# WEBCON BPS 2021 R3

## history of changes for version 2021.1.3.163

## Before upgrading WEBCON BPS

- 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.
- If the changelog contains a section titled "Changes to existing features", please verify whether the changes will impact your implemented system in any way.
- Changes introduced in this version will break the compatibility of the Export-Import mechanism. Exported process packages created in versions 2021.1.2.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.
- From version 2021 R3, WEBCON Designer Desk requires an active dedicated Designer Desk CAL license.

  After updating the system, it will not be possible to use WEBCON Designer Desk without active licenses.
- Manually stopping the java.exe or jstack.exe process may be required while updating the system.
  - This operation is necessary to update the Java libraries' version.
- The latest system version requires the FineReader 11 component in version 11.1.19.72.
  - Before upgrading the system, make sure that the appropriate version of FineReader 11 is installed. If not, upgrade FineReader 11 the minimum version

can be downloaded from: https://community.webcon.com/downloads/abbyy\_2021.zip.

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.

Depending on the size of the SOLR database, this update may take some time.

### Changes to existing features

#### [General]

- The name of a variable representing the form field database identifier was changed from DB-ID to DB-Field ID. The operation of the variable remains unchanged.
- The method of adding texts containing configuration translations (e.g. form field names) to the SOLR search database has been altered. Currently, when placing configuration values in the SOLR index, text in the language resulting from the application language settings is added. Updating the values of elements already in the SOLR database requires manual re-indexing of the database.

#### [Portal]

- The operation of the Import-Export mechanism has been altered in the case of data from reports dedicated to dictionary and document templates processes. Currently this action is only possible for Process Business administrator or Global Business administrator.
- The design of the check-boxes used in the system configuration (reports, start buttons, dashboards, etc.) has been altered.
- Improved the BPS ID validation of local groups after their update. From now on this validation will only be performed when creating new BPS groups.
- For all newly created application reports, the default option for the number of lines displayed per page will be set to "Dynamic".
- The design of the step icons displayed in the application reports has been changed.

- Two predefined color themes have been introduced: "WEBCON Dark" and "WEBCON Light". Based on those predefined themes you can create your own color themes for WEBCON BPS Portal (after cloning the original theme), however the basic themes are not editable. When migrating to the latest version of the system, previous Dark and Default themes will be replaced by the "WEBCON Dark" and "WEBCON Light". If Dark or Default themes were previously modified by the system administrator, during the migration they won't be overwritten. "WEBCON Dark" and "WEBCON Light" themes will be created independently.
- The operation of substitutions created by service has been altered. They now present the display name not the user login and their behavior has been made uniform with the substitutions created by the Portal.

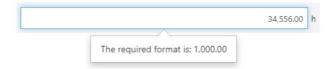
#### [Applications]

- The method of creating filters in application reports was changed when the range filter and the value filter are set at the same time. Currently, when such a filter configuration is used, the engine will generate a filter query in the [Value from the value filter] AND [Value from the range filter] form.

  In other cases, the method of creating a query remains unchanged.
- In the case of a large number of views defined in the application report, a scroll bar will always be visible in the view selection window.

#### [Modern form]

The behavior of the "Floating point" form field with the amount formatting set has been altered. Currently, the entered numerical value is verified in terms of correct formatting while typing. The system blocks the entry of characters other than digits, the decimal separator character or the minus sign.

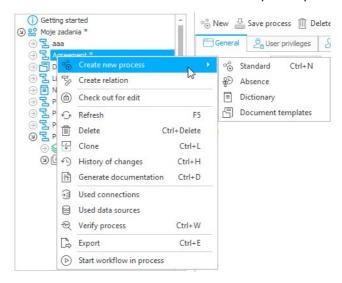


When changing the form type from Classic to Modern, information that the filter "Dynamically defined person by login" of the "Absence chart" form field is no longer supported was added. To maintain functionality, the "Dynamically defined person by ID" field has to be configured.

#### [Designer Studio]

The behavior of the Import-Export mechanism in terms of transferring the companies' definitions when importing a process template has been altered. Currently when importing process as a template, the definition of the companies which are not directly related to the imported process is not transferred.

In the process tree context menu it is now possible to choose creation of absence processes, dictionaries and document template processes.



#### [Form fields]

- The rules for setting form fields related to a choice field have been changed after entering a value to a choice field.
  - Values in the choice fields are stored in the ID#Name form. The value in the choice field can be set in several ways: as a default form field value, as a value entered on the form, by the "Change value single field" action, and by the initialization of the item list (for choice item list columns).
  - Currently, when entering an ID (no name) or Name (no ID) to a choice field form fields related to this field will always be set to the indicated source value. If the choice field is set to a value in the ID#Name format, the behavior depends on the context of the invoke.
  - For the form field whose default value is ID#Name, related form fields will not be set. If the value of ID#Name is entered in a different way (entered by a user, changed by a rule, changed by an action), related form fields will be set. For the item list whose default value is ID#Name or the item list initialization value is ID#Name, related form fields will not be set. If the value of ID#Name is entered in a different way (entered by a user, changed by a rule), related form fields will be set.

