WEBCON BPS

history of changes for version 2021.1.1

Table of Contents

1. Before upgrading WEBCON BPS 4

2. Changes to existing features 5

2.1. Change in the method of invoking the „On timeout" action 5
2.2. Changes in the trusted domains configuration and in additional response headers 5
2.3. Changes and optimizations in the indexation and search based on the SOLR engine 6
2.4. Archive database configuration save 7
2.5. „Local service status" option will not be always visible 7
2.6. Extended user list synchronization diagnostics 7
2.7. Different operation of the standard filter set by the creator 7
2.8. Change of the way of presenting the list of the most used applications to new users 7
2.9. WEBCON BPS Portal performance improvement 8
2.10. Application reports performance improvements 8
2.11. Form field rendering performance improvements 8
2.12. Change in the presentation of the form rule invoke logs 8
2.13. Docking the header in the history preview 8
2.14. Change of the default value in the transition path configuration 9
2.15. Change in the way the form fields are refreshed 9
2.16. Changes in the SDK add-on classes 9
2.17. Changes in starting the WebCon WorkFlow Service 9
2.18. Changes in stopping the WebCon WorkFlow Service 9
2.19. Form rules errors 10

3. Information 11

3.1. REST API 1.0 marked as „deprecated" 11
3.2. "Multiple lines of text" form field 11

4. New features 12

4.1. WEBCON BPS Designer Desk 12
4.2. Appearance of WEBCON BPS Portal fixed elements 12
4.3. Separation of authentication providers for the WEBCON BPS Designer Studio and the WEBCON BPS Portal 13
4.4. Defining separate synchronization schedules for full and incremental synchronizations 14
4.5. Debug option in the user list configuration synchronizations with the Azure Active Directory 15
4.6. OpenID Connect standard to define authentication providers 15
4.7. Diagnostics and form behavior registration mechanism 16
4.8. Custom redirect link from the WEBCON BPS Portal 18
4.9. Favorite system elements widget 18
4.10. en-GB language package 19
4.11. Using variables representing configuration objects' ID 20

4.12. Configuring the size of the workflow start tiles 20
4.13. Using a variable representing the item list row ID 21
4.14. Custom color of the workflow start tiles 21
4.15. Connections and data sources defined in the application 22
4.16. Pinning favorites on the main page 23
4.17. Report views in the navigation menu 24
4.18. Invoking an external PDF file editing tool directly from the form 24
4.19. Prefix and suffix for numeric values 24
4.20. Choosing data source column 25
4.21. Grouping in the item list 25
4.22. Tooltips in the item list column 26
4.23. Avatars of commenting users 26
4.24. Action changing the form type 27
4.25. Import-export of the dictionary process content 27
4.26. Moving import packages larger than 128MB 28
4.27. Forcing the SOLR indexation for form fields and item list columns with a defined visibility restriction rule 28
4.28. Displaying all connections and data sources used in the process 29
4.29. REST action – defining the content of the request as a mapping table 30
4.30. REST action – defining the data type and business rules 31
4.31. REST action – using a Swagger definition 31
4.32. SAM Account Name" and "NetBIOS Domain Name" variables 32
4.33. ATTACHMENTS COUNT function 32
4.34. GET ATTACHMENTS function 32
4.35. SELECT VALUES function 33
4.36. ITEM LIST COUNT and HAS ANY ROWS functions 33
4.37. FOR EACH ROW function 34
4.38. Functions allowing to define the appearance of the item list cells 35
4.39. Functions which allow the user to operate on a value 35
4.40. SET FOCUS function 36
4.41. GET AT INDEX function 36
4.42. Text transforming functions 36
4.43. Variable interface language code 36
4.44. Data source and connection owner 37
4.45. REST API extension 38
4.46. REST API 3.0 38

5. Bug fixes 39

1. Before upgrading WEBCON BPS

1. Make sure that WEBCON BPS licenses are up to date. It is recommended to refresh licenses before upgrading the system to avoid any unnecessary downtime.

2. If the changelog contains a section titled "Changes to existing features", please verify whether the changes will impact your implemented system in any way.

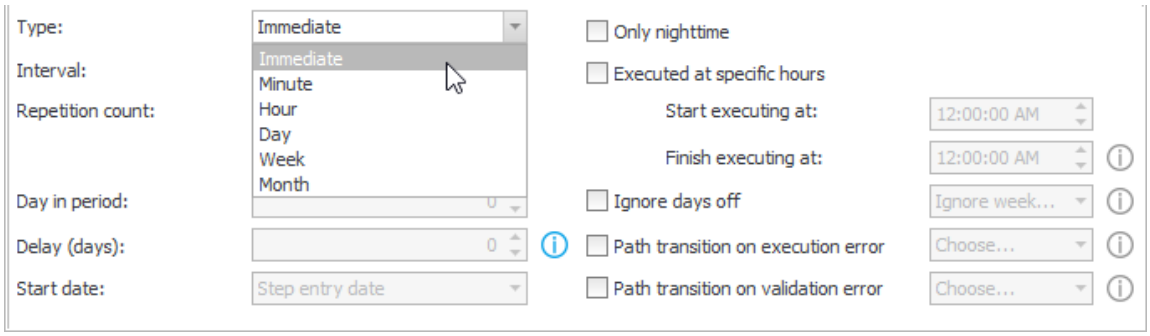
3. This update changes the SOLR search database structure. During the update, it will be necessary to provide the SOLR database admin's password - in order to update the database and correctly complete the update process.

4. Changes introduced in this version will break the compatibility of the Export-Import mechanism. Exported process packages created in versions 2020.1.3.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.

2. Changes to existing features

2.1. Change in the method of invoking the „On timeout" action

The method of invoking "On timeout" action defined on workflow steps has been altered. As a part of this expansion an option to immediately trigger the "On timeout" event on the step entry was added. In this case, start of the configured action will happen only once and will not be repeated.



2.2. Changes in the trusted domains configuration and in additional response headers

The configuration of the trusted domains and additional response headers has been modified.

For new WEBCON BPS installations, domains for MS Outlook and MS Teams will no longer be automatically added to the list of trusted domains.

If the administrator will remove the asterisk "*" or will configure the "frame-ancestors" section of the Content-Security-Policy header in the additional response headers configuration while configuring the trusted domains list, then in order to keep the WEBCON BPS Portal functioning in the MS Outlook and MS Teams environments it is required to manually add following domains: https://*.office365.com, https://*.office.com, https://*.microsoft.com as trusted.

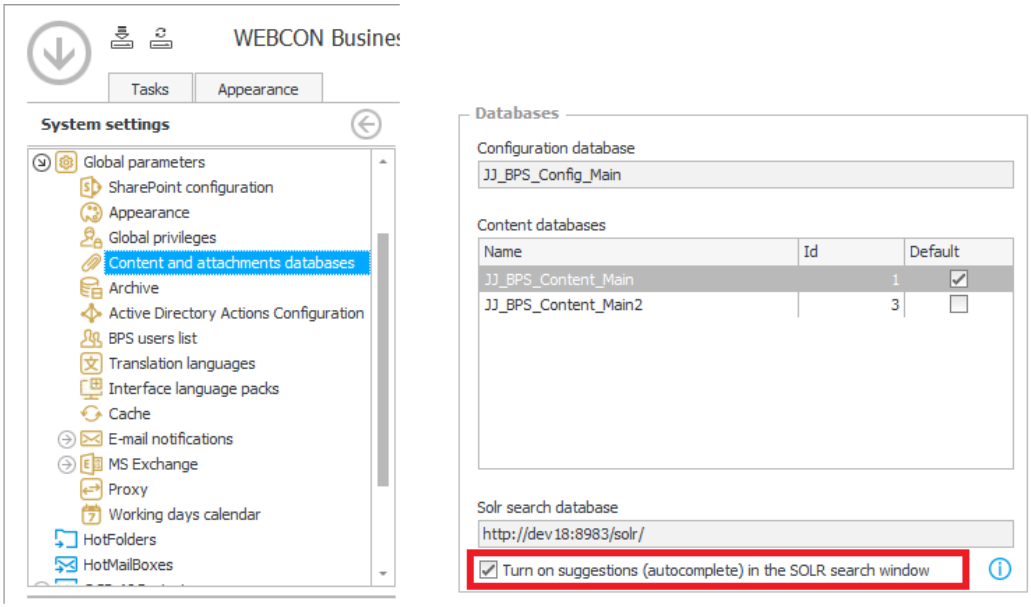
In order to ensure business continuity for existing installations, domains for MS Outlook, MS Teams and the domain of a configured WEBCON BPS Portal will be added to the trusted domains by the migration script.

Removing the added entries will be possible via manual editing of the trusted domains list in the WEBCON BPS Designer Studio in System settings -> Global parameters -> Environment settings -> Trusted domains.

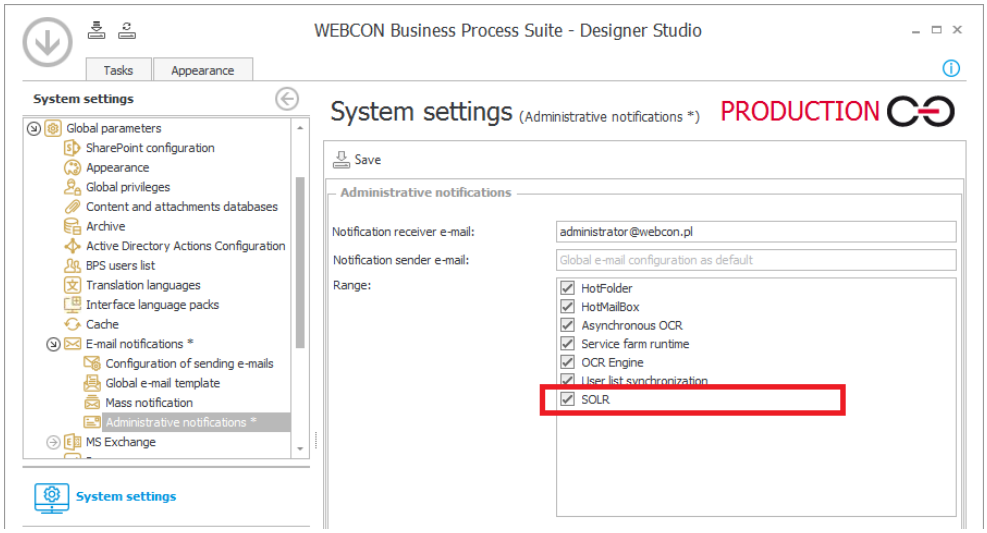
2.3. Changes and optimizations in the indexation and search based on the SOLR engine

Introduced changes and optimizations in the methods of indexation and search based on the SOLR engine.

As a part of the expansion it is now possible to turn off the suggestions when entering phrases on the SOLR search site. Configuration option that allows to turn it off is available in the WEBCON BPS Designer Studio in the "System settings" tab.



Another novelty is an option to send administrative notifications for indexation errors caused by a lack of free disk space or memory. To activate them in the WEBCON BPS Designer Studio go to the "System settings" tab, then "Global parameters", "E-mail notifications", "Administrative notifications".



2.4. Archive database configuration save

In the Webcon BPS Designer Studio launched in the Web service mode it is now possible to save archive database configuration.

2.5. „Local service status" option will not be always visible

If WEBCON BPS Designer Studio is launched on a server or a computer where WebCon Workflow Service is not installed, the option "Local service status" will not be visible. Until now it was available on the "System settings -> Service configuration" tab. This option will remain visible when launching WEBCON BPS Designer Studio on a server where WebCon WokrFlow Sevice is already installed.

2.6. Extended user list synchronization diagnostics

In the synchronization of the user list with the Azure Active Directory, the scope of the diagnostic information saved at synchronization has been extended.

2.7. Different operation of the standard filter set by the creator

The standard filter set by the wizard in the WEBCON BPS Designer Studio was altered in a following manner:

- In the Designer Studio it is now possible to save the standard filter despite using a form field from outside of the list defined in the report columns

- In the WEBCON BPS Portal it is now possible to also use any form field as the standard filter (Application administrator or Portal Designer privileges required)

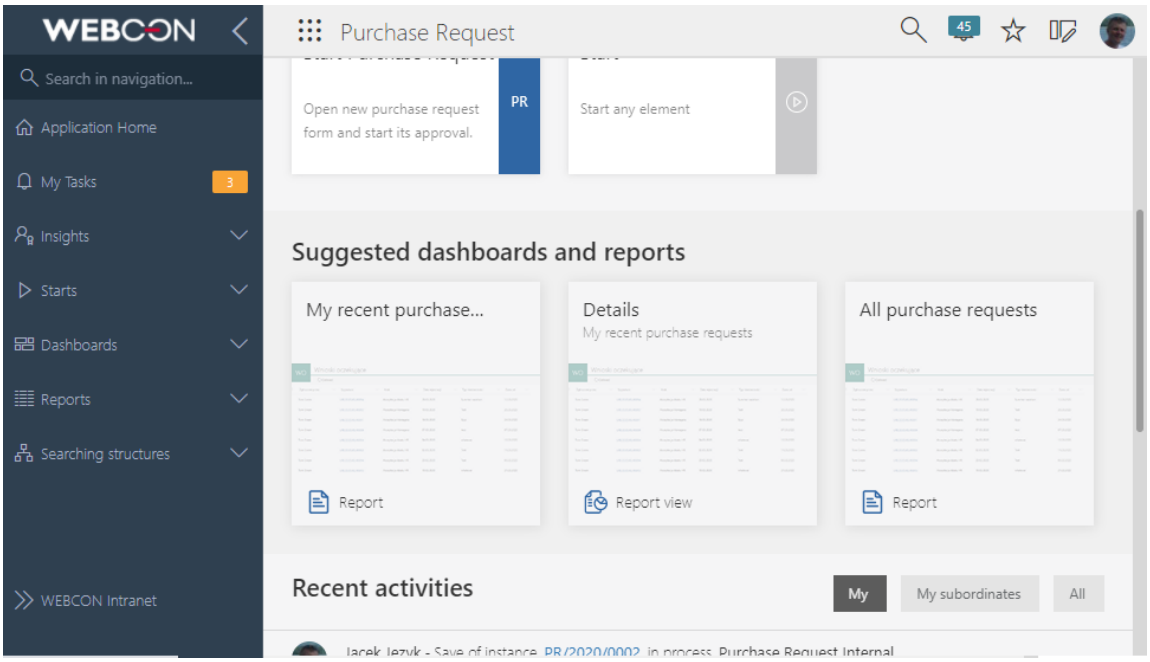
- In the WEBCON BPS Portal when creating private views, a "typical" user (with a "Read-only" role) can now select only those form fields as filters which were provided by the administrator on the report list column

2.8. Change of the way of presenting the list of the most used applications to new users

The method of presenting the list of the most frequently used applications as well as suggested reports and dashboards to the user who logged into the WEBCON BPS Portal for the first time was altered.

