

WEBCON **BPS 2022 R4**

history of changes for version 2022.1.4.47

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Before upgrading WEBCON BPS

1.1. Before upgrading WEBCON BPS

- To avoid unnecessary interruptions in the system operation, make sure that WEBCON BPS licenses are up to date. To do this, verify the availability of the **WEBCON BPS Server 2022** license in the license report. This report is available from **WEBCON BPS Designer Studio** -> **system menu in the upper left corner** -> **Licenses**. Current licenses must be downloaded if necessary.
- 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 2022.1.3.75 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. General

- Removed the global parameter: **ExceptionsLanguage**. Messages from technical errors will be displayed in the user's language.

2.2. Portal

- In the **Color theme** settings of Portal:
 - Removed the **Task counter numbers** color picker (it was not used),
 - Changed the font color in the **WEBCON Dark** theme from white to gray,
 - Removed coloring options for **Filter buttons** and **Filter button text**.

The appearance of these elements is now consistent with the appearance of regular buttons and text. To distinguish active filter buttons their background is now dimmed.

- Fixed error preventing the execution of **Hyperlink** action for an external domain by removing validation of such a domain.

2.3. Form

- The **Single line of text** form field will now limit the maximum number of characters entered to **255**, which is the limit of characters saved in the database for this type of field (in earlier versions, a user could enter any number of characters but only 255 would be saved). Additionally, a limit was imposed on the field's other operating modes: **Image field** (243 characters) and **Hyperlink field** (237 characters) in order to fit additional characters that are saved in the database for this configuration.
- Suffixes and prefixes in **Floating-point number** form fields and **Item list** columns are now placed inside the field frame to improve the overall appearance and harmonize with the already existing layout of the **Calculated floating-field value** columns.

	Price	Total
	1500,00 USD	3000,00 USD
	1500,00 USD	3000,00 USD

- Unified the coloring of buttons in form field controls – they will correctly inherit **Regular button** settings in the **Color themes** configuration of Portal.

- Due to implementation in the form logic of a mechanism for checking the number of characters entered into the **Single line of text** form field, the on-path transition is not possible if the default value text of this form field exceeds the maximum allowed length (depending on the mode: 255, 243, or 237 characters). In such cases, it is necessary to change the configuration so that the default value text would not exceed the allowed length.

2.4. Actions

- Added an alert in the **Invoke REST Web Service** action that uses JSON Grid controller warning users about deleting subordinate nodes when changing collection type to **valuesCollection**.
- Changed the moment in which the **Action execution condition** is evaluated. The condition is now checked right before the action execution – similarly to how it was checked in WEBCON BPS 2021. This change will affect mainly actions executed outside the transaction. Their execution condition will also be checked outside the transaction (i.e. right before action execution) instead of during the transaction (i.e. at the moment the action is queued).

2.5. API & SDK

- **CompanyStructureHelper** can now load the manager/subordinate without passing the process ID (information is obtained from the context).

3. Security fixes

3.1. Security fixes

- Updated **moment-timezone** component to version 0.5.37 due to CWE-319-related vulnerabilities

