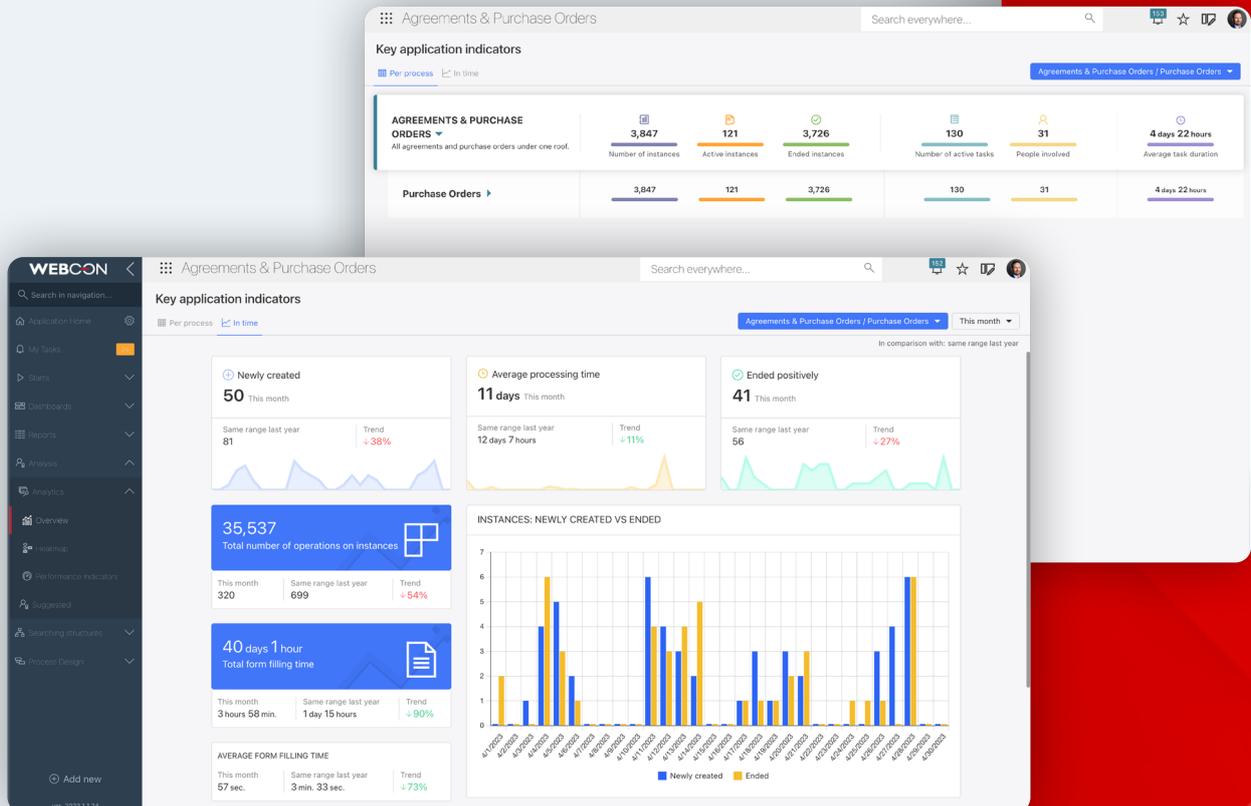# WEBCON

WEBCON BPS
2023

Discover the possibilities
of the latest platform version

WEBCON BPS 2023 – what's new

WEBCON BPS 2023 is the latest release of our platform for digitalizing and automating business processes. While working on this year's version, we focused on enhancing:

- support for the entire application lifecycle,
- business user involvement in the application development,
- processes that involve external business partners/users,
- our use of the latest available technologies.

We thank you for your ongoing trust, and we invite you to dive into this document. It highlights the most important changes introduced in the 2023 version, and it also recaps the changes we were able to insert into the interim releases of the 2022 version.

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New Module: Advanced Analytics Framework

Thanks to WEBCON BPS making it easy to introduce changes to applications, our clients are increasingly moving away from the classic waterfall approach in favor of agile application development. This agile approach promotes the fastest possible launch of minimum viable applications into the production environment. It also fosters the constant collection of feedback from end users to gather input for possible improvements and optimizations to introduce in subsequent iterations.

Carrying out a process using an application built with WEBCON BPS provides an opportunity to collect data on its performance, something that would be difficult at best if done via paper or email.

WEBCON BPS 2023 provides a new, advanced analytical module. It will allow for a quick comparative analyses of application usage. It will enable you to create process-specific performance indicators, too. You'll be able to use the analytical information presented in this new module to make better resource allocation decisions, set better application development priorities, and provide evidence that your applications are making a definite contribution to your organization.

For perpetual-license customers, this new module will involve an independent license; subscription customers will have access to it for a base fee.

Built-In Reports

Each application now has received a new Analysis area so you can quickly view:

- the number of instances (processed forms/items) launched within the application - broken down into *Active, Completed and All Instances,*
- the number of people who actively use the application,
- number of active tasks assigned by the application,
- the average task duration.