If the user has not yet worked in the WEBCON BPS Portal, the most frequently used applications by other system users will be presented. The privileges of the logged user will be considered.

In the case of suggested application reports and dashboards, the elements most frequently used by other system users will be presented. The privileges of the logged user will be considered.



2.9. WEBCON BPS Portal performance improvement

Introduced performance improvements in the loading mechanism of WEBCON BPS Portal main page.

As a part of the optimization following elements were modified: number of queries to the database when displaying the task list, the amount of data when retrieving the list of most used application has been reduced and the collection of all applications will no longer be downloaded.

2.10. Application reports performance improvements

Performance improvements have been made in the application report data display.

2.11. Form field rendering performance improvements

Performance improvements have been made when rendering, loading and modifying the value of a form field on the Modern form.

2.12. Change in the presentation of the form rule invoke logs

Due to the introduction of logging the behavior of the form in the diagnostic mode, the preview of the invoke log for form and business rules was moved from the form to the session preview window.

2.13. Docking the header in the history preview

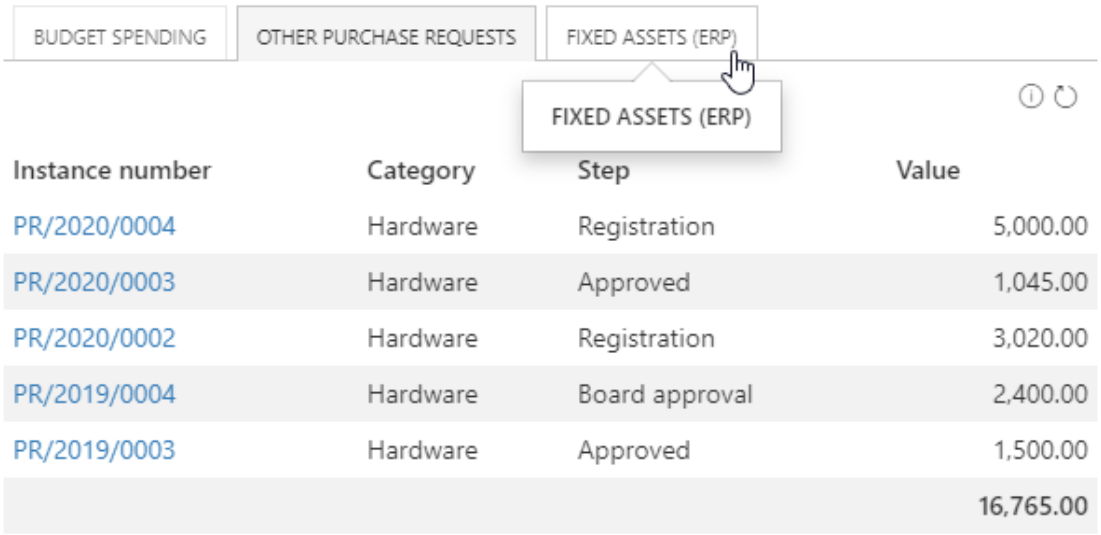
Header with a toolbar is now docked on the workflow instance history preview window. It allows a continuous access to the tool buttons regardless of the position of the history preview horizontal scroll bar.

2.14. Change of the default value in the transition path configuration

Default value of the "Operation executed on parallel tasks" parameter in the path transition configuration has been altered. From now on the default value is "Set other tasks as cancelled".

2.15. Change in the way the form fields are refreshed

The method of refreshing data in "Data table", "Data row" and "Chart" form fields which are placed in the tabs on the form was altered. From now on data is loaded once when entering the tab or on request after clicking on the "Refresh" button. The next entry to the same tab does not load the data again.



2.16. Changes in the SDK add-on classes

Following changes have been made in the SDK add-on classes:

- SDK configuration form field constructors have been reordered
- the default editing level of CC tasks created from Custom actions has been changed

2.17. Changes in starting the WebCon WorkFlow Service

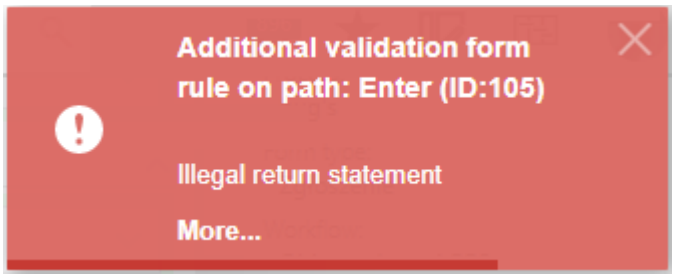
Implemented changes in the method of starting WebCon WorkFlow Service. It results in a faster start of the service. This modification includes: delaying start of the queues until the service has started, decrease in the number of queries for the queues and implementation of a cache of references to the Services table.

2.18. Changes in stopping the WebCon WorkFlow Service

Implemented changes in the method of stopping WebCon WorkFlow Service. It results in faster stopping and restarting the service.

2.19. Form rules errors

In the WEBCON BPS 2021 the information about execution errors of the Form rules in the JavaScript mode resulting from an incorrect syntax or definition of the JS script will be presented on the form as a pop-up window. So far this type of errors were only displayed in the browser's console.



3. Information

3.1. REST API 1.0 marked as „deprecated”

The last system upgrade will mark REST API 1.0 as "deprecated" and will be unavailable soon. It is recommended to migrate from REST API 1.0 to a higher version.

3.2. "Multiple lines of text” form field

"Multiple lines of text" form field in "Rich" mode was provided with an additional information that it may not work correctly on some mobile web browsers.

4. New features

4.1. WEBCON BPS Designer Desk

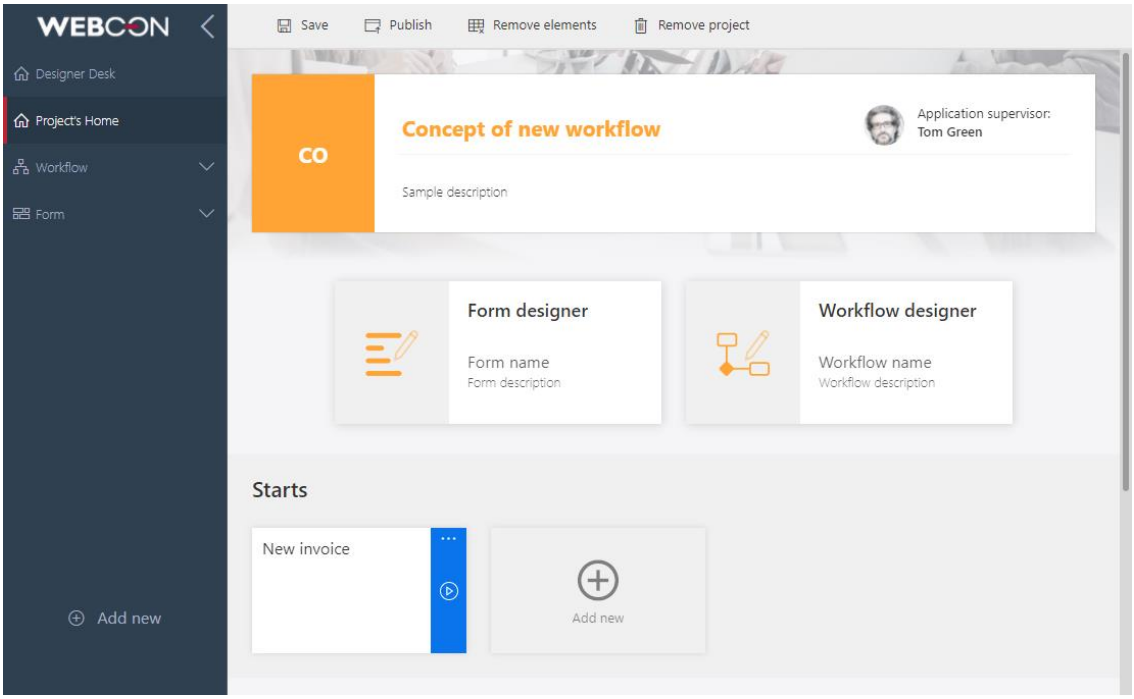
A new tool - WEBCON BPS Designer Desk.

WEBCON BPS Designer Desk is a new tool designed to support the process of collecting business requirements and prototyping applications.

This tool allows business users to create a workflow prototype with step and transition paths definitions, form design with form fields, data source (value list) and action prototypes performed on paths. The created prototype can be started which allows to simulate an actual operation of the final solution.

Using the "Publish" option transfers the accepted prototype to the WEBCON BPS Designer Studio. After publishing the further work on the process is done via the WEBCON BPS Designer Studio only.

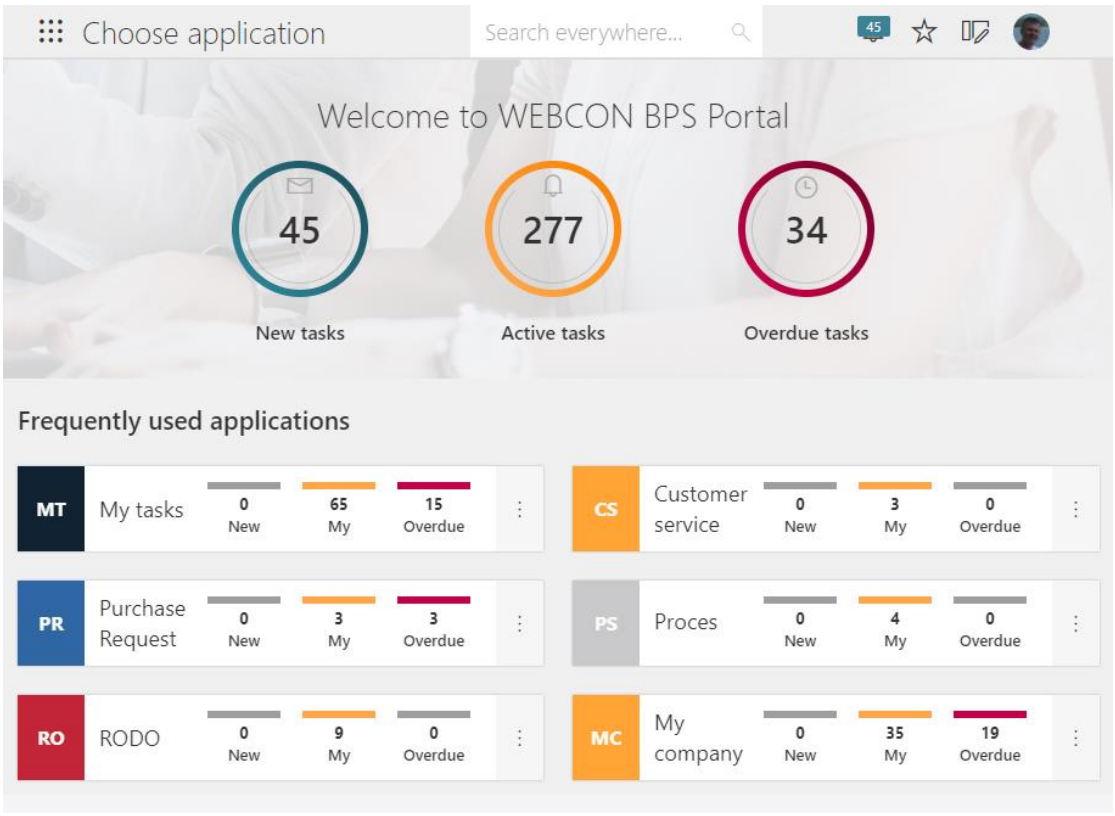
WEBCON BPS Designer Desk is available in the browser by choosing "Designer Desk" in the user menu. Users or groups of users allowed to use this tool are defined in the WEBCON BPS Designer Studio on System settings -> Global parameters -> Designer Desk tab.



4.2. Appearance of WEBCON BPS Portal fixed elements

The appearance of WEBCON BPS Portal fixed elements has been modified.

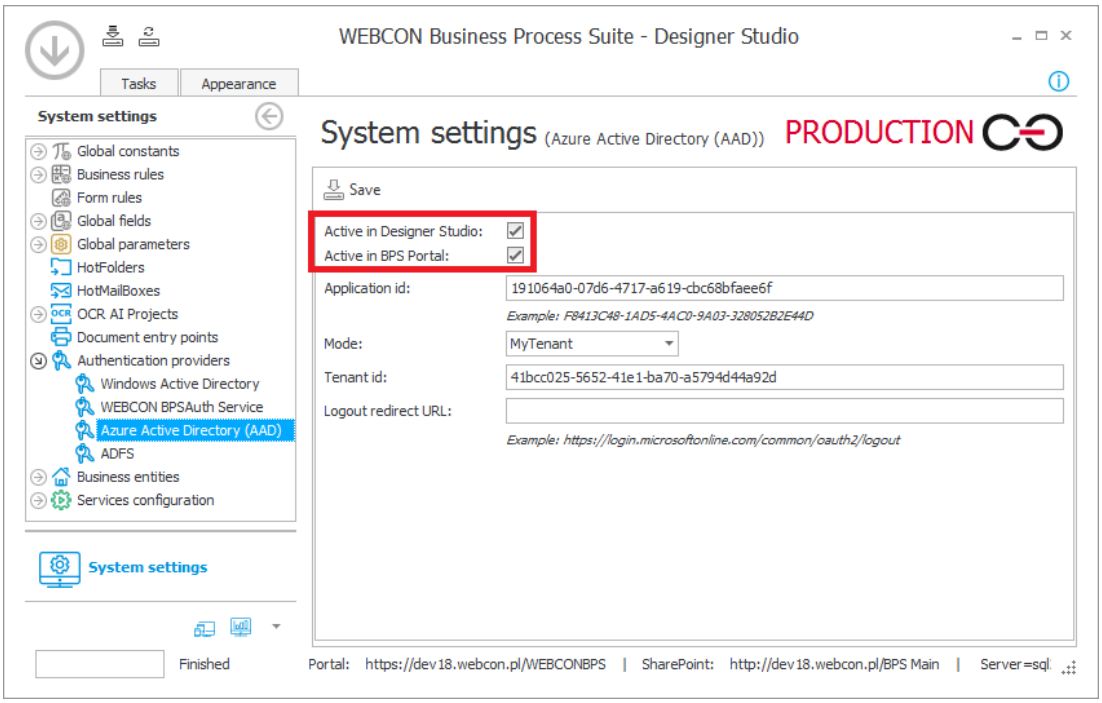
Changes include the appearance of task counters, application tiles, main page of the application, application details window, workflow start buttons, and of the suggested dashboards and views report.