4. New features

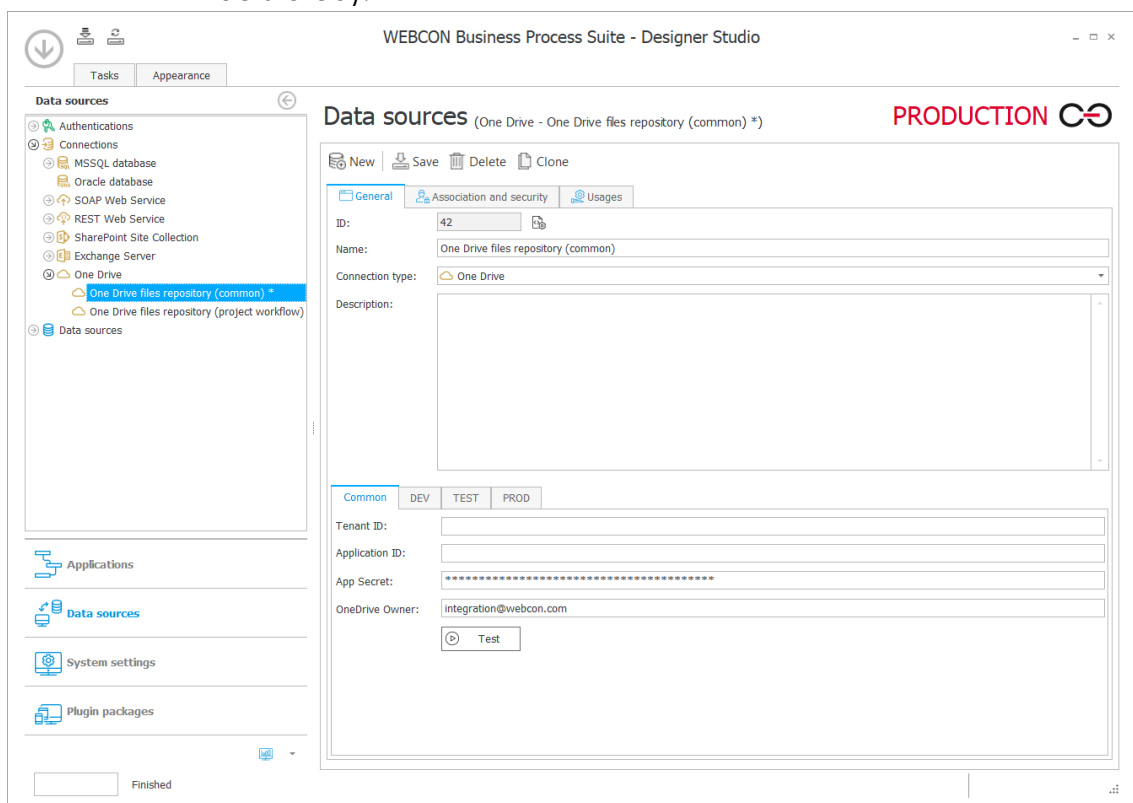
4.1. Working with OneDrive files

Introduced the ability to work with attachments in the form of files stored on OneDrive. The user will be able to edit MS Office files (Word, Excel) in Microsoft 365 **both in a desktop browser and from mobile devices** (app, browser).

New connection type – connection to OneDrive

In the **Data sources** section, the user can now configure a new connection type – **OneDrive**. When adding a new such connection, it is possible to define the following parameters:

- **Tenant ID**
- **Application ID**
- **App Secret**
- **OneDrive Owner** (it is necessary to create a dedicated technical account and indicate the owner of the drive where the documents will be stored).



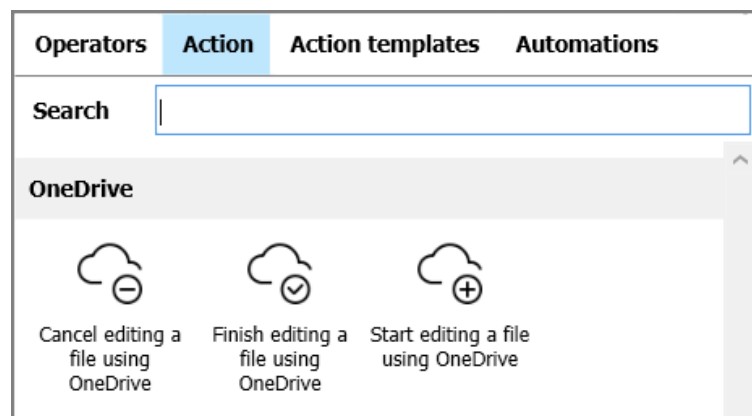
The connection configuration allows to enter various parameters for **DEV/TEST/PROD** environments. The connection, like all other connections in the

system, will be transferred via Import/Export, i.e. the connection will appear in the tooltip when importing files, if used in the process.

The connection ID will be saved in the metadata of attachments so that the user can work with the right file at the form level.

New actions in the OneDrive group

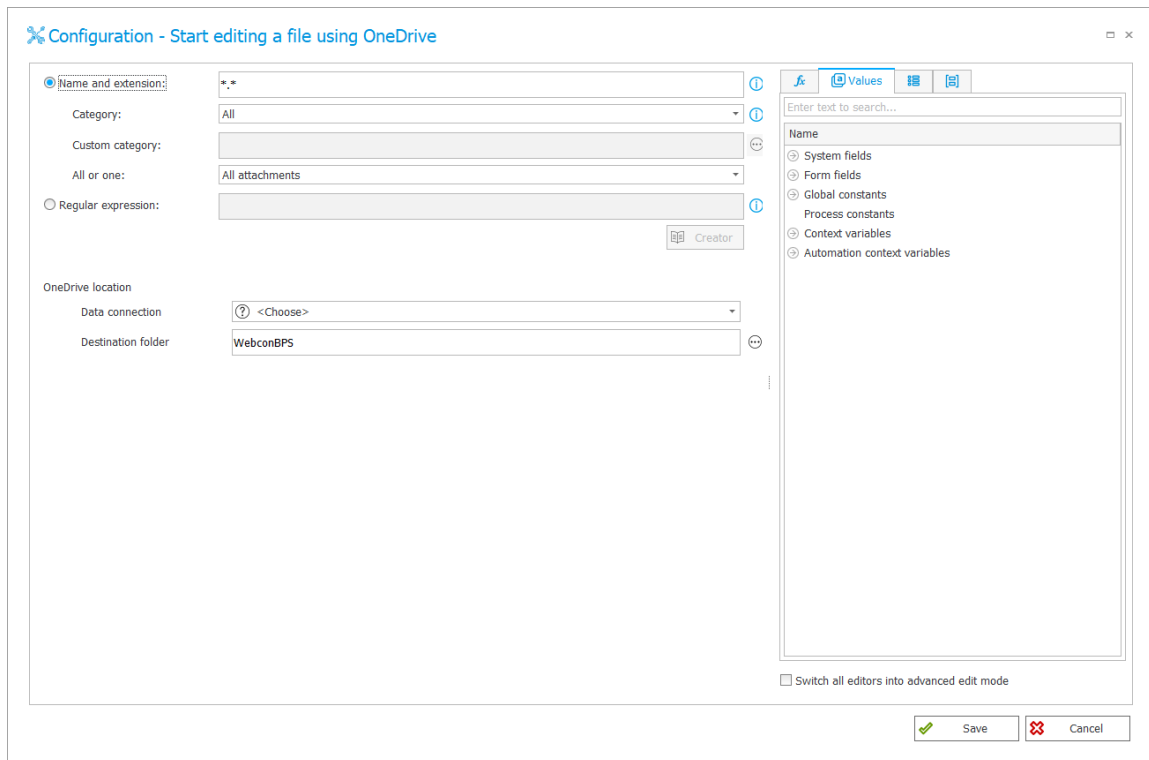
The list of available actions has been expanded to include the **OneDrive** group which has 3 items:



