WEBCON BPS

Updates for WEBCON BPS version 2017.1

Version history

2017.1.3.33 ---------- 2

2017.1.2.121 ---------- 30

2017.1.2.109 ---------- 31

2017.1.2.83 ---------- 33

2017.1.1.127 ---------- 45

2017.1.1.112 ---------- 46

2017.1.1.86 ---------- 47

2017.1.1.77 ---------- 48

2017.1.1.54 (Launch) ---------- 49

2017.1.3.33

1. Information

1. Changes in this version will break compatibility of the Export-Import mechanism. Exported process packages created in versions 2017.1.2.x and older cannot be imported to the newest system version. In order for an import to be possible, update the environment to the newest version and export the processes again.

2. WEBCON BPS installations that make use of the **FineReader 11** component will need to upgrade it to version **11.1.19.72.** The previous version of this component was 11.1.19.48.

   The process of updating FineReader 11 must be carried out simultaneously with the update to WEBCON BPS 2017.1.3.
   The FineReader 11 component and WEBCON BPS may not be updated independently in two separate update processes.

   Before starting the update, please read through the FineReader 11 component installation guide, available here: http://howto.webcon.com/ocr-ai-installation/. The installation process requires a product activation key and access to the product's license.

   In order to update FineReader 11:
   a. Deactivate FineReader 11 product license
   b. Uninstall the previous version of FineReader 11, remove the following registries from the system:
      HKEY_LOCAL_MACHINE\Software\ABBYY\SDK\11
      HKEY_CURRENT_USER\Software\ABBYY\SDK\11
   c. Launch WEBCON BPS 2017 installer and follow the steps described here: http://howto.webcon.com/ocr-ai-installation/
   d. Activate FineReader 11 product license

2. Changes to existing features

2.1. SharePoint connections for 'SharePoint list' type sources

Due to the introduction of SharePoint connections, during the update to WEBCON BPS 2017.1.3, appropriate connections will be created for 'SharePoint list' type data sources. New connections will be created automatically based on existing configurations of any 'SharePoint list' data source.

Data sources will operate identically as before.

2.2. SharePoint actions

Introducing SharePoint connections changed the configuration method of SharePoint-centric actions (actions groups 'SharePoint – content' and 'SharePoint – users & privileges'). From now on, action configuration requires the use of an already existing connection or creating a new one.

All addresses used in action configurations that refer to the connection (i.e. website address) have to be provided as relative addresses (relative to the site collection defined in the connection).

In order to maintain backward compatibility, the configurations of existing actions (created in older WEBCON BPS versions) remain unchanged. In such cases, the <Default> connection is set and addresses are provided as absolute addresses (i.e. http://webconbps/site/list).

After manually changing the <Default> connection to any other defined connection, returning to the <Default> connection option is not possible.

2.3. Configuration of 'Menu button' actions

Updating to WEBCON BPS 2017.1.3 will create new menu buttons. It is the result of introducing independent menu button configuration and independent configuration of actions that trigger after pressing a button. Menu buttons are created according to the following rules:

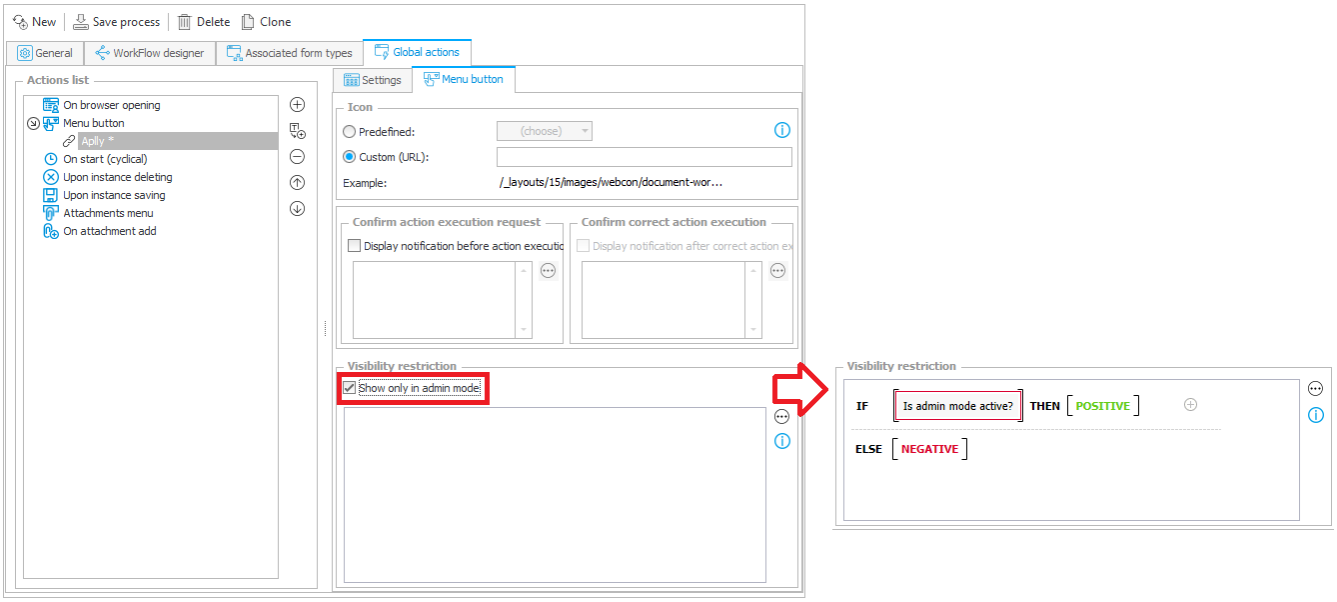
- For each existing 'Menu button' action, a button with the same name is created. The newly created button will have the action it was created from attached to it.
- For each action group a button group is created. The newly created group will have existing actions attached to it (each as an individual button)

2.4. Removal of ‘Show only in admin mode’ option for menu buttons

The checkbox ‘Show only in admin mode’ which was available in the configuration of menu buttons has been removed.

If in previous system versions this option was selected, then updating to WEBCON BPS 2017.1.3 will automatically transform it into a rule restricting visibility of the menu button according to the following rules:

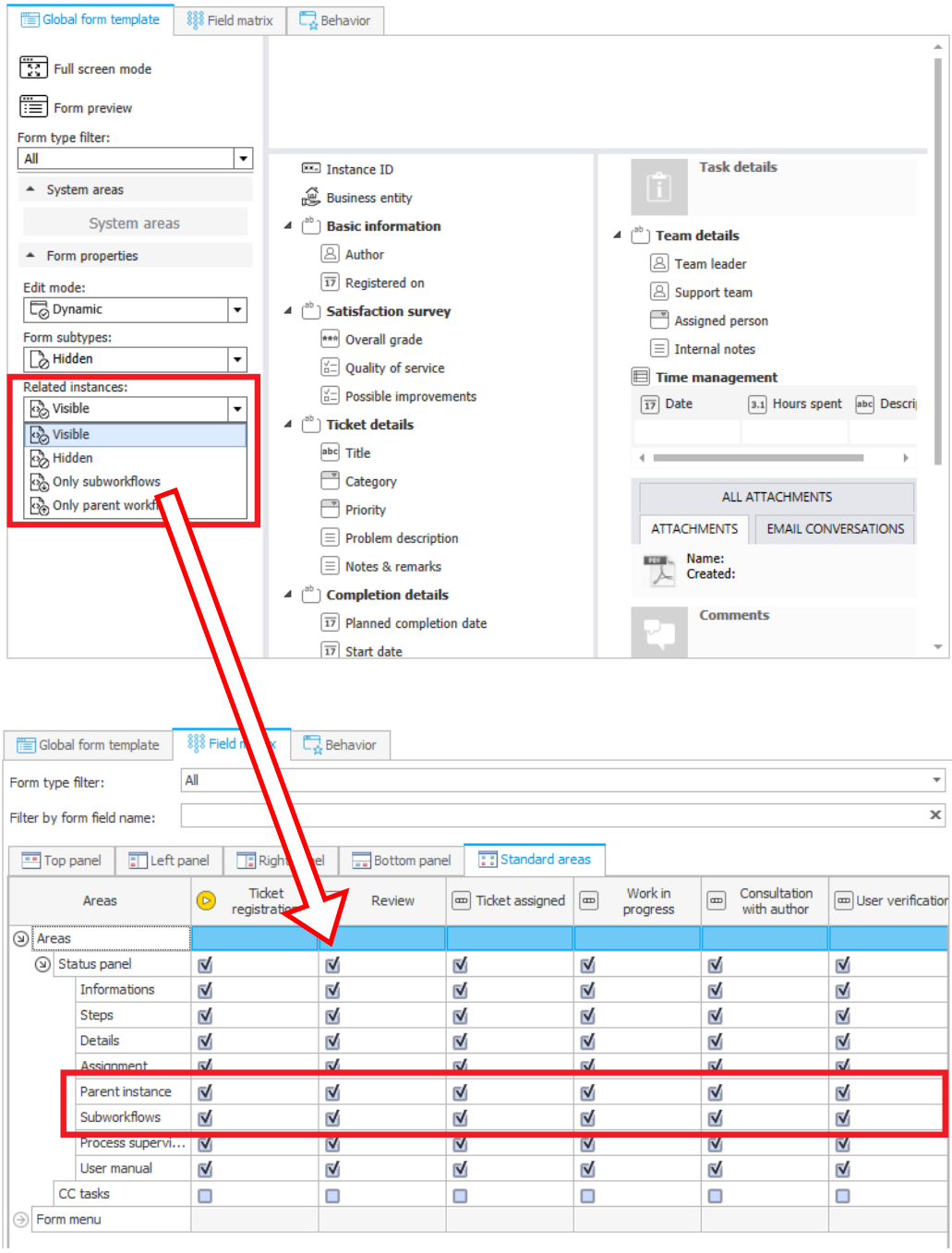
- In cases where no visibility restriction rule existed, a new rule will be created. It will contain a condition which uses the contextual variable ‘Is admin mode active?’



- If a visibility restriction rule did exist, it will be expanded with another AND operation which uses the contextual variable ‘Is admin mode active?’.

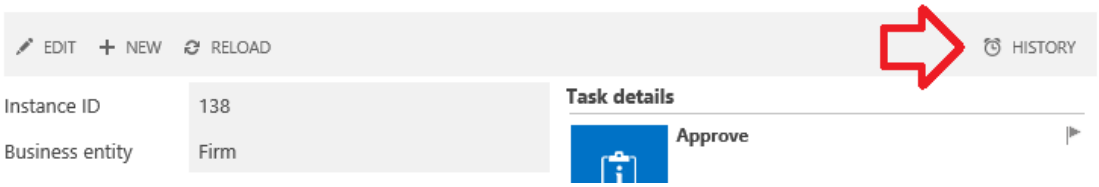
2.5. Display configuration of related instances shown on the status panel

The display configuration of Related instances has been moved from the 'Global template' tab to the 'Standard settings' section of the 'Field matrix' tab.



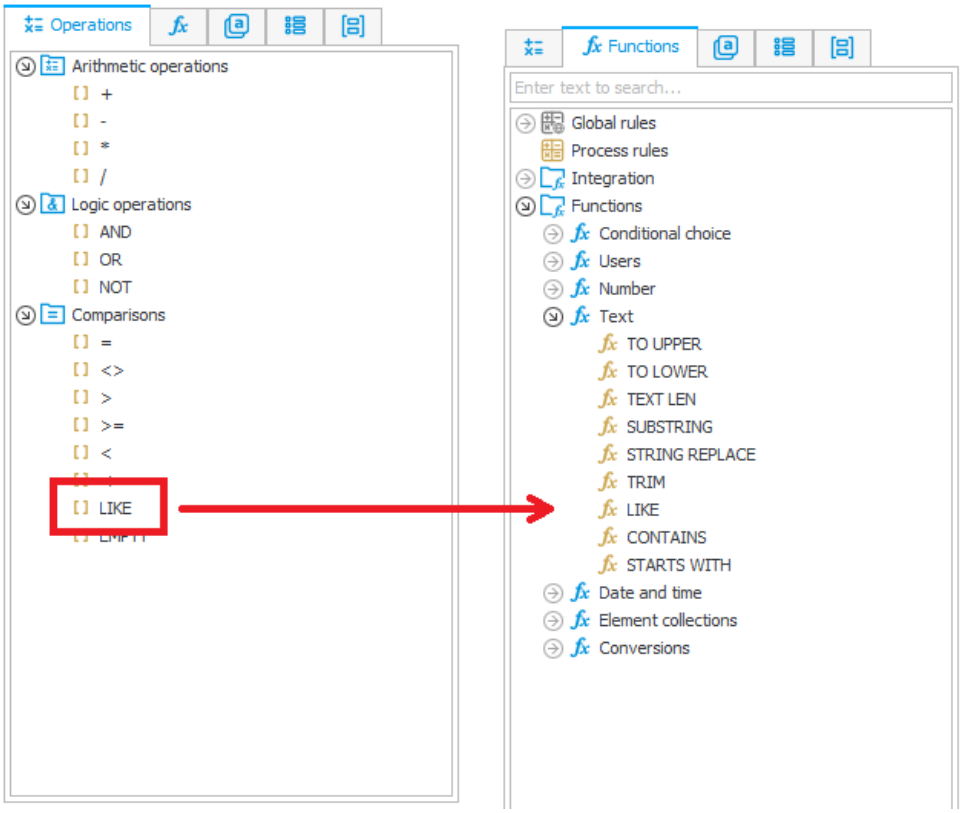
2.6. Instance history moved to form menu

The button for viewing the workflow instance's history has been moved from the status panel to the form menu. The history itself remains functionally unchanged.



2.7. Business rules

The LIKE function was moved from the comparisons group in the 'Operations' tab to the text group in the 'Functions' tab. Its functionality remains unchanged.



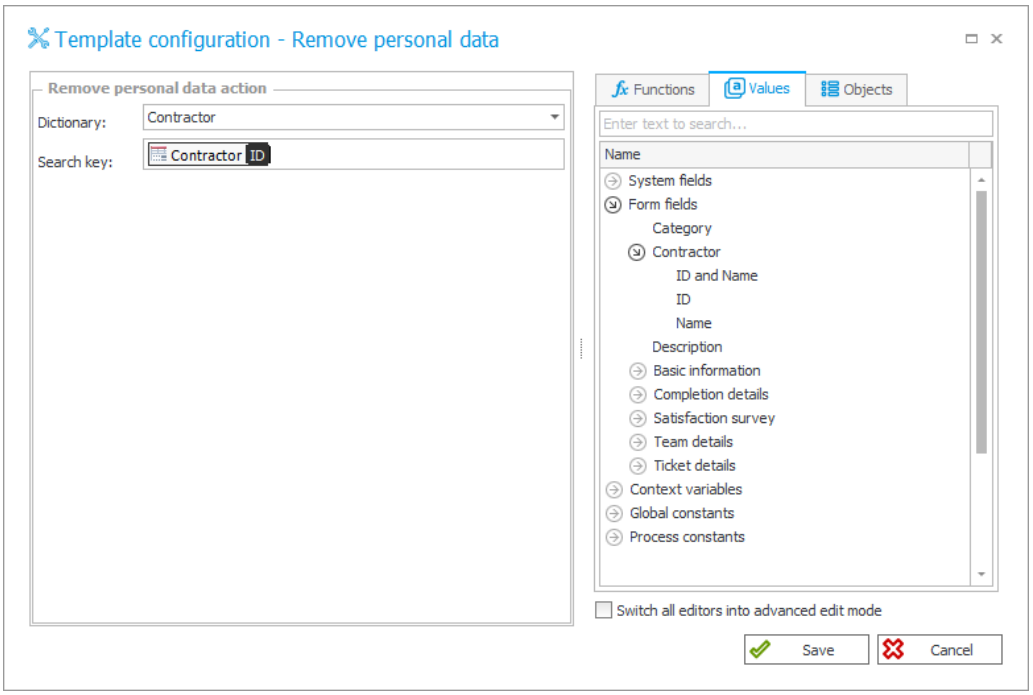
3. New features

3.1. WEBCON BPS ready for GDPR

Multiple features were introduced in order to help manage personal data in business processes in accordance with the new General Data Protection Regulation guidelines.

New functionalities available as part of the GDPR expansion in BPS:

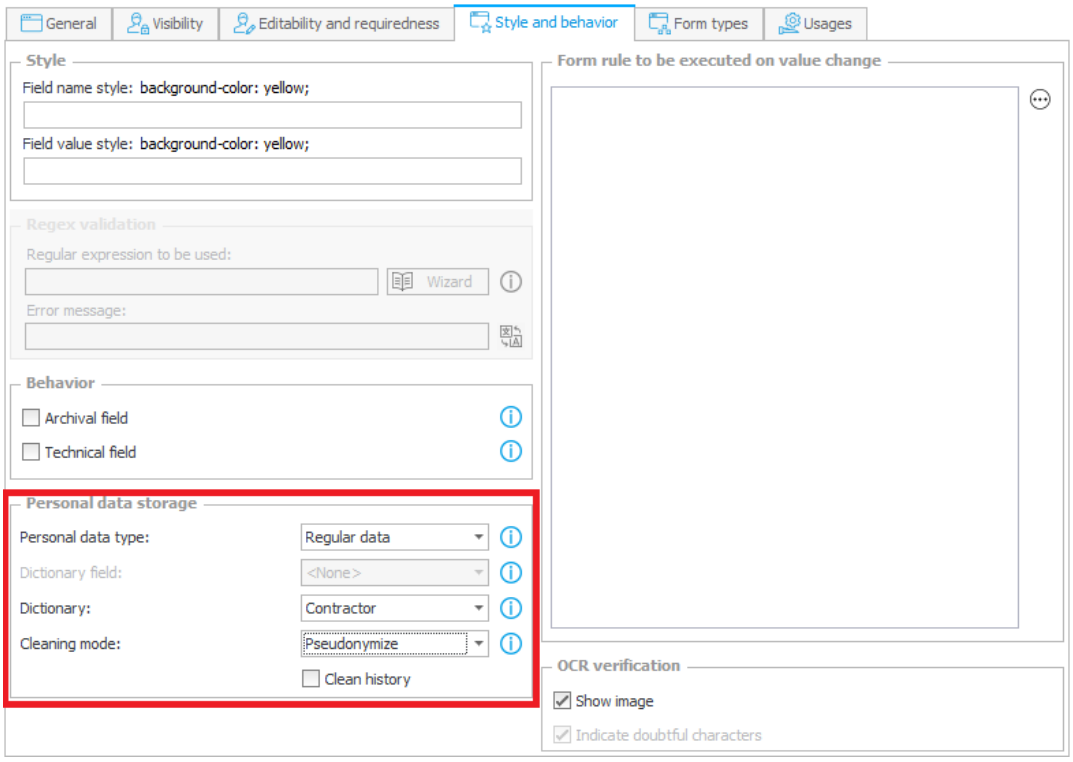
- Personal data removal action, which operates on the entire system. Based on the configuration, the action can delete personal data or replace it with a pseudonym if a person decides not to give/withdraw permission for data processing.
  The action configuration needs to be provided with an identifier of the person whose data needs to be deleted/pseudonymized.
  The action will automatically seek out and delete that person's data in all workflow instances that use it.
  Action is found in the "Database retention" group.



- It is possible to define data sources as 'Personal data dictionaries'

- Mark form fields that save/contain personal or sensitive data in processes that operate on personal information.
  Action configuration allows to automatically delete personal data and search for relationships between workflow instances and the 'Personal data dictionaries' from which the data was obtained from.

- Define the behavior of each form field separately



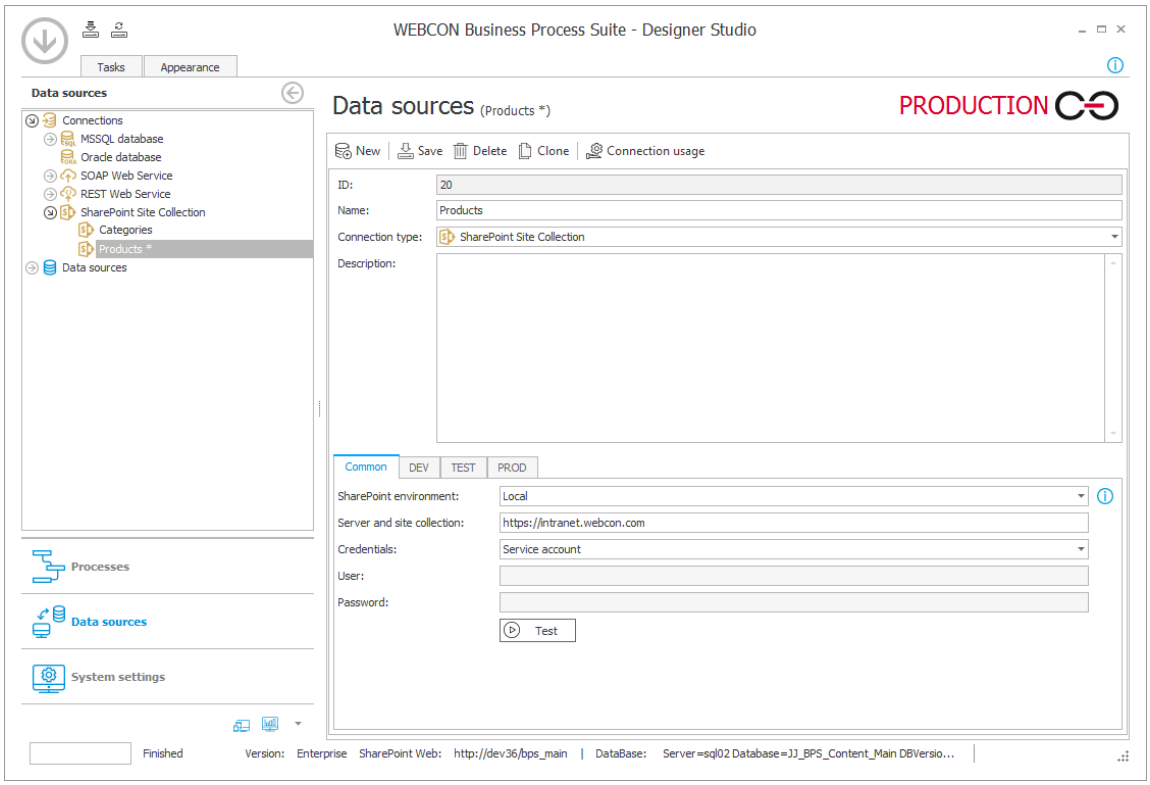
These features make it easier to adjust existing processes to the new GDPR guidelines.

However, deciding which form fields need to be marked, determining their behavior in the face of data-deleting actions, as well as the method and place of execution of the action itself, will require scrupulous analysis of the context in which they operate. Changes to the process will need to be planned and tailored to their specific scenario.

3.2. Integration with SharePoint Online components

3.2.1. SharePoint On-premises and SharePoint Online

A new connection type is introduced which allows a cooperation between WEBCON BPS and SharePoint Online components.



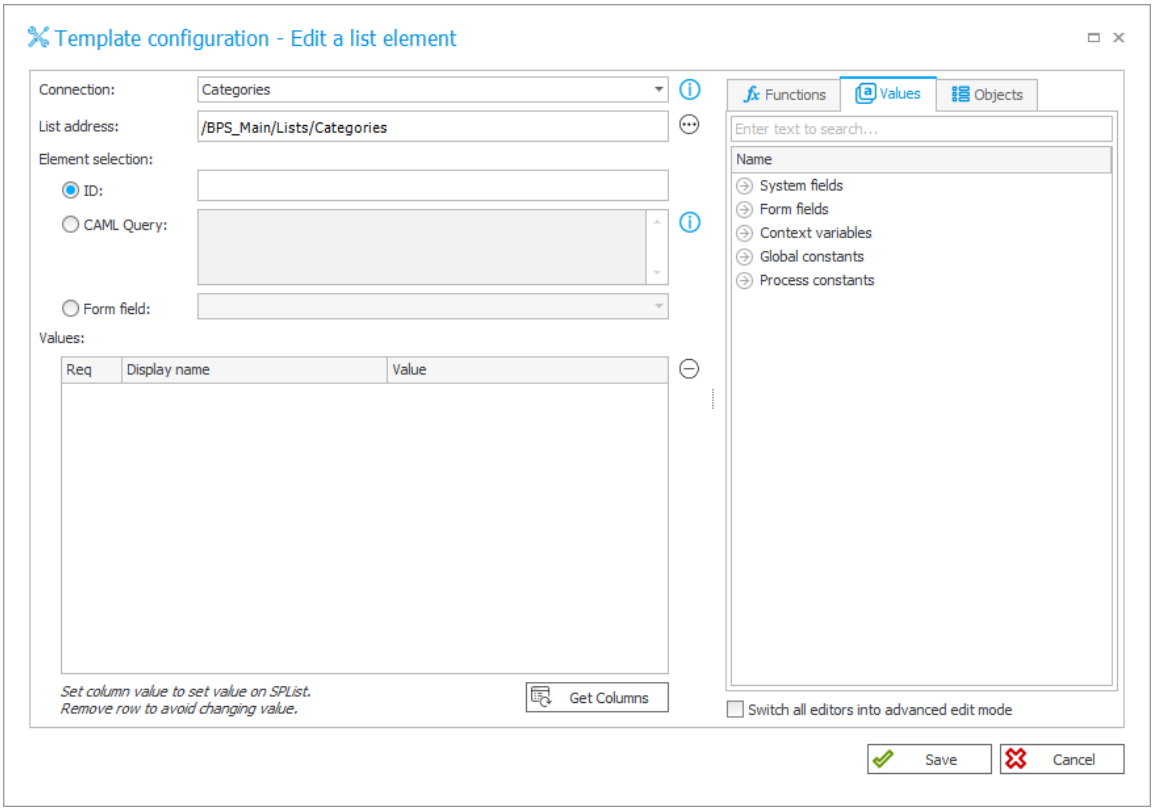
Connection is defined by providing a connection type (SharePoint Online or On-premises), server name, site collection and user whose credentials will be used to connect with the SharePoint server.
DEV/TEST/PROD model is fully supported. It allows for independent configurations for different types of environment.