4.3. Separation of authentication providers for the WEBCON BPS Designer Studio and the WEBCON BPS Portal

It is now possible to independently define available authentication providers for the WEBCON BPS Designer Studio and the WEBCON BPS Portal.

Visibility configuration is available in the "System settings" tab in the WEBCON BPS Designer Studio.



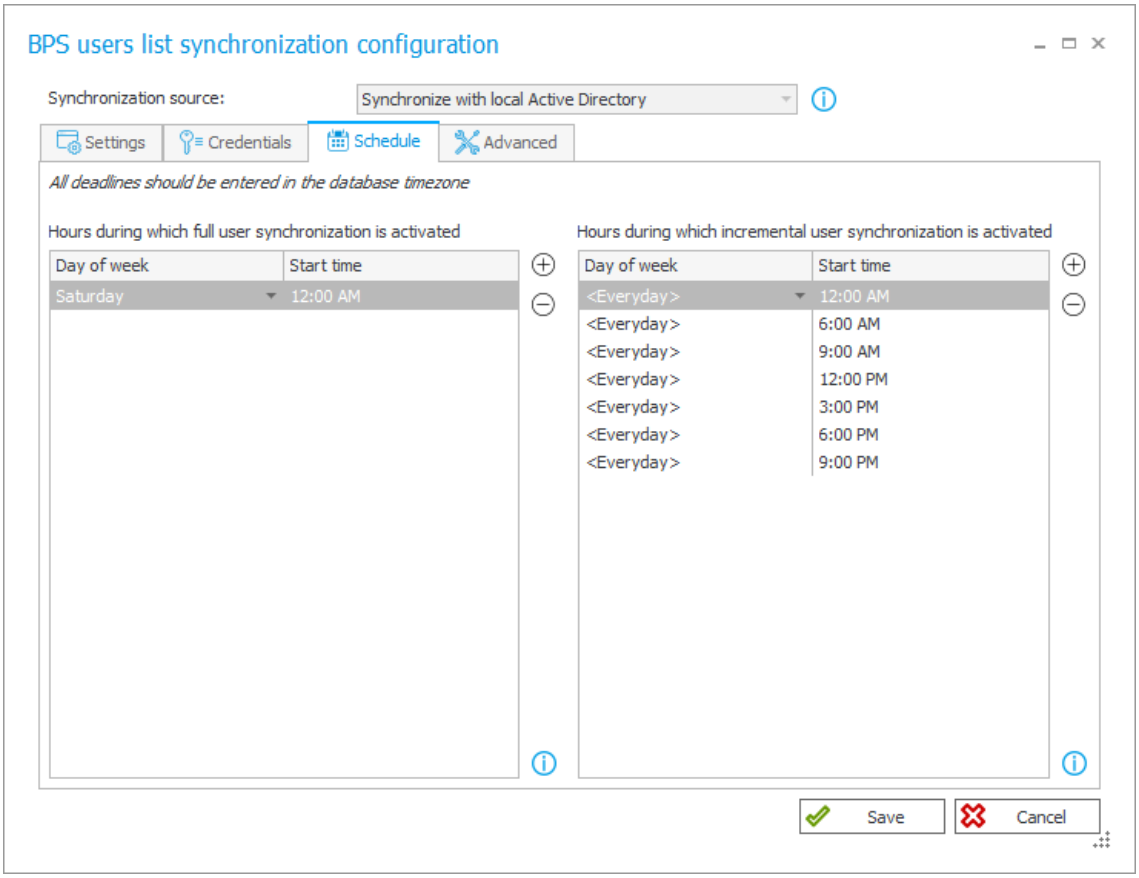
4.4. Defining separate synchronization schedules for full and incremental synchronizations

The user list synchronization can now define separate synchronization schedules for full an incremental synchronizations.

It is possible to define all or only selected days of the week and set a specific hour of the synchronization.

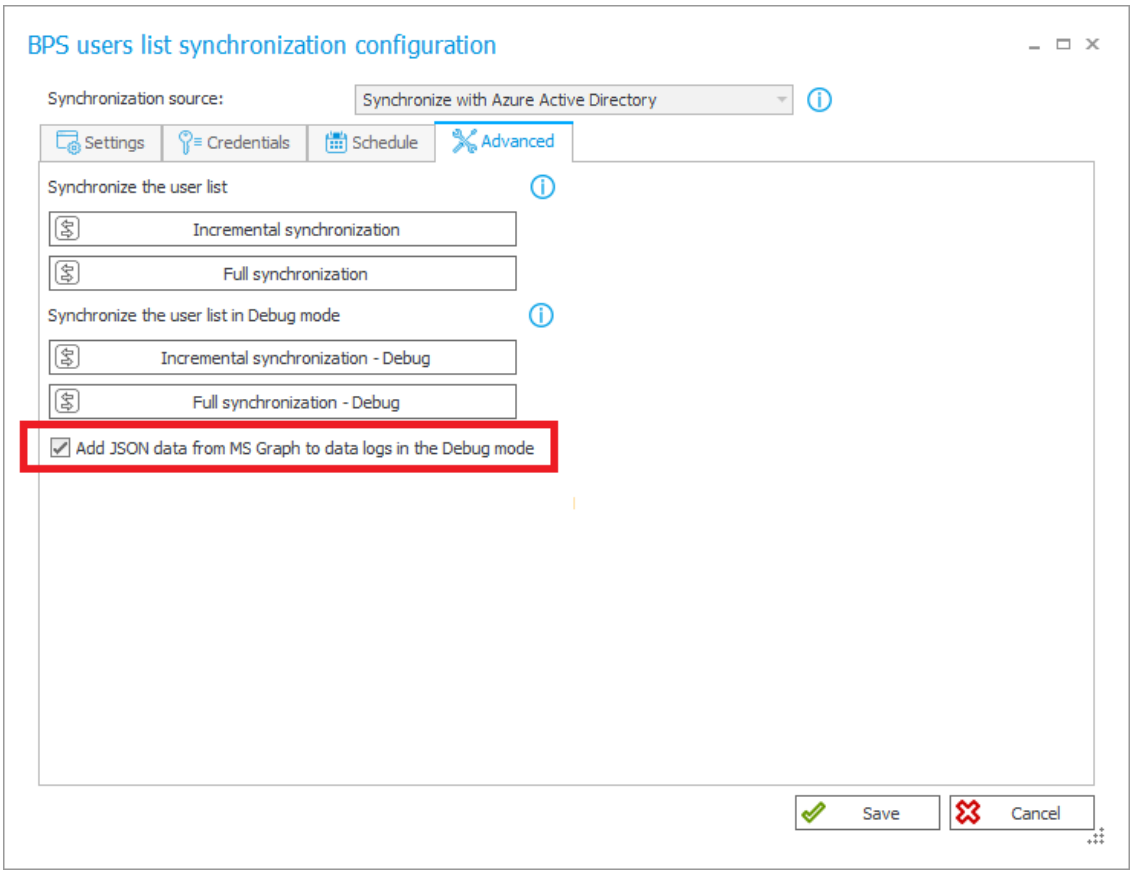
In the newest version the option to choose the synchronization type (full/incremental) has been removed. Currently, a specific schedule defines which synchronization type will be performed. If there are no entries in the schedule of a certain synchronization, then it will not be carried out.

When migrating to the latest version of the system, the currently existing synchronization schedule will retain its synchronization hours and it will be performed each day of the week. Depending on the synchronization type configuration on the environment, a schedule of full or incremental synchronizations will be created.



4.5. Debug option in the user list configuration synchronizations with the Azure Active Directory

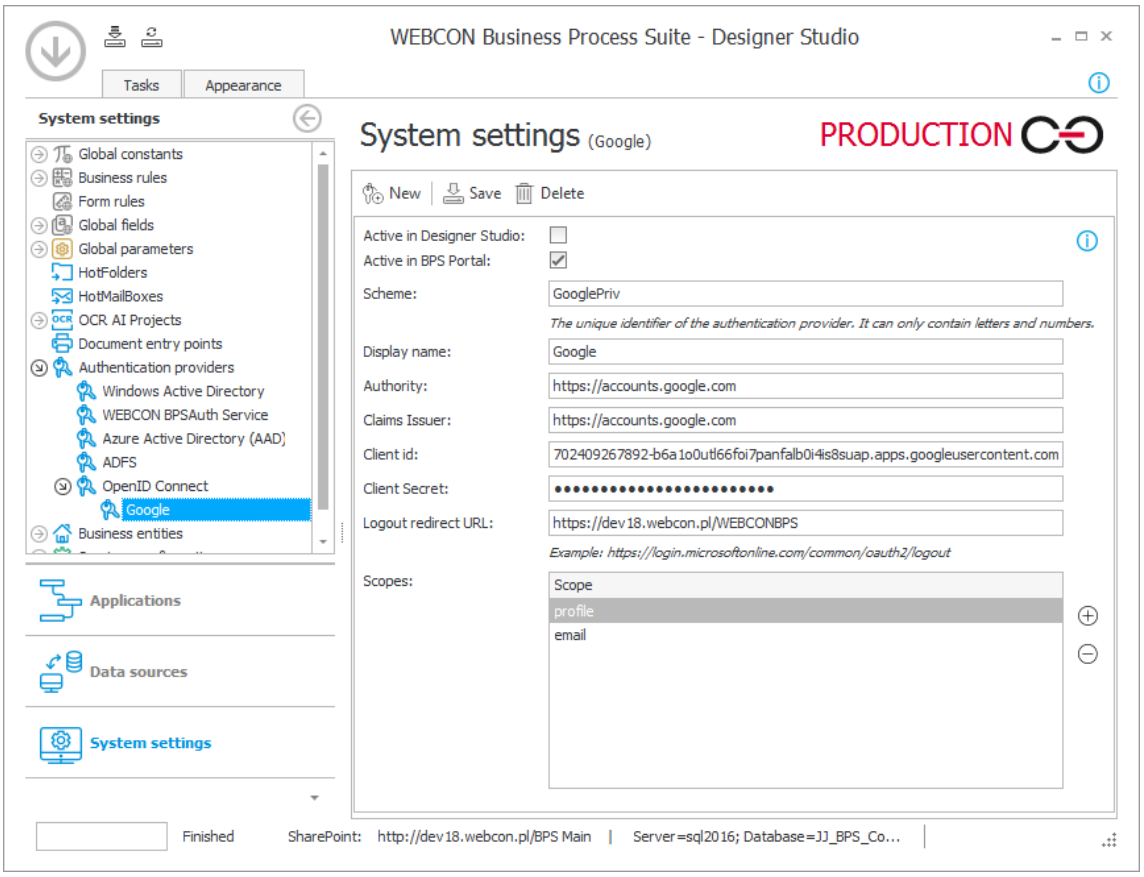
In the configuration of the user list synchronization with Azure Active Directory an option was added which allows to save the data downloaded when synchronizing with the MS Graph (in the Debug mode).



4.6. OpenID Connect standard to define authentication providers

It is now possible to use OpenID Connect standard to define authentication providers.

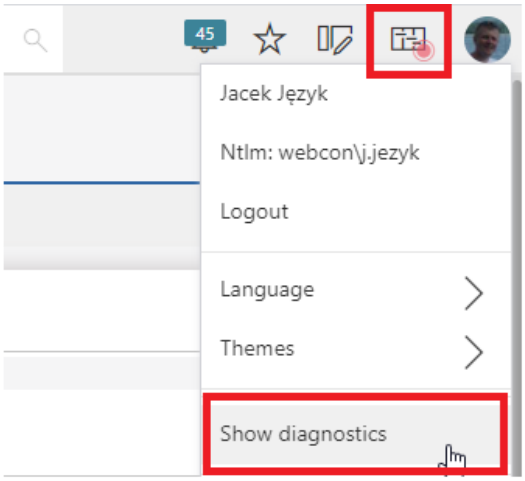
Authentication provider configuration is done via WEBCON BPS Designer Studio in System settings -> Authentication providers tab.



4.7. Diagnostics and form behavior registration mechanism

A new mechanism for diagnostic and recording the behavior of the form and other WEBCON BPS Portal elements was introduced.