Start editing a file using OneDrive

The action allows to add a copy of a file in the indicated location on OneDrive. The permission to edit the file in OneDrive is granted only to the users authorized to edit the instance to which such a file is attached.

The action **Start editing a file using OneDrive** can be configured in a dedicated window:



with the following options available:

- **Name and extension** – a field in which to specify the name and/or extension of the file.
 - **Category** – allows to select the category in which attachments are searched. The available categories are: **All**, **Custom**, **None**.
 - **All or one** – the user can indicate whether the following will be returned:
 - **All attachments** [that meet the criteria],
 - **The oldest attachment**,
 - **The newest attachment**.
 - **Regular expression** – a field specifying the standard action when selecting an attachment.
- **OneDrive location**, including:
 - **Data connection** – allows to select a connection to OneDrive from the list of defined connections.
 - **Destination folder** – allows to select a folder in text format.

Finish editing a file using OneDrive

The action retrieves the file from OneDrive and removes the link of the file in the database with the file in OneDrive.

The action operates on all attachments linked to the instance in the context of which it was triggered (or in the context of a single file if it was triggered from the **Attachments menu** or in the automation (**For each** operator)). The appropriate file on the corresponding OneDrive is referenced based on the information saved for the file during its check-in.

Cancel editing a file using OneDrive

The action allows to cancel the link to an attachment in the workflow and restore the version from before publication, e.g. in situations where unexpected errors occur.

Similar to **Finish editing a file using OneDrive**, the action affects all attachments linked to the instance in the context of which it was triggered (or in the context of a single file if triggered from the **Attachments menu** or in the automation (**For each** operator)).

The action removes the selected files from OneDrive, restores the file from before it was checked in the database, and also deletes all information about the file's link in OneDrive.

The above actions are available for all action triggers except for the following:

- **On start (cyclical)**
- **Attachments menu in the View mode**

4.2. General

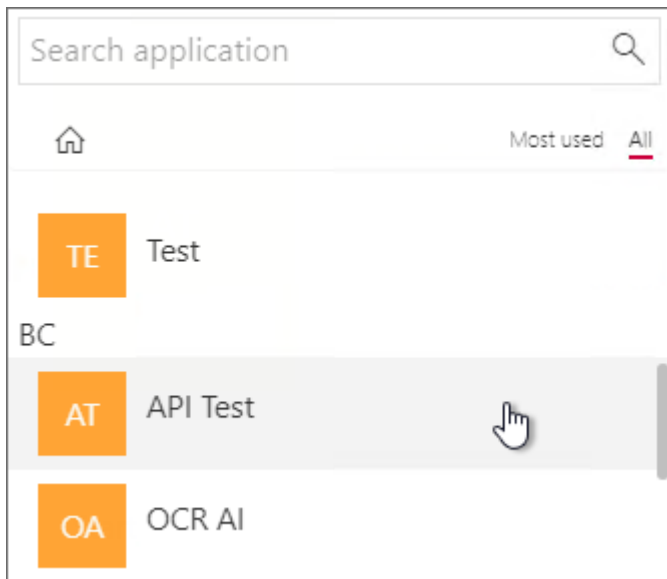
- Expanded the **Licenses and Users** section of the **Admin Panel** in Portal.

