

WEBCON **BPS 2023 R3**

history of changes for version 2023.1.3.29

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1. Before upgrading WEBCON BPS

1.1. Important information

- If the changelog contains a section titled "Changes to existing features", please verify whether the changes will impact your implemented system in any way.
- To avoid 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 2023** 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.
- Changes introduced in this version will break the compatibility of the Export-Import mechanism. Exported process packages created in versions **2023 R2** 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. Security fixes

2.1. General

- Fixed a bug where the security system, designed to protect against Cross-Site Request Forgery (CSRF) attacks, failed to start despite the correct configuration.

2.2. API & SDK

- In **REST API** versions **4.0**, **5.0**, and **beta**, operations that add, edit, and remove attachments will now have additional protection against unauthorized checkout of instances by users that do not have privileges for such an operation. This issue occurred only when the REST API was called in the context of an application that had the parameter `forceCheckout=1`.

This fix ensures that:

- admin privileges will be verified before the checkout operation
- connections in the context of the user will require the scope: `User.Elements.Admin.All lub User.Elements.Admin.<ProcGuid>`
- it will no longer be possible to force checkout in the context of an application with impersonation enabled.

In **REST API beta** version, all operations that force checkout (`forceCheckout=1`) and connect in the context of the application, will now have an additional scope privilege verification **App.Elements.Admin.All**.

2.3. Updated components

- The following components have been updated:
 - Azure.Identity to version 1.10.3,
 - Azure.Core to version 1.35.0due to a vulnerability patch:
CVE-2023-36414, CWE-94 – <https://security.snyk.io/vuln/SNYK-DOTNET-AZUREIDENTITY-6009155>.
- The SkiaSharp component has been updated to version 2.88.6 due to the vulnerability patch:
CVE-2023-4863, CWE-122 – <https://security.snyk.io/vuln/SNYK-DOTNET-SKIASHARP-5922114>.

- The tinymce component has been updated to version 5.10.9 due to vulnerability patches:
 - CVE-2023-48219, CWE-79 – <https://github.com/tinymce/tinymce/security/advisories/GHSA-v626-r774-j7f8>
 - CVE-2023-48219, CWE-79 – <https://security.snyk.io/vuln/SNYK-JS-TINYMCE-6062167>.

- The SkiaSharp component has been updated to version 2.88.6 due to the vulnerability patch: CVE-2023-4863, CWE-122 – <https://security.snyk.io/vuln/SNYK-DOTNET-SKIASHARP-5922114>.

- The tinymce module has been updated to version 5.10.8 due to vulnerability patches:
 - CVE-2023-45819, CWE-79 – <https://github.com/advisories/GHSA-hgqx-r2hp-jr38>
 - CVE-2023-45818, CWE-79 – <https://github.com/advisories/GHSA-v65r-p3vv-jjfv>
 - CVE-2022-23494, CWE-79 – <https://security.snyk.io/vuln/SNYK-JS-TINYMCE-3166281>.

3. Information

3.1. Important information

- Fixed an issue that caused instances indexed in the **SearchIndex** database to have their dates converted to UTC, which could cause incongruencies when searching and filtering data in **Reports** that use a **SearchIndex source**.
The error occurred from version 2022.1.4.174 to 2022.1.4.274, and in all published versions of 2023 R1.
In order to fix existing date indexes, it is required to add **Reindex all databases** (or a specific database) to the **SOLR indexer queue**.
The duration of reindexing depends on the size of the database – in the case of large databases this operation may take several hours.

3.2. Data sources

- Removed the following data source **Templates**:
 - Substitutions – permissions to define,
 - Substitutions – available substitutes.

These types of data sources are no longer used in the substitution mechanism. Existing data sources that use these templates will be changed to **Standard**.

4. Changes to existing features

4.1. Visibility of applications/processes when creating and editing substitutions

The rules for applications and processes that a user can specify when creating a substitution for themselves or another user have been changed. The update applies to both **Task delegation substitutions** and **Working on behalf of substituted person with full access**.

The list of applications and processes for which a substitution can be created varies for users with different privilege levels. The updated rules are as follows:

- If a **user** creates a substitution for themselves (using the **New substitution for me** option), they can select the processes where the substitution will be active based on the application privileges. This means that all processes within the application will be available for selection, provided that substitutions are enabled in the process configuration and the user has any application privileges. Process privileges for that user are not taken into account. The list of applications/processes is not limited by business entities.
- If a **Superior** creates a substitution **for subordinates** (following the subordinate structure configuration), then, as previously explained, they can select processes from all applications for which the subordinate, i.e., the replaced person, has any privileges. The list of applications/processes is not limited by business entities.
- If a **System administrator** or a user who is authorized to create substitutions for anyone creates a substitution for another person (using the **Specified users for anyone** option in the substitution configuration), they can select any processes with enabled substitutions among all applications. The administrator can also select any process with enabled substitutions when creating a substitution for themselves.

The same rules apply when editing an existing substitution.

The list of applications and processes available for creating or editing a substitution is updated each time the **Replaced person** is changed.

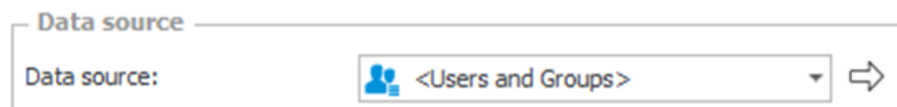
4.2. Portal

- The format of the built-in graphic files has been changed to AVIF/WebP in order to minimize the amount of data transferred.

4.3. Form

- Changed the behavior of NULL values during sorting in **Data table** form fields. When sorting numerical columns (ascending and descending), NULL values will always be placed at the bottom of the table.
- Removed the character limit for RegEx used to validate form fields. The following columns had their type changed from varchar(100) to varchar(max): WFCON_ValidationExpression (WFConfigurations table) and DCN_ValidationExpression (WFDetailConfigs table). The execution time of a RegEx can be tracked in diagnostic mode.
- In **Person or Group** form fields, it is now possible to change the data source. By default, these fields will use the new system source **<Users and groups>**, which has the **Data source type: person or group** option enabled. Full description of this new data source can be found in the **New Features** chapter

5.1.



It is possible to create additional **Users and groups** data sources for specific purposes – they will be available for use as sources in **Person or Group** form fields as long as the **Data source type: person or group** option is enabled.

The system source **<Users and groups>**, and all additional sources that have the **Data source type: person or group** option enabled, will always return the following 8 columns:

- COS_BpsID*
- COS_Department*
- COS_DisplayName*
- COS_Email*
- COS_JobTitle*
- COS_Login*
- COS_ManagerBpsID
- COS_ManagerDisplayName

The columns marked with an asterisk will always be loaded by default into **Person or Group** form fields.

Additional columns can be loaded manually.

Previously, the following columns were used by default in **Person or Group** form fields:

- LoginName
- DisplayName
- JobTitle
- Department
- Email.

- Changed the way the **Path panel** is displayed on the workflow instance when the browser window is zoomed to 200% or more. After the change, under the described conditions, the Path panel will always be **Floating at the bottom of the screen** to improve the visibility of the form fields. Different settings in WEBCON BPS Designer Studio are ignored in this case.

4.4. Designer Studio

- Values from outside the data source can now be added to the **Choice field** in the **Dropdown** mode and the **Choice field** column when the **Allow selecting values no longer available in the data source** checkbox has been selected.

4.5. Rules

- Changed how AND and OR operators in **Form rules** are evaluated. If the first condition unequivocally determines the outcome, the second (right) condition will

not be evaluated.

Fixed an exception that occurred when using invisible **Item lists** in some functions (ITEM LIST COUNT, HAS ANY ROWS, SELECT VALUES, GET IDS, GET NAMES).

4.6. Service

- It is now possible to add the previously unavailable service roles when configuring WEBCON BPS installation in Docker and in the case of running the service locally directly from the .exe file. In addition, modified the system behavior in the situation where the service with the **Basic features** role assigned has not communicated with content database for over 45 s. Now, in such a case, this role is taken over by another service if it has been selected in its configuration.

4.7. API & SDK

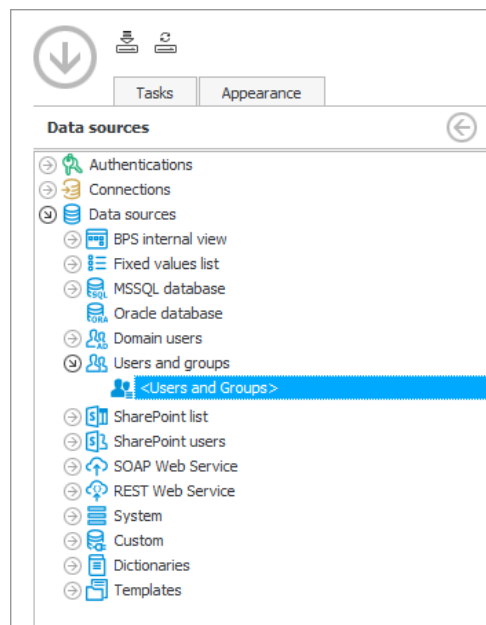
- The method of logging the moment of calling the REST API method has been changed. Currently, the log is created before the operation performed by the REST API method is performed. This makes it possible to chronologically analyze the invocation of individual methods.
- Modified operation of the API endpoint used to initialize the **Item list** form field in the beta version. Now, after calling the endpoint, it verifies if the initialization has been activated in the Item list configuration. If the initialization is disabled, a validation error is displayed.

5. New features

5.1. System data source <Users and groups>

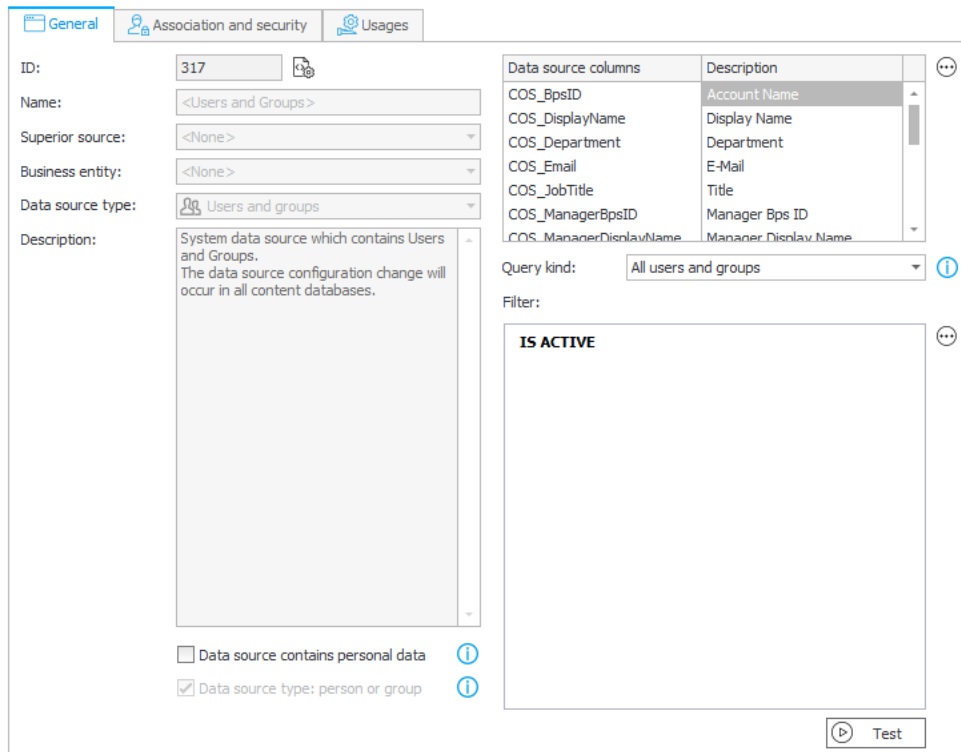
The configuration of the form field **Person or group** has been changed – it is now possible to select a data source and configure a filter on the side of the form field (just like it is possible for the **Choice field**).

To avoid manually creating data sources for all existing form fields, a new system data source **<Users and groups>** has been created instead. By default, it contains all (active) elements from the CacheOrganizationStructure table.



Filtering this data source will limit the list of users available throughout the system. The goal of creating this new data source and changing the **Person or group** field is to enable the creation of complex, multi-level filters to handle the following scenarios:

- Filter users available in the system in situations where the user synchronization configuration does not allow users to define the scope of the synchronization (e.g. AAD),
- Allow data sources to be selected in **Person or group** fields, and to create data sources that can be used by these fields, so that different filters can be applied in different use cases.



