WEBCON

WEBCON BPS
2022

Discover the possibilities
of the latest platform version

WEBCON BPS 2022 - What's New

WEBCON BPS 2022 is the latest version of our low-code platform for digitalizing and auto-mating business processes. We've been hard at work for the past twelve months improving existing features and adding significant new functionalities. They'll immediately enhance the applications you've already built, but they'll offer you even more as you build new solu-tions. They'll be faster, less expensive, and more agile, to be sure. Most importantly, though, they'll be able to do more – a lot more.

We're assuming that since you're reading a "what's new" document, you're familiar with what WEBCON has offered prior to 2022, and for that we want to say "thank you." We value your interest and your trust.

This document highlights the most important changes we introduced over the course of 2021 in the form of periodic updates, but taking center stage is what we're introducing for the 2022 release.

TABLE OF CONTENTS

Automations

This one is big, and it's probably the most dramatic new feature for 2022. Seriously – it's a game-changer.

When you wanted to execute a series of actions along a path or in response to an event, you'd go to a step's Actions tab and add them as a simple list under one of the events. When the event fired or the path was selected, they'd execute one after the other until all were finished. If you had any conditional logic in mind, you needed to add filtering expressions to the conditional actions.

We've got something better now – a lot better. We're calling them automations. They look like flowcharts that can branch based on conditions and execute actions. They're easy to visualize, and even easier to create and maintain. They're bursts of automated activity, so we're calling them automations.

So now:

- An application contains one or more processes
- A process contains one or more workflows
- A workflow contains one or more steps
- A step can contain one or more automations
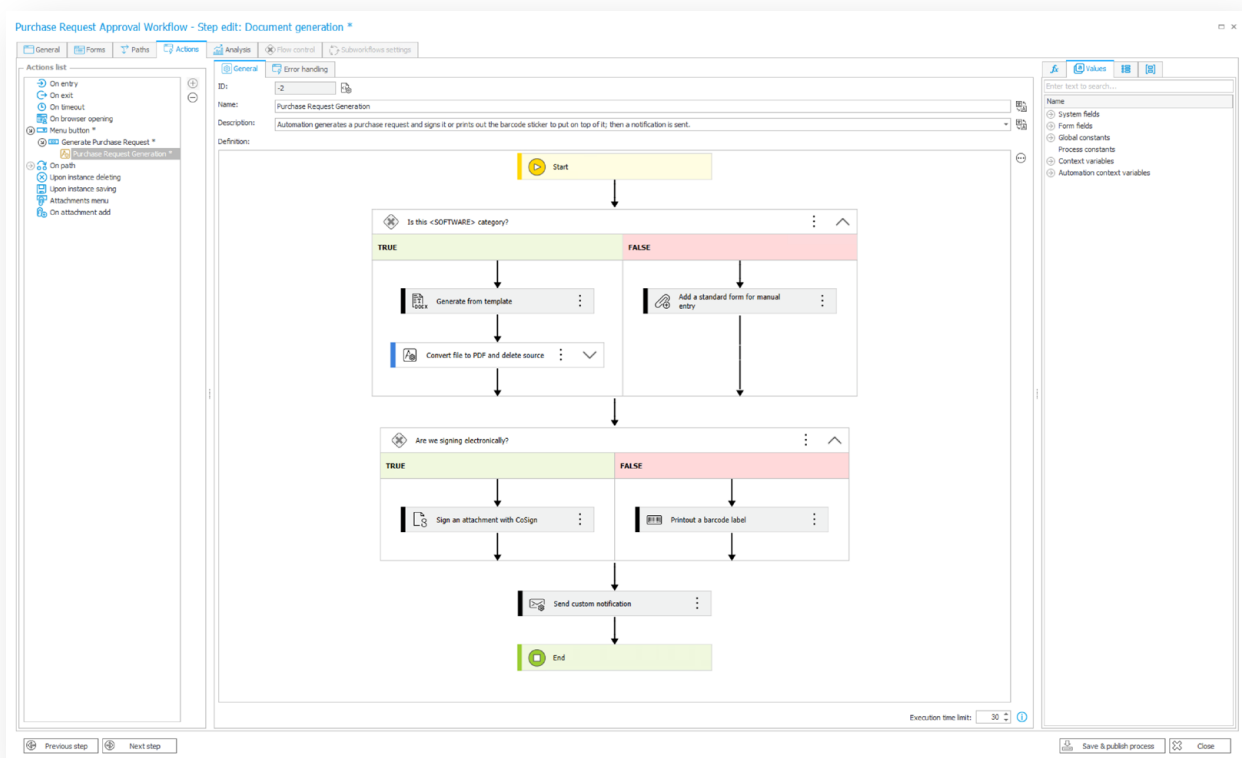
We've also made it possible to reuse automations, pass parameters between them without needing to use technical form fields as temporary storage, and configure advanced error handling. Yes, they can indeed be nested. We told you this was better, didn't we?.

Automation Example

Imagine a WEBCON BPS application that integrates with an external ERP system, and doing so requires not making a single web service request, but a whole series of them. If it were an invoice, for example, we'd need to:

1. Create an ERP invoice document, pass BPS form data to it, and receive an Invoice ID.
2. For each entry in the BPS invoice form's item list, methods would be called to add its column values to the ERP invoice's details. We'd supply the invoice ID we received in the previous step.
3. When all line items have been sent to the ERP system, another method would be called to commit the invoice document and submit it for processing. Again, we'd supply the ID we were given in the first step.