Actions and SharePoint data sources will now operate based on the SharePoint connections. It is the basis for fully integrating WEBCON BPS with both SharePoint On-premises and SharePoint Online.

3.2.2. SharePoint actions now operate based on connections

Functionalities of actions in 'SharePoint – content' and 'SharePoint – users & privileges' groups were expanded to make use of SharePoint connections.

Introducing connections in action configuration allows the action to work in the DEV/TEST/PROD model, and fully utilize connections to SharePoint Online or SharePoint On-premises.



3.2.3. SharePoint data sources now operate based on connections

'SharePoint list' type data sources were expanded to make use of SharePoint connections.

Introducing connections in data source configuration allows the source to work in the DEV/TEST/PROD model, and fully utilize connections to SharePoint Online or SharePoint On-premises.

3.3. Form layout and configuration

3.3.1. Buttons and actions in the form menu

For actions triggered by 'Menu button', it is now possible to execute multiple actions with one button. The configuration now allows you to execute a series of actions in a previously set order. Actions are executed in a transaction. It means that failure of a single action in a sequence withdraws all the changes made by previous actions in the same sequence.

Button and button group configuration is separate from the configuration of actions:

- Button names are displayed in the menu and are independent from names used used by actions.
- Buttons have their own visibility settings which define if the button is available in the menu. Visibility settings are independent of the action execution conditions.

By independently defining button visibility conditions and action execution conditions, it is possible to control the behavior of each action in the sequence. It means that if a couple of actions are defined to trigger on one button, and one of the actions returns a negative response, then all other actions will be executed regardless.

Menu button configuration allows to:

- Place multiple buttons and button groups on the form menu (globally and for each step individually)
- Place multiple buttons in a button group
- Configure one or multiple actions executed per button

Functional restrictions.

While configuring an action sequence on a menu button, it is important to remember about the specifics of various action. Execution of some actions can influence the whole sequence and as a result the final effect of the execution.

This applies to actions which require interaction with the user, redirect to a different address, display results, and execute JavaScript.

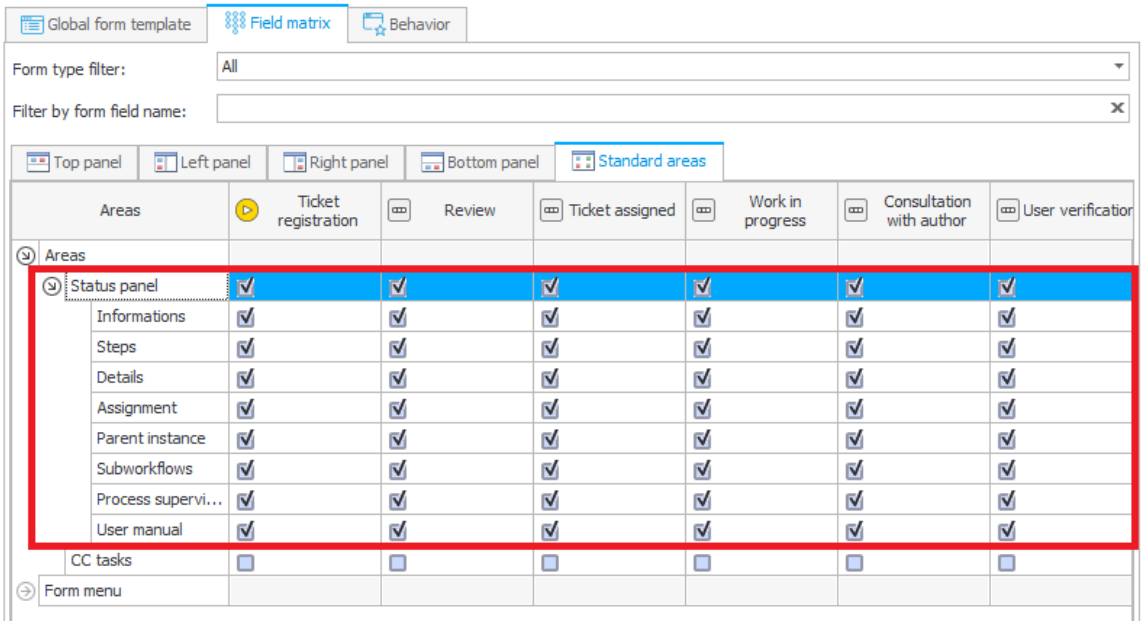
- Actions that require interaction with the user i.e. 'Start workflow manually', 'Change form type' can exist only as single action defined on a button.
- 'Hyperlink' actions which redirects to another address is always executed at the end of the whole sequence. In cases where there are a couple of these actions, only the last one is executed.

- JavaScript used in 'Hyperlink' actions will be executed only if this type of action is defined as the first in the sequence.
- Actions that display the result on the screen (Generate/Update a Word file, Generate a PDF file) the result will be presented by the last action executed.

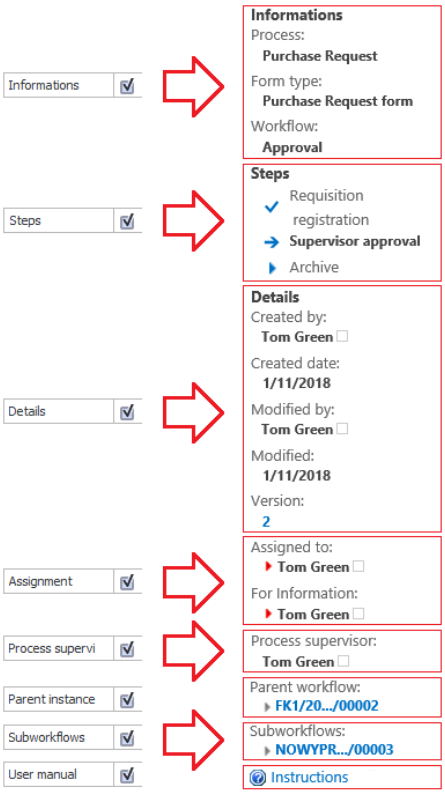
3.3.2. Customizable status panel

Visibility configuration of the status panel elements was expanded. Now it's possible to independently hide/show elements which display:

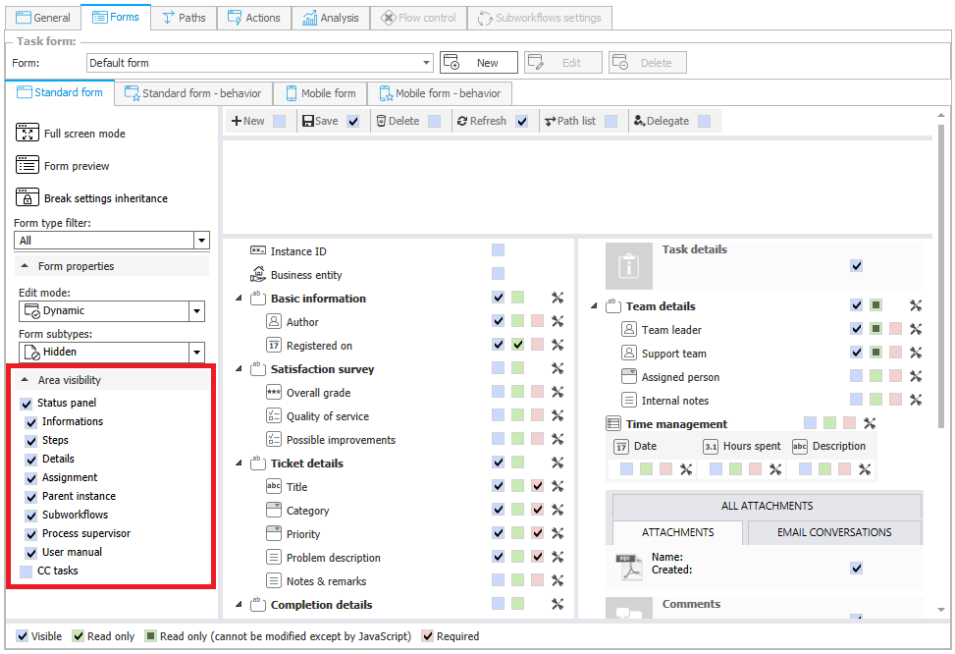
- Information
- Steps
- Details
- Assignments
- Parent workflow
- Sub-workflows
- Process supervisor
- Instructions



Checking and unchecking these option causes them to show and hide respectively on the form status panel.



Visibility configuration for the 'Status panel' elements is configured in the 'Standard areas' section of the 'Field matrix' tab. It can be defined independently for each workflow step on both classic and mobile forms. Access to the status panel visibility configuration is also possible in the form editor of a specific step.



3.4. Mobile devices

3.4.1. Availability of actions on the WEBCON BPS mobile app

The spectrum of actions available for various triggers on the mobile form has been broadened – especially of actions available as a 'Menu button'.

The table below contains information about action availability for each trigger in the context of the mobile and classic form.

✓ – action available for mobile and classic forms

✓ – action available for mobile form with limited functionality (no limitations for classic form)

✓ – available only for classic form action (unavailable for mobile form)

Action group	Action type	On entry	On exit	On timeout	On browser opening	Menu button	On path	Cyclical	Upon instance deleting	Upon instance saving	Attachments menu	On attachment add
Active Directory	Manage groups	✓	✓	✓	✓	✓	✓			✓		
	Add user to a group	✓	✓	✓	✓	✓	✓			✓		
	Manage users	✓	✓	✓	✓	✓	✓			✓		
Digital signatures and certificates	Authorize user		✓				✓					
	Sign an attachment with CoSign	✓	✓	✓	✓	✓	✓			✓	✓	
	Sign an attachment	✓	✓	✓	✓	✓	✓			✓	✓	
	Verify attachment's signature		✓		✓		✓			✓	✓	
Barcodes	Read a barcode	✓	✓	✓	✓	✓	✓			✓		
	Add a barcode	✓	✓	✓	✓	✓	✓			✓		
	Printout a barcode label	✓	✓			✓	✓			✓		
Workflow control	Choose path (list)				✓							
	Move workflow (SQL)	✓	✓	✓	✓	✓	✓	✓				
	Start a subworkflow (SQL)	✓	✓	✓	✓	✓	✓	✓	✓			
	Start a subworkflow	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	Manual workflow start					✓						
	Set workflow status	✓	✓	✓		✓	✓			✓		
	Update related workflow instance	✓	✓	✓	✓	✓	✓	✓		✓		
	Change form type					✓						

Excel, Word & PDF	Generate a Word file	✓	✓	✓	✓	✓[1]	✓			✓		
	Convert Word to PDF	✓	✓	✓	✓	✓	✓			✓	✓	
	Generate an Excel file	✓	✓	✓	✓	✓	✓			✓		
	Generate a PDF file	✓	✓	✓	✓	✓	✓			✓		
	Read data from an Excel file	✓	✓	✓		✓	✓			✓		
Substitutions	Add a substitution	✓	✓	✓	✓	✓	✓			✓		
	Remove a substitution	✓	✓	✓	✓	✓	✓			✓		
Notifications	Send custom e-mail	✓	✓	✓	✓	✓	✓		✓	✓		
	Send standard e-mail	✓	✓				✓			✓		
Exchange	Exchange events	✓	✓	✓	✓	✓	✓		✓	✓		
	Exchange tasks	✓	✓	✓	✓	✓	✓		✓	✓		
	Out of office autoreply	✓	✓	✓	✓	✓	✓			✓		
Integration	Run an SQL procedure	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	Run an SDK action	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	Run a PowerShell script	✓	✓	✓	✓	✓	✓		✓	✓		
	Invoke SOAP Web service	✓	✓	✓		✓	✓			✓		
	Invoke REST Web service	✓	✓	✓		✓	✓			✓		
Form	Validate form	✓	✓	✓			✓		✓	✓		
	Hyperlink	✓	✓		✓	✓	✓			✓		
	Change field value	✓	✓	✓	✓	✓	✓		✓	✓		
	Change field value (SQL)	✓	✓	✓	✓	✓	✓		✓	✓		
	Change items list values	✓	✓	✓		✓	✓			✓		
Reports and printouts	Generate an RS report	✓	✓	✓	✓	✓	✓	✓		✓		
	Generate an HTML printout	✓	✓			✓	✓					
OCR and scanning	Attachment OCR	✓	✓	✓			✓					
	OCR AI recognition	✓	✓	✓	✓	✓	✓			✓		
	Teach OCR AI	✓	✓	✓	✓	✓	✓			✓		
	Add a text layer	✓	✓	✓	✓	✓	✓			✓		✓
Privileges	Remove privilege	✓	✓	✓	✓	✓	✓			✓		
	Add privilege	✓	✓	✓	✓	✓	✓			✓		
Task assignment	Create task	✓	✓				✓			✓		
	Choose an approver	✓	✓	✓	✓	✓	✓			✓		
Database retention	Remove personal data	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	Archived instances retention	✓	✓	✓		✓	✓	✓				
	Archive workflow instances	✓	✓	✓		✓	✓	✓		✓		
	BPS users list synchronization	✓	✓	✓		✓	✓	✓		✓		
Attachments	Add attachment	✓	✓	✓	✓	✓	✓			✓		
	Update attachment	✓	✓	✓	✓	✓	✓			✓		
	Remove attachment	✓	✓	✓	✓	✓	✓			✓		
	Copy to the other instance										✓	
	Move to the other instance										✓	
SharePoint – users and privileges	Create/delete a user	✓	✓		✓	✓	✓		✓	✓		
	Create group	✓	✓		✓	✓	✓		✓	✓		
	Add privileges	✓	✓		✓	✓	✓		✓	✓		
SharePoint - content	Create a list	✓	✓		✓	✓	✓		✓	✓		
	Create a site	✓	✓		✓	✓	✓		✓	✓		
	Edit a list element	✓	✓	✓	✓	✓	✓		✓	✓		
	Delete a list element	✓	✓	✓	✓	✓	✓		✓	✓		

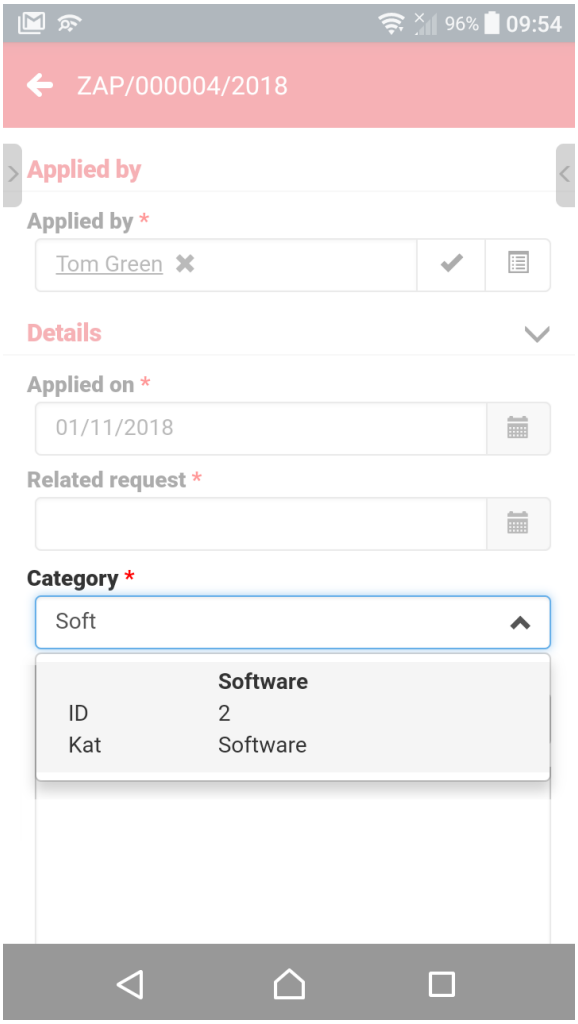
[1] For the mobile form option „Create new file for item list rows" is unavailable.

	Delete a list	✓	✓	✓	✓	✓	✓		✓	✓		
	Download an attachment from the list	✓	✓	✓	✓	✓	✓		✓	✓		
	Add an attachment to the list	✓	✓	✓	✓	✓	✓		✓	✓		
	Add a new list element	✓	✓		✓	✓	✓		✓	✓		

3.4.2. Choice field in 'Choice with autocomplete' mode

Choice fields using 'Choice with autocomplete' have been expanded. From now on, it allows data to be entered directly on the mobile device, giving access to a dynamically narrowed list appropriate to the input data.

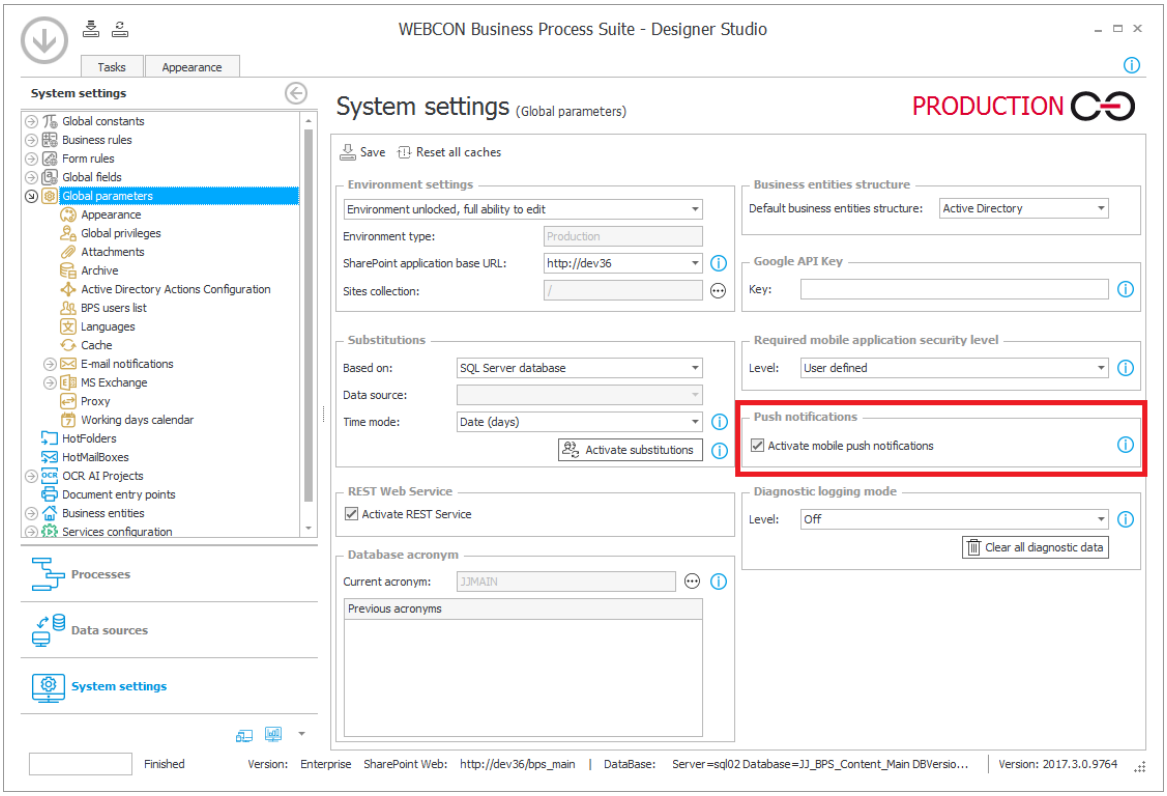
The field also has a new option to input data from outside the source (option is available if the 'Allow adding values not in data source' option is selected in the configuration).



3.4.3. Deactivating PUSH notifications

The option to globally turn off PUSH notifications sent by WEBCON Workflow Service is now available. It can be found in 'Global parameters' node of the 'System' tab in WEBCON BPS Designer Studio.

Global deactivation of PUSH notifications causes WEBCON Workflow Service to not engage in any tasks connected to this notification type, even if the option to receive PUSH notifications is configured on a mobile device profile.



3.5. Outlook Add-In

3.5.1. Preventing accidental multiplication of e-mail attachments

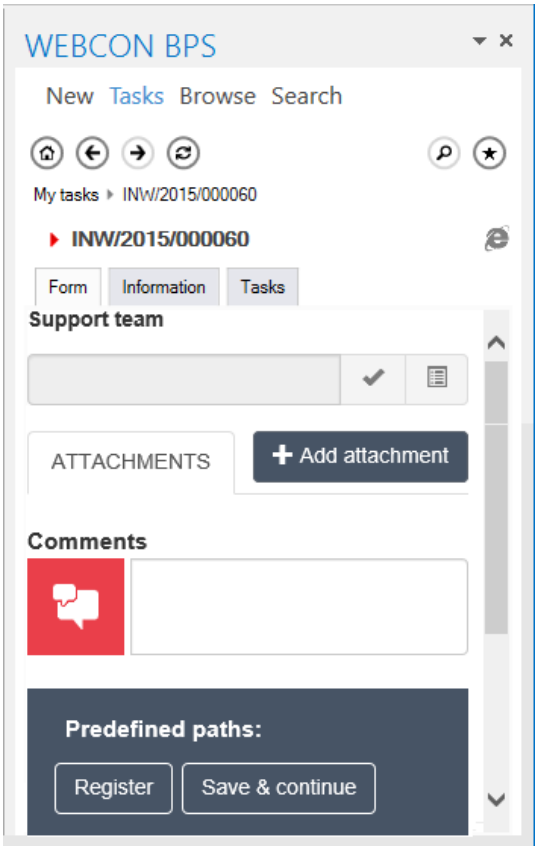
The way e-mail attachments are identified and added to workflow instances has been modified. E-mails will now be identified based on the Message-ID saved in the message header (previous versions of the Outlook Add-In identified e-mails based on their subject).

This change will prevent the same e-mail message being added as an attachment twice with different names.

If the added e-mail message already exists in the 'E-mail conversations' tab of the specific instance, the user is given the choice of aborting the operation or overwriting the attachment.

3.5.2. Quick paths available in the from view

The Outlook Add-In window now has access to any 'Quick paths' that would normally be available to the viewed workflow instance.

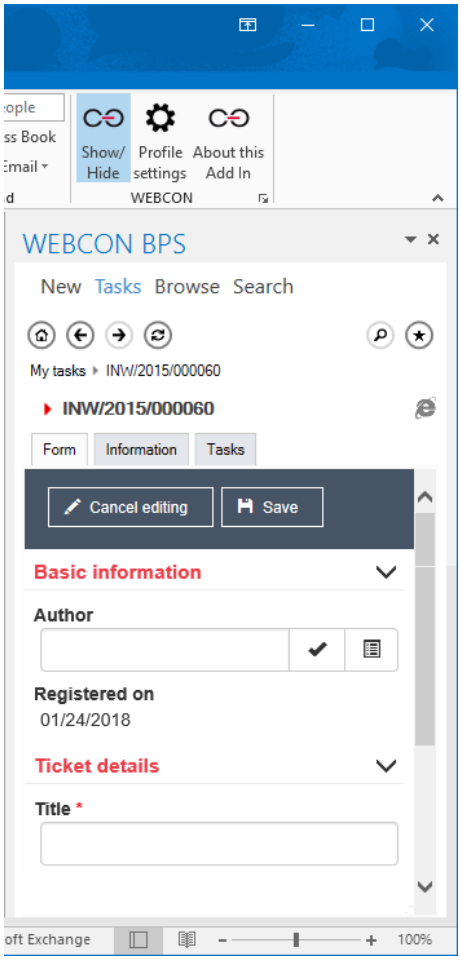


3.5.3. Editing and saving form data in the Outlook Add-In

The Outlook Add-In which allows you to interact with WEBCON BPS directly from your mailbox has been further expanded, it now allows all data to be edited.