Display name	User identifier	User CAL	Single Solution	Designer Desk CAL	Power User CAL	Type
Danny Ings	danny.ings@webcon.pl	<input type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Defined - External User
Eve Mendes	evemendes@webcon.pl	<input type="checkbox"/>	0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Defined - External User
Isabel Green	isabel.green@webcon.pl	<input type="checkbox"/>	0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Defined - External User
John Doe	john.doe@webcon.pl	<input checked="" type="checkbox"/>	0	<input type="checkbox"/>	<input type="checkbox"/>	Defined - External User
		1/10	3/5	3/5	2/5	

This report is used to assign licenses to users - including **Single Solution Access** licenses for individual processes.

4.3. Portal

- Changed appearance of drop-down lists in Portal. A highly transparent, slightly visible hover with Portal theme text color is displayed on the active element background.



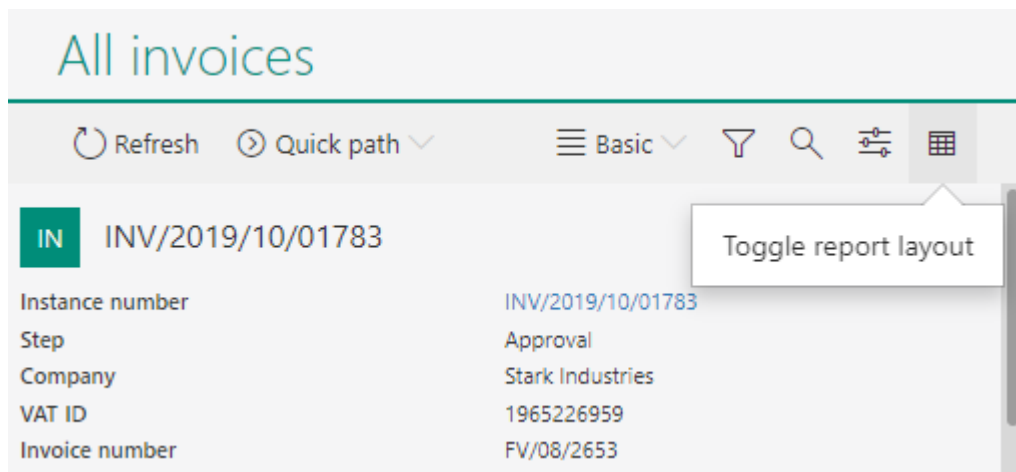
- Removed browser suggestions displayed in **autocomplete form fields** and **person selection form fields** that obscured the list containing data source values.
- Added the **Display mode** option to the **Views** tab of a **Report** configuration. This option is used to determine the display mode in table-type views.



Available modes:

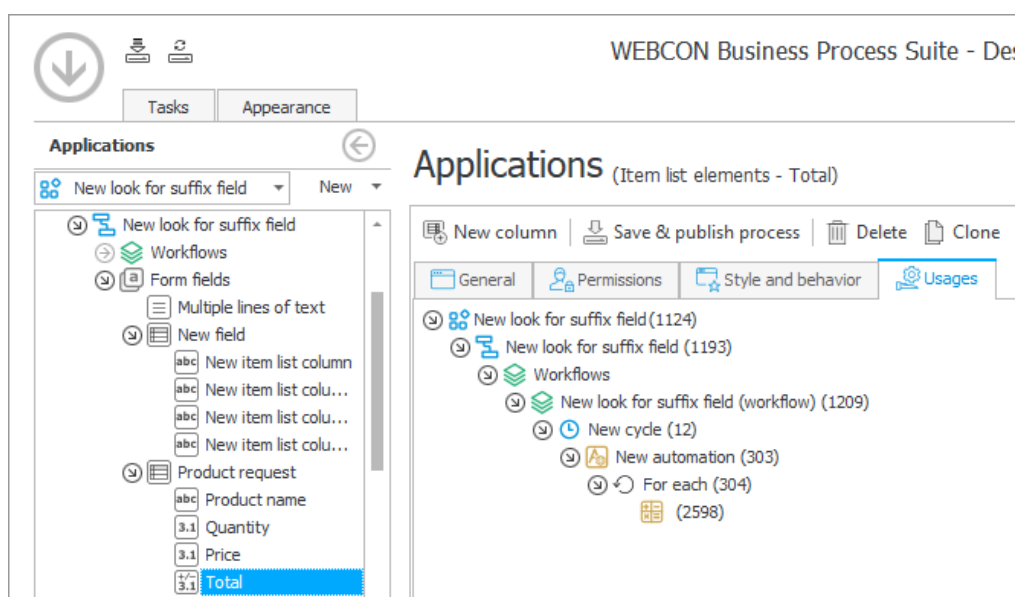
- **Dynamic** - display mode is dependent on screen width and it is dynamically switched between table and tile display. For small screen widths (e.g. for mobile devices) the **Tiles** mode is activated.
- **Table** - report data is always (regardless of screen width) presented in table display mode.
- **Tiles** - report data is always (regardless of screen width) presented in tile display mode.

When **Dynamic** mode is chosen and **Tiles** mode activates, the user may manually switch to **Table** mode using a button in the report menu.