The data source is associated with all Applications by default.

It can be used in:

- **Person or group** fields,
- Item list columns that **Use people field data source**,
- The **Any person** option in predefined task assignment,
- Delegating tasks in Portal,
- Adding privileges by admin action in Portal,
- **Business rule** functions in the “Users” node, such as CURRENT USER IS ONE OF, USER IS ONE OF, etc.,
- Privileges at Global, Application, Process, and Workflow levels,
- Application supervisor.

Note: all of the above areas use the **<Users and groups>** system data source. Since this source is used globally and extensively, any changes to its configuration (filter) should be carefully considered.

If a filter is required for a specific (local) use, e.g. to limit the accounts returned in a specific process, form, or form field, it is recommended to create a dedicated data source – either by cloning the **<Users and groups>** system data source, creating a new **Users and groups** source, or configuring the filter at the form field level.

The full, unfiltered list of users can still be accessed in the following places:

- An overview can be seen in the **Users and groups synchronization** in the System settings,
- By creating additional custom **Users and groups** data sources and configuring them independently of the system source.

V_CacheOrganizationStructure is a new view that returns the data from the CacheOrganizationStructure table and takes into account any filters defined on the **<Users and groups>** system data source.

Filtering

The core aspect of the new **<Users and groups>** system data source is the ability to define global filters that will limit the users and groups shown throughout the system. The main purpose of this is to:

- Exclude certain accounts synchronized to the WEBCON BPS users cache (e.g. test accounts, guest accounts),
- Limit the values available in **Person or group** fields (e.g. by an attribute like location or position).

The default filter is **IS ACTIVE** that returns active accounts (COS_IsActive=1).


Filter:



This filter is applied along with the predefined filter from the **Query kind** option.

Note: it is important that this filter does not exclude people who grant privileges or administrators. If the ability to log in is lost, it will be necessary to use the Local Admin account defined in the Installer.

Query kind

Query kind: 

Predefined filters that are used in conjunction with the custom filter. There are two available options:

- All users,
- All users and groups (*default option*).

Available columns

Use	Data source columns	Description
<input checked="" type="checkbox"/>	COS_BpsID	Account Name
<input checked="" type="checkbox"/>	COS_Department	Department
<input checked="" type="checkbox"/>	COS_DisplayName	Display Name
<input checked="" type="checkbox"/>	COS_Email	E-Mail
<input checked="" type="checkbox"/>	COS_JobTitle	Title
<input checked="" type="checkbox"/>	COS_Login	Login
<input checked="" type="checkbox"/>	COS_ManagerBpsID	Manager Bps ID
<input checked="" type="checkbox"/>	COS_ManagerDisplayName	Manager Display Name

This area is used to define which columns will be returned by the data source. The columns with a gray background are required and cannot be unchecked.


These are:

- COS_BpsID*
- COS_Department*
- COS_DisplayName*
- COS_Email*
- COS_JobTitle*
- COS_Login*
- COS_ManagerBpsID
- COS_ManagerDisplayName

The columns marked with an asterisk are the default columns loaded into the configuration of each **Person or group** field. Other columns can be loaded manually in the configuration of the form field.

Data source type: person or group

For the default system data source **<Users and groups>** this option is always enabled and cannot be disabled.

Data source type: person or group 

This option determines whether the data source can be used in a **Person or group** field or in Item list columns that have the **Use people field data source** enabled. This option also causes the data source to be automatically associated with all **Applications**.

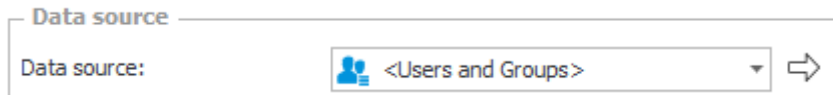
When this option is enabled, the icon of the data source changes and is filled.

  Users and groups
 <Users and Groups>
 Users and groups
 Users and groups with type: person or group active

When enabled, the data source will always return the 8 mandatory columns mentioned above, with no way to skip them.

Changes to Person or group fields

Existing **Person or group** fields will now use the **<Users and groups>** system data source.



It is now possible to switch the data source for **Person or group** fields. Only data sources that are of the **Users and groups** type and have **Data source type: person or group** enabled can be selected.

By default, 6 of the 8 columns listed above are loaded into the field configuration.

Other columns can be loaded manually in the configuration of the form field.

The advanced configuration of **Person or group** fields still contains additional filters in the **Picker** tab that can be used to modify the **Available data range**.

In effect, each **Person or group** field can have filters defined at multiple levels, allowing the location and specificity of the filters to be tailored to the particular process and organization.

- Filter at the **<Users and groups>** or **Users and groups** data source level,
- **Query kind** at the **<Users and groups>** or **Users and groups** data source level,
- Filter at the **Person or group** field level,
- **Available data range** in the advanced configuration of a **Person or group** field.

5.2. WEBCON BPS mobile application

A new WEBCON BPS mobile application has been made available for mobile devices with Android 10.0 or newer and iOS 16.0 or newer.

The mobile application now features a new interface and includes a number of enhancements. It also offers multiple useful functionalities, including scanning QR codes, capturing photos and recording voice memos within the form, authorizing operations with PUSH notifications, and saving the user’s geographical location.

The application, WEBCON BPS, is available for downloading from the Google Store for Android or the App Store for iOS, depending on the mobile device's operating system.

New interface

The mobile application received a new, clearer interface. The changes included, among other things, new icons, logos, splash screens, lists, and a new design for fields and buttons. Furthermore, the application offers two themes (light and dark) that align with the currently set device system theme.



PIN and biometrics

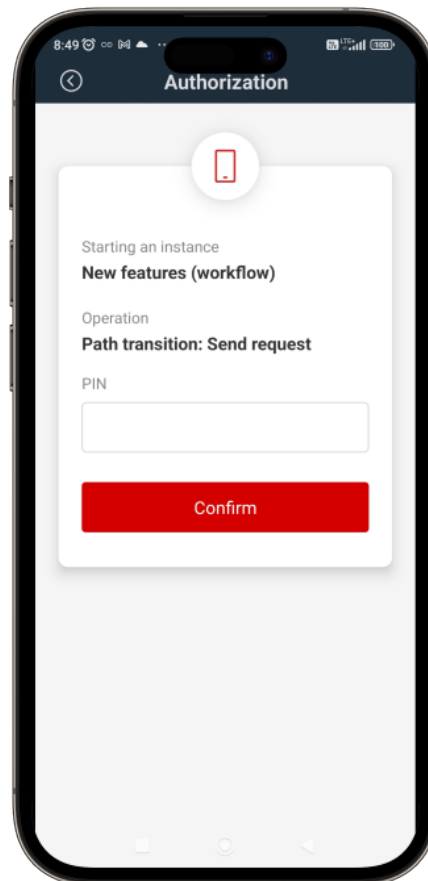
The application provides a secure login option, allowing users to use a PIN or biometric protection. You can configure the functionality in the **Connection edit** window by clicking the **PIN security** option. After setting up the PIN code, you can enable biometric protection (fingerprint or facial recognition) by selecting the **Biometric security** button (ensure that biometric functions are enabled on the device).

Adding a trusted device

You can register the device where the mobile application is installed as trusted in your **User profile**. This will allow you to authorize path transition with your mobile application. You can do this immediately after logging into the application for the first time on the new device or at any later point while using the application on that device.

Authorizing operations with the mobile application

A new mechanism has been introduced to authorize user operations through the mobile application. When following a properly configured path, a user receives a PUSH notification in the mobile application, prompting them to authorize the operation.



The functionality that enables you to authorize operations through the mobile application is part of a broader mechanism for authorizing path transitions (see “Path transition authorization”).

QR codes scanning

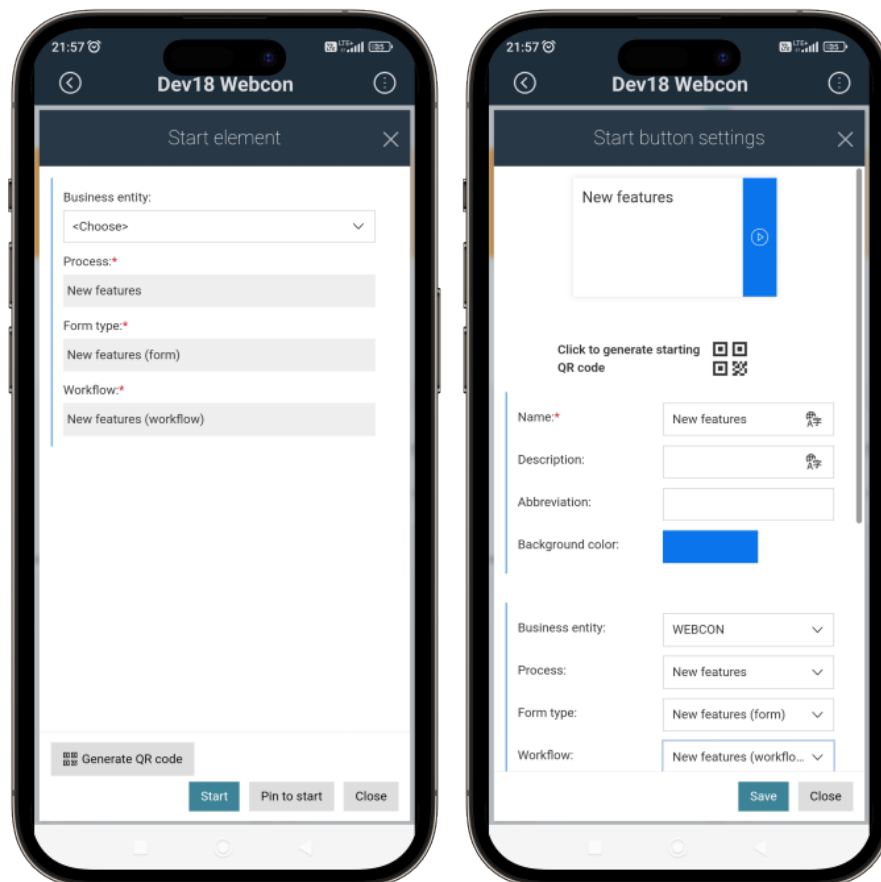
The application allows you to scan QR, bar, and DataMatrix codes.

- **Code scanner in the mobile application**

The mobile application comes with a code scanner accessible by clicking the QR code icon in the upper right corner of the window. The scanner embedded in the application enables reading QR, bar, and DataMatrix codes.

- **Starting a new instance with a QR code**

Through the mobile application, administrators can generate and share QR codes to start new workflow instances. The code can be generated in Portal using the **Click to generate starting QR code** button located in the bottom-left corner of the window for configuring the start tile or the **Generate QR code** button in the window for starting a new instance.



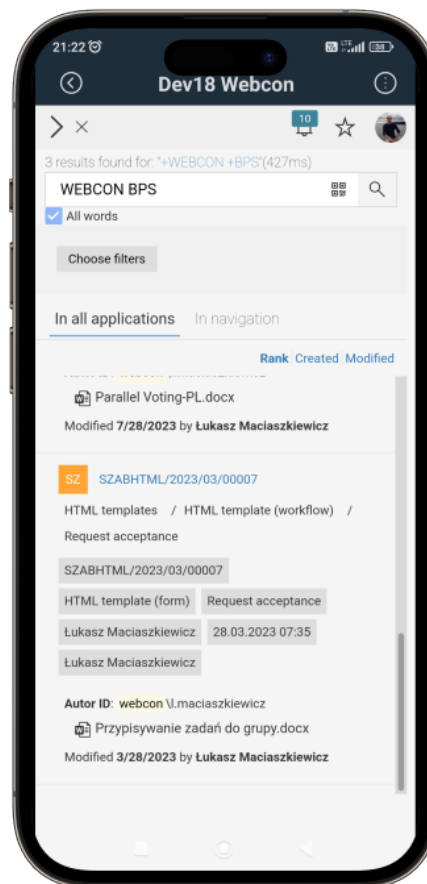
- **Redirecting to an instance with a QR code**

You can now generate a QR code that redirects to a specific workflow instance. To generate the code, click the **Generate QR code** button in bottom part of the infopanel in Portal. To configure the button availability, go to the **Standard areas (Main form → Field matrix)**.

