RAYFLOW®

Workflow
Management

Administration and Configuration Guide RayFlow Server 6.5

RayFlow is part of RaySuite.

raynet

Administration and Configuration Guide RayFlow Server RayFlow 6.5

Raynet GmbH Germany
See our website for locations.

www.raynet.de

Contents

Introduction

RayFlow is a workflow process management tool with the ability to support diverse workflow processes. The possibility to be customized to fit the user's needs and requirements makes it one of the most efficient and user friendly workflow management tools. This guide shows how to configure and manage RayFlow, so that IT departments can stay ahead, save time, increase productivity, and decrease IT costs.

RayFlow is based on the client-server architecture in which all the information, data, and configuration is stored on the RayFlow server. Users work on this server remotely through the RayFlow web and Windows-based clients.

Aim of this document

This document has been written to guide both potential users and administrators of RayFlow. Some of the topics in this document refer to other documents which are delivered with this product. In case a user needs more information or wants to contribute towards the improvement of this document, he can reach us by using our customer support channel.

RayFlow Features at a Glance

RayFlow is a modular application with an ability to support diverse workflow processes. Some of the core features which make RayFlow a unique product include:

- Highly interactive and intuitive interface design
- Modular architecture allowing users to use only those features which suit their requirements
- Support for multiple projects and possibility to clone tasks between projects
- Ability to control visibility at datafield level
- User and permission group management
- User defined phases and sub-phases
- Possibility to define own workflow process
- Receive task related status updates via notification e-mail
- Ability to track tasks through a single view
- Access to key statistics via quick reports and the possibility to add and access detailed SSRS and Crystal reports

RayFlow is a Part of RaySuite

"Best-practice workflow" for Enterprise Application Lifecycle Management

RaySuite offers product solutions for the creation, operation and control of individually customized Enterprise Application Lifecycle Management projects in automatically administered environments.

RayFlow connects the RaySuite elements required for your individual Application Lifecycle Process. Within RayFlow, you can seamlessly control and manage the various RaySuite products. This in turn helps reduce the complexity and increases the productivity of your projects.

Please refer to the RaySuite website for further information regarding the benefits this product family offers for your daily business tasks.

System Requirements

The given requirements are the prerequisites for devices running the RayFlow Server application.

Hardware Requirements

Minimum Hardware Requirements	Recommended Hardware
• Minimum disk space required: 120 GB • Minimum RAM required: 1GB • Pentium 4, 2.4 GHz Processor • Network 100Mbit	• CPU: Intel Core 2 Duo • RAM: 8 GB • Disc Space: 500 GB RAID 10 (4x250GB)

Note:
As best practice, Raynet recommends all its customers to have separate web and data servers. Customers can upload the package files directly to the data server using the virtual directory (as upload file location) in IIS. For information on how to configure RayFlow to use a virtual directory as upload file location refer to the chapter *Virtual Directories as Storage Point*.

Software Prerequisites

The following are the minimum software requirements for the installation and running of RayFlow 6.5.

- Windows Server 2008 SP2 or higher
- Microsoft SQL Server 2008 or higher
- IIS 7 or higher
- .NET 3.5 for SQL Server
- .NET 4.5

Note:
Minimum server requirement for .NET Framework 4.5 is Windows Server 2008 SP2. Further information on system requirements for .NET Framework 4.5, can be found under the following link: https://msdn.microsoft.com/en-us/library/8z6watww%28v=vs.110%29.aspx

- Microsoft Report Viewer Runtime (Required to view SSRS Reports)

Please refer to the following links for system requirements related to different versions of Microsoft Report Viewer Runtime

Microsoft Report Viewer 2012 Runtime

http://www.microsoft.com/en-us/download/details.aspx?id=35747

Microsoft Report Viewer Redistributable 2008

http://www.microsoft.com/en-us/download/details.aspx?id=577

- Crystal Report Runtime 2010 13.0.14 (Only required if Crystal Reports are used for reporting)

Supported internet browsers:

- Microsoft Internet Explorer™ version 9.0 and newer
- FireFox version 3 and newer
- Chrome
- Microsoft Edge
- It is recommended to use a screen resolution of at least 1024x768 pixels.
- Although other browsers might work they are not officially recommended.

Migration

This chapter of the document is meant to help users upgrade from their existing RayFlow version to RayFlow 6.5.

Migration from 1.x RayFlow Servers

If migrating from a 1.x RayFlow server to RayFlow 6.5, it is recommended to ask for the help of our consultants.

Migration from 2.x RayFlow Servers or Higher to 6.5

1. Make a Backup the Current System

(This step is optional but strongly recommended)

A. Uninstall the previous version of RayFlow Server:
- Start the SQL Server Management Studio.
- Right-click on the existing RayFlow database and select **Task > Back Up** from the context menu.

B. Backup the file system:
- Go to the RayFlow Server Installation directory (`%INSTALLDIR%`).
- Right-click on the directory and select **Send To > Compressed Zip Folder**.
- Store the database and the file backups at a safe location.

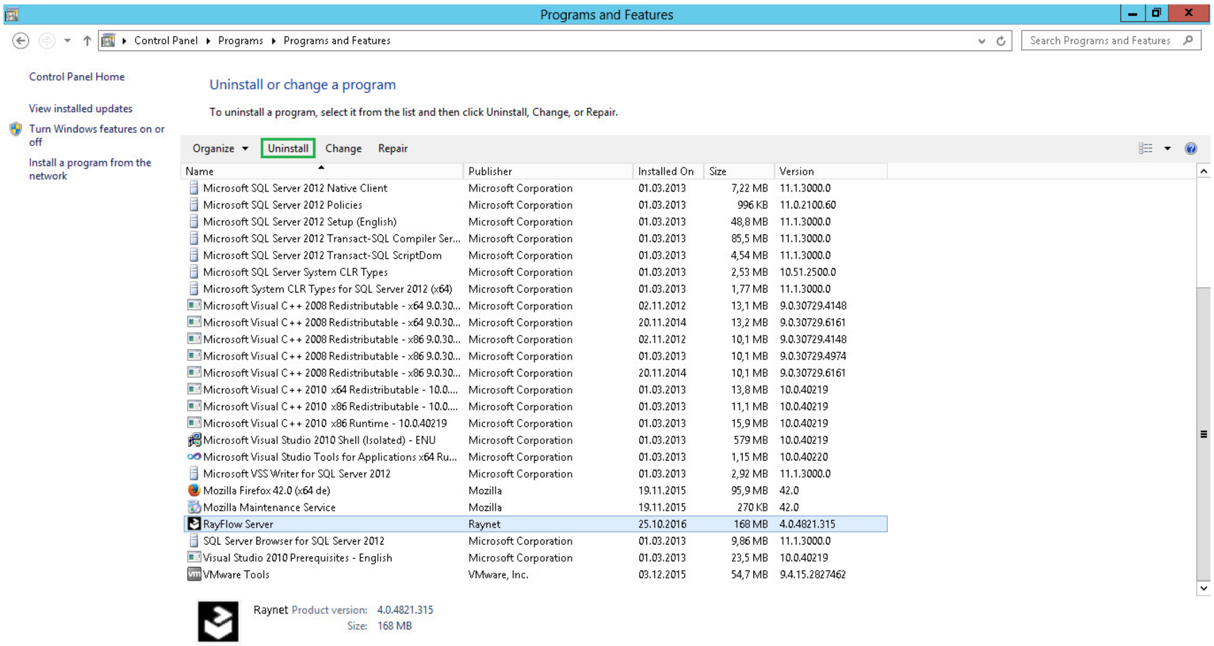
Note:
The content of the previous related `web.config` file will later be needed for the edition of the new `web.config` file.

2. Uninstall the Previous RayFlow Server

Warning:
If step 1 has been skipped, make sure that the `web.config` file of the previous installation is kept available in a safe location.

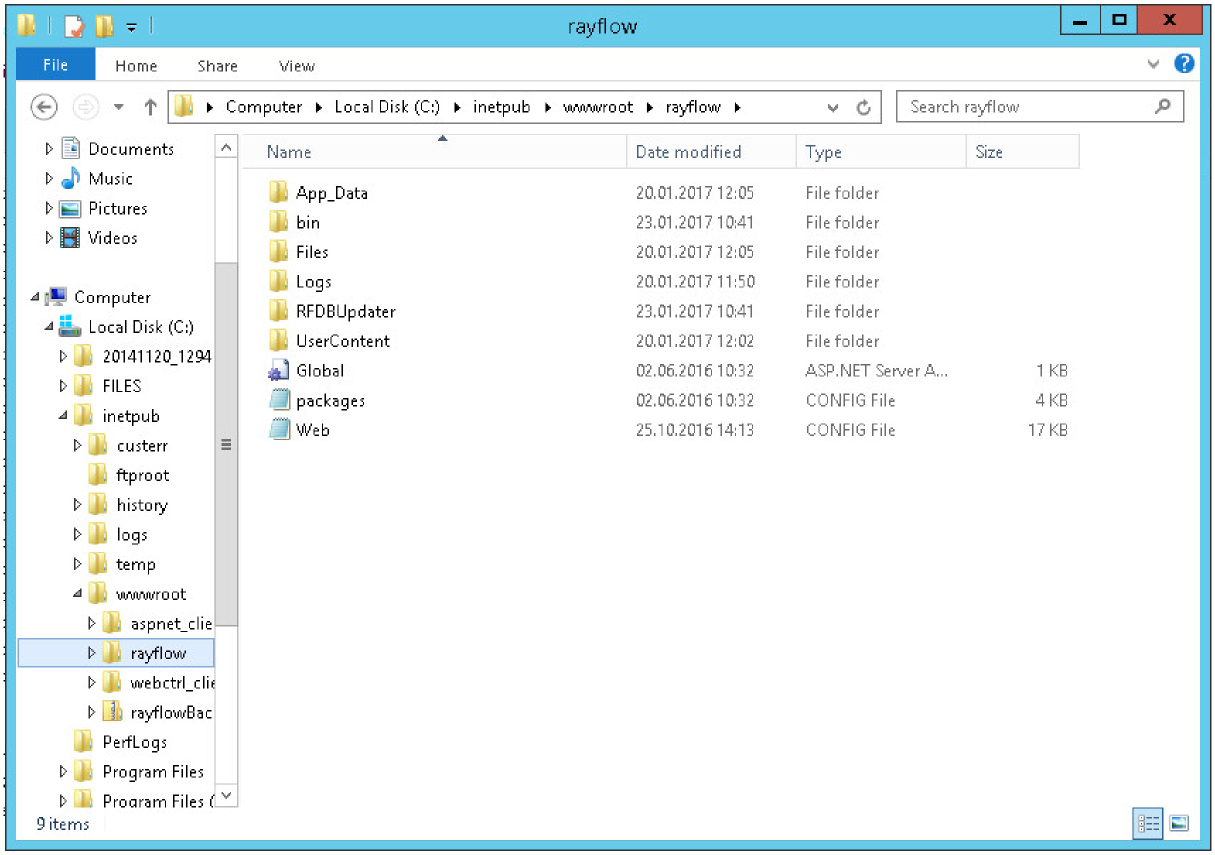
After the old `web.config` file has been saved uninstall the old version of RayFlow Server.

To uninstall RayFlow Server use the Windows Control Panel. In the **Uninstall or change a program** section, select the entry for RayFlow Server. Right-click on the entry and select **Uninstall** from the context menu.



Be aware:
Folders which contain customized data (icons, license files, files uploaded to tasks, etc.) will not be deleted by this action and will remain in the `%INSTALLDIR%` or in its subfolders.

In the screenshot below there is an example of data that will remain after uninstalling the old RayFlow Server.



3. Installation of RayFlow Server 6.5

Install the current version of the RayFlow Server to the `%INSTALLDIR%` folder using the MSI installer. Detailed information on how to install the new RayFlow Server can be found in the RayFlow Servier Installation Guide.

Warning:
Skip the database creation during the installation!

4. Edition of the New Web.config File

Open the `web.config` file which is located in the `%INSTALLDIR%` in a text editor and replace the connection string with the connection string of the old `web.config` file (see either the first or the second step). Save the changes to the new `web.config` file.