Prior to WEBCON BPS 2022, you'd have to place the Invoice ID you received in the first step into a technical field on the form. And you would have had to do any of several tricks to iterate through the item list. And if one out of several line items wasn't being accepted by the ERP system, it was far from clear how to handle that. And while you could figure out a solution, it wouldn't be easy to explain to someone else.
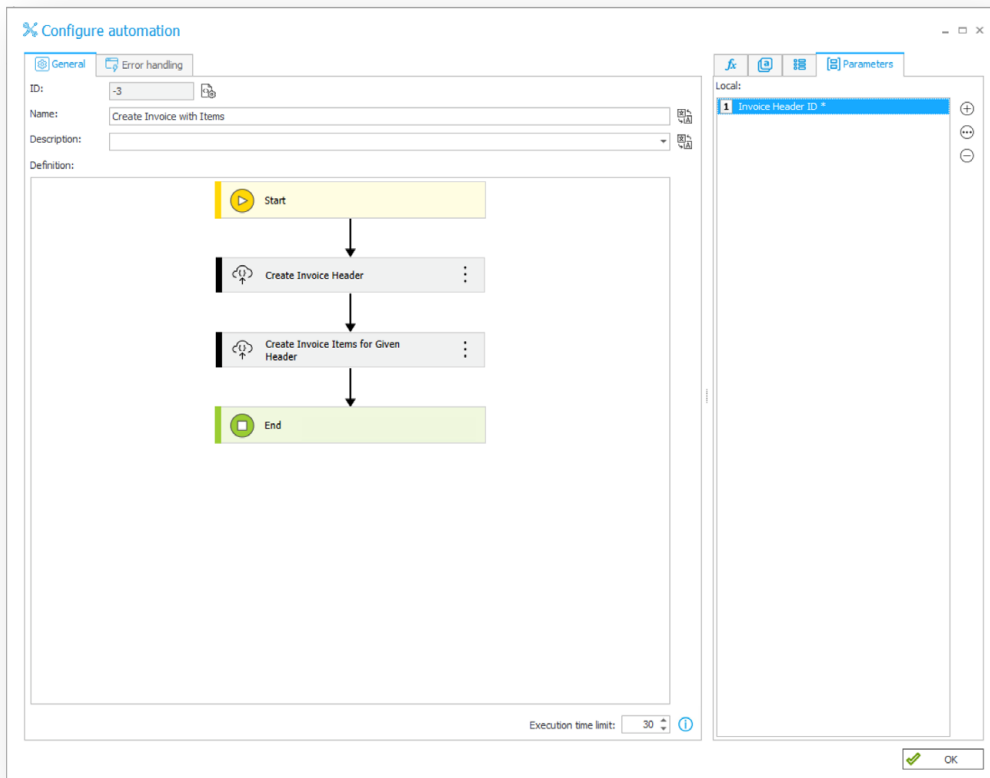
Error Handling

Automations include error handling, and it's configurable. For each action in an automation, you can define an error code+message and specify what should happen if it were to occur. In the above-mentioned example, should any of those line-item web service calls in step 2 were to fail, an action could be called to delete the item created in step 1, an email notification could be sent to an administrator, etc.
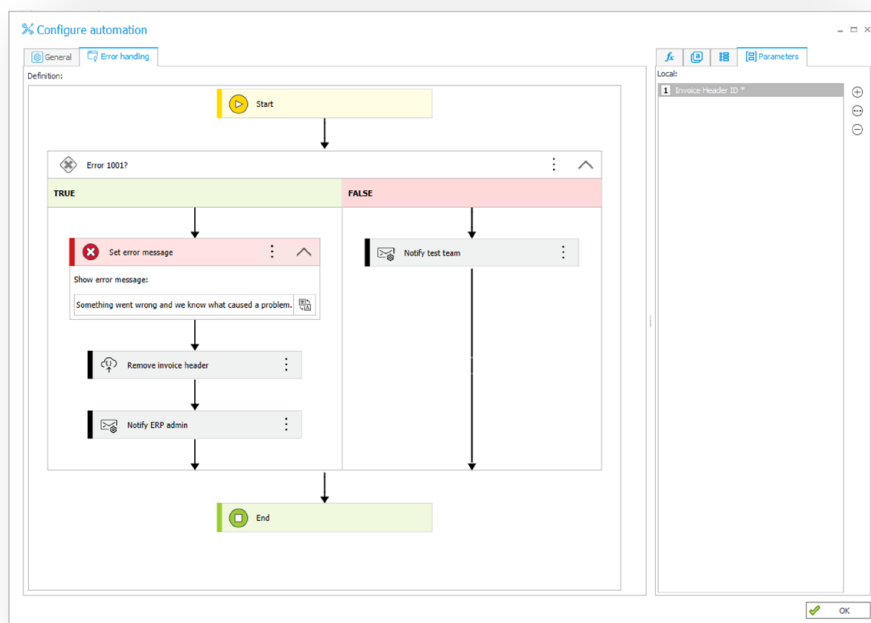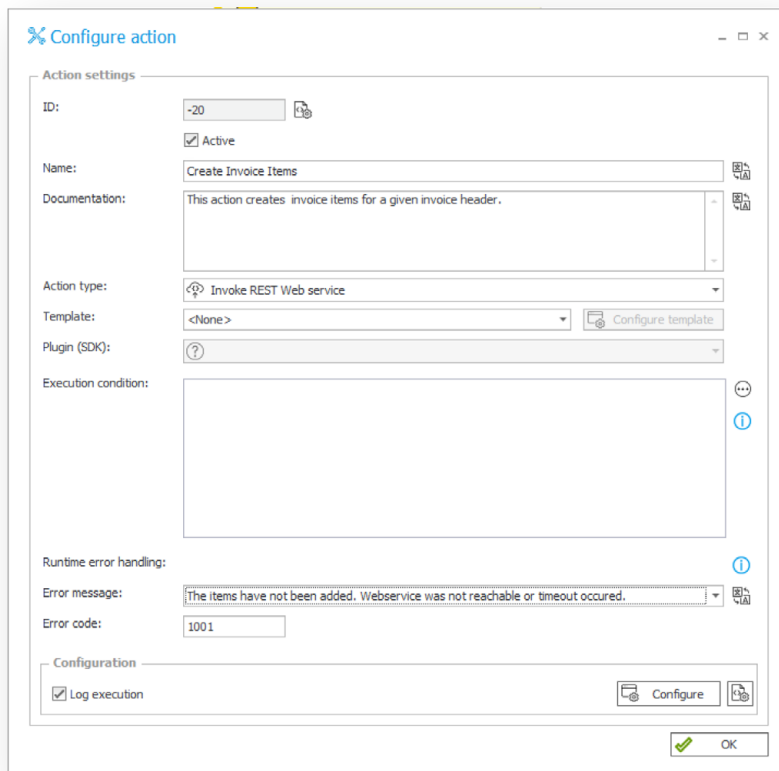
Useful Now, and Even More Useful Later

You'll find automations immediately useful for application-specific activity, and we hope you like it. But know that the architecture behind automations will allow both you and WEBCON to build and curate entire libraries of reusable automations for integrating with the APIs you actually want and doing so in the way you actually need. This isn't just about convenience – it's a watershed event.

WEBCON Designer Desk

We debuted Designer Desk debuting in 2021, and WEBCON customers and partners loved it. For some, it became a defining first step for bringing technical and business people together to create an application design made up of examples and annotations rather than abstract requests that would require negotiations. But there's always room for improvement.

Free Online Subscription

Over the course of 2021, we introduced a free Designer Desk-only online subscription. People can use it to build, try out, and iteratively improve examples. Output from this environment is a one-click generation of thorough requirements documentation in either PDF or DOCX format.

WEBCON BPS customers/subscribers (online or on-premises) with Designer Desk can, on the other hand, also export Designer Desk prototypes to WEBCON BPS Designer Studio to accelerate building the application itself.