For applications with multiple processes and multiple document types, these analyses are available at both the individual and aggregate level. Thanks to the report, you can quickly determine the scale of usage for any given application.
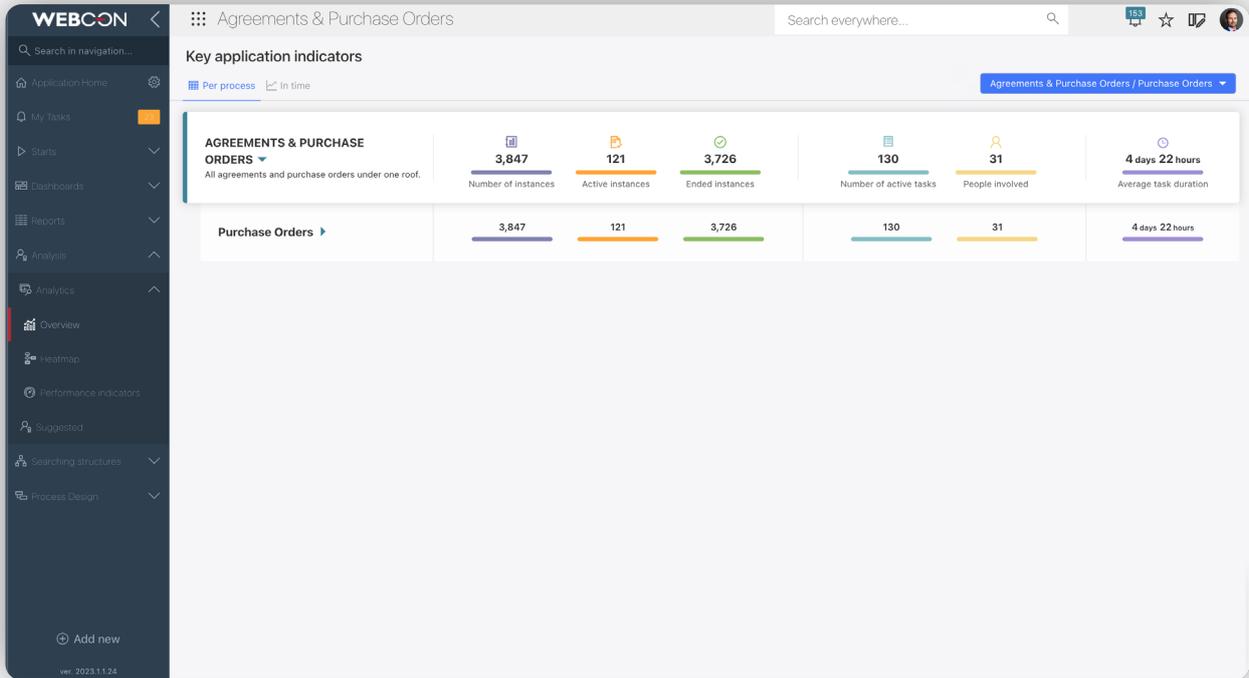
Another built-in report displays the usage of applications and how it changes over time. Because it offers the option to focus on specific periods of time, you can assess whether changes made to an application had the intended effect (e.g., "did the change to the form shorted the time spent filling it out?").
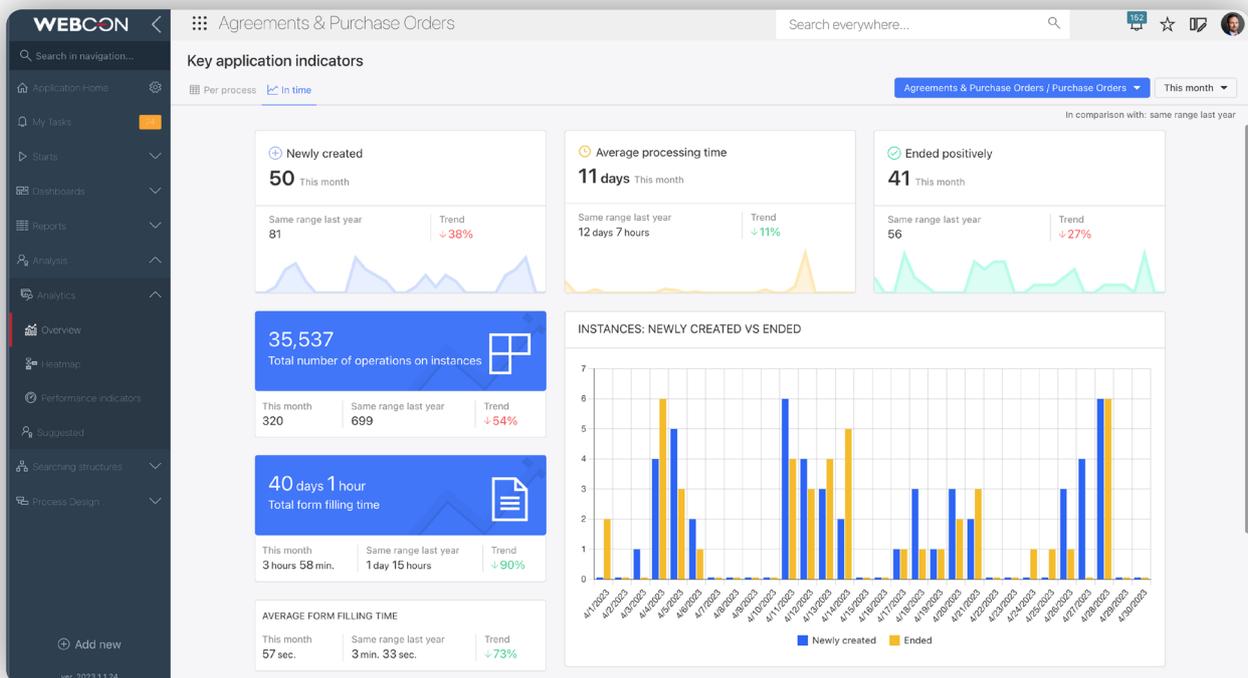
A new heatmap report provides a multidimensional analysis of editing time and task completion time for sets of workflows, including their individual steps and paths. It's the kind of insight you can use to easily identify the bottlenecks in processes and elements requiring optimization.