Example:

```
<!-- Your connectionstring -->
  <connectionStrings>
    <add name="RayflowEntities"
      connectionString="Data Source=(local);Initial Catalog=Rayflow;Integrated
     Security=True;MultipleActiveResultSets=True;App=EntityFramework"
```

```
    providerName="System.Data.SqlClient"/>
  </connectionStrings>
```

5. Upgrade the RayFlow Database

The database needs to be updated using the RayFlow-Updater. This is a simple console program which contains the four parameters which are necessary to update the RayFlow database to the latest state without the use of SQL scripts.

```
rfDBUpdater.exe –path %INSTALLDIR%\RFDBUpdater\ -upgrade –wait
```

The application itself is located in the following directory of the RayFlow Server installation: `%INSTALLDIR%\RFDBUpdater\`

Example of how to launch an update from a local folder:

```
rfDBUpdater.exe -upgrade –wait
```

Example of how to launch an update from any folder:

`rfDBUpdater.exe -path %INSTALLDIR%\RFDBUpdater\ -upgrade –wait` (with full path `%INSTALLDIR%`)

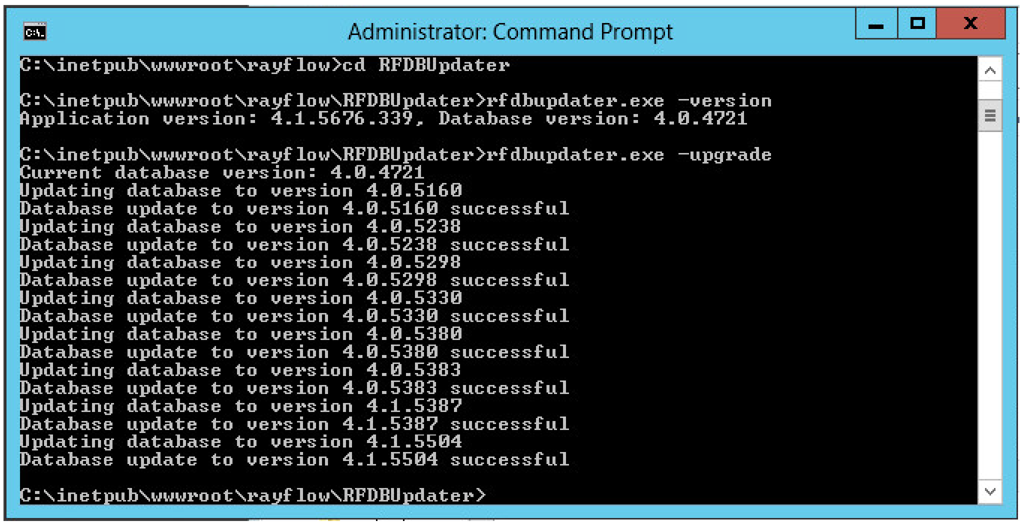
List of Arguments:

`-path`: The path containing the RayFlow Server installation. It is necessary for the Database/ Connection string which will be taken from the `web.config` in the given path. At the same time, the path is the address of the SQL Scripts folder which also resides in the same folder. The path can be omitted if the command is launched from the RayFlow Server installation folder.

`-upgrade`: Using this parameter will update the database to the latest state.

`-version`: Get the current version of RayFlow.

`-wait`: Wait for a key action.



Note:
If any errors are reported, please contact the support team.

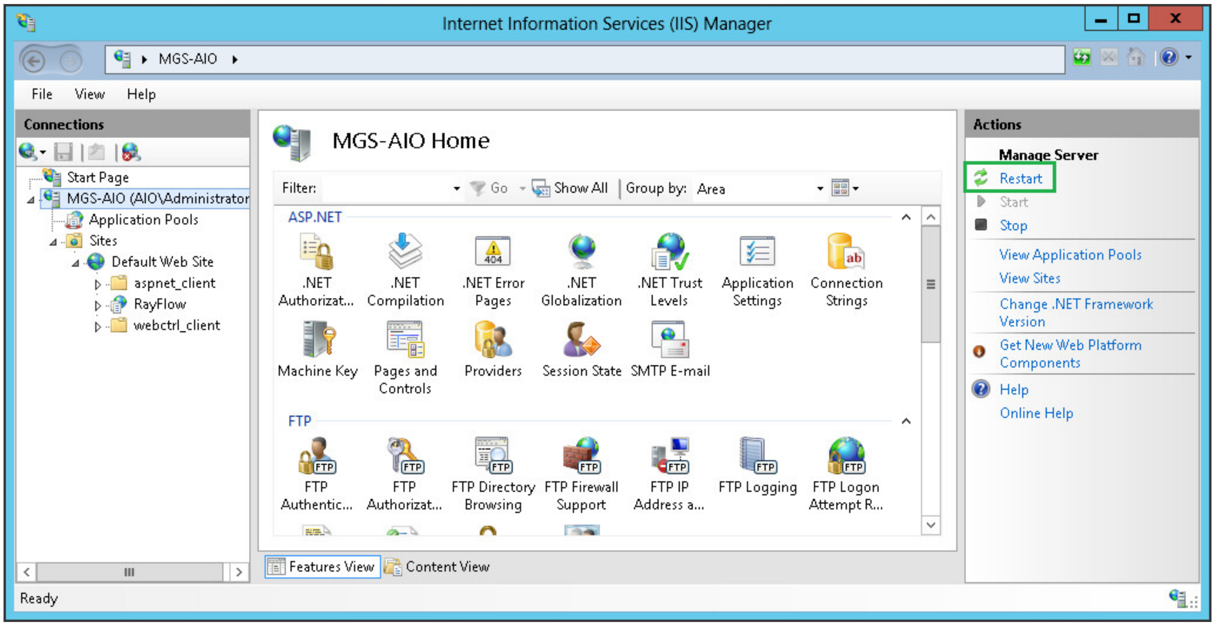
6. Manual Configuration

(The necessity of these steps depends on the environment.)

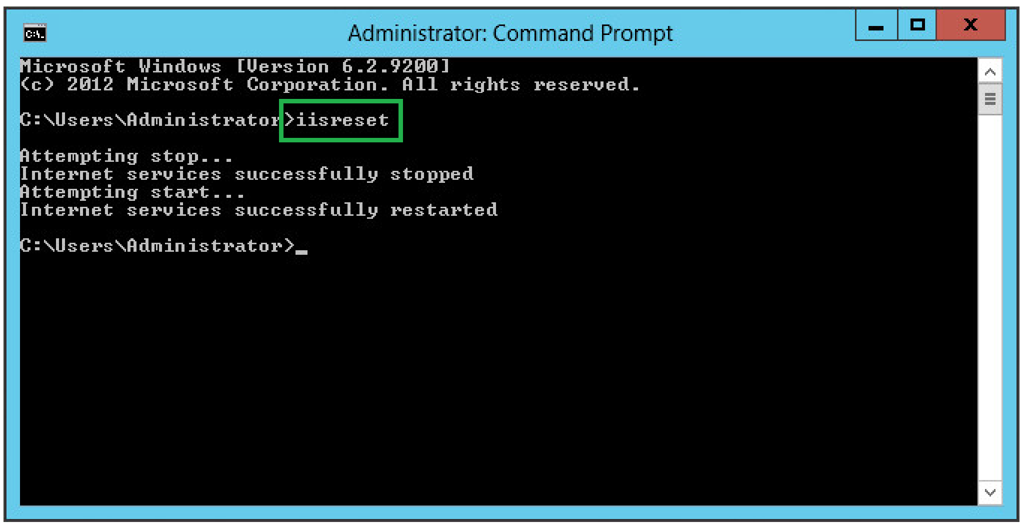
Internet Information Services (IIS) Restart

Restart the Internet Information Services either using the Internet Information Services Manager or via Command Prompt using the iisreset command line.

Internet Information Services Manager:



"iisreset" command line:



RayFlow License

If the previously installed RayFlow Server version has been a version prior to 4.0, it will be necessary to activate the RayFlow Server using a new .rsl license file instead of the old .license files that were used previously to 4.0. In this case, reactivate your RayFlow license by using the license activation tool or contact the Support Team using our Support templates. Information on how to reactivate a Raynet Product License can also be found in our KnowledgeBase.

Product Activation

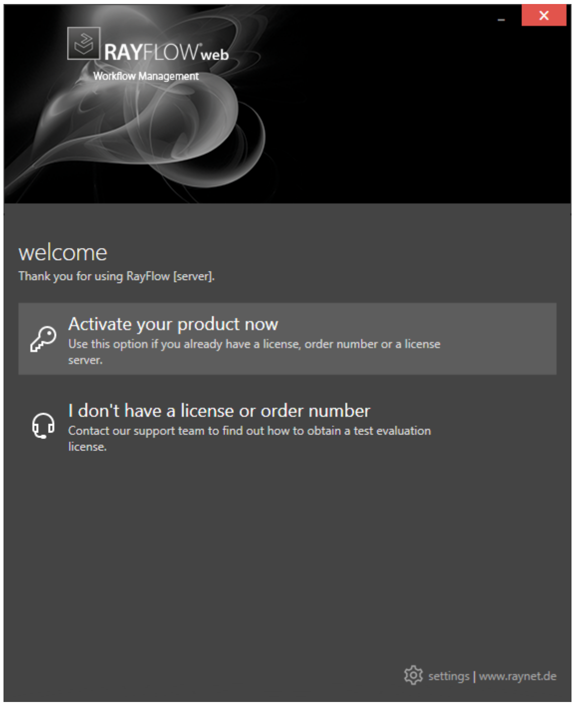
The product can be activated using one of the following methods:

- Directly within the installation
    - By supplying the order number
    - By supplying an already generated license file (`.rsl` format)
- When the product is started for the first time.

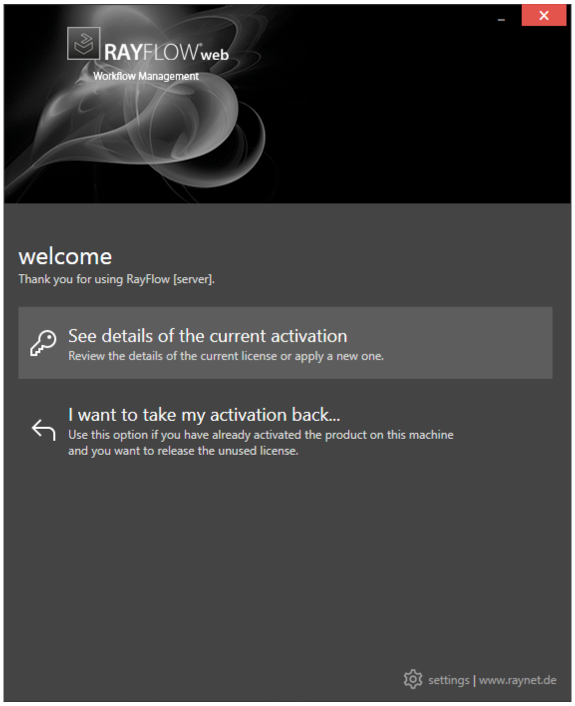
If RayFlow detects that no valid license is present on start-up, the license activation wizard will be shown after starting the main executable. The tool can be also started manually, by executing `Raynet.LicenseActivation.exe` from the main installation folder.

License Wizard

This section describes the usage of the licensing wizard.
On the initial start of RayFlow, the licensing wizard is shown. If the need to transfer an existing license arises, the license wizard can be started manually. There are a variety of ways in which a license can be activated and below they are described in detail.



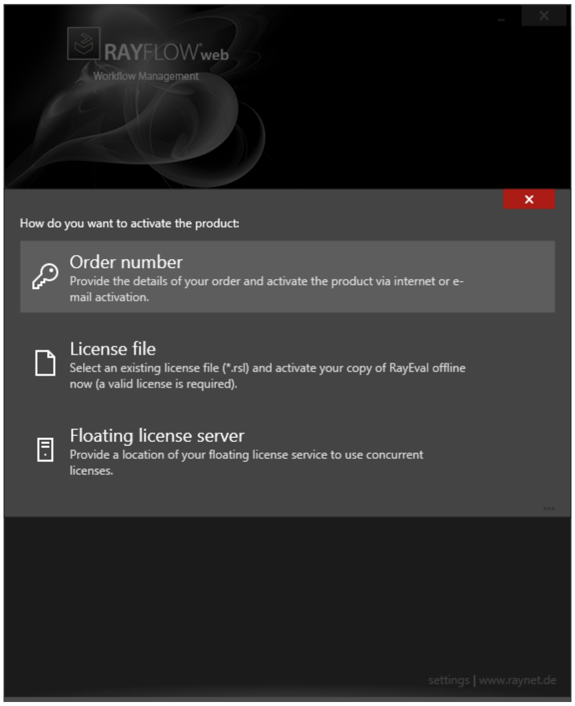
First time activation



The main screen when the product has been already activated

Activate your product now

This option should be used to activate the product using one of the following methods:



- **Use order number**
  Online activation using a valid order number received from Raynet (recommended for most users)

- **Use license file**
  Offline activation using a license file (`.rsl`) received from Raynet

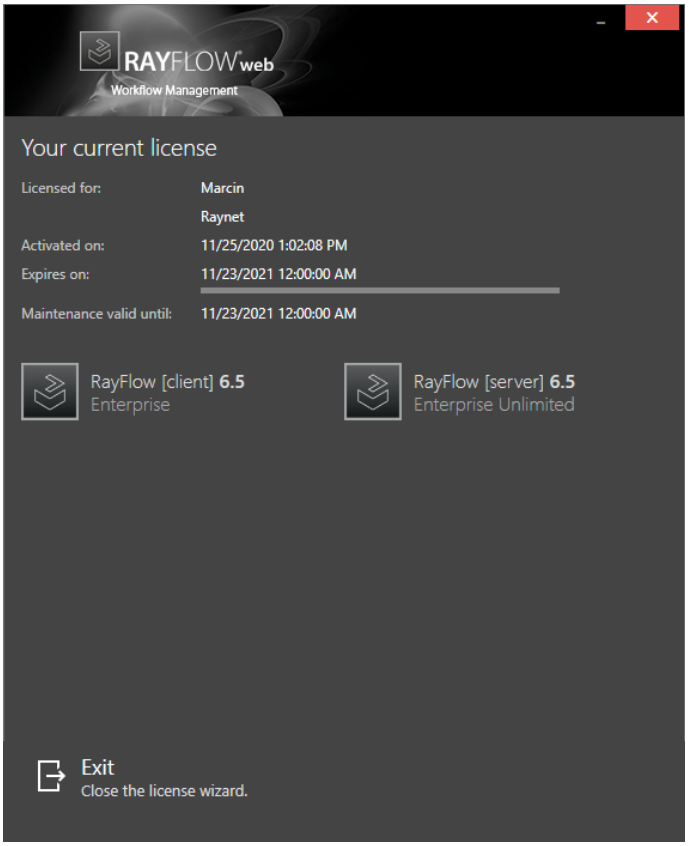
- **Use floating license server**
  Activation using a local floating license server.