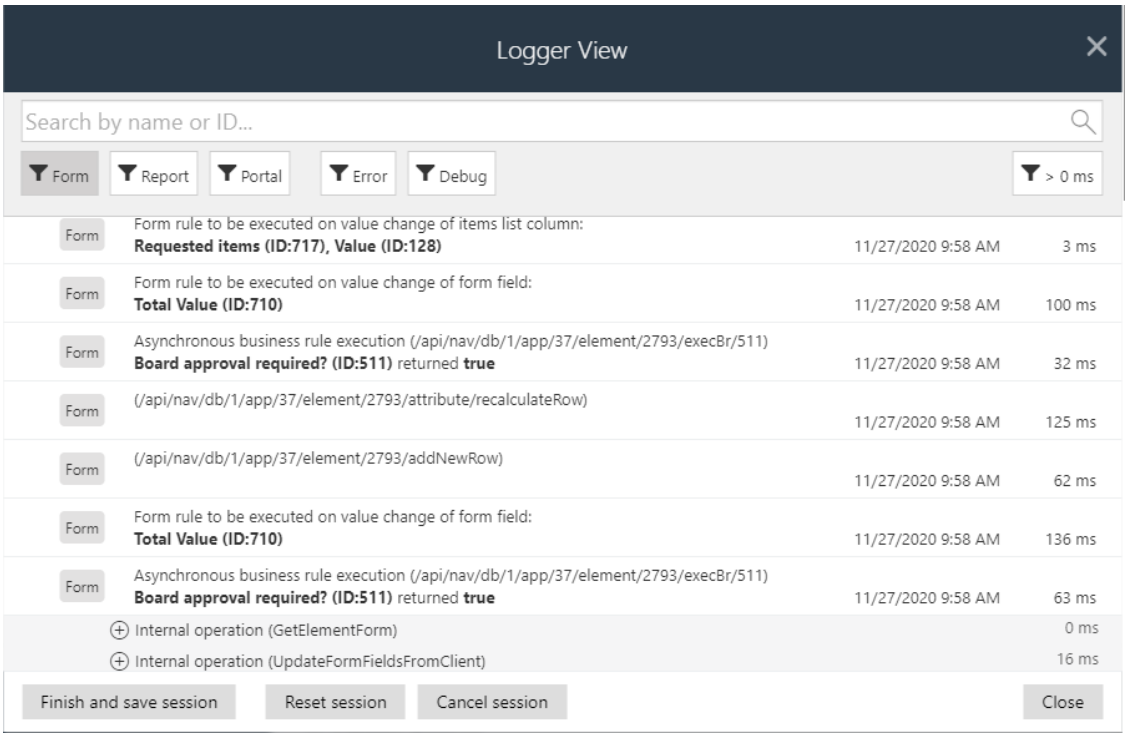
The functionality allows to start a diagnostic mode in the WEBCON BPS Portal which registers all invocations. Diagnostic mode is activated in the user menu by selecting "Show diagnostics" option. Access to it is provided to all WEBCON BPS Portal users. Diagnostic mode work is indicated by an icon in the main menu.



While the diagnostic mode is running, all form, report and other WEBCON BPS Portal elements' invocations are registered. Collected records consist of invocations for following elements: business rules (with the SQL content if the rule contains it), form rules (with the invocations of all functions which modify the form's state), rules responsible for visibility, editability and requirement of form fields, asynchronous form field invocations of form fields of "Data table", "Data row", "Chart", "Choice field" (with the queries) type or the queries of the application reports. Each invocation has its duration displayed.

Details of a registered session can only be viewed by the System Administrator or the Application Administrator. Users with lower privileges can only register and save session in the preview window. Session saved as a link can be directly sent to the Administrator for further analysis.

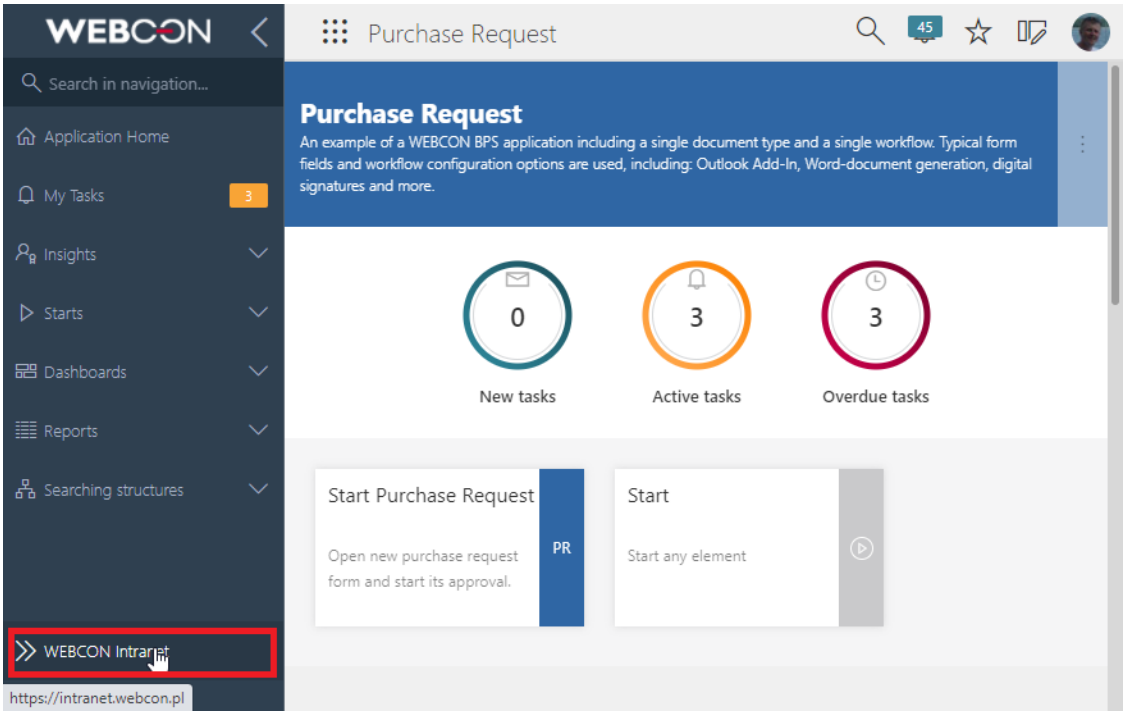
Users with the System Administrator or the Application Administrator privileges can view all registered sessions and their details in the "Administration" tab. Session preview window can filter invocations by their source (form, reports, Portal). It is also possible to search for specific elements saved in the session (i.e. form field or business rule name).



4.8. Custom redirect link from the WEBCON BPS Portal

A custom redirect link from WEBCON BPS Portal to any website can now be defined.

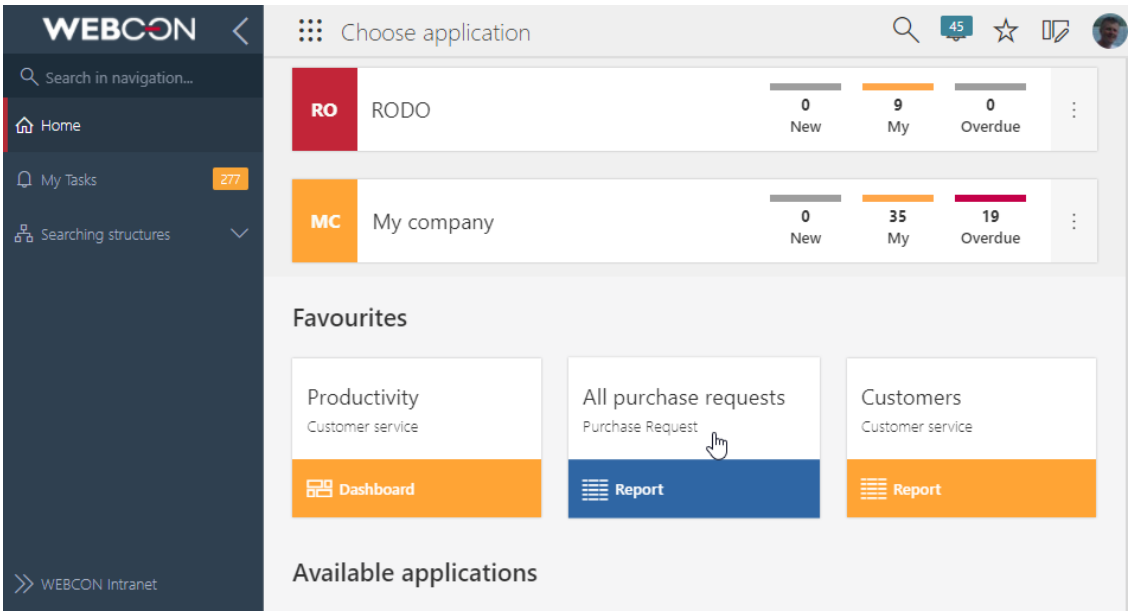
The link is available to all users in the WEBCON BPS Portal navigation menu. The redirection address is defined by the Administrator in WEBCON BPS Designer Studio (System settings -> Global parameters -> Appearance -> Additional navigation link).



4.9. Favorite system elements widget

A widget displaying tiles of the user's favorite system elements was added to the WEBCON BPS Portal main page.

Tiles represent the list of favorite system elements which is defined by the user in the "Favorites" menu (star icon in WEBCON BPS Portal upper-right corner).

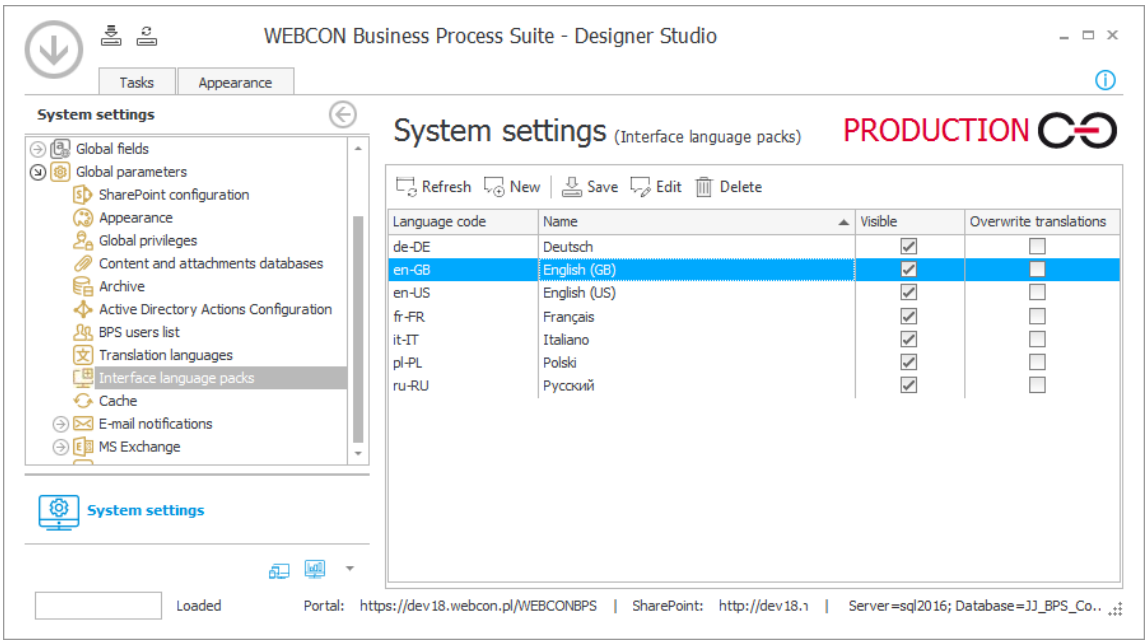


4.10. en-GB language package

English language coded as en-GB was added to the built-in language packs.

Choosing this language (en-GB) allows to change the display of the dates across the system to dd/MM/YY.

Already existing installations will need to be manually switched to English (GB) in the system configuration menu available in the WEBCON BPS Designer Studio.



4.11. Using variables representing configuration objects' ID

Variables which represent identifiers of configuration objects can now be used in the application report configuration. Those variables should be presented in the text format #{PREFIX:ID}#, where PREFIX is an object's configuration code and ID is an identifier of a specific object.

Currently supported list of variables related to configuration objects:

#{AP:id}# - returns the application ID

#{DF:id}# - returns the process ID

#{WF:id}# - returns the workflow ID

#{DT:id}# - returns the form type ID

#{ST:id}# - returns the step ID

#{PH:id}# - returns the ID of the transition path

#{COM:id}# - returns the company ID

The variables above can be used in following places of the application report configuration:

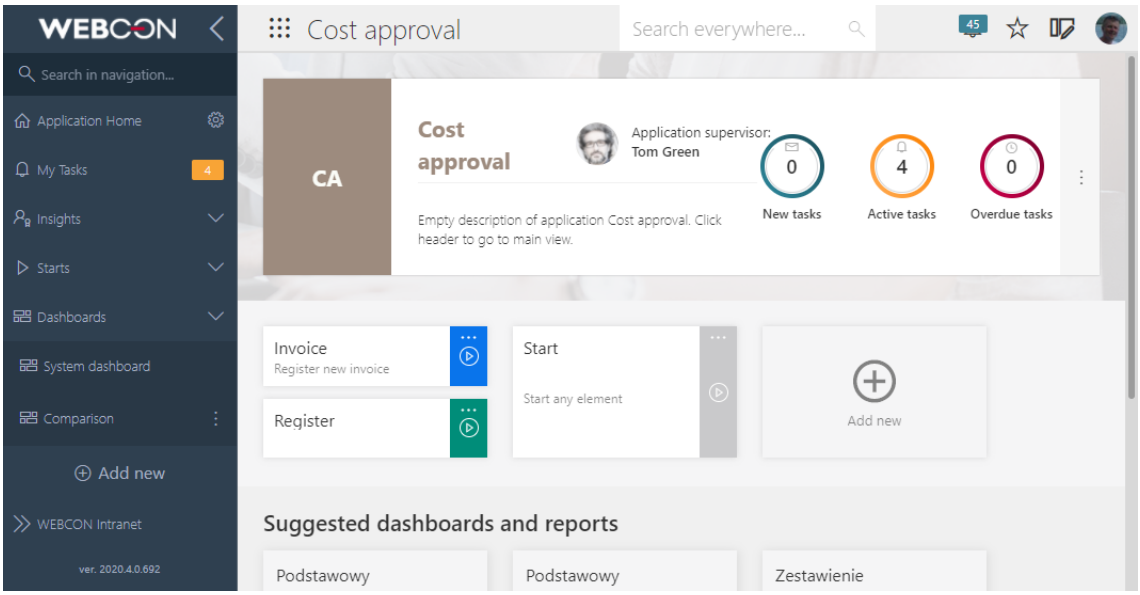
- Source-> Standard Filters (Value)
- Source-> SQL Filters
- Views-> Standard Filters (Value)
- Views-> Appearance (coloring): Advanced mode, Conditions (value)
- Calculated columns

Usage of this type of variables is required if the application definitions are transferred between DEV/TEST/PROD environments by using the Import-Export mechanism.

4.12. Configuring the size of the workflow start tiles

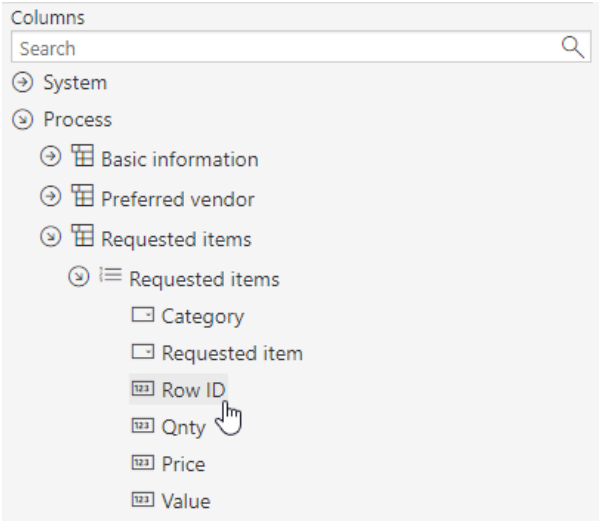
It is now possible to configure the size of the workflow start tiles in the WEBCON BPS Portal application view.