Other Designer Desk Enhancements in 2021

The most important changes included:

- Usability improvements
- Video tutorials and walk-through to accelerate adoption
- Undo/redo support
- Default values for form fields

2022 Improvements

Much like we did in 2021, you should expect us to make incremental improvements throughout the year. But at the beginning of 2022, we've added the following:

- Configuring task information within transition paths
- Sharing a prototype design between multiple users within the same organization
- Improvements to the auto-generated documentation

Forms

We've focused both on making forms a bit more attractive and a lot more functional.

General changes

Forms provide more context now. Once they've been registered (saved at least once), they now display the name of the form type in the area where the form signature appears (this was introduced in Q3 of 2021).

User actions (top bar buttons), as of Q4 2021, can be enhanced with Fabric UI icons. It's a lot easier to complete forms without using a mouse; the keyboard tab order has been optimized and enhanced, and tabbing includes every field and UI element.

Form Field Controls

For mobile form entry, you can specify which type of onscreen keyboard should be used for each single-line text, multi-line text, and numeric text field (this debuted in Q3 of 2021).

We also added input placeholders for these fields, displaying sample text or explanatory text inside the field. The text isn't actually "in" the field, and vanishes the moment the user enters actual data into the field. This, combined with tooltips, should make form entry more intuitive.
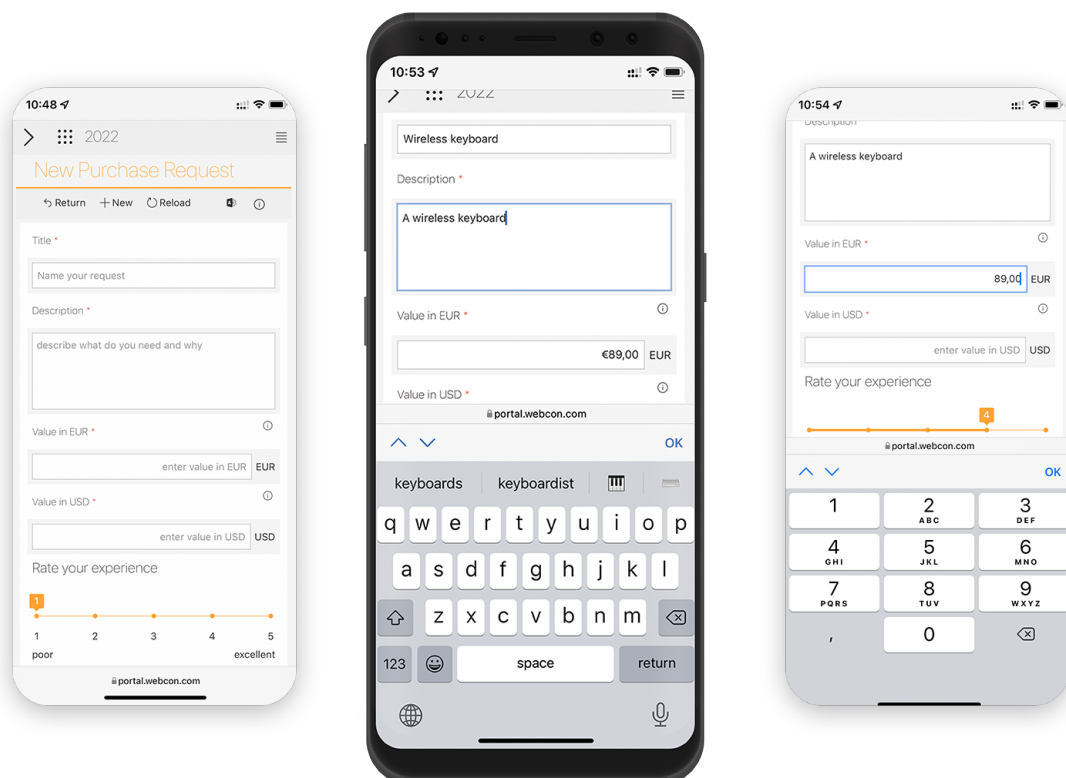
The 2022 release introduces a new scale rating control; it's more attractive and, most importantly, it adapts better to fit the available screen width. We're also using new code to render text and multiline field controls; they now have more editing options and better behavior on mobile devices.