The feature allows quick access to the workflow instance associated with the received e-mail message. The instance can be modified, saved, and transition paths may be used without opening it in the browser.

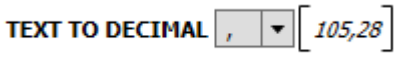
It is possible to quickly open the instance in the browser by clicking the 'Explorer' icon next to the instance's number.



3.6. Business rules and Form rules

3.6.1. TEXT TO DECIMAL and DECIMAL TO TEXT functions

Business and Form rule editors now have access to a new function which transforms text to a decimal value.



Business and Form rule editors now have access to a new function which transforms decimal values to text while also taking formatting into account. It is possible to define the thousands separator, decimal separator, and number of decimal places.

3.6.2. STARTS WITH function

Business and Form rule editors now have access to a new function which checks whether the provided text begins with a specific string of characters.

3.6.3. LIKE function

Form rule editors now have access to a new function which checks whether the provided text contains a specific sample of text.

The template may contain the following operators:

% - any character

_ - single character

[] – any character from the provided range

[^] – a single character that doesn't appear in the provided range

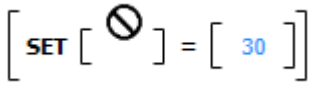
3.6.4. 'Is admin mode active?' variable

Business rule editors now have access to a new context variable named 'Is admin mode active?' which returns POSITIVE if the user activates admin mode on the form.

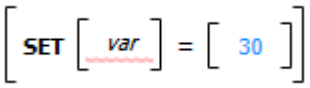
3.6.5. Blocking invalid configurations

The form rule editor now features a mechanism which blocks configurations which are invalid from the perspective of the form rule engine. Thanks to this, the user is informed of any errors they commit while constructing a rule.

When attempting to use an invalid rule construction, it will be blocked by the editor (the cursor will change).



When an invalid rule construction is entered via keyboard, it will underlined with a red line.



Some examples of invalid configurations blocked by the rule editor:

- Attempting to set non-editable values (chart type form field, data table, tab panel)
- Attempting to prevent editing values that non-editable
- Attempting to set values of other rules

3.7. WORD templates – handling DEV/TEST/PROD

It is now possible to use the same WORD template file regardless of the DEV/TEST/PROD environment.

Thanks to this, it is no longer necessary to define three separate templates for DEV, TEST and PROD environments. One file can be used for Generate/Update a Word file actions regardless of environment.

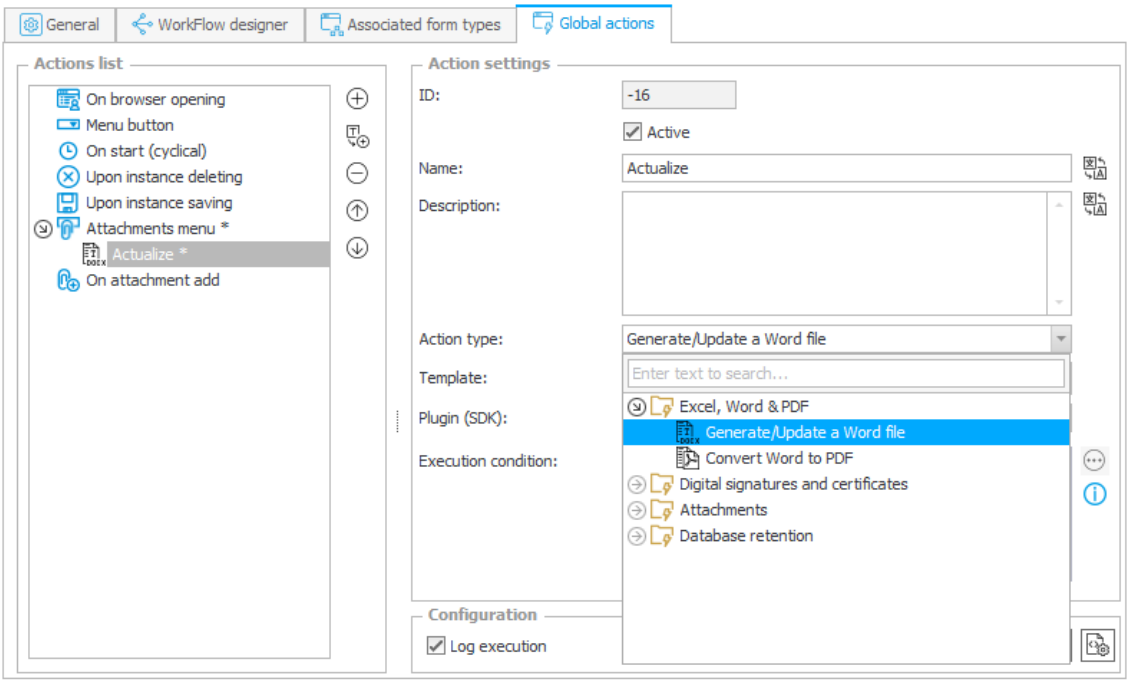
Note:

This feature is not available for templates created in previous versions of the WORD Add-In (version 2017.1.2 and older).

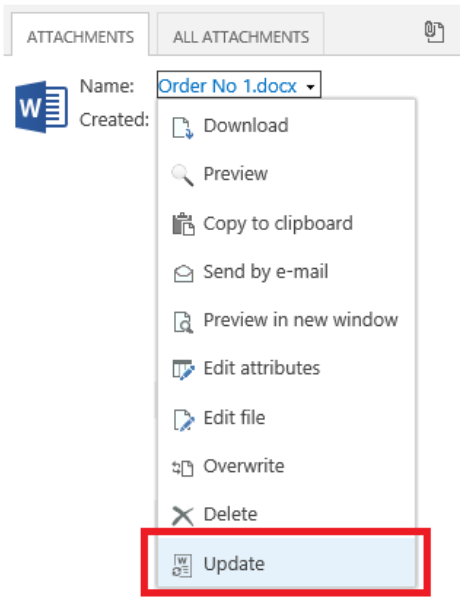
To use one template on all environments, the template must be created in WORD Add-In version 2017.1.3 or newer.

3.8. ‘Generate/Update a Word file’ action on attachments

The ‘Generate/Update a Word file’ action may now be triggered on files added as attachments to the workflow instance.



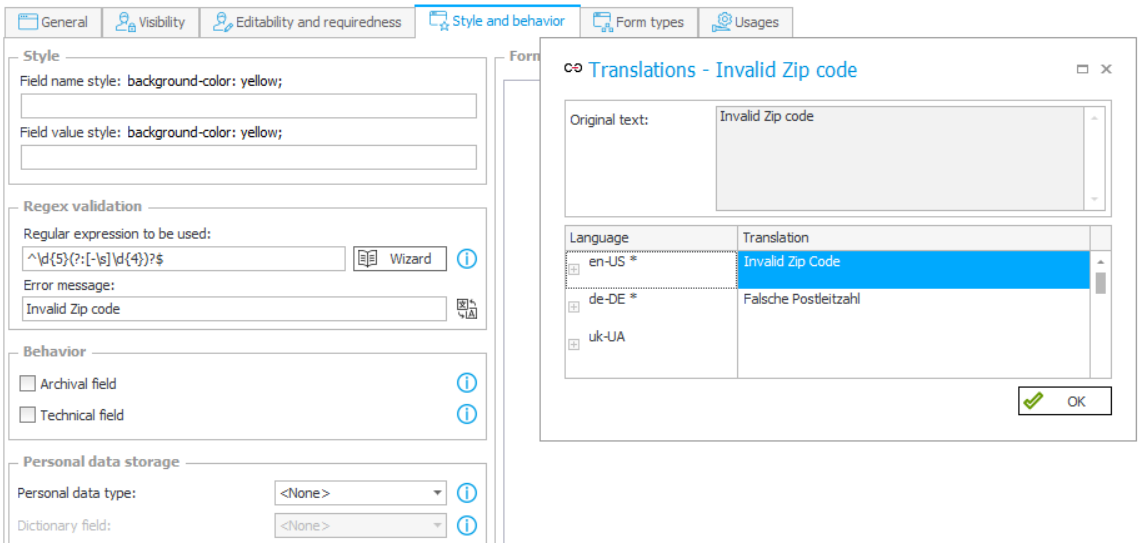
The action is visible in the context menu of a specific Word file. Depending on its configuration, the action can be used to update the attachment with values from the form, or generate a completely new attachment using the current state of the form as a base.



3.9. Translations for regular expression validation notifications

For form fields and item list columns that or of the 'Single line of text' and 'Multiple lines of text' type, it is now possible to define multilingual notifications that will be displayed while checking if the entered value matches the provided regular expression.

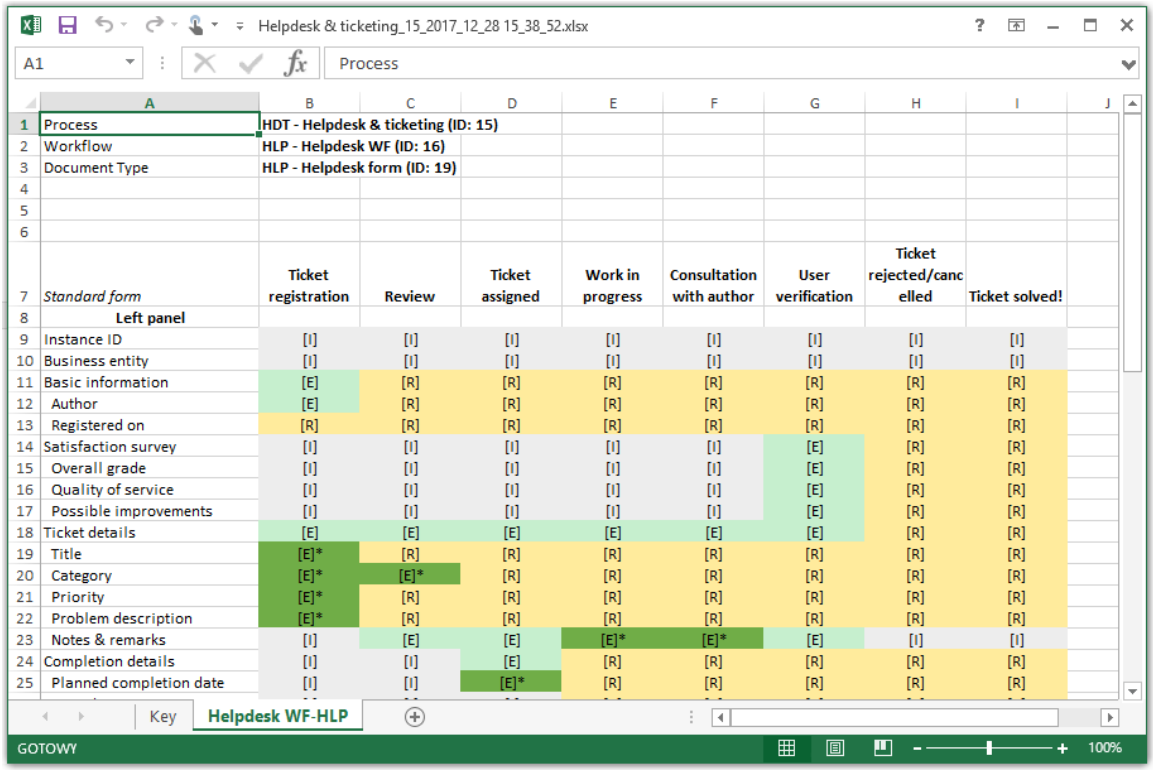
If the entered value does not match the regular expression, the user will see the notification in the appropriate language.



3.10. Field matrix documentation

The feature that generates process documentation was enhanced to also generate an Excel file in addition to the standard documentation Word file. The Excel file contains a rundown of all available form fields, divided by workflows, form types and taking into account the inheritance settings for both classic and mobile forms.

The Excel file is always created concurrently with the process documentation by using the 'Generate process documentation' feature. The file name and language of its contents are set accordingly to the name and language of the Word documentation. Excel document is comprised of spreadsheets that each represent "Workflow – form type" pairings. In cases where the inheritance is broken for the mobile form configuration, a separate spreadsheet is created for it with a 'MOB' suffix added on.

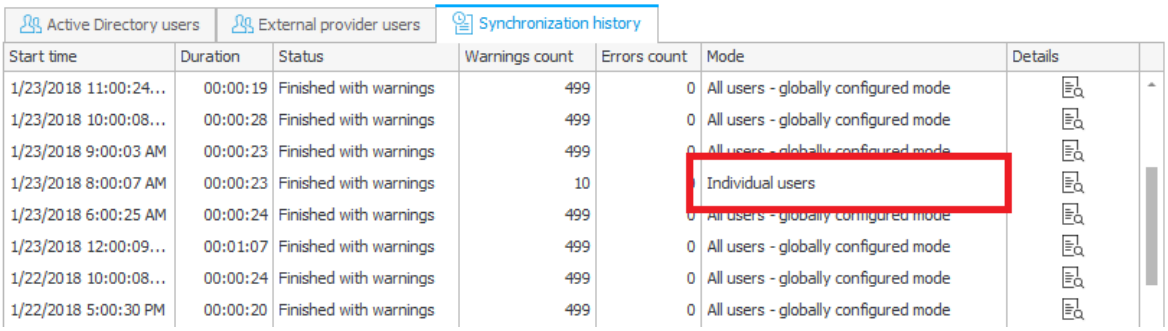


	A	B	C	D	E	F	G	H	I	J
1	Process	HDT - Helpdesk & ticketing (ID: 15)								
2	Workflow	HLP - Helpdesk WF (ID: 16)								
3	Document Type	HLP - Helpdesk form (ID: 19)								
4										
5										
6										
7	*Standard form*	Ticket registration	Review	Ticket assigned	Work in progress	Consultation with author	User verification	Ticket rejected/cancelled	Ticket solved!	
8	**Left panel**									
9	Instance ID	[I]	[I]	[I]	[I]	[I]	[I]	[I]	[I]	
10	Business entity	[I]	[I]	[I]	[I]	[I]	[I]	[I]	[I]	
11	Basic information	[E]	[R]	[R]	[R]	[R]	[R]	[R]	[R]	
12	Author	[E]	[R]	[R]	[R]	[R]	[R]	[R]	[R]	
13	Registered on	[R]	[R]	[R]	[R]	[R]	[R]	[R]	[R]	
14	Satisfaction survey	[I]	[I]	[I]	[I]	[I]	[E]	[R]	[R]	
15	Overall grade	[I]	[I]	[I]	[I]	[I]	[E]	[R]	[R]	
16	Quality of service	[I]	[I]	[I]	[I]	[I]	[E]	[R]	[R]	
17	Possible improvements	[I]	[I]	[I]	[I]	[I]	[E]	[R]	[R]	
18	Ticket details	[E]	[E]	[E]	[E]	[E]	[E]	[R]	[R]	
19	Title	[E]*	[R]	[R]	[R]	[R]	[R]	[R]	[R]	
20	Category	[E]*	[E]*	[R]	[R]	[R]	[R]	[R]	[R]	
21	Priority	[E]*	[R]	[R]	[R]	[R]	[R]	[R]	[R]	
22	Problem description	[E]*	[R]	[R]	[R]	[R]	[R]	[R]	[R]	
23	Notes & remarks	[I]	[E]	[E]	[E]*	[E]*	[E]	[I]	[I]	
24	Completion details	[I]	[I]	[E]	[R]	[R]	[R]	[R]	[R]	
25	Planned completion date	[I]	[I]	[E]*	[R]	[R]	[R]	[R]	[R]	

3.11. Changes to BPS Users list synchronization

Certain optimizations were made to shorten the time it takes to synchronize an individual user. An individual user synchronization is carried out after executing an action from the "Active Directory" and "SharePoint – privileges" groups, for objects defined in the action configuration.

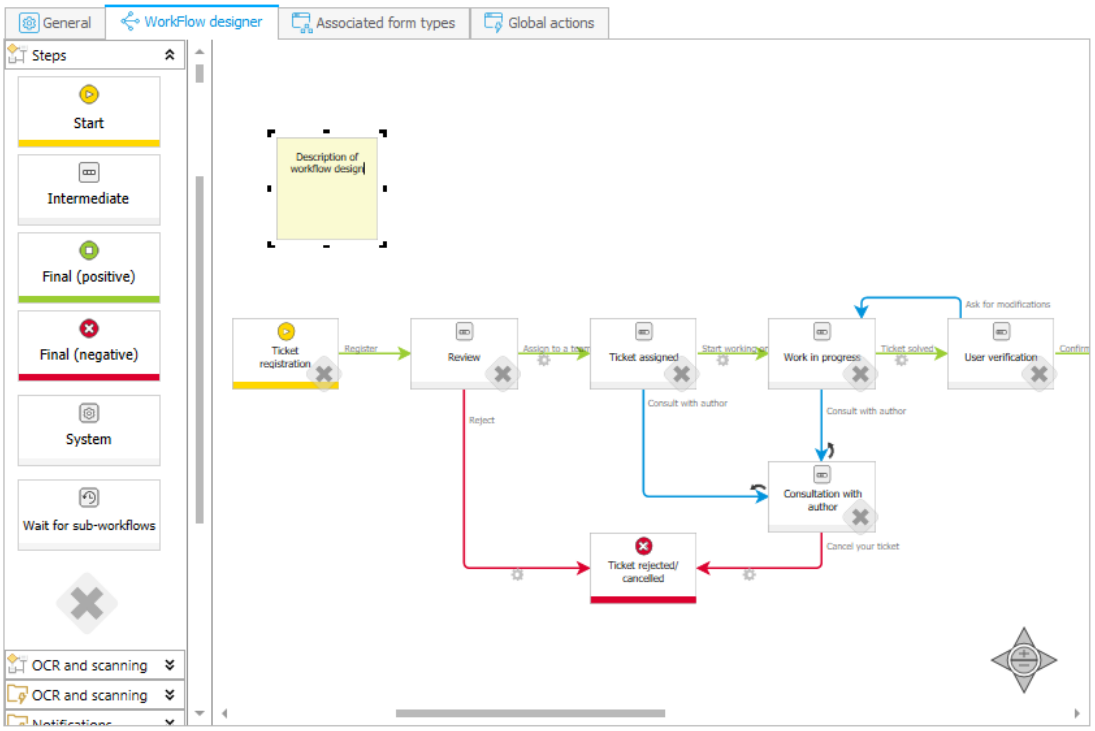
A notification about the successful synchronization of an individual user is can be found in the WEBCON BPS Designer Studio synchronization history (System settings -> BPS users list -> Synchronization history).



3.12. Workflow designer

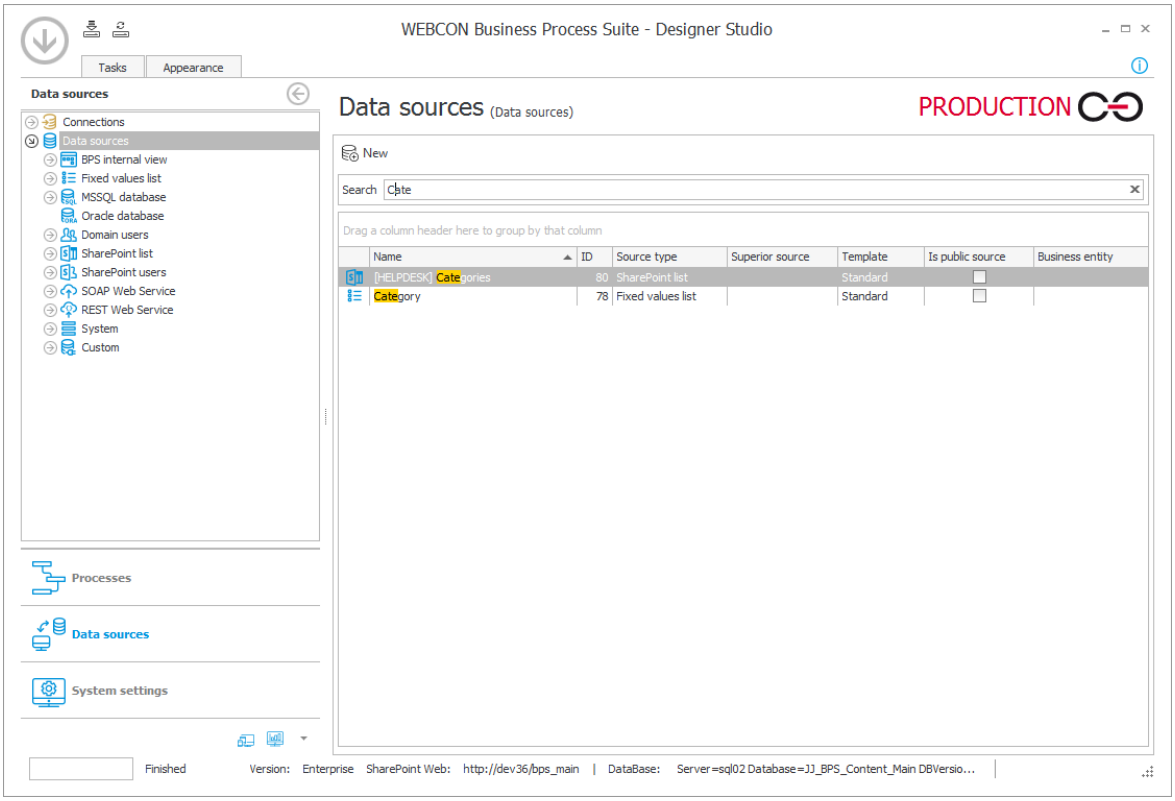
The graphical workflow designer has received several upgrades which aim to increase its utility and transparency of the diagram.

- Paths can now be colored (option 'Paint it…' from path context menu)
- Diagrams can be improved by adding commentaries in a form of short notes (option 'Create note' from the context menu)
- It is possible to add/edit the path description (option 'Edit description' from the path context menu)
- Path description is displayed in a 'tooltip' window (by hovering the mouse cursor over a path)



3.13. Searching for sources and connections

A view displaying a list of all data sources and connections is now available. It is also possible to conduct a search based on the connection or source name.



3.14. Exchange rate import from the Central Bank of the Russian Federation

It is now possible to download exchange rates published by Central Bank of the Russian Federation. This option is available as a data source in the exchange rate configuration.

Currently, exchange rates can be download from following banks:

- European Central Bank
- National Bank of Poland
- Central Bank of the Russian Federation

4. Bug fixes

- **[General]** Fixed an issue with HotFolders where files would sometimes fail to attach to existing workflow instances.
- **[General]** Improved the method of verifying WEBCON BPS Service activity in cases where the times of the database server and service server are desynchronized.
- **[General]** Improved the Import-Export mechanism for SOAP data sources.
- **[General]** Fixed a configuration issue with HotMailBoxes that would make it impossible to select different data sources in a few HotMailBoxes.
- **[General]** Improved text formatting for SharePoint data sources that contain 'Multiple lines of text' type columns. Additional HTML tags will not be displayed.
- **[General]** Introduced a series of small improvements to the feature responsible for synchronizing the 'BPS user list' with the Active Directory. This should resolve several synchronization errors which occurred for non-typical AD configurations.
- **[General]** Authentication via ADFS should now correctly handle logins containing hyphens.
- **[Processes]** Improved the feature for testing queries in various areas of WEBCON BPS Designer Studio when using different connection parameters for DEV/TEST/PROD environments.
- **[Processes]** Improved how values from the clipboard are copied into BPS Designer Studio widgets and input fields.
- **[Processes]** Added the option to define multiple e-mail addresses to receive notifications in 'Deployment mode'.
- **[Form fields]** Fixed the column name display on 'Data grid' form fields. The column name is now taken from the form field configuration instead of the column name in the query.
- **[Form fields]** Improved the handling of numerical keyboard characters used in 'Floating-point number' form fields when viewed in Internet Explorer.
- **[Form fields]** Improved the searching efficiency of choice fields that use the 'Contains phrase' option and BPS internal view.
- **[Rules]** Improved how Form rules interact with form field values that are not visible on the form.
- **[Rules]** The business rule function 'IS IN' should now interact correctly with empty values.
- **[Workflows]** Improved how workflow previews are generated for more expansive workflows with scroll bars.
- **[Workflows]** Dates in the E-mail conversations tab will now be displayed correctly without being snipped.
- **[OCR]** Fixed the snipping of horizontal documents processed by OCR AI. In order for this fix to take effect, it is necessary to upgrade the FineReader 11 component.
- **[OCR]** Improved how the 'Teach OCR AI' handles teaching blocks located on two different pages of the document.
- **[OCR]** Fixed an error with 'Teach OCR AI' logs displaying incorrect information from the previous action execution.

