration" of the document "Scheduler Operation Manual").

The subitem's parameters are set in the "Special Parameters" form:

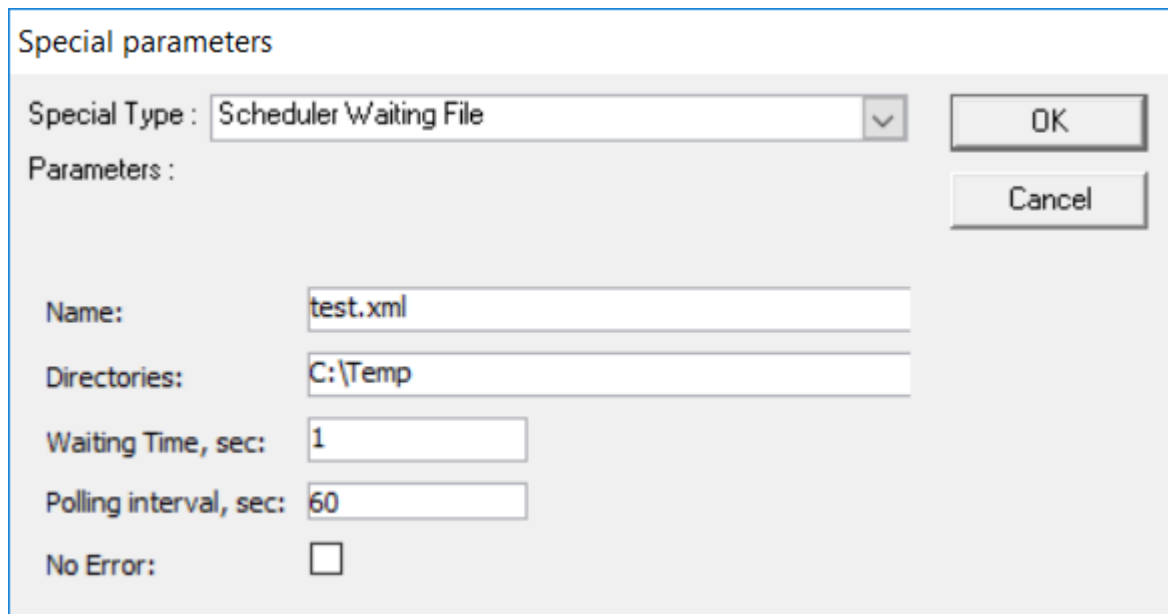
- *Subject* – message subject
- *Text* – message text



Window to set parameters for the "Scheduler Sending Mail" module of the "Special" subitem

- "Scheduler Waiting File" – wait for a specific file to appear in a specific directory. This type of subitem is only used when working with Scheduler (see the document "Scheduler Operation

Manual").



Window to set parameters for the "Scheduler Waiting File" module of the "Special" subitem

The window to set this module's parameters contains the following fields:

- *Name* – file name; a Java regular expression (mask) may be used for the name. For example, to wait for a file with any name and extension, specify the ".*" mask, for files with the ".xml" extension – the ".\..xml" mask. All files with the ".txt" extension beginning with the capital letter "A" will comply with the mask "A.*\..txt".
- *Directories* – path to the directory waiting for the file. Several paths can be specified, with semicolons (";") used as separators.
- *Waiting Time, sec* – waiting time (in seconds).
- *Polling Interval, sec* – polling interval (in seconds).
- *No Error* – if this checkbox is selected and the file does not appear in the directories by the end of the waiting period, execution of this menu item ends without an error message. If the checkbox is not selected and the file did not appear in the specified directories by the end of the waiting period, execution of the menu item will be terminated and the next menu subitem with the "Menu Item" type and *Run if previous step was unsuccessful* checkbox selected will be run.