The tile can be of standard or compact size.



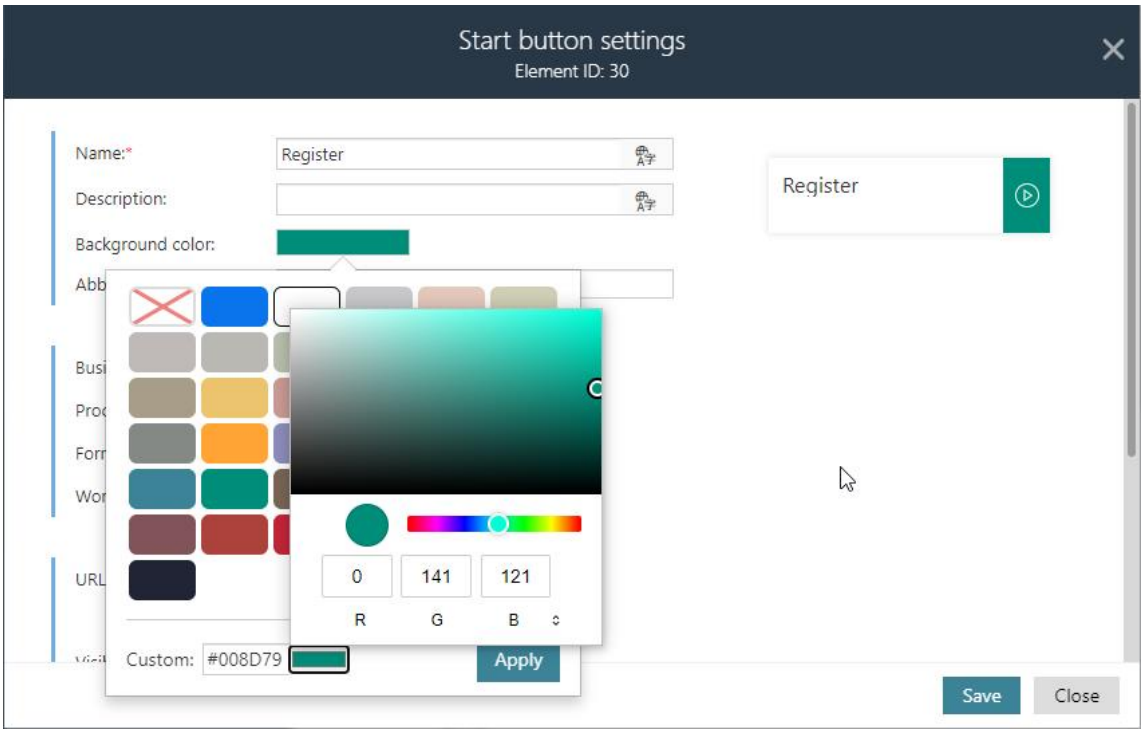
4.13. Using a variable representing the item list row ID

In the configuration of application reports using the "Item list" form field it is now possible to use a variable representing item list's row ID (database DET_ID column)



4.14. Custom color of the workflow start tiles

It is now possible to define a non-standard color of the workflow starting tile.



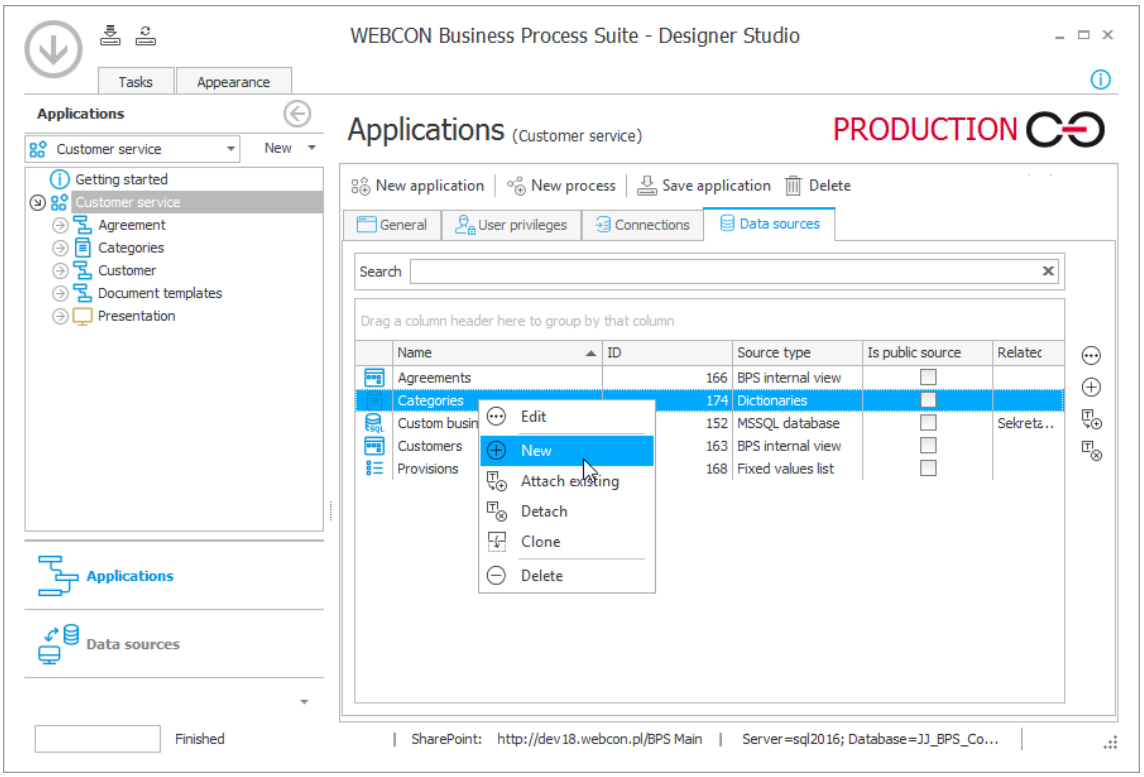
4.15. Connections and data sources defined in the application

It is now possible to create connections and data sources directly in the application configuration in the WEBCON BPS Designer Studio.

Connections and sources associated with the application can be created by the user with Application Administrator or System Administrator privileges. Connections and data sources created in the application are visible on appropriate application details tabs. Here, by using the "Link existing" option it is possible to add connections and sources already defined in the system but available within other application. The user can associate an already existing connection/source with the application if he is its owner (has the appropriate privileges in the data source configuration or has the System Administrator role) or the connection/source was marked as public. The owner of the connection/source can also edit it.

When configuring the process the user can use only connections or data sources associated with a specific application, however in the process configuration window where the connection/source is selected a new option is available – "Show all". This option allows to create a new one or associate an existing connection/source with the application.

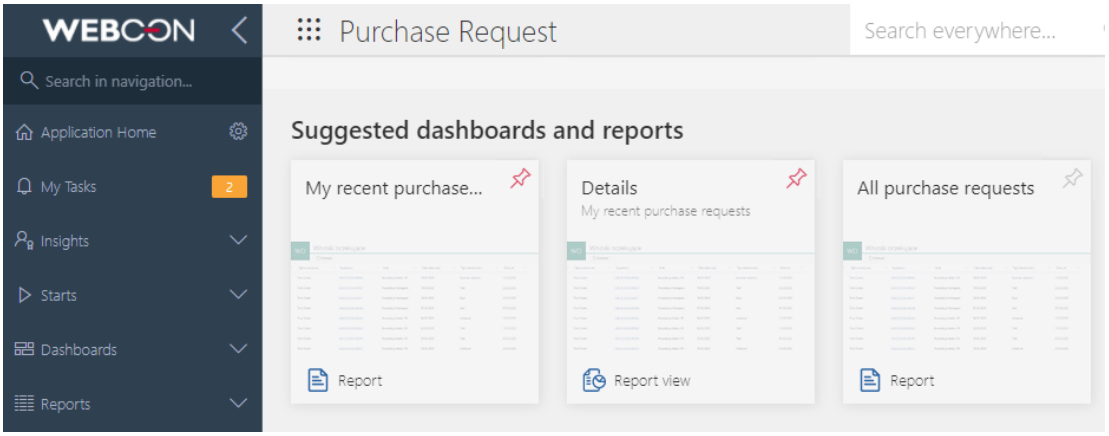
In the configuration of the processes linked with the application, the connections/data sources associated with the parent application (where the linked process was originally created) are available.



4.16. Pinning favorites on the main page

It is now possible to pin a suggested report or dashboard on the application main site.

Pinned tile will always be visible as the first one on the list of suggested reports and dashboards of the application.



4.17. Report views in the navigation menu

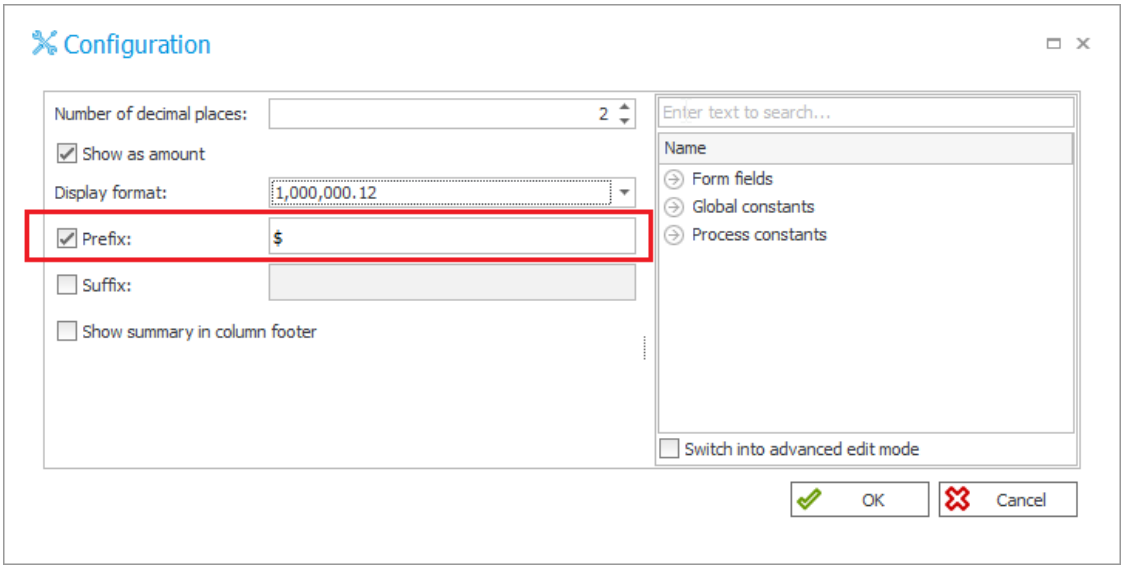
In the navigation menu of the WEBCON BPS Portal a list of views defined for the report is now visible.

4.18. Invoking an external PDF file editing tool directly from the form

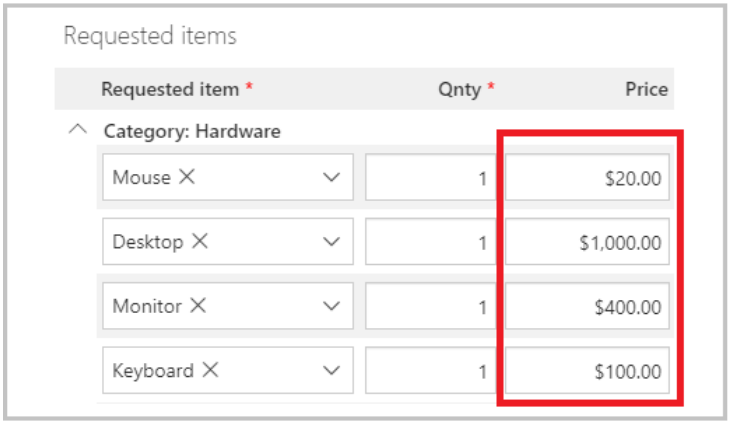
In the Standalone installation type it is now possible to invoke an external PDF file editing tool directly from the form. The edited file is updated on the form when the editing is complete.

4.19. Prefix and suffix for numeric values

It is now possible to define a prefix and a suffix for all numeric form fields and numeric item list columns.



Both parameters allow to define a text displayed before or after the numeric value in the form field. Prefix and suffix can both be defined based on variables related to the form values, global variables or process constants.

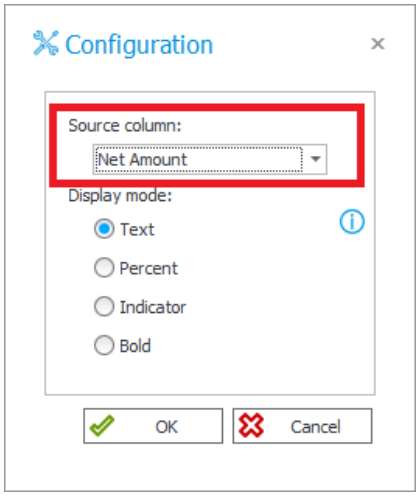


"Suffix" has replaced the "Currency code" parameter.

During migration the configuration will be updated so that form field's behavior will remain unaltered.

4.20. Choosing data source column

In the configuration of item list columns "Calculated text value" and "Data row" it is now possible to choose a data source column which will feed the value on the form.



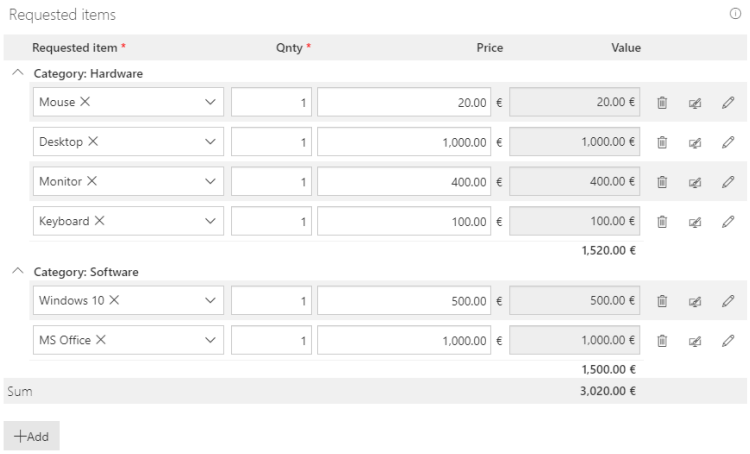
4.21. Grouping in the item list

Item list form field can now display data in grouping mode.