4.4. Designer Studio

- Added **Usages** tab for **Item list** column like the one already available for form fields. It allows users to determine where a column is used.

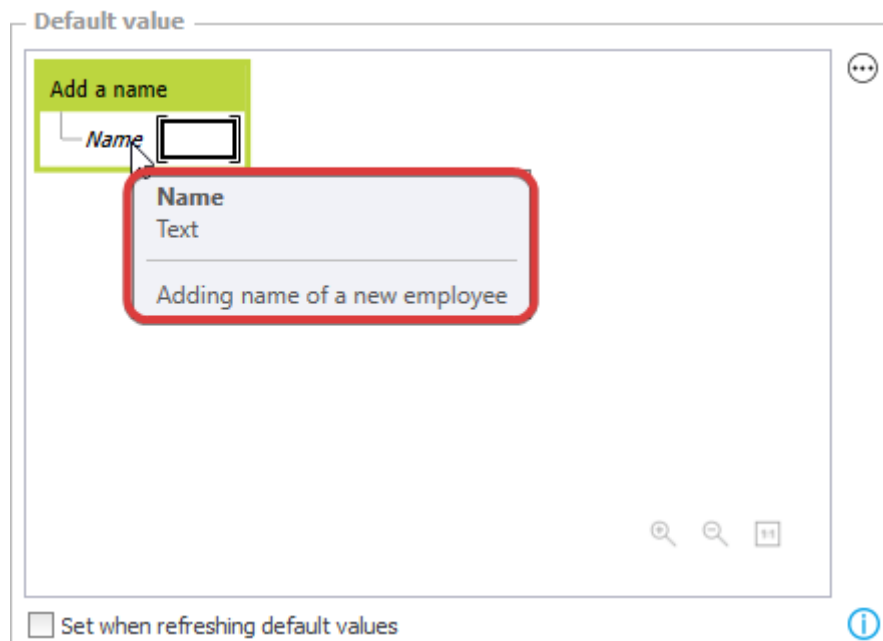


- Added information in the main form field matrix on breaking settings inheritance in a respective step. Similarly to compact forms where this feature is already available, the information is displayed after placing the pointer over the step column heading displayed in red italics.

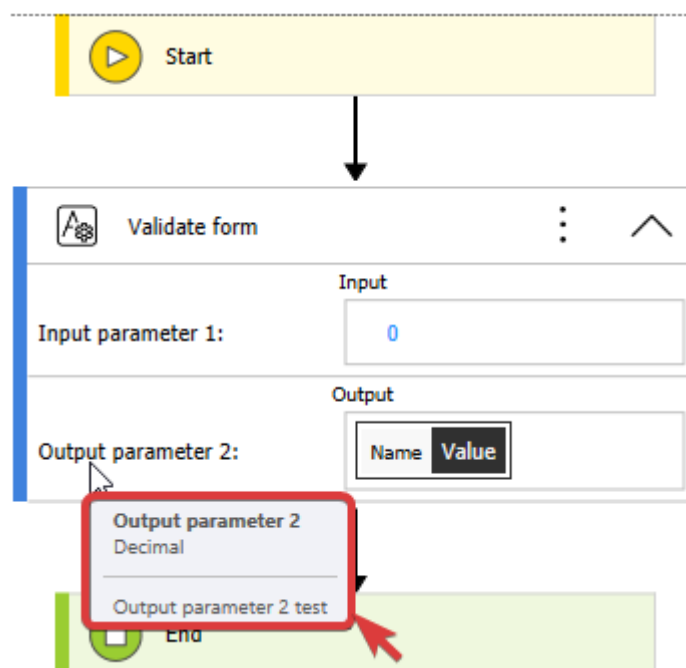
4.5. Tooltips for business rules and automation parameters

Tooltips for business rules parameters and input and output automation parameters are now added to business rules editor and automation editor in WEBCON BPS Designer Studio. The tooltips contain information on parameter name and type and its description.

After adding a parameter in business or form rules editor and defining its name and type, and adding description, this information is shown when placing pointer over the parameter added to a rule.

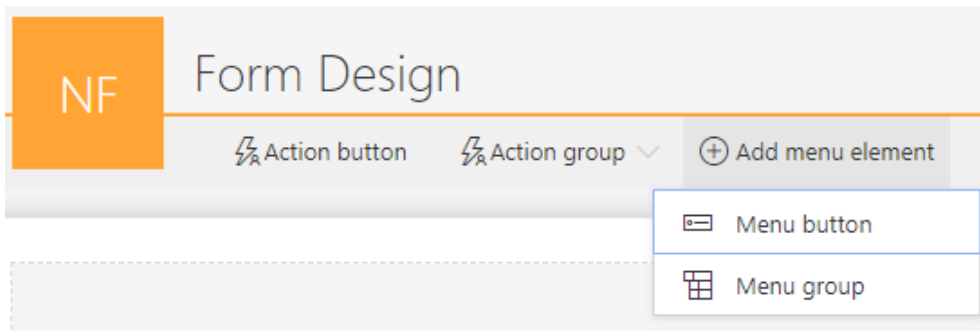


The tooltips are also available for input and output automation parameters. Once a new automation is created and an action is added in the **Configure automation** window opened with the **Edit** button, it is possible to add parameters in the **Parameters** tab on the right. Also here, it is possible to define parameter name, type, and description. After adding the defined automation, the added and saved parameter is displayed when a pointer is placed over it.