We expect this knowledge will be of great value to organizations. It provides real data to use when improving business processes, which of course ought to leading to increased efficiency, greater time and cost savings, and more.
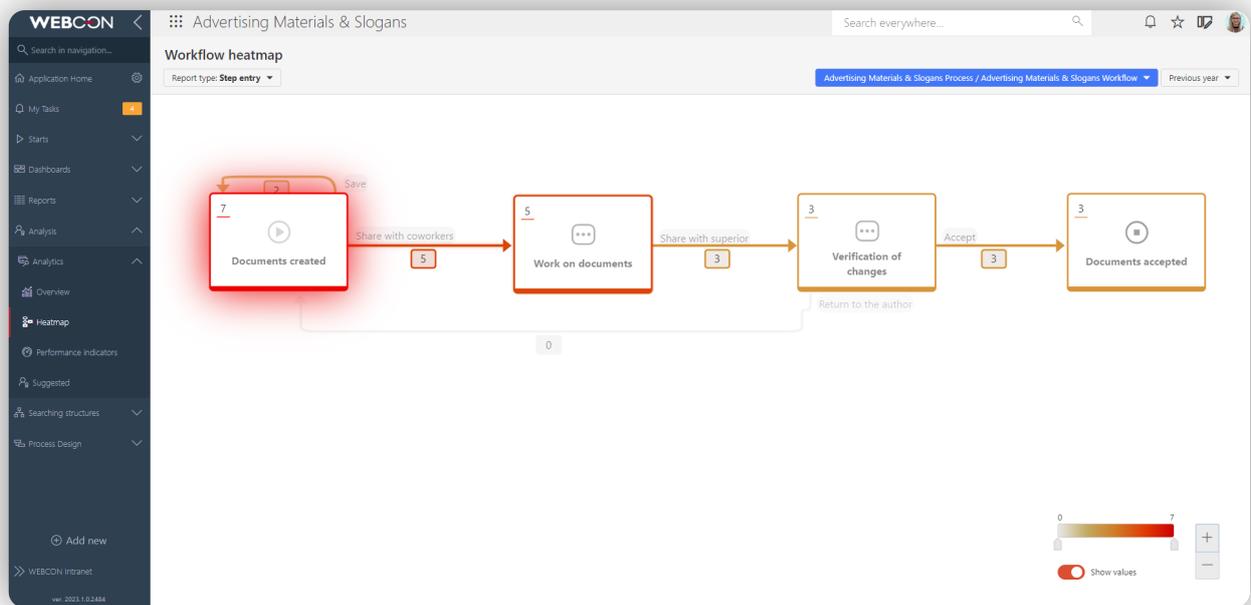
Performance Indicators

Previously available Key Performance Indicators (KPIs) made it possible to determine the expected editing time and task completion time within individual process steps. The WEBCON BPS 2023 Advanced Analytics Framework module adds a new mechanism that enables you to define advanced performance indicators. More specifically:

- they can be calculated on a set of tasks taking place over many process steps,
- they can support advanced scenarios in which the counting of a KPI can be repeatedly interrupted and resumed,
- they can factor in designated workdays and working hours.

New KPIs can be visualized within individual instances (forms, audit views), within reports, and – in an aggregated way – at the level of the application indicators analysis screen.
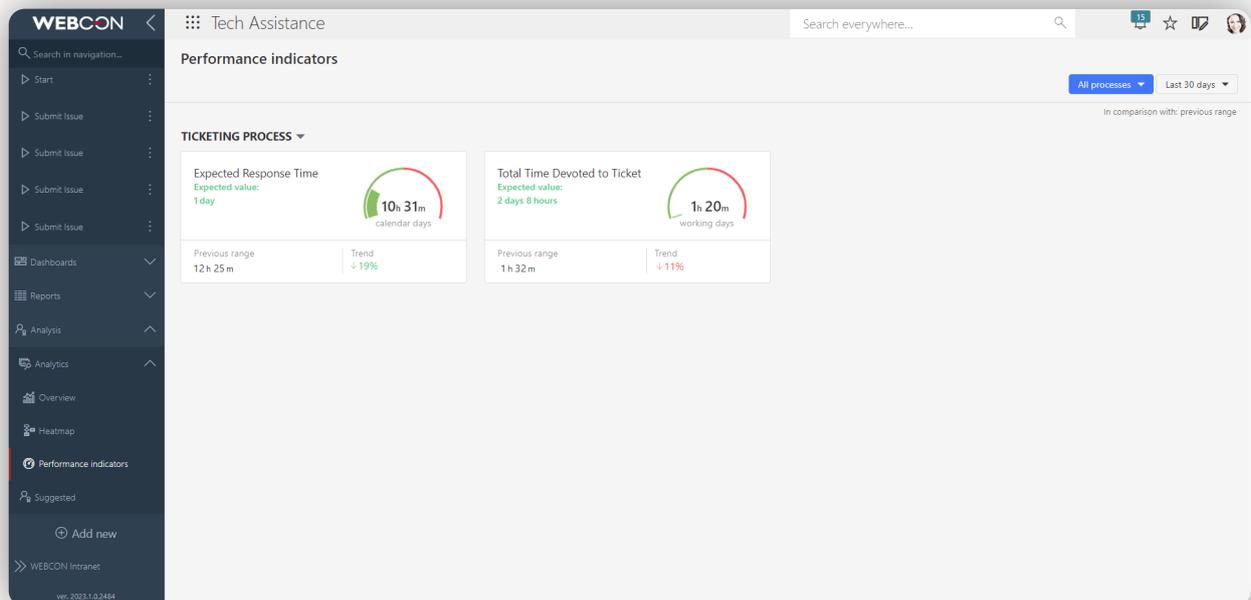
Enhanced Business User Engagement