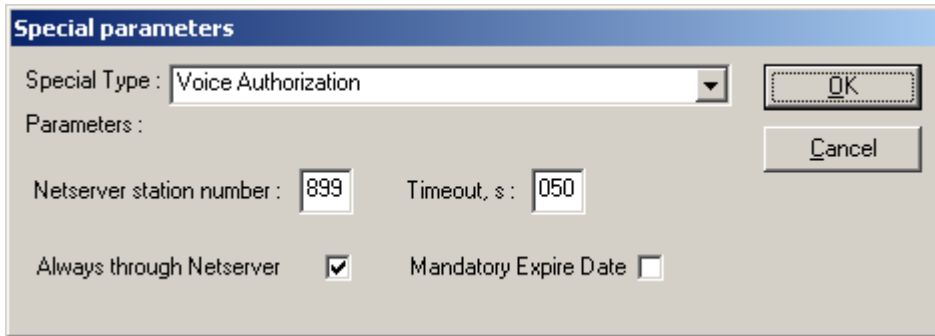
If a menu item containing a "Waiting Files" subitem is called from another menu item, the *No Error* checkbox is selected, and the file did not appear in the specified directories by the end of the timeout, the next subitem of the menu that called the menu item is executed.

- "Security" – opens the "DB Manager Users and Groups" window.
- "Special" – execute special commands in the system.

The following commands are allowed:

- "RECOMPILE_PIPES" – recompile all pipes. It is recommended to perform this operation after changing the files used in the source code of the pipes. Only for use by OpenWay representatives.

- "MICROHELP_SELECT" – edit an SQL expressions that composes messages displayed in the DB Manager status bar.
- "SILENT_MODE" – start a pipe in "Silent" mode.
- "INTERACTIVE_MODE" – start a pipe in "Interactive" mode.
- "Voice Authorization" – opens the voice authorization interface for card requests.



The screenshot shows a dialog box titled "Special parameters". Inside, the "Special Type" dropdown menu is set to "Voice Authorization". Below it, the "Parameters" section contains two input fields: "Netserver station number" with the value "899" and "Timeout, s" with the value "050". At the bottom, there are two checkboxes: "Always through Netserver" which is checked, and "Mandatory Expire Date" which is unchecked. "OK" and "Cancel" buttons are located on the right side of the dialog.

Window to set parameters for the "Voice Authorization" module of the "Special" subitem

The window to set this module's parameters contains the following fields:

- *Netserver station number* – the ID of the communication server used by DB Manager for launching authorization procedures for on-us and foreign cards.
- *Timeout* – the maximum time, in seconds, to wait for a response from the communication server.
- *Always through Netserver* – when this checkbox is selected, requests to the database always come through the communication server (it is recommended to select this checkbox).
 - *Mandatory Expire Date* – when this checkbox is selected, entry of a bank card's expiry date is a mandatory condition for authorization.

3 Importing and exporting the user menu

The DB Manager user menu may be altered by directly editing menu folders and items or upgraded by importing data from a special-format file or files

The menu can be upgraded during general system upgrade (in this case, the standard menu developed by OpenWay is imported) or when developed and debugged menu elements are copied from one system to another.

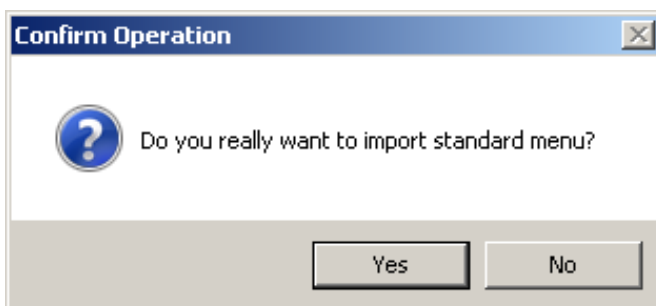
3.1 Importing the standard menu

The standard version of the user menu is imported by selecting "Database → Import Standard Menu" in the DB Manager system menu.



To prevent the loss of settings for the parameters of menu items, as well as menu folders and items created by users, it is necessary to create custom menu folders and items in a separate branch parallel to the "OpenWay" branch.

To import the standard menu, confirm execution of this procedure by clicking the [Yes] button in the "Confirm Operation" dialog window.