- **[Actions]** Forbidden characters can no longer be used in the name template for files generated by the 'Generate EXCEL file' action.
- **[Actions]** Fixed an error with cyclical actions which would sometimes cause the cycle to be interrupted.
- **[Actions]** 'Send custom e-mail' actions should now save correctly when business rules with parameters are used in its configuration.
- **[Actions]** Improved the 'Test' function in the 'Move workflow (SQL)' action configuration.
- **[Web Part]** Improved the efficiency of the 'Search' function on the Show Worfklow Elements Web Part by removing an obsolete query.
- **[Web Part]** Fixed an issue with the behavior of the mass acceptance window on SWE Web Parts.
- **[Web Part]** Improved the visibility of chart labels.
- **[Mobile]** Fixed the order in which form rules are executed on the mobile form. Form fields which are tied to other fields should now update correctly.
- **[Plugins]** Fixed configuration and testing of SDK plugins when launching BPS Designer Studio using User + Password authentication.

2017.1.2.121

1. Bug fixes

- **[Add-In]** Fixed an issue with the Word Add-In which would cause exceptions when attempting to edit a template located in a SharePoint list.
- **[Processes]** Fixed an issue with the variable for returning the most recent comment.
- **[Processes]** Fixed an issue with the Process Export mechanism, which would occur if the exported process contained a rule using the SQL COMMAND function with a process variable.
- **[Form fields]** Improved the performance of the editor used to create data source filters.
- **[Form fields]** Fixed an error in floating-point number fields, where it would sometimes be impossible to enter the full-stop sign "." from the numeric keypad when using Internet Explorer.
- **[Form fields]** Added the ability to search for surnames in the "Person or group" field.
- **[Rules]** Fixed an issue with action visibility rules, which would sometime cause JavaScript errors on the form.
- **[Actions]** Fixed an issue with the SOAP action configuration, which would sometimes cause errors when attempting to access this action's configuration.

2017.1.2.109

1. New features

- **[Processes]** SOAP and REST data sources and actions can now use Proxy.
- **[Processes]** The BPS users list can now by synchronized in DEBUG mode. Various synchronization modes can be found in the "Advanced" tab of the Synchronization configuration.
- **[Processes]** The BPS users list can now by synchronized in "Full synchronization" mode. Various synchronization modes can be found in the "Advanced" tab of the Synchronization configuration.
- **[Rules]** Business rule functions HIDE and SHOW can now be used on tab panels, individual tabs, and on form field groups.

2. Bug fixes

- **[Add-In]** Adding attachments via Outlook Add-In has been improved.
- **[General]** Fixed an issue with BPS Designer Studio license assignment that would occur when attempting to log in while providing a password manually.
- **[General]** When searching for SharePoint groups in certain configurations, the search should now encompass all site collections of the web application. This applies to the configuration of the "Send a custom e-mail" action, mass notifications, and in form field visibility conditions.
- **[General]** Improved the visibility of the Item list ID variable in SQL and JavaScript editors.
- **[Processes]** Improved the Import-Export mechanism to better handle transferring SDK form fields.
- **[Processes]** Improved how data source configurations are migrated from earlier versions to take into account superior sources.
- **[Processes]** Improved the mechanism responsible for identifying related instances during process export.
- **[Processes]** The AD synchronization mechanism should now be able to handle commas in the CN.
- **[Rules]** Improved the performance of the Form rules engine to better handle large numbers of rules being activated for one form.
- **[Rules]** The business entities of data sources used in Business rules should now be handled correctly.
- **[OCR]** The OCR AI recognition action should now take date formatting into account based on the set language culture.
- **[Actions]** The "Generate a Word file" action should now correctly obtain data from "Multiple lines of text" form fields.
- **[Actions]** The action for adding users to groups has been improved to better handle external users.

- **[Actions]** Fixed an issue with the translation mechanism in action configurations that have been based on a template.
- **[Actions]** Generated barcodes should no longer overlap the instance number.
- **[Actions]** The "Generate a Word file" action should now correctly obtain data from "Data row" form fields.

2017.1.2.83

1. Information

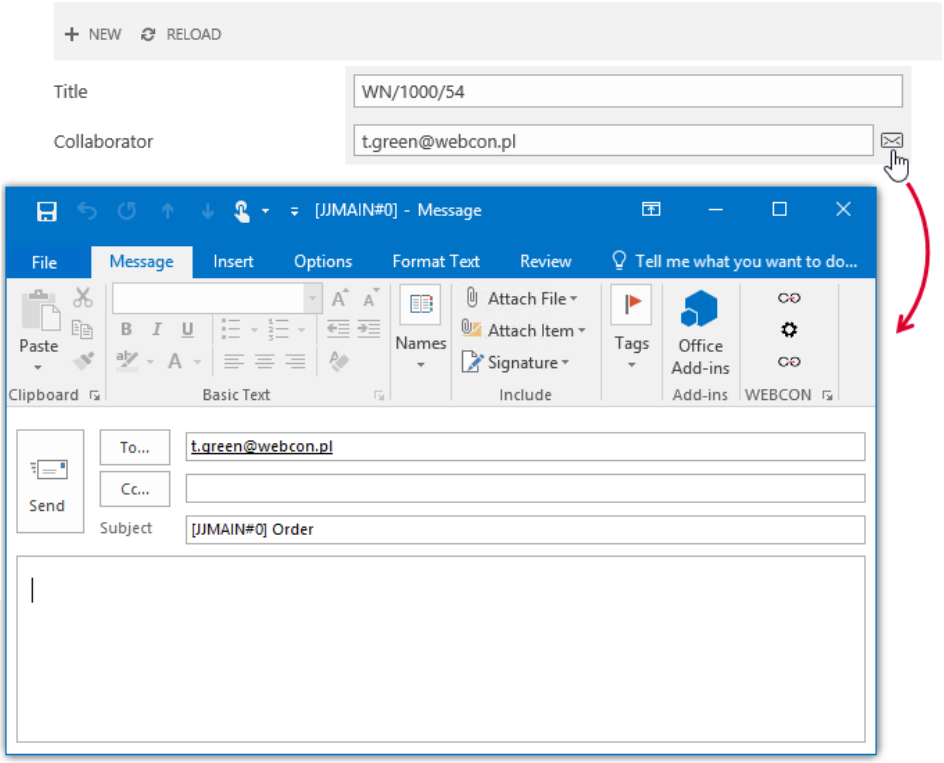
3. Changes in this version will break compatibility of the Export-Import mechanism. Exported process packages created in versions 2017.1.1.x and older cannot be imported to the newest system version. In order for an import to be possible, update the environment to the newest version and export the processes again.

2. New features

2.1. E-mail form field

The system now includes a new type of form field which can be used to validate and store an e-mail address. The configuration of this from field is used to define the default recipient, CC recipient, BCC recipient, subject, and contents of a message. Clicking the form field on the form will open the default e-mail client and generate a message based on the configuration.

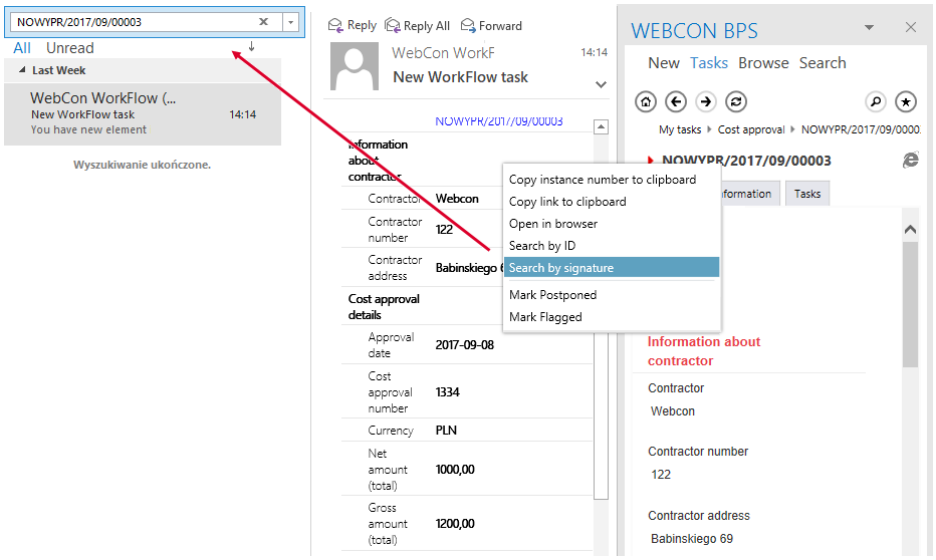
The e-mail form field is also available as a column on the item list.



2.2. Upgrades for WEBCON BPS Outlook Add-In

2.2.1. Search by instance ID or number.

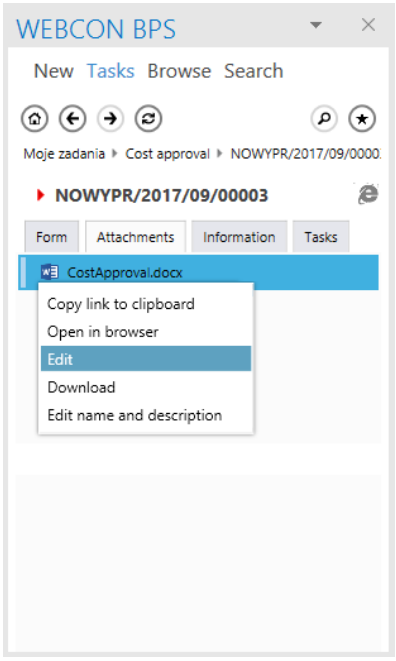
It is now possible to quickly search the inbox for e-mails associated with a given workflow instance. This option is available from the context menu after right-clicking on an instance number in the BPS Outlook Add-In.



2.2.2. Edit attachments directly in BPS Outlook Add-In.

It is now possible to open and edit files that have been added as attachments to a workflow instance using WEBCON BPS Outlook Add-In. This is done by double-clicking a file in the "Attachments" tab. You can also edit and download the file from the context menu.

Note: in order to edit files directly from WEBCON BPS Outlook Add-In, it is necessary to activate "Edit using SharePoint list" on the form (Designer Studio -> Workflow -> Standard/Mobile form -> click on the "Attachments" panel to view options -> mark "Edit using SharePoint list").



2.2.3. Workflow instance can be associated with a planned meeting.

Meetings planned with MS Outlook can be associated with a specified workflow instance. Connecting a workflow instance with an event in the calendar requires the instance ID to be entered into the meeting subject (right click on the instance number -> insert ID into subject). Opening the meeting from the calendar will also cause WEBCON BPS Outlook Add-In to open the associated instance.

2.2.4. Automatically go to started workflow instance

When starting a workflow instance by dragging a file or an e-mail onto the start tile in WEBCON BPS Outlook, a workflow instance will be started according to the configuration of the tile. The new workflow instance will automatically be opened in the browser.

2.2.5. Handling multiple business entities

Added business entity configuration when defining a workflow-start shortcut tile.

2.2.6. Adding attachment descriptions

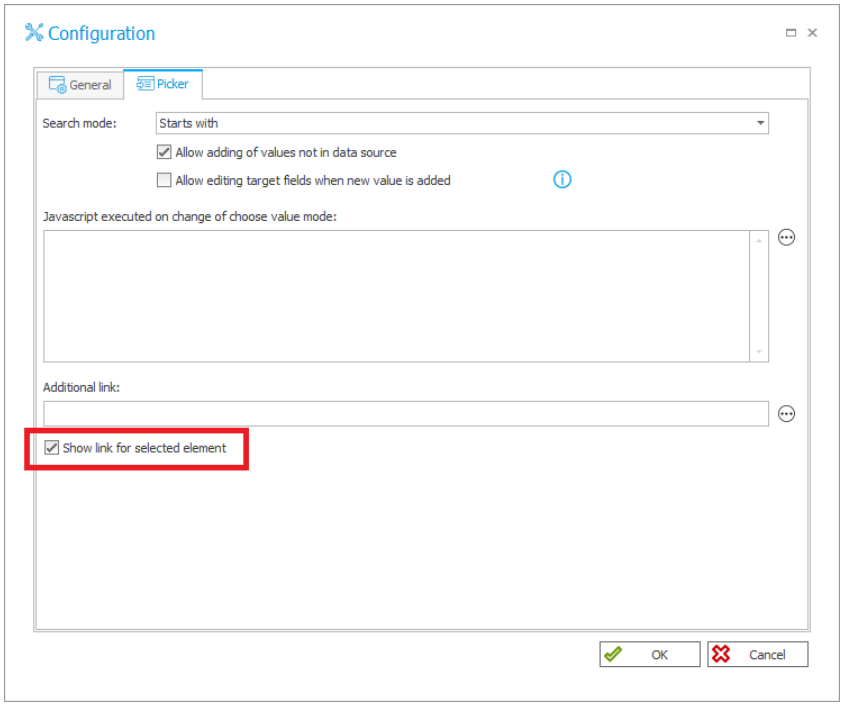
Descriptions can now be added to files attached to a workflow instance. The description may be defined when the attachment is added (dragging a file onto the attachment tab in an open workflow instance) or by selecting "Edit name and description" from the context menu of an attachment.

2.2.7. Display attachment category

The category to which an attachment belongs can be seen in the attachment tab of the open workflow instance.

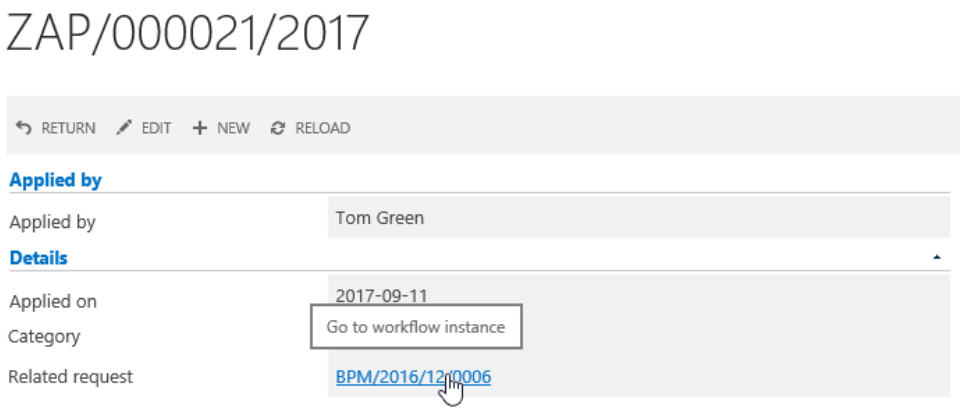
2.3. Navigate to workflow instance via choice field

For "Autocomplete" and "SharePoint picker" choice fields, and for "Autocomplete" and "Choice field (picker)" item list columns, it is possible to display a link that will redirect the user to the selected workflow instance. This option is available when the data source of the choice field is a "BPS internal view" type source (therefore the linked object is another workflow instance created in WEBCON BPS).



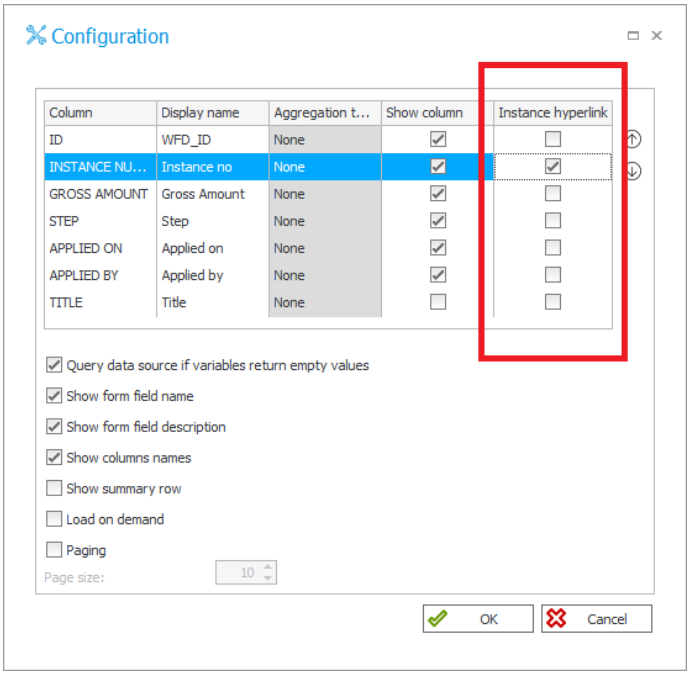
The link is available for both editable and read-only form fields (i.e. it is a button next to the choice field).

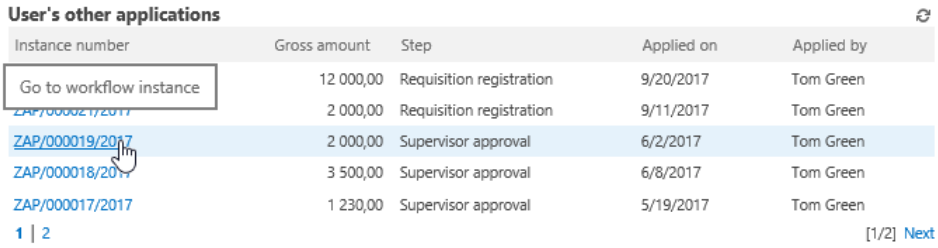
The link is also available if the form field is configured as a column on the SWE Web Part.



2.4. Navigate to workflow instance via Data table and Data row

Form fields "Data table" and "Data row" now have the option to display a link that will redirect the user to a workflow instance. This option is available if the data source is a "BPS internal view" type source. When marking the "Hyperlink to instance" option, the corresponding column will display links that can be used to view the associated workflow instance.

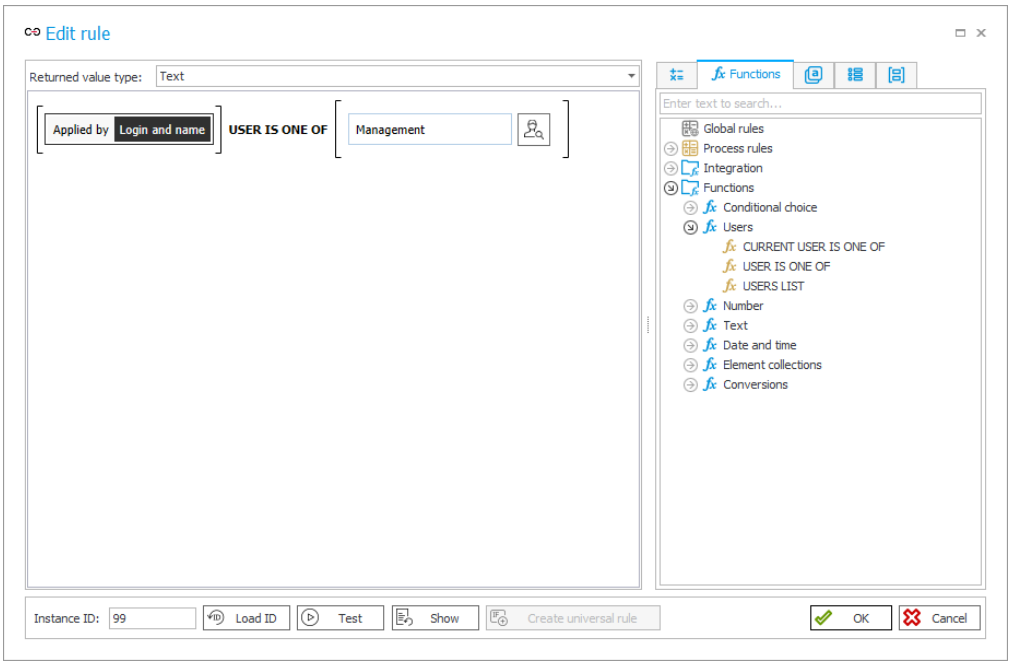




2.5. Rules

2.5.1. USER IS ONE OF function

The business rule editor now includes the USER IS ONE OF function, which is used for checking if the given user is a member of the selected group.



2.5.2. Business rules parameters

It is now possible to use parameters defined for business rules within functions that obtain data from data sources (DATA SOURCE VALUE) as well as SQL and ORACLE databases (SQL COMMAND).

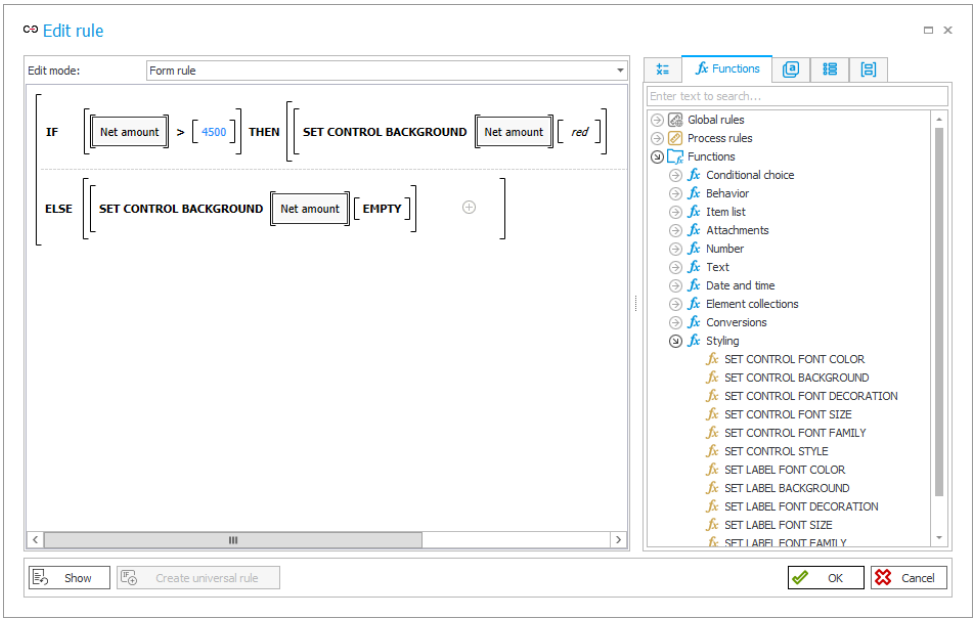
This feature makes it possible to parameterize SQL queries and data source filters.

2.5.3. COLLECTION function

Business rules and Form rules may now use the COLLECTION function to create a list of values.

2.5.4. Functions that modify the appearance of controls

The Form rules editor has been expanded to include a set of functions that can be used to modify the font family, font size, font color, background color, and field label on the form. These functions work identically on both the standard and mobile form.



2.5.5. System fields in Form rules

The Form rules editor can now use variables that reference system fields (i.e. system constants).

2.6. Search-box for functions and operations

A search-box has been added to help find operations and functions in the Business rule and Form rule editors.

2.7. BPS internal view

2.7.1. Formatting data according to form field configuration

Implemented data type recognition in BPS internal view columns. Therefore, values of "Floating-point number" and "Date and time" form fields that are used as data source columns will be formatted appropriately in accordance with their form field setting.

2.7.2. Ability to view form field value ID

For picker fields and system fields (Process, Workflow, Step, Form type, Form subtype, Business entity) it is now possible to load the ID of the field value.

2.8. Business rules in Word file generation

It is now possible to use Business rules when creating Word document templates with WEBCON BPS Word Add-In. The rules are taken into account when generating a Word document with the "Generate a Word file" action.

2.9. Generate process documentation

2.9.1. Rule visualization

The automatically generated process documentation will now include a visual representation of Business rules and Form rules.

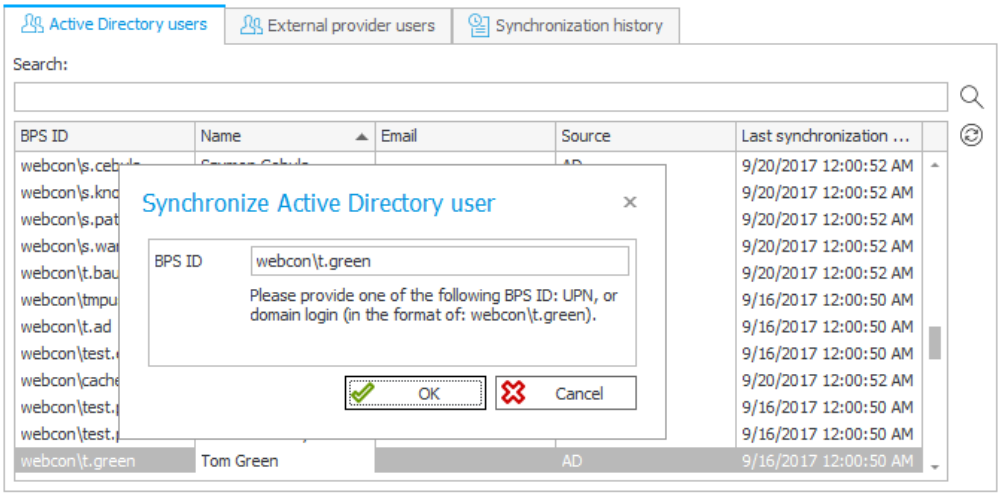
2.9.2. German template

Introduced the German-language template that can be used for the automatically generated documentation.

2.10. AD user list synchronization

2.10.1. Synchronizing an individual user

It is now possible to synchronize a single Active Directory user. This can be used to quickly refresh the data of an individual user on demand, or to instantly load the data of user that has been created recently, without needing to wait for the next full synchronization scheduled in the system.