See details of the current activation
This options shows the details of the current activation. This option is only visible if the product has already been activated or if a floating license server has been configured
This option also allows to reactivate the product using a different order number or a different floating license server connection details.

I don't have a license or order number
Choose this option if there is neither a license nor an order number available. For in-depth information please read this section. This option is only visible if the product has not been activated yet.

I want to take my activation back...
Use this option to deactivate a currently licensed version of RayFlow. For in-depth information please read this section. This options is only visible if the product has been already activated.

Once the license file has been generated or copied to the correct location the following will be shown...



Note:
Depending on the license, more available products may be shown, as pictured above.

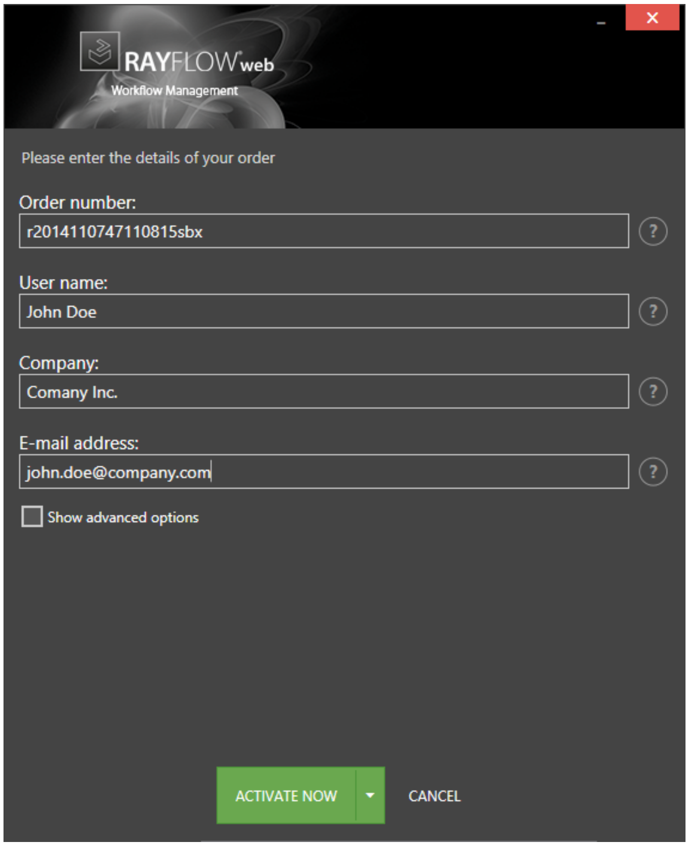
Then the option of starting RayFlow or just closing the activation wizard is made available.

Troubleshooting

If any issues arise during the activation process, please contact our help desk to receive assistance in activating RayFlow.

Use Order Number

RayFlow can be activated either directly online or via email once the order number has been delivered. The activation process generates a license file (`*.rsl`) that is created (or must be copied) to the installation directory of RayFlow (in the same location as the `RayFlow.exe`). When performing an online activation, sufficient permissions must be readily available to allow the creation of the license file in the installation directory. The activation **binds** the license to the machine on which it was activated on. This is the only time that an active connection to the internet is required (if activating online).



Choosing the **ACTIVATE NOW** button, connects to the Raynet license server using the information provided and will dynamically generate a license file. Choosing the **ACTIVATE BY E-MAIL** button will open a dialog as shown here. Choosing the **CANCEL** button will abort the activation process.

Order details

Order number:
This is the unique order number received when RayFlow has been purchased. If it is necessary to recover the order number, please contact our sales team.

User name:
This is the name of the user that is activating RayFlow. It does not need to be the same name used to order RayFlow.

Company:
This is the name of the company for which RayFlow will be licensed.

E-mail address:
This is the email address of the person that performs the activation. We respect the privacy of our customers, this email address will only be used by Raynet and only when there are any problems or important information regarding the license.

Advanced options

On choosing the advanced options check box, extended information and possibilities of the licensing and activation of RayFlow are shown.

Hardware ID:

This is a ID calculated based on the hardware on which the activation is taking place on. The ID is unique, but cannot be used to personally identify a user. It is used to generate the license for the machine on which the activation process is carried out on.

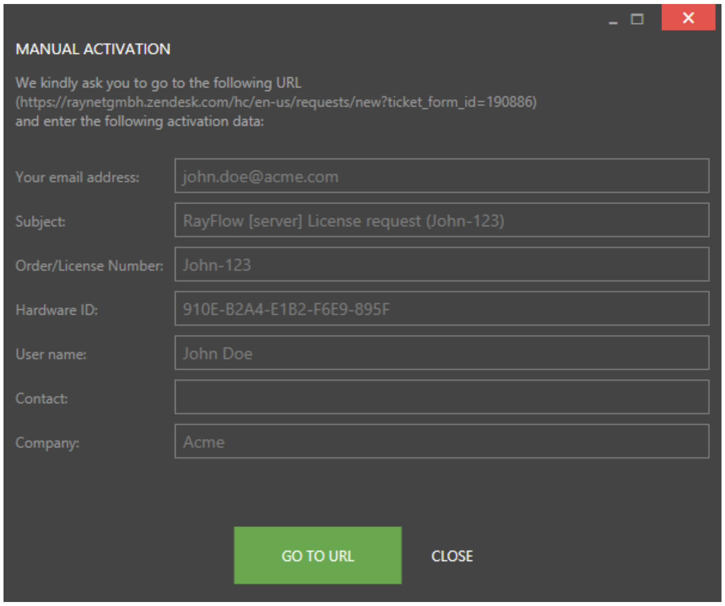
Transfer the license

If this option is selected, the order number and details may be used to activate RayFlow on a second machine, that has differing hardware (which obviously has a different Hardware ID). This assumes that RayFlow has been deinstalledfrom the machine on which it was previously activated on. The transfer license functionality is logged on our license servers and is periodically checked to ensure that no abuse is made of this functionality.

If the license transfer is part of a regular maintenance and can therefore be prepared and scheduled, it is highly recommended to use the deactivation function first, to disconnect license and packaging machine. This is the standard way for transferring licenses. The option offered here is intended for unscheduled transfers, required if a machine, for whatever reason, cannot be accessed or used operational any longer.

Activation by e-mail

On choosing the Activation by e-mail, the dialog shown below is displayed.

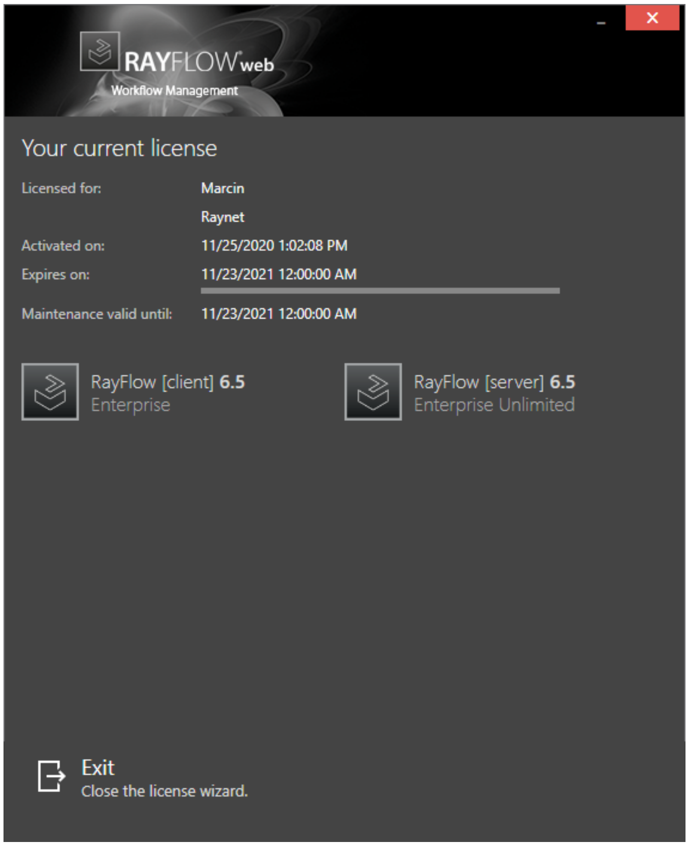


This basically shows the contents of the email that will be sent to Raynet. If RayFlow detects that an e-mail client is installed on the machine on which the activation process is active, the button **SEND E-MAIL** will be active and selectable. Clicking this button will then send an email to Raynet and a license file with instructions how use the license file will be delivered. This information is also available here.

If no email client is present on the machine on which the activation process is taking place, copy and paste the contents of the dialog onto a machine on which an email client is present, and send the information from that client. On receiving the mail, a license file will be generated and sent back including instructions on how to use the license. This information is also available here.

Tip:
Please ensure that when copy & pasting information from the **E-MAIL ACTIVATION** dialog everything is added as shown above (To: Subject: and Content:)

Once the license file has been generated the following will be shown:



Note:
Depending on the license, more available products may be shown. As an example, see the image above.

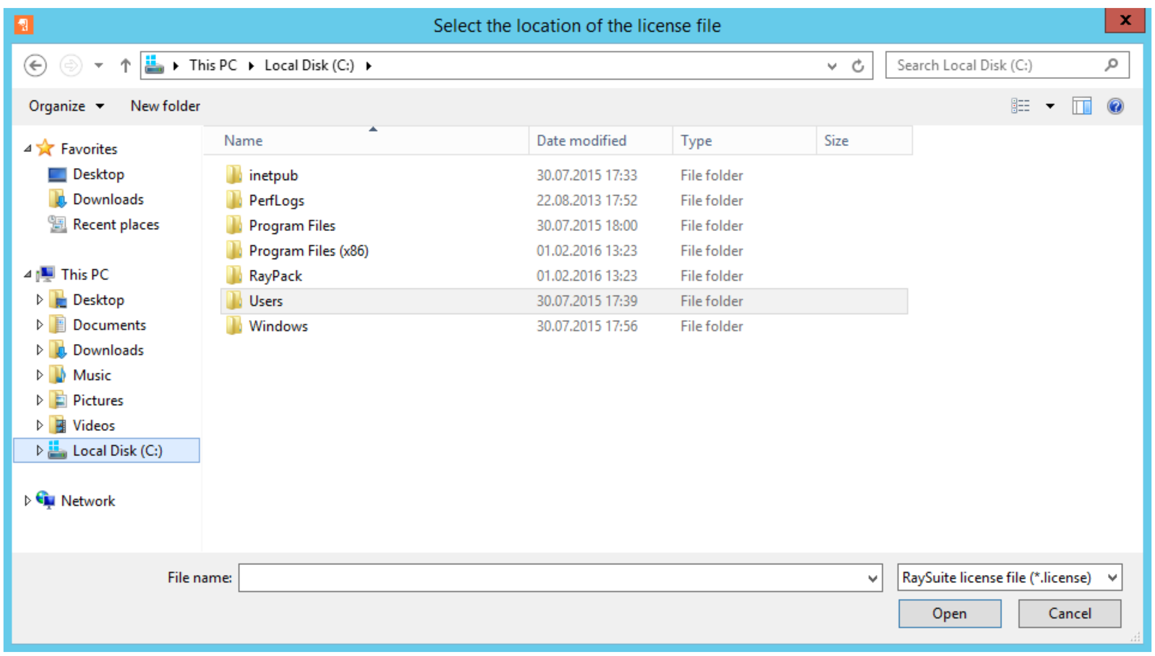
The option of starting RayFlow or just closing the activation wizard are available now.

Troubleshooting

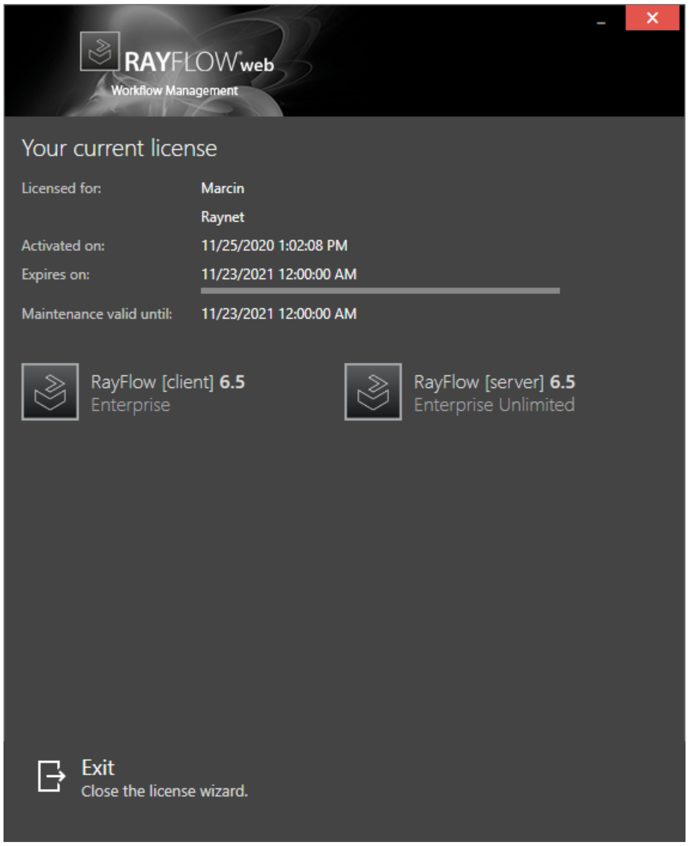
If there are any problems during the activation process, please contact our help desk for receiving assistance in activating RayFlow.