- **Searching with a QR code**

With the mobile application you can search for information using the value stored in a QR or bar code. To facilitate this, the search box on the search subpage now features

a QR code icon. (You can access the search box by clicking the magnifying glass icon in the upper bar of the mobile app, located next to the QR code icon, or by navigating to the search subpage in Portal.)



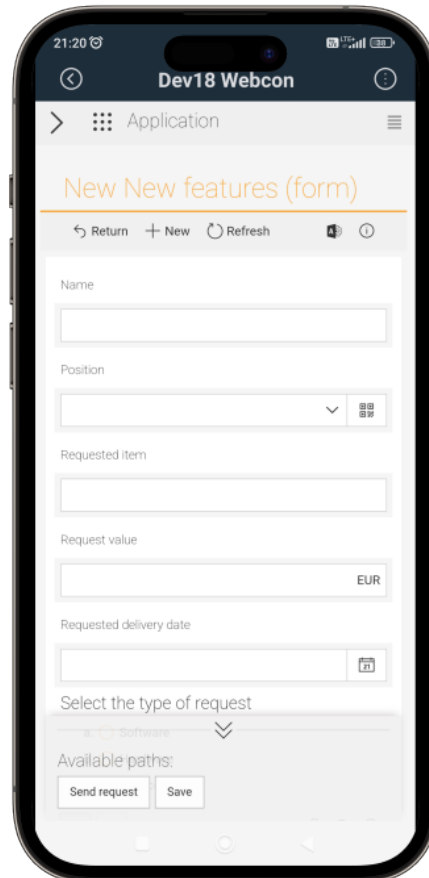
The system starts searching immediately after reading the value stored in the code.

- **Entering the QR code value into the form field**

The mobile application enables you to input the values stored in QR codes into form fields. The new functionality is available for devices equipped with a camera after selecting the **Enable QR scan** button (the **Style and behavior** tab → the **Behavior** section) in the configuration of the relevant form field or column.

You can enable the functionality for most basic form fields (excluding the **Picture** field) and for the **Choice field** operating in the **Popup search window** and **Autocomplete** mode. In the case of the **Item list** columns, the QR code scanning is available for the **Single line of text**, **Multiple lines of text**, **Floating-point number**, **E-mail**, and **Choice field (picker)** and **Autocomplete** columns.

After selecting the aforementioned checkbox, a QR code icon appears in the field control in the form.



Clicking the icon opens a window that allows you to scan the QR code and input its value into the form field.

- **New business rules**

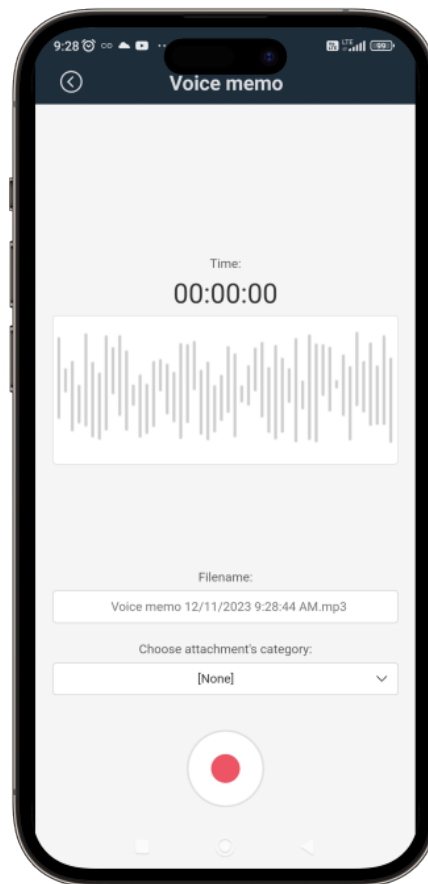
Three new rules are now available for inputting values into form fields and columns using QR codes.

The **SCAN QR** rule allows you to insert into the rule's block a relevant form field or column for which a QR code scanner is to be initiated. The rule can be executed when loading the form or when changing the value of a form field.

The **SHOW QR** and **HIDE QR** rules show or hide the QR code icon in the field or column control. (For the **Item list** columns, it is possible to constrain the rule operation by means of the **FOR EACH ROW** operator). Similar to the first rule mentioned above, the target form field is specified in the block of the rule.

Recording voice memos

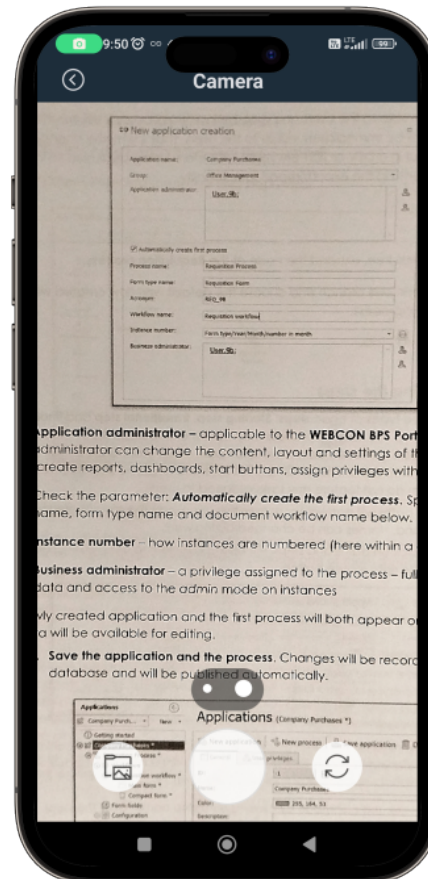
The mobile application supports adding voice memos as attachments within the form. You can record a voice memo by clicking the microphone icon (🎤) in the attachments panel. Please note that to see the icon, your mobile device must have a microphone, and the functionality of adding and removing attachments must be enabled. The icon opens a multimedia player, allowing you to record a voice memo and subsequently add it to the attachments list while specifying its name and category.



Capturing and cropping photos

A user of the mobile application can capture and crop photos, and then add them as attachments to the form. To access this functionality, click the camera icon (📷) in the attachments panel (make sure that the functionality of adding and removing attachments has been enabled in the form configuration).

Clicking the icon opens a new camera window where you can either capture a photo (**Take photo**) or add one from your hard drive (**Add from library**). Once the photo is loaded into the camera window, it can be cropped.



The saved photo is added to the attachments list.

Geographical location registration and new context variables

Now, you have the ability to retrieve and save the geographical location of an individual transiting a path. The information is saved in the instance history. It can be accessed only by individuals authorized to display the instance history in the admin mode (the gear icon).



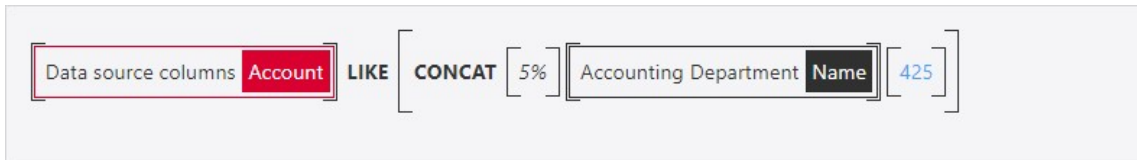
To activate the functionality in the Designer Studio, select the **Location required** button available in the **Parameters** tab of the path configuration window.

Furthermore, the expression editor has been expanded to incorporate a new **Location** node which introduces four additional context variables: **CURRENT_LOCATION**, **CURRENT_LOCALIZATION:LONGITUDE**, **CURRENT_LOCALIZATION:LATITUDE**, and **CURRENT_LOCALIZATION:ISNATIVEAPP**. The variables allow for the determination of the user's location.

5.3. CONCAT function within LIKE for filtering Data sources

The **CONCAT** function used to combine text values into a single string of characters can now be used inside the **LIKE** function that checks if the selected text contains a given text pattern for creating advanced filtering conditions on **Data sources**.

This solution makes it possible to narrow down the list of values returned by a Data source, for example, when configuring **Choice fields**.



The arguments for the **CONCAT** function used in this context will be form fields, system fields, process/global constants, text values, etc. Within this function, it will also be possible to use operators that were previously available to the **LIKE** function:

- % – any string,
- _ – a single character,
- [] – a single character in the specified range,
- [^] – a single character outside the specified range.

5.4. Path transition authorization

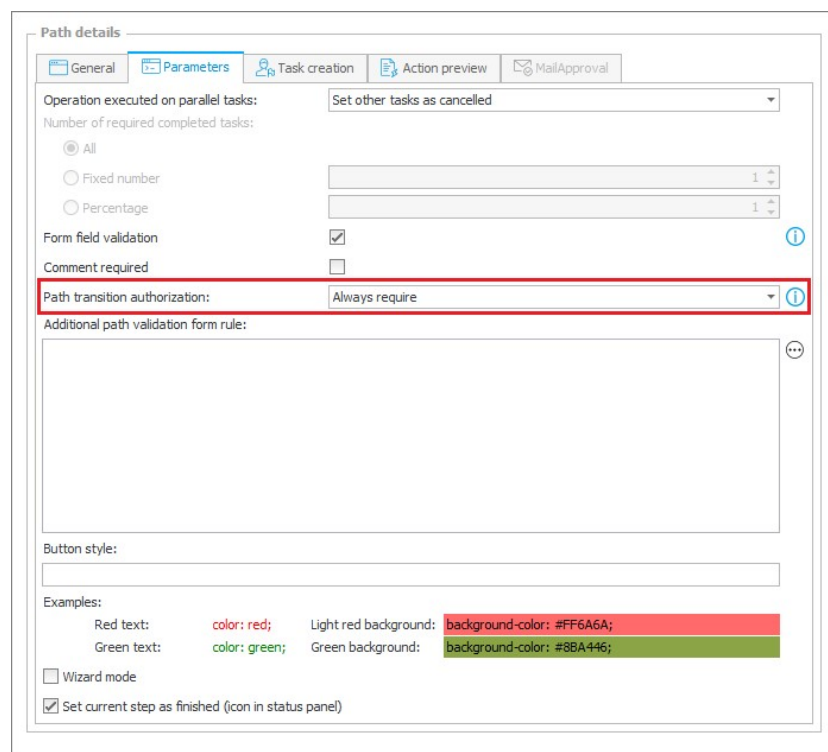
WEBCOB has introduced a functionality that provides additional protection against unauthorized path transition and execution of a task (e.g. signing a contract) by an unrequested person. The user, who wants to go to the next step, is forced to confirm their identity.

Configuration in WEBCON BPS Designer Studio

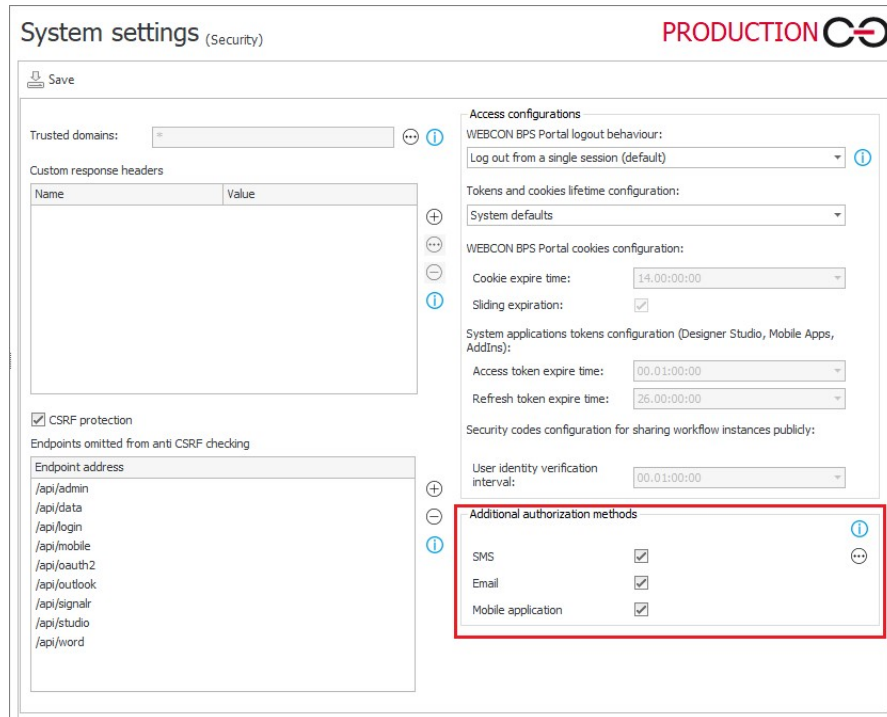
The **Parameters** tab of the **Path details** configuration window now includes the **Path transition authorization** option that can be set to:

- **None** – no additional authorization is required,
- **Require** – one authorization is required for the entire authorization session. The authorization session lasts 5 minutes by default, but this value can be changed globally for the environment. During the session, the end user may go any number of times through any path (on any workflow instance) for which this authorization mode is set. When the authorization session expires, a new authorization is necessary,
- **Always require** – each path transition requires authorization. In this mode, the authorization session is related to a specific instance and a specific path.