As the democratization of technology has progressed, so has the growth in demand for new applications supporting business processes. Our clients are already building dozens of new applications each year, and we believe that this pace will increase even further. Moreover, it's not enough to speed up the building of applications; it's equally necessary to speed up their design and increase the likelihood that they'll match business requirements.

It's behind our mandate to develop effective ways of communication between IT teams and business users, and it's behind our version 2023 priority to foster increased business stakeholder involvement in creating and developing applications.

Version 2023 introduces completely new features to enhance even better cooperation between technology and business teams. They should have a strong positive effect on the pace of application delivery. Moreover, they should enhance the continuous improvement of applications without needing to increase the size of IT teams.

Built-In Change Suggestions

Regardless of whether an application is built using waterfall or agile methodologies, its launch marks the beginning of the need to collect comments and suggestions from end users. Many of our clients have created a custom dedicated Helpdesk workflow and added it to their WEBCON BPS environments to support this.

Version 2023 introduces a new feature for collecting development suggestions for each application in a manner that's fully integrated with the portal user interface. From now on, suggestions can be registered for almost any element of the application (form, report, dashboard) while working with that element (i.e., "click here to comment on this form"). Suggestions can then be viewed, rated, and commented on by other app users. Selected suggestions can be sent to the appropriate Helpdesk workflow within WEBCON BPS (or an external system) and their status can be updated over time to keep users informed of progress. We expect this functionality will allow business users to have an even stronger impact on the development of an application, something which should have a positive effect on involvement. It should also result in faster discovery of ways to put process applications through continuous improvement cycles.
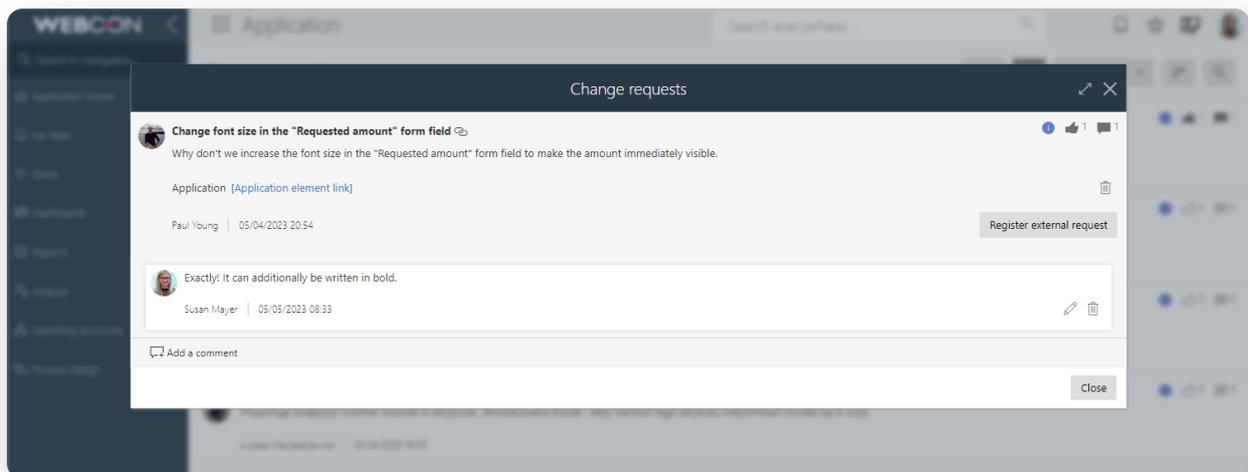
Preview and Editing of Application Configurations from the Portal

Version 2023's WEBCON Designer Desk will let authorized users preview an application's config-uration/design from within the BPS portal environment. They'll even be able to edit some of the application's configuration elements (label text, for example). Moreover, they'll be able to do this whether or not the application was originally prototyped in Designer Desk.

Process Preview enables authorized stakeholder to, among other things, verify business rules, form design, the method of assigning tasks within workflow paths, automations, and config-uration of the field matrix (assignment of field visibility, editability, and requiredness for each workflow step).