2.10.2. Synchronization efficiency optimization

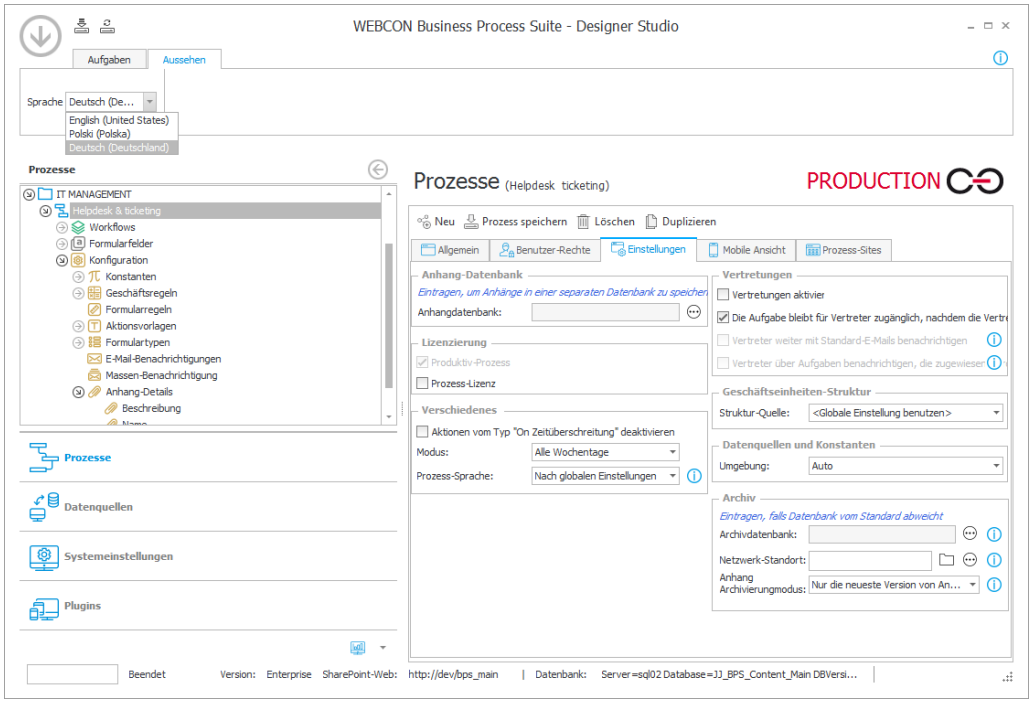
Introduced several performance-oriented improvements to the process of synchronizing the BPS user list with the Active Directory.

2.11. Currency exchange rate import from EBC

It is now possible to load the exchange rates of currencies based on the European Central Bank (https://www.ecb.europa.eu).

2.12. WEBCON BPS Designer Studio in German

A third language option for Designer Studio is now available in the appearance tab – the entirety of WEBCON BPS Designer Studio can now be viewed in German.



3. Changes to existing features

3.1. Business rules and Connections in action configuration

3.1.1. Changes to advanced configuration windows of certain actions

Business rules and Connections have been added to the configuration windows of the following actions:

- Change field value,
- Change field value (SQL),
- Validate form,
- Change item list values

As a result, the user interface and the method of configuring action parameters has undergone several changes. When updating the system to version 2017.1.2, parameters that are based on SQL queries will be automatically transformed into Business rules that use the SQL COMMAND function.

3.1.2. Change field value (SQL) action renamed

Change field value (SQL) action has been renamed to Change multiple field's values. The way the action operates remains unchanged.

3.2. Removed the ability to update instances via MS Word

The WEBCON BPS Word Add-In can no longer update data in the template based on the current values found on the form.

The feature for updating and generating Word files via the "Generate a Word file" action remains unchanged.

3.3. RUN SQL and RUN SDK functions renamed

In the Business rule editor, the RUN SQL and RUN SDK functions have been renamed to SQL COMMAND and SDK EXECUTION respectively.

These functions have been placed in the "Integration" node along with the DATASOURCE VALUE function.

4. Bug fixes

- **[General]** Improved the handling of system accounts on the BPS users list.
- **[General]** Improved transaction processing for BPS internal view data sources.
- **[General]** Improved the visibility of e-mail messages that have been added as attachments to the attachment panel.
- **[General]** Improved the layout of configuration windows for 125 DPI resolution.
- **[General]** Improved the visibility of grouping form fields in the SQL editor window.
- **[Processes]** Fixed how the "Superior" variable works, if the user (in the context of which the variable is used) doesn't have a superior.
- **[Processes]** Improved the synchronization of the COS_JobTitle column in the organization structure cache.
- **[Form fields]** Improved currency amount formatting in Choice field search windows.
- **[Form fields]** "Person or group" choice fields have been tweaked to handle groups that contain inactive users.
- **[Form fields]** When using Internet Explorer, long strings of text in "Multiple lines of text" columns on Item lists should now be formatted correctly.
- **[Actions]** The "Generate a Word file" action should now work correctly with Russian browser settings.
- **[Actions]** The "Choose path (list)" action should now work correctly when set to trigger "On browser opening".
- **[Actions]** Several improvements were made to actions that trigger "On timeout" at set intervals.
- **[Actions]** Fixed an issue with refreshing values after using the "Change field value" action on a field that has an active filter.
- **[Rules]** The Form rule function CheckIfAttExists() should now work correctly in JavaScript mode.
- **[OCR]** Improved OCR text layer filtering when using predefined masks.
- **[Web Part]** Optimized performance on SWE Web Parts that use calculated columns to filter data.

2017.1.1.127

1. New features

- [Form fields] A new variable was added for “Single line of text” and “Multiple lines of text" form fields. This variable allows encoded text (which supports special characters) to be used in the configuration of REST action.

2. Information

- [Processes] Changes introduced in this version will break the compatibility of the Export-Import mechanism. Exported process packages created in versions 2017.1.1.112 and older cannot be imported to the newest system version. In order for an import to be possible, update the environment to the newest version and export the processes again.

3. Bug fixes

- [General] Improved the handling of system accounts on the BPS users list.
- [General] Improved transaction processing for BPS internal view data sources.
- [General] Improved the visibility of e-mail messages that have been added as attachments to the attachment panel.

2017.1.1.112

1. New features

- [Plugins] In the Outlook Add-In, the configuration of "Start a workflow instance" tiles can now also include the relevant Business entity.

2. Changes to existing features

- [General] Change the behavior of the system if it encounters two users with identical UPN identifiers when synchronizing WEBCON BPS with the AD. The synchronization of such users will be skipped, and a warning will now be posted in the synchronization log informing of this. The rest of the synchronization should proceed normally.
- [Actions] Multiple "Teach OCR AI" actions can now be triggered from a single transition path.

3. Bug fixes

- [General] Improved cache refreshing after saving changes in Designer Studio.
- [General] Fixed an issue with the BPS User List synchronization. Using uppercase letters when entering a UPN should no longer cause users to be doubled.
- [Form fields] Improved data source filters used in "Choice fields".
- [Actions] Fixed the 'send a test e-mail' feature in the "Send a custom e-mail" action.

2017.1.1.86

1. Bug fixes

- [General] Lengthened the timeout for awaiting a response from the Active Directory (when loading an organization structure in the BPS users list synchronization configuration).
- [OCR] Improved the handling of special characters found in documents processed by the "OCR AI Recognition" action.
- [Actions] Improved handling and updating of variables used in the "Invoke REST Web service" action.

2017.1.1.77

1. Bug fixes

- [General] Fixed an issue with the 'Return' button in a workflow instance's history.
- [General] Fixed an issue that would cause the wrong 'current step' to be displayed on the status panel if form validation failed.
- [Processes] Fixed an issue with the Export-Import mechanism that would sometimes cause an exception when importing associated processes.
- [Form fields] Fixed an issue with postback generation for 'Floating-point number' form fields.
- [Form fields] Fixed an issue with the 'Add' button not displaying properly on Item lists with a large number of columns.
- [Action] Improved handling of variables in the 'Invoke REST Web service' action.
- [Action] Improved handling of variables in the 'Invoke SOAP Web service' action.
- [Web Part] Fixed an issue with how labels are displayed on SWC Web Parts.
- [Web Part] Improved filter caching on SWE Web Parts. When returning to a filtered SWE report, it should display the previously filtered results.
- [Web Part] Fixed page and filter caching on SWE Web Parts.
- [Mobile] Improved connection handling for PUSH notifications.
- [Mobile] Improved queue handling of outgoing PUSH notifications.
- [Mobile] Links in SQL Row form fields should now open properly.
- [Add-In] Fixed an error in the WORD Add-In that would occur is a 'person or group' global form field was used.

2017.1.1.54 (Launch)

2. Information

4. The way in which WEBCON BPS Web Part configuration is saved has been drastically overhauled. The configuration of these Web Parts is now saved directly in the WEBCON BPS database. Due to this change, when updating from versions older than 2017.1.x, Web Part configuration settings will be migrated. In order for the migration to be successful, all SharePoint sites that contain WEBCON BPS Web Parts cannot be checked-out or in edit mode.
   In order to avoid an incomplete migration, the installer now includes an additional step which will verify all prerequisites necessary for a successful migration. The installer will create a list of all SharePoint sites that are checked-out, and offers the option to automatically discard changes and check-in all sites.

5. Changes in this version will break compatibility of the Export-Import mechanism. Exported process packages created in versions 2016.1.3.x and older cannot be imported to the newest system version. In order for an import to be possible, update the environment to the newest version and export the processes again.

6. WEBCON BPS installations that make use of the **FineReader 11** component will need to upgrade it to version **11.1.19.48**. The previous version of this component was 11.1.10.100.
   Before starting the update, please read through the FineReader 11 component installation guide, available here: http://howto.webcon.com/ocr-ai-installation/.
   The installation process requires a product activation key and access to the product's license.

   In order to update FineReader 11:
   a. Deactivate FineReader 11 product license
   b. Uninstall the previous version of FineReader 11, remove the following registries from the system:
      HKEY_LOCAL_MACHINE\Software\ABBYY\SDK\11
      HKEY_CURRENT_USER\Software\ABBYY\SDK\11
   c. Launch WEBCON BPS 2017 installer and follow the steps described here: http://howto.webcon.com/ocr-ai-installation/
   d. Activate FineReader 11 product license

7. The WEBCON BPS 2017 system features an updated OCR AI engine. Because of this, all OCR AI projects that use WebCon.OcrAI.Projects.CommonInvoice.dll version 5.x.x.x must be manually updated to use the newest DLL file.

   How to find projects that use an outdated DLL file:
   a) Launch WEBCON BPS Designer Studio on the relevant environment.
   b) In the "System settings" panel, expand the "OCR AI Projects" node.
   c) For every element under the "OCR AI Projects" node, locate and verify the values in the "DLL file name" and "DLL file version" fields.
   d) If the file name is "WebCon.OcrAI.Projects.CommonInvoice.dll" and the file version is 5.x.x.x (where x can be any number), then an update to the project file is necessary.

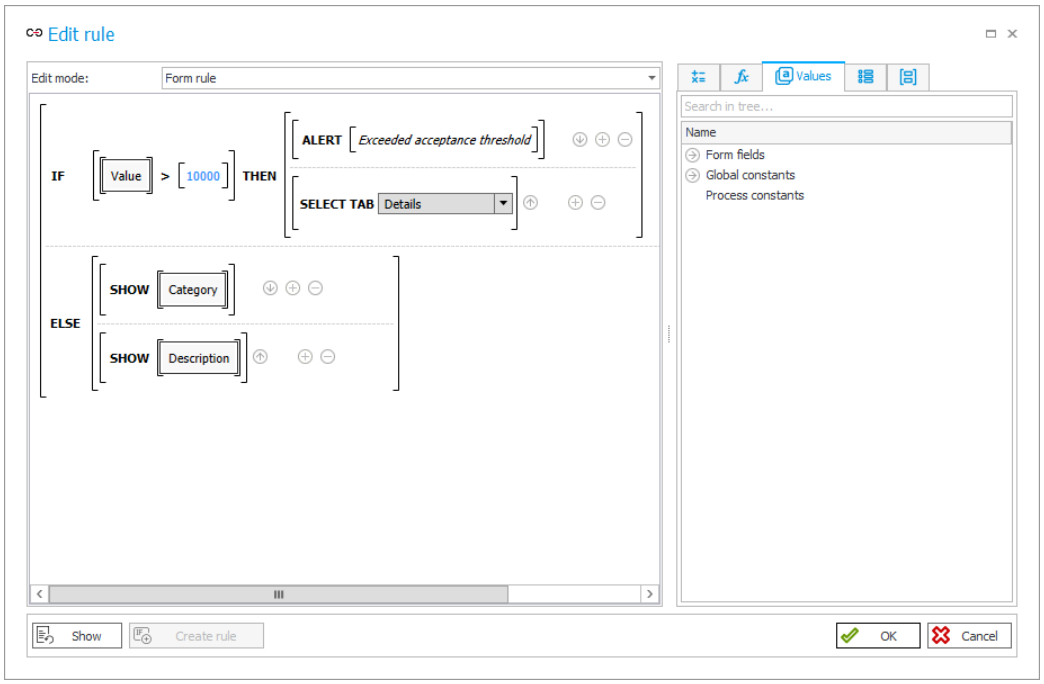
   How to update an OCR AI project file:
   a) In the "OCR AI Projects" node, select a project that requires an update.
   b) From the toolbar, select "Update" and then locate the relevant ZIP file containing the newest version of the project. Files with the newest project versions are provided with every release of the WEBCON BPS system, they can be found under WebconWorkFlow\OcrAI\Projects of the published version.
      - The file "PL_CommonInvoice - 6.x.x.x.zip" contains current files for the common invoice project.
      - The file "PL_CommonInvoiceWithoutTaxID - 6.x.x.x.zip" contains current files for the common invoice project, excluding vendor Tax ID recognition.
      - The file "PL_TaxID - 6.x.x.x.zip" contains current files for the vendor Tax ID recognition project.
   c) Confirm the selection of update file.
   d) In the "Choose project elements" window, mark the "DLL file" option, the "General network" option should be left un-marked.
   e) Confirm the configuration by clicking OK.
   f) If an incorrect update file was selected, that is incompatible with the selected project, the following warning should appear: "OCR AI project could not be updated, because the selected project contains different field definitions". The update process will not be completed.
   g) Once the project is updated correctly, the value of the "DLL file version" field should be changed to 6.x.x.x
   h) The update will not modify the definitions of custom fields previously created in the project. Dedicated networks will also be unchanged.

   The above information is relevant to systems using OCR AI projects that are based on universal network projects.

3. New features

3.1. Form rules

WEBCON BPS 2017 implements the ability to define Form rules using the visual rule editor. Form rules are designed to control and dictate the behavior of the form that end-users view in their browsers.



The old method of defining form behavior via JavaScript is still available, it can be accessed by switching the editor to "JavaScript mode".

Form rules may be used interchangeably with JavaScript mode. The JavaScript mode has been retained in order to guarantee compatibility with previous versions of WEBCON BPS.

Migrating from previous versions (8.x, 2016.x) will not transform existing JavaScript into Form rules.

3.2. Business rules

3.2.1. New operators

Additional operators have been made available in the Business rules editor.

EMPTY – Represents an empty form field. Can be used to make comparisons with other form fields of any type (text, number, choice field) to determine whether a value has been entered.

NOW – Returns the current date and time. Can be used in operations which need to take the passage of time into account.

TODAY – Returns the current date. Can be used in operations that require a date but not necessarily a time.

3.2.2. Loading values from data sources

Additional functions for loading values from external data sources have been added to the Business rules editor.

DATA SOURCE VALUE – Loads a value from the specified database via filters that narrow the scope of returned data. The configuration of this function allows to define a data source column from which a value will be loaded. If the defined filter would load multiple rows of data, the function will return the value from the first row of data.

RUN SQL – Executes SQL queries and loads a value from SQL, Oracle, and BPS data sources. The configuration of this function allows to define a SQL query, setting a connection, and specifying a column from which a value will be loaded. If the defined query would load multiple rows of data, the function will return the value from the first row of data.

RUN SDK – Activates a Business Rule SDK.

3.2.3. Load user list

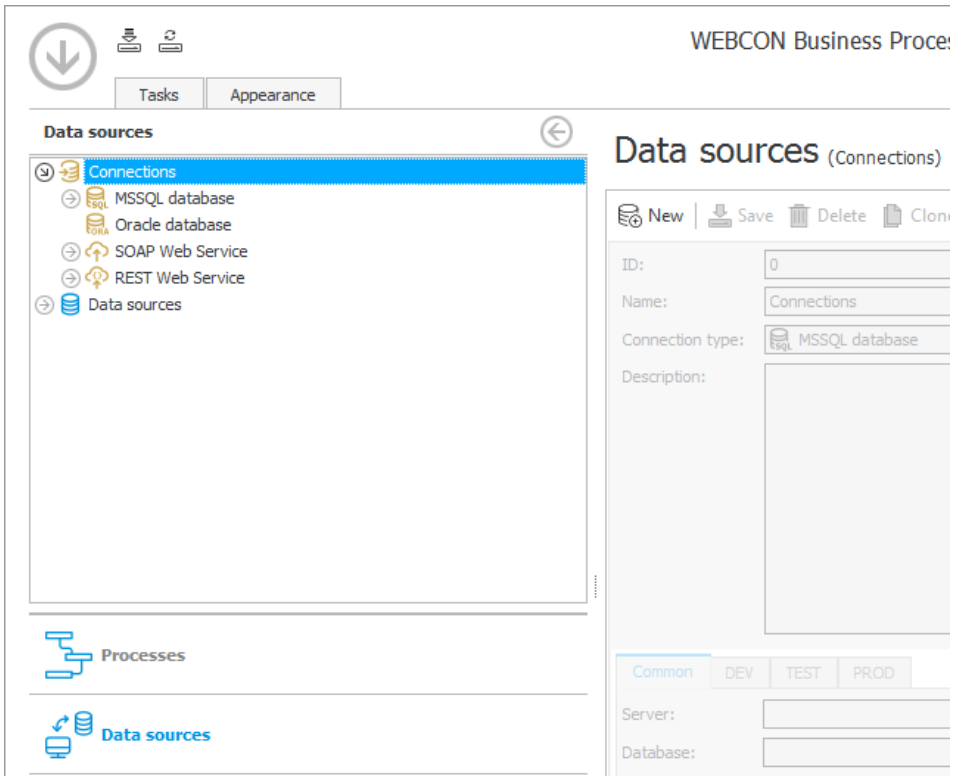
The **GET USERS** function has been added to the Business rules editor, used for defining a list of users.

3.3. Connectivity and data sources

3.3.1. Connecting to data sources

WEBCON BPS 2017 introduces the ability to independently define connections to data sources of the following types:

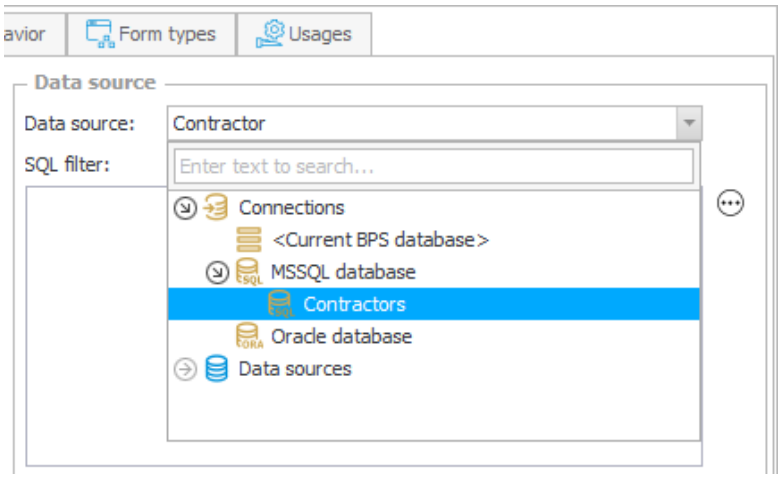
- MSSQL database
- Oracle database
- SOAP Web service
- REST Web service



This feature is used for configuring connections to appropriate servers in DEV/TEST/PROD environments. Correctly configuring the connection is necessary before configuring MSSQL, Oracle, SOAP, and REST data sources.

Additionally, the defined connection may be used as a universal data source for form fields powered by SQL sources (e.g.: Choice field, Chart, Data table).

In such a case, after selecting a MSSQL or Oracle database connection, it is possible to define a query that returns data which will be used to initialize a form field, directly in its configuration.

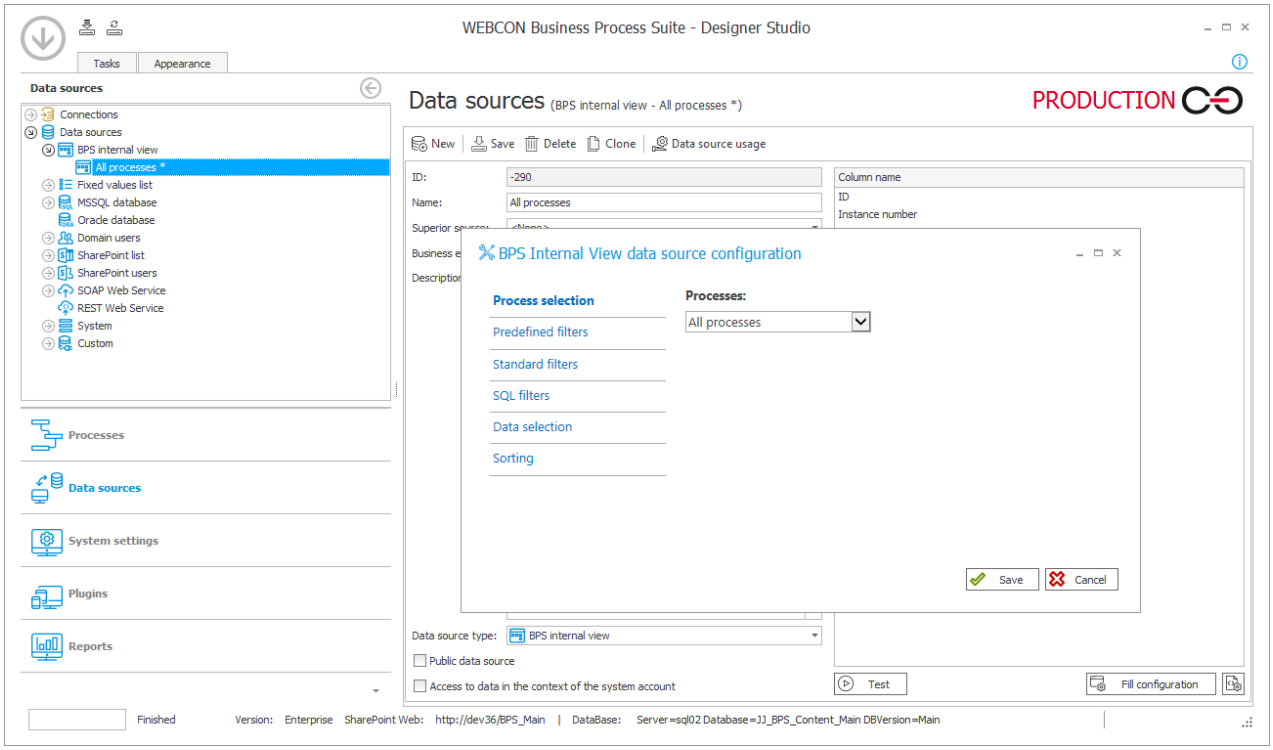


Migrating from earlier versions

When upgrading the system to WEBCON BPS 2017, connections will be created for all existing configurations of MSSQL database, Oracle database, SOAP Web service, and REST Web service data sources. These connections will be created automatically. Parameters for each connection will be copied from the corresponding data source configuration.