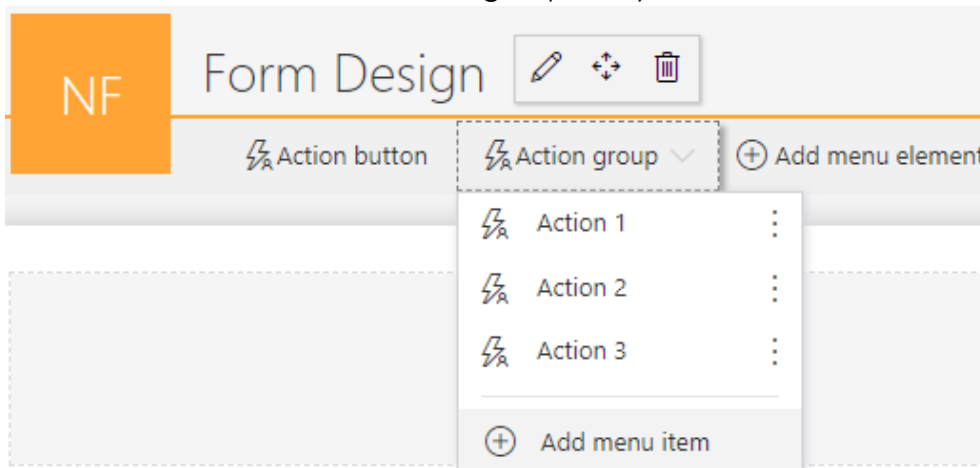


4.6. Designer Desk

- In the **Form designer** of the **Designer Desk**, it is now possible to add action buttons to the menu.



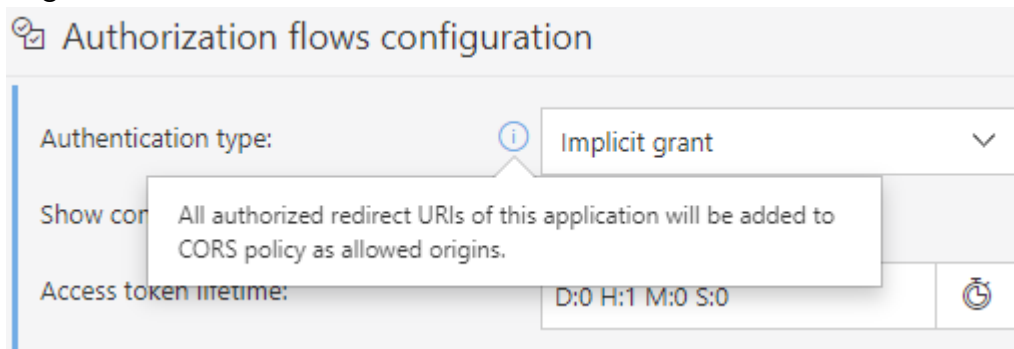
Individual menu buttons or menu groups may be added.



4.7. API & SDK

- Added filter to the SDK configuration attribute `ConfigEditableItemListItemListColumnID` showing item list columns that restricts the selection of column types by users.
- Added 4 new fields to the `BaseContext` property available in SDK addons:
 - **Environment** (can return one of the following parameters: web (Portal), service, or unspecified),
 - **BSPortalUrl** (Portal address),
 - **CurrentDbId** (data base ID),
 - **CurrentUser** (user running SDK).
- Added support for CORS (Cross-Origin Resource Sharing) in WEBCON BPS. In the configuration of **Applications with API access** (in the **BPS Portal Admin Panel**), if **Implicit grant** is chosen as the **Authentication type** - the entire list of **Authorized redirect URIs** will be added to the CORS policy as allowed

origins.



- Added a new method to **DocumentsManager** which can load an attachment from an instance number.
- Added **CustomFilesManager** to SDK which can be used to handle temporary files. It can save a temporary file to the WEBCON BPS database that can then be displayed or downloaded via a generated link.
- Data from WEBCON BPS can now be loaded in OData format. Two new custom connectors have been made available that can be added to Power BI Desktop in order to import data easily.

The two connectors correspond to the two contexts in which data can be obtained - user (OAuth) or **Application with API access**.

In the latter case, it is necessary to create an **API application** in the **Admin panel** that uses the **App context** type and has **App.Odata.Read.All** permissions.