The option to enable grouping mode is available for every workflow step (option is located in the item list column configuration in the form editor on step). Grouping can be activated simultaneously for several columns. Item list displayed in the grouping mode allows to add new rows. Adding a row in the grouping mode always displays the edit window.

In this mode the row edit button is always visible regardless if the "Single row editing" option was selected. In the edit window it is possible to change value for the grouping column. After saving this change the entered row is moved to the appropriate group.

Grouping view allows the user to collapse and expand groups as well as displays subtotals if a column is configured to display totals.

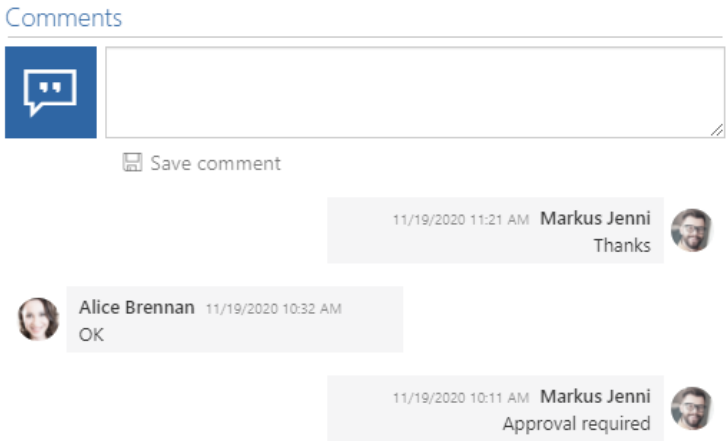


4.22. Tooltips in the item list column

"Item list" form field can now define and display the column description as a tooltip.

4.23. Avatars of commenting users

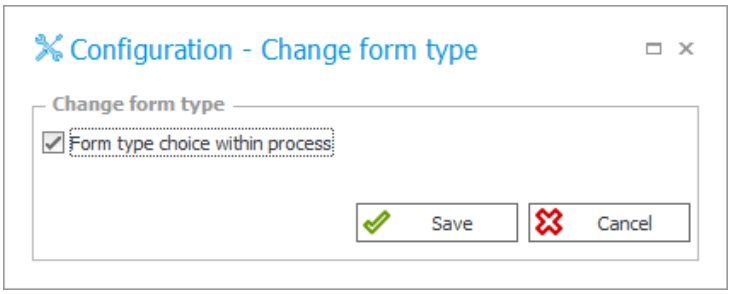
Avatars of people entering a comment are now visible on the form. Those avatars are displayed if the user has a user icon defined in or synchronized with the system.



4.24. Action changing the form type

For "Modern on Portal" processes the action to change the form type is now available.

This action allows to manually change the form type of the workflow instance. Depending on the configuration the change is available within a single process or for all applications available to the user.

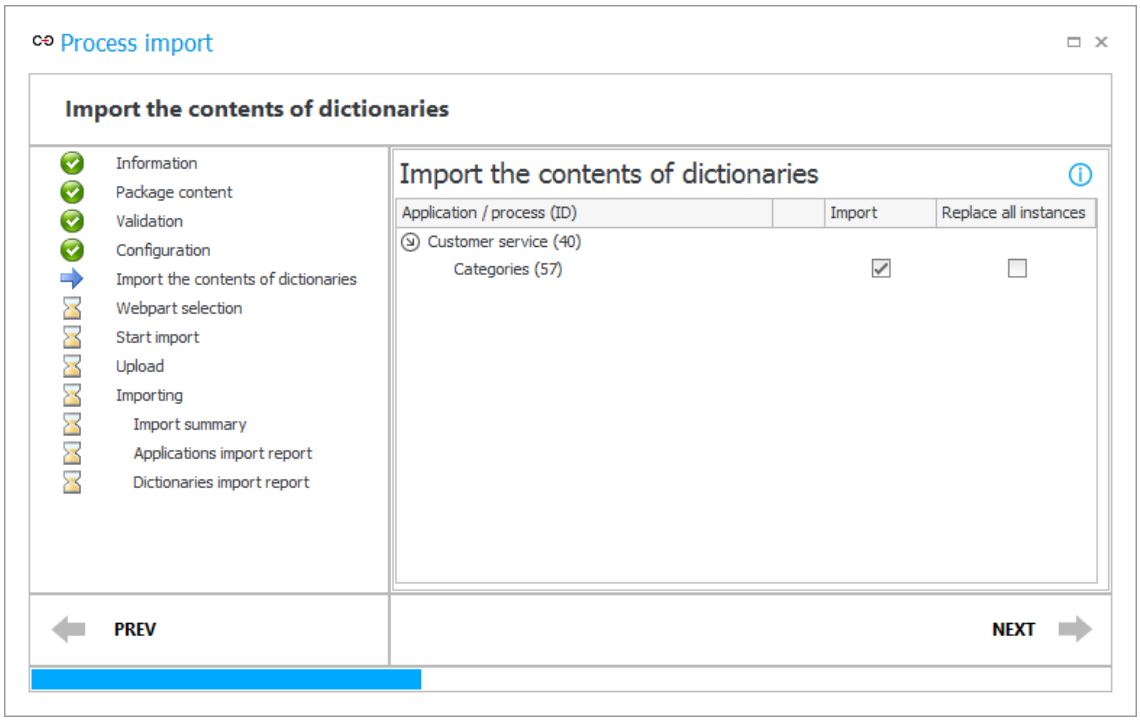


4.25. Import-export of the dictionary process content

Import-Export mechanism was improved with transferring the content of the dictionary and document template processes between DEV/TEST/PROD environments.

During the dictionary or document template processes export it is possible to choose in the export wizard whether to transfer its content together with the process definition. During the import it is possible to select data to import and determine if it will be completely overwritten on the target environment or the import should be incremental (only new or modified dictionary data will be imported). Data import ends with a report containing a summary of the added/modified data in dictionary or document template processes.

Import creator allows to independently move process definitions and the content of dictionary and document template processes.



4.26. Moving import packages larger than 128MB

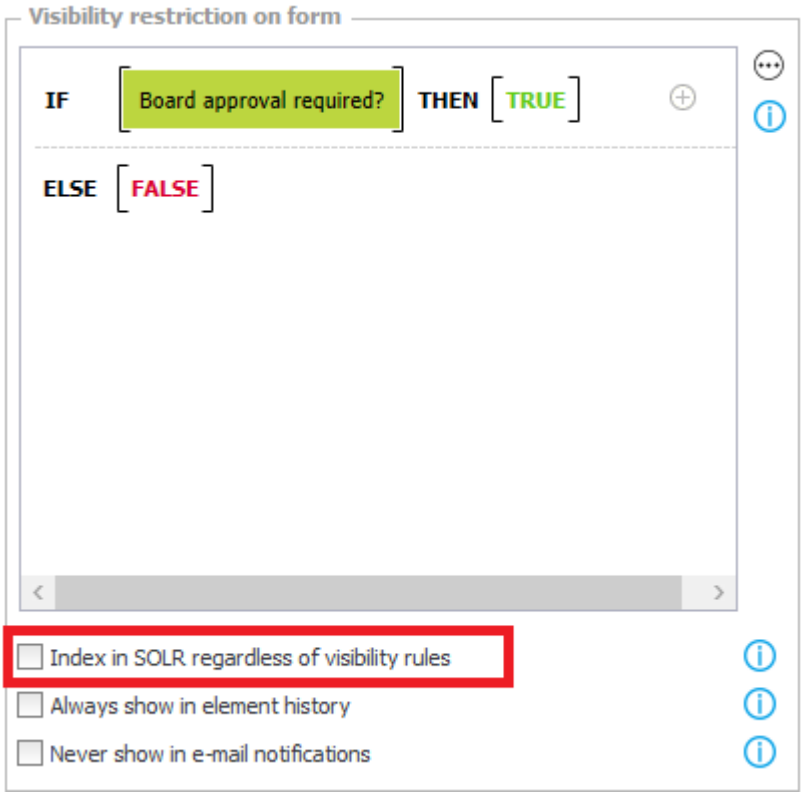
Import-Export mechanism was improved and can now move import packages of size exceeding 128MB.

This change is especially important when importing the content of a document template process which includes many large files.

4.27. Forcing the SOLR indexation for form fields and item list columns with a defined visibility restriction rule

It is now possible to force the SOLR indexation for form fields and item list columns with a defined visibility restriction rule. Due to the need of the system to control the data access, form field and item list column values, for which the rule was defined, are not added to the SOLR index by default. It means that those values are not included in the SOLR search results and cannot be found in the SOLR database.

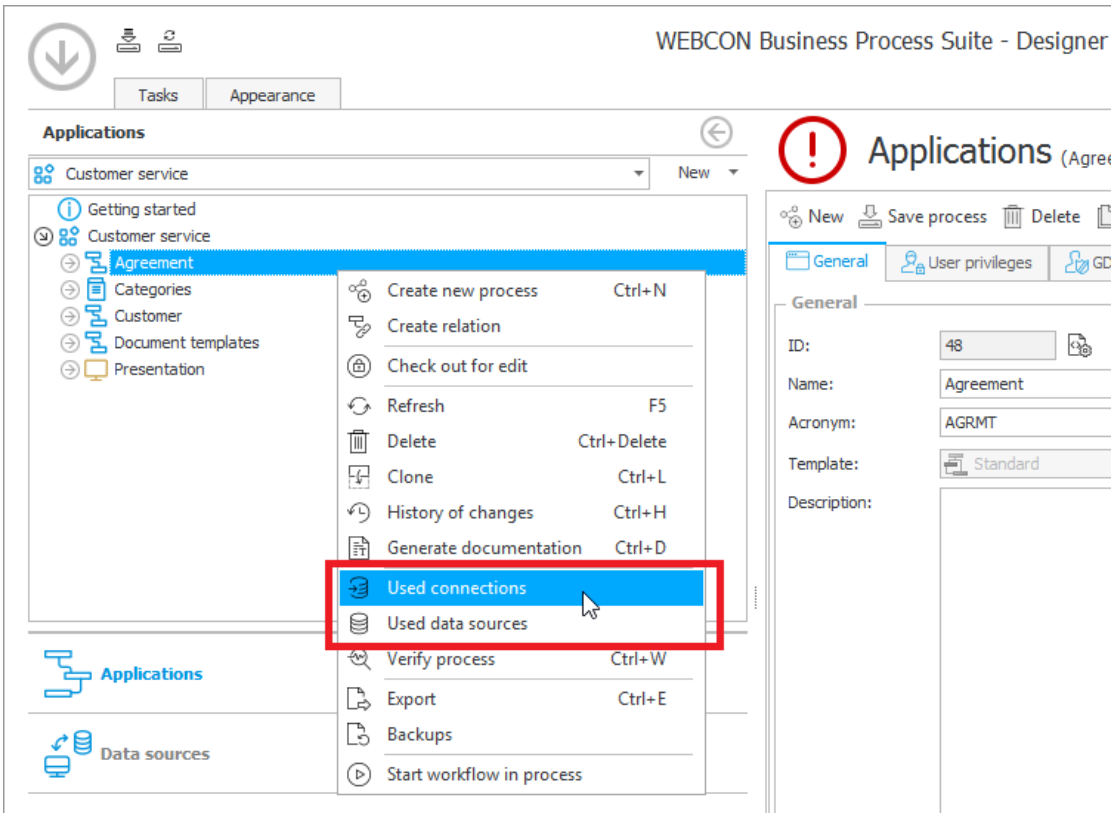
Newly introduced option allows to force the SOLR indexation despite the visibility restriction if the administrator who configures the process decides that the access to the data saved on a specific form field shouldn't be restricted and values can be displayed in the search results to all the users who have proper privileges.



4.28. Displaying all connections and data sources used in the process

A new feature was added in the process configuration which allows to display all connections and data sources used in the process.

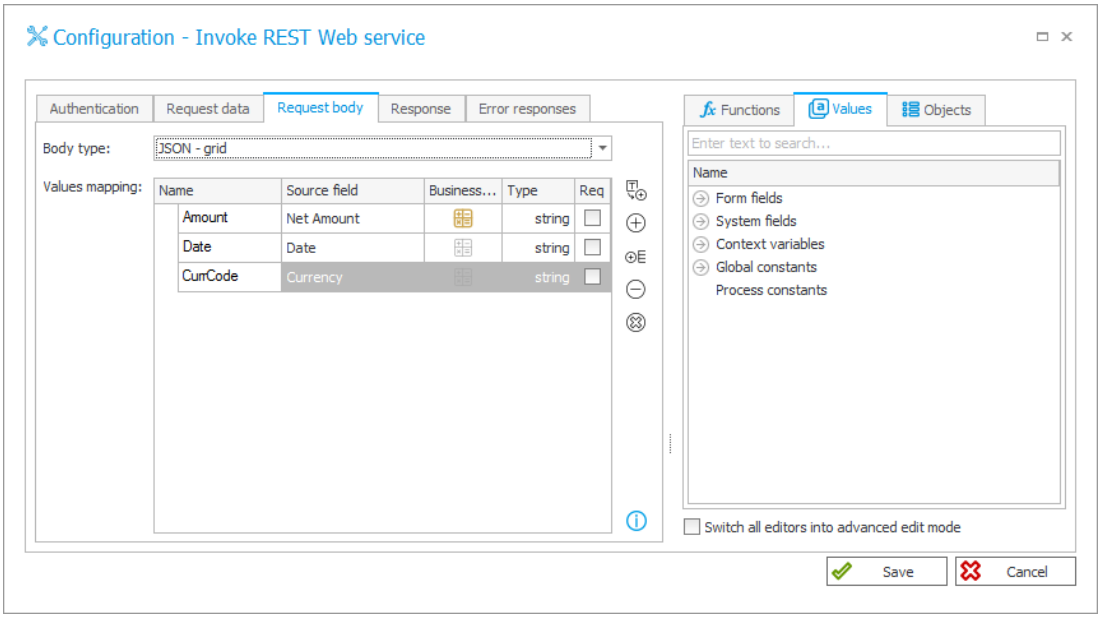
This option is available in the context menu of the process tree in the WEBCON BPS Designer Studio.