The portal-based options for editing an application are not universal; they are limited to attri-butes where changes would not potentially destabilize an application's ability to continue to operate. What can be edited from within the portal will include:

- form field labels, tooltips, and documentation descriptions,
- labels for action buttons, steps, paths, and task descriptions.

These new editing capabilities are meant to free the technical team from the need to be in-volved in changes that neither require technical expertise nor would affect the operation of an application. In version 2023 this generally centers around visual text and object names.
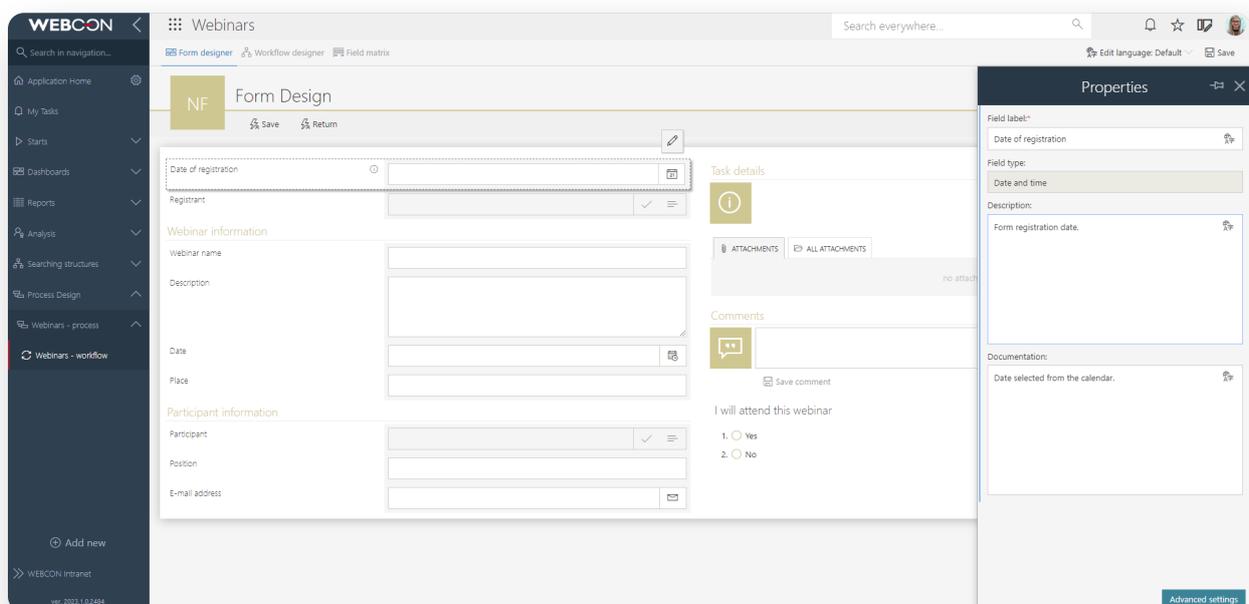
Editing Translations

WEBCON BPS has facilitated multilingual user interfaces for many years. This functionality is especially useful at international branches of companies and/or in countries with multiple official languages (e.g., Switzerland, Canada).

Prior to version 2023, editing translations had to be done using WEBCON BPS Designer Studio, and was available only to people with a high level of permissions and a license to use this tool.

