Getting started with process designer

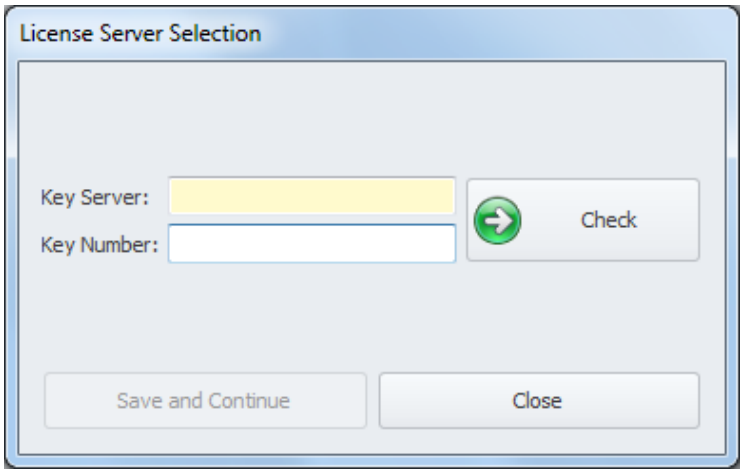
BPM process designer is an application which allows for handling BPM processes, as well as for defining their structure and functioning. Upon starting the Comarch ERP Standard BPM application, first the logon window is opened.

Comarch ERP Standard BPM logon window

In the logon window, it is necessary to enter the name of database and the name or address of the server hosting the database. It is also necessary to specify user's data/ Analogically to the Comarch ERP Standard system, it is possible to select the option of integrated security.

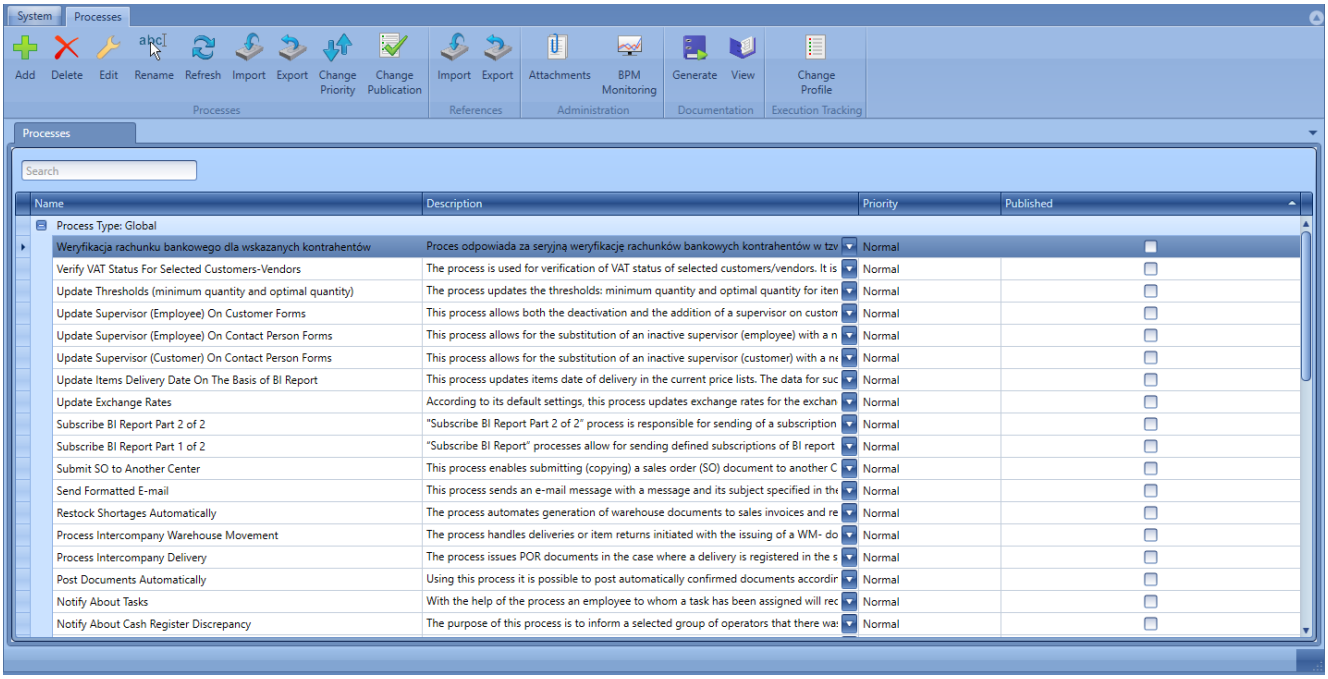
At the bottom of the window, it is possible to select the language in which the application will be started. From this level it is also possible to start the tool for solving problems regarding BPM services and BPM configuration tool.

Hint
The application language can be also changed during the work with the process designer, which has been described in article *Process designer configuration.*
In case for the operator there is no configured license, a window for specifying license key server and its number, is opened.



License server selection

Upon correct completion of the above-mentioned data and selection of a company structure center, the application is opened in full screen mode.



BPM process designer interface

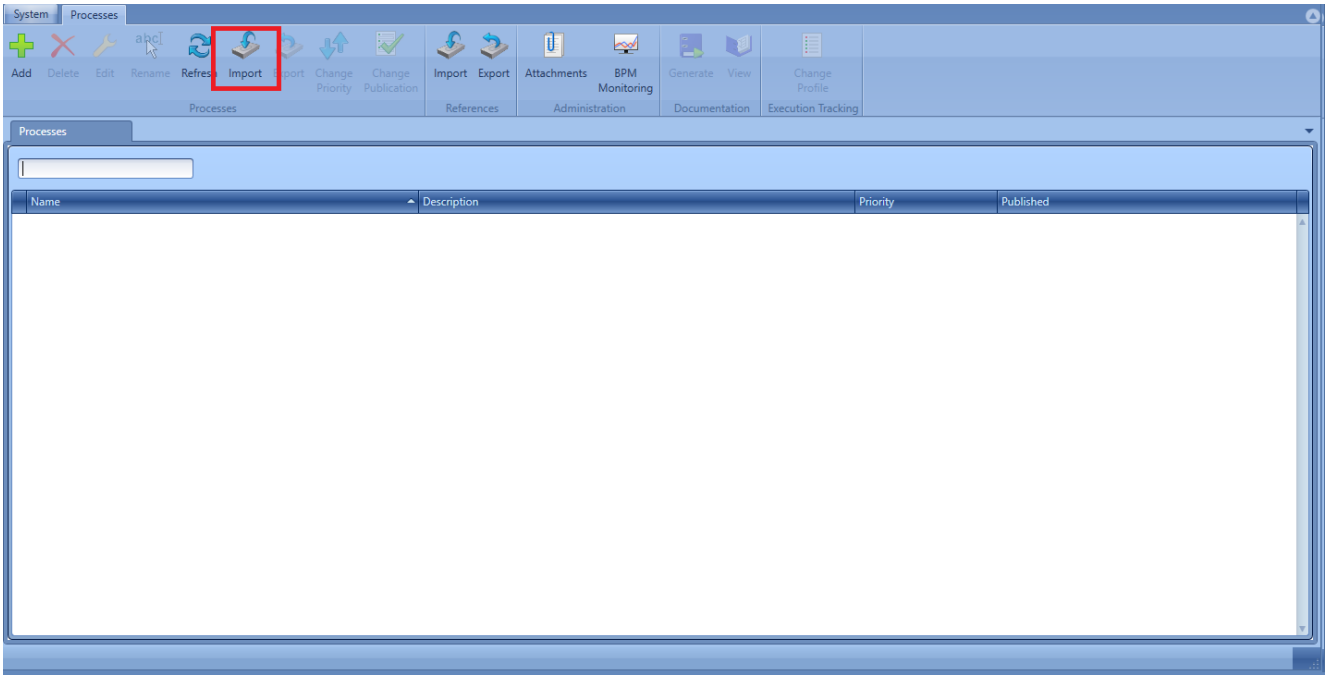
Importing/exporting processes

In the Comarch ERP Standard BPM system, it is possible to transfer BPM processes between databases or to load standard processes to the system. For this purpose, the mechanism of importing and exporting processes is used.

Note
After migrating the Comarch ERP Standard system to a higher version, it is necessary to import once again all standard processes in order to update them.

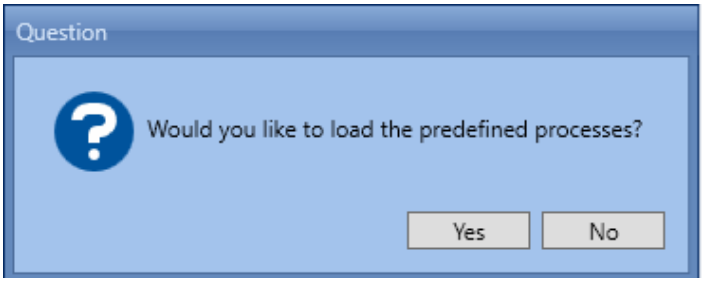
Import

To import a process to the process assembly, from *Process Assembly* group of buttons, it is necessary to select [**Import**] button.