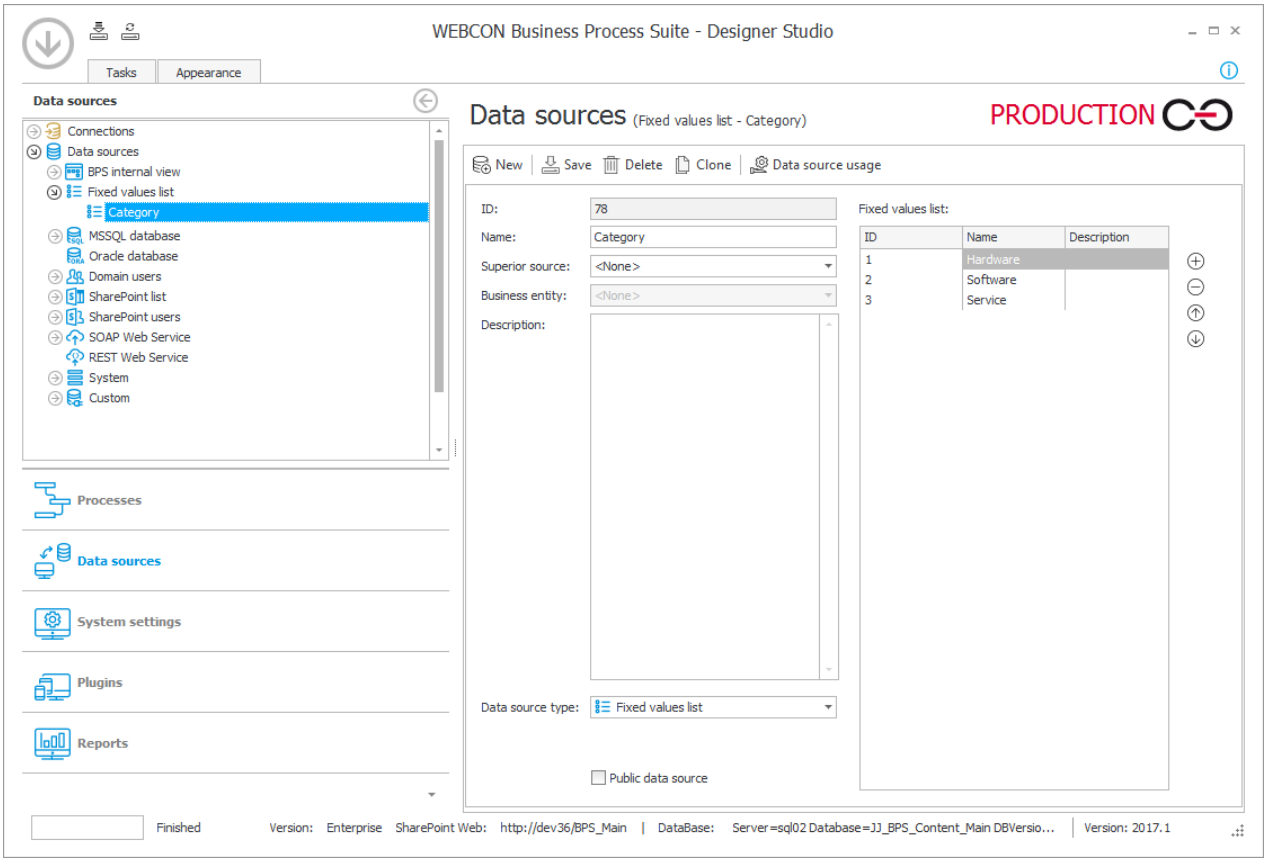
3.3.2. New data source - BPS internal view

WEBCON BPS 2017 introduces a new type of data source used for loading data created directly in the WEBCON BPS system. The type and scope of data returned by the BPS internal view is configured by using a visual editor. It is possible to define the process, workflow, various filters, and columns available from the data source.



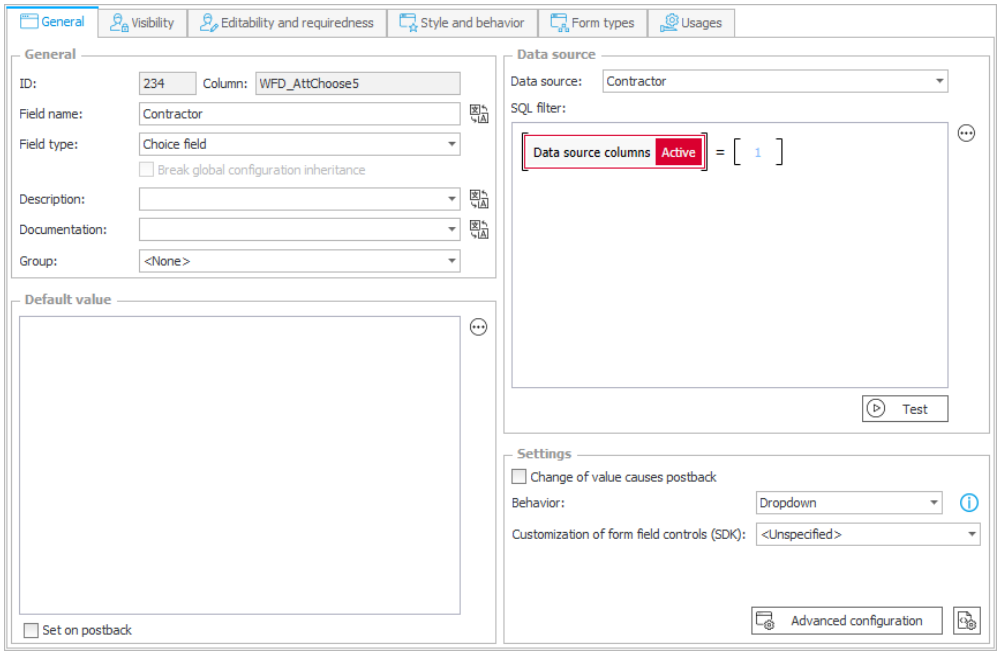
3.3.3. New data source – Fixed values list

WEBCON BPS 2017 introduces a new data source which is used for defining a fixed list of elements. This feature is analogous to the fixed values list configuration option available to **Choice field** and **Choice tree** form fields in previous versions of WEBCON BPS.



3.3.4. Data source filters

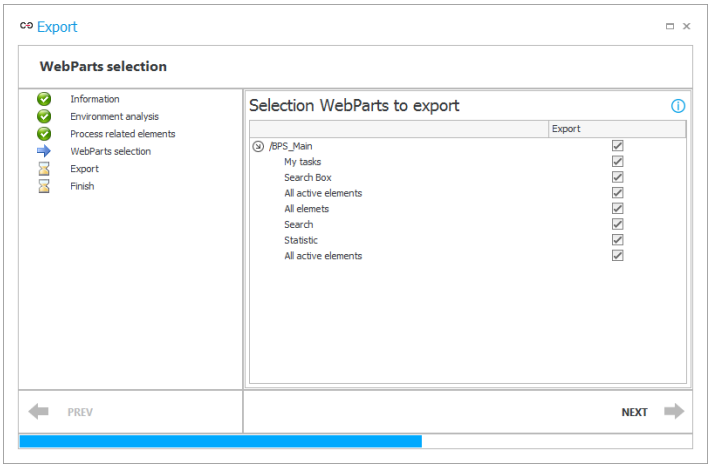
WEBCON BPS 2017 introduces a visual designer for creating data source filters used in form field configuration. The filter can be used to narrow down the scope of data returned by the data source. The filter can reference form field values and constants. Standard logic operators and comparisons can be used to build expressions and conditions which operate on data from the source.



An advanced edit mode is also available when defining the filter. This mode is used to define filters in accordance with syntax used in the WHERE SQL clause. The expression defined within the filter will narrow the data from the source to meet the defined condition.

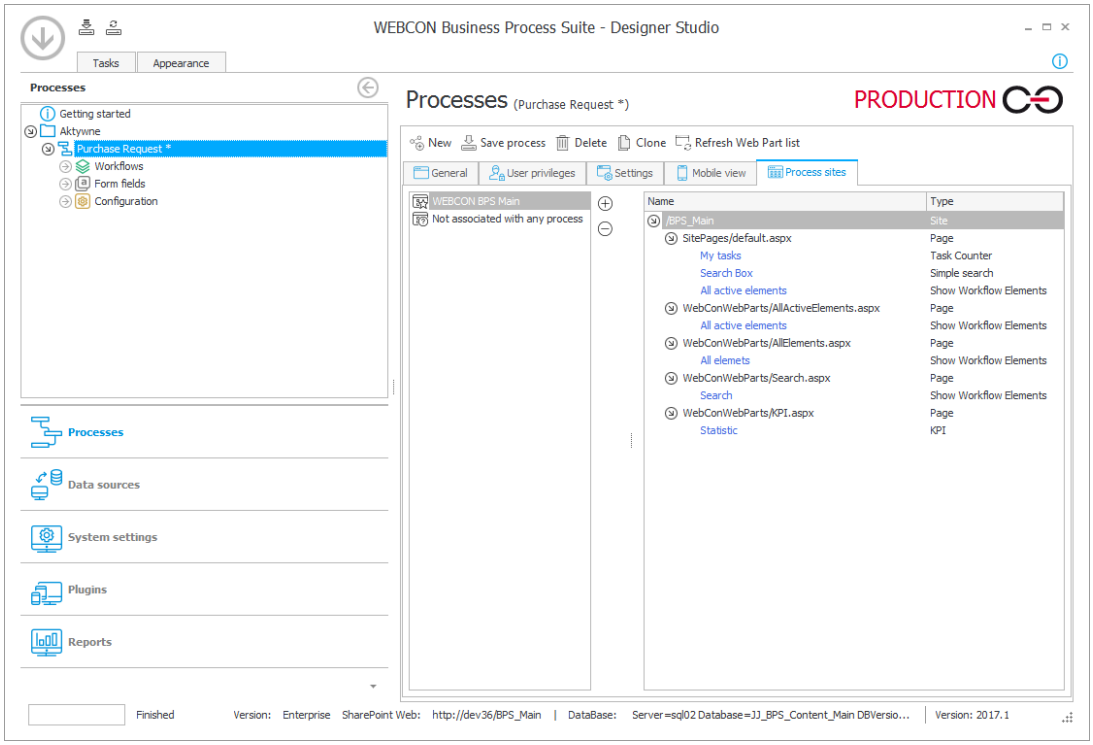
3.4. Export-Import of Web Part configuration

The Export-Import mechanism was expanded to also include the configuration of Web Parts related to the process.



The process export wizard can now be used to select which Web Parts will be placed in the export package file. It is possible to export the complete process configuration (i.e. the process itself and all related Web Parts), but it is also possible to export the process and Web Parts (or even a single Web Part) separately.

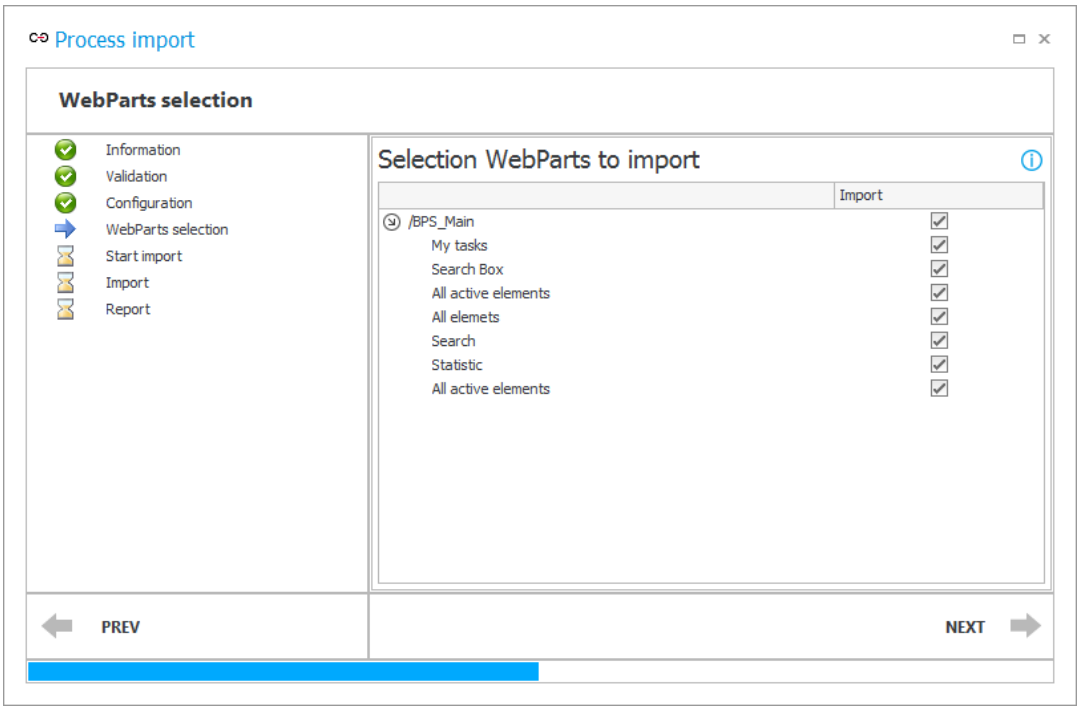
The list of Web Parts which are shown as available for export will depend on which sites are associated with the process. It is possible for a process to be associated with multiple sites. The list of sites associated with a given process can be configured in the **Process sites** tab.



Apart from Web Parts found on process sites, the export wizard will also suggest a list of additional configuration elements associated with the process. These additional elements are optional, and may be excluded from the export package (they are marked for export by default, unmark the checkbox to exclude them).

The export wizard will list the following configuration elements:

- The process, along with any associated processes
- Web Parts found on sites associated with the above processes
- Web Parts found on sites that are not associated with any process (these can found in the "Not associated with any process" view in the "Process sites" tab)
- Recursive, further processes or Web Parts which are referenced in the configuration of any of the processes and Web Parts currently being exported.

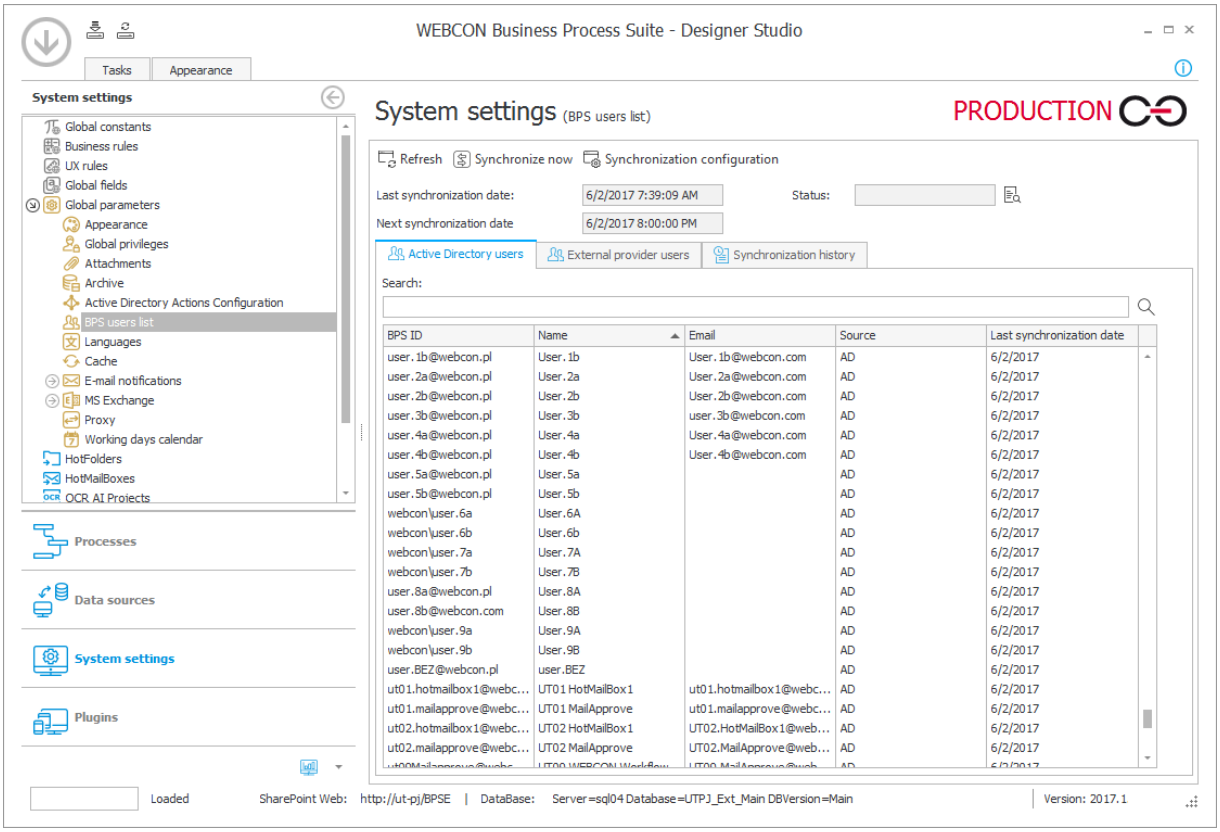


Attention!

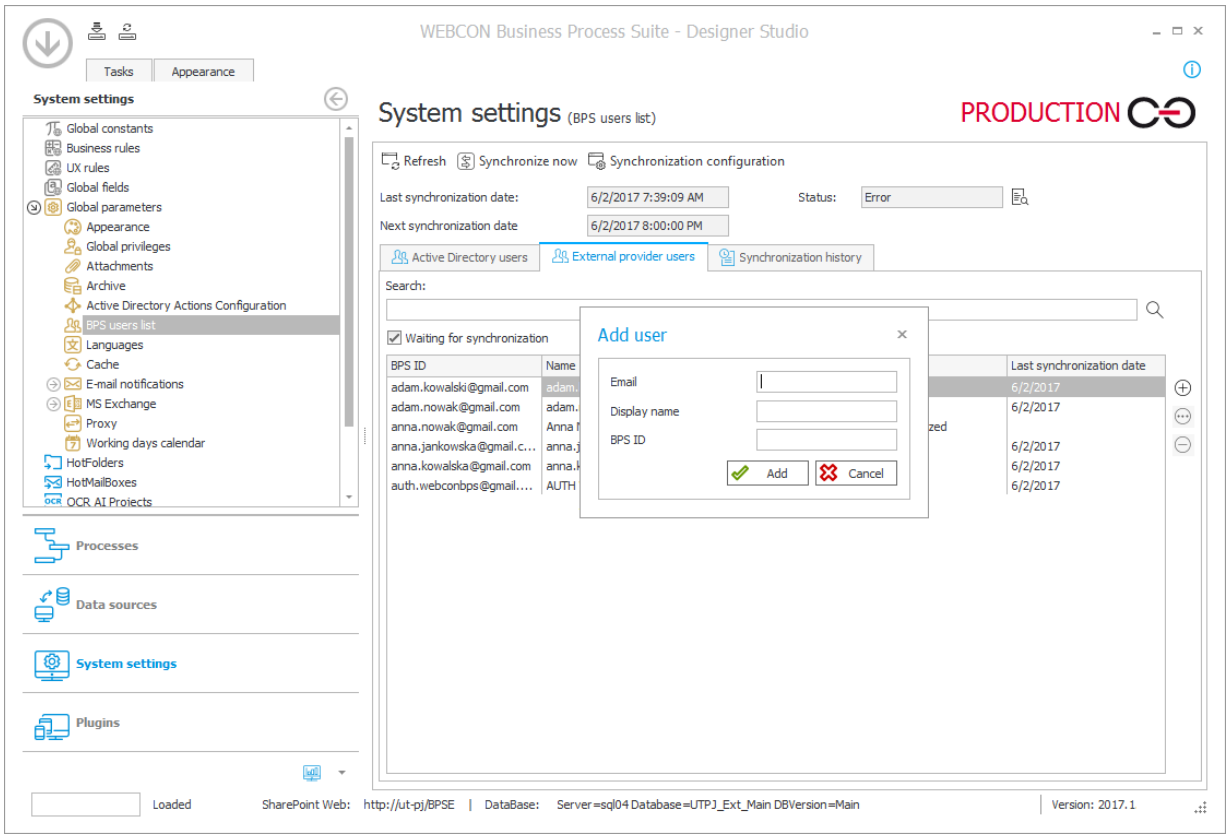
For this feature to fully work, the testing environment will need to be recreated according to the procedures of creating DEV/TEST/PROD environments in WEBCON BPS 2017.

3.5. BPS users list

The BPS users list is a complete list of all users defined in the WEBCON BPS system. Due the possibility of synchronizing with the Active Directory (AD), the list of BPS users can be periodically updated with new entries to the AD. The full list of configuration parameters for synchronizing with the Active Directory is accessed by clicking the **Synchronization configuration** button.



It is also possible to add users from outside of the synchronized AD domain – i.e. **External provider users**. These users are identified within the system by their e-mail address, which is provided when such a user is added to the BPS users list.



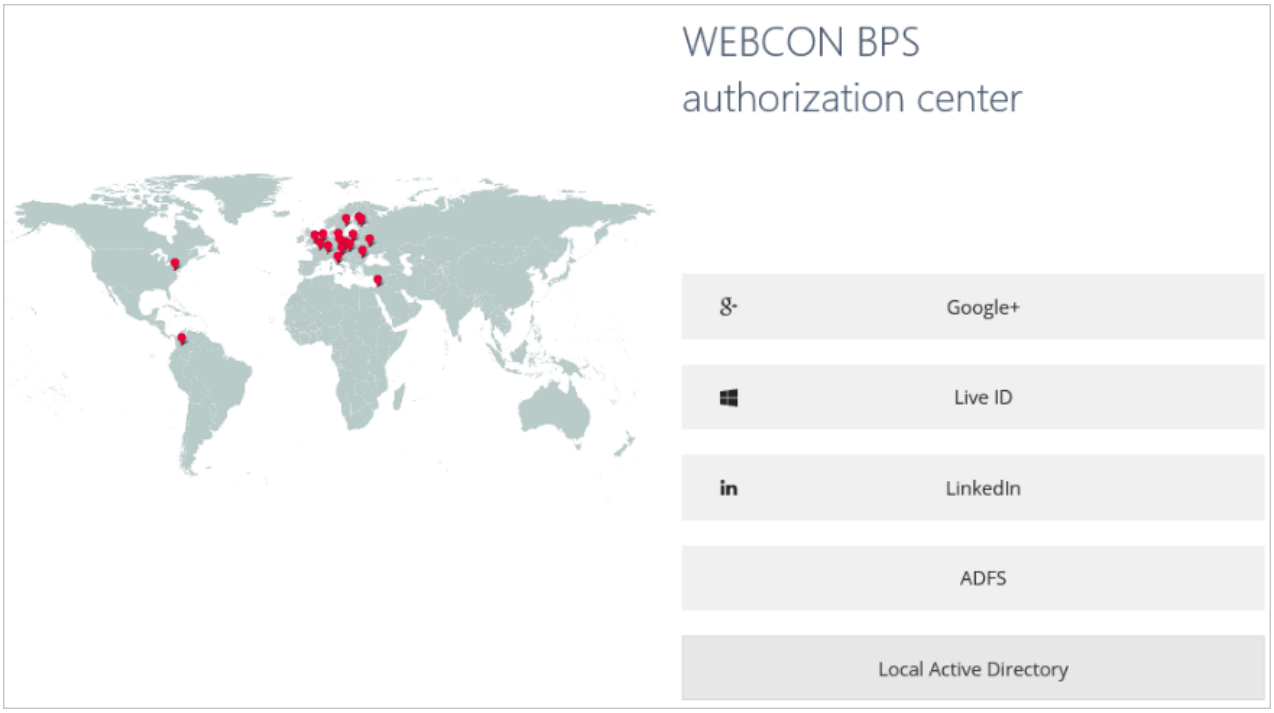
Assigning process privileges to a user is possible only after the user in question can be found on the BPS users list (either via AD synchronization or by being added as an external user).

3.6. External user authentication

The system can support external authentication providers in order to authenticate users working in WEBCON BPS.