The HTML field control has been reworked. Aside from general improvements, it can now make use of local variables, form fields, constant values, and business rules.
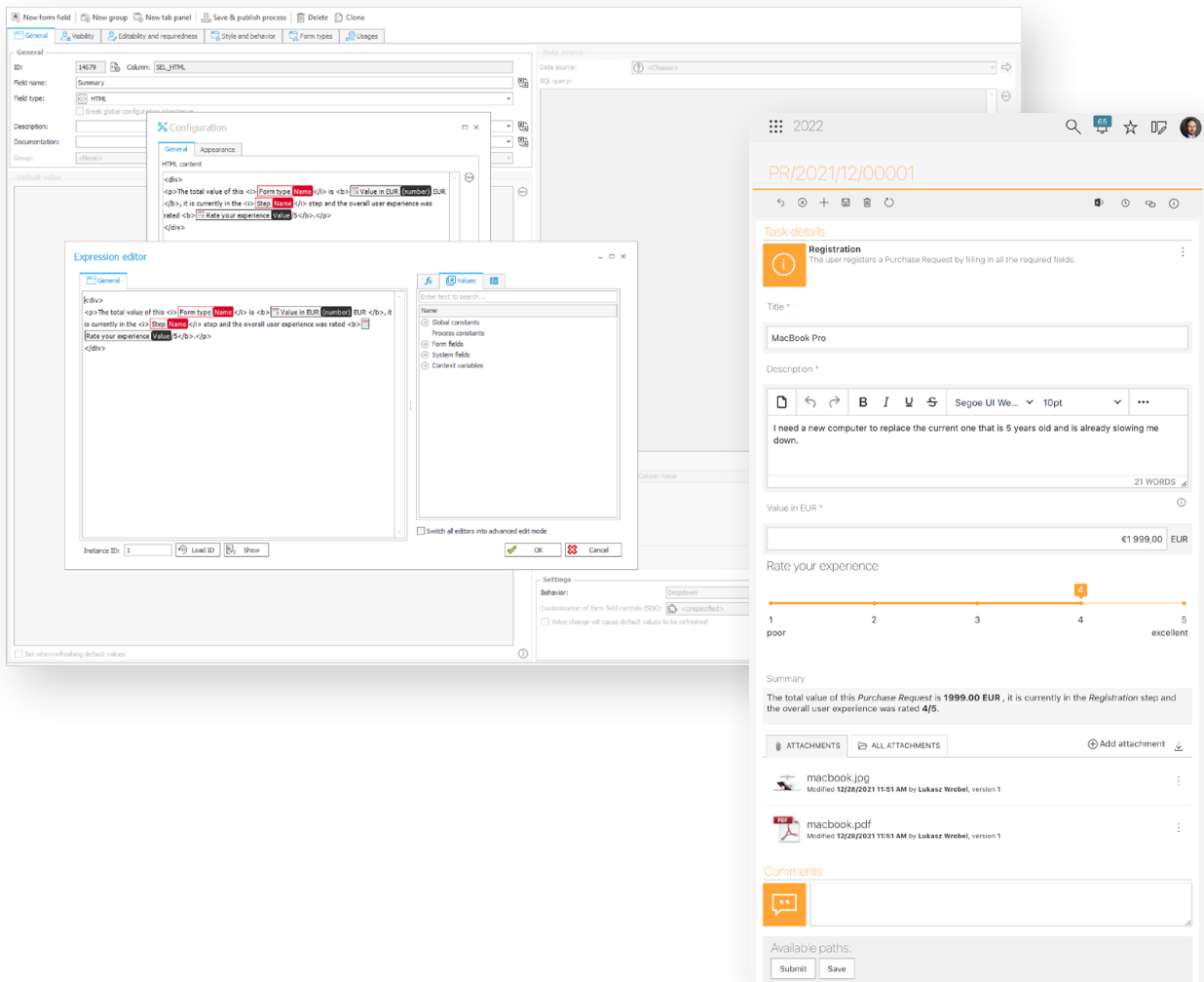
It's also now possible to place Microsoft Graph Toolkit components on the form. For example, Microsoft 365 customers can display a user's detailed contact card, Exchange calendar agenda, Planner tasks, To-Do entries, and much more.
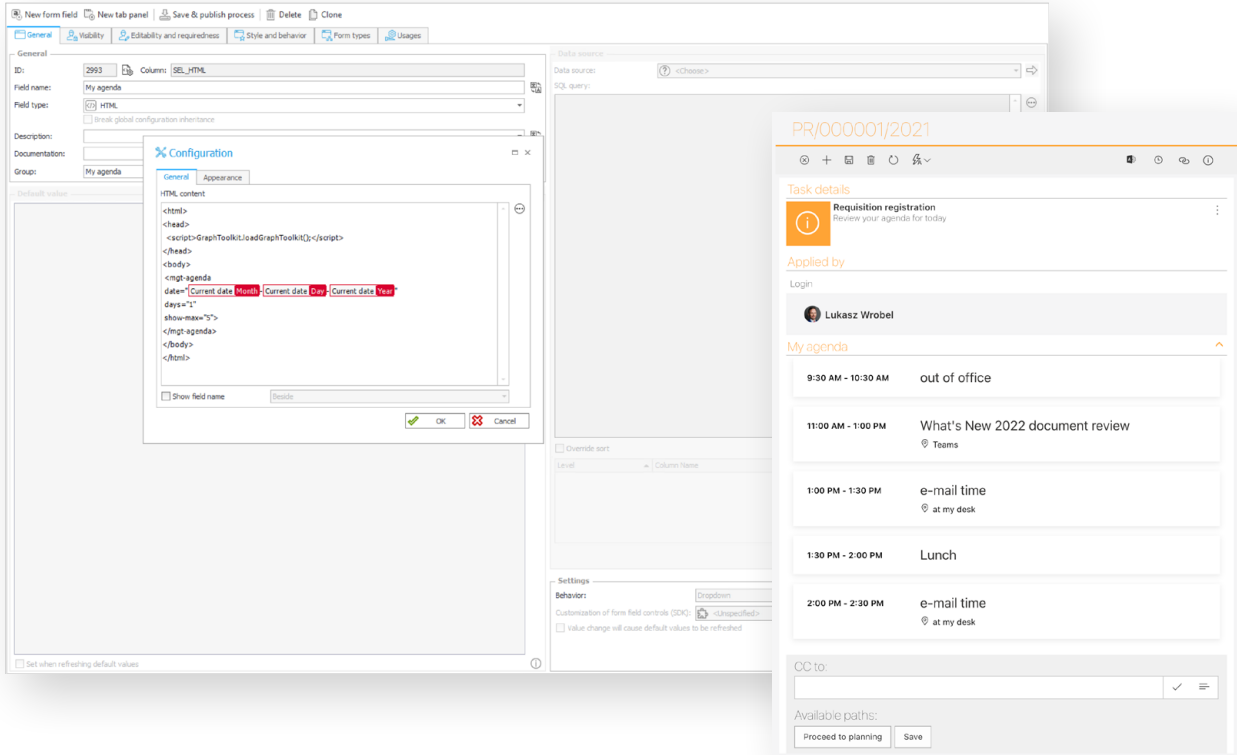
Attachments

Due to the increasing use of WEBCON BPS with document management systems, we've introduced significant changes to the way the form's attachment section works. In Q3 of 2021 we made it possible to configure restrictions on file sizes (per-process maximum bytes) and extensions (global blacklists/whitelists). Chromium-based browsers (we specifically test on Chrome and Edge) users can paste a file to a form using CTRL + C and CTRL + V key combinations. We also added a "download all" option.

For 2022, we have rebuilt the file transfer mechanism to allow working with large (even very large) file attachments to operate on large and very large files. File transfers are carried out in chunks, and transfer can even be suspended and resumed.

Extended Sorting

In Q3 of 2021, we enabled sorting on item lists, and in Q4 of 2021, we provided the same functionality for data tables. The 2022 version lets you configure the default, multi-level sorting for data coming from external sources to control its display in tables and value selection entries.
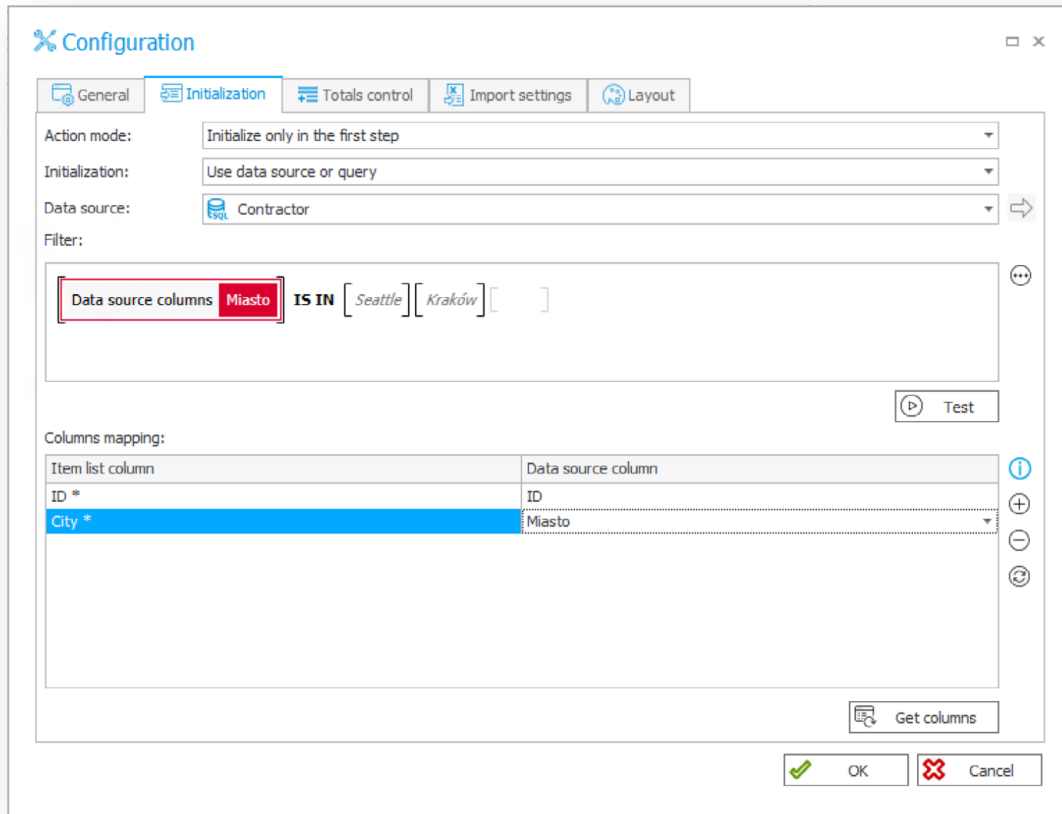
Item Lists