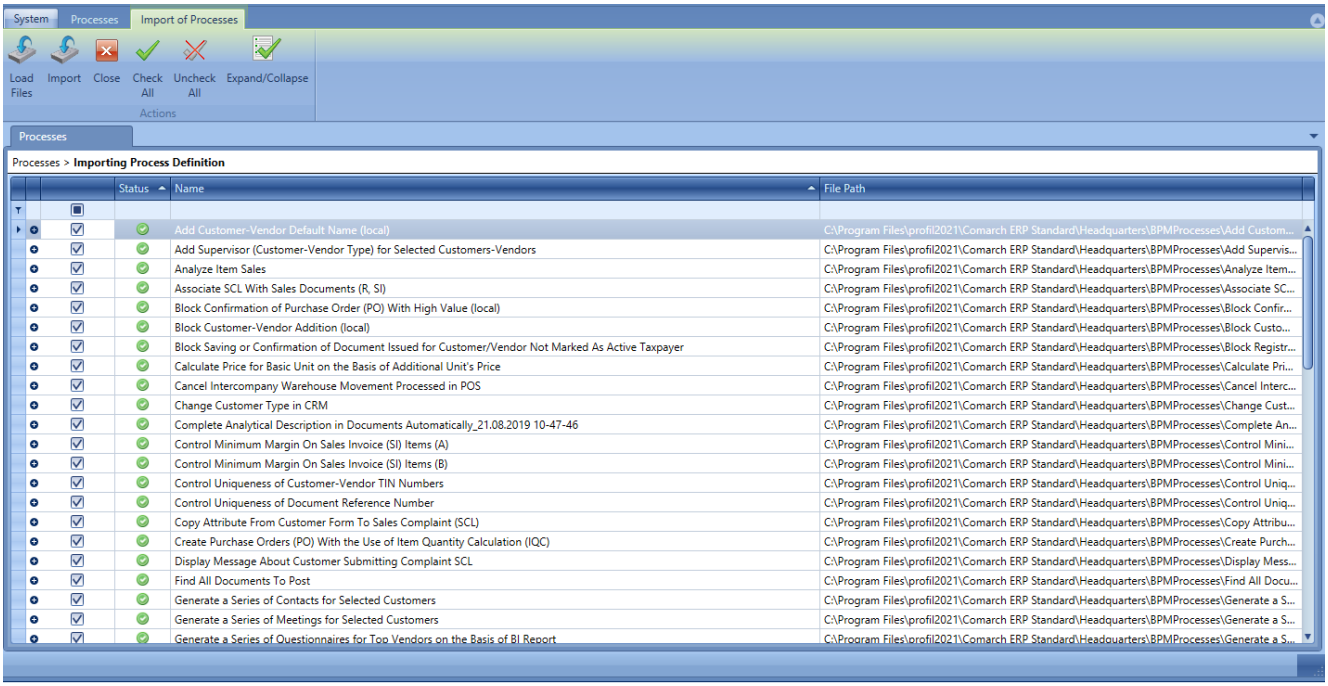
Process import

When importing processes for the first time, that is when the process assembly is empty, the system asks the user whether to load standard processes.



Message asking whether to load predefined processes

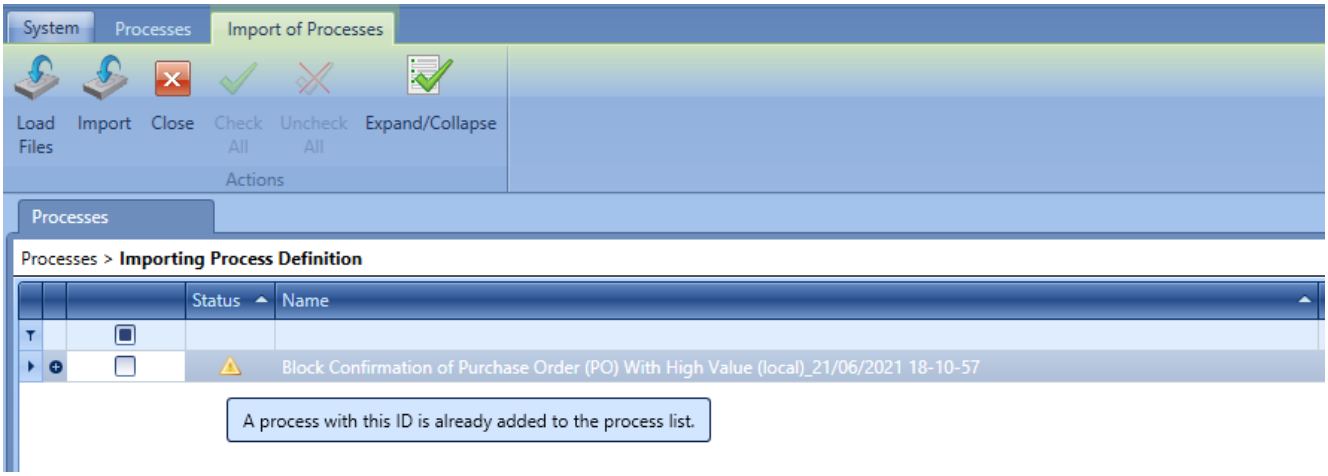
Upon selecting *Yes*, the system loads a list of all processes available within a standard installation of the system.



List of loaded standard processes

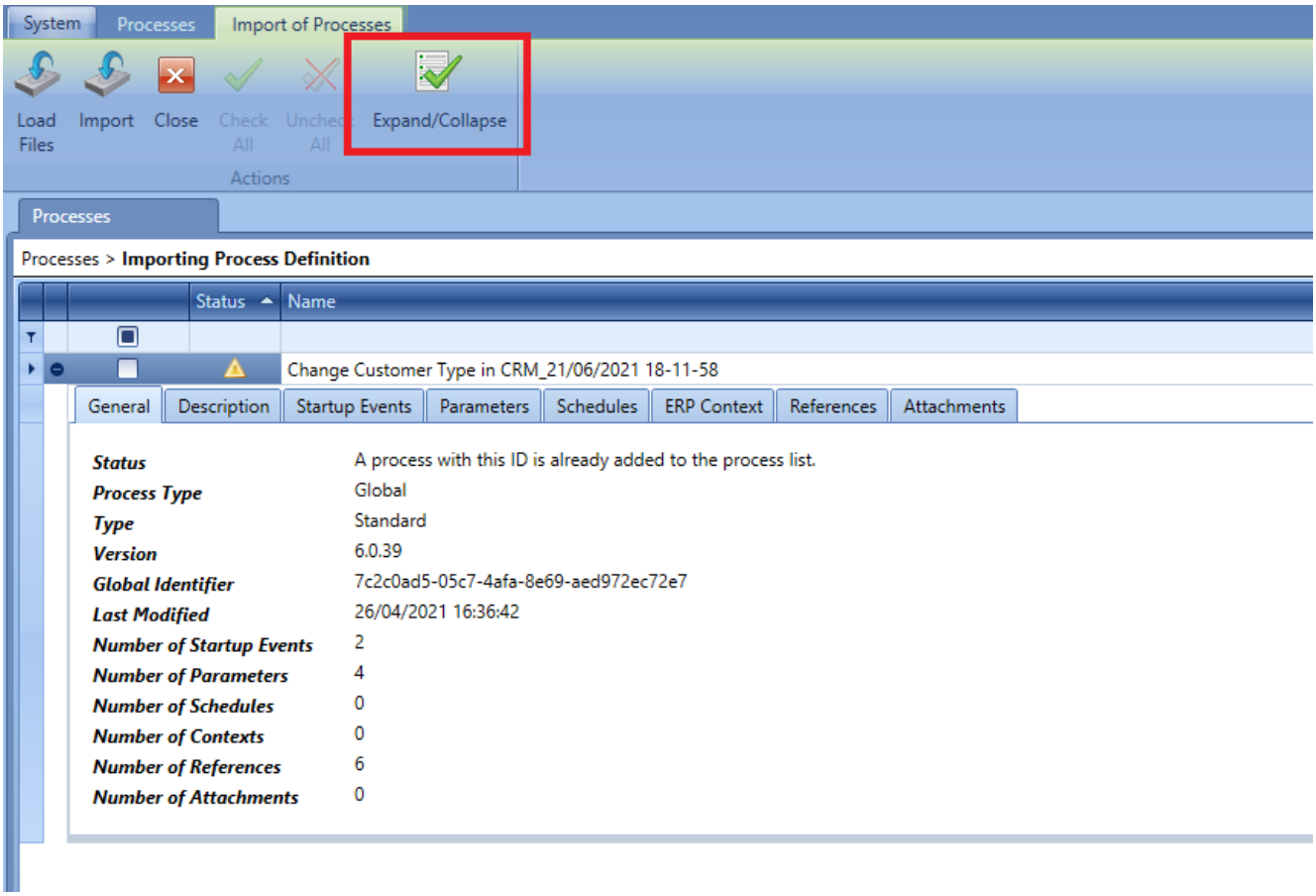
Upon selecting *No*, an empty list is opened. To add a process to the list, it is necessary to use [**Load**] button and select a file with. wdf extension. At this stage, the process is subject to a preliminary validation. A process loaded correctly will be marked with a green symbol in *Status* column. Whereas an incorrectly loaded process marked with a warning or error symbol providing information about the reason of the occurred problem.

Note
It is possible to import a process marked with a warning, but it is not possible to import a process loaded with an error to the assembly.



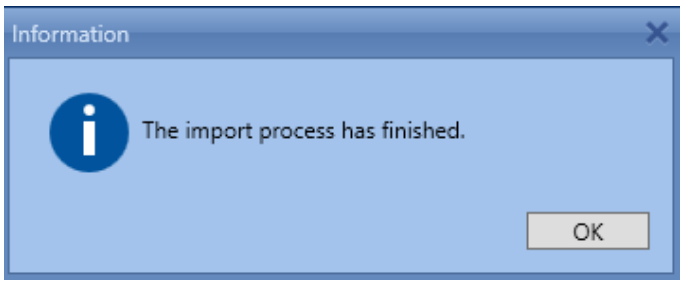
Example of a warning message displayed during a process upload

Hint
Files of standard processes can be found in the main installation directory of the Comarch ERP Standard application, in *BPMProcesses* folder.
From the level of that list a user can also preview details of an imported process. To do so, it is necessary to mark a given process on the list and select [**Expand/Collapse**] button.