4.29. REST action – defining the content of the request as a mapping table

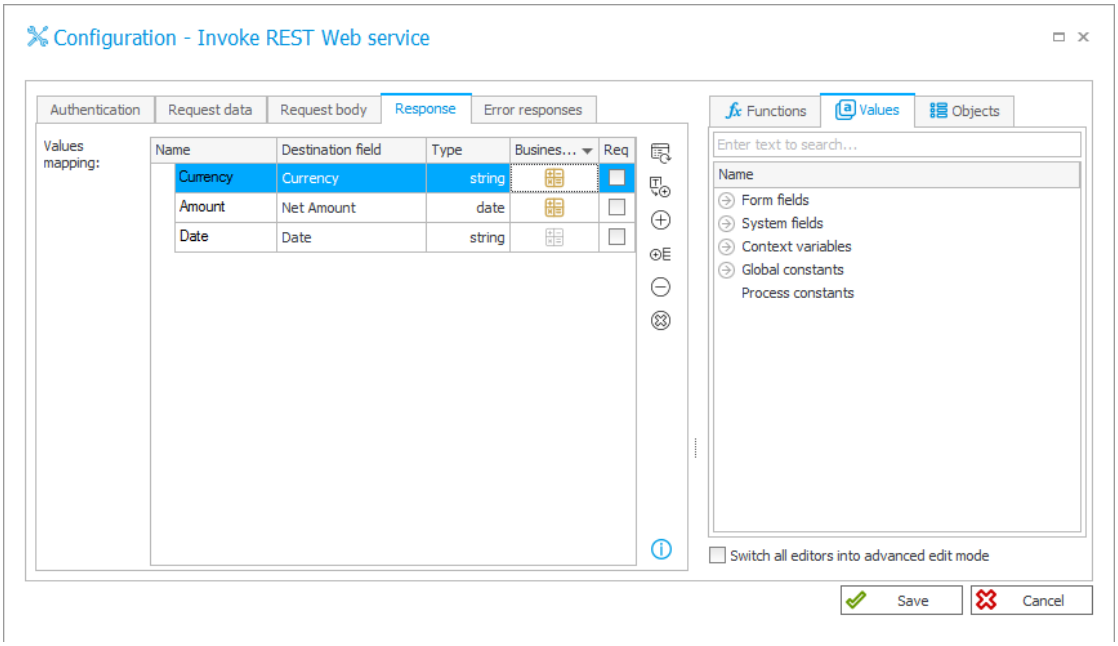
In the configuration of the invoke REST service action it is now possible to define the content of the request as a mapping table (JSON-grid).

JSON-grid table allows to indicate form fields from which the value will be fed to the request. Additionally, for each mapped value it is possible to define a business rule which allows to transform or calculate the value fed in the request.



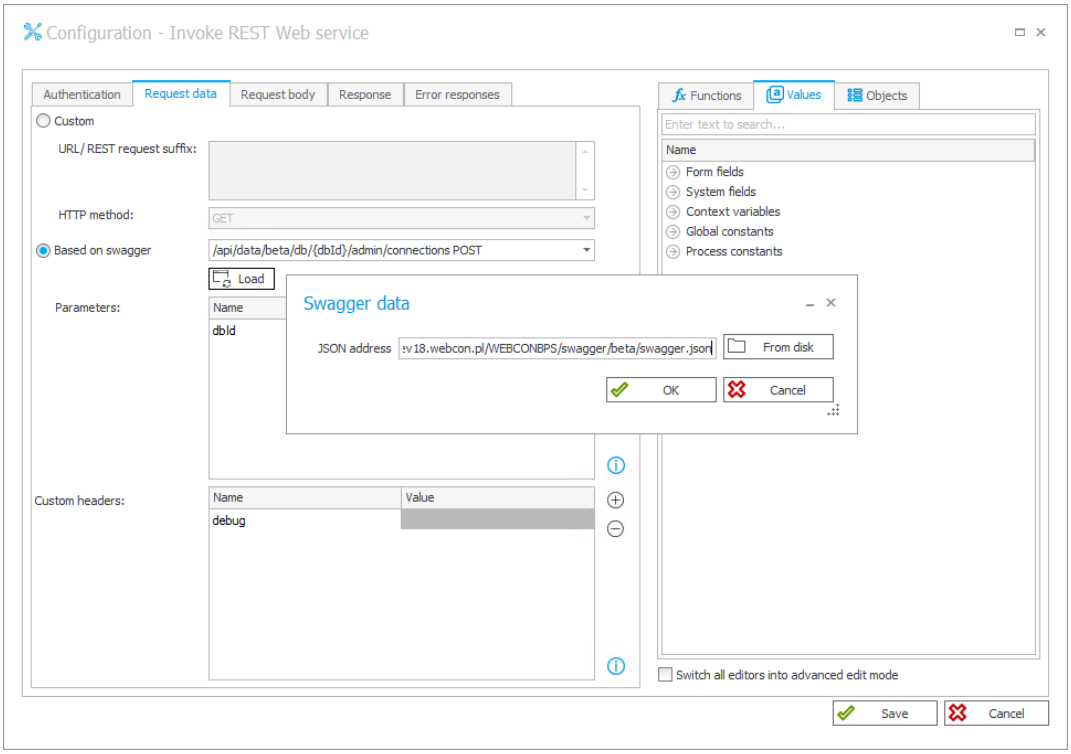
4.30. REST action – defining the data type and business rules

In the configuration of the invoke REST action it is now possible to define the type of data and business rules which transform the value of the Web service response before feeding it to a selected form field.



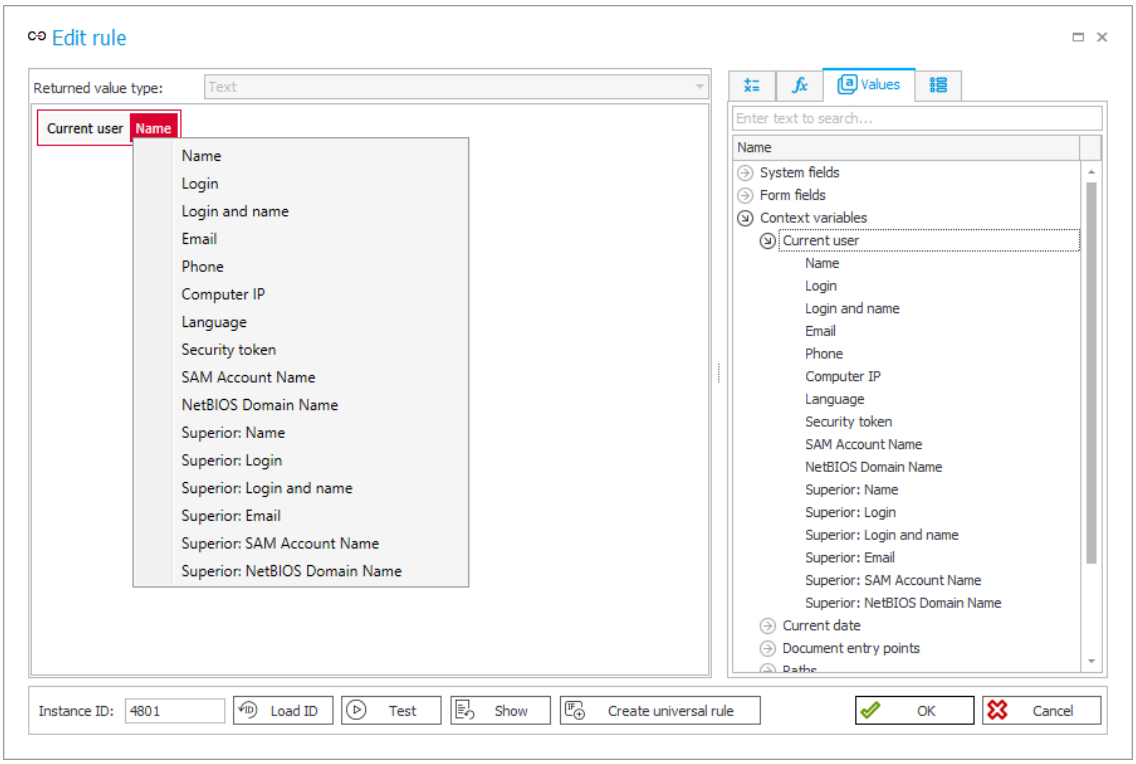
4.31. REST action – using a Swagger definition

In the configuration of the "Invoke REST Web service" action it is now possible to configure a request based on the definition generated by the Swagger tool.



4.32. SAM Account Name" and "NetBIOS Domain Name" variables

For the "Person or group" form field and for the "Current user" context variable, variables "SAM Account Name" and "NetBIOS Domain Name" were added and are available in the graphic and text modes of the business rules. Both variables are available for the users synchronized with the AD.



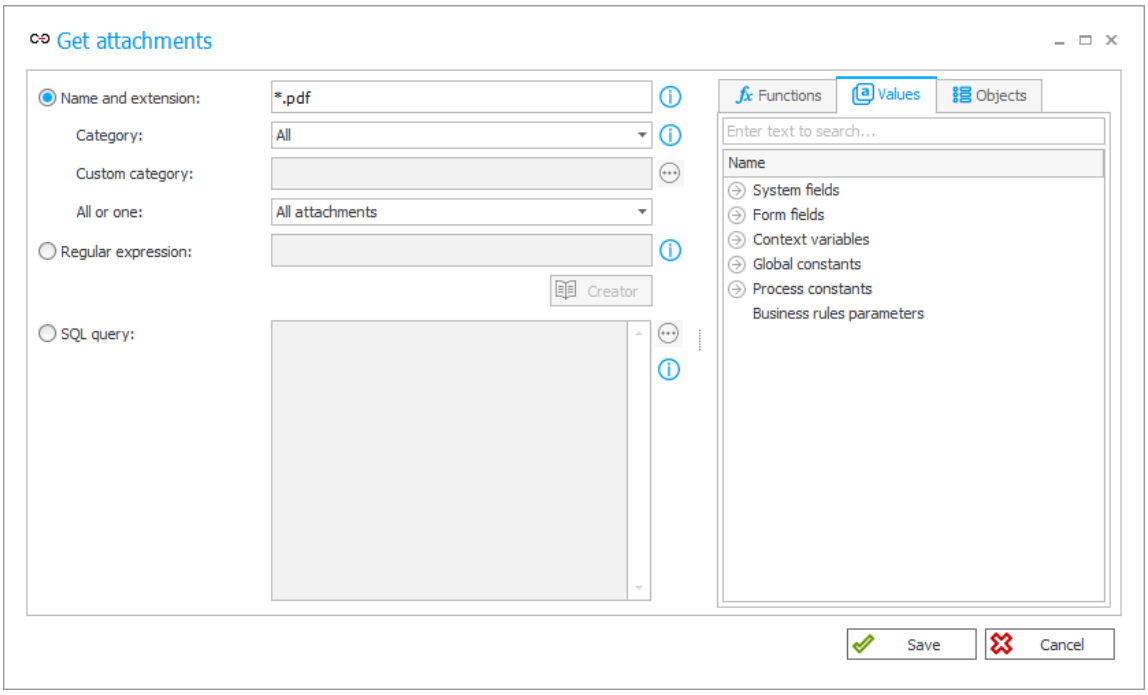
4.33. ATTACHMENTS COUNT function

Business rules can now use ATTACHMENTS COUNT function which returns the number of attachments added to a workflow.

4.34. GET ATTACHMENTS function

Business rules are now enhanced with a GET ATTACHMENTS function which allows to retrieve ID's of the attachments related to a workflow instance.

This function allows to search for attachments based on the name and the extension including categories by using a regular expression or a SQL query.

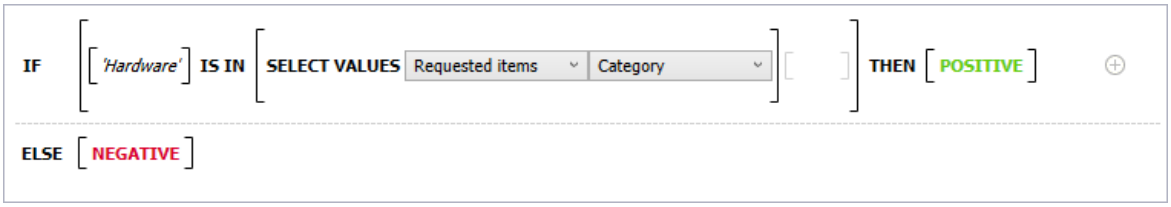


4.35. SELECT VALUES function

The SELECT VALUES function has been added to business and form rules. It allows to retrieve all values from a selected item list column.

The values are returned as a collection of values. In case of form rules, the SELECT VALUES function returns only values visible to the user (values hidden with a business rule or a HIDE COLUMN function are not downloaded and the rows which are not visible because of the acceptance mode condition are not returned). For business rules, the SELECT VALUES function returns both values which are visible and hidden to the user.

In both cases the SELECT VALUES function returns also values which were newly added to the item list without the need to save the form.



4.36. ITEM LIST COUNT and HAS ANY ROWS functions

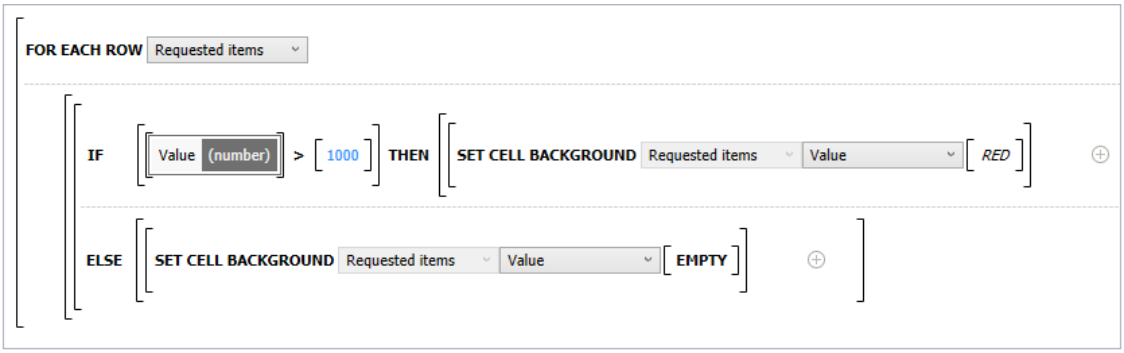
Functions ITEM LIST COUNT and HAS ANY ROWS were added to business rules.