In Q3 of 2021, we added support for data sources (not just SQL queries) when configuring item list initialization and value change actions.

Interoperability with Business Rule

In Q4 of 2021 we improved the ergonomics of the business rules editor and added the ability to using a business rule to determine which form fields should be required. This change significantly improves the way to handle situations where one field's required status is dependent on (for example) the value of another field.
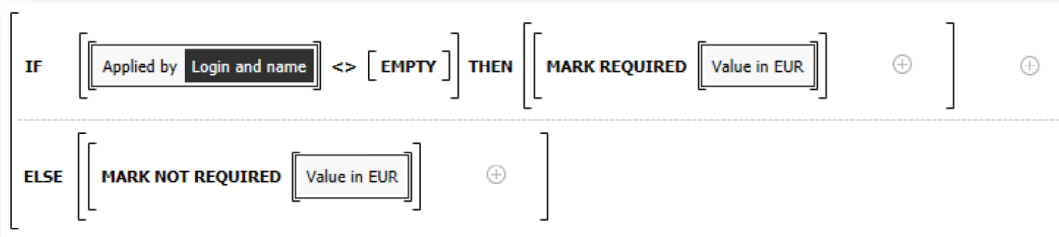
Portal

In Q3 of 2021, we added two standard supported color themes for the WEBCON BPS portal – Light and Dark. We also expanded the options for configuring themes and improved the theme editor's ergonomics.

For 2022, we've introduced a user profile feature that allows users to manage their language, topic, and notification settings, as well as verify where their permissions have been granted to external applications.

Dashboards

We introduced a lot of improvements for configuring dashboards in Q3 of 2021; this included controlling element alignment and margins, as well as a rich text element. The 2022 release updates these, especially the rich text editor experience.
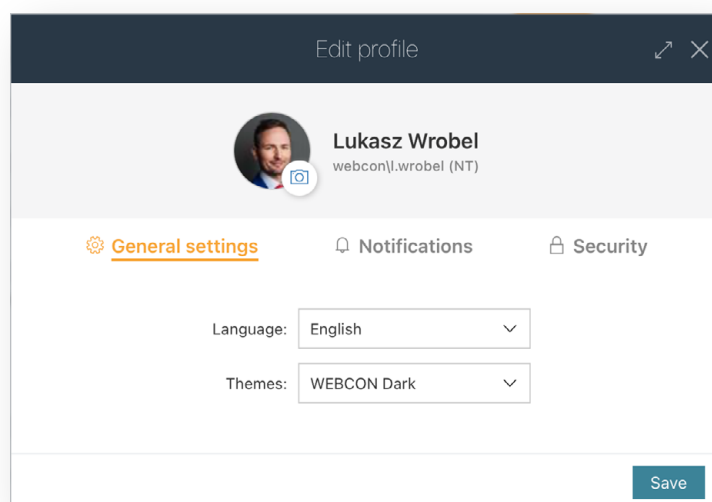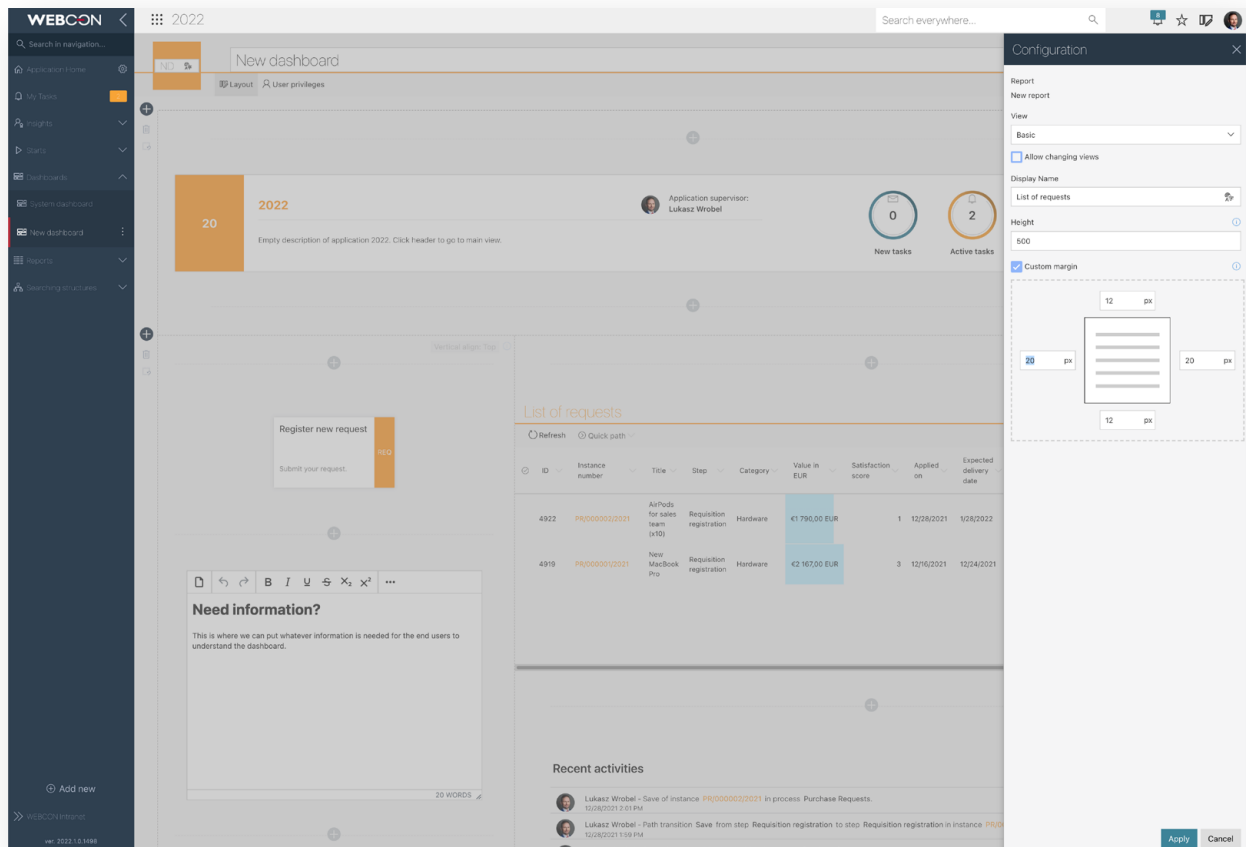