#### [Actions]

- The "Start workflow manually" action has been altered. Additional configuration is currently entered via TextUrlEncode, instead of the SQL mode.
- User list synchronization mechanism used to handle the mapping of the additional fields downloaded from AD/AAD has been modified. Currently, such property names must contain the initial phrase 'extension\_'.

The number of available COS\_ExtensionAtrribute fields has also been extended from 15 to 30.

E-mail notification sending action behavior has been altered. Currently if a given user is entered as CC, he will always receive the e-mail as CC even if

there are no direct TO recipients (e.g. because of BPS language settings).

The address validation behavior on Modern form when using a "Hyperlink" action configured to transfer to another site within the same root domain has been modified. Currently validation is disabled.

#### [Service]

Added a function of removing <u>only</u> successful or finished with error entries in the WFElementTimeouts table during maintenance hours. Elements older than 30 days will be purged.

#### [Designer Desk]

The list of people that can be selected in the "Person or group" form field used on the WEBCON BPS Designer Desk form has been limited. The list was limited to the immediate supervisor, direct subordinates and the user who launched the prototype.

### Information

#### [General]

- Updated a version of the SOLR search engine to 8.8.2 and a version of Java libraries to 16.0.1. This change introduces the latest performance and security improvements of those components. Because of this update, it is recommended to re-index the SOLR database the process depends on the database size and can be time consuming.
- Swagger component version has been upgraded. This change introduces the latest security fixes for this component.
- The [WFD\_lsFax] and [WFD\_ActionTime] columns have been removed from the WFElements and WFHistoryElements tables. The columns were not used in the system.
- The following functions has been added to the Archive database structure: ClearWFElem, ClearWFElemAdv, ClearWFElemAdvLanguage, ClearWFElemExt, ClearWFElemID, ClearWFElemIDAdv, ClearWFElemIDExt, ConvertToSafeDecimal, FormatDecimal, GetDateFromSubColumn, RemoveDiactrics, Split, SplitToTable.

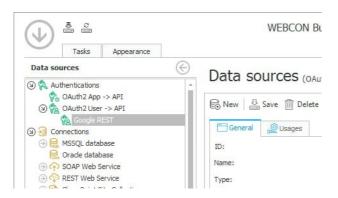
### New features

#### [General]

Introduced the ability to use OAuth2 authentication in the context of a current user when invoking REST services of external applications.

The first element of the introduced solution is the ability to define the configuration for "Authentication" in the OAuth2 standard – available from the level of WEBCON BPS Designer Studio in the "Data sources" tab.

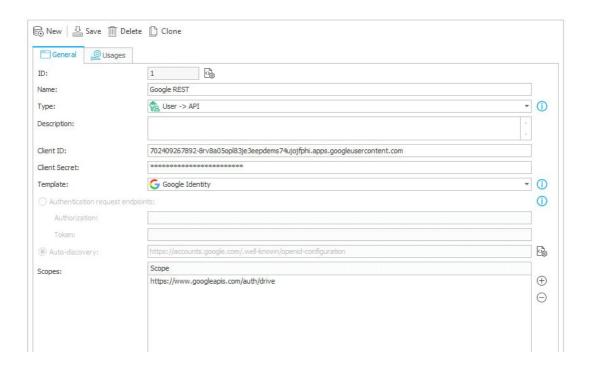
Two types of authentication can be defined: User -> API which allows you to operate in the context of the currently logged in user, and App -> API which allows you to communicate with an external system as an application.



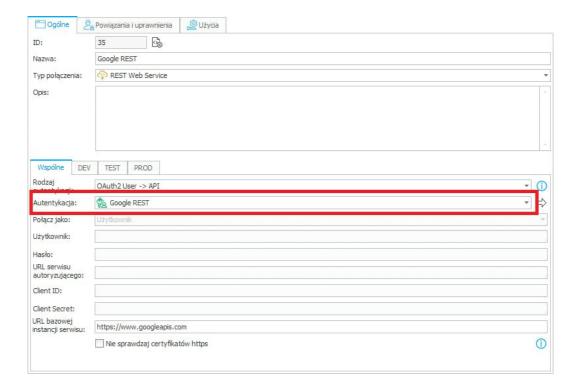
In both cases, the configuration allows you to enter the appropriate Client ID and Client Secret parameters, and URL addresses to which the authentication requests will be directed. Addresses in "Authentication request endpoints" can be entered in two ways:

- 1. By directly entering these addresses: address for authentication, address for obtaining a token.
- 2. If the identity provider provides an auto-discovery document following the Open ID Connect standard (Discovery document in JSON format), you can enter the URL address of this document in the configuration. Then, addresses related to this authentication will be downloaded from this file.