Use License File

If a license is already available, or a license file has been received as a result of activating RayFlow via e-mail, then all that is required is to copy the license file into the installation directory of RayFlow (the directory in which the `RayPack.exe` resides). Clicking on the **I have a license** button on the **License wizard** dialog opens a dialog box which allows to choose the license file. Once chosen, the file will be copied automatically to the RayFlow installation directory. Please ensure that sufficient permissions to allow the creation/copying of a file to the installation directory of RayFlow are available.



Once the license file has been copied to the correct location the following will be shown:



Note:
Depending on the license, more available products may be shown. As an example, see the image above.

The option of starting RayFlow or just closing the activation wizard are available now.

Troubleshooting

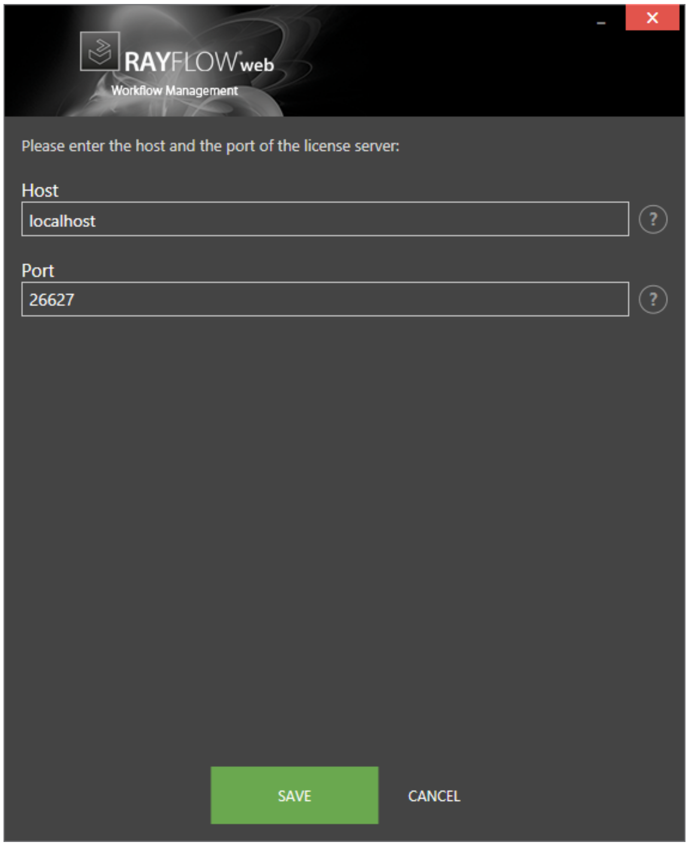
If there are any problems during the activation process, please contact our help desk for receiving assistance in activating RayFlow.

Use Floating License Server

RayFlow can be activated using a local floating license server. This requires that the server component is installed (the installation is available separately from the product installer).

Once the server is configured, the following details are required from the server administrator:

- Server name or IP address
- Configured port (by default `26627`)



Enter required values and confirm them by clicking on the **SAVE** button. The server will be contacted once to verify the correctness of the data. If the server is not available at that time, an option will be presented to write the data anyway.

Once the connection details are saved, please restart the product to activate it using the floating license server.

I Do Not Have a License or Order Number

If neither a license or order number is available, then just simply register with Raynet to download an evaluation license for RayFlow. This allows potential customers to test and work with RayFlow before purchasing. Choosing **I don't have a license or order number** opens the Raynet website in the default browser, allowing potential customers to download an evaluation copy of RayFlow.

I Want to Take My Activation Back

Deactivating an existing license for RayFlow may be required if the packaging machine used has to be switched. Whenever there is a scheduled migration, e. g. when a virtual machine is transferred in a way that affects the **Hardware ID**, or when a physical machine is no longer used for packaging purposes, deactivating the license is the right thing to do.

To Deactivate a Licensed RayFlow Installation

1. Launch RayFlow and open the license and edition tab of the **about** area.

2. Click on the **Open the license wizard** button on the lower left hand side of the application window.

3. Use the option **I want to take my activation back...**

4. Enter the **order number** that was originally used to activate RayFlow on the current machine. It was part of the resources and information material delivered during product purchase.

5. If required, adjust the user name already entered into the input field **User name**. The users who activate and deactivate an installation do not necessarily have to be the same.

6. Click on **DEACTIVATE NOW**.

   The license wizard will connect to the Raynet licensing server and send the deactivation information. On success, the number of licenses available for activation, which are bound to the used order number, is incremented by one. With this new free license it is possible to activate any RayFlow installation, on the current machine or any other.

Troubleshooting

If any problems during this process occur, please contact our help desk for receiving assistance in deactivating RayFlow.

Working with RayFlow

This part of the document provides key information from an end user point of view. The information has been structured to first introduce how to use the basic elements/objects in RayFlow, and then how to work with them to meet the target requirements pertaining to the project being worked upon.

A list of chapters and the key information provided in them follows as a part of this section of the document:

- Objects: This section provides a brief introduction to key objects in RayFlow.
- Element Structure: This section introduces users with how elements are structured in the RayFlow user interface.
- Getting started - First usage: This section describes the features that are relevant to an end user in order to execute regular tasks.
- Typical User Workflows: This section describes the features relevant to an end user to execute their regular tasks using a standard workflow as an example.
    - Working with Phases: This section provides key information on how to work within a phase and the functional options available to the user.
    - Tracking (Package Follow-up): Tracking provides an end user with the ability to track progress and state of tasks within a workflow process.
    - Reports: A user has the ability to gather information pertaining to projects and tasks in RayFlow by using quick and detailed reports.
    - Appointments: Appointments allow users to schedule reminders pertaining to tasks and other activities related to a RayFlow project.
    - Global Search: This section describes how the global search works..
- Typical Administration Workflows: This section describes basic jobs in RayFlow from an administrator point of view.
- Package Path Autofill Function: This section describes how to configure RayFlow to be able to use the Package Path Autofill Function..

Objects

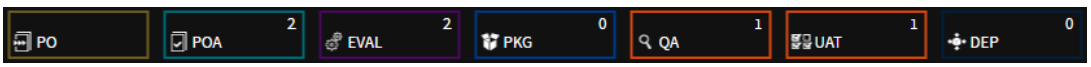
RayFlow is a modular application where functional objects are combined to set up an environment that provides a platform to work on diverse workflow processes. This modular architecture of RayFlow results in the flexibility to be configured to match specific end user requirements. This section of the document provides a brief introduction on the key objects in RayFlow.

Project

A workflow project in RayFlow is represented as a series of phases and sub-phases from the order to the completion of a task. The configured phases are organized in the process navigation bar on the top. The order in which phases appear depends on the phase order of a particular task as well as the level of visibility/permissions that a particular user has.

Phases

A phase is a part of a series of phases in a workflow project and contains any number of tasks. A user with the permission to view, edit and download tasks in a phase can see information (properties, files, comments) and even create appointments and track a selected task. A phase can have any number of sub-phases which can be independently configured.

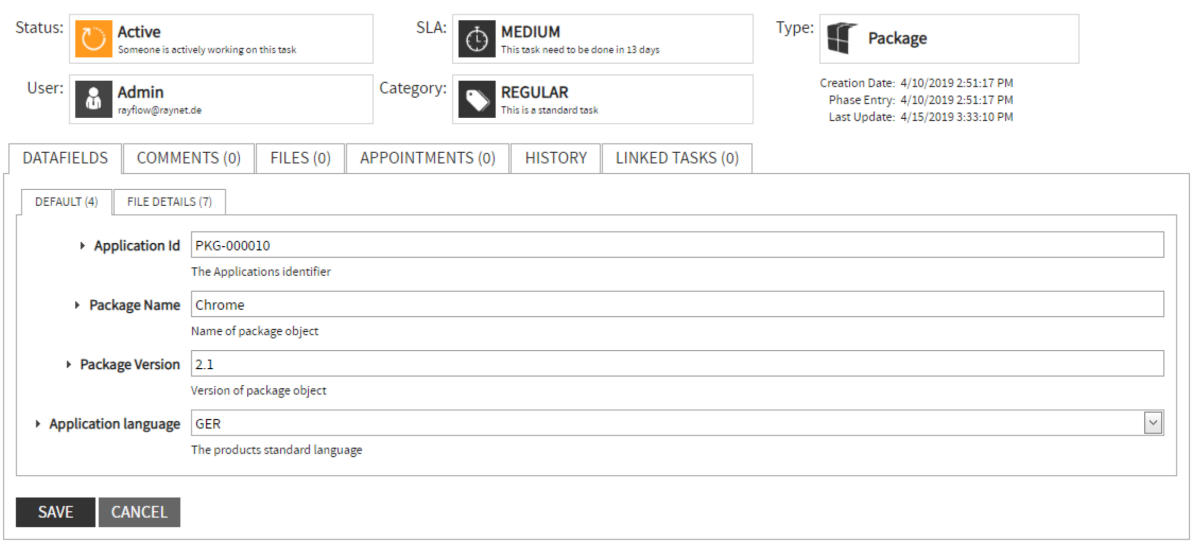


Task

Every task in a project walks through the defined workflow of that project. All necessary information needed to work in a specific phase is listed in the properties section of a task.

It has a current status which can be changed by triggering phase specific events. The SLA is an indicator to visualize if the work on a task is being performed in time.

A task, in the context of Raynet being a service provider in the field of application management, is software that goes through all phases of a best practice workflow, e.g. evaluation, packaging, quality assurance, user acceptance, and deployment.

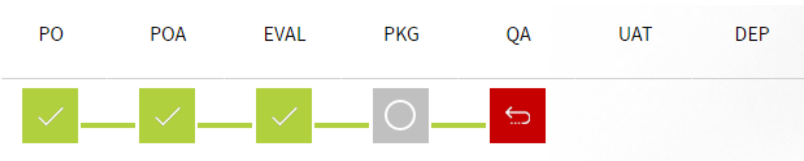


Status

Status defines the current state of a task within a phase. Every status can have a unique icon to easily identify it.

The default statuses are:

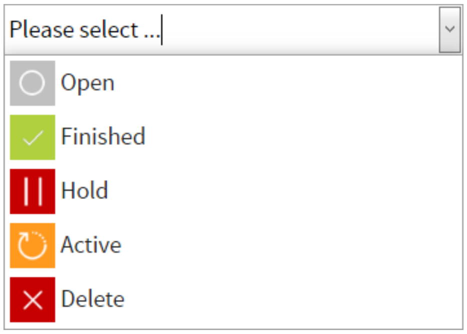
- Open: Task is currently not assigned to any user
- Active: Task is assigned and is being worked on
- Delete: Task is deleted from the workflow
- Finished: Task has been completed



Events and Actions

Events are defined per phase and can be triggered by users. By triggering an event, the status of a task will be changed. Every event defines these status changes with actions. For example, the "finished" event is configured with two actions:

- Set the status in the current phase to finished
- Set the status in the next phase to open.



Datafields

Datafields are input fields that store information within a task. Every phase can provide different sets of datafields and even change the editability or visibility. For example, a datafield can be a mandatory field in one phase and an uneditable field in the next.

There are different types of datafields. Currently the following datafields are available:**Textbox**, **Checkbox**, **Drop down list**, **Multi drop down list**, **Date**, and **Date and time**.


Multi Drop Down List
First Option | Second Option | Third Option
This is an example of a Multi Drop Down List datafield
TextBox
This is a sample text
This is an example of a TextBox datafield
Checkbox
This is an example of a Checkbox datafield
Drop down list
Second Option
This is an example of a drop down list datafield
Date
3/1/2018
This is an example of a date datafield
Date and time
3/1/2018 12:00 AM
This is an example of a date and time datafield

Users

All users belonging to a project can be members of multiple groups. A user can be identified by a unique username and e-mail address. In addition, a user has optional information about name, last name, and company.

A user can also belong to multiple projects. After the login, a user can choose the project he wants to work on.

Groups

A group can have one or more users as members. Within a group the permissions (view, edit, download) per phase and the accessibility of menus are defined. Users, which are member of the group, can access phases and menus only as defined.
Also the dashboard can be personalized and differ from group to group.

Every group has one of three types: Root, User, Manager or Administrator. This type grants members additional functionality like assigning other users to tasks, administer projects, etc.

Elements Structure

The application is structured in a modular way and consists of six different sections:

Section I contains the toggle menu button to display / hide the vertical functional navigation as well as the information where the user currently is. Furthermore, the global search field is located here.

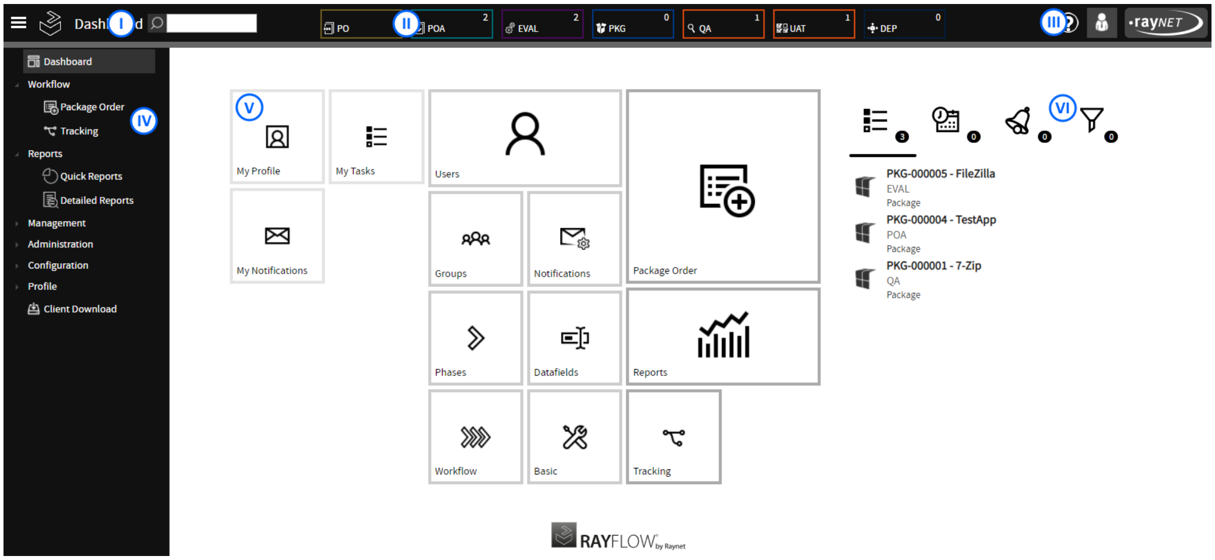
Section II is the horizontal process navigation. It shows the configured phases of the general process for software packaging. Based on the user access model, each user access can be phase or sub-phase specific based on the user access model. All users with limited rights will only see their assigned phases of the general process. Each user can focus on his assigned phases and tasks. The process structure divides each phase into a logical and sequential flow. Given rules and content define and control the workflow between phases.