Reports

Sometimes, sorting by a date field doesn't provide enough context, so for 2022, we are introducing a completely new view for displaying a report's contents as a calendar or agenda. We anticipate it being particularly useful for applications involving events, meetings, scheduling, and so on. This new view allows you to choose the columns, filters, and groupings to be displayed, as well as the styles and colors in which individual calendar entries will be presented. This will include display conditions, which should allow for user-specific fine-tuning. Month, week, work week, day, and agenda views are available. As with other report views, the calendar view can also be used on mobile devices.
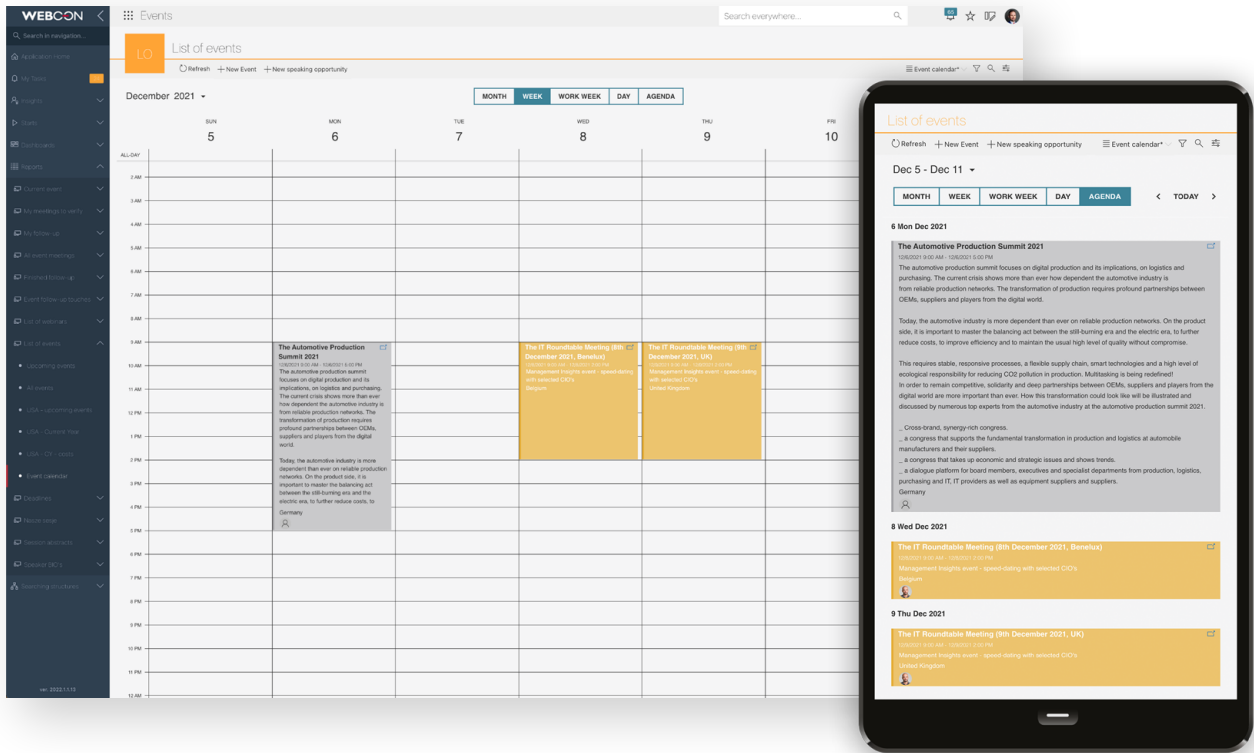
In Q4 of 2021 we added options for report columns that contain links to other workflows. Now you're able to have the user click on it to open that linked workflow item, open the current item, or not have the column be a link at all. We also introduced predefined display styles for Person Or Group columns so that they can show both the Display Name (usually the first and last name) and their avatar image.