Version 2023 provides the option to enter translations of the application UI text from within WEBCON BPS Designer Desk. Editing form label text from Designer Desk is done „directly" on the form, which should help translators see the context and the use of the phrase to be translated. In addition, we have introduced the option to export phrases used throughout an application to an Excel worksheet; after updating it with translations, the XLSX file can be reimported and applied to the source application.
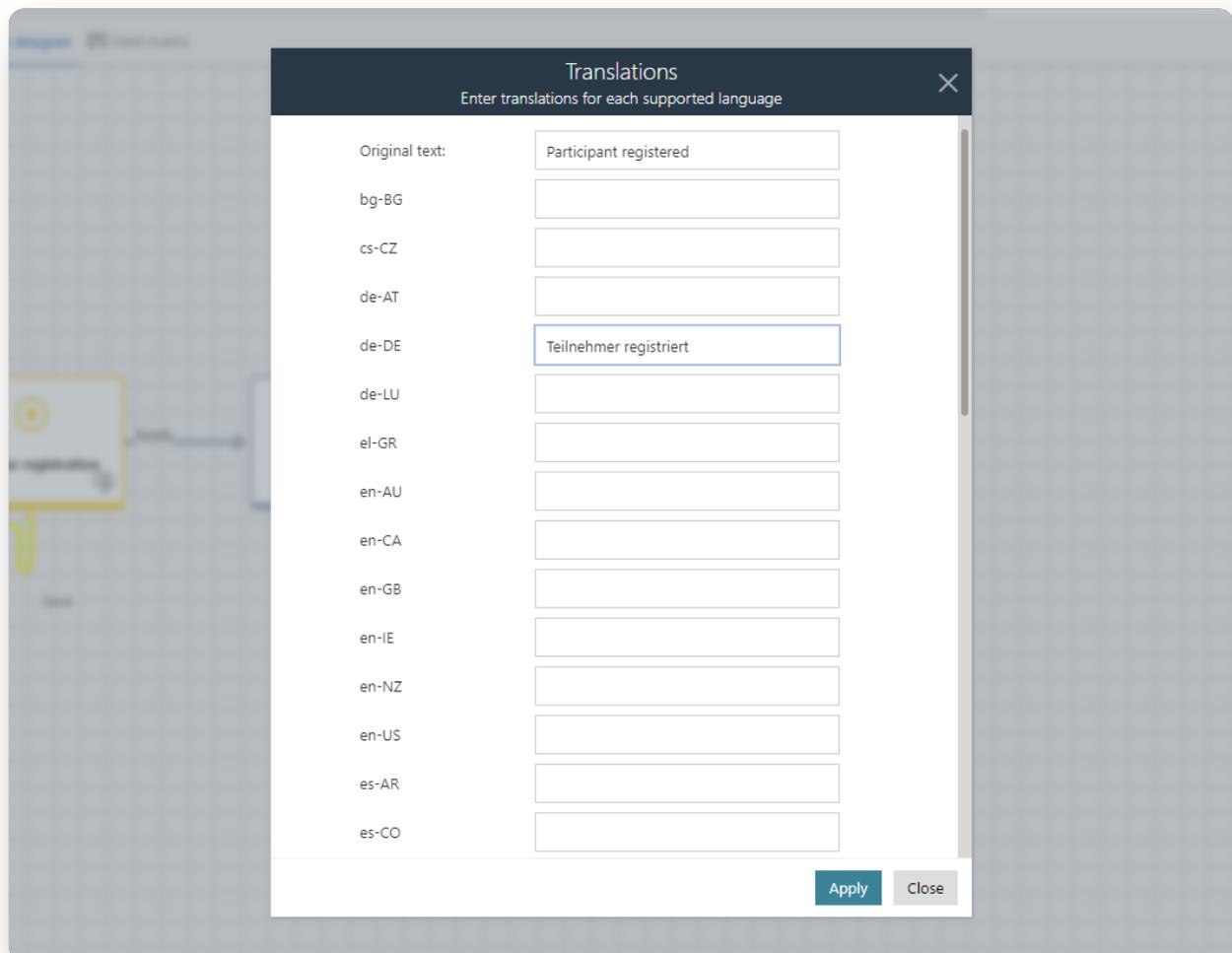
Support for Applications that Involve External Users

We are seeing more and more frequent use of WEBCON BPS for applications with processes that involve people outside our clients' organizations; example of this would include business partners, contractors, and clients. Version 2023 introduces new functionality and licensing options that will help better address these needs.

Sharing Attachments via OneDrive

We know that there are situations when it is necessary for many users to collaborate on a document attached to a process. An example of this would be the refinement of contracts, where we want to make a document attachment available to many users performing simultaneous changes and corrections.

A later-year release of version 2022 introduced the option to upload a document to a managed OneDrive area and maintain a connection to it. Doing this made it possible to make simultaneous edits to it from within its appropriate editing tool (e.g., Word for .DOCX files) – assuming the document editor supports simultaneous editing (e.g., Word, Excel). Documents shared this way behave exactly the same as if they were manually placed and handled in OneDrive.
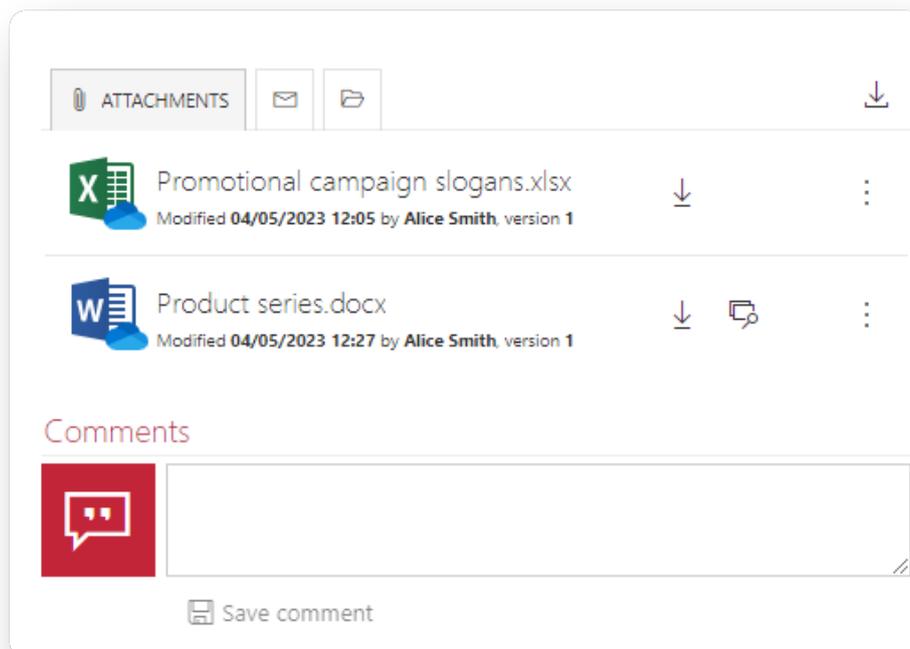
Sharing Forms and Tasks

We have introduced the option for an internal user to share a form with external users via a unique URL address generated by the system. External users invited this way do not have to authenticate themselves with the WEBCON BPS portal; their authorization is limited to the specific form from which the invitation was generated, and in accordance with the selected level of authorization (view or edit).