Details regarding an imported process

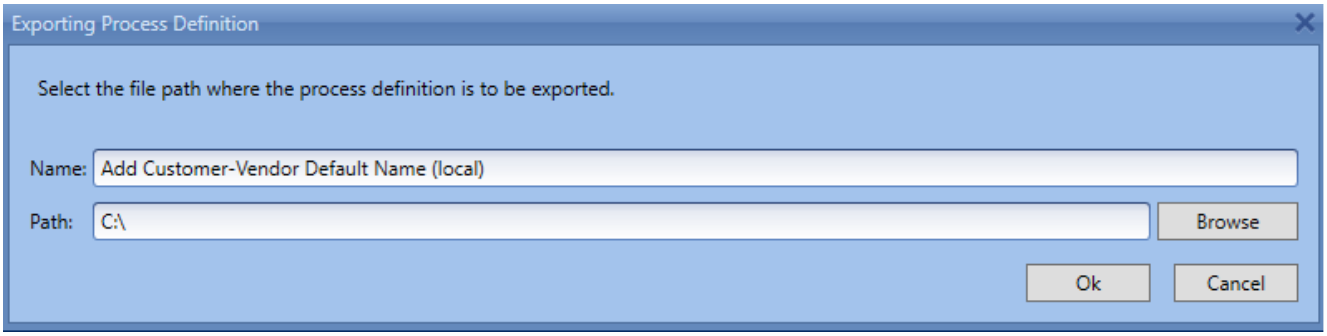
To finish the import of processes to the assembly, it is necessary to select [**Import**] button. The system will inform the user about a correct completion of the operation.



Information about finished import

Export

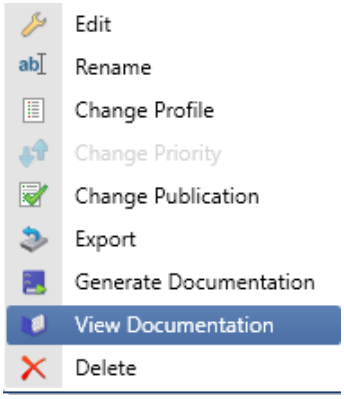
To export a process, it is necessary to select a given process and click on [**Export**] button, available in the *Process Assembly* group of buttons. A window for inserting file name and saving path of the exported file, will be opened.



Process export

Process execution settings

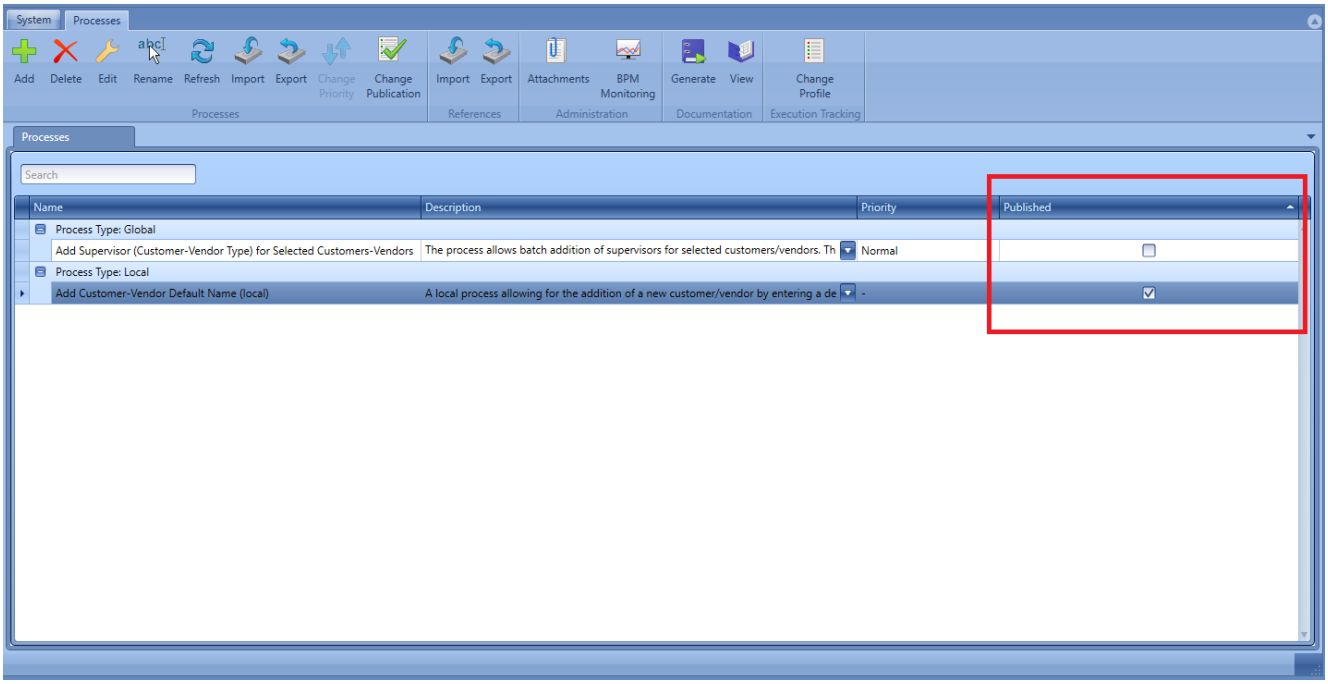
From the level of BPM process designer, it is possible to set parameters of a process affecting its visibility, priority or method of tracking in the system. Those parameters can be changed from the level of the main menu or upon clicking with right mouse button on selected process.



Process menu available under the right mouse button

Process publication

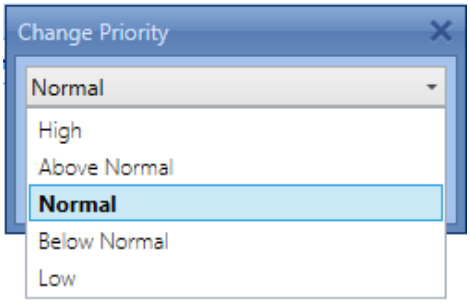
In order to use a process, it is necessary to publish it with the use of [**Change Publication**] button. The information indicating whether a process has been published can be found on the list of processes, in *Published* column.



Information about process publication

Priority of processes execution

From the level of the list of processes it is possible to specify the priority of execution of a process, by clicking on [**Change Priority**] button. By default, the priority of all global processes is set to normal. In such case the order of processing all planned processed is determined by FIFO mode. It means that processes are executed in that order in which they have been started and added to the queue. Assigning higher priorities to processes which are more important as regards operational activities will allow them to be executed first.



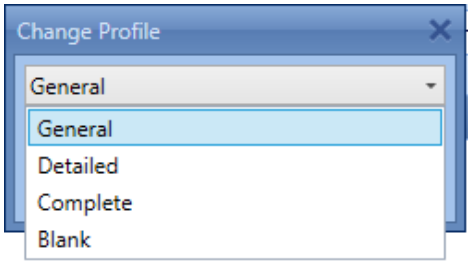
Selecting process priority

Note
Upon setting a high priority for complex and time-consuming processes, process with lower priorities might not be executed because they will be continuously placed at the end of the queue.
Changing a priority for a process definition does not affect the time for execution of already queued (started) processes. It is not possible to speed up or postpone an already queued process.

Tracking profiles

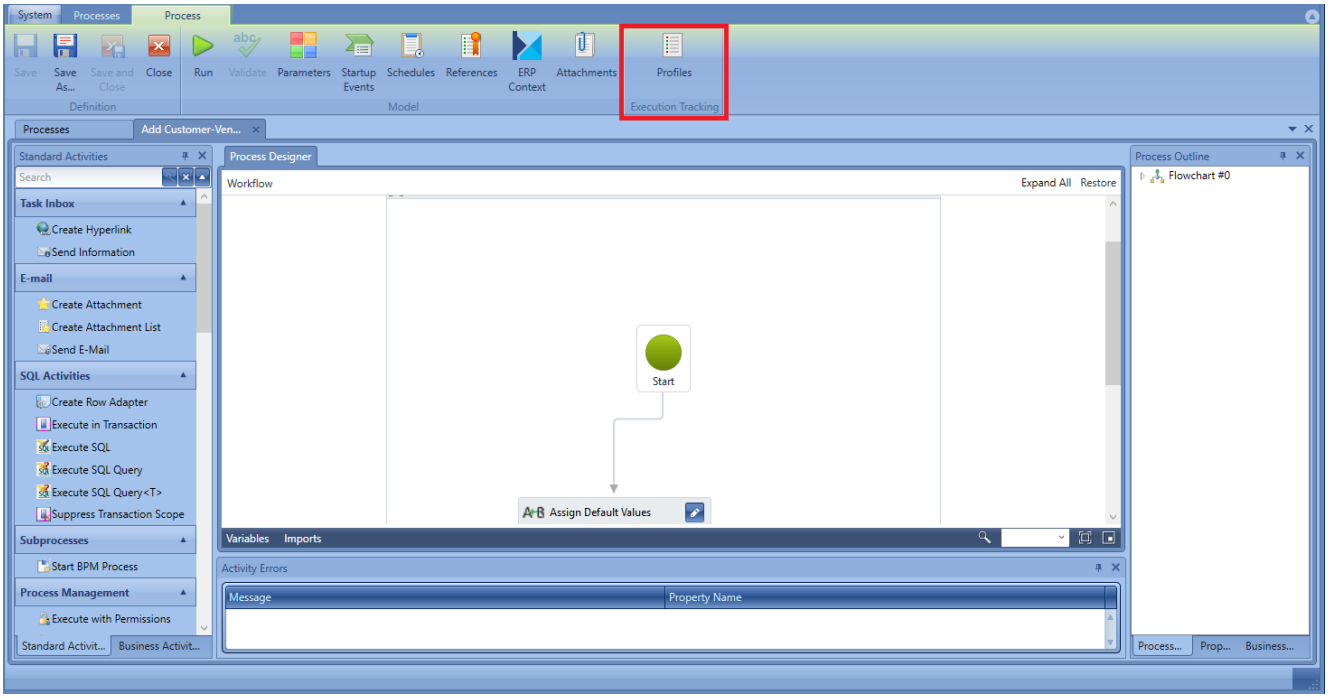
From the level of the list of processes it is possible to change tracking profiles defining detail level of diagnostic

information saved in the database when executing a process. Such information is used during the work with process monitoring. Normally, in the system there are 4 profiles available:

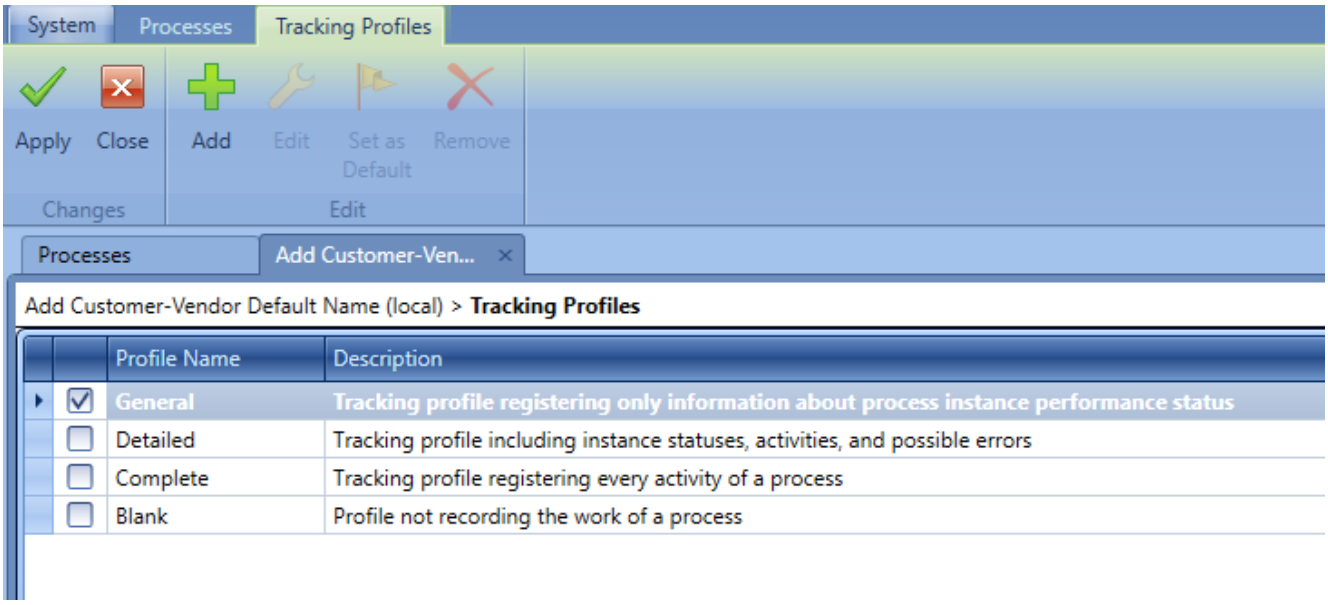


Selecting tracking profile

Hint
It is recommended to use the profile of detailed and complete tracking only in justified cases, e.g., when implementing a newly created process or verifying a process which generates errors. The higher level of detail of a tracking profile, the more data is stored in the database, as a result of which the execution of a process is slower.
From the level of the window of process addition/modification, it is possible to open the list of tracking profiles. To do so, it is necessary to select [**Profiles**] button, available in the main menu. Detailed description of adding and editing processes can be found in article *Process modification*.



Selecting profiles from the level of process addition/modification

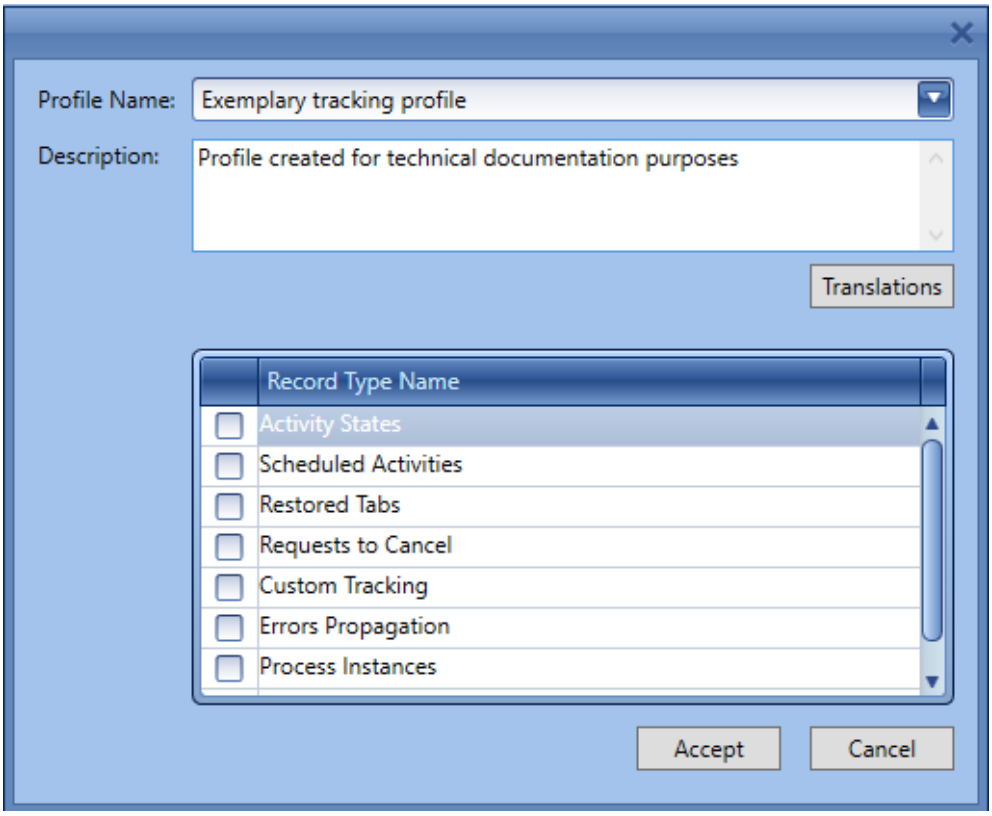


List of tracking profiles

From the level of the list of tracking profiles, besides of selecting profiles, it is also possible to add, modify or delete them. The user can also select a given profile as default.

Note
It is not possible to modify or delete standard tracking

profiles.
The user can define his/her own tracking profiles by selecting the type of information which will be subject to the analysis.



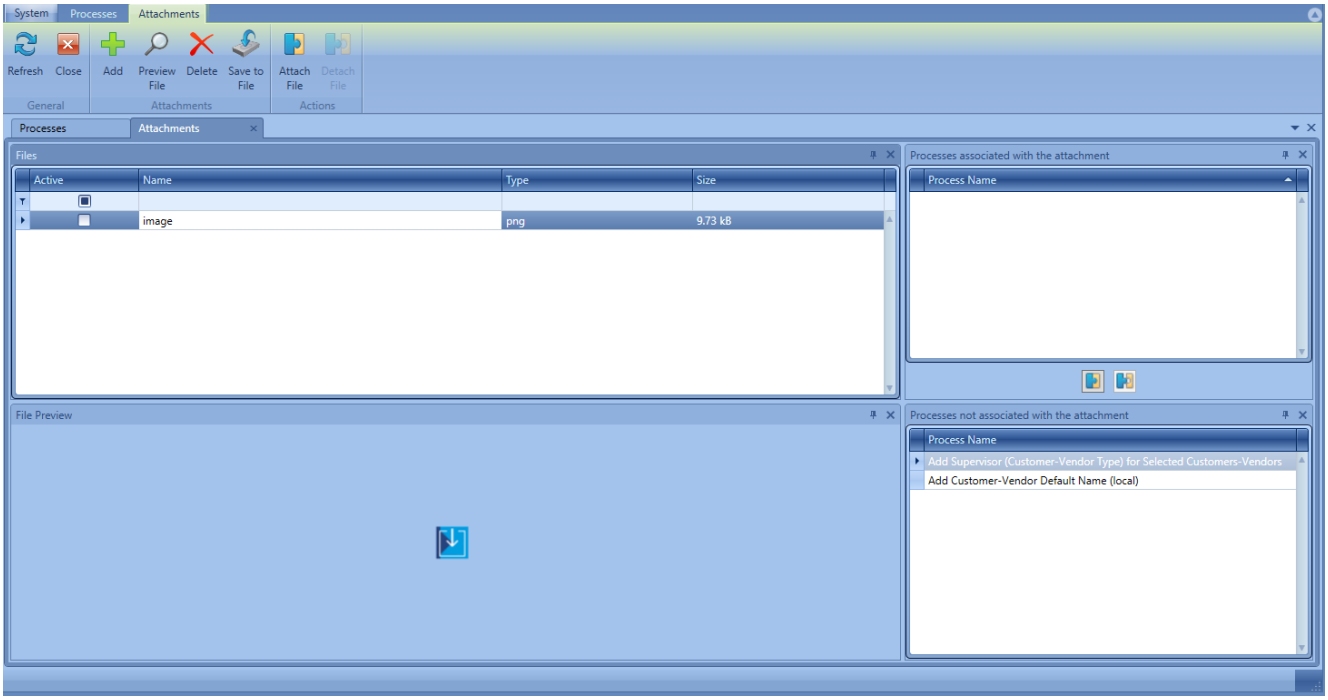
Window for adding an exemplary tracking profile

Attachments

In the Comarch ERP Standard BPM system, it is possible to assign attachments to processes, e.g., in order to send them via e-mail. An attachment can be, for example, an image or a spreadsheet. There are two ways of adding attachments: from the level of the global list and from the level of the local list.