For reports based on the SOLR search index, we have also introduced a new search box, available on the top bar of the report.
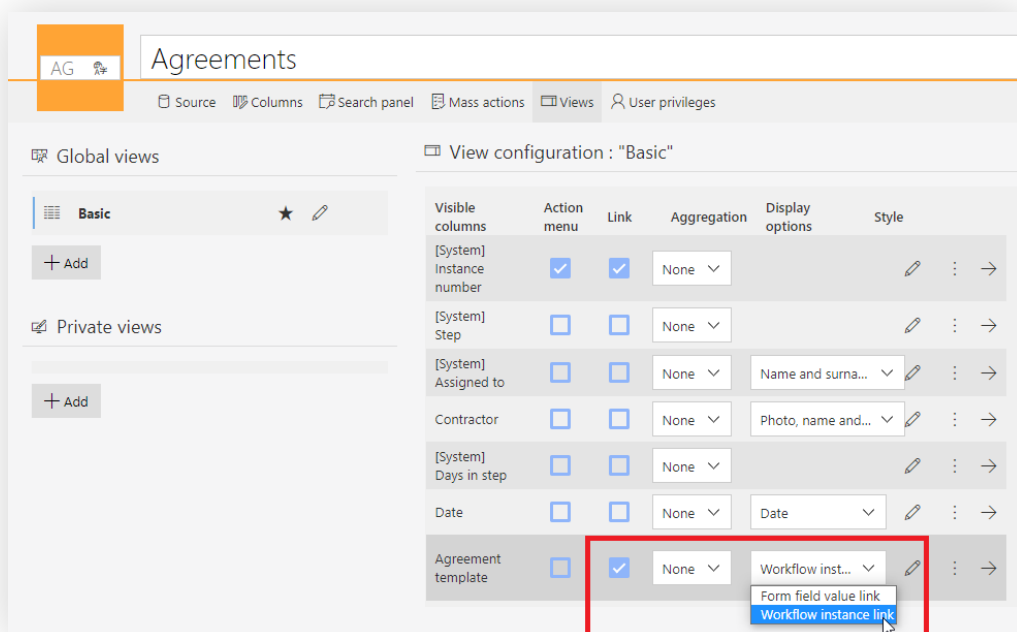
To add more configuration options, we have also introduced a number of new, predefined filters. In Q4 of 2021 R4, this included new filters for Date columns ('past' and 'future') and Person Or Group columns ('me'). For all columns, we also added a 'non-empty' filter. In 2022, we've added more predefined filters for Date columns that allow for selecting the previous week and previous month.
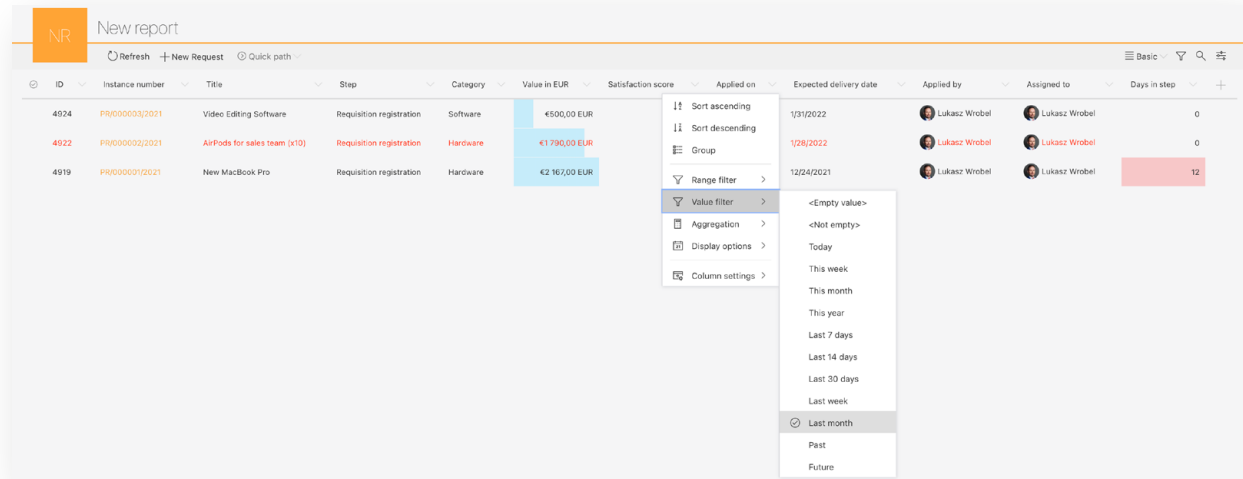
For 2022, we also added the ability to define a condition for coloring an entire report row (previously, you could only configure the display of individual report columns), expanded the options for defining start buttons, and introduced the ability to clone views on the report settings' edit screen.

Mass notifications

The 2022 release includes a completely rebuilt mechanism for handling mass notifications, generated by the system automatically and aggregating information about a user's tasks into a tabular form or a tile view. We also introduced a new mass notification template and with it new, preconfigured notification sections that can be further customized by the system administrator.

The new version enables the definition of many independent mass notifications, each containing data from selected processes and sent at selected times. Additional filtering settings allow notifications to include only those workflow elements that meet specified conditions (e.g., only those relating to tasks overdue by a specified number of days, coming from a specific category, or meeting a business rule defined by the administrator).

Advanced Replacements

For 2022, we've expanded the way you can manage replacements for tasks, adding a completely new, advanced mode for handling situations where one user is doing work on behalf of another user.

The pre-2022 mode of handling replacements for tasks assigned in the system remains available and allows the user to set a replacement person who will receive and execute tasks during their absence. In the 2022 version, however, defining substitutions in the standard system interface has been extended to include the possibility to simultaneously indicate many specific processes (not just applications) as substitutes, and the possibility of defining independent substitutions for each of the companies defined in the system.

WEBCON BPS already offers many options for handling task substitutions, but business scenarios clients have shared with us made it clear that there remained still more room for improvement. In many situations, forms need to retrieve data from external systems, the connection to which is made in the context of the logged-in user, and replacing the absent user requires the stand-in user to access reports and dashboards stored in the application. If a stand-in user doesn't have the same permissions as the original user, they won't see the same info and cannot successfully substitute for the original user.