EA

Edit API application

Application type and credentials

Application type:	App context
Name*:	OData app integration
Login*:	odataconnector@webcon.com
E-mail:	g.stras@webcon.pl
Client ID:	8c7989cb-2668-48c4-9004-875b88945e9a

Secrets

Created on	Description	Value	Remove
9/20/2022 5:50 AM	Connector Access	b1*****	

+ Generate new client secret

Application permissions (scopes)

Name	Description	Remove
App.Odata.Read.All	Read form data in oData format in all processes...	

+ Edit

Once the connectors are placed in the "Custom connectors" directory of Power BI Desktop, they can be found through the "Get Data" function.

Get Data

All

Other

All

WEBCON BPS Connector (Application context)

WEBCON BPS Connector (User context)

The connector will require the Portal address, Content database identifier, and both **Client ID** and **Client secret** from the **API application**.

5. Bug fixes

5.1. General

- Fixed an issue with migration script 4992, which blocked the WEBCON BPS update.
- Fixed an issue that prevented adding a new SQL user during database creation.
- Fixed missing check-in mark in the **Integrated authentication** checkbox in **WEBCON Business Process Suite Installer** on the **SQL connection parameters** step after changing connection parameters from **SQL Server** to **Azure SQL Managed Instance** and back to SQL Server.
- Fixed local account verification in an environment without a domain.

5.2. Portal

- Fixed incorrect displaying of column names in the drop-down list in WEBCON BPS Portal. Data source column names are no longer displayed instead of the user-defined column names. The error occurred when a dictionary was defined as a data source in the **Popup search window** with **Searching** enabled and **Show in dialog (PopUp)** disabled in the **Advanced configuration**.
- Fixed an error that caused the Portal main page to scroll to the top when expanding groups of applications.
- Enhanced appearance of version column in instance history.
- Fixed an issue causing an incorrect change of data format in a **Single line of text** form field. The problem appeared when a string entered in the form field was a date in a specific format, making saving a particular data string in a database impossible.
- Fixed an issue that caused the page to scroll to the top of the dashboard when clicking on the column header of a report embedded on it.
- Added various improvements to how buttons on Portal behave, adjusted their size, and fixed issues with how they are highlighted.
- Reports that use the SearchIndex as their source will now export data to Excel much more efficiently.
- Fixed an issue resulting in untranslated column headings when selecting a user to delegate task to.

- Fixed an issue occurring at an attempt to edit Microsoft Word file in the **Attachments** section in Mozilla Firefox. Additionally, the user is alerted that the file cannot be edited when no suitable edition software is installed on their computer.
- Added message „Element was modified on another workstation. Refresh browser window.” displayed when trying to save an element modified on a different workstation. The message is displayed in a modal window that requires pressing the **OK** button.

5.3. Designer Desk

- Fixed an issue resulting in long user synchronization time. The endpoint returning incorrect user synchronization status was fixed in API 3.0 and 4.0.

5.4. Form

- Fixed an issue with sorting on an **Item list** with grouping enabled. The problem occurred when the sorting and grouping were both based on the same column.
- Optimized requiredness update mechanism for form fields and item list columns based on business rules. The update now takes place only when there are existing dependencies between form fields in requiredness rules.
- Fixed incorrect text display in MS Word file generated from a template. Previously, the text entered in three lines in the **Multiple lines of text** column of the item list was displayed in the MS Word file in one line.
- Fixed an issue with the visibility restriction rule for **Item lists** not working under specific conditions - the problem occurred when the form fields on which the rule was based were arranged in certain ways (e.g. when one form field was placed above and another below the Item list).
- Fixed an issue caused by substituting variable **Is edit mode active?** with **Do I have permission to edit?** in form rules resulting in returning TRUE value every time.
- Fixed an issue that broke the **Show field name** option for **HTML** form fields when it was located in horizontal form field groups.
- Fixed an issue resulting in displaying the message **Invalid Checksum**. The problem occurred after adding a new row in the Item list and selecting a value from the **Autocomplete** column.
- Fixed an issue causing incorrect comment validation in API. The problem occurred when transiting a path with marked **Comment required** checkbox.

- Fixed incorrect filtering of **Item list** columns with calculated value including Polish diacritics. The issue resulted in removing Polish diacritics in the filter values returned by the query to the internal API. After choosing the filter with such values, the system was unable to find the respective value. The problem occurred only for the database with **en-US** language.
- Fixed an issue that resulted in displaying the message **Cannot read properties of undefined (reading 'operationid')**. The problem appeared when a **Choice field** was filled out with a default value.
- Fixed incorrect placement of form fields above each other on a form despite enabling the **Horizontal arrangement of form fields in group**. The problem occurred after entering **display: none** setting in the **Field name style** field.
- Fixed incorrect comment requiredness validation. The issue occurred in the form read-only mode and blocked the on-path transition.