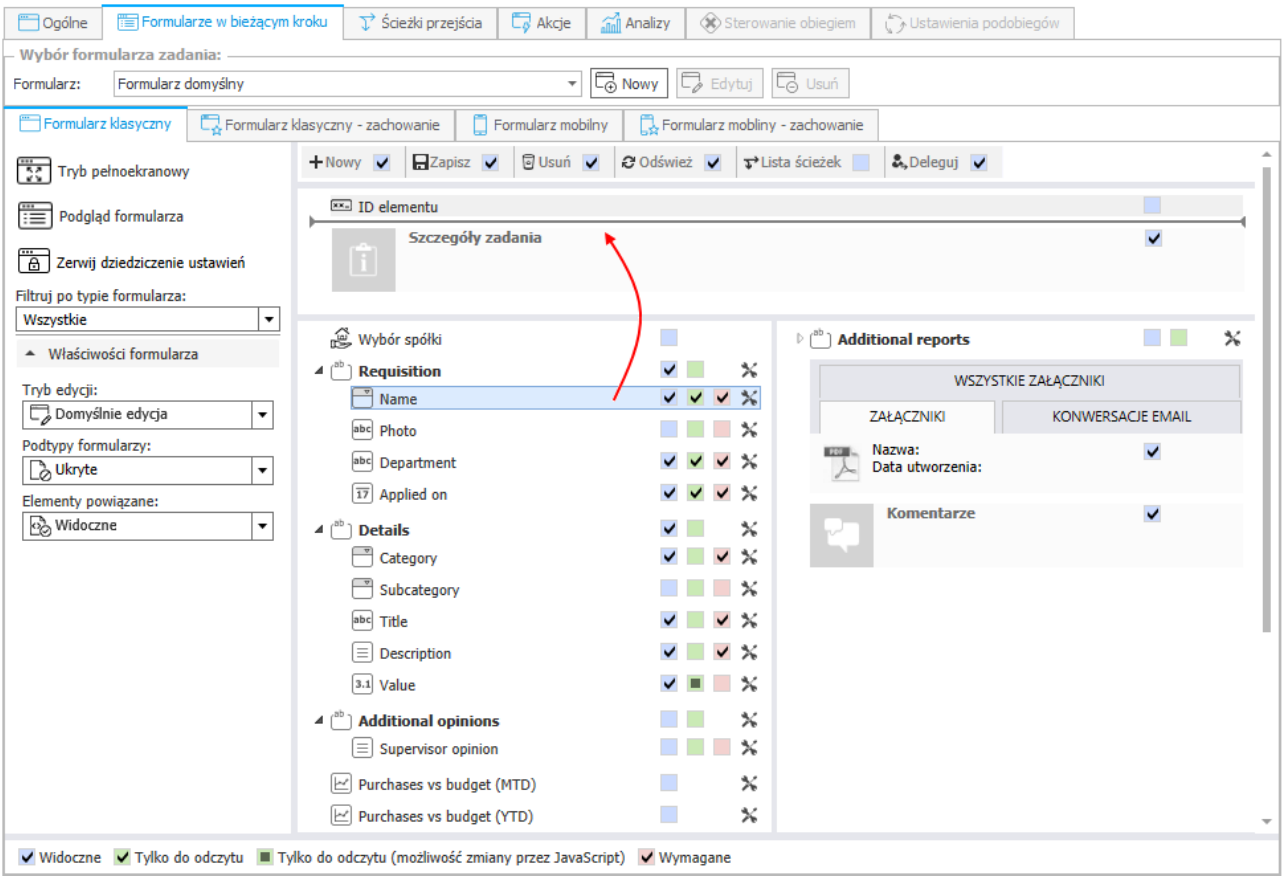
In order to use this feature, it is necessary to install and configure the **WEBCON BPS External User Module**. The following methods of authentication are available:

- Google
- LinkedIn
- Live ID
- ADFS
- ACS



3.7. Form template – unrestricted customization of groups and tabs

It is now possible to modify the contents of form field groups and tabs directly from the **Form template** editor. The form fields belonging to tabs and groups can be freely rearranged and included/excluded by dragging and dropping them around the editor. Additionally, this means that the contents of groups and tabs can be modified individually for each step. This feature is available on both the standard and mobile form.

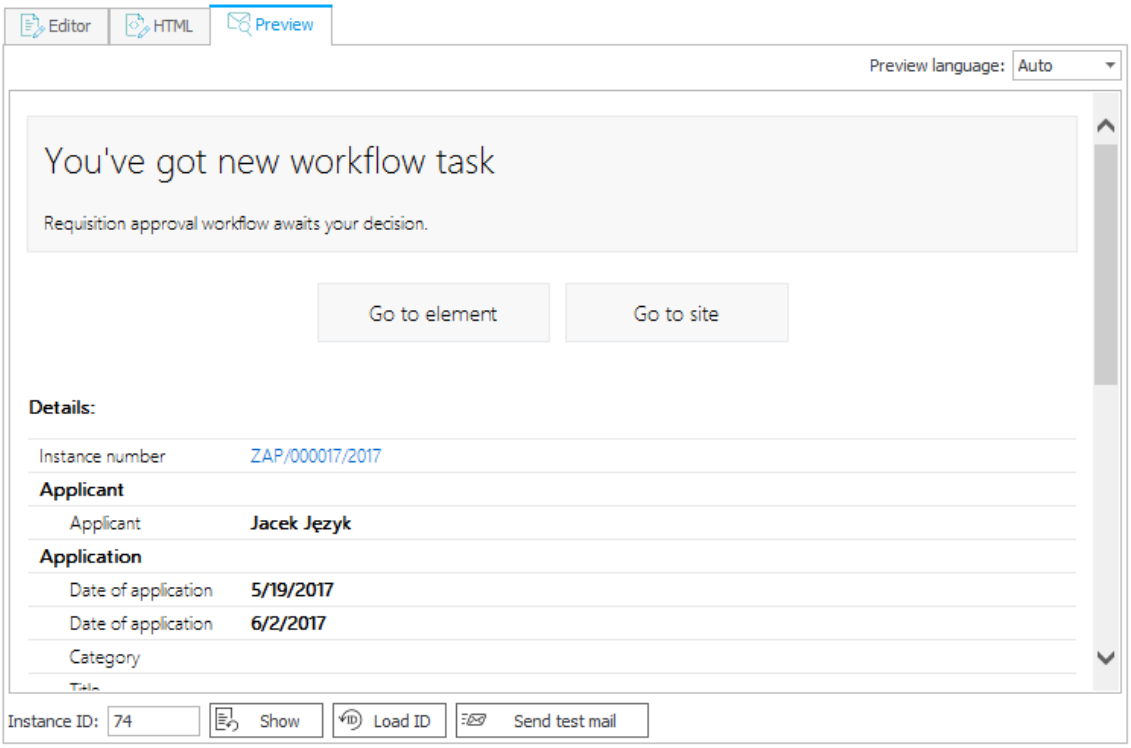


3.8. Generating a sample e-mail preview using real data

The e-mail message template editor can now generate a real preview of an e-mail sent by the WEBCON BPS system.

After specifying a workflow instance ID, the feature will use the data found in that workflow instance to fill out the template.

In environments that are designed to support multilingualism (defined system languages exist), it will be possible to select a language based on which the preview will be generated.



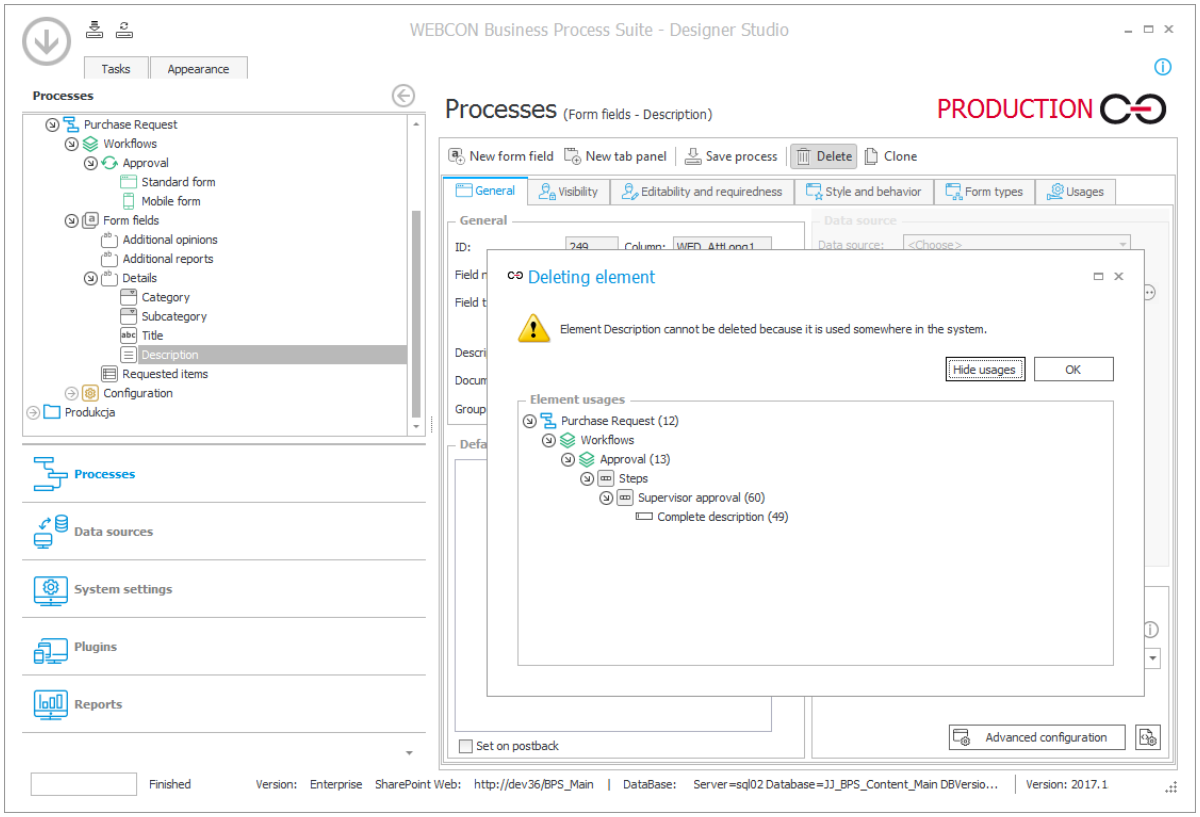
Furthermore, it is possible to send a test e-mail to any chosen address. This feature is accessed by pressing the "Send test mail" button under the preview.

3.9. Images embedded in e-mail templates

E-mail templates now support embedded image attachments in *base64* format.

3.10. Verification of configuration consistency

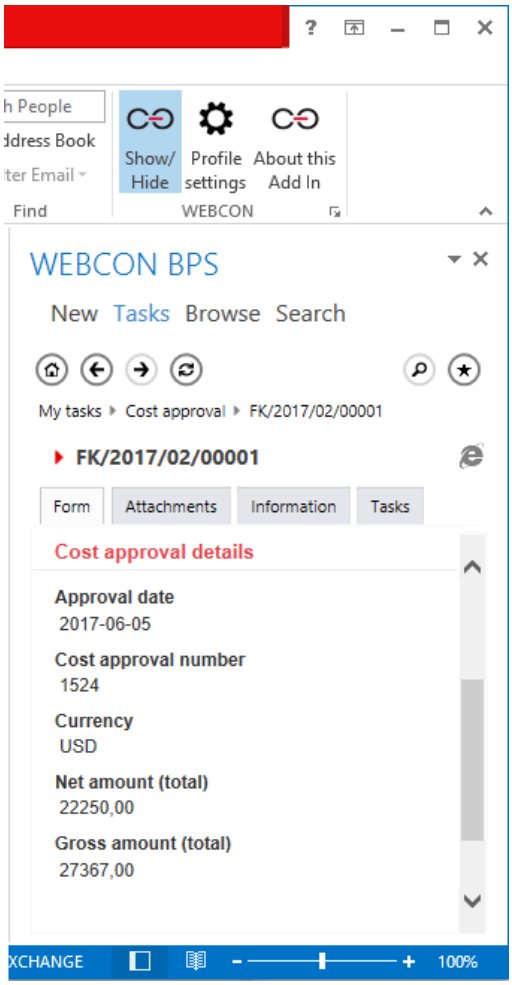
WEBCON BPS Designer Studio now includes a mechanism which verifies whether or not you can delete a certain configured element (e.g.: constant, form field, Business rule, Form rule). If the element that you wish to delete is being used anywhere in the process configuration, the mechanism will prevent the deletion.

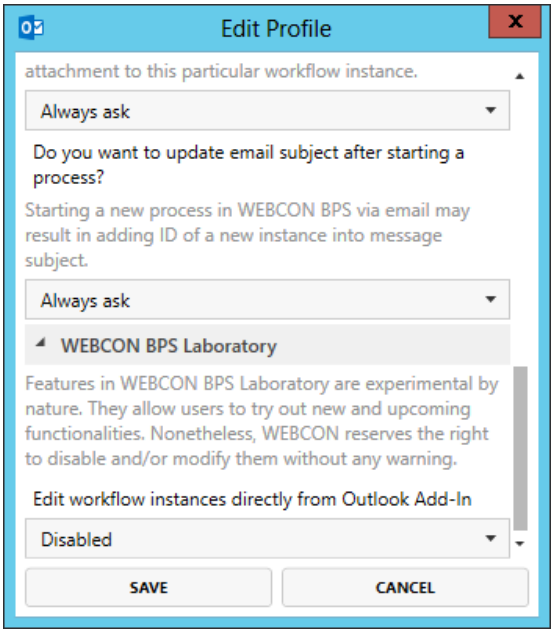


In order to completely delete a configured element, it is necessary to first modify the process configuration so that all references to the element in question are removed.

3.11. Outlook Add-In panel

The MS Outlook Add-In panel received changes to how it presents workflow instance data. The revamped interface has the ability to present form fields, item lists, tables, and form fields divided by groups/tabs.
It is also possible to invoke Form rules that change the layout and contents of the panel.





After enabling **WEBCON BPS Laboratory** mode, it is possible to edit and save workflow instances directly from MS Outlook. Laboratory mode can be enabled in the Add-In profile configuration.

3.12. Fixed process language

It is now possible to set a unified, fixed language for each process. Workflow instances and their contents will be displayed in this language on the form, in e-mail messages, and in documents generated for the process.

Setting a **Process language** (in the **Settings** tab) will cause all components of a process to be displayed in the chosen language, overriding browser language settings, SharePoint user profile settings, and SharePoint site language settings.

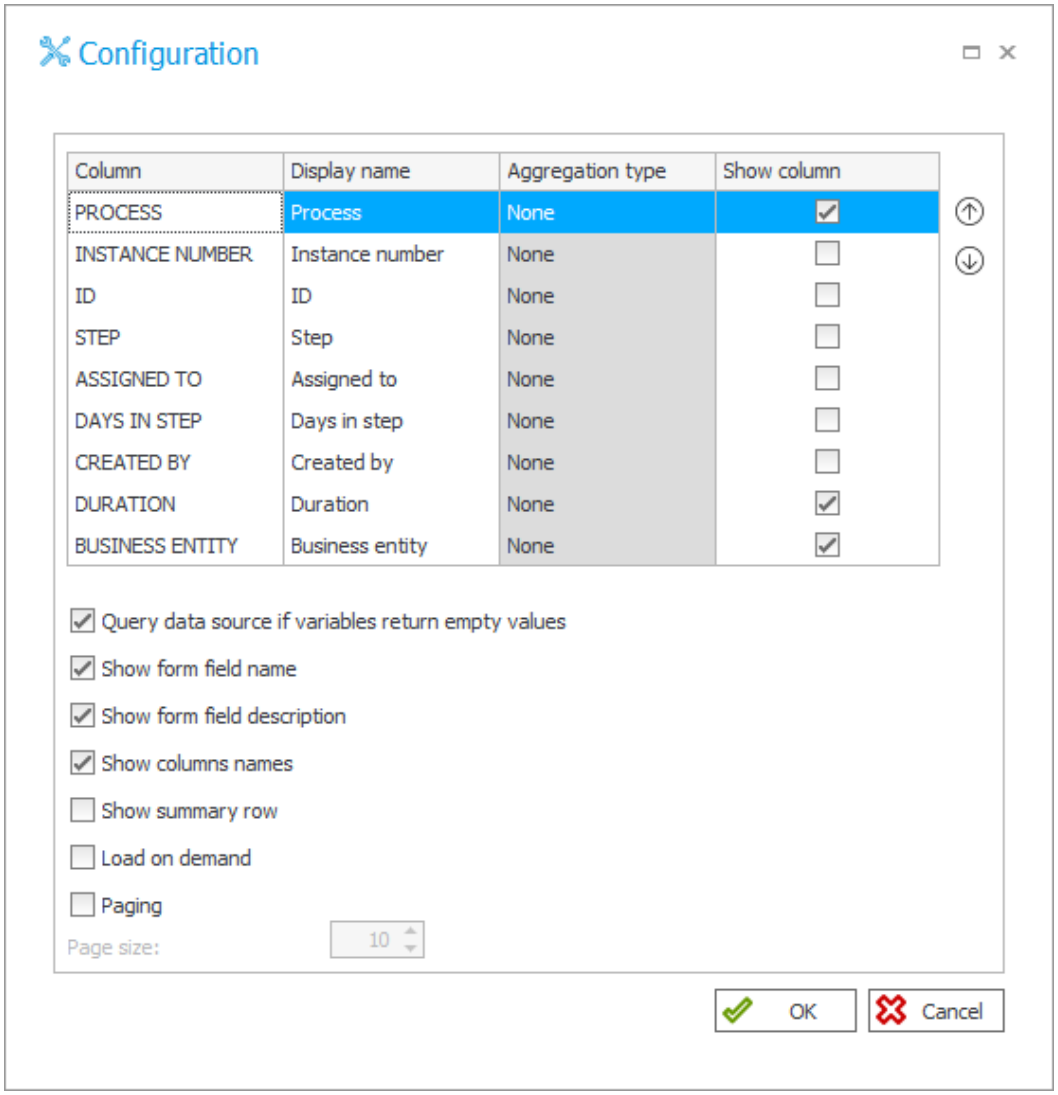
If there are missing translations for the selected language, the untranslated contents will be presented in the following language instead:

- English (for standard system components, these translations are made via WEBCON BPS Translator)
- Default, i.e. in whichever language the process was configured in Designer Studio. Translatable process components (which have the button) that don't have any translations defined will simply use the text which was entered into the configuration fields.

When choosing the **Use global settings** option, the process language will depend on the **Default user's language** setting found under **System settings -> Global parameters -> Languages.**

3.13. Visibility and ordering of columns in Data table and Data row form fields

Additional options were added to the advanced configuration screens **Data table** and **Data row** form fields. It is now possible to select which of the data columns returned from the database will be visible on the form. Furthermore, it is possible to customize the order in which these columns are displayed.



3.14. AM/PM time format

A unified time formatting was introduced to time displayed on forms, Web Parts, and in generated documents. Depending on the browser culture in which the user is working, the time will now be formatted consistently for the entire system in both 24 and 12-hour formats.

4. Changes to existing features

4.1. JavaScript configuration changes

4.1.1. JavaScript scripts transformed into Form rules

Due to the introduction of Form rules, updating the system to WEBCON BPS 2017 will cause all JavaScript scripts to be transformed into Form rules operating in **JavaScript mode**. This change applies to the following sections of Designer Studio:

- Form (standard & mobile)
  - Behavior -> Javascript to be executed on page load
  - Behavior -> Javascript to be executed on page load and on postback
- Form fields
  - Style and behavior -> Script to be executed on value change
- Item list configuration
  - General -> Functions invoked after callback
- Item list column configuration
  - Style and behavior -> Script to be executed on value change
- Form on step
  - Forms on current step -> Standard form behavior -> Javascript to be executed on page load
  - Forms on current step -> Standard form behavior -> Javascript to be executed on page load and on postback
  - Forms on current step -> Mobile form behavior -> Javascript to be executed on page load
  - Forms on current step -> Mobile form behavior -> Javascript to be executed on page load and on postback
- Form field configuration on specific step (standard form and mobile)
  - Script to be executed on value change
- Item list column configuration on specific step (standard form and mobile)
  - Script to be executed on value change

4.1.2. Automatic JavaScript registration

WEBCON BPS 2017 introduced changes to how JavaScript is registered on the website. From now on, scripts created as Form rules are automatically registered on the website. The previous configuration that allowed to define and register JavaScript was removed. Existing scripts were moved and added to Form rules that are executed on page loading.

This change applies specifically to the following sections of WEBCON BPS Designer Studio:

- Form (standard and mobile)
  - Behavior -> JavaScript to be registered on the webpage
- Form fields
  - Style and behavior -> Script to registered on webpage

Migrating from earlier versions

When a script found in the configuration of a form field is migrated, the original script will be placed within a clause verifying the visibility of that form field, and making sure that exceptions are supported. This transformation guarantees full backwards-compatibility and correct functioning of the form after upgrading the system.

```
if (IsFormFieldVisible( FormField_Code ,FormField_ID )) {
   try {
      window.eval('function ShowHideDeadline()\
{\
Original script
}');
   }
   catch(error) {
      console.log("Error in user script registered for form field with ID _");
   }
}
```

4.1.3. Changed JavaScript execution order

The order in which JavaScript scripts (now defined as Form rules) are executed has been changed.

The order that has been used in previous versions can be found here:

http://howto.webcon.com/javascript-execution-order-in-8-3/

Currently, the order in which Form rules in Rule and JavaScript modes are executed is as follows:

JavaScript sequence whenever the page is loaded

Execution order	Place of rule configuration	Previous configuration name (version 2016.1.3)
1	Workflow configuration -> Form (standard or mobile) -> Behavior -> **Form rule to be executed on page load**	JavaScript to be executed on page load
2	Edit Workflow step -> Forms -> Form (standard or mobile) – behavior -> **Form rule executed on page load**	JavaScript to be executed on page load
3	Workflow configuration -> Form (standard or mobile) -> Behavior -> **Form rule executed on page load and on postback**	JavaScript to be executed on page load and on postback
4	Edit Workflow step -> Forms -> Form (standard or mobile) – behavior -> **Form rule executed on page load and on postback**	JavaScript to be executed on page load and on postback

JavaScript sequence on value change

If the **Change of value causes postback** checkbox is set in the form field configuration, the order of running Form rules (whenever that form field's value is modified) is as follows:

Execution order	Place of rule configuration	Previous configuration name (version 2016.1.3)
1	Form field configuration -> Style and behavior -> **Form rule to be executed on value change**	Value changing script
2	Workflow configuration -> Form (standard or mobile) -> Behavior -> **Form rule to be executed on page load and on postback**	JavaScript to be executed on page load and on postback
3	Edit Workflow step -> Forms -> Form (standard or mobile) – behavior -> **Form rule to be executed on page load and on postback**	JavaScript to be executed on page load and on postback

4.2. Data source configuration

4.2.1. Changes to the configuration of data sources – defining connections for MSSQL database, Oracle database, SOAP Web Service and REST Web Service

For data sources of the following types: MSSQL database, Oracle database, SOAP Web Service, and REST Web Service, will require setting up a **Connection** to the appropriate server for the given data source. The **Connection** itself is defined as a separate configuration element in the **Data sources** panel.

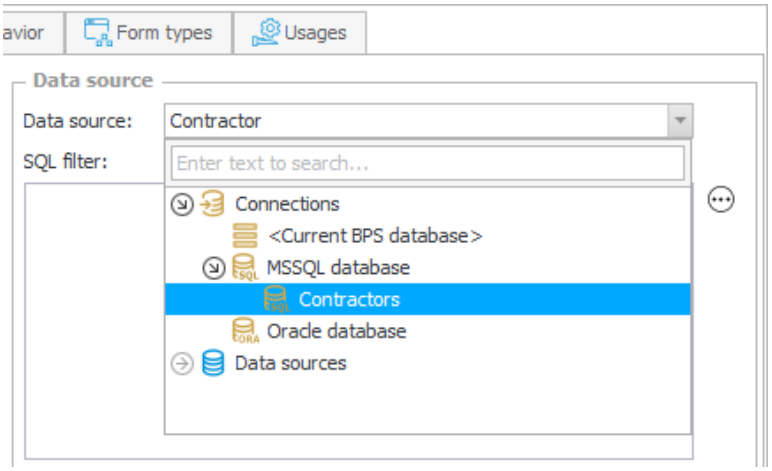
Migrating from earlier versions

During the update to WEBCON BPS 2017, connections will be created automatically for the 4 types of data source mentioned above. The connection parameters will be copied from the previous configurations of those data sources.

4.2.2. Changed configuration of data sources for form fields – data source filters

The method of filtering and operating on data sources in the configuration of form fields has been revamped. From now on, the data source configuration will be used only for applying a filter narrowing the scope of the returned data. Notably, the data source filter will no longer allow queries that retrieve data from tables and columns different than those defined in the data source.

The previous configuration (allowing full SQL queries) can still be accessed by selecting one of the **Connections** as the data source in the form field configuration.



Migrating from earlier versions

For **MSSQL database** and **Oracle database** type data sources, if there exists a form field that uses an SQL query to one of those databases, then during the migration to WEBCON BPS 2017 the data source choice will be switched automatically to the corresponding Connection instead. The contents of the query will remain unchanged.

For **SharePoint list** type sources, every form field that uses this source will have its own independent data source created during migration. This new data source will contain the CAML query originally found in the form field configuration.

4.2.3. The “People field data source” option has been removed from “Choice field” form fields

In the configuration options of the “Choice field” type form field, it is no longer possible to select “Use people field data source” as the data source.

From now on, the functionality of selecting a single user or a group was moved entirely to the “Person or group” form field.

In WEBCON BPS 2017, the “Person or group” form field has two operating modes: as a choice window (picker) and as an autocomplete field.

Migrating from earlier versions

Due to the changes mentioned above, after updating to WEBCON BPS 2017, all “Choice field” form fields that contain “Use people field data source” in their configuration will be transformed into “People or group” form fields with an identical configuration.

The same will apply to global “Choice field” form fields, they will be transformed into the new global “Person or group” form fields which were added for this purpose.

4.3. Web Part configuration moved to main database

Due to the Export-Import feature now also covering Web Part configuration, the method of storing the configuration of BPS Web Parts has been changed. In WEBCON BPS 2017, the configuration of Web Parts is saved and stored directly in the WEBCON BPS process database.

Due to these changes, it is important to remember that all modifications made to Web Parts will be instantly visible to all SharePoint site users as soon as the new configuration is saved. The SharePoint mechanism for checking-out and publishing is skipped entirely.