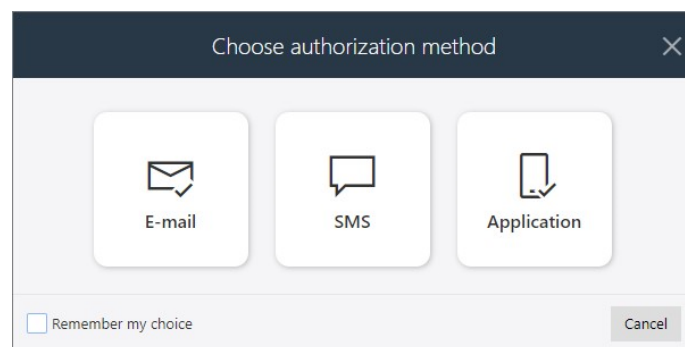
If **Back to the previous step** is set as the target step in the path configuration, the option to authorize a path transition will remain inactive.



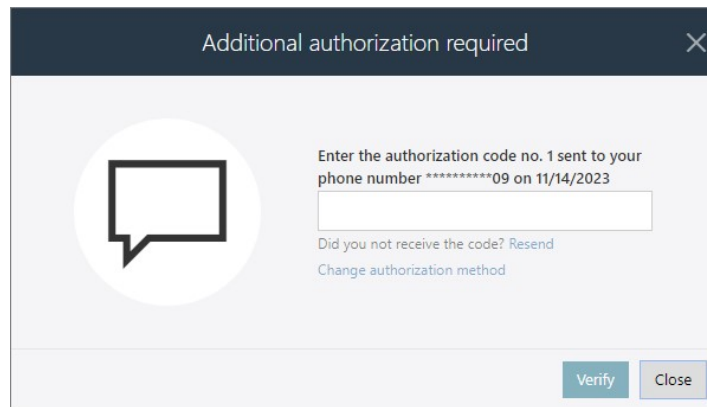
The authorization methods to be used by the end user are defined by the system administrator in the **Available authorization methods** section under **System settings** → **Global parameters** → **Security**.



If the path is configured with the **Require** or **Always require** mode selected, and the administrator allows any authorization method, the following window will appear during the path transition attempt:



where the user can select the method of additional authorization – a one-time authorization code will be sent to the user's email address (**email message**), phone number loaded from Active Directory and defined in the user's profile (**SMS**), or to the mobile application (**PUSH notification**). The received authorization code must be entered in the form window:



Entering the code is equivalent to confirming the user's identity, and once authorized, the user may continue working with the instance(-s) once or for the duration of the session.

Note that a user can have only one authorization session active at a time – starting a new session automatically invalidates the previous one.

If the path has been configured with the **Always require** option selected, the path transition will require additional authorization, even if the user already has an active authorization session. The previous session is invalidated, and proceeding to the next step in the workflow requires re-entering the one-time authentication password.

If a user replaces another employee, i.e. works on their behalf or the replaced person's tasks are delegated to the user, and the substitute goes through a path that requires additional authorization, a one-time code is sent to the substitute's email/phone number/mobile application and authentication is based on the data associated with their account.

MailApproval, HotFolders, HotMailBoxes, WEBCON BPS Workflow Service

If going through a path requires periodic authorization or must always be authorized, it cannot be used for the **MailApproval** functionality, whose configuration tab is then unavailable.

Similar restrictions apply to **HotFolders** and **HotMailBoxes**, and documents and attachments processed in the context of these functionalities cannot be transferred through a path for which an additional authorization is required.

If the path transition is implemented by **WEBCON BPS Workflow Service** (e.g. automatic start of the workflow, execution of **Cyclical** actions, actions executed **On Timeout**), the configuration of an additional authorization on that path will lead to an operation execution error.

Authorization for Quick paths and Mass actions

The functionality also works in certain cases when using **Quick paths**. If the user configures a Quick path with periodic or each-time authorization, the received code can be used to move single or multiple workflow instances through that path at the same time, for example, from the **Report** or **My tasks** level, without having to enter form edit mode.

A similar authorization solution is provided for users of **Mass actions** on reports. When configuring **Mass action buttons**, the user can select a path for which a periodic or each-time authorization requirement has been set. The code received is then used to authorize the simultaneous movement of multiple report elements through that path.

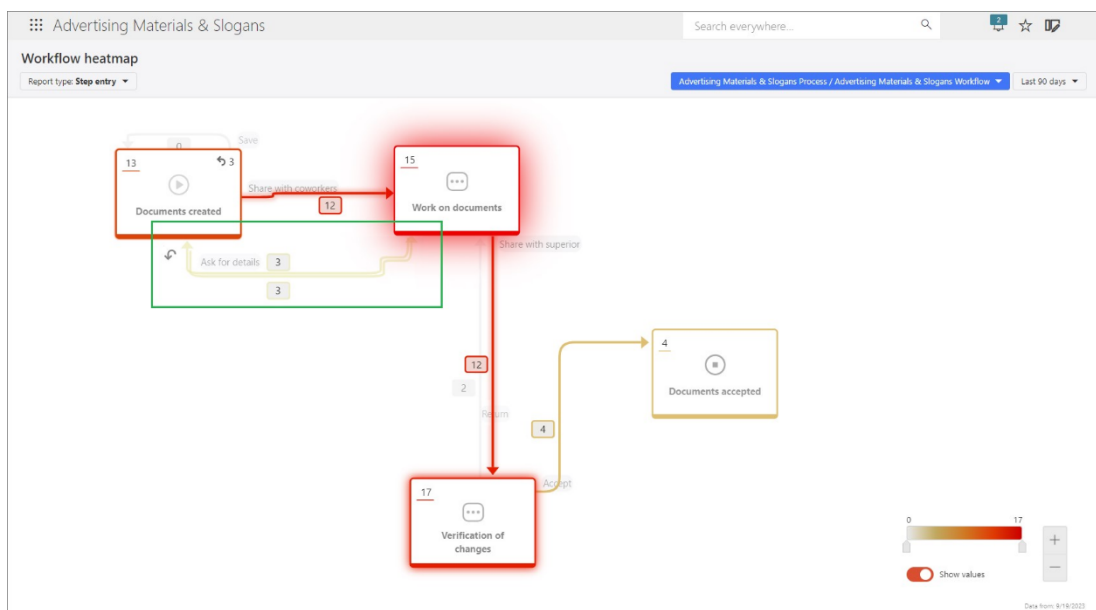
Path transitions in subworkflows

The functionality of path transition authorization affects how automatic subpath transitions are handled, i.e. when an instance is started in a new workflow or subworkflow, for example, by triggering an action or automation. It is not recommended to configure additional authorization for path transitions in subworkflows (**None**). However, if the user wants to configure a separate authorization for a subpath transition, they should select periodic authorization (**Require**). Validation will then take place, and the subpath transition will succeed only if periodic or each-time authorization (**Always require**) is configured also for the path in the parent workflow and that session is still active.

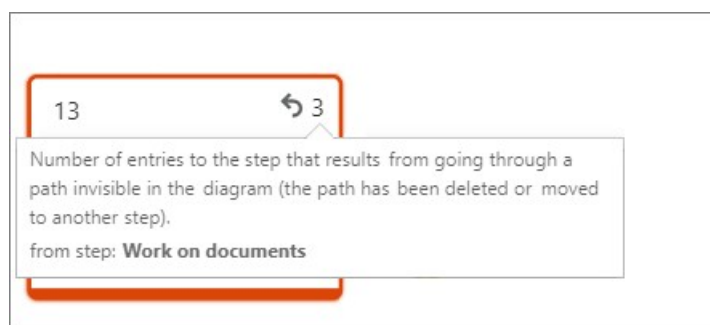
5.5. Visualization of "Return to previous step" path in Heatmap report

Heatmap analytical reports (**Step entry**, **Step re-entry**) now include more detailed information on the number of return path transitions in the workflow.

If a workflow instance has gone through a return path that no longer exists on the diagram (e.g. it has been deleted or moved to another step), then this path is drawn in the Heatmap report as a copy of any path leaving the return step – offset from the original and pointing in the opposite direction. Such a return path is drawn if the workflow instance has passed through it at least once. The number of transitions through the return path is indicated by the counter next to it.



In addition, all return paths are marked with a special graphical identifier (arrow symbol). The return path counter for a particular step is also marked with this symbol, and hovering the cursor over it will display the corresponding tooltip.



5.6. Improved digital accessibility of WEBCON BPS Portal

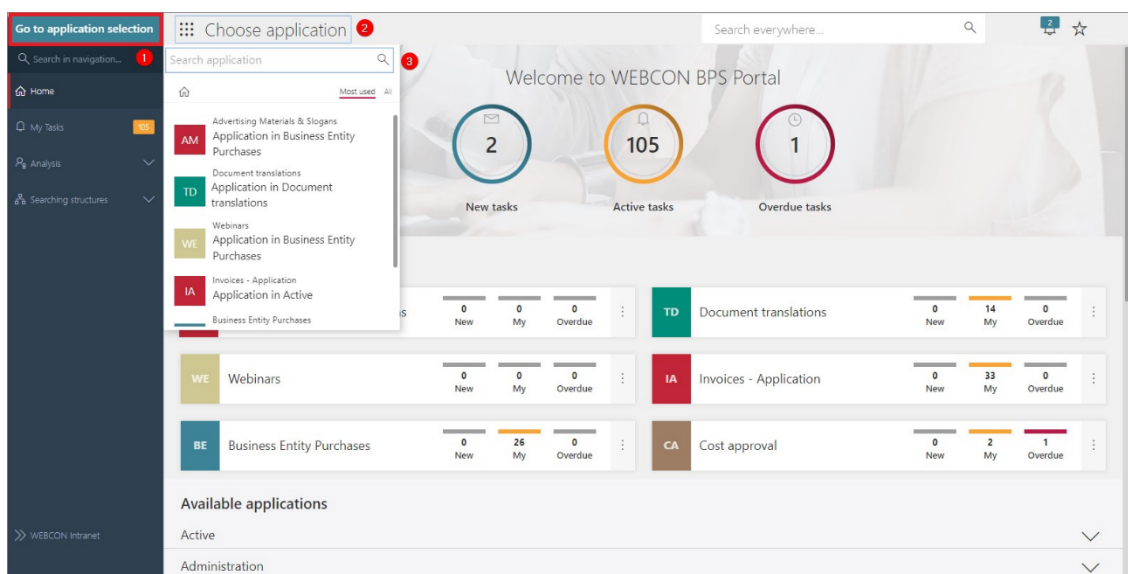
Changes have been made to WEBCON BPS Portal to improve its digital accessibility for end users (including those with disabilities).

As part of this release, a number of modifications have been initiated that will make Portal easier for users to navigate, while at the same time bringing it into compliance with the applicable Web Content Accessibility Guidelines (WCAG).

Keyboard operation

A new component has been added to allow keyboard users to navigate Portal more quickly. The component sequentially sets the focus on the **logo** (side panel), **application selection**, or **search pane** in the top menu.

In addition, focus visibility has been improved for navigation on the Portal home page and application page. The focus can now be set on the sub-elements of the above areas – in the case of the side panel, these are the license selection modal window and the drop-down lists of the **Process Design** in **Edit mode**; in the case of the application, the application selection drop-down list; and in the case of the search pane, the drop-down list of search prompts.



Increased focus visibility in Portal

In addition to making the focus visible when using the keyboard, it is also possible to specify the width of the focus border in the color theme definition. The default border is 1px, changing it to 2px will make it more visible to users who have such needs. This functionality is available from **Admin panel** → **Color themes** → **Edit themes** (pencil icon).

The image shows a configuration panel with three rows. The first row is 'Focus color:' with a text input containing '#c39f4c' and a color swatch. The second row is 'Focus width' with a dropdown menu showing '1px' and a downward arrow. The third row is 'Demo:' with a text input containing 'Lorem Ipsum'. A red rectangular box highlights the 'Focus width' dropdown menu.