Global list

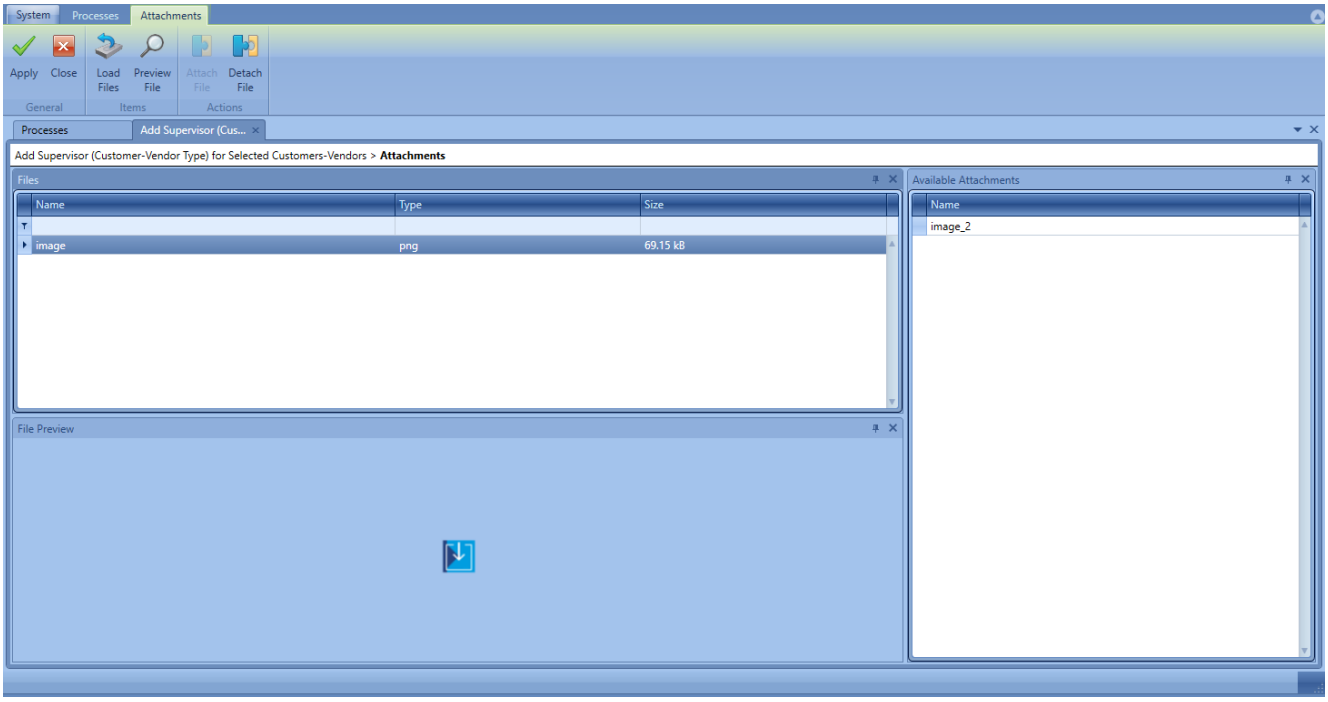
From the level of the window of processes library, it is possible to open the global list of attachments, by selecting the [**Attachments**] button from the group of buttons *Administration.* It is used to handle attachments within all process in the assembly. The user can add files and attach them to particular processes. In case the attachment is an image, it is possible to preview it in *File preview* section.



Global attachment list

To add an attachment to a process, it is necessary to:

- Load an attachment to the list with the use of [**Add**] button.
- Check the attachment in *Files* section
- Check the process in section *Processes not associated with the attachment*
- Select [**Attach file**] button

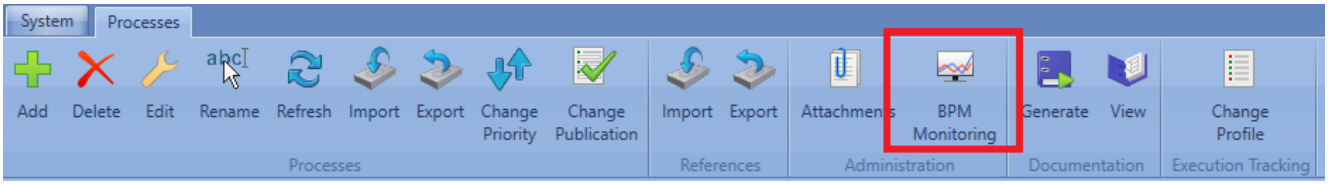


Local attachment list

The local list is opened from the level of the process modification window. It contains attachments used in a current BPM process. The difference between the local and the global lists consists in the fact that the local list concerns only one, currently modified process and therefore in the window there are no sections related to the selection of a process. Instead of them, the window contains a list of previously added attachments. Associating of an attachment with a process is performed by means of the button [**Attach file**], available in the menu.

Process monitoring

Process Monitoring allows for analysing a process flow and for identifying errors encountered during its execution. To start Process Monitoring, from the level of the window of process assembly, it is necessary to select [**BPM Monitoring**] button.



Starting Process Monitoring

The window of Process Monitoring is divided into 3 sections:

- **List of instances (1)** – contains all running process instances. Each of them can assume one of 4 statuses:
  - **Started** – the process is being executed
  - **Waiting for Response** – the process was paused intentionally or is expecting a user's decision. More information regarding decisions can be found in article Task Inbox.

Note
In the case of an error in a process with a decision, statuses of all decisions, which were taken earlier, change – they are transferred to a folder named *With Errors* and are additionally marked as unread.

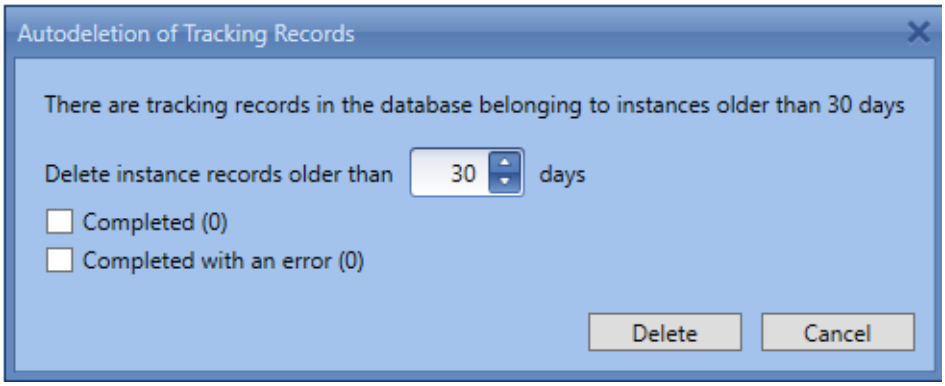
  - **Error** – some errors occurred during the process To display detailed information about errors, it is necessary to set the *tracking profile* as *detailed* or *complete.*
  - **Completed** – process executed correctly

- **Process flow (2)** – visible upon double clicking on a given instance or selecting [**Show Execution Status**] button. Allows for previewing process execution. For the complete or detailed profile, activities are marked according to their execution status parent activities take on the status of child activities. For example, if one of the child activities is executed with an error, that activity and its parent activity will be marked in red.
- **Execution details (3)** – depending on selected tracking profile, contains information about particular

activities and the instance itself. Above the list of details, there is general information regarding process execution, such as: execution time, operator or tracking profile. In the bottom part, there are tabs *Properties* and In the first of them, it is possible to preview the settings of each activity. The second tab presents the structure of a process in a form of a tree.

Hint
Exceptions handled with the *<<TryCatch activity>>* are not visible as instance errors. The user should remember about that in case a process does not produce desired effect, but it is visible in Process Monitoring as correctly completed.

Note
If there are started process instances at the moment of a crash or an intentional deactivation of BPM Server service, then the instances will remain in this status. Upon the renewed service activation, they will not be continued from the moment they were interrupted. Such instances can be restarted automatically if the option *Continuation of Interrupted Instances* has been checked in the BPM Configuration.
From the level of the *Process Monitoring* window, a function of deleting archival process tracking records is available. After selecting [**AutoDelete**] button a window for specifying period and type of deleted data is displayed.



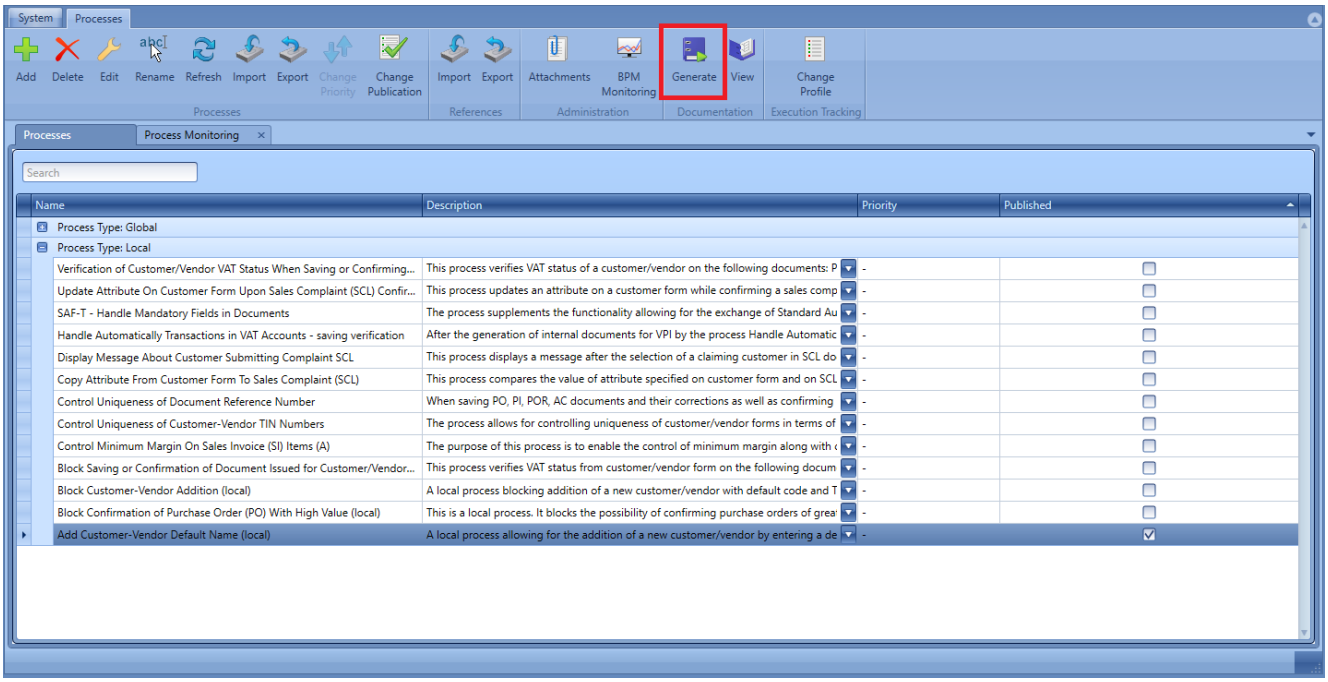
Autodeletion of tracking records

It is also possible to delete tracking instances manually by

means of [**Delete**] button. In the case of instances presented as started, records can be deleted after determined time, defined in the configuration (24 hours, by default).