Section III contains the user logout icon and the project icon. In case of the user being assigned to more than one project, clicking on the project icon allows the user to switch between projects.

Section IV is the vertical, functional navigation. Here, a user can see the functions he has access to, e.g., package order, tracking, reports, management, etc. This section is used to get an overview of the available functions. Each function can be assigned to a specific user role.

Section V is the content section. This section switches the content depending on what navigation point is selected.

Section VI contains the user information panel. Here an overview of the users tasks, appointments, notifications, and filters is shown.



This picture shows the main navigation. Main navigation topics are shown on the start page only.

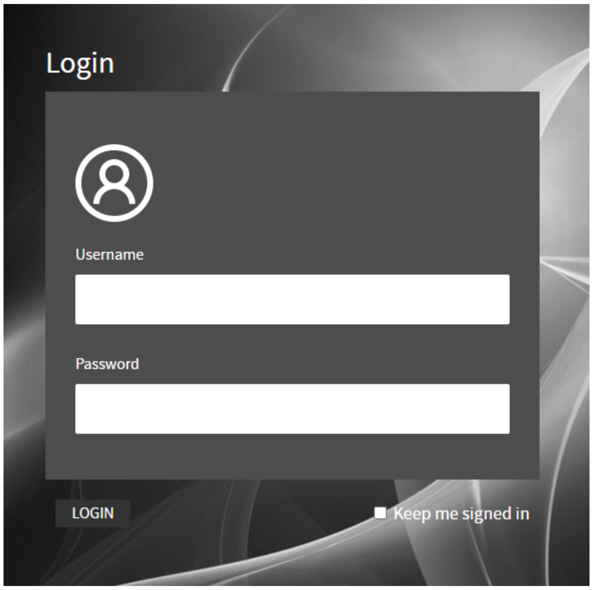
With a click on the "RayFlow icon" button in the upper left corner next to the location name the user can return to this start page at any time.

The configured menu for the logged on user considering his / her assigned user rights is shown here.

If a phase is clicked within the process navigation, this phase and its view of tasks will be shown in the content section.

Getting Started - First Usage

If a valid license file has been applied, and when the application is loaded in a web browser, the RayFlow login page is shown. The login page serves as an access point to the underlying projects. Using cookies the **Keep me signed in** option remembers the username for the next login. This option can be disabled through the `web.config` file. For more information on this file refer to *RayFlow 6.5 Installation Guide*.

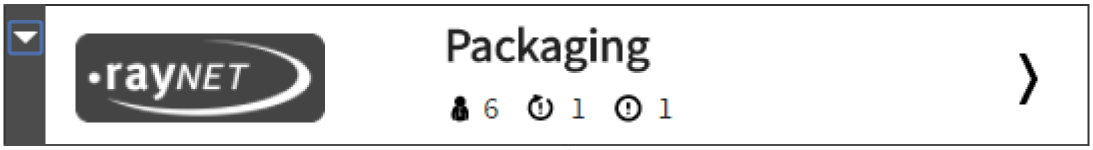


Login Screen

RayFlow is a web-based application that launches from the URL https://rayflow.net/customer. The RayFlow-SPOC will supply you with your personal username and the initial temporary password. These credentials can be used to log into the RayFlow system via the login interface site.

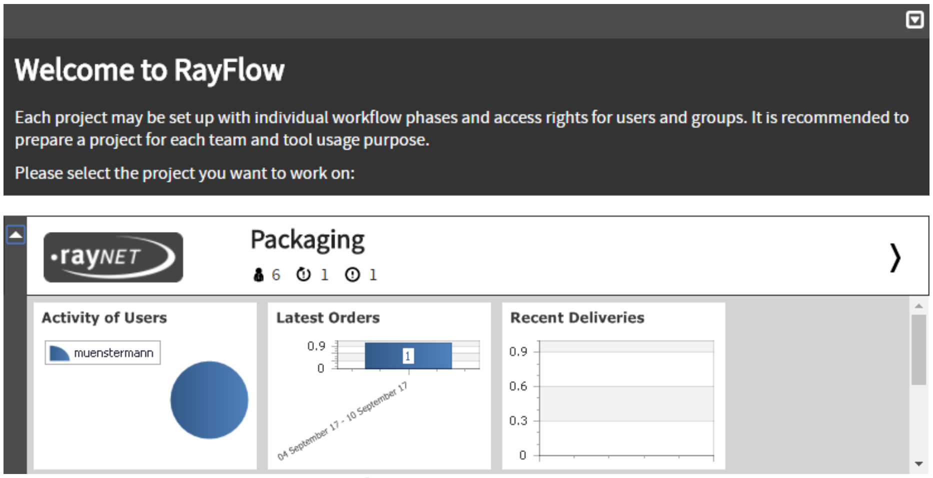
After logging in, the main menu with its process and configured navigation is accessible. If any further individual settings or rights are needed, these can be configured by your SPOC.

If an account is assigned to more than one project, please select the desired project from the list of projects. On the right site of the list, there is a field with a button that is showing an arrow that is pointing downwards..



Project Selection

When clicking on this field the **Quick Reports** for the project are shown below the project in a small overview. More on **Quick Reports** can be found found in the *Quick Reports* chapter.



Quick Reports Overview

Note:
It is possible to switch between projects at any time.

Warning:
While working with RayFlow, refreshing of the pages is not allowed! Users shall receive a warning from their browser when trying to refresh a website. Be aware, that this behavior depends on the way the browser resents data and there may be no warning!

Project Selector

To switch a project simply click on the company logo in the top right corner of the window (see Pic. 6, red marked logo right next to the user logout button). This will return you to the project selection.

After logging into RayFlow the first time, it is strongly advised that you change your initial password.

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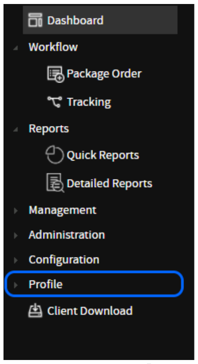
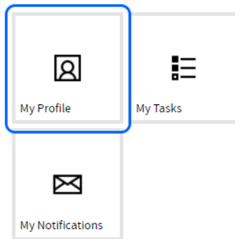
To do so go into you profile by either selecting **Profile** in the right side functional navigation section or by clicking on your name tile.

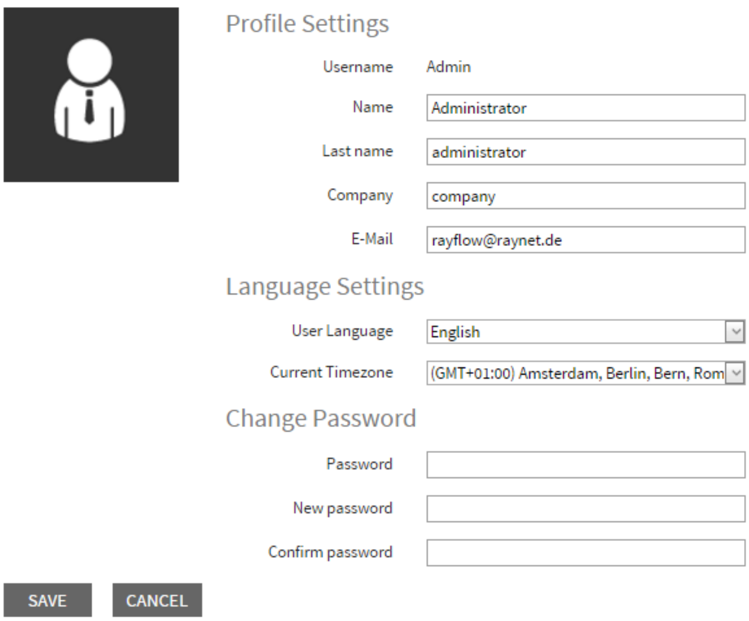




Change Password

Passwords can be changed at any time using the vertical navigation bar or the My Profile tile.

Once started, the following dialog appears:



Due to security reasons the password needs to contain at least 8 characters and one special character from this list (!,§,$,%,&,/,@,~,+,*).

Typical User Workflows

RayFlow is a tool to support standard and custom packaging processes such as the below process. The entire software packaging process is monitored and controlled by RayFlow.

Standard Packaging Process

The process consists of several phases and some phases also have their sub-phases.

Phases can be individually configured as needed. Each phase can consist of different tasks and datafields.

Each task covers the work that needs to be done to finish the task and to move from one phase to another throughout the process.

Thanks to its flexible administration options, RayFlow offers quick individual configurations to the customer specific packaging process, so that each enterprise can implement and use their own packaging policy.

Depending on the assigned roles and user rights, users can order software packages, check their completeness, document the packaging tasks, test the package and carry out quality assurance, accept packaged software and generate reports on the process and the packages resulting out of this process.

Monitoring reports are used showing the current status to support the process. Each report can be exported in standard file formats.

The tracking section is another option in RayFlow to quickly control the general workload and the current status of all packages.

Working with Phases

This section of the document is written to help users work on a task within a phase. Different options available are described under different topics of this chapter.

- Creating a new task: Creating a new task within a workflow process
- Edit task properties: Editing task properties
- User assignment: Assigning a user to a task
- Change the status of a task: Changing the status of a task
- Task movement within phases: Movement of tasks within a workflow process
- Comments: Adding comment to a task
- Copy Permanent Link to a task: Allows a user to copy the link to the task. This link can be used to directly access the task
- Up- and Downloads: How a user can upload and download files to a task

- TaskTrack: How to receive notification regarding changes made to a task

Creating a New Task

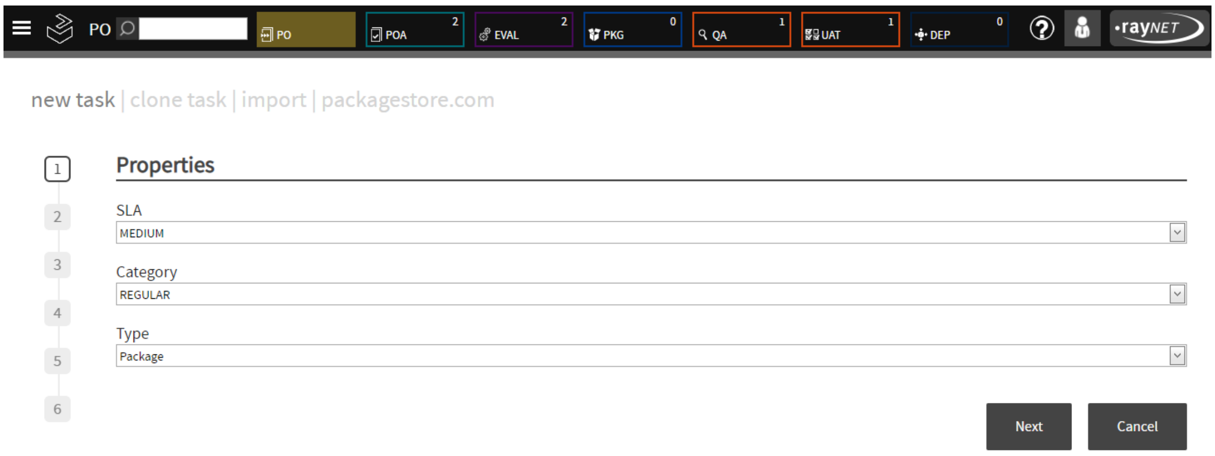
RayFlow offers four different ways to create a new task:

Create a new task manually - type in the task information manually in predefined datafields
Clone a task - clone a task from the current project or from another project
Import a task from CSV - import the task information from external files
Task from PackageStore - Create task in Integration with PackageStore

Create a new task manually

The user has the possibility to create new task by typing in the initial properties.