After the change, the focus will also be visible when using the Contrast theme in Windows system settings.

5.7. Translations of questions and answers in Survey fields

It is now possible to define translations in the configuration of **Survey fields**.

For the **Rating scale** form field, users will be able to add translations of the question and descriptions of the minimum and maximum scale values.

For the **Choice list**, users will be able to add translations of the question, each answer, and description of the optional answer.

Configuration □ ×

Question

Question:

Show question text:

Answers

1	Yes.	+
2	No.	...
3	I don't know.	-

Numbering of answers: Numerically Alphabetically

Options

Multichoice

Show field to type answer

Description:

Rows:

Configuration of those translations is possible from both from Designer Studio and **Form designer** in Portal.

Sind Sie mit der Ausbildung zufrieden?

1. Ja.

2. Nein.

3. Ich weiß es nicht

4. Nur teilweise, weil ...

Phrases of Survey fields with defined translations will be displayed in the language selected in the **User profile**.

Values selected on the form for a **Choice list** that are available in other parts of the system (e.g. in **Reports, My tasks, Rules, and Mass notifications**) will also be displayed in the language currently set in Portal. However, this does not apply to previously saved instances – once the translations have been configured, the form must be re-populated with the values of these fields in order for their translations to be visible.

Additionally, the total length of all phrases and answers configured for a **Choice list**, including their translations, cannot exceed 1000 characters. This is checked when the configuration is saved and on the form, where a user who enters an optional answer that is too long will receive a warning message.

Also, given the way configuration data are stored in the database, the following (sequences of) characters are not allowed in answers and their translations: "#", "\$\$", "|", ".".

5.8. Share owner

The configuration window for the **Share workflow instance** action has been enhanced to include the **Share owner** option. The change was intended to better manage the mechanism for sharing instances and tasks from the action.

The Share owner from the action level can be:

- **System user,**
- **Current user** – the user who initiated the action on the form, e.g. by going through the path or triggering the action from the menu button. If the action is executed **On Timeout**, the share owner is the user of the WebCon Workflow Service account.

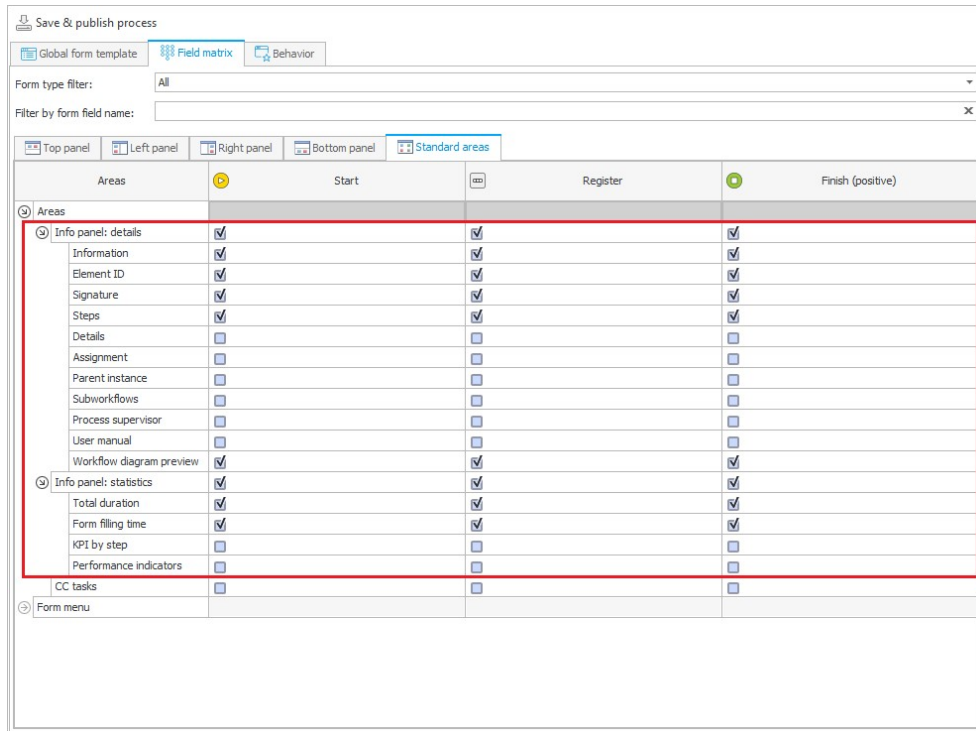
The share owner has access on the form to the list of their active shares made by executing the action, with the ability to delete them.

In addition, the **System user** will be the author and owner of all task shares made outside of the action.

5.9. Visibility of Statistics in the Info panel

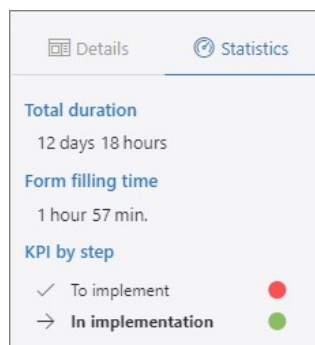
Users of the latest version of WEBCON BPS can now edit the visibility of the **Statistics** tab and its parameters for individual workflow steps in the Info panel.

The visibility of this tab and its data on an instance is determined by the settings of the **Field matrix** in the **Standard areas** tab. Changes can be made by checking the appropriate boxes in the **Info panel: statistics** section.



In turn, the visibility of the **Details** tab and its parameters can now be edited in the **Info panel: details** section (previously Status panel).

Info panel in Portal will contain only the elements marked as visible in Designer Studio. If no element in the Statistics or Details tab is selected as visible in the Field matrix for a given step, the entire tab is also hidden in the Info panel on that step.



5.10. New actions on the Item list

New actions have been added to the list of actions that allow users to perform additional operations on the **Item list**. As part of this modification, the **Change item list values** action has also been updated. All of the actions listed below are available in the **Form** group and can be triggered:

- On entry,
- On exit,
- On timeout,
- On browser opening (except for the **Update item list value** action),
- Under a Menu button,
- On path,
- Upon instance saving.

Update item list values

This is an updated version of the previous **Change item list values** action that allows users to more clearly and flexibly specify the type of change to values in the Item list. The action configuration window in Designer Studio has been modified – the **Change type** section now contains the following three options to choose from:

- **Update existing rows** – updates values in the Item list rows whose data source and Item list identifiers provided in the Unique value mapping field are matching.
- **Add new rows from the data source** – adds rows to Item list that exist in the data source, but are not available in the Item list. The rows to be added are identified on the basis of unique values provided in the Unique value mapping field.
- **Remove rows that don't exist in the data source** – removes the rows that are not found in the data source from the Item list. The rows are identified on the basis of unique values specified in the Unique value mapping field.

At least one of the above options must be selected for the action to be executed. Depending on the type of changes made to the item list, the action log displays data on the number of rows updated, added, or removed.

Configuration - Update item list values

Item list:

Change type:

- Update existing rows
- Add new rows from the data source
- Remove rows that don't exist in the data source

Data source:

SQL query:

Unique value mapping:

Columns mapping:

Item list column	Data source column

Replace item list

This action works in the same way as the previous **Change item list values** action in the **Replace values** mode. This means that executing this action will result in removing all rows of the Item list and replacing them with new ones with the specified values in the selected columns. Unlike the **Update item list values** action, the configuration window for this action does not have a section dedicated to Unique value mapping. The action log displays information about the number of rows added or removed.

Configuration - Replace item list

Item list:

Data source:

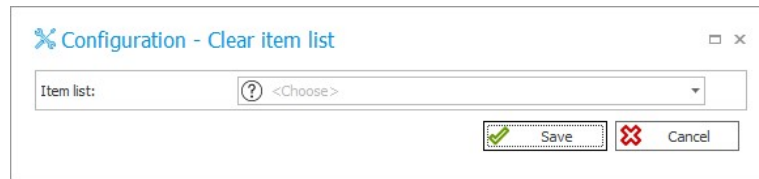
SQL query:

Columns mapping:

Item list column	Data source column

Clear item list

This action removes all rows from the Item list that the user has specified in the configuration. The action also removes rows that are not visible to the user in approval mode. This action is not available from the global automation level.



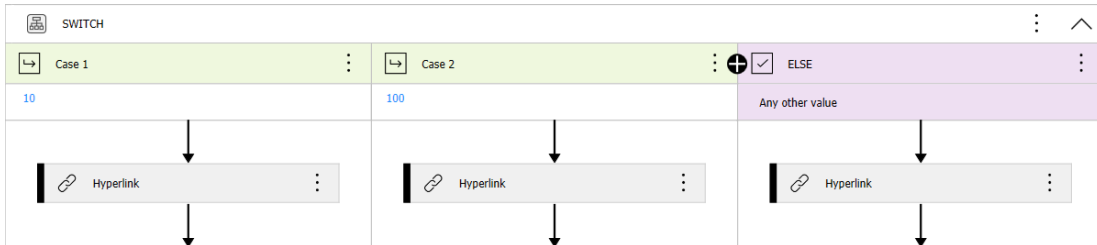
Remove an item list row

The action, as the only one described here, is available only in the context of the **For each** operator, where the defined **Collection type** is Item list. The action's operation is limited to removing the current Item list row, so there is no configuration window available for it. It is possible to create action patterns based on it. The action log in Admin mode shows exactly which Item list row has been removed.

5.11. SWITCH Operator

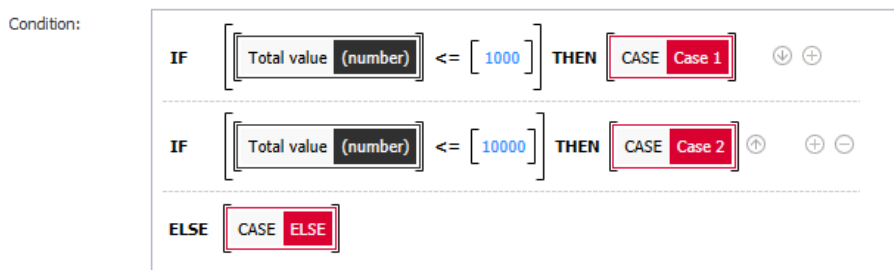
A new operator named SWITCH was added for use in **Automations**.

The operator allows more outcomes and conditions to be handled when compared to the existing **Condition** operator.



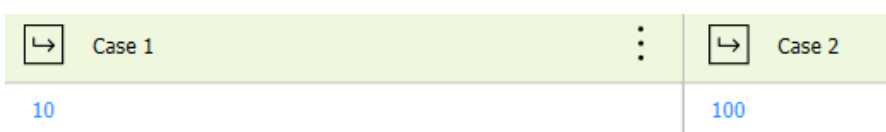
The condition within the **SWITCH** operator is a business rule whose result will point to the case that will be used. The case can be designated in two ways:

Variable referencing the case



As with the **Workflow control** step, the result of the rule can be a variable that references one of the available cases. If the rule does not identify any case, the **ELSE** case will be used.

Value assigned to case



Each case may be associated with a value. The result of the condition will be compared with these values (from left to right). If a match is found, the matching case will be used. If the result does not match any case, the ELSE case will be used.

Configuration

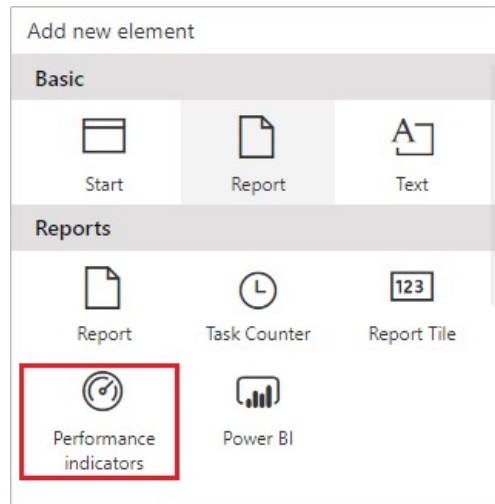
Any number of cases may be created, and their names and order may be changed. The ELSE case is always at the end.

The operator must have at least 2 cases (including the ELSE case).