5.5. Designer Studio

- Fixed incorrect presentation of a variable instead of data source column name in the **DATA SOURCE VALUE** element in an unsaved business rule. The variable was also incorrectly displayed in the element tooltip.
- Fixed an issue causing problems with refreshing the form field list in sub-workflow settings. If a process included two workflows, the issue occurred after adding a new step following the transition from one workflow to the other.
- Fixed cache refresh after deleting an application - importing an application immediately after deleting another application will no longer cause an error.
- Fixed an issue consisting in inserting blank lines in standard e-mail text obtained from the **Multiple lines of text** form field operating in **Append mode** with the editor working in **Rich** mode.
- Eliminated value change in the **Redirect all e-mail notifications** checkbox in the deployment mode on clicking the **Save all** button.
- Fixed an issue that prevented copying and pasting form fields within a process.
- Fixed an error that caused the **Mass actions** tab to momentarily become visible in the configuration of a report configured to show data from the archive database (set to Process -> **Archived**).

- Fixed an issue with WebView2 component handling. If a user attempts to launch Designer Studio from two remote desktop sessions, they will receive a message about such a scenario not being possible.
- Fixed an issue with action template modification warning displayed when opening action template configuration at automation level. The warning is now displayed when trying to save the configuration.
- Added missing instance number nodes in the **Expression editor** window. The problem appeared when editing form custom instance number (Application name -> **Configuration** -> **Form types**).
- Fixed an issue causing an incorrect change of data format in a **Single line of text** form field. The problem appeared when a string entered in the form field was a date in a specific format, making saving a particular data string in a database impossible.
- Fixed an issue resulting in incorrect coloring of variables in **Designer Studio** when entering them in lower case.
- Fixed incorrect displaying of the **Hyperlinks** function (**Start Element (...)** and **Open Element (...)**). The issue consisted in displaying the function in advanced mode each time.
- Fixed incorrect display of login window when starting WEBCON BPS Designer Studio in administrative mode. As a result, the login window was displayed behind the Designer Studio banner.
- Fixed incorrect validation of e-mail address in deployment mode. Previously, after selecting the checkbox **Redirect all e-mail notifications** in **E-mail notifications** and leaving the **E-mail receiver** field empty, the system accepted the configuration as correct. Now, it is not possible to save settings without entering the e-mail address.
- Fixed an issue that precluded sending an e-mail with confirmation of successful path transition through **MailApproval**.
- Fixed an issue resulting in failure to import process. The failure was due to an invalid migration script that did not remove records from the **Translations** table referring to non-existent instances.
- Fixed an issue that caused incorrect plugin package creation and application import. The problem occurred in the environment with two WEBCON BPS Portal instances and load balancing through **Azure Application Gateway** with **cookie-based affinity** enabled.
- Fixed an issue that obstructed changing the sequence of form fields in **Global form template**.

5.6. Actions

- Fixed an issue with **Generate a PDF file** actions configured on the **Menu button** trigger. The issue was caused by access and privileges to the template based on which the file was generated.
- Fixed an error that blocked action templates from being created at **Automation** level.
- Fixed an issue obstructing the execution of **Hyperlink** action in the **On browser opening** automation.

5.7. Rules

- Fixed an issue with the **GET ATTACHMENTS** function failing to save attachments to an attachments column of an **Item list**.
- Fixed an error that caused complicated **Business rules** containing many components to treat the multiplication operator as addition.
- Fixed an issue that caused a **Business rule** to load the incorrect parameter type, e.g. it would treat a decimal-type parameter as text.
- Fixed missing **Context constants** in the editors of certain **Business rules**.
- Fixed an issue that prevented **Form rules** from clearing choice fields in OCR verification view.

5.8. Data sources

- Fixed an issue resulting in missing variables in the endpoint address for the **REST Web Service** data source. Fixed problem with the request body value transfer in JSON grid conversion. Added insertion of variables in the request body.
- Standardized how **Rest Web Service** data sources work. A response that returns null or "" will pass DBNull.Value to the result. Fields that are not returned in the response will not be included in the result.
- Fixed an error with importing dictionary instances from Excel in a dictionary process report - the error occurred when attempting to import data after deleting instances using the **Administration tools**.
- Fixed missing values in the **Edit parameters mapping** of **SOAP** and **REST Web Service** data sources
- Fixed a connection error to the database that occurred when the connection string contained a non-standard port before the SQL server name and was also separated with a space.

- Fixed a bug that occurred when trying to delete BPS data source after refreshing its configuration several times.
- Fixed a bug hindering synchronization of users between domains when the number of users exceeds the permitted length of the query sent to the database.

5.9. Add-In

- Fixed an issue preventing the user from logging in to the **Outlook Modern** add-in.
- Fixed the definition of the manifest file for the **Outlook Modern** add-in.

5.10. Service

- Fixed an issue that blocked e-mails from being sent via MS Graph if both the display name and e-mail address were defined.