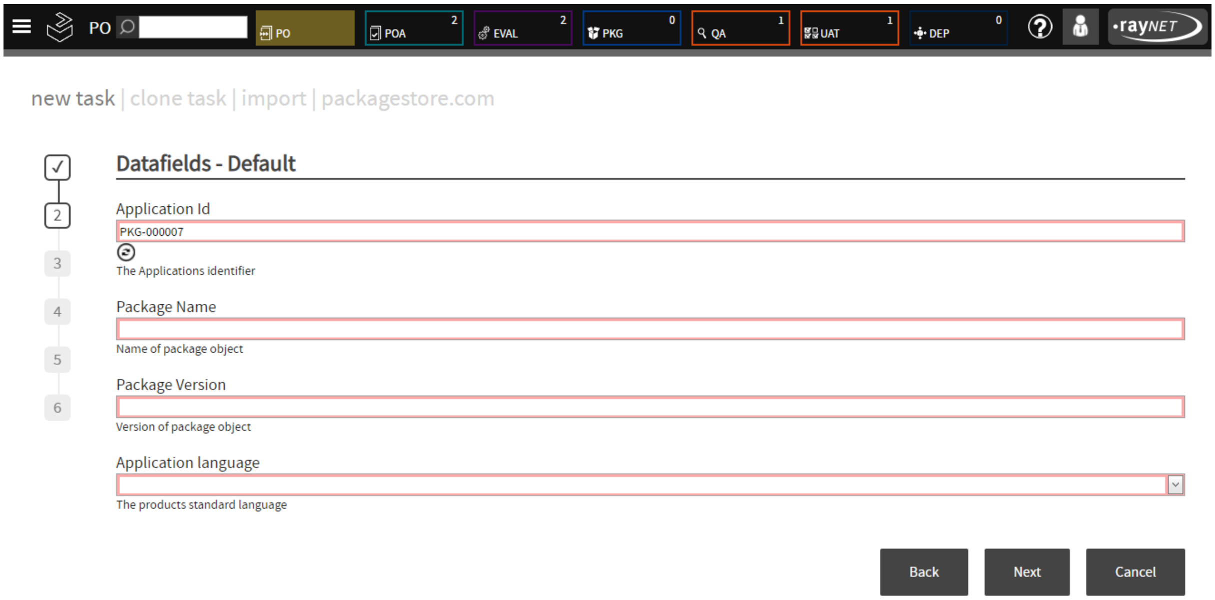
Therefore open the order phase (first phase in the phase sequence) or the site menu item "Package Order". Please make sure that the sub menu **new task** is opened.



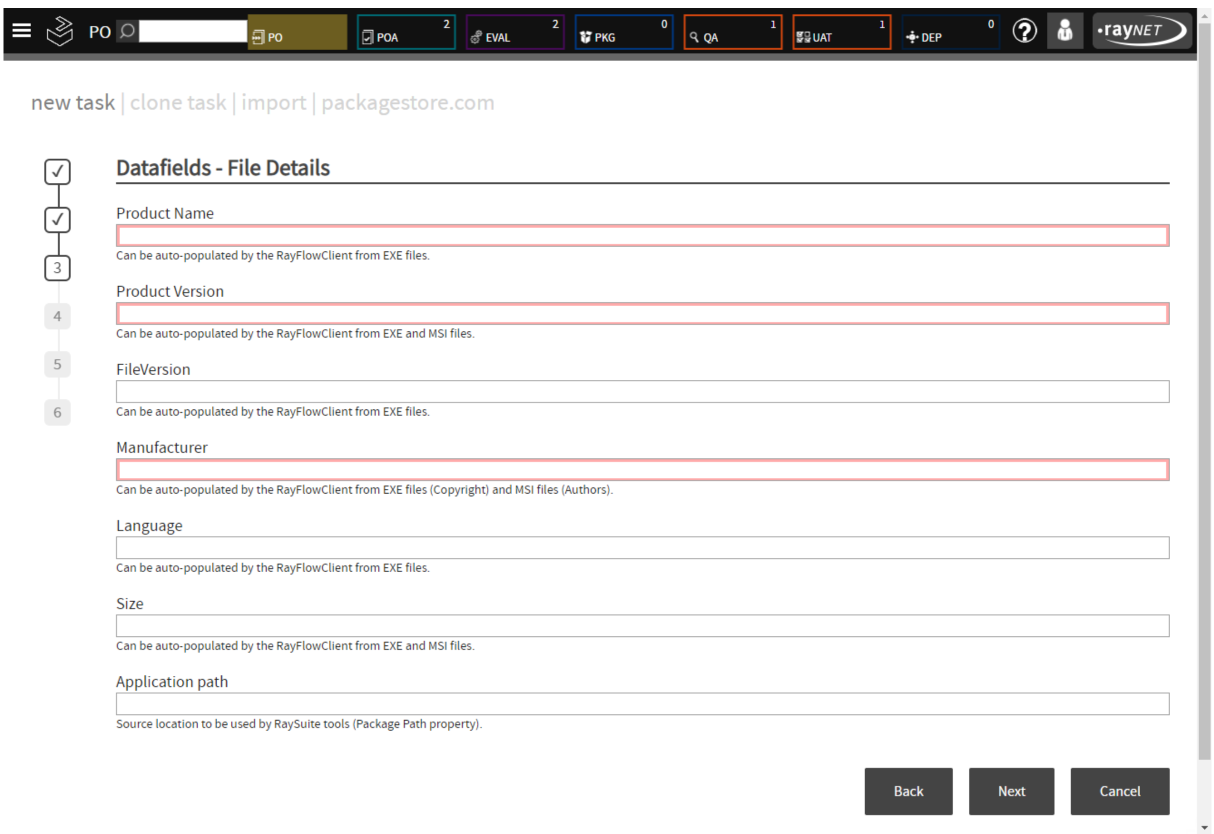
In the first step the **SLA**, the **Type**, and the **Category** must be defined. This is mandatory information. Click on the **Next** button to continue.

The **SLA** is necessary to control if a task goes through the workflow in time and also gives the user a visual alert if takes too much time.

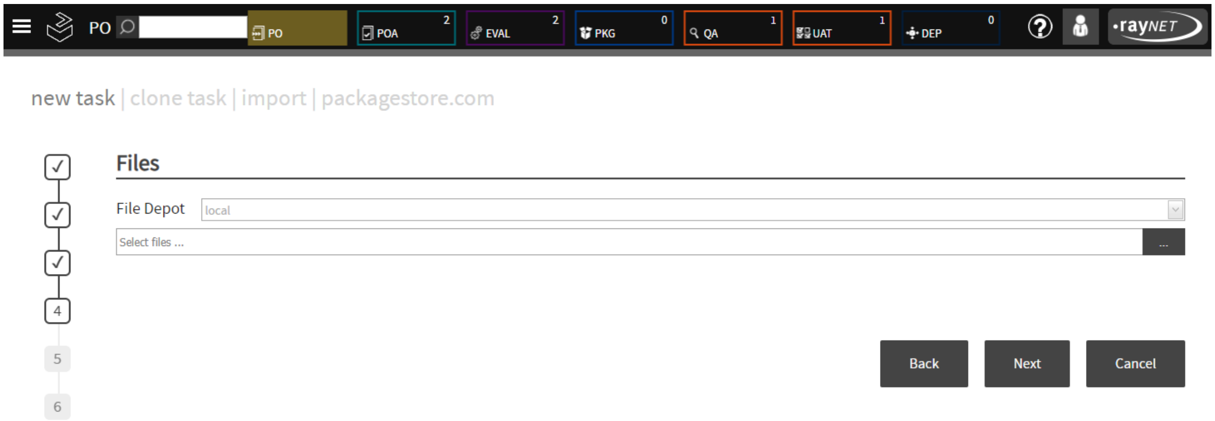
The **Category** is a semantic value to classify the task. It can be used to filter tasks in phases or in mail notifications.



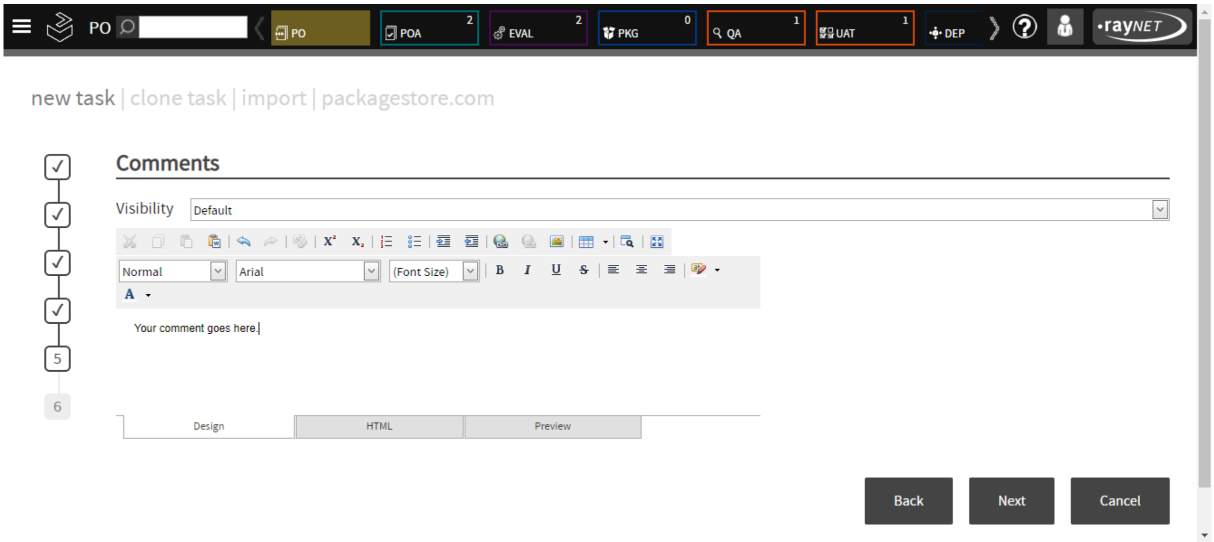
In the second step fill out all fields and click on the **Next** button to continue. The Application Id can be updated by using the **Refresh** button underneath the field.



In the third step fill out all mandatory fields (red outline). Only **Product Name**, **Product Version**, and **Manufacturer** are mandatory. All other fields are optional. Click on the **Next** button to continue.



In step **4** files can be added and the File Depot can be defined. This data is optional. For more information please have look at the sections File Depots or Up- and Downloads. Click on the **Next** button to continue.



In the fifth step an optional comment can be written. This data is optional. For more information please have look at the section Comments. Click on the **Next** button to continue.

The final step shows all information that have been entered. Check all information while scrolling down to the bottom of the page.

To create the task, click on the button **Create new order**.

Note:
The new task, which can be found in the next phase (for example **POA**), has the status **Open** and is not assigned to a user.

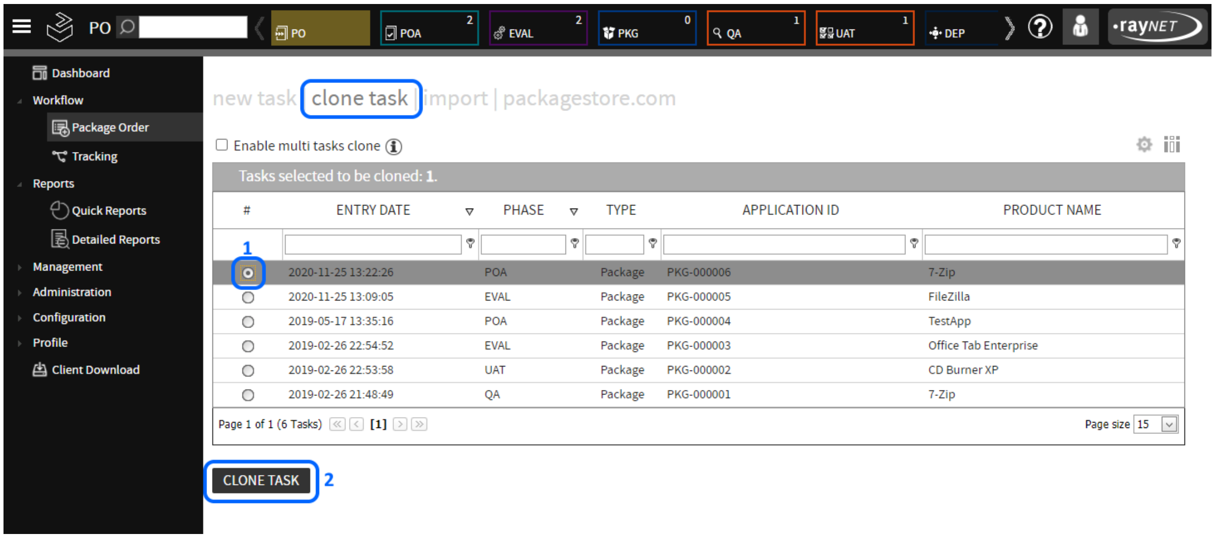
Clone a task

The user has the possibility to clone a task from the current project or even from other project.

Therefore open the order phase (first phase in the phase sequence) or the site menu item **Package Order** and go to the sub menu **clone task**.

All clone-able tasks are listed and can be selected by clicking on the ratio button in the row. After selecting the task which should be cloned, click on the **Clone Selection** button.

The initial properties will be copied to the new task view and can be edited before the task is created.



To clone multiple tasks at ones a user can activate the checkbox with the caption **Enable multi task clone** right above the list.