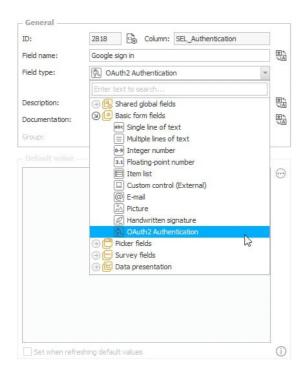
In the case of User -> API authentication, you can provide one of the predefined configuration templates. Currently, there are two predefined identity provider templates – Google Identity and Microsoft Identity. If you select the template, there is no need to enter the invoke addresses. They will be automatically loaded based on the Discovery document provided by Microsoft or Google identity platforms.



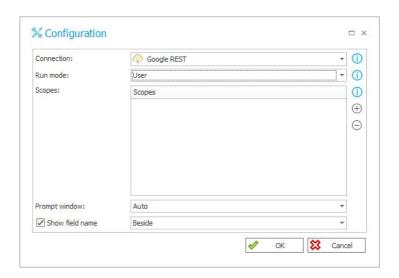
The created Authentication configuration can be used in REST connection definition and then in actions or data sources using this connection.



Another element is the "OAuth2 Authentication" form field that allows a user working on the form to log in and obtain an authentication token from an external system. The token is necessary for the correct communication of REST services.



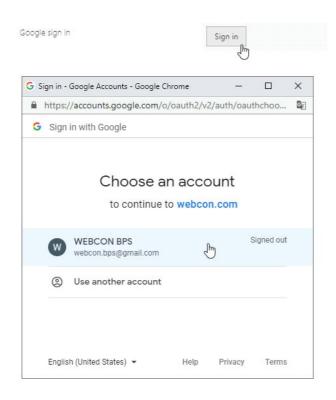
In the form field configuration, indicate the type of authentication.



Additionally, it is also possible to define additional scopes of privileges. The list of scopes set in the form field configuration overwrites the scopes defined in the authentication configuration. When defining scopes, remember to include all scopes required for proper operation in actions or REST sources. If several REST actions with different required scopes but working on the same connection are running, specify the sum of these scopes in the form field configuration. If the authentication on the selected REST connection is defined based on the template (e.g. Microsoft or Google), then during authentication two necessary scopes will be added to the configured list: profiles and email.

The "OAuth2 Authentication" form field can work in three modes: User, JavaScript, and User + JavaScript.

In the User mode, the form field displays a button that allows a user to log into the configured authentication provider and then shows the user an appropriate status. In this mode, operation from the level of Form rules (or JavaScript) is limited – it is possible to invoke the authentication process with the Authenticate rule, but it is not possible to download an access token obtained in this process from the JavaScript level.



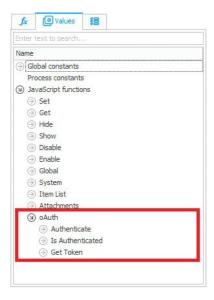
In JavaScript mode, the button for the form field is not displayed. However, all Form rules (and JavaScript) work, including the GetToken rule that allows you to programmatically download an access token obtained during user authentication.

User + JavaScript mode is a combination of the above two. All functionalities of both modes are then available.

The last elements are AUTHENTICATE functions available for form rules operating in the Form rule mode,



and the Authenticate, Is Authenticated, Get Token functions available for form rules in JavaScript mode.



The functions allow you to log in to the indicated user account, verify the status of this operation, and obtain the access token.

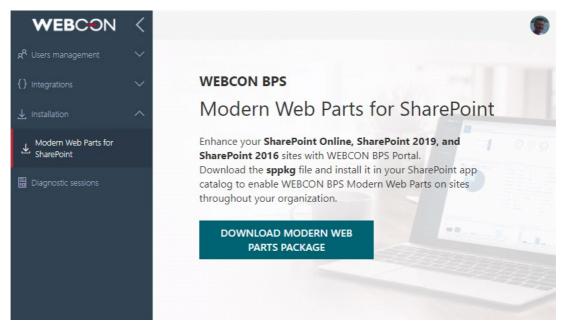
All described configuration elements allow you to handle most business scenarios when the integration with an external system using a user account and the OAuth2 standard is required.