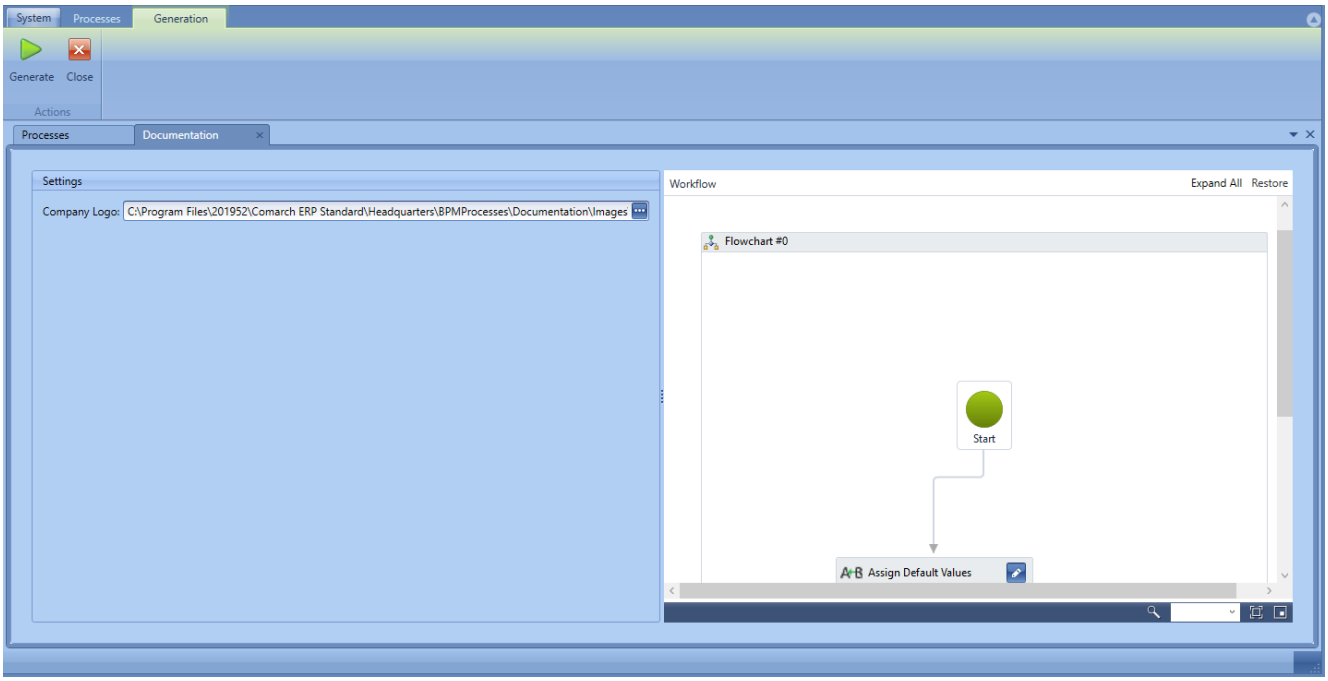
Documentation

The system enables generation of documentation for any process available in BPM process designer, on the basis of its description, parameters, references and schedules. It contains also a process layout in the form of an image representing general scheme of an activity tree. To generate a documentation, from the level of the process assembly, it is necessary to select one or more processes and select [**Generate**] button, available in *Documentation* group of buttons.



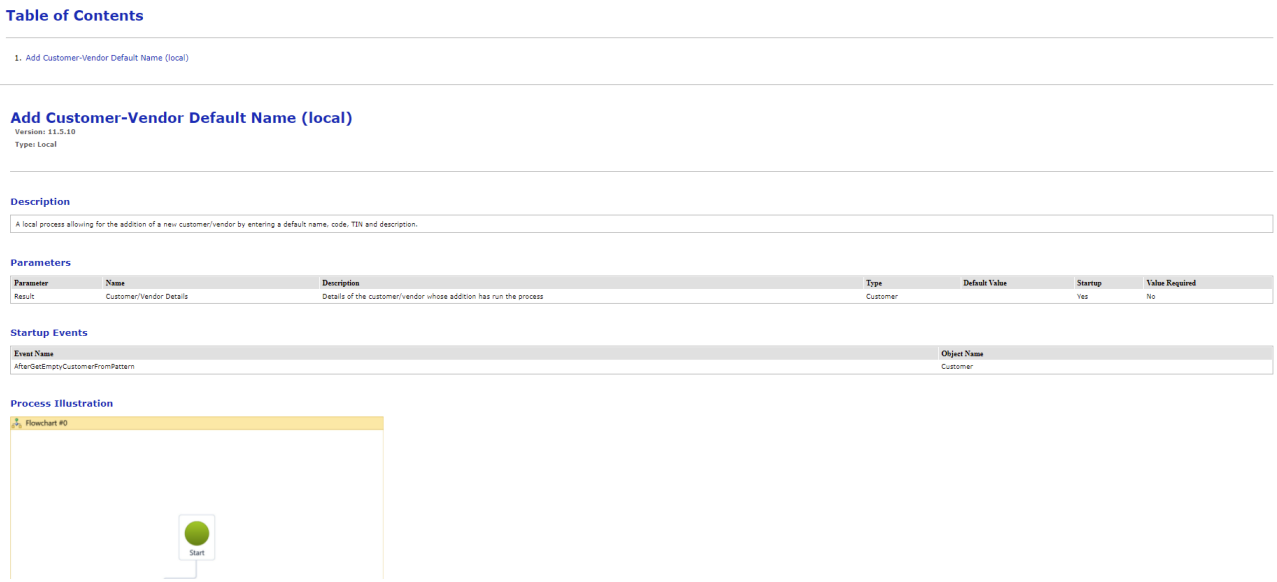
Generating process documentation

Upon starting the generation, a window with settings will open in which it is possible to add a company's logo. On the right side, there is a layout of marked process. In case more than one processes are marked, the layout presents the first of the marked processes.



Window with documentation settings

Upon selecting the [**Generate**] button and specifying a path for saving the documentation, an html file with description or descriptions of selected processes will be generated.

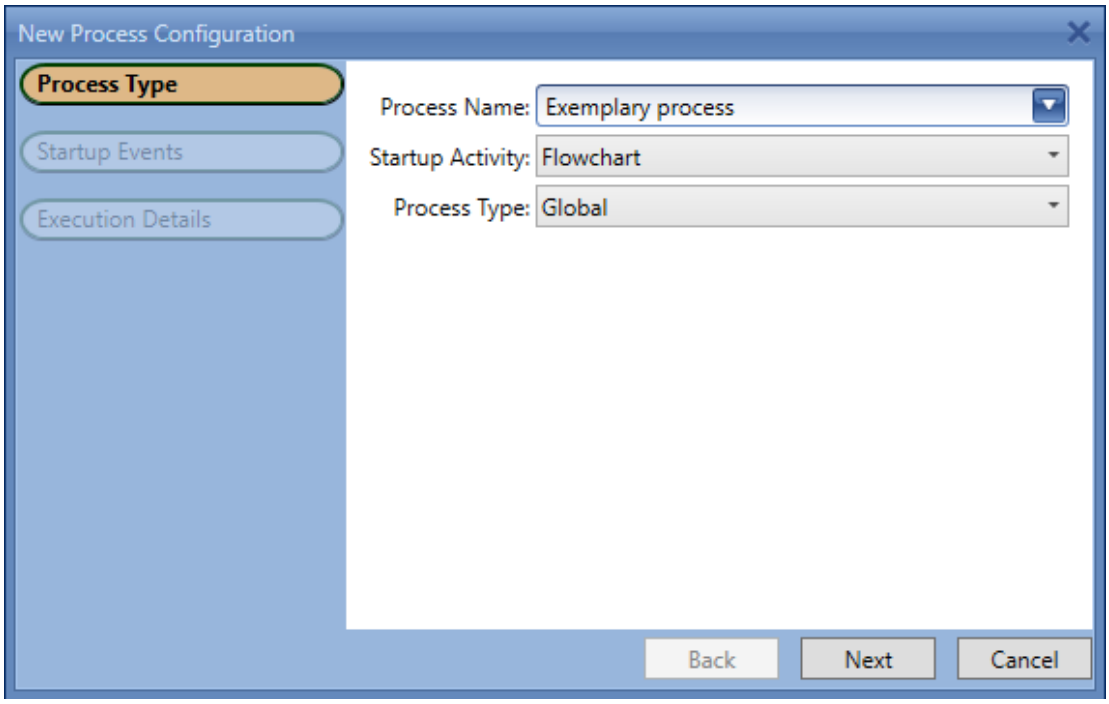


Exemplary documentation

For standard processes, the documentation is available upon clicking on [**Show**] button. Descriptions of particular standard processes can be also found in article *<<Standard processes>*