We have also added the ability for a workflow to assign tasks directly to external users. Again, users do not need to authenticate with the BPS portal (so no extra accounts need to be created) and they gain access via an automatically generated, unique URL. In addition to the ability to view (and/or edit) the content of the form, they also receive the ability to select transition paths (clicking on path buttons).

Consider, for example, a supplier registration workflow: a purchasing team can determine the information they need from a given supplier and move the workflow along a path named "obtain supplier info." As the workflow moved along that path to a „waiting for supplier" step, it would generate an email invitation containing a unique link to the form and send it to the supplier's representative to provide that required information. After entering the requested details, the supplier clicks a button for the "return to customer" path and the workflow returns the form to the purchasing team.

This functionality will be additionally licensed and available only via the subscription model.
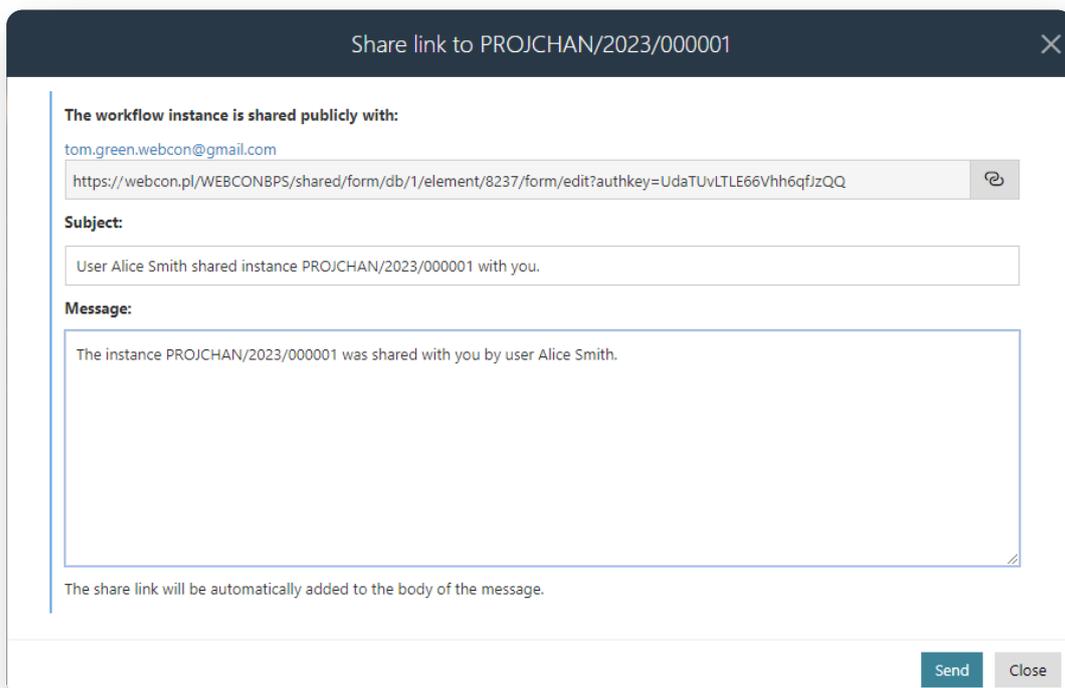
New Options for Licensing Access for External Users

Version 2023 provides a new way to license access for external users (people who are not employees of the licensee or its subsidiaries). Previous policy required these users to have User CALs.

It is, essentially, a per-use model. Customers can obtain a set of consumable per-use licenses for a given calendar month. When an external user (identified by an email address) opens and/or edits a single workflow instance, a license is consumed. Ten external users each being assigned a task would consume ten of these licenses. That said, once a given external user consumes twenty such licenses of this type within a given month, subsequent external shares with, or tasks assigned to, this same user will not consume additional licenses for the remainder of that month.

The new licensing method ensures that licenses are consumed only when the system is actually used. Licenses of this type will be available in packages, to be purchased and paid in advance.

Display name	User identifier	Unlimited Solutions Access	Single Solution Access	External User Access	Designer Desk Access	Designer Studio Access	Type
Alice Smith	alice.smith.webcon@gmail.com	☑	0 |	☐	☑	☑	Defined - External User
Jack Black	jack.black.webcon@gmail.com	☑	0 |	☐	☑	☐	Defined - External User
Tom Green	tom.green.webcon@gmail.com	☑	0 |	☐	☑	☑	Defined - External User
		7/101	0/50		10/10	7/11	

Forms

Version 2023 introduces several improvements to the functionality and performance of forms, a topic important to our customers, to our partners, and to ourselves. We have enabled, among others, changing the width of item list columns and optimizing the behavior of row-level action buttons. We have also introduced improvements to the information bar level (on the right side of the form), adding a new analysis tab that presents information about performance metrics – and this indeed includes the new performance metrics introduced with the Advanced Analytics Framework. We also improved the ergonomics of the www address field.


Automations

We have added the ability to define global automations – automations that can be reused across many applications and processes. Automations of this type are defined at the level of global parameters and, similarly to global business rules and/or global form rules, they make use of input/output parameters.