#### [Portal]

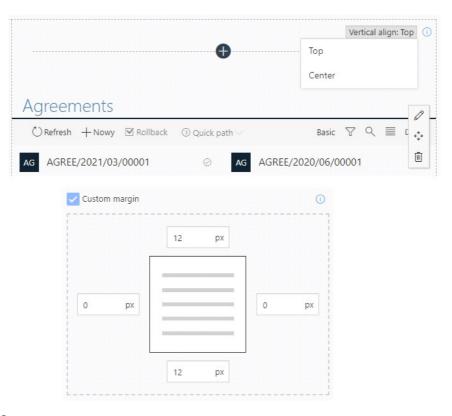
Added a new start page of WEBCON BPS Portal administration panel.



It is now possible to download the Modern Web Parts installation file directly from the WEBCON BPS Portal administration panel.



- The color themes of WEBCON BPS Portal now include an option to specify colors of the background displayed below the system logo.
- Configuration of the appearance of application dashboards has been enhanced with the option to set vertical alignment of the embedded elements. This configuration is available to each dashboard column and elements placed in it can be centered or aligned to the top. Additionally in the configuration of each element embedded in the dashboard it is possible to define custom margins, which results in setting any displacement of the dashboard element in relation to other elements.



#### [Applications]

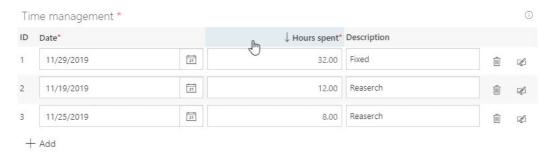
1 The option to block a header displaying calendar days was introduced in

absence chart reports. The header is always visible when scrolling the page content.

This feature is not available in Internet Explorer.

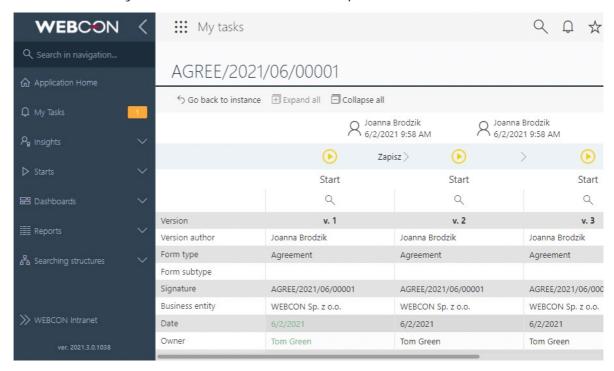
#### [Modern form]

The item list was improved with manual sorting of data saved in the list. Sorting can be set by the user on any column: ascending, descending or default (according to the configuration settings of the item list).

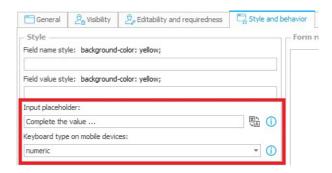


In the instance history view the header displaying steps has been docked in such a way that it is always visible when scrolling the page.

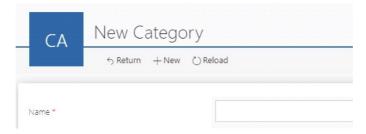
This functionality is not available in Internet Explorer.



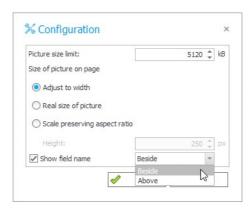
For text and numeric form fields and item lists' columns it is now possible to define a placeholder text which is displayed when the form has not been yet filled with a value. Additionally it is possible to define the style of the screen keyboard displayed on mobile devices when entering values.



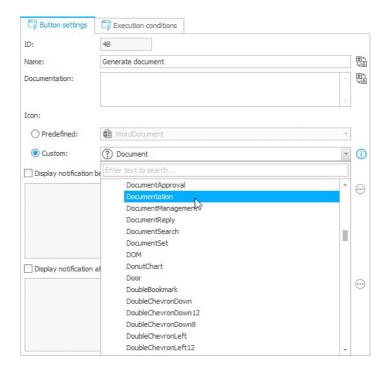
Information about the form type was added to the form for newly registered instances. Form type name is displayed where the instance number is visible after registering the instance in the system.



It is now possible to change the location of the image type form field's name. Configuration which includes "Next to" or "Above" options is available in WEBCON BPS Designer Studio.



List of custom icons for the menu button on the Modern form has been expanded.



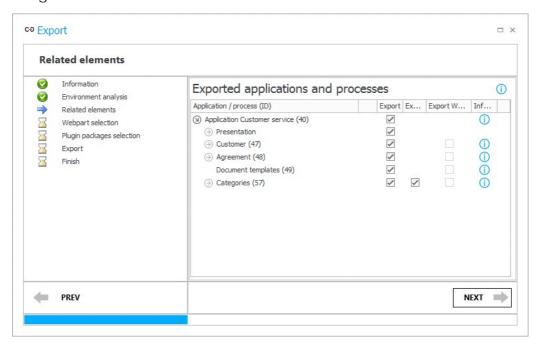
#### [Designer Studio]

The engine of the Export-Import mechanism has been changed. Changes increase the efficiency and speed of the entire mechanism. As a result of the modification, the time needed to environment analyze during the export and import of a package was reduced, and thus the total time needed to transfer the application configuration to the target environment.