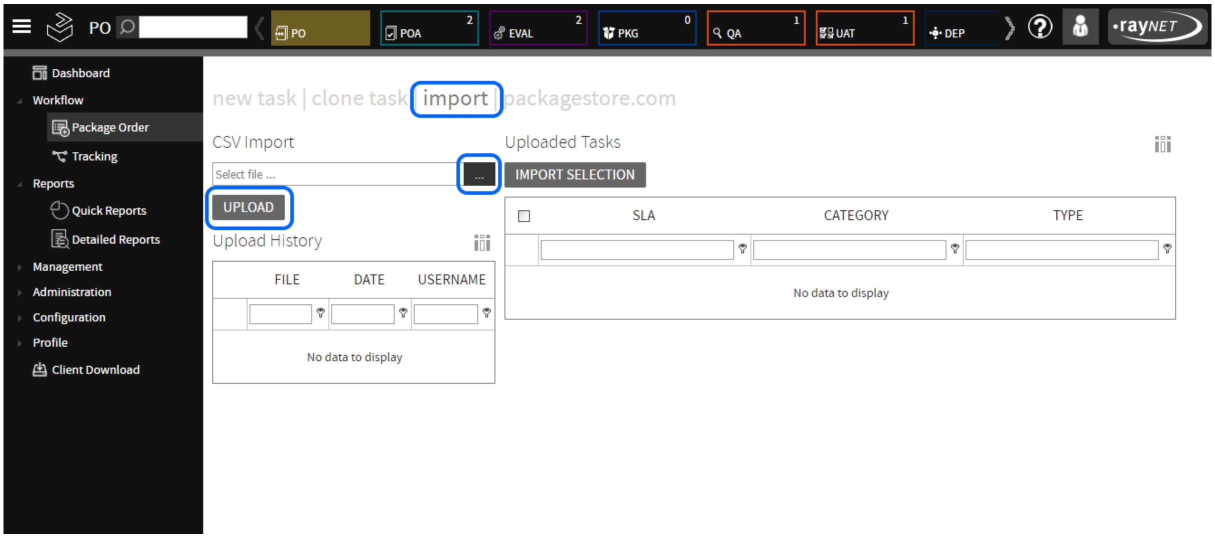
All ratio buttons in the list change to checkboxes and enable multiple selections. After selecting the task and clicking on the **clone selection** button, all selected task will be created with the same properties as the original.

Note:
The user cannot change the initial properties of the cloned value by using multi clone option.

Import a task from CSV

The user has the possibility to import multiple tasks from a semicolon separated value (CSV) file.

Therefore open the order phase (first phase in the phase sequence) or the site menu item **Package Order** and go to the sub menu **import**.



To upload a CSV file, click on the **...**-button and a browser default upload dialog shows up. Choose the file and press open. Press **Upload** to complete the upload process.

The uploaded sample file has the following content.

Category	SLA	Application Id	Application language	Application name	Application path	Application vendor	Application version	Comment
EASY	LOW	PKG-000004	ENG	Flash	\\path\to\package\flash.msi	Adobe	17.0	Test comment
REGULAR	MEDIUM	PKG-000005	GER	Reader	\\path\to\package\reader.msi	Adobe	11.0	Import task to RayFlow
COMPLEX	HIGH	PKG-000006	ITA	FileZilla	\\path\to\package\filezilla.msi	Tim Kosse	3.0	and even comments

Be aware:
The column headers should have the same title as the datafields used in the package order view! Be aware, that all datafields that are mandatory in the create phase have to be included in the CSV file and need to have valid datafield values!

The upload history gives the user information about the upload date and the name of the user as well as the status of the upload. A successfully uploaded CSV file can be selected from there and the task information is shown on the right site.

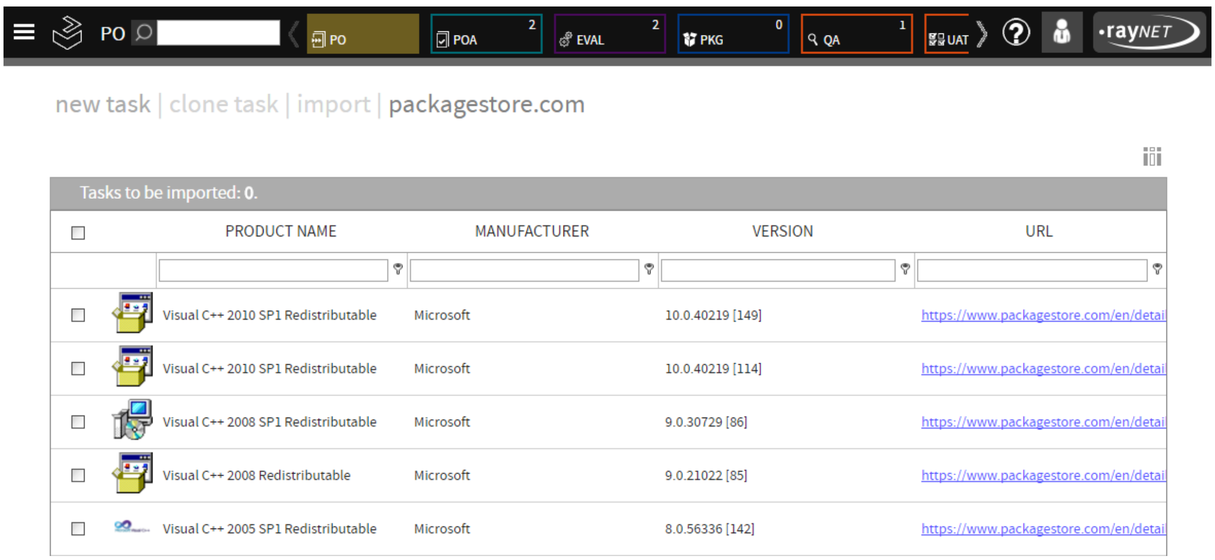
It will be stored for later use.

To import the uploaded tasks, select the tasks by activating the checkbox in the row. To select all tasks activate the checkbox in the header of the list.

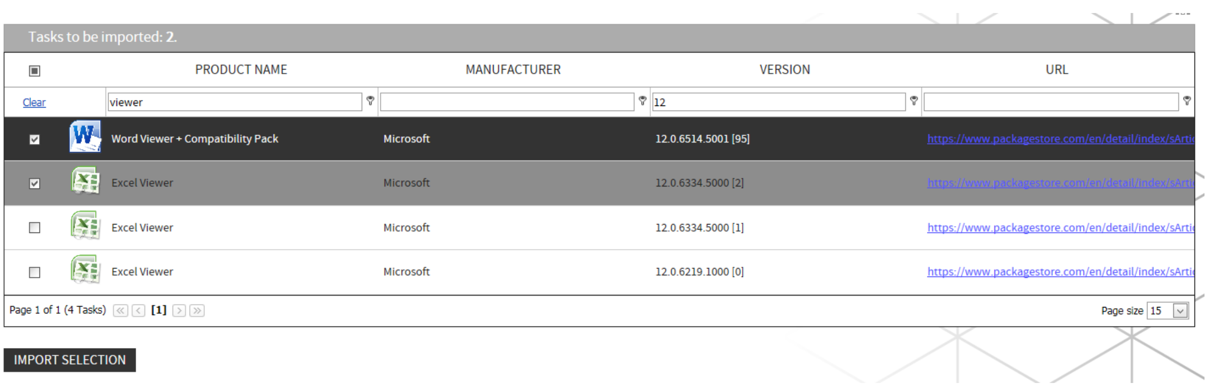
Press **Import Selection** to import the selected tasks.

Note:
The new task, which can be found in the next phase (for example **POA**), has the status **Open** and is not assigned to a user.

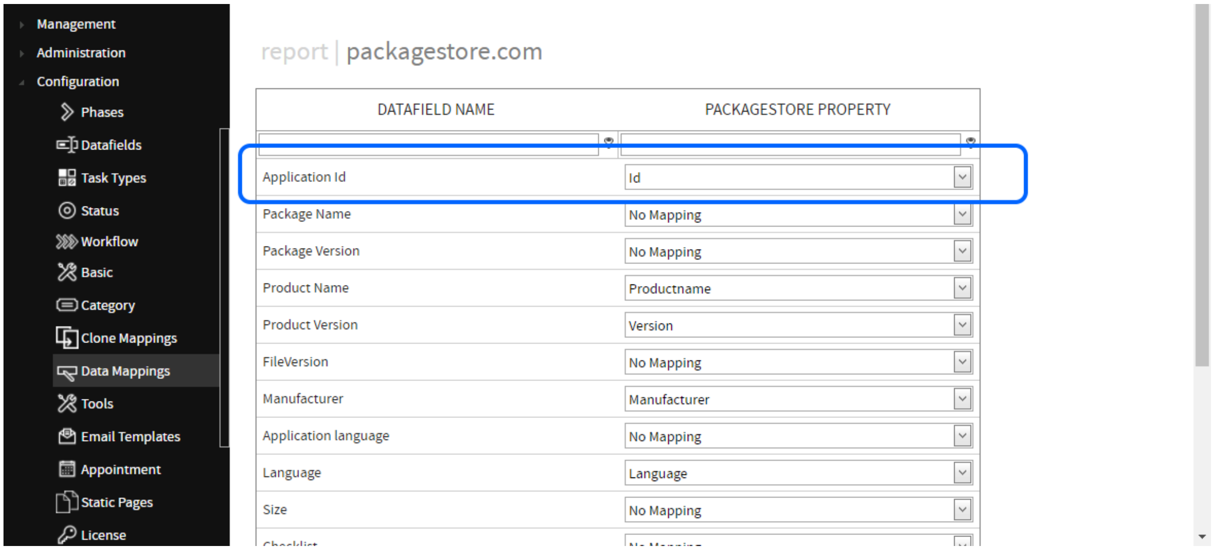
Task from PackageStore

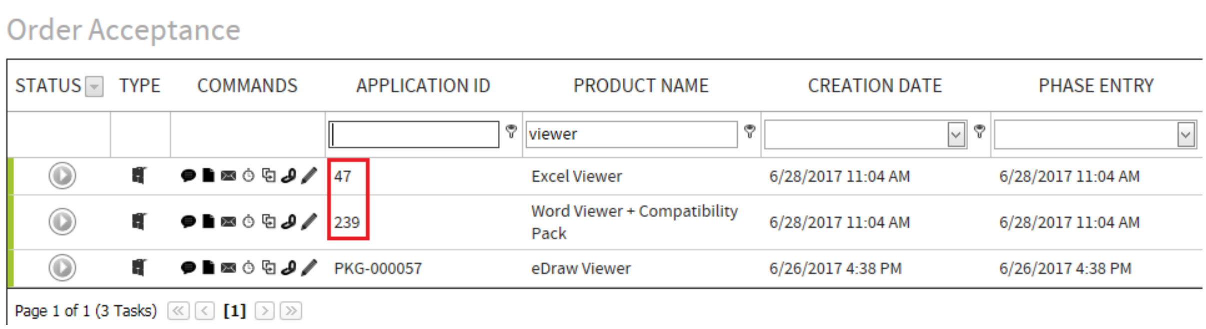


The creation phase now has a forth tab called packagestore.com which provides integration between RayFlow and our Package Store service, allowing one or more package definitions to be imported as tasks into RayFlow.



If the **Configuration** > **Data Mappings** > **packagestore.com** maps the Package Stores Id field with a RayFlow datafield that automatically creates a task identifier, then the Package Store's package identifier will be used:

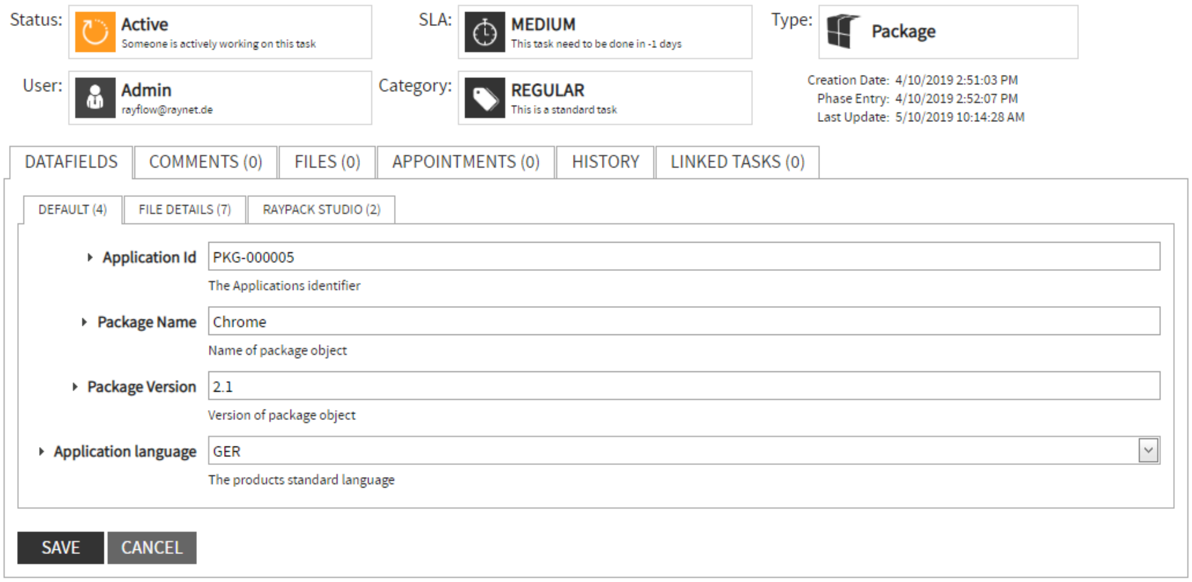




Edit Task Properties

After selecting a task, you can edit its properties in the **DATAFIELDS** tab.