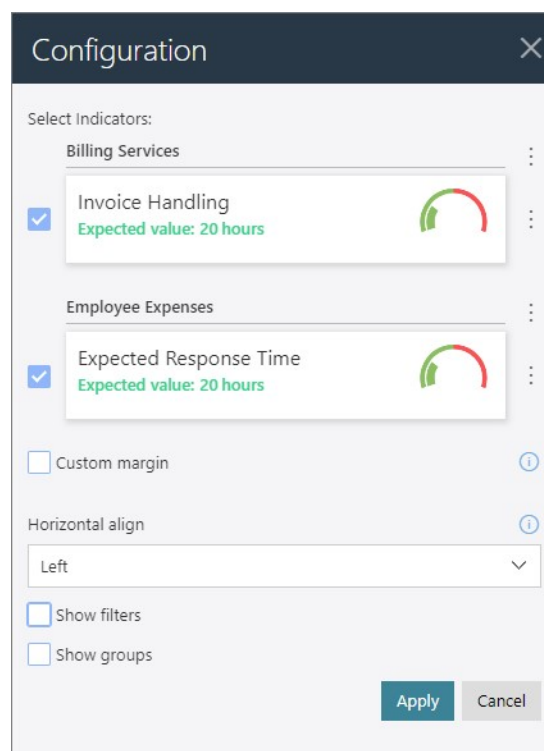
The **SWITCH** operator may be changed to the **Vertical layout** from the context menu.

5.12. Performance indicators on Dashboard

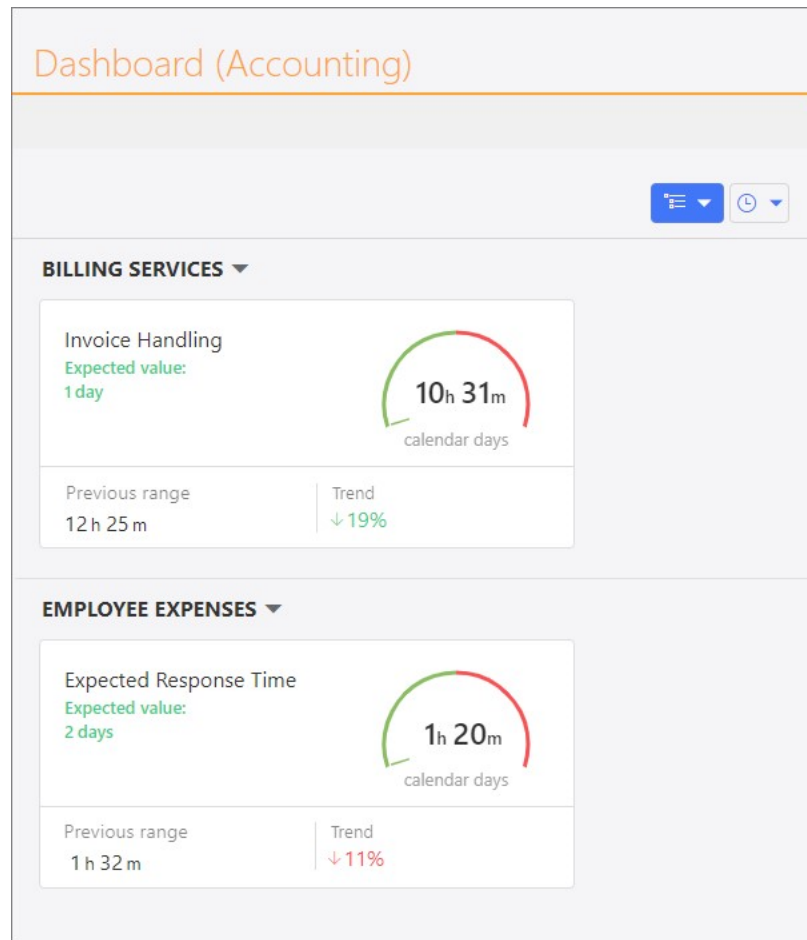
Users can now add and configure the display of **Performance indicators** on the Dashboard in WEBCON BPS Portal. A new element has been made available in the Reports group to support this functionality:



Once the widget is added, a configuration window appears where users can select the desired performance indicator, set margins, and adjust horizontal align. They can also choose to group the indicators in the widget based on process (**Show groups**) and apply filters (**Show filters**) to compare indicator data from different periods.



By default, performance indicators are displayed in alphabetical order by application processes, but this can be changed using the context menu located on the right-hand side (icon with three dots). It is possible to adjust the sequence of processes and their related performance indicators as well as individual indicators within a process.



Availability and privileges

The new functionality is available to users with an active **WEBCON Advanced Analytics Framework** license. In addition to the global business administrator and the process business administrator, access to the data in the Performance indicators widgets on the Dashboards is granted to users with both global: **Workflow data read-only access** and process privileges: **Access and edit all workflow instances**, **Access all workflow instances and attachments**, as well as **Access all workflow instances (excluding attachments)**.

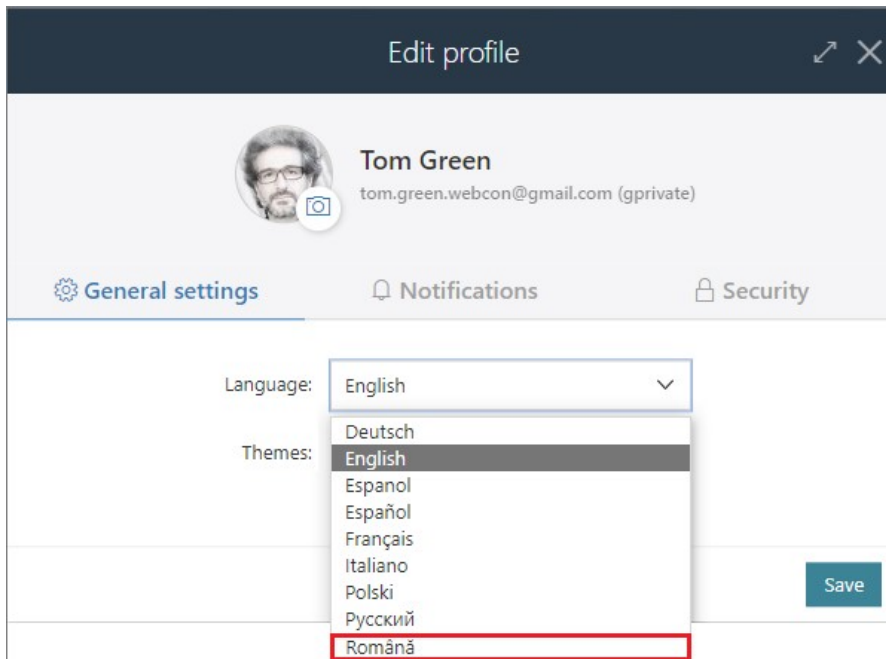
Note: as part of this change, the availability of analytical indicators in Portal (**Analytics** section) has been extended. Starting with this version of WEBCON BPS, users who have been granted **Workflow data read-only access** global privileges can also view these indicators.

5.13. General

- Communication with OneDrive has changed – it now uses the GraphServiceClient (Microsoft Graph) library. With this change, most HTTP codes are supported and appropriate error messages are returned.
- Added an index for the **Calendars** table, which should noticeably increase query speed.

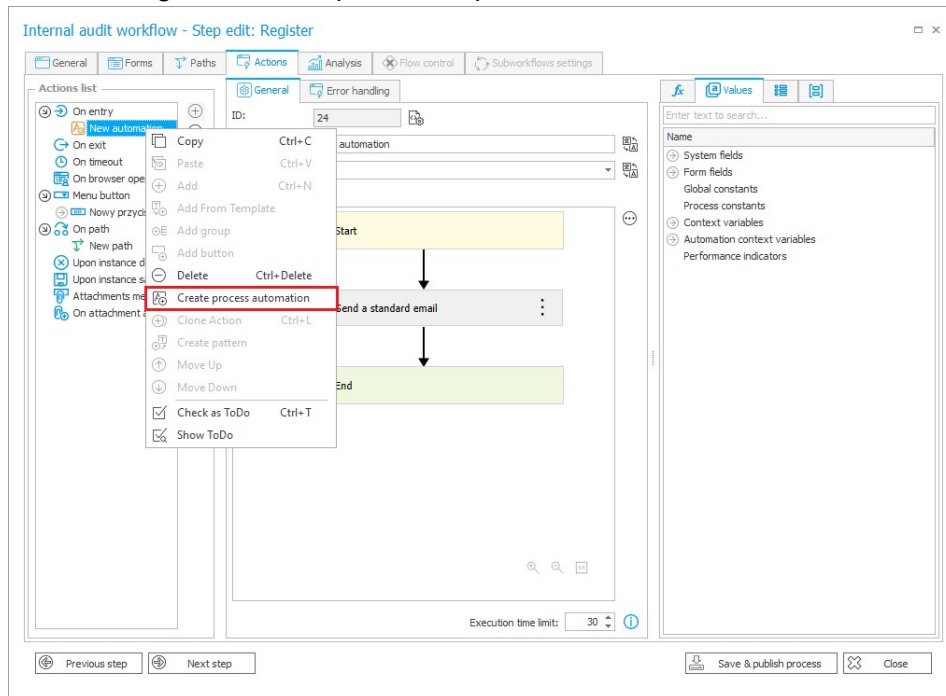
5.14. Portal

- The values of **Picker fields** on the form and in reports will now support translations defined for both the full language and country code (en-GB, en-US, de-DE, etc.) and the shortcode (en, de, etc.).
- Romanian has been added to the list of basic interface languages in WEBCON BPS Portal.



5.15. Designer Studio

- It is now possible to **Create process automation** from the context menu in the action configuration on a path or step.



- It is now possible to specify whether a proxy defined in the system will be used to establish WEBCON BPS Portal network connections with the **Authentication provider**.

Therefore, the configuration windows of the Azure Active Directory (AAD), ADFS, and OpenID Connect Authentication providers feature a new dedicated checkbox **Don't use proxy**.



If this option is unchecked, but no proxy is defined in the **System settings**, authentication calls to the provider are made without employing a proxy.

- 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.

5.16. Actions

- Introduced the ability to run a JS script following the **Run an SDK action** triggered from a **Menu button**.

5.17. Rules

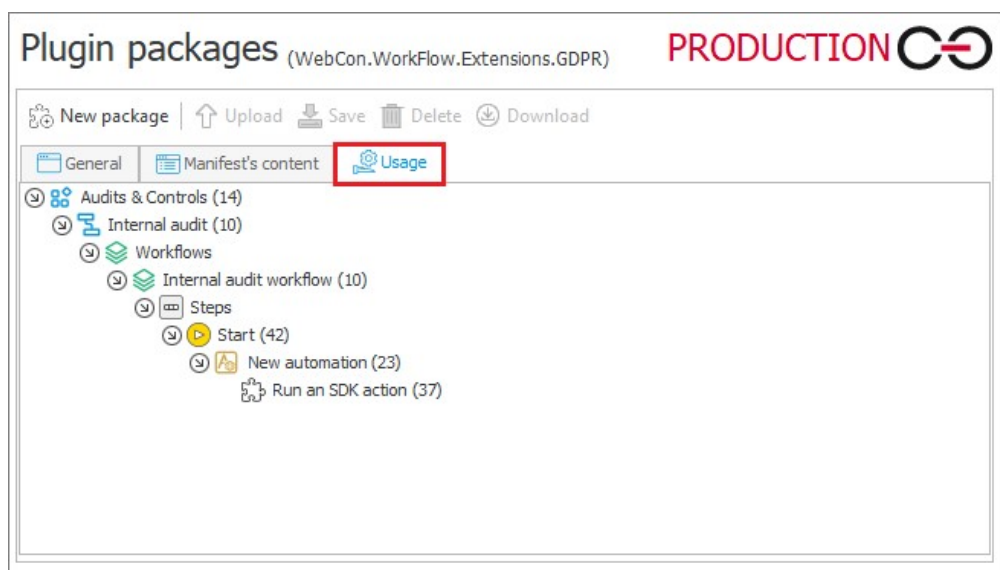
- Added the ability to retrieve the value of the **Local attachments** column by means of **Form rules**. Such values are now returned in the format "AttachmentID#Name".

5.18. Data sources

- Added a new filter rule **IS ACTIVE** that returns only active groups and users. If a user or group is active, it returns the logic value "TRUE" and displays only active items. The rule is available in a newly created section **Users and groups** in the **Functions** tab of the expression editor which is visible only for the BPS users data sources.