The mechanism of creating a mapping list and presenting connections between processes has been completely changed. This eliminates problems that appear if a user unchecks part of the definition of the transferred application in the list of imported elements.

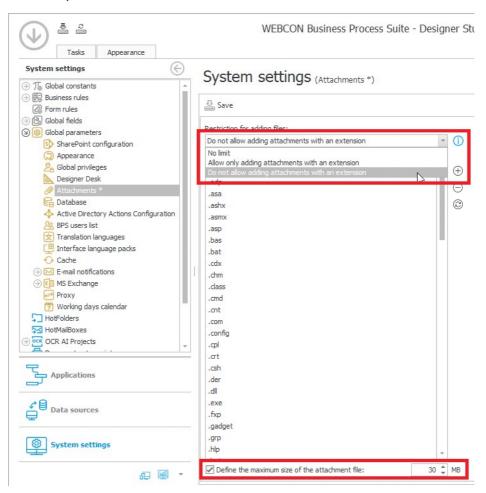
Increased the scope, detail of information, and method of logging operations in the diagnostic mode.

All changes were introduced with the same user interface.



It is now possible to define a list of attachment extensions which can be entered into the system by users. Configuration of allowed or disallowed extensions is available in the System settings -> Global parameters -> Attachments tab. The

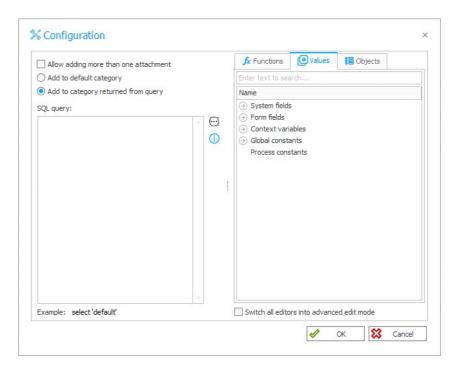
default setting allows to add attachments with any extension. The configuration also allows to set the maximum size of the attachment. The list of available extensions is defined globally for all processes. The maximum size of the attachment however can be independently defined globally or only for selected processes (Process -> Settings -> Maximum attachment size).



- In the starting elements' context menu in WEBCON BPS Designer Studio it is now possible to choose the type of the form if the workflow has more than one form type defined.
- The shortcut of the context-sensitive opening of the configuration (CTRL+G) has been improved with the possibility to provide an instance link and a quick transition to the configuration of the process to which this instance belongs.



The option to use the expression editor displayed in a new window was added to the configuration of the "local attachments" and "related attachments" type of item list columns.



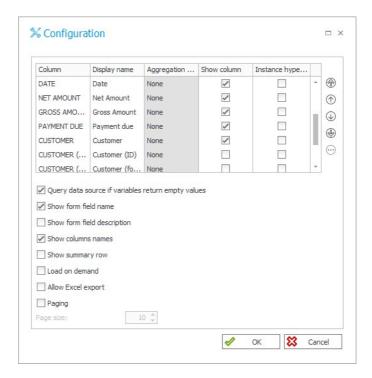
In the graphical rule wizard, information about the type of rules in use has been added to the tooltip.



A visual marking of inactive actions has been added to the configuration usage search tree. The name of an inactive action is displayed with a gray background.



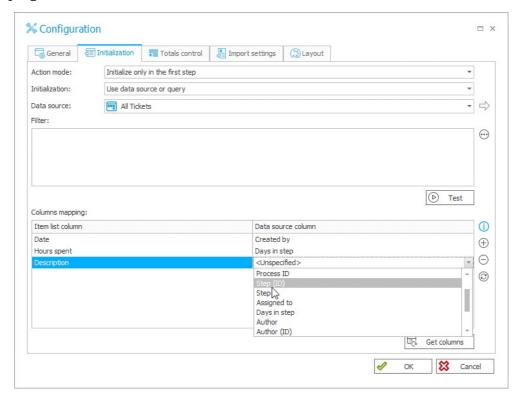
In the configuration of the "Data table" and "Data row" form fields it is now possible to move the visible columns to the top or bottom of the list. Additionally after saving the configuration the list of available columns will be sorted so that at the top of it columns marked as visible will be placed.



The ability to remove a SOLR index has been added for an instance from the WEBCON BPS Designer Studio level.