Adding new process

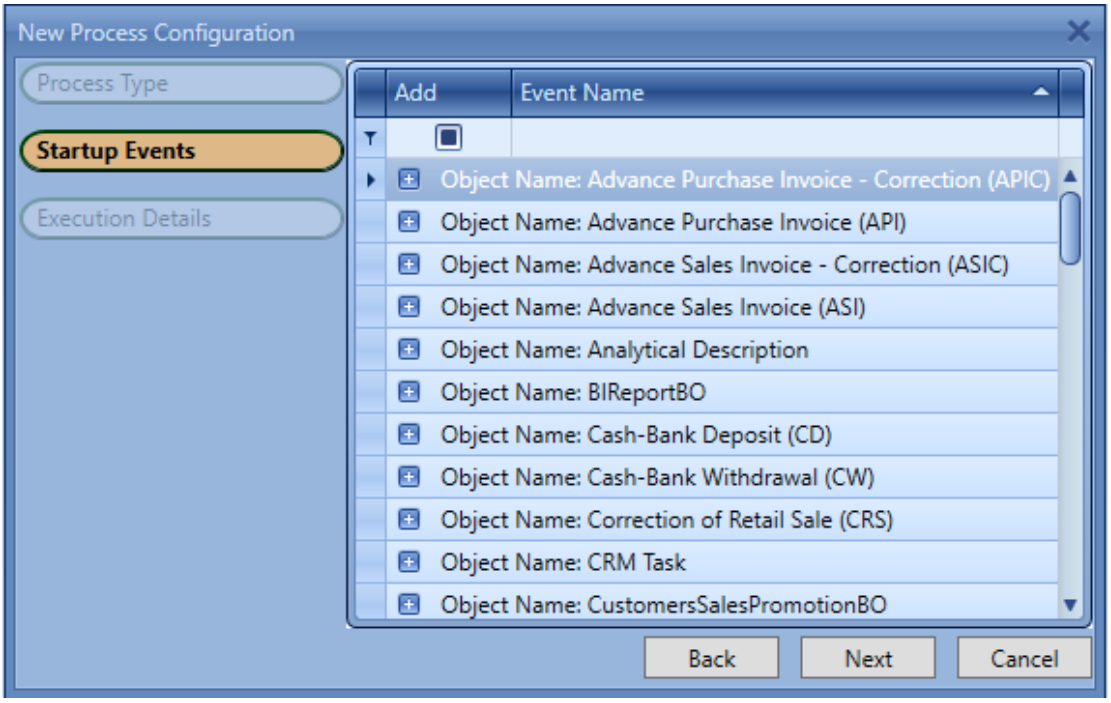
To add a new process, it is necessary to select [**Add**] button, available in the window of process assembly. A new process configuration window opens. In the first stage, it is necessary to select the type of the startup event (flowchart or sequence) and the process type (*local* or *global*). At this moment, the name field is not mandatory, it can be completed when saving the process for the first time.



Process type

In the second stage, the user can select any number of startup events. They determine the moment in which a process should be

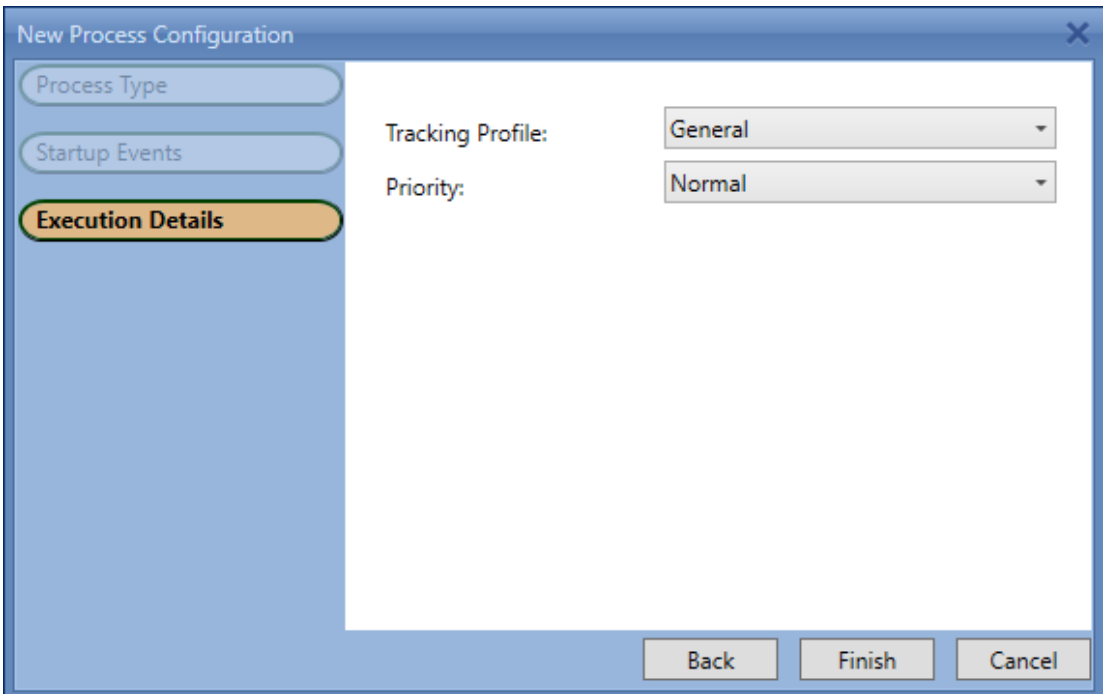
started automatically. An example of such event is *After saving an item.* For each process type, different startup events are available. Moreover, for local processes it is necessary to select at least one event.



Startup events

In the last step, it is possible to change the method of process execution. Two parameters are available: *Tracking Profile* and *Priority,* which are described in detail in article *Process execution settings*.

Note
For local processes, it is not possible to set the priority.

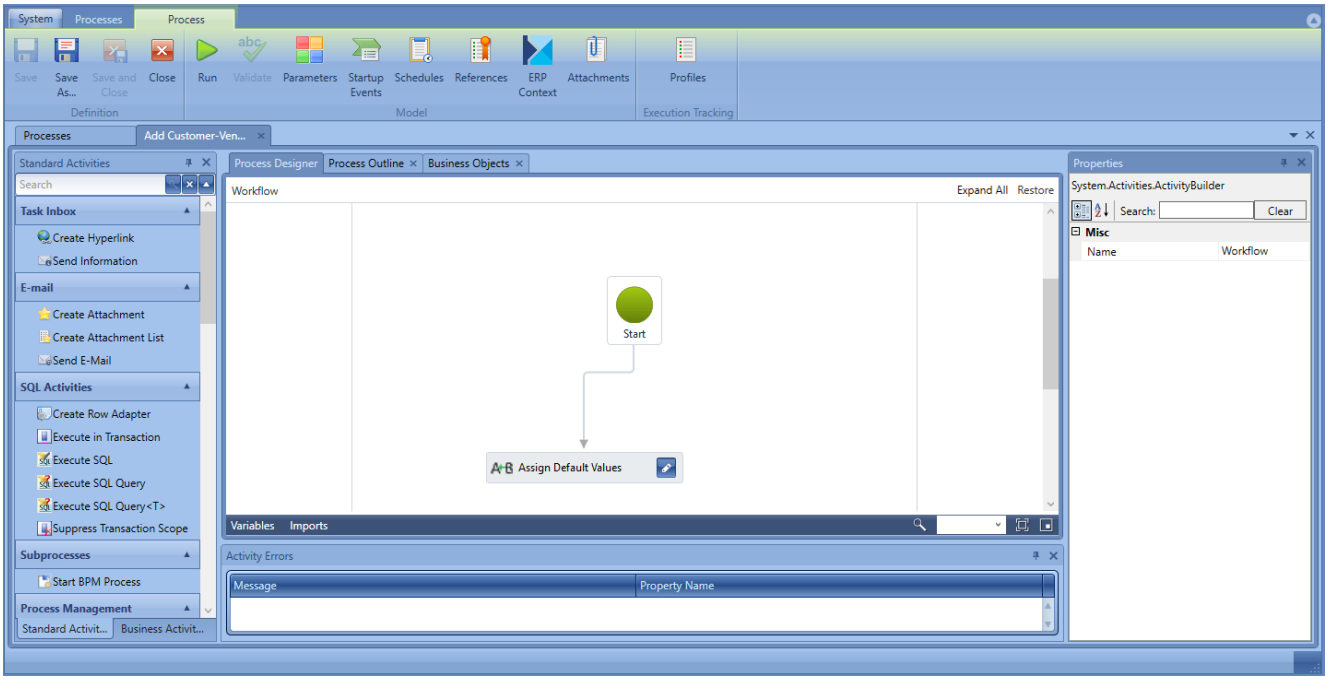


Execution details

After completing all steps, a new process window will be opened.

Process modification

After creating a new process or opening an existing process to editing mode, a modification window is opened. In *Process Designer* tab, it is possible to create a process flowchart by adding relevant activities with the use of the *drag and drop* method.

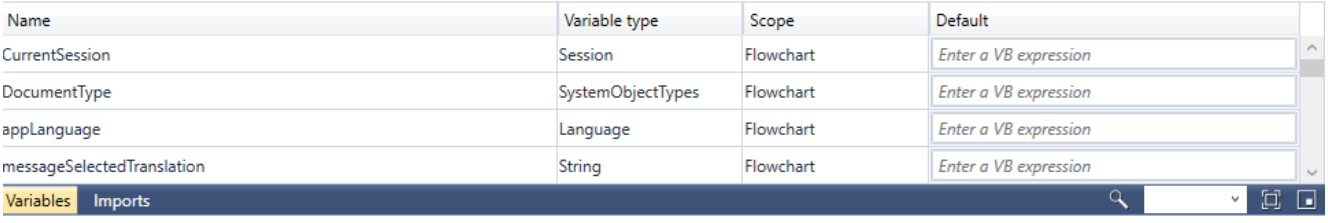


Process edition window

On the right side of the window, there is an activity list. The user can select from among standard and business activities. Standard activities are described in detail in *Selected standard activities* category.