ITEM LIST COUNT function returns the number of rows added to a selected item list.

HAS ANY ROWS function returns TRUE or FALSE depending whether the indicated item list contains any rows.

4.37. FOR EACH ROW function

FOR EACH ROW function which allows to iterate over the item list rows was added to the form rules.



FOR EACH ROW executes a block of operations for all rows of a selected item list. Inside the block you can perform both operations on the currently processed item list row as well as refer to remaining form fields by reading or modifying their values. FOR EACH ROW allows also to use conditional functions changing the appearance of the item list cells and to use all operators available in the toolbox.

Requested item *	Qnty *	Price	Value
Category: Hardware			
Mouse	1	20.00 €	20.00 €
Desktop	1	2300.00 €	2,300.00 €
Monitor	1	400.00 €	400.00 €
Keyboard	1	100.00 €	100.00 €
			2,820.00 €
Category: Software			
Windows 10	1	500.00 €	500.00 €
MS Office	1	1,000.00 €	1,000.00 €
			1,500.00 €
Sum			4,320.00 €

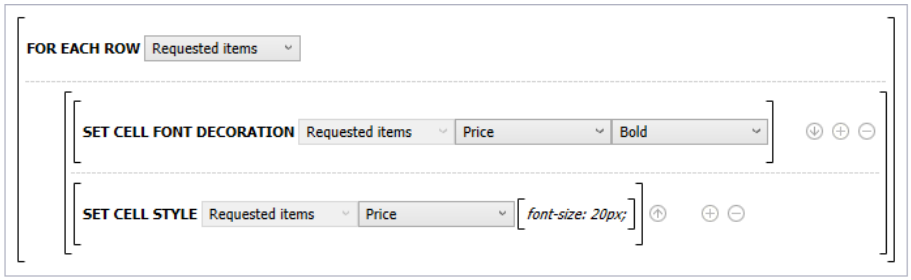
Using an operation block of a function returning a row value from an item list row (i.e. GET ROW VALUE) or a form field value interrupts the execution of the current block and starts a block execution for the next row of the list.

In this case FOR EACH ROW function will return a value collection consisting of values returned from following blocks.

4.38. Functions allowing to define the appearance of the item list cells

Form rules were enhanced with new functions which allow to define the appearance of the item list cells.

- **SET CELL FONT COLOR** - changes the font color in the item list cell
- **SET CELL BACKGROUND** - changes the background color of the item list cell
- **SET CELL FONT DECORATION** - sets one of the styles "Italic", "Bold", "Underline" for the font in the item list cell
- **SET CELL FONT SIZE** - sets the font size in the item list cell
- **SET CELL FONT FAMILY** - sets the font in the item list cell
- **SET CELL STYLE** - allows you to set a custom CSS style for the item list cell



Requested item *	Qnty *	Price	Value
Category: Hardware			
Mouse	1	20.00 €	20.00 €
Desktop	1	1,000.00 €	1,000.00 €
Monitor	1	400.00 €	400.00 €
Keyboard	1	100.00 €	100.00 €

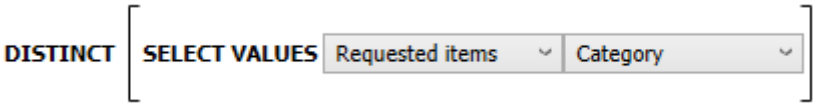
This function can be used in form rules executed on value change, in the item list column, and within the FOR EACH ROW function.

4.39. Functions which allow the user to operate on a value

Business and form rules were enhanced with new functions which allow the user to operate on a value collection.

- **SUM** - Returns the sum of all values in the collection
- **AVG** - Returns the average of all values in the collection

- **MAX** - Returns the largest value in the collection
- **MIN** - Returns the smallest value in the collection
- **COUNT** - Returns the number of values in the collection
- **DISTINCT** - Returns a set of unique values in a collection.



4.40. SET FOCUS function

Form rules were enhanced with a SET FOCUS function which allows to set focus on a specific form field displayed on the Modern form.

4.41. GET AT INDEX function

Business rules and form rules were enhanced with a GET AT INDEX function which allows to retrieve values from a value collection.

4.42. Text transforming functions

Business and form rules were enhanced with new text transforming functions.

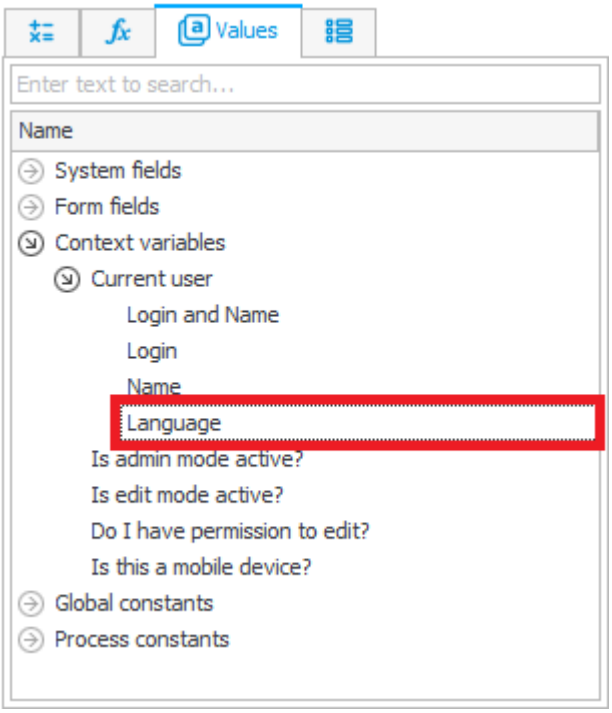
SPLIT - breaks the provided text into parts according to a specified separator. Split text is returned as a collection of text values.

CONCAT - combines multiple text values into a string.

SUBSTRING - retrieves a fragment of a specified length from the provided text, starting from the specified character.

4.43. Variable interface language code

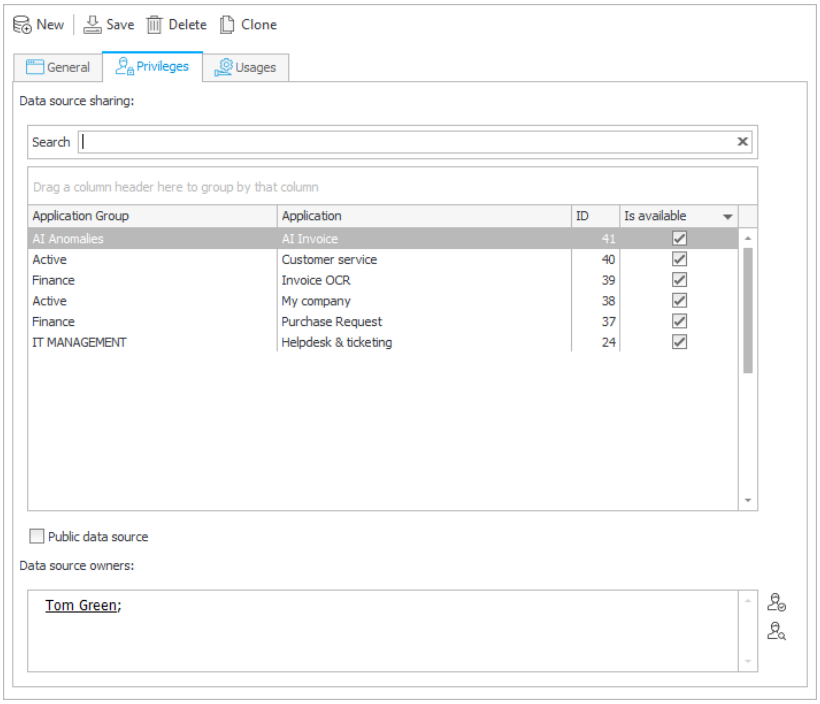
Form rules were implemented with a variable which allows to retrieve the language code in which the form is currently displayed.



4.44. Data source and connection owner

Data source and connection configuration were enhanced with the option to define its owners and define their availability for applications.

System administrator and the owner of the data source/connection has privileges to modify its configuration and determine if the data source/connection is available publicly for all applications or only for selected ones. Data source/connection shared with applications can be used by users with Application administrator role.



4.45. REST API extension

The REST API interface was improved with methods that allow to handle global and process constants. Appropriate methods are available in the API beta.

/api/data/beta/db/2/admin/connstants

/api/data/beta/db/2/processes/{idguid}/admin/connstants

4.46. REST API 3.0

REST API 3.0 was created. It contains all methods available so far in the REST API Beta.

5. Bug fixes

[General]

- Fixed a documentation generation bug for rules which included STP_ID column.
- Improved the method of checking privileges required to download the list of available domains in the AD users list synchronization configuration. Currently both the domain and OU lists are downloaded in the context of the user on which the synchronization will be performed (user is defined in the synchronization configuration on the installer or WEBCON BPS Designer Studio levels).
- Fixed an import-export mechanism error related to the transfer of the usage of the global rules parameters.
- Fixed a WEBCON BPS installer error which caused a lack of proper administrator rights to the Designer Studio and Portal.
- Fixed a bug caused by the use of the "{" sign in custom source configuration.
- Improved the attachment database selection during import.
- Fixed a migration error which prevented from loading the IIS application creation step.
- Fixed a bug in the import-export mechanism which caused a global constant from another process to be found by it.
- Fixed a bug in the display of the business rule preview.
- Fixed an OCR verification error which prevented from learning on a form in the Classic mode.
- Fixed an appearance editing error in the advanced mode in the WEBCON BPS Designer Studio.
- Fixed an error occurring when deleting too many workflow instances by using the administration tools in the Designer Studio.
- Fixed the editability rule (SQL COMMAND) on the item list of the Classic form.
- Fixed a bug in the address override function in the mass notification configuration for the Standalone installation.
- Fixed an issue that would sometimes prevent correct SOLR reindexation.
- Added improvements to the SOLR login window in the WEBCON BPS installer that is displayed before updating the SOLR database structure. Also added validation for the user and password in the context of which the scripts will be executed.
- Fixed an issue with the script updating the SOLR database structure. This error would sometimes prevent data from being loaded from the SOLR database when updating the system from version 2019 to 2020.

[Portal]

- Fixed the visibility of import/export buttons depending on user privileges.
- Fixed the display of the validation/comment error message in the view mode.
- Fixed the display of a required column on the item list.
- Improved the substitutions mechanism, now the system administrator can set himself as a substitute.
- Fixed an error preventing from sorting the report by a calculated column.
- Fixed a bug which caused the user without appropriate privileges to see technical form fields in the search structure.

[Modern form]

- Fixed an error which occurred when setting dependency of one form field by the other when both are using different data sources.
- Fixed a data source error of dictionary processes and document templates which caused the dependent choice field not to set properly.
- Fixed the choice field validation mechanism and the way it sets target fields in the form edit mode.
- Fixed the message prompt appearing when moving along a path where the task is configured to be assigned to any user, but this person needs to be provided in a specified field on the form.
- Fixed a bug related to uploading a translation package and setting the Portal language to Chinese.
- Fixed an error which occurred on an action configured on the menu button with displaying a notification before execution and when the prompt appeared the cancel button was chosen.
- Fixed a SET VALUE rule on value change error.

[Processes]

- Fixed an error where there was no match for the user in the "Administrator" field when creating a new application.

[Form fields]

- Fixed the "Test" button on the configuration window of the data source which uses a view. Its use will now mark the data source whose returned columns have changed from the previous configuration.

[Actions]

- Fixed a user synchronization mechanism error which caused a lack of required entries.
- Fixed a OCR learning error if teaching was performed on a field with active block merging which were on different pages of the document.
- Fixed an error in the "OCR AI recognition" action caused by using a single quotation mark " ' ".
- Fixed an issue that occurred when saving the configuration of a SOAP action. This error would cause an unintended GUID changes in the chosen WSDL library.
- Fixed an error which caused the documents to get stuck in the OCR AI verification queue due to an excessively long time of transitioning the path.
- Fixed a barcode printing action error which caused it to take long and timeout.
- Fixed an import-export mechanism error which prevented from transferring the process from PROD to DEV environments.
- Fixed an error of the "Read data from an Excel file" action which occurred when trying to add an attachment but the category had a translation.

[Data sources]

- Fixed a bug which caused the process list in the BPS source configuration not to refresh after moving a process from one application to the other.
- Fixed a bug which occurred when migrating from WEBCON BPS 2017 to 2019 which caused errors on BPS data sources.
- The content of the user list synchronization logs was corrected and additional information regarding it was provided under the (i) icon.

[Plugins]

- Fixed an Outlook Add-in error which was related to the selection of a workflow where a form field using a SharePoint list was located.
- Fixed a bug which caused the basic configuration of the “Date and time” form field to be ignored if it was customized.
- Fixed an issue that would prevent variables used in custom data source configuration from being updated.

[Web Part]

- Fixed the display of the vacation diagram on the Gantt chart.

- Fixed a bug caused by importing the same process, application or presentation to another base of the same environment and added a mechanism protecting against this situation.
- Fixed the display of the Web Part responsible for process starting.
- Filters on reports have been fixed.

[Mobile app]

- Fixed the display of the version for the Google Play application. Also fixed an error which caused profiles to remain on the device after uninstalling the application as well as the error which prevented from logging in after adding a new profile.
- Fixed an iOS application bug which caused an error code 500.
- Updated the PUSH certificate for mobile devices using iOS.

[Service]

- Fixed a bug which caused entry duplication for the same user in a specified group.
- Fixed a user synchronization error caused by setting a distant date in the "Account expires" parameter.
- Fixed an AAD synchronization error on environments with many on-premise AD groups.
- Fixed a HotMailBox and HotFolder issue caused by a too long path and attachment name.
- Fixed a substitution replacement bug which occurred on databases where this function was disabled.