We have also changed the way automation errors are handled, so that compensation actions will be run sequentially for successive automations. Consider, for example, an automation run as part of exiting a step, followed by an automation run as part of a transition path, followed by an automation tied to the entering of a new step. Should the second or third of this set of automations throw an exception, all three sets of compensating actions will take place in the correct (reverse) order.
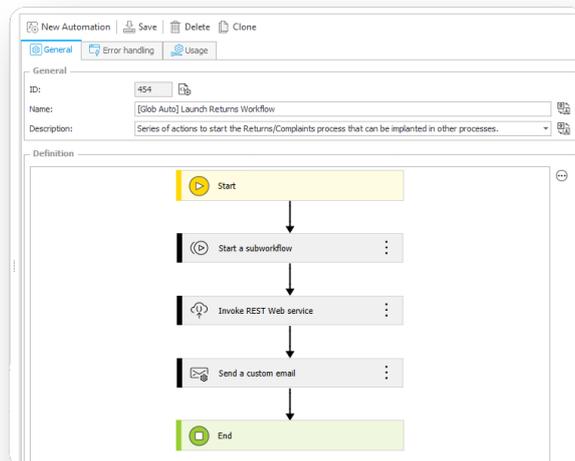
Workflow Engine: Assigning Tasks to Groups

Previously, when a task was assigned to a group, it was actually assigned to the members of the group at the time the task was assigned. If the composition of the group changed after the task was assigned, those task assignments would not have been changed accordingly.

Version 2023 introduces a new, dynamic way of assigning tasks to groups. From now on, if you assign a task to a group itself (as opposed to its members), the system will verify the user's membership in the group at the time of task completion.

With version 2023, this will be the new default behavior for handling task assignments to groups. For those wishing the previous behavior, a new business rule function will return the members of a group as a list, to which individual task assignments can be made. To ensure continuity without unintended consequences, previously-assigned tasks will continue to behave the way they did prior to version 2023.

Architecture

.NET Core 6.0

One of the most important changes introduced in the subsequent post-release releases of the 2022 version was the migration of the platform from the .NET Framework to the latest release of .NET Core 6.0. The introduced changes mean that the platform currently uses only the latest (and fully Microsoft-supported) .NET libraries.

Containerization

Version 2023 introduces the option to run selected WEBCON BPS components in Docker containers. Customers wishing to do so can prepare images and create isolated runtime environments (containers) for the WEBCON BPS Web Portal, Search Server (Solr), and Workflow Service. This is an alternative to the standard installation of WEBCON BPS on physical or virtual machines. A container-based installation of WEBCON BPS involves at least one container for each of these three services, with the option to add or remove extra containers as needed (for instance during times of higher performance). This infrastructure model is performance-driven and is particularly applicable when using cloud services that support containerization.

These containers are based on Docker (see docker.com for more details), and can be deployed in any cloud or local environment capable of hosting Docker containers. The resource consumption based on containers is lighter comparing to using multiple hosts or multiple virtual machines. The containers will be based on Windows Server images (WEBCON BPS Web Portal and WEBCON BPS Workflow Service) or Linux (Solr).

All containers are isolated from each other, but they can communicate with both the WEBCON BPS database and with each other, as each of them constitutes an integral part of one system. Moreover, it is possible to run only some container-ready services in containers and run others in virtual/physical machines.

Other than the Portal, Search Service, and WEBCON BPS Workflow Service, everything else – particularly the SQL Server database – must be run the traditional way (physical server, virtual server, Azure SQL Managed Instance, etc.).

Working with WEBCON BPS elements in containers is possible only for users with subscription licenses. Starting an additional container will involve the use of an additional license. If the container has been properly disabled, the license is released.

Permission Management

We have introduced a new, dedicated privilege that allows you to use the new application preview and editing function within WEBCON Designer Desk. We have also added a new permission to manage internal BPS user groups (defined in the administration panel of the WEBCON BPS portal).
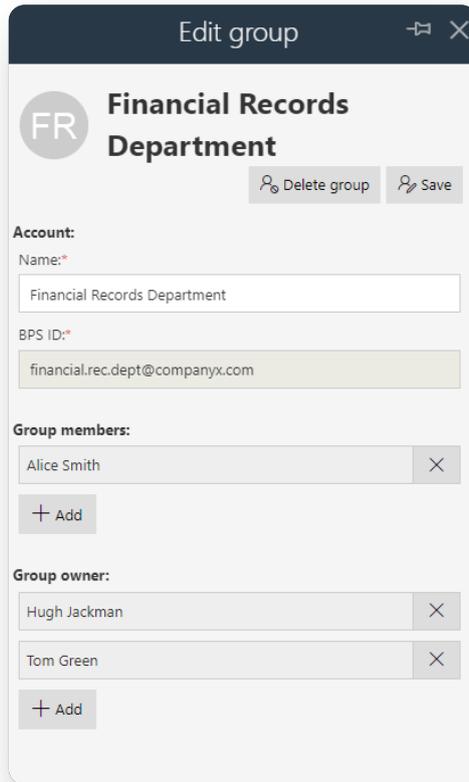
Deactivation of Companies

We have added an option to deactivate companies (business units) that are no longer in use. Deactivated companies will not be available for selection when starting new workflow instances.

Changes to the Indexing of Checkboxes

We have made changes to indexing the content of checkboxes. As a result of the introduced change, the performance of some forms and reports has been accelerated.