The list of below contains Web Parts that are affected by the change. The second column contains new names for BPS Web Parts which will be used from version 2017 onwards.

Previous Web Part name	WEBCON BPS 2017 name
BPS Dashboard	Admin Dashboard
BPS Element Details	Element Details
BPS Site Filter	Filter
BPS Steps KPI	KPI
BPS Office Add-Ins Installer	Office Apps Installer
BPS Show Workflow Charts	Show Workflow Charts
BPS Show Workflow Elements	Show Workflow Elements
BPS Search Box	Simple search
BPS Start Workflow	Start Workflow
BPS Substitution Management	Substitution Management
BPS My Inbox	Task Counter
BPS Vacation Chart	Vacation Chart
BPS Vacation Summary	Vacation Summary

Migrating from earlier versions

When updating the WEBCON BPS system to version 2017, the configuration settings of Web Parts will be automatically transferred to the WEBCON BPS process database. In order for the migration to be successful, all SharePoint sites that contain WEBCON BPS Web Parts cannot be checked-out or in edit mode. This requirement is checked on the "Prerequisites" step of the WEBCON BPS Installer.

4.4. Process sites

The method and the place of configuring sites associated with a process has been changed. In WEBCON BPS 2017, associated sites are defined in the new **Process sites** tab of the process configuration.

WEBCON BPS 2017 also allows users to associate multiple sites with a single process, nonetheless only one site is considered the "main site". The address of the main process site is used in e-mail messages to link to workflow instances, allowing a given instance to be opened in the browser.

Migrating from earlier versions

When updating the WEBCON BPS system to 2017 version, associated process sites will be added to the list according to the following logic:

- The site entered in the "General" tab -> "Linked site" will remain associated with the process. It will also be set as the "Main site" (distinguished by a star).
- All other sites and sub-sites will be searched for Web Parts which reference the given process. All sites where such a Web Part is found will be listed as a Process site.

4.5. Sites collection address

The site collection address configuration has been moved from:

Global parameters -> **Attachments** -> **Site collection address**

To:

Global parameters (main node) -> **Environment settings** -> **Sites collection**

The site collection address is built by combining:

"SharePoint application base URL" + "Sites collection".

4.6. Storing users in the database

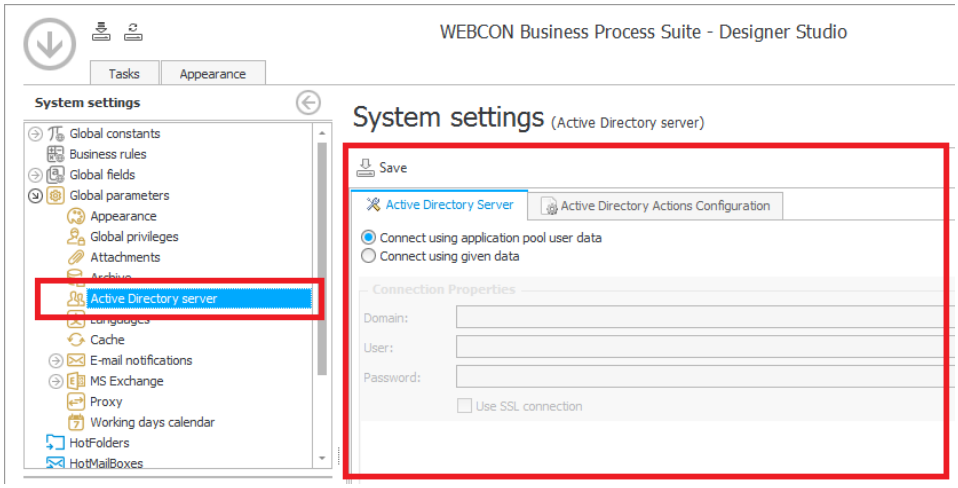
WEBCON BPS 2017 introduces a new format of storing and identifying users in the database. The **User Principal Name** will now be the user's identifier, saved in the database according to the following format:

UPN#Name (e.g. TomGreen@webcon.com#Tom Green)

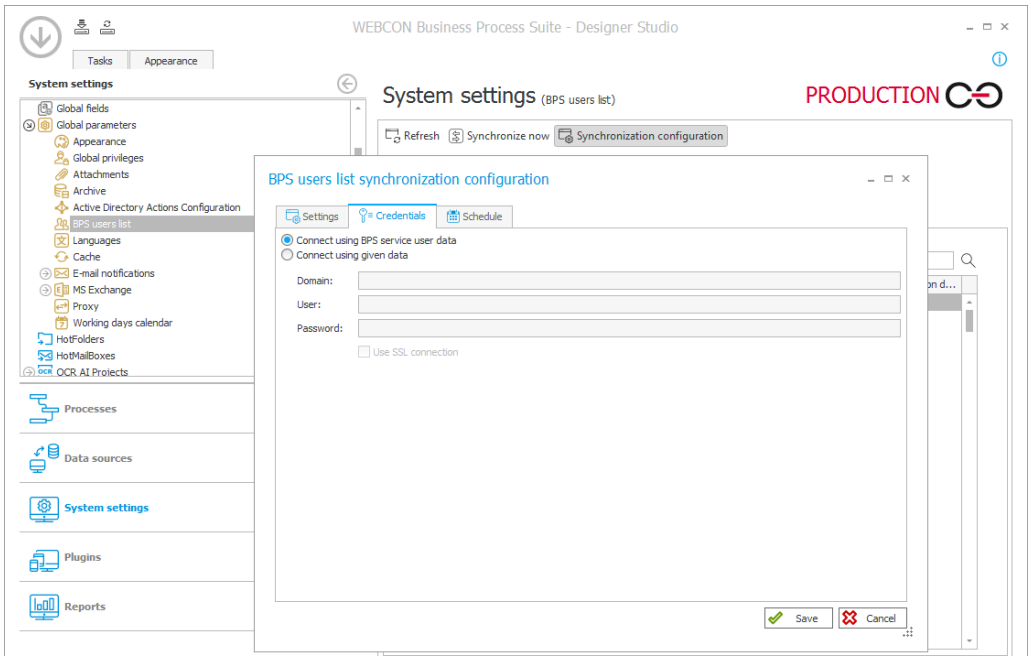
This change only applies to fresh installations of the system, created directly in WEBCON BPS 2017. For existing installations which will be updated to WEBCON BPS 2017, the previous format of storing users will be maintained (Down-Level Logon Name):
DOMAIN\UserName#Name (e.g. webcon\TomGreen#Tom Green)

4.6.1. Changes to the Active Directory Server configuration

Due to the **BPS users list** feature being added, the place and method of configuring the Active Directory Server connection settings has been changed. The configuration group: **Active Directory Server** in Global parameters has been removed.

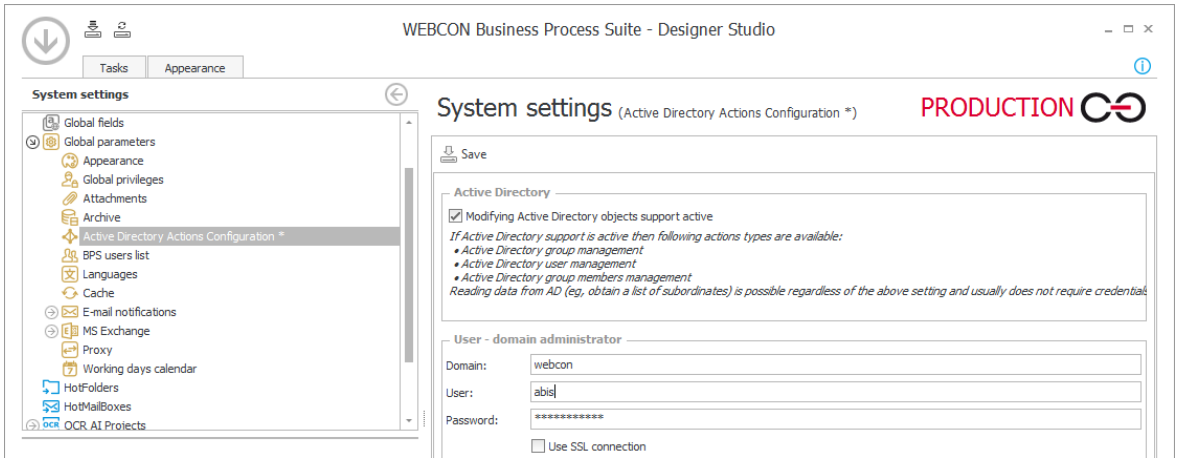


- The Active Directory Server connection configuration for the purpose of synchronizing AD users with BPS Users List is available under:
  Global parameters -> **BPS Users list** -> **Synchronization configuration** -> **Credentials**
  Based on the set parameters, the service synchronizing the AD contents with the BPS Users List is responsible for making the connection to the AD server.



- The Active Directory Server connection configuration for **Data sources** of the **Domain users** type was moved to the data source configuration. If **Domain users** data source types exist in the system, updating to WEBCON BPS 2017 will result in copying the parameters defined in **Global parameters** -> **Active Directory** -> **Active Directory Server** to the configuration of each of those individual data sources.

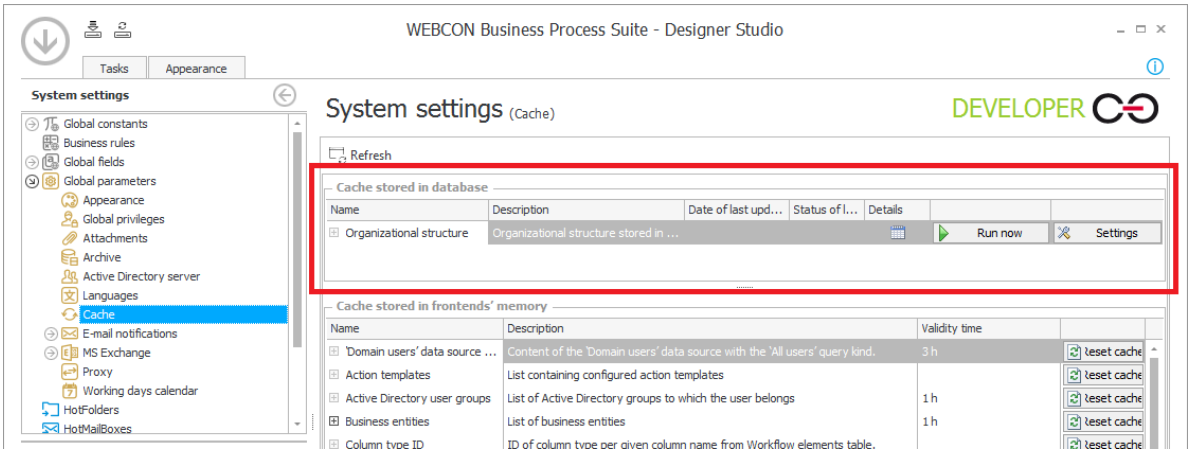
- **Active Directory actions configuration** group was added. It contains the connection parameters employed by actions that manage AD users and groups.



4.6.2. Cache configuration changes

Due to the introduction of the **BPS Users List** feature, the method of synchronizing and storing organization structure data from the Active Directory in the WEBCON BPS system has been changed.

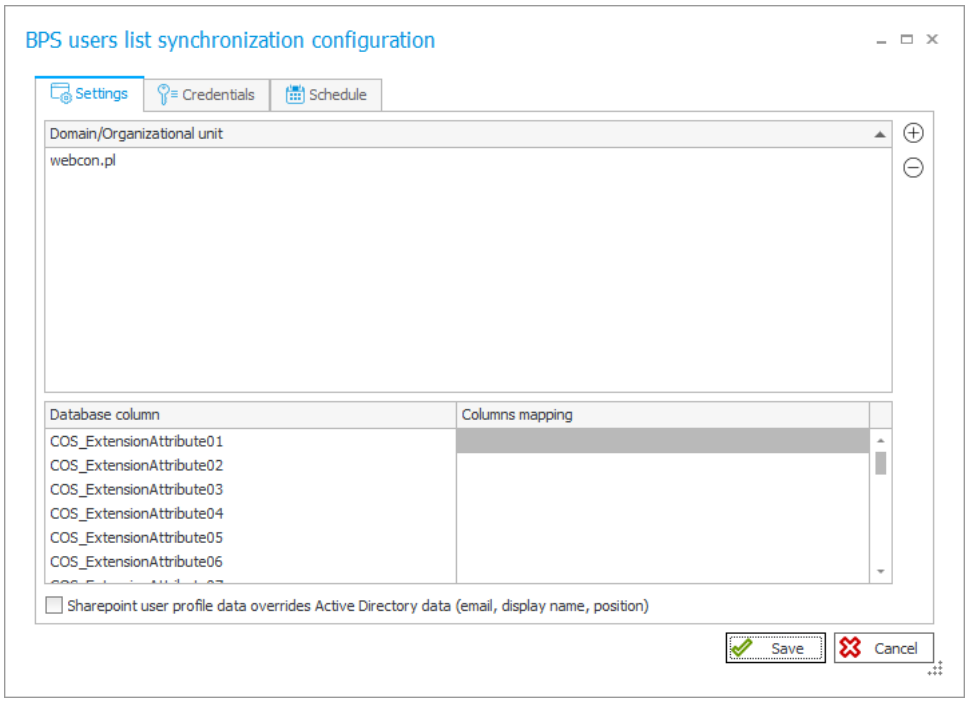
The **Organization structure cache** and its configuration were removed from the **Cache** node of the global parameters.



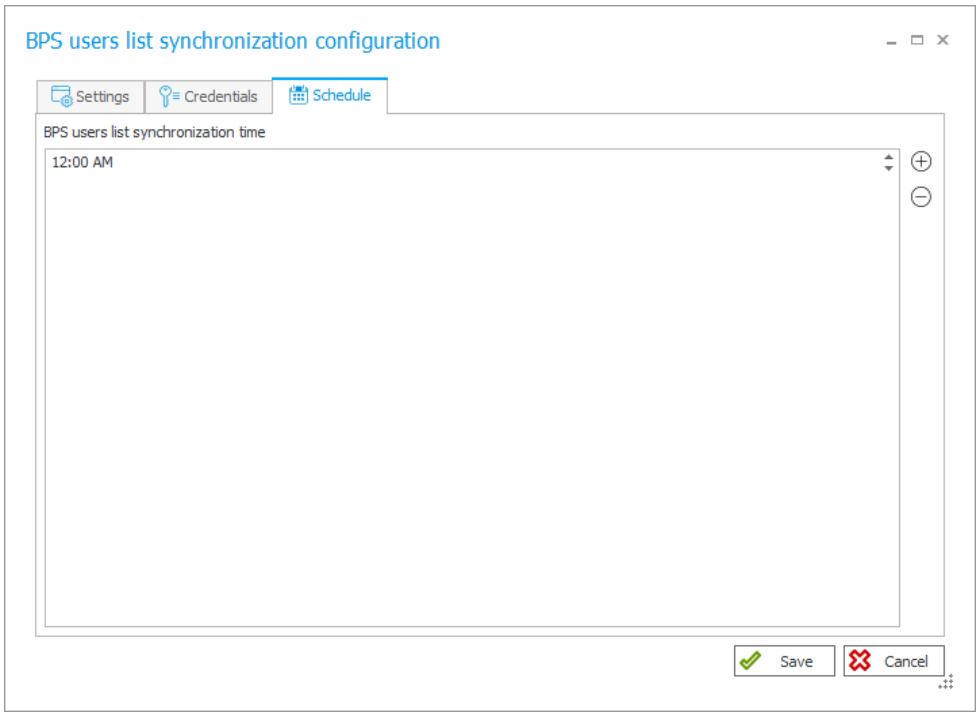
- Synchronization of the **Organizational structure**, along with the structure of privileges, is carried out during the synchronization of the BPS Users List and when data is loaded from the Active Directory.

  The organizational structure and its privilege settings is always loaded during BPS Users List synchronization, there is no way to deactivate this.

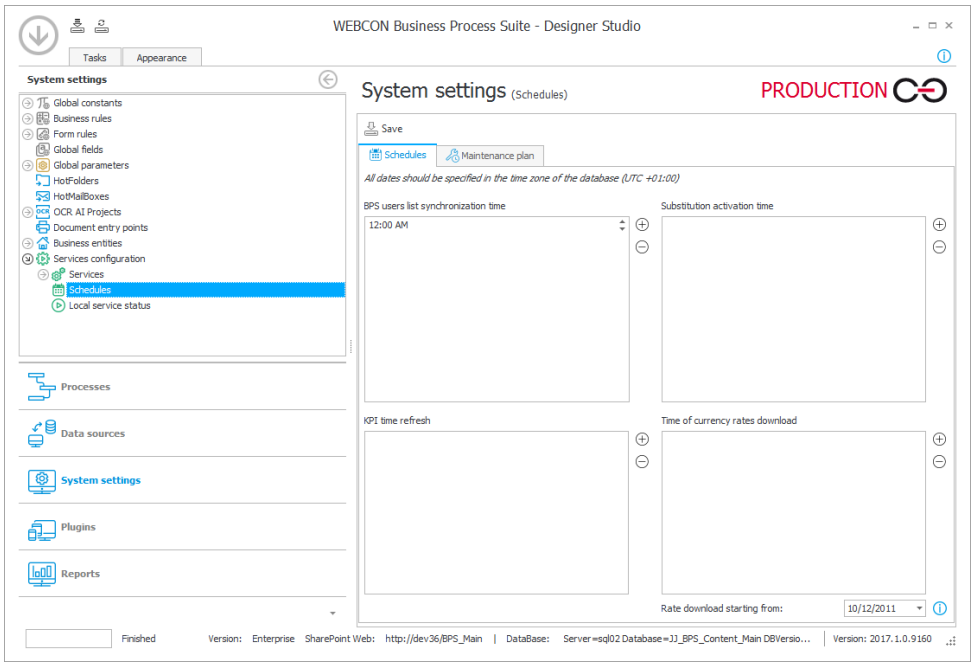
  The configuration for narrowing the scope of synchronization, and for mapping AD properties to columns of the cache database, can be found under **Global parameters -> BPS users list -> Synchronization configuration -> Settings**.


BPS users list synchronization configuration
Settings
Credentials
Schedule
Domain/Organizational unit
webcon.pl
Database column
Columns mapping
COS_ExtensionAttribute01
COS_ExtensionAttribute02
COS_ExtensionAttribute03
COS_ExtensionAttribute04
COS_ExtensionAttribute05
COS_ExtensionAttribute06
Sharepoint user profile data overrides Active Directory data (email, display name, position)
Save
Cancel

The configuration of synchronization schedules is found under **Global parameters -> BPS users list -> Synchronization configuration -> Settings**.



Synchronization schedule configuration is also available in the service schedule.



4.7. Business rules – "+" and "–" operators

WEBCON BPS 2017 changed how "+" and "-" operators work when used in operations involving dates. From now on, the number (blue) will represent how many days are to be added/subtracted from the given date (yellow).

4.8. Business rules – SQL mode changed to RUN SQL function

Due to the introduction of new functions that load values from data sources, **SQL Mode** and **SDK Rule** mode have been removed from the Business rules editor. SQL queries and SDK can still be used in Business rules via functions.

Migration from earlier versions

Rules using SQL Mode will be transformed into Business rules with an appropriately configured **RUN SQL** function.

Rules using SDK Rule mode will be transformed into Business rules with an appropriately configured **RUN SDK** function.

4.9. Action availability

The number of possible triggers that can be used to invoke certain actions was increased. Please consult the table below to learn which actions can be invoked by which triggers.

✓ – Action available before version 2017

✓ – Action available since version 2017

Action group	Action type	On entry	On exit	On timeout	On browser opening	Menu button	On path	Cyclical	Upon instance deleting	Upon instance saving	Attachments menu	On attachment add
Active Directory	Manage groups	✓	✓	✓	✓	✓	✓			✓		
	Add user to a group	✓	✓	✓	✓	✓	✓			✓		
	Manage users	✓	✓	✓	✓	✓	✓			✓		
Digital signatures and certificates	Authorize user		✓				✓					
	Sign an attachment with CoSign	✓	✓	✓	✓	✓	✓			✓	✓	
	Sign an attachment	✓	✓	✓	✓	✓	✓			✓	✓	
	Verify attachment's signature		✓		✓		✓			✓	✓	
Barcodes	Read a barcode	✓	✓	✓	✓	✓	✓			✓		
	Add a barcode	✓	✓	✓	✓	✓	✓			✓		
	Printout a barcode label	✓	✓			✓	✓			✓		
Workflow control	Choose path (list)				✓							
	Move workflow (SQL)	✓	✓	✓	✓	✓	✓	✓				
	Move workflow	✓								✓		
	Start a subworkflow (SQL)	✓	✓	✓	✓	✓	✓	✓	✓			
	Start a subworkflow	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	Manual workflow start					✓						
	Set workflow status	✓	✓	✓	✓	✓	✓			✓		
	Update related workflow instance	✓	✓	✓	✓	✓	✓	✓		✓		
	Change form type					✓						
Excel, Word & PDF	Generate a Word file	✓	✓	✓	✓	✓	✓			✓		
	Convert Word to PDF	✓	✓	✓	✓	✓	✓			✓	✓	
	Generate an Excel file	✓	✓	✓	✓	✓	✓			✓		
	Generate a PDF file	✓	✓	✓	✓	✓	✓			✓		
	Read data from an Excel file	✓	✓	✓		✓	✓			✓		

Substitutions	Add a substitution	✓	✓	✓	✓	✓	✓			✓		
	Remove a substitution	✓	✓	✓	✓	✓	✓			✓		
Notifications	Send custom e-mail	✓	✓	✓	✓	✓	✓		✓	✓		
	Send standard e-mail	✓	✓				✓			✓		
	Send Lync message	✓	✓	✓		✓	✓					
Exchange	Exchange events	✓	✓	✓	✓	✓	✓		✓	✓		
	Exchange tasks	✓	✓	✓	✓	✓	✓		✓	✓		
	Out of office autoreply	✓	✓	✓	✓	✓	✓			✓		
Integration	Run an SQL procedure	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	Run an SDK action	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	Run a PowerShell script	✓	✓	✓	✓	✓	✓		✓	✓		
	Invoke SOAP Web service	✓	✓	✓		✓	✓			✓		
	Invoke REST Web service	✓	✓	✓		✓	✓			✓		
Form	Validate form	✓	✓	✓			✓		✓	✓		
	Hyperlink	✓	✓		✓	✓	✓			✓		
	Change field value	✓	✓	✓	✓	✓	✓		✓	✓		
	Change field value (SQL)	✓	✓	✓	✓	✓	✓		✓	✓		
	Change items list values	✓	✓	✓		✓	✓			✓		
Reports and printouts	Generate an RS report	✓	✓	✓	✓	✓	✓	✓		✓		
	Generate an HTML printout	✓	✓			✓	✓					
OCR and scanning	Attachment OCR	✓	✓	✓			✓					
	OCR AI recognition	✓	✓	✓	✓	✓	✓			✓		
	Teach OCR AI	✓	✓	✓	✓	✓	✓			✓		
	Add a text layer	✓	✓	✓	✓	✓	✓			✓		✓
Privileges	Remove privilege	✓	✓	✓	✓	✓	✓			✓		
	Add privilege	✓	✓	✓	✓	✓	✓			✓		
Task assignment	Create task	✓	✓				✓			✓		
	Choose an approver	✓	✓	✓	✓	✓	✓			✓		
Database retention	Archived instances retention	✓	✓	✓		✓	✓	✓				
	Archive workflow instances	✓	✓	✓		✓	✓	✓		✓		
	BPS users list synchronization	✓	✓	✓		✓	✓	✓		✓		
Attachments	Add attachment	✓	✓	✓	✓	✓	✓			✓		
	Update attachment	✓	✓	✓	✓	✓	✓			✓		
	Remove attachment	✓	✓	✓	✓	✓	✓			✓		
	Copy to the other instance										✓	
	Move to the other instance										✓	
SharePoint – users and privileges	Create/delete a user	✓	✓		✓	✓	✓		✓	✓		
	Create group	✓	✓		✓	✓	✓		✓	✓		
	Add privileges	✓	✓		✓	✓	✓		✓	✓		
SharePoint - content	Create a list	✓	✓		✓	✓	✓		✓	✓		
	Create a site	✓	✓		✓	✓	✓		✓	✓		
	Edit a list element	✓	✓	✓	✓	✓	✓		✓	✓		
	Delete a list element	✓	✓	✓	✓	✓	✓		✓	✓		
	Delete a list	✓	✓	✓	✓	✓	✓		✓	✓		
	Download an attachment from the list	✓	✓	✓	✓	✓	✓		✓	✓		
	Add an attachment to the list	✓	✓	✓	✓	✓	✓		✓	✓		
	Add a new list element	✓	✓		✓	✓	✓		✓	✓		

4.10. Name change to SQL Grid and SQL Row form fields

SQL Grid has been renamed to **Data table** and SQL Row became **Data row**. Their functionality remains identical.