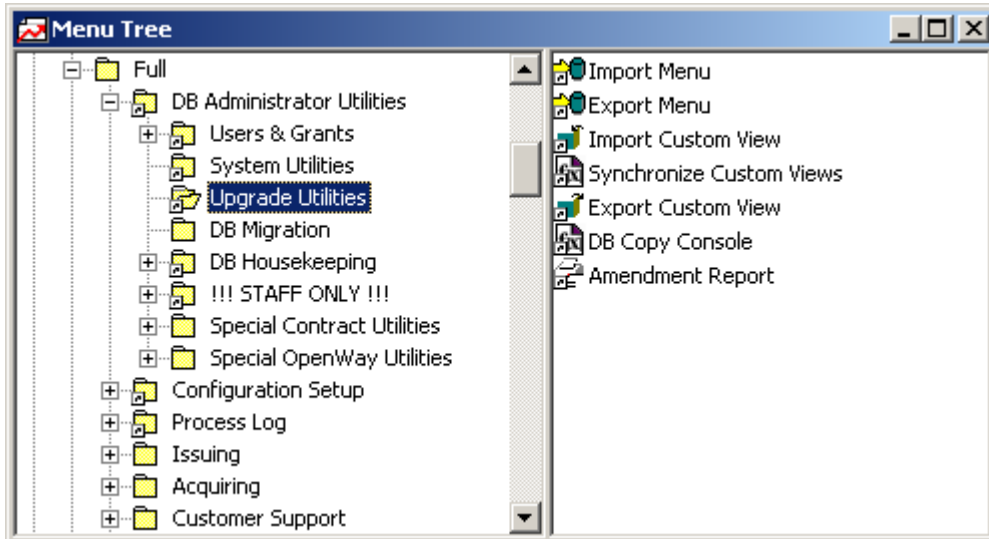
Prompt to confirm import of the standard menu

The standard menu may also be imported by selecting "Full → DB Administrator Utilities → Upgrade Utilities → Import Menu" and then clicking the [Full Upg] button in the "Menu Upgrade File Loader" form.

3.2 Exporting menu folders and items to a file

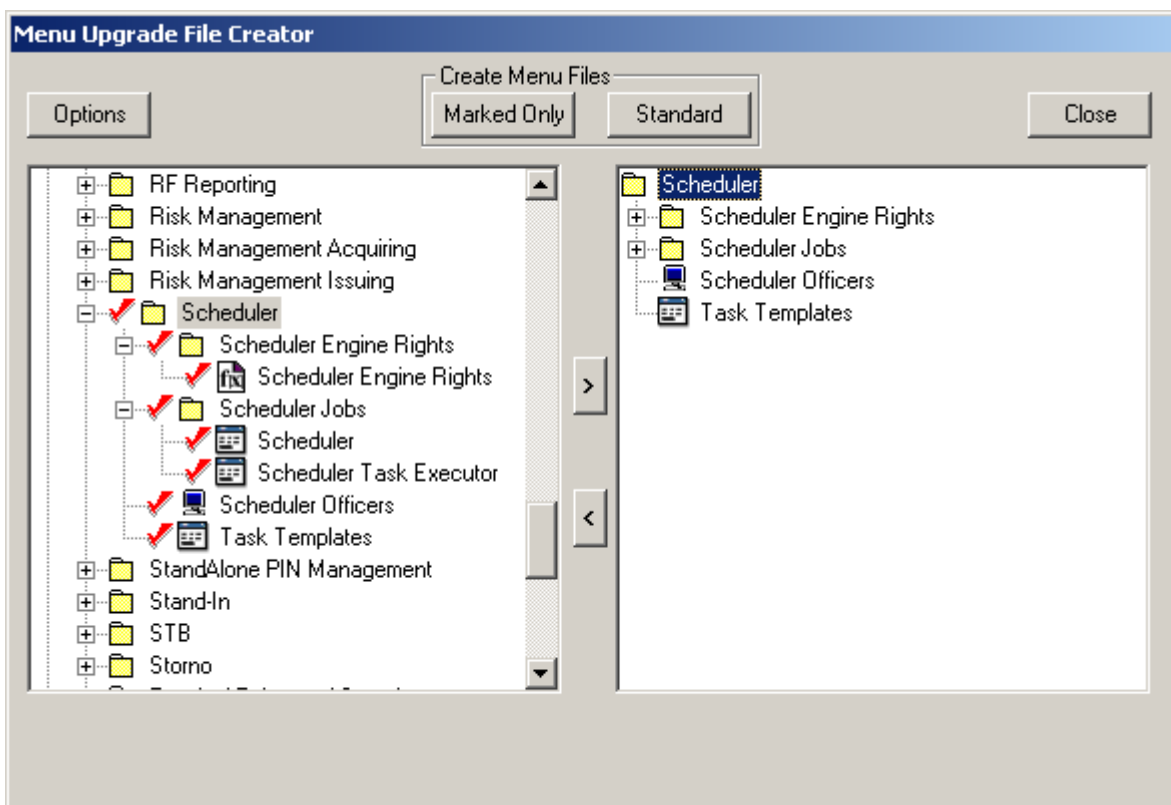
Menu folders and items are exported after new menu elements have been developed and debugged in one system to move them to another system, e.g. from a test system to a production one.