5.19. API & SDK

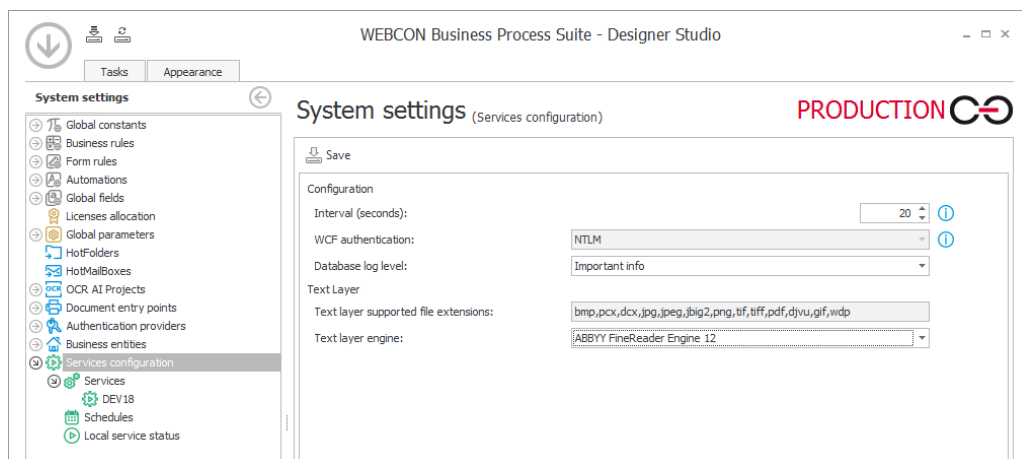
- As part of the REST API functionality, it is now possible to add attachments directly to the local attachment column when starting and editing workflow instances.
- New methods have been added to the SDK, enabling the removal of values from the **Multiple lines of text** form field in **Append mode**, as well as values entered in the comment field.
- Introduced the ability to export all files contained in **SDK plugin packages** at once and then import them as a whole. Previously, only plugins used in the exported/imported process were included in the export/import operation. In addition, a **Usage** tab has been added to the configuration windows for **Plugin packages** and individual **Plugins**.



5.20. Updated components

- WEBCON BPS now supports the **ABBYY FineReader 12** component for recognition and creation of the text layer of documents in graphic formats. An older version of the ABBYY FineReader library can still be used in the system if it is installed in the environment.

The option to choose the version of the component that will be utilized by **WEBCON BPS Workflow Service** to recognize OCR files can be found in the global configuration of WEBCON BPS Designer Studio: **System settings -> Services configuration -> Text layer engine**.



To select the newer version of **ABBYY FineReader 12** in the service configuration, it must be installed first. After upgrading the system to the latest version, **ABBYY FineReader Engine 11** will become the default.

Note: due to the higher resolution of the version 12 component, the text layers created by the version 11 and 12 components may differ. In particular, these differences affect the text coordinates of the resulting text layer, which in turn can affect the quality of recognition by OCR AI networks. If recognition quality degrades, it may be necessary to perform an OCR AI network teaching operation based on the new data.

6. Bug fixes

6.1. General

- Improved the script that adds the AutomationSessionExecutions table when migrating to a production environment. After the change, the migration will run correctly regardless of the installation size.
- Improved error handling when migrating **Active tasks** using the Installer. After the change, exceptions are handled in such a way that application errors do not occur.
- Fixed a deadlock problem in the procedures responsible for the checkout of elements in the system.
- The Designer Studio installer that is downloaded from Portal (from the user menu) has been digitally signed so that Windows Defender does not block the installation file.
- External components used to create .exe files downloaded from the browser for the installation package will now be signed with WEBCON's certificate to avoid being classified as malware by antivirus programs.
- OCR AI project templates now have an additional parameter for controlling the minimum acceptable probability threshold of recognizing a value in a given field.
- Fixed an issue that would prevent version 2021 R5 from being updated to version 2022 R4 and newer. This issue was caused by SDK actions configured to be triggered cyclically.

6.2. Portal

- Changed the message informing the user that they do not have permissions to display a **List of substitutions**.
- Fixed a bug that occurred after adding a JFIF file to the theme and setting that theme as a default one. The bug prevented changing and editing themes.
- Fixed an issue with displaying **Stacked** charts in **Reports**. Grouping did not work correctly – the bars overlapped each other and had the wrong width.
- Fixed errors that occurred while grouping data in **Reports** that used a **SearchIndex source**.
- Improved the order of loading configuration for the **Portal** container. Fixed an issue where environment variables were not taken into account.
- Improved loading of grouped data in reports when changing their views.
- The sensitive data that were previously displayed when Portal started and in the associated logs are now hidden.

- Fixed an issue with displaying workflow instances, reports, forms in relation to a group of languages (such as Swedish, Finnish, Croatian, Norwegian, Lithuanian) for which the default negative sign was minus (U+2212) and not the standard hyphen-minus (U+002D).
- Fixed an issue with searching dates on **Reports** using **Searchindex** as their source.
- Fixed an issue with displaying tasks delegated as part of a substitution in the **My tasks** view. Tasks would appear in the task list, but not in search results.
- Fixed a bug that prevented the correct display of reports when using the **Substitutes** functionality in **Acting on behalf of** mode.
In addition, when selecting the replaced person subordinate view and switching to **Direct subordinate's view**, the data of the respective subordinate are now correctly displayed.
- Fixed a bug that resulted in missing available values for the **Choice field** and **Choice tree** form fields in the **Mass actions** window in **Reports**.
- Fixed an issue with downloading files in **Reports** when the diagnostic mode is enabled.
- Fixed a bug that caused filter values to be displayed in different languages in SOLR search results. As long as the appropriate translations are available, after changing the language in the **Profile settings**, the names of the filtered fields (Application, Process, Workflow, Step, Form type) will be displayed in the specified language version.
- Fixed a bug that prevented saving changes to the **BPS Group** configuration in the **Admin panel**.
The issue arose when an inactive user (either deleted or deactivated in AD or AAD) was one of the group members.
To rectify the issue, a validation of BPS Group members was included when editing the group. Whenever a user, who is a BPS Group member, is inactive, a message displays indicating to remove them from the group before saving changes.
- Improved dynamic paging in **Reports** and **Searching structures**.
- Fixed a bug that prevented the diagnostic session report from being saved.
- Fixed a bug that prevented **Tenant ID** from being edited in the **Azure AD Synchronization** node of the **Admin Panel** for WEBCONAPPS-SaaS installations.
- The **SearchIndex source** option can no longer be selected for **Document templates** Reports.
- Corrected the URL redirecting to the login error page.

- Fixed incorrect display of **Legends** after cloning a **Chart** report view and placing it with the original view on the **Dashboard**.
- Fixed errors caused by date formatting after setting Portal to Danish language.
- Fixed an issue with the configuration of start buttons in **Reports**. The error allowed creating buttons with incomplete configuration, but now the validity of buttons will be checked.
- Improved the contextual help for the **Standard filters** in the configuration of **Reports**.
- Fixed an instance startup bug where, in the absence of a default business entity, the dedicated field was automatically populated with the data of the first company in the database.
- Improved filtering of data by form field value on a report for which the data source is a **Fixed value list**.
- Fixed an issue that occurred when adding attachments for a group of languages (such as Swedish, Finnish, Croatian, Norwegian, Lithuanian) where the default negative sign was minus (U+2212) instead of the standard hyphen-minus (U+002D).
- Improved filtering of **Calculated columns** in reports.
- Fixed a user synchronization error when configuring an application with API access in the **Admin Panel**. After the change, the user's data are retrieved from the **Default content database**, not the application database.
- The columns available in the **Additional filters** section, which are used to filter values in reports, now appear in alphabetical order, with system columns displayed first, followed by process columns.
- Fixed a bug where setting the ASPNETCORE_ENVIRONMENT variable to "Development" made it impossible to run WEBCON BPS Portal.
- Fixed a bug in the display of **Multiple lines of text** report columns in **Append mode** when the column view was limited to the **First 100 characters**. The bug caused key data, such as the date and author of the comment, to be hidden. After the fix, this type of data is not included in the 100-character limit.
- Fixed an issue where the superior would not see the substitutions configured for employees who report to them but are not their direct subordinates, even though the **Active of my subordinates** filter was set.
- When creating a substitution for another user (**Supervisor for subordinates**), an option has been added to save the definition of a substitution for an employee who reports to the person creating the substitution, but is not their direct subordinate.

- Improved the display of the **Multiple lines of text** column with **Append mode** enabled in the report when the **Do not wrap** option is selected. After the change, the column values do not overlap.
- When starting a workflow instance, the list of available business entities is limited to those covered by the user's privileges.
- Optimized the user privilege check when loading all applications on the WEBCON BPS Portal home page.
- Fixed an issue where text in the **Choice list** form field would overlap radio buttons, e.g. when working on a mobile device.

6.3. Form

- Fixed an error that occurred when the value of the **Multiple lines of text** form field in Rich Text formatting mode was checked by a regular expression (regex).
- Fixed an error that occurred when deleting an **Item list** row that was a **Choice field (Popup search window)**. In case of an Item list with multiple rows of this type, an attempt to delete one of them resulted in unnecessary validation of other rows' values.
- Improved changing the value of the **Floating-point number** form field and Item list column to **EMPTY** using a Form rule.
- Fixed an error in the execution of the rule defined for the **Date and time** column of the **Item list** that occurred after the value of this column was cleared.
- Fixed a bug where a rule restricting the visibility of **Item list** columns only worked when the form data were reloaded, e.g. after a path transition.
- Optimized loading of the historical version of the workflow instance to save an attachment.
- Fixed an erroneous interaction in choice fields that used the **Target field** function. If a user manually changed a value set using a Target field and the form contained a visible **Data row** form field, the changed value would be reverted after using a path.
- Fixed an issue that prevented attachments from being deleted if their name contained an ampersand (&).
This was caused by "&" being a special character in XML.
The fix changes all "&" characters into their XML counterpart: "&".
- Added missing translations in the **Tab panel**.
- Fixed a bug that caused an error message to be displayed when trying to edit a workflow instance attachment in Mozilla Firefox.
- Fixed an error that occurred when changing the order of **Form fields** on the form. This fix will clear up duplicate field ordinal numbers, therefore the order of existing fields may change.
- Added an error message to be displayed in case of network problems, such as 502 "BAD GATEWAY", when working with the form.
- Fixed an issue that occurred when adding new rows to an **Item list** with grouping enabled.
- Fixed an issue with sorting dates and numbers in the **Data table** form field.
- Deletion of an attachment to a workflow instance will now automatically close its preview.

- Improved loading of a file preview in **OCR verification mode** when **working on behalf of another user**.
- Standardized the way the **Choice field** target values are set on the form in **OCR verification mode**. Previously, when that form field was configured to allow multiple values to be selected, the new value was added to the previous one – now it overwrites it.
- Fixed a bug that prevented the correct validation of form fields in case of their large number on the form, which was supported by the message "Error during saga execution".
- Increased the maximum value of a workflow instance version when assigning a task to users.
- Fixed a bug that prevented the correct display of the instance **History**. The bug occurred when the instance had an **Item list** whose number of rows changed between workflow steps.
- Fixed a bug that caused form fields related to a **Choice field** (in **Autocomplete** mode) to be automatically populated with incorrect values from the **Data source**. This was the case despite setting **Allow adding values not in data source** for the Choice field and attempting to populate it with new values.
- Fixed an error that prevented the user from choosing their business entity on the form.
- Corrected display of **Floating-point number** with suffix on the form – after the change the numeric value and suffix are aligned with each other.
- Adjusted the email preview width on the workflow instance to ensure that the entire content is visible.
- Fixed a bug that caused changing capital letters into underscores when editing an attachment.
- Fixed a bug that caused the hour value in the **Date and time** form field to be reset by 1 hour when saving the form. The error occurred in the Mozilla Firefox browser when the time zone set was (UTC+02:00) Helsinki, Kiev, Riga, Sofia, Tallinn, Vilnius.
- Fixed a bug in which, regardless of the entered configuration, the search panel in reports always displayed the **ID** and **Instance number** columns.
- Fixed an issue with importing data from an Excel sheet to an **Item list**. If the source sheet contains currency formatting, only the numerical value will be imported.

- Improved the refreshing of values in **Item list** columns that use a data source. Filters defined on these data sources that make use of other values entered on the form will correctly filter available values.
- Fixed a timeout error that occurred when removing workflow instances at the form level. Additionally, a related bug has been fixed that either prevented instance archiving or considerably extended its processing time.
- Improved the operation of **Query data source if variables return empty values** option available when configuring a **Choice field**.
- Fixed a bug that caused the display of the superior's login instead of their name in the subordinates view. This issue only occurred when the **Allow to work on behalf of another user** mode was enabled.