Responding to the suggestions made by our customers and partners, the 2022 release introduces a completely new mode of work with full access on behalf of the employee being replaced.
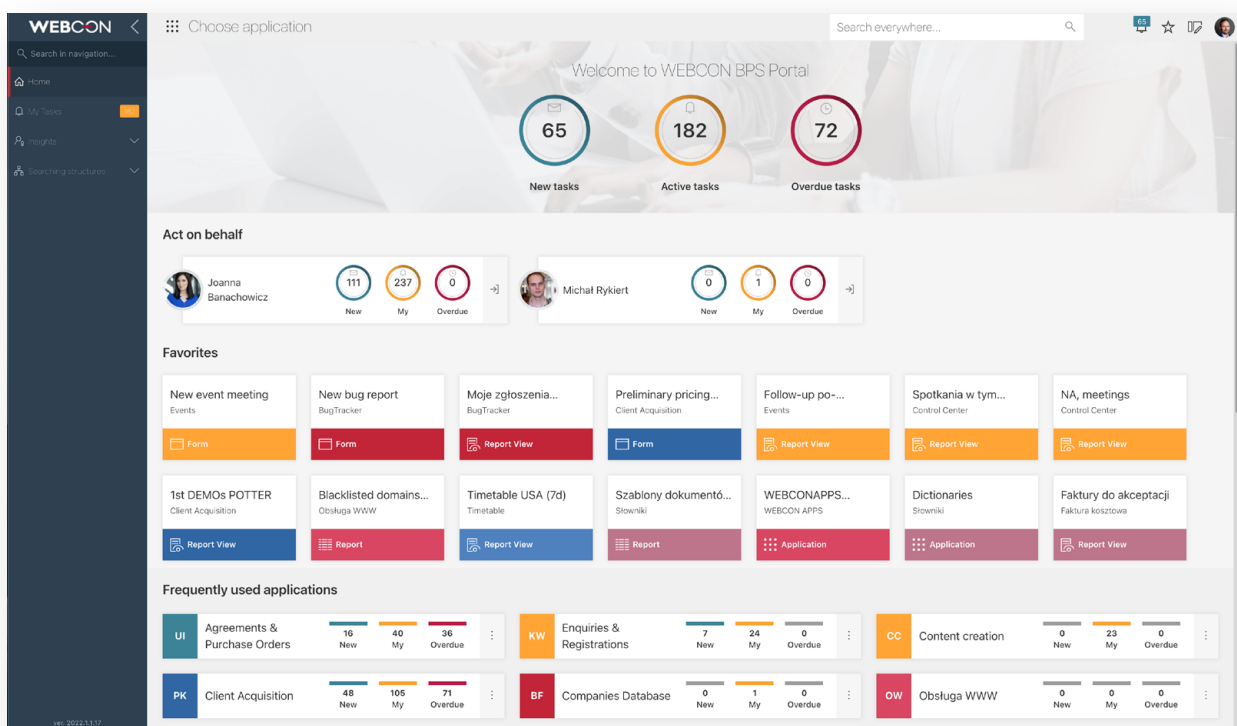
When a new mode is selected, the stand-in person can use the indicated application or process in exactly the same way – and with the same privileges – as the original user. This means that when working with the form, the stand-in user will gain access to external data sources (in the form of reports and checkbox contents) as if they were the user being replaced. If the replaced application is made available, they will get access to all reports, dashboards, and data visible to the original user - including those for which they do not currently have an active task. Actions performed by an alternate in full access mode will be signed with the original user, and information about the operation in "on behalf of" mode will be available (for audit purposes) in the item history view.
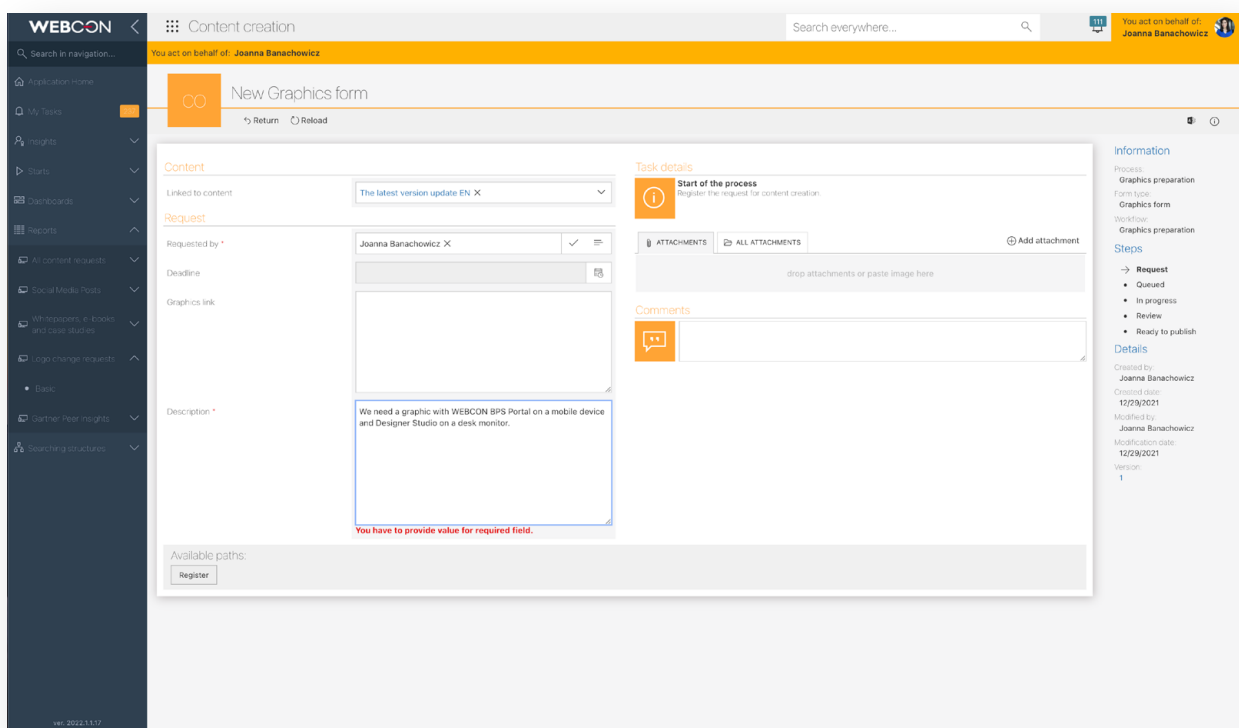
In addition to making it possible to handle replacements in advanced business scenarios, the new mode also has the potential to improve support team operations; a support person could, when acting on behalf of the original user, to see the system through their eyes and thus more easily identify a problem.

Integration

WEBCON BPS remains a foundational application platform for our clients, and as such it is often used in end-to-end scenarios that involve it being integrated with other enterprise systems. To enhance these scenarios, we've significantly expanded our support for REST-type web services and introduced support for the OAuth2 standard.

The most important changes in the use of REST were introduced in the Q3 of 2021, and revolve around adding support for the OpenAPI (formerly known as Swagger) standard. OpenAPI handles on-demand descriptions of REST endpoints, allowing requesting software to more easily adapt the request parameters. WEBCON BPS can, when calling a REST endpoint, obtain its metadata using OpenAPI and automatically format its request details for the application designer to complete. While working on this, we also extended WEBCON BPS' ability to handle request response messages.

We have also added support for the OAuth2 standard to handle authentication when the user logs in to the portal (version 2021), enabling the calling of external web services from systems that require logging based on the OAuth2 standard (both for logging in with the application account, in the Q3 release of 2021, and the user account under Authorization Code Flow, under the Q4 release). The introduced changes made it possible to use a wider range of external web services, extending the list of scenarios for using WEBCON BPS.

For 2022, we are introducing changes to WEBCON BPS' web API to enable the use of OAuth2 authorization based on the Authorization Code Flow, thus enabling integration with the platform based on web services in the context of the end user account. Further works extending the use of the OAuth2 standard within WEBCON BPS are planned for the updates to version 2022.

Maintenance

In the Q4 2021 release, we expanded the functionality of the diagnostic mode of event viewer with the ability to import and export entire diagnostic session records to and from files. The new solution makes it easier to transfer saved sessions between environments (as well as to remote user support) without needing access to the original environment.

Compatibility

According to the development plan of the WEBCON BPS platform, version 2022, we have ended support for the following Microsoft technologies: **Internet Explorer, Exchange Server 2013, SQL Server 2012, and SharePoint Server 2013**. At the same time, version 2022 can no longer be installed in a mode that is tightly integrated with SharePoint (full trust code running on the SharePoint server), and therefore, support for classic SharePoint forms and web parts has ended. This means that when you want to display reports, start buttons, and other WEBCON BPS elements inside of pages within a SharePoint site, you should now use modern web parts, which remain available and fully supported.

For 2022, we've extended the mechanism we use to synchronize users and groups with Azure Actiuve Directory to make it possible to download user avatars (profile pictures). The expansion of the WEBCON BPS web API with methods allowing for interaction with the substitution engine allowed to end the support for the substitution source, which was removed in 2022 version.

As of Q4 of 2021 R4 version, we introduced changes to the way we communicate with Microsoft 365's Exchange Online service, switching to OAuth2 authentication.