To export menu elements, select "Full→ DB Administrator Utilities → Upgrade Utilities → Export Menu".





Menu items for upgrading the user menu

Selecting this item opens the "Menu Upgrade File Creator" window. This window is used for selecting folders and/or items to be exported.




Dialog window to select menu elements for export

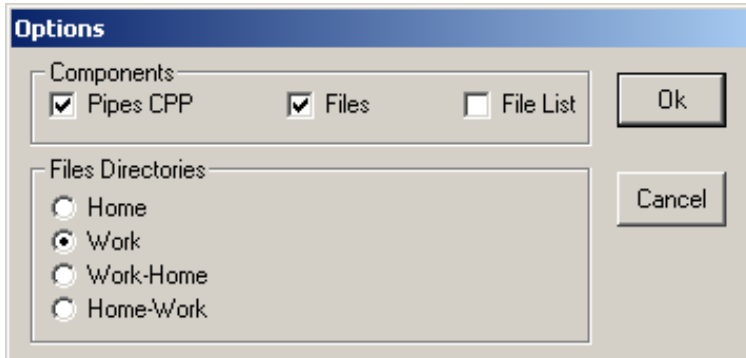
In the left section of the window, select the menu elements to be exported, and click the  button.

As a result, the elements selected for export will appear in the right section of the "Menu Upgrade File Creator" window and will be marked with a  in the left part of the window.

To exclude an element from the selection, select it in the right section of the "Menu Upgrade File

Creator" window and click the  button.

Parameters for menu element export are set in the "Options" window opened by clicking the [Options] button in the "Menu Upgrade File Creator" window.



Window to set menu element export parameters

This window contains the following fields and buttons:

- *Pipes CPP* – when this checkbox is selected, the source code of the pipes being exported will also be exported to a file with the name <name>.dmp, where <name> is the menu export filename specified by the user.
- *Files* – when this checkbox is selected, files used when menu items like pipes or forms are executed will be exported to a <name>.dmp file.
- *File List* – when this checkbox is selected, export of a menu will be accompanied by the creation, in a <name>.lst file, of a list of files used when the items of this menu are executed.
- *Files Directories* – group of radio buttons determining the order for selecting standard Way4 directories from which files will be taken when menu folders and items are exported. For a description of standard file server directories and their access privileges, see section "Classification of Way4 users" of the document "DB Manager User Management". The following radio buttons are available:
 - *Home* – the system will search for all necessary files in the <OWS_HOME> directory only.
 - *Work* – necessary files will be only searched for in the <OWS_WORK> directory of the workstation from which the menu is being exported.
 - *Work-Home* – the necessary files will be searched for in the <OWS_WORK> directory of the workstation; if no files for export are found, the <OWS_HOME> directory will be searched.
 - *Home And Work* – the system will search for all necessary files in the <OWS_HOME> directory; if no files for export are found, the system will search for files in the <OWS_WORK> directory.

After menu elements have been selected for exporting and the export parameters set, click the [Marked Only] button and in the "Save upgrade information" window, specify the name of the file in which data will be saved. This file will be automatically given the .upg extension.