Variables and imports

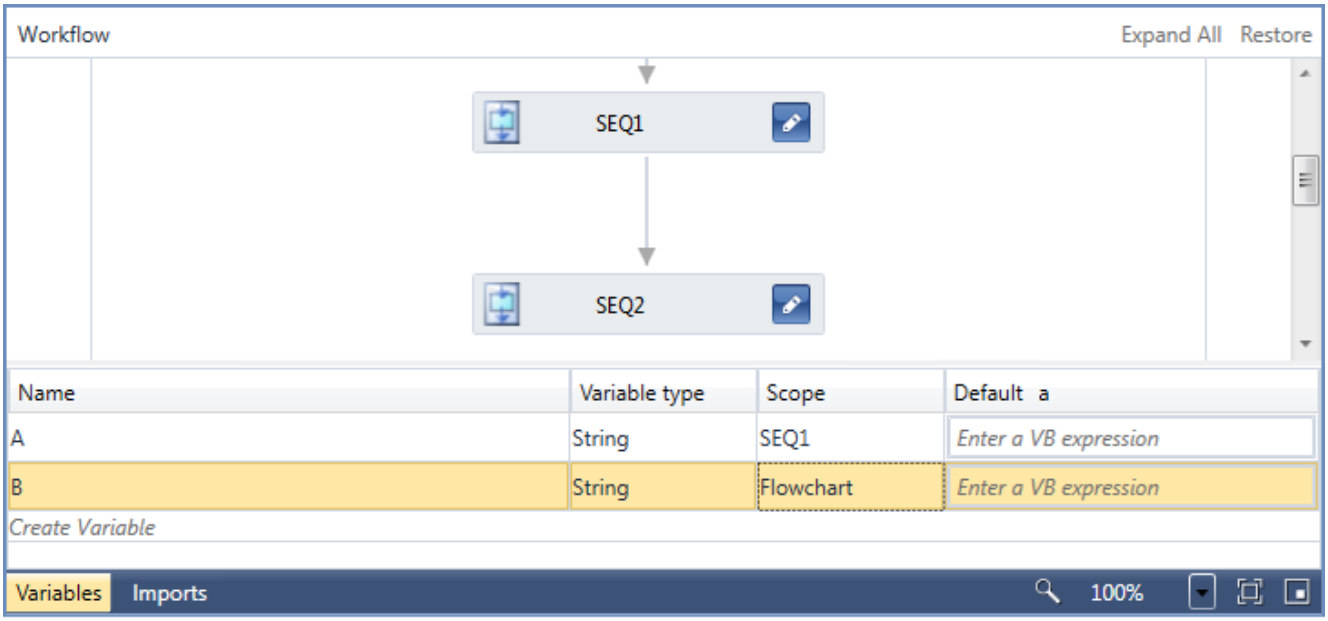
Below the working pane (*Process Editor* tab), there are buttons [**Variables**] and [**Imports**]. From this level, it is possible to handle variables used in a process, create new variables and delete existing ones. It is also possible to change a variable, its visibility range and define its default value.



Variables in a process

Example
Process is composed of *Flowchart* activity which contains two

sequences: *SEQ1* and *SEQ2.* Variable defined for the scope of the *SEQ1* sequence will be not visible for the *SEQ2* sequence nor for *Flowchart.*
Variable defined for the *Flowchart* range will be visible for all process elements, because variables are visible for a given activity and its child elements.



Example of variables scope in a process

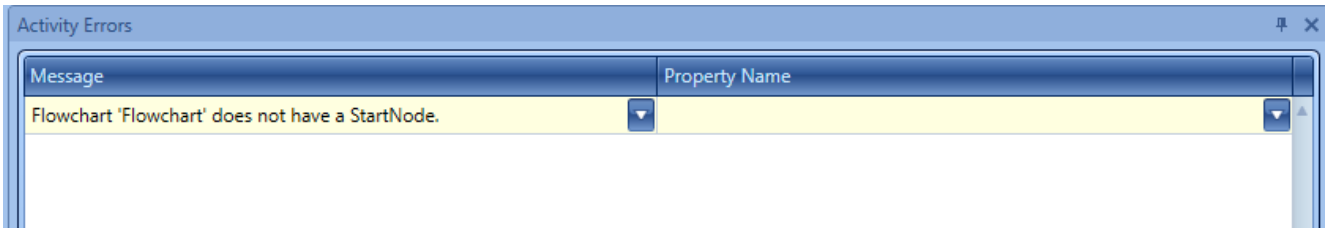
In the *Imports* tab, there are imported namespaces The list contains standard references and references imported by the user. The process of adding new namespaces is described in *References* article.

Imports in a process

Activity errors

Below, there is *Activity Errors* section. It contains messages about incorrectly configured activities. Such message contains

information about error’s localization and reason. If error regards an activity, upon clicking on the message, the user us transferred to that activity. The messages are generated on the basis of errors identified by the validator which verifies the correctness of used activities.

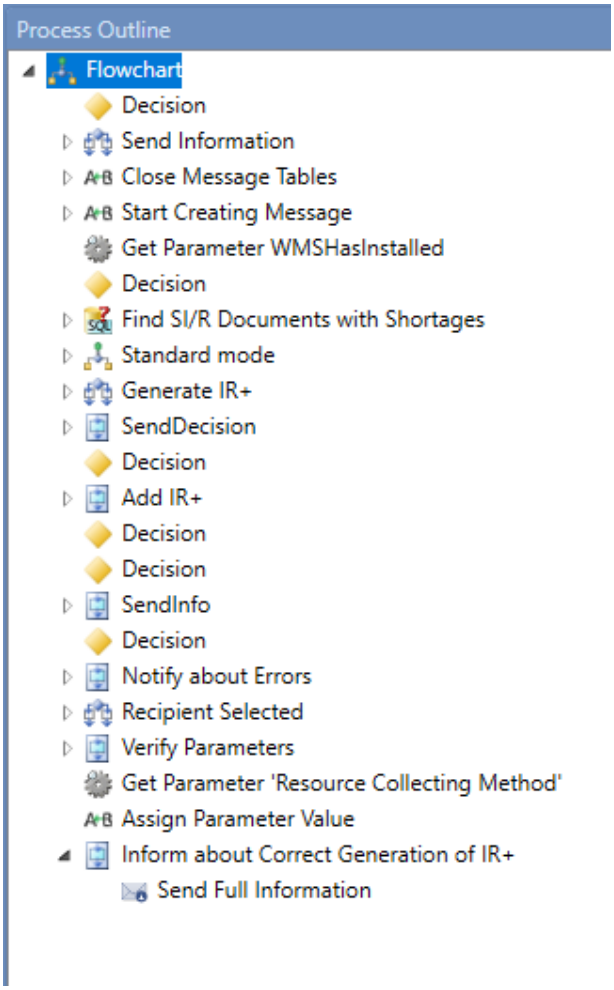


Activity errors

Note
It is not possible to save a process, if there are activity errors.

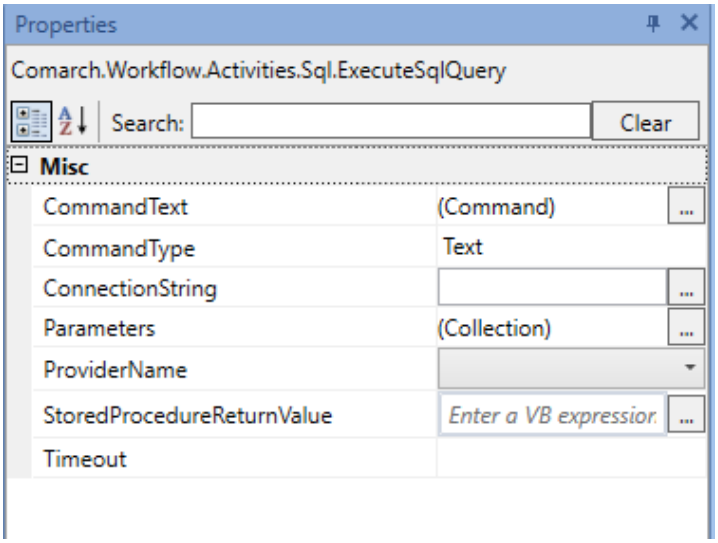
Structure, properties and business objects.

Section on the right side presents additional information about process. In *Process Outline* tab, there are all activities used in the process ordered in a tree structure.



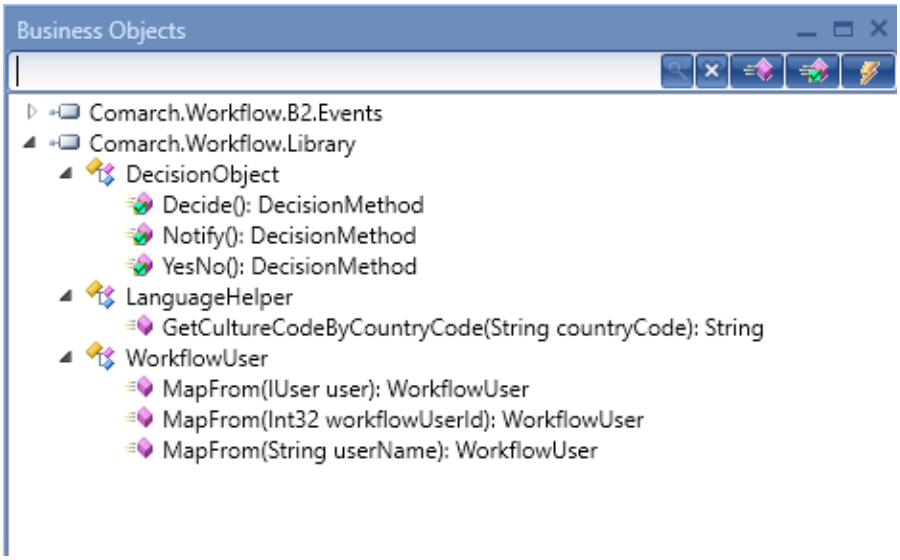
Process outline

In *Properties* tab, it is possible to modify parameters of a selected activity. The list of properties works in contextual mode, which means that it is displayed depending on activity marked in the work pane.



List of properties of activities

Tab *Business Objects* presents advanced view of a process outline. It contains all methods and events available in a process.



List of business objects