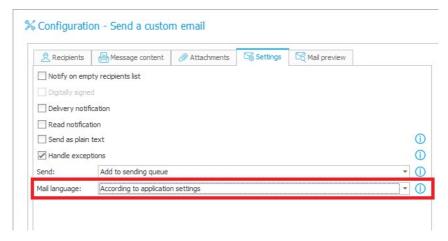
#### [Form fields]

The configuration of the item list initialization and the action of changing the value of the item list has been expanded with the usage of any data sources. As a part of the extension it is possible to filter data source and set mapping between the source and item list columns in order to specify the method of supplying the item list with the values from the source.



#### [Actions]

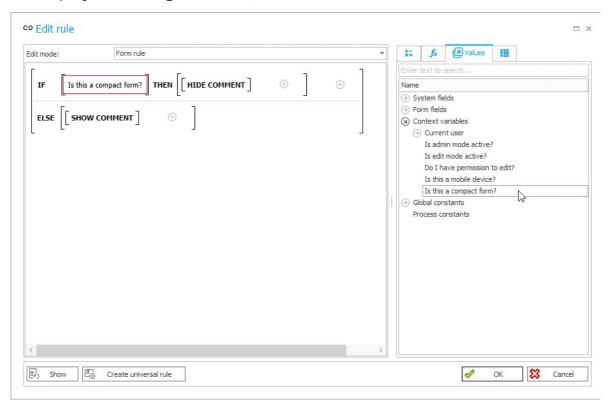
The option to set a language of the e-mail content was introduced in the "Send a custom e-mail" action. The configuration allows you to select the application language or a specific translation language.



The option to use the flag "Works elsewhere" has been added to the action of adding an Exchange calendar entry.

#### [Rules]

In the Form Rules functionality a variable has been implemented which returns information whether the form is displayed in the compact mode (all form fields are displayed in a single column).



#### [Data sources]

The functionality of the REST data sources has been extended. As a part of the extension it is possible to load the service definition based on the data from Swagger, define request and response as a table. The support for nested collections and objects not being collections was also added.

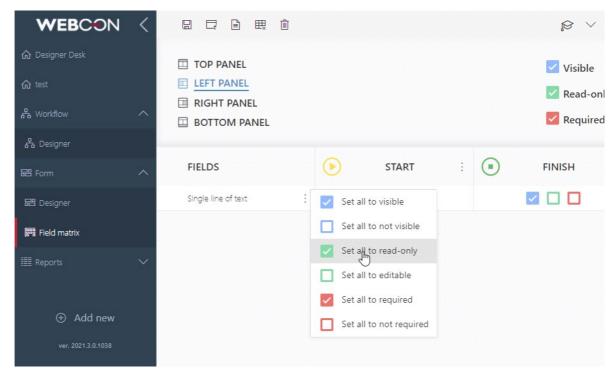


#### [Plugins]

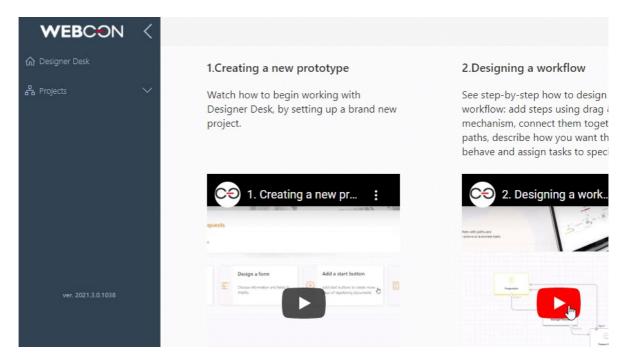
It is now possible to install add-ons for Microsoft Word and Microsoft Outlook from the Microsoft Edge browser.

#### [Designer Desk]

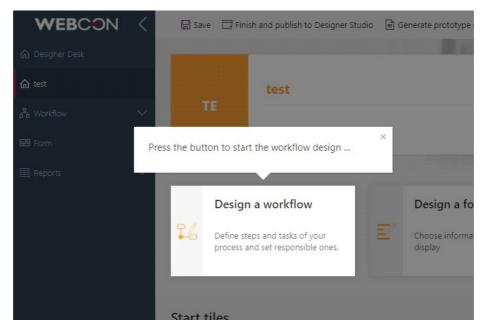
New functions have been added to the WEBCON BPS Designer Desk. As a part of this extension, the information available in the field tooltips was extended with a detailed description of conditions provided in the configuration, prototype start buttons were simplified, the option to configure the question and answers list of the survey field was added, the display of system columns and the context menu on the form field matrix were added also.



Added video tutorials that present the process of creating application prototypes.



Introduced the option to use a tutorial that will help the user create the application prototype.