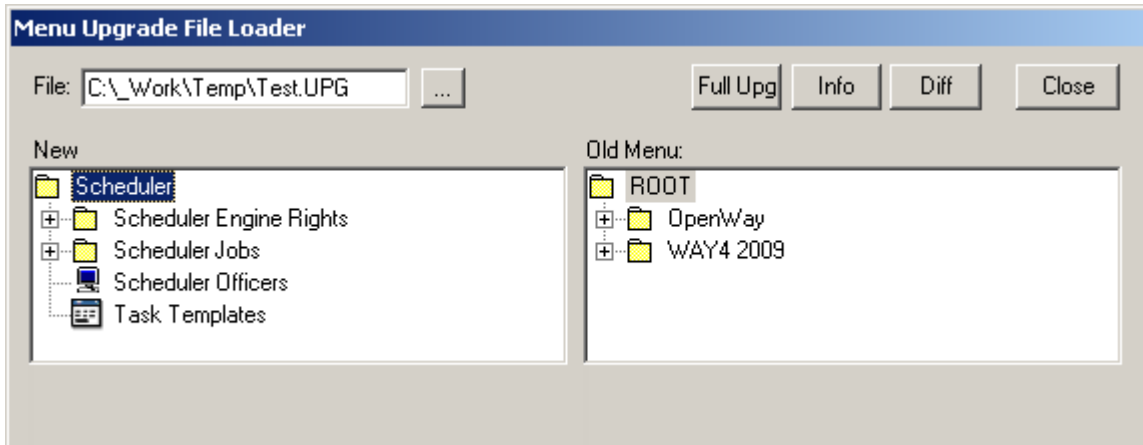
To export all elements of the user menu, click the [Standard] button.

3.3 Importing menu folders and items from a file


Users import menu folders and items after receiving menu upgrade files from OpenWay, or after creating these files in a test system.

To import menu groups and/or items, select "Full → DB Administrator Utilities → Upgrade Utilities → Import Menu" from the user menu.



The "Menu Upgrade File Loader" window used to select user menu folders or items for import opens.

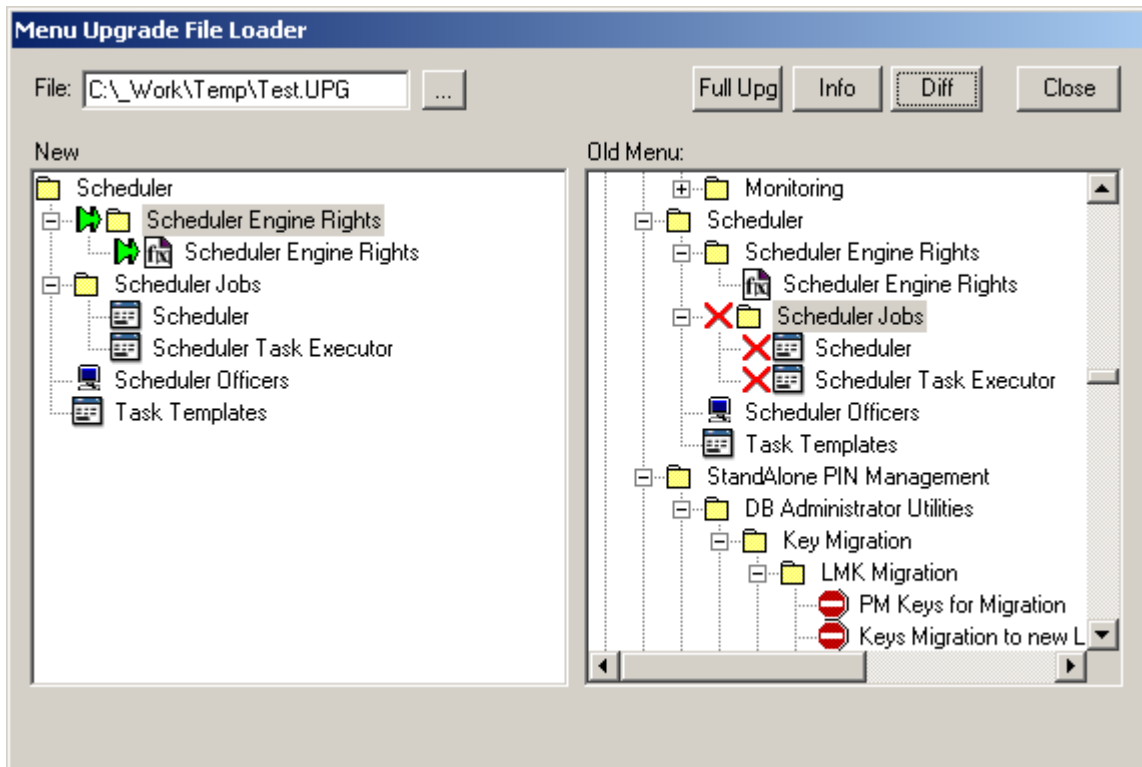


Dialog window to select menu elements for import

In this form's *File* field, click the  button, specify the name of the file from which the menu will be imported. After doing this, the *New* field will display menu elements contained in the selected file.