6.4. Designer Studio

- Fixed a bug that prevented the display of an error message when clicking the **Create universal rule** button while attempting to create a universal rule that refers to an **Item list** column.
- Fixed an issue that prevented **Mass notifications** from being sent if they had the **Use custom send rules for user notifications** option enabled. The error occurred when using "Date of task creation" and "Date of task modification" properties.
- Fixed a bug that occurred after pressing the **Show** button in the SQL query editor.
- Fixed a bug that caused duplicate automation IDs when generating process documentation.
- Changed cursor behavior for long SQL queries so that copying code snippets in the editor does not take the user to the very beginning of the query.
- Fixed a bug that occurred when importing an application with form rules containing regular expressions (regex) with values in curly brackets "{ }". When the application was imported, the values in the brackets were replaced with "0".
- If the **Dynamic** option is inactive in the configuration of task creation, any field and column settings for it will be cleared.
- Fixed an error that occurred during application export when the process included a form field whose value was checked by a regular expression (regex) containing curly braces "{ }".
- Restored correct resetting of the counter of erroneous executions after activating the previously disabled cycle of actions in WEBCON BPS Studio.
- Fixed an issue that occurred during process import and prevented the transfer of the **Chart** report configuration, namely its **Label description** and **Grouping** settings, to the target environment.
- Fixed an issue that prevented replacing a tag in the configuration of the **Hyperlinks Start Element** function after importing an application.
- The startup time of WEBCON BPS Designer Studio has been reduced on machines with Microsoft Defender Antivirus running.
- Fixed an error that occurred when defining an **Insert condition (SQL)** for an action executed **On timeout**. After the change, the tag in the SQL expression is correctly replaced with the BPS object/label (tag name + its variant).
- Fixed a process export error that occurred as a result of deselecting an application checkbox in the list of exported elements, going to the **Plugin packages selection** step, and then returning to the **Related element** step in the wizard.

- Fixed an error that occurred when trying to switch from the last to the first step of a workflow in the step preview (**Next step** button).
- It is now possible to change the order of the **Active** column in a report based on data from a **Dictionary process** and after specifying a certain **Form type** in the report configuration.
- The email message sent by the system for the **Rating scale** form field will display the configured question, not the form field name.
- Fixed a crash caused by duplicates in the TranslateLanguages table. Added a mechanism that prevents future duplicates.
- Removed a bug that provided extra, undue license for Designer Studio in addition to the one standardly available in the Enterprise license package. So far, the second user who opened Designer Studio received an undue, additional license for Designer Studio.
- Fixed a bug that caused the **Form rule editor** window to close in **JavaScript** mode when the "Enter" key was pressed in the function search area.
- Fixed a bug that caused instances imported with the **Dictionary process** to be assigned to the wrong business entity.
- Improved navigation through the **System settings** using the directional keys.
- Added an operation to check if a value is selected in the **Data Source** section when saving the configuration of the **Update item list values** and **Replace item list** actions. If no data source is specified, a corresponding message is displayed.
- The unsupported **{PATH:_____}** tag will no longer be replaced by values in WEBCON BPS Designer Studio.
- During export/import of an application, the contents of the **Documentation** fields in the process configuration are no longer parsed for the presence of tags specifying process variables. The previous operation could result in displaying incorrect configuration message during export.
- Fixed an error that occurred during application import and caused the following exception: "Message=Input string was not in a correct format". This error was caused by a forbidden special character in the default German translation. This translation has been fixed.
- The context menu available for automations configured in the **Action list** section has been customized to match the event in the context of which the automation is triggered.
- Improved cloning of paths with automations configured using the **For each** operator.

- Fixed an error in the execution of the **Generate an Excel file** action in the **Update of existing attachment** mode, which resulted in processing attachments of a different category than the one defined, or in no processing at all.
- Fixed a bug where tags available under **Collection columns** were not correctly replaced with the corresponding values in a cyclic action configured with the **For each** operator.
- Fixed an error that prevented tags from being replaced with corresponding form field values in the **Send custom email** action template after importing an application from another environment and when the form field ID was negative. The same error occurred when this action was embedded in **Global automation**.
- Fixed an error that prevented replacing a tag in the **OpenElement** JavaScript function (the **Hyperlinks** group) in the configuration of the **Start a subworkflow** action after importing an application. The same error occurred under similar conditions for the **Data table** form field.
- Improved communication between WEBCON BPS Portal and WEBCON BPS Designer Studio by including the PortalRunningAddress parameter in HTTP methods.
- Resolved an issue with exporting applications when the number of defined **BPS groups** is significant (more than 32 thousand).
- Fixed a bug where the context of the **Variable editor** remained the same after leaving the configuration of automations based on the **For each** operator.

6.5. Actions

- Fine-tuned the exceptions for the **Insert condition (SQL)** in the action executed **On timeout** and in the **Date and time** form field.
- Fixed an error in the execution of the **Add a new list element** action that caused the action to add only one row, even though the query from its configuration returned more.
- Fixed an issue with the **Generate an Excel file** action not using the correct template.
- Fixed an issue that blocked **Automations** from being added on entry to a step. Improved the mechanism that checks if an Automation was already configured for the given trigger.
- The ability to create/add a destination file without an assigned category (**None**) has been restored in the configuration of actions for adding and modifying attachments. This option will always be available regardless of the source file's category settings.

The assignment of attachments to categories in the **Add attachment** action has been enhanced. If the SQL query includes a category, the category specified in the **Destination file settings** is ignored and the category from the query is assigned instead.

- Fixed a bug in token retrieval when the defined authentication type is **OAuth2 App -> API**.
- Fixed an error in the execution of the **Generate/Update a Word file** action in update existing file mode that was triggered from the **Attachments menu**.
- Fixed an error in executing the **Print a barcode label** action triggered from the **Menu button** by a user who had privileges to read an instance but not to edit it.
- Information that a user's **Unlimited Solutions Access** license was revoked upon granting them the **Single-Use Access** license will now be logged in the **Manage BPS user licenses** action.
- Improved the handling of small attachments < 4 MB by OneDrive actions. An error prevented 0 B files from being edited.
- Fixed a bug that occurred when transferring attachments from the parent workflow using the **Add attachment** action.
- Fixed a bug where executing the **Generate an Excel file** action from a template resulted in the creation of a file whose configured name was replaced with a default one.

- Corrected the message that appears in the workflow instance history when the action **Delete BPS user** is triggered and no user is found.
- Enhanced the WSDL verification when configuring **SOAP** data sources and the **Invoke SOAP Web service** action. When the WSDL definition contains complex type table that is unsupported by the system, a warning message is displayed and the definition of such a table is not loaded.
- Improved the way that privileges are granted to edit/read files on OneDrive. Only properly authorized users will now be able to edit such files.
- Fixed a bug that, despite granting appropriate privileges to the **BPS group**, blocked the ability of members of that group to edit a file placed on OneDrive with the **Start editing a file using OneDrive** action.
- If the **Overwrite value** box is checked in the configuration of the **Update related workflow instance** action, executing the action results in removing form fields with empty values from the related workflow instance.
- Blocked ability to select a file to edit for the action **Start editing a file using OneDrive** configured **On attachment add**. The action will be executed in the context of the attachment for which it was triggered.
- Unified the operation of the **Change value of single field** and **Change values of multiple fields** with respect to empty entries. After the change, it will be possible to clear the field values using both actions.
- Fixed a bug that caused the **Invoke SOAP Web service** action to set the form field value to "0" instead of the configured empty value.
- Fixed a bug where the **Hyperlink** action prevented an instance from being edited (due to lack of privileges).
- Fixed a bug that caused the callstack to be missing in the log, despite selecting the **Log execution** checkbox in the **Invoke REST Web service** action properties.
- The layout of the controls in the **Convert Word to PDF** action configuration window has been changed to be on the same line as the **PDF/A file** checkbox.
- Aligned the operation of the **Add a substitution** action configured in Basic and SQL query modes – in both cases, if the specified **Substitution start date** is < **today**, this date will automatically be replaced with the current date.
- Fixed an issue in the **Change value of single field** action that prevented it from changing the values of **E-mail** and **Image** type form fields.
- The configuration of **Invoke SOAP Web service** actions will now display parameters that are an enum within a table of complex types. Additionally, unsupported parameter types (i.e. table of tables or complex types

within a table of complex types) will be shown in the configuration if they have a configured mapping.

- Fixed a bug that prevented the parent workflow ID from being correctly set using the **Change value of single field** action.

6.6. Rules

- Fixed an error of the **MAX** and **MIN** functions where numbers greater than 1000 were treated as dates.
- Fixed an issue that occurred when using **SELECT VALUES** and **GET ROW** functions on an **Item list** that contained no valid columns.
- Improved the creation of **Business rules** using the **SQL Command** function – when editing, the focus is automatically moved to the edit button (three-dot icon) next to the function name.
- Fixed a bug that prevented the execution of a rule created based on an **SQL Command** when Turkish was selected as the interface language in Portal.
- Improved the **SET CELL FONT SIZE** function available for **Form rules** when no unit is specified. The default font size is now pixel (px).
- Optimized execution time and number of **Business rules** executed under load conditions, i.e. with a large number of concurrent users working in the system.
- Fixed an issue with the **SET ROW VALUE** function executed on value change. If the changed value was used within the function, the old value was loaded instead.
- Improved the configuring of **Constants** in **Rules**. From the context menu of a constant used in a rule, it is now possible to switch to another constant from the same group.
- Fixed an error that caused the **SELECT VALUES** function defined in the rule to retrieve values from the last row of the **Item list** instead of the specified row. The error occurred when the above rule was used in the configuration of the **Change value of single field** action, followed by the **For each** operator in the automation.

6.7. Data sources

- Fixed an error that occurred when setting an **EMPTY** value in a query that filters a **Fixed values list** data source in the configuration of form fields such as **Choice field** or **Data table**.
- Added the ability to select elements from the **BPS internal view** while **Working on behalf of a substituted person** and the **Access to data in the context of the system account** is enabled in the source configuration. This feature will be available regardless of the substitution settings in the process.

- Improved handling of non-integer numbers (e.g. tinyint, smallint) and non-decimal floating-point numbers in data sources.
- Added Polish translation of the last column of the **Dictionary** data source. After the change, the column name is "ID elementu w URL".
- After choosing the address/location of a WSDL, if there is an error when processing the WSDL, any errors will be displayed in a pop-up window.
- Fixed an issue in the **BPS internal view** data source created for the Sample application.
- Fixed missing button tooltips in the **Response** tab of the **REST Web Service** data source configuration.
- Expanded the message of ORA-00904 error that occurs when querying a database to include the final contents of the Oracle query. Furthermore, a tooltip has been included in the Oracle data source configuration window to notify users of unsupported column aliases enclosed in quotation marks within queries.
- Optimized data retrieval from the **BPS internal view** data source narrowed down to **Selected workflows and steps** of the process when this data source is used in the **Choice field** configuration with a defined filter query.
- Fixed a bug that occurred while updating database during migration from the version 2022.1.4.111 to 2023.1.2.44 and produced the error „Migration class error (The given key was not present in the dictionary)“.
- Fixed a bug that occurred when trying to reference **Dictionary processes** where form field names contained the characters ":", "}", "{", so that they could not be converted correctly to XML.

6.8. Add-In

- Improved translations of the names of the WEBCON BPS Word Modern add-in tabs in the windows that open when clicking on these tabs.
- Fixed a bug that resulted in inability to log in to the Outlook Classic add-in after selecting **Global logout** in WEBCON BPS Portal.

6.9. Service

- **Instance history** entries will no longer be created for automations configured **On Timeout** and for which no actions are executed.
- Improved credential validation when configuring user list synchronization with Active Directory.
- Fixed a bug in the DocumentManager class constructor which can be employed by the cyclical **Run an SDK action** actions. The bug produced an exception when constructing an object.

6.10. Designer Desk

- Fixed a bug that allowed a new prototype element (e.g. start button, report) to be added even though the prototype was opened in read-only mode.
- Fixed a bug that prevented the action description entered in the **Properties** window from being saved after closing the window.

6.11. API & SDK

- Fixed an issue related to insufficient privilege levels that prevented data from being loaded via **TemporaryEntitiesManager**.
- Fixed a bug where the **History of changes** for **Plugin packages** imported into the environment with the application/process did not contain any entries.