#### **API**

- Public REST API has been expanded. As a part of the expansion methods were introduced to download information about configured reports, views and dashboards, and to download list and companies' metadata. Information about the step type has also been added to the metadata, and it is also possible to retrieve the available survey fields values and selection fields.
- The option to download information about the editability and requiredness of individual form fields in a given instance has been added to the public REST API.

### **Bug fixes**

#### [General]

- Fixed an installer bug which caused problems with selecting the application pool in IIS from the picker list.
- Fixed an installer error which caused the Portal and the application pool not to be installed.
- Fixed a bug that could cause a very high consumption of processor computing power on the application server.
- Fixed a bug caused by an incorrect database configuration which prevented the export due to the detection of unused local business rules.
- Fixed an item list bug which caused logs to appear unnecessarily in the Event Viewer.
- The migration has been improved in a situation where the reference to a data source that has been removed remains in the action configuration. Currently such situation will display a message with a list of those cases and it will be recorded in the log.
- For the AD synchronization configuration, the retrieval of information about trusted domains has been improved when there is no access to the trust relationship for a domain from the AD controller domain forest.

#### [Portal]

- Fixed the display of the absence report types in search results of WEBCON BPS Portal.
- Improved the appearance of the search results window in the dark color theme.
- Fixed bug of the "Control style" function which caused the line containing headers to be incorrectly colored.
- Fixed the bug of search structures which have not correctly refreshed data when a different application was selected.

Fixed the operation of filters on the report when the user start to enter his own phrase while the available filters were still loading.
Fixed the incorrect display of the date field on the report.
Fixed languages in which error messages were displayed.
Fixed the display of the "Multiple lines of text" form field on item list.
Fixed a reports search error when using checkbox form fields with SOLR data source.
Fixed a bug appearing when switching between dashboards created by cloning which caused the reports not to refresh.
Fixed a report bug which caused the standard filter not to work correctly.
Fixed an error which caused incorrect suggested dashboards and reports to be displayed.
Fixed a reports error which caused an incorrect display of grouping and incorrect linking to instances after clicking on the selected report bar.
[Applications]
Fixed the appearance of the mass approval window by changing margins and visibility of the scroll bar.
[Modern form]
Fixed the behavior and appearance of the form in the OCR verification mode, compared to the "regular" form.
Fixed an item list bug which made it possible to edit more rows than it was defined.

Fixed an error related to the usage of the requiredness rules on a tab panel.

- Fixed the operation of rules modifying the item list appearance.
- Fixed an issue where tabs could not have their appearance (style) changed using form rules.
- Fixed a bug caused by placing the "%" sign in the form field name and the inability to color the form field name due to "{" or "}" characters in its name.
- Fixed the display of the header for the "Data row" column of the item list.
- Fixed a bug related to redirecting to the same address, causing an error message to be displayed.
- Fixed the operation of data import from Excel file to "Date and time" and "Floating-point number" item list columns.
- Fixed the display of the "Data row" form field when using border-style:solid style.
- Fixed the operation of the mechanism adding values from OCR which are not in the data source to the picker field (autocomplete).

#### [Designer Studio]

The logins replacement by the permissions migration mechanism which can be found in the Designer Studio Administration tools has been fixed. This fix affects CURRENT USER IS ONE OF and USER IS ONE OF rules.

Attention! Additionally the following procedures have been removed for new installations:

[dbo].EnsureConfigurationTable

[dbo].INTERNAL\_CreateReservedAttribute

[dbo].pDeleteWFDocxGenerationsOlderThanOneDay

[dbo].ReplaceLogins

[dbo].ReplacePermissions

[dbo].RS\_ShowMyInvoices

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[dbo].ShowWFActive
[dbo].ShowWFElements
[dbo].ShowWFElementsWithoutAttachments
[dbo].ShowWFHistory
[dbo].ShowWFMyInbox
[dbo].ShowWFMyInbox_Count
[dbo].ShowWFMyReservations
[dbo].ShowWFSent
[dbo].WC_AddFieldDoAllFormsOfWorkFlow
[dbo].WC_AssignAttachments
[dbo].[WC_JoinElements]
```

- Fixed a bug that caused CSS styles to work incorrectly.
- Fixed a bug of coloring paths which after using workflow audit tool did not return to the previously set colors.
- Fixed the lack of visibility of the cloned form field on the form template after moving the form field from another form type.
- Fixed a bug with grouping process constants.
- Fixed a bug of the "Recognize OCR AI" action which prevented from disconnecting a previously added source in the form field mapping settings.

**NOTE:** Additionally the option to select an "undefined" data source has been added to the HotMailBox and HotFolder barcode configuration. The same option has been added also for the substitutions data source in the system settings tab.

- Fixed an issue which prevented printing a label from the registration point.
- Fixed an issue which caused the order of parameters in a business rule to be unexpectedly changed.

- Fixed a bug that caused a timeout message to be displayed when entering the system settings tab.
- Fixed a bug that caused the value passed in a parameter to be replaced with another one after saving.
- WEBCON BPS Designer Studio's performance improvements have been implemented. The Fixes focus on optimizing the speed of saving processes at the step editor level.
- Fixed the operation of the query retrieving a list of non-standard attachments for a catalog III.
- Fixed a bug which caused the application/process translations to disappear after refreshing Designer Studio which worked in WSCache mode.
- 1 Fixed an error of the documentation generation mechanism.
- Fixed the behavior of the translation import from an Excel file to Designer Studio, when there are apostrophes (" ' ") in the imported file.
- Fixed a bug with launching Designer Studio in wscache mode by local administrator.
- Fixed the handling of the variable that returns the 'Current path' in the context of the action execution.
- Fixed operation and availability of the STP\_ID system column from the form field configuration level for BPS View data sources.

#### [Form fields]

Fixed an issue that would prevent the user from selecting a value from the popup search window in a 'Choice field (picker)' type column on an Item list.

#### [Actions]

Improved service memory management performance during AAD

synchronization.

- Fixed a bug of the Import-Export mechanism which caused the configuration of the custom source to be transferred to the target environment despite it being unchecked in the configuration.
- Fixed a bug in the Import-Export mechanism which did not log the deletion of the recurring action definition.
- Fixed the operation of the Import-Export mechanism. Currently if an "Length of LOB data to be replicated exceeds configured maximum" exception appears during import, additional information will be provided to which table it refers to.
- Fixed a bug related to the action adding a text layer, when the user had the incorrect version of FineReader.
  - Currently, when activating service roles, the current version of FineReader is checked. If it is unsupported, an entry will be made in the Even Log and the administrator will receive an e-mail (administrative notification).
- Fixed a bug in the REST calling action on Classic and Classic on SharePoint environments.
- Fixed the operation of the "Generate Word file" action performed on timeout by users with different permission levels.
- Fixed a bug in the Import-Export mechanism which caused the dashboard report tile to be incorrectly imported.
- Fixed an issue that resulted in CC people receiving the same e-mail title as TO people despite having two different titles defined for these recipients.
- The "Copy subworkflow ID to field" function of the "Start a subworkflow" action has been improved. It will no longer prevent from removing the associated form field which was referenced.
- Fixed bug in the Import-Export mechanism concerning the presentation node.
- Fixed a bug in the "Start a subworkflow (SQL)" action which caused the SQL query entered via edit mode to disappear after changing the path

configuration to a different one.

- Fixed the bug of the "Hyperlink" action which caused incorrect display of data on the form.
- Fixed a bug of the Import-Export mechanism which caused two additional form fields to appear after importing.
- Fixed a bug in the barcode print action where deleting the contents of the "quantity" field resulted in the action not working. A validation has now been added to prevent this from happening.
- Fixed a bug in the Import-Export mechanism which caused displaying the "Request Entity Too Large" error message.
- Fixed cell formatting in an Excel file generated by the "Generate an Excel file" action.

#### [Data sources]

- Fixed a bug caused by a NULL values in the WFD\_Version column.
- Fixed bugs that could cause exceptions in certain BPS side filtering configurations for REST data sources.

#### [Web Part]

Fixed a bug with displaying vacation days in the Gantt chart in a situation where one date had two assigned vacation days.

#### [Mobile app]

- Fixed a bug in the iOS application where it was not possible to follow the path using the CONFIRM rule.
- Fixed an error which caused problems with adding an attachment in an application designed for Android devices.
- Fixed a bug that caused the application to freeze when logging in for the first time from a new profile on Android devices.

#### [Service]

- Fixed a BPS group synchronization bug which was caused by white characters in the group BPS ID.
- Improved error handling when AAD synchronization was interrupted by the user. Currently, in such a situation, an error will appear with information specifying where the synchronization was interrupted.
- Fixed a HotMailBox bug which caused problems when downloading attachments containing the ")" sign in their name.
- Fixed the operation of the OCR AI mechanism by adding the version number validation when downloading the project. Backward compatibility with older versions has been removed.

Versions 1.x.x.x and 2.x.x.x are currently incompatible with project DLLs that start with WebCon.OcrAl.Projects.

Note: The change above means that it is necessary to update existing projects.

In addition, all actions in Designer Studio that use the attachment category have been enhanced with a category loading button.

- A separate entry has been added to the HotMailBox logs informing about the reason for moving the e-mail to the error folder.
- Fixed a bug that prevented the service from starting when the OCR role was enabled.
- Improved SOLR indexing efficiency.

#### [Designer Desk]

Fixed an error which occurred when starting prototypes, related to system form fields which were hidden on the form.

#### API

Action errors should now be logged correctly.