The form contains the following control buttons:

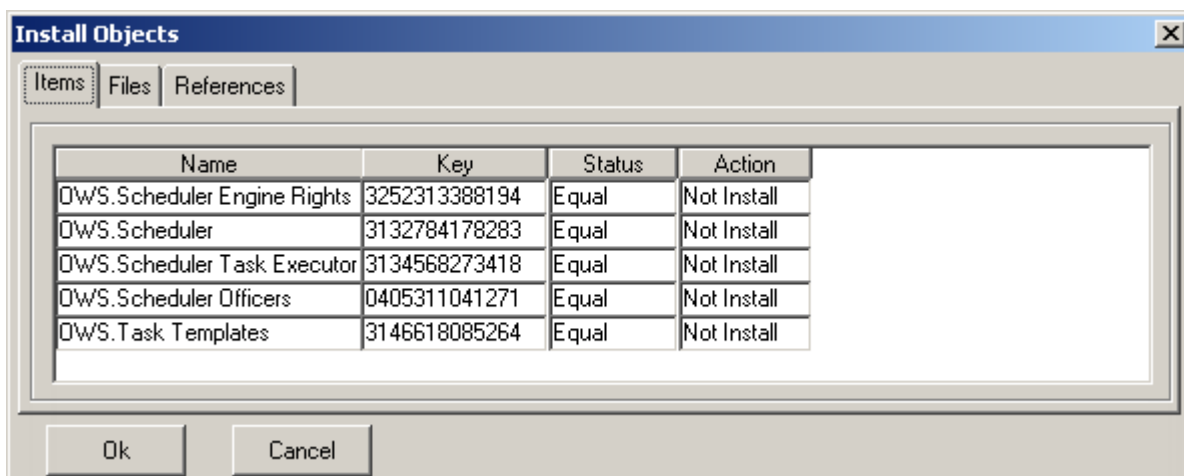
- [Full Upg] – starts the procedure of importing the standard menu.
- [Info] – opens a window containing information about the menu element that is being imported. This element is highlighted in the *New* field.
- [Diff] – display information about differences between menu folders being imported and those installed on the workstation; before clicking this button, in the left and right parts of the "Menu Upgrade File Loader" window, select the menu folders to compare. After comparison of the selected menu folders, new menu items will be marked with a  icon in the left part of the menu and items that are missing in the menu being imported will be marked with a  icon in the right part of the menu.



Information about differences between the menu folders being imported and those installed on the workstation

To import a menu element, left-click on it in the *New* field and, holding the left mouse button down, drag it to its place in the appropriate menu folder in the *Old Menu* field.

After doing this, the "Install Objects" window will open.



Menu element import parameters

The window has three tabs:

- "Items" – table with the list of menu items contained in the file selected for import.
- "Files" – table with the list of files necessary for executing the menu items being imported and contained in the file selected for import. When a menu item associated with such files is exported, the latter are saved in a file with the .dmp extension (see the description of the "Options" window in the section ["Exporting menu folders and items to a file"](#)).

- "References" – table listing additional access privileges required for a user to start a certain menu item. (see the *Security* field in the section "[Editing menu item definitions](#)").

Each element of these lists has one of the following values in the *Status* field:

- "Equal" – the element being imported already exists in the user menu and does not differ.
- "Modified" – the element being imported differs from the corresponding element in the user menu.
- "New" – the element being imported is not in the user menu.

In the *Action* field of the tables shown in the "Install Objects" window, using a drop-down list, the user can specify if a particular menu element will be imported from the menu upgrade file. "Install" is the default value for elements whose statuses are either "Modified" or "New". If this value is specified, the selected element will be imported. "Not Install" in the *Action* field is the default value for elements whose status is "Equal"; this value specifies that the given element will not be imported.

After user menu import parameters have been set, click the [Ok] button in the "Install Objects" window to start the import procedure.