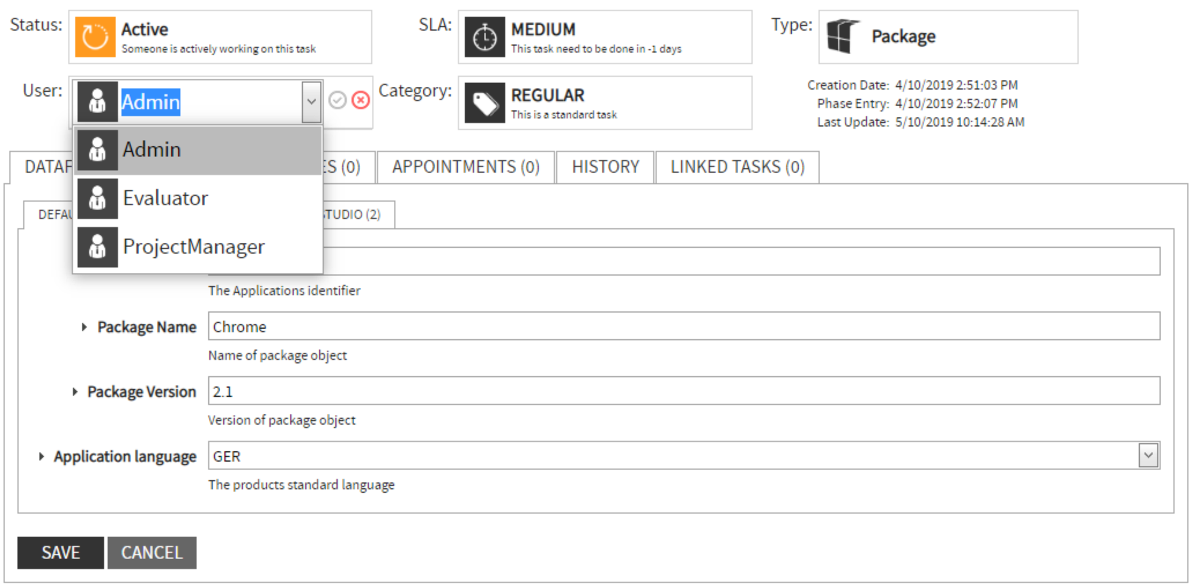
In the administration of RayFlow, these values can be configured as editable and as visible datafields. This is dependent on the user view / edit permission.



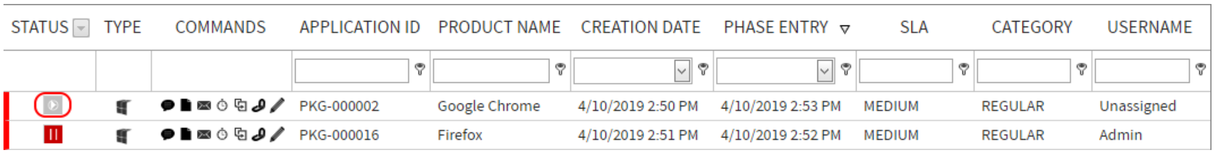
User Assignment

To work on a package which is currently assigned to another user, it first needs to be taken over.

Therefore open a task by clicking on the appropriate row and click on the **User**-field. Then choose the account and click the little green check mark icon. One needs to have at least edit rights to do so.

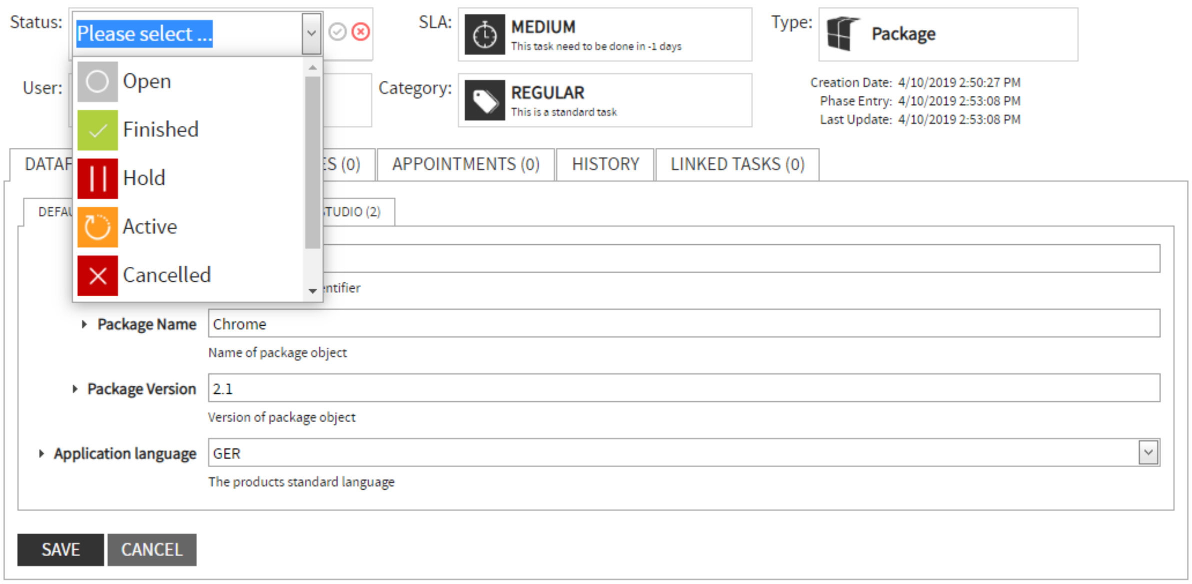


It is possible to take over an unassigned task directly by clicking on the accept tool in the beginning of the row of a task:



Change the Status of a Task

Note:
A user with only read rights for a phase can see the comments, appointments, and files, but cannot edit them or change the status!



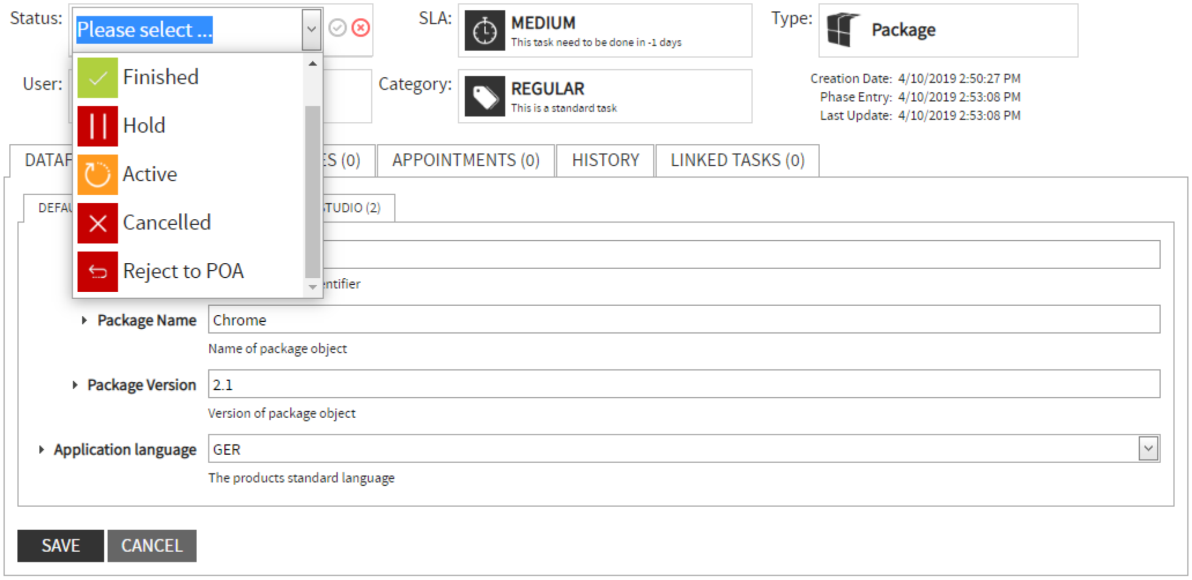
After a click on the field next to **Status**, the drop down list shows all available events which will change the status of a task.

After selecting the desired event, please press the green check mark button to have the status changed.

If a user has only view rights for a phase they will not be able to select an event to change the status, SLA, user, category or properties, add comments or upload and download files. The user will be able to read the comments, to see all uploaded files, to see and create appointments and to view the history for this task.

Task Movement within Phases

A reject event causes the task to be moved to a previous phase. Before setting the reject it is best practice to first enter a comment in the comment section with the reason why the task was rejected.

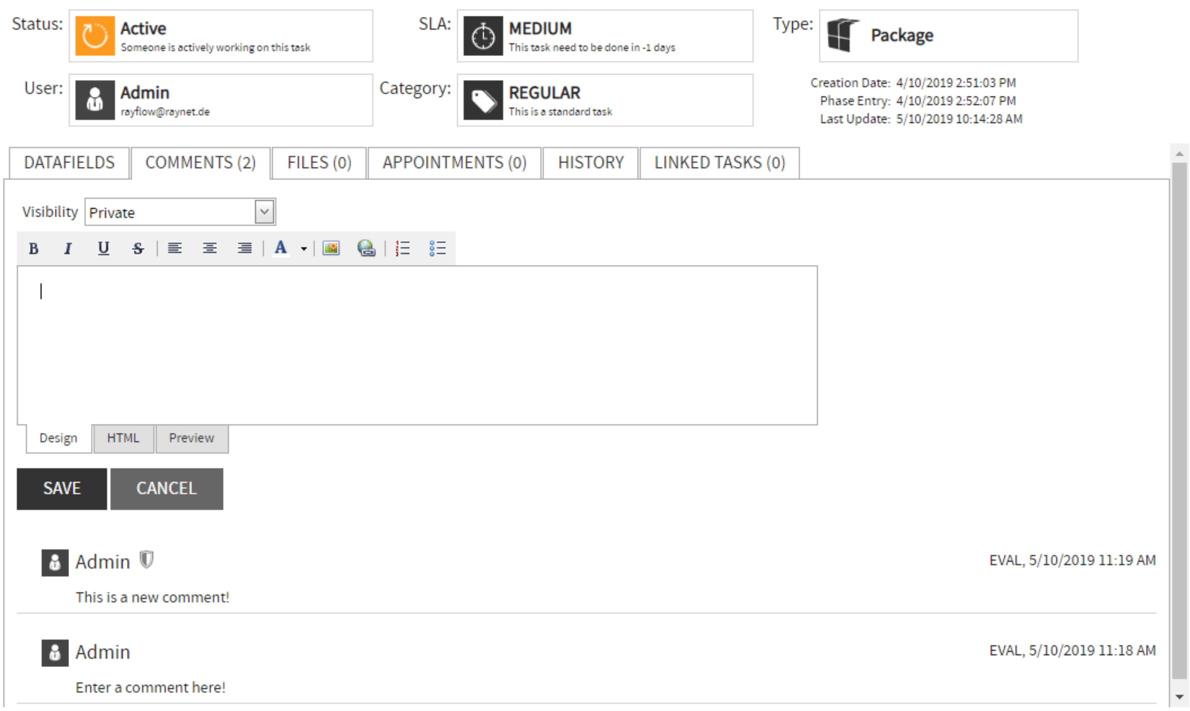

Status:
Please select ...
Finished
Hold
Active
Cancelled
Reject to POA
SLA:
MEDIUM
This task need to be done in -1 days
Type:
Package
User:
Category:
REGULAR
This is a standard task
Creation Date: 4/10/2019 2:50:27 PM
Phase Entry: 4/10/2019 2:53:08 PM
Last Update: 4/10/2019 2:53:08 PM
APPOINTMENTS (0)
HISTORY
LINKED TASKS (0)
Package Name
Chrome
Name of package object
Package Version
2.1
Version of package object
Application language
GER
The products standard language
SAVE
CANCEL

Note:
Best Practice means that no package should be allowed to be rejected without a reject reason!

Comments

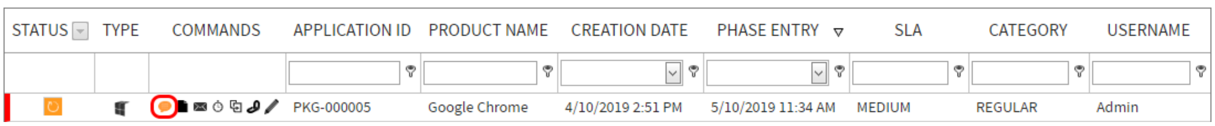
After opening a task you can see if comments have been added to it by the number in brackets in the **COMMENTS** tab.

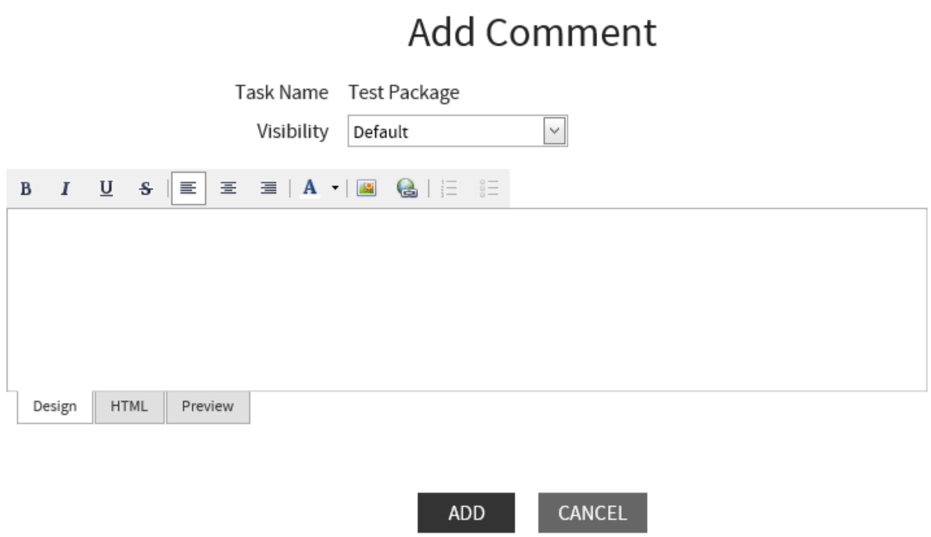
Note:
If there is no number in brackets there are not comments added to the task yet.



To add a comment or read it, the **Comment** tab has to be clicked. Comments made are shown in chronological order starting with the newest comment (see Pic.18). Also the name of the commentator and the entry dates (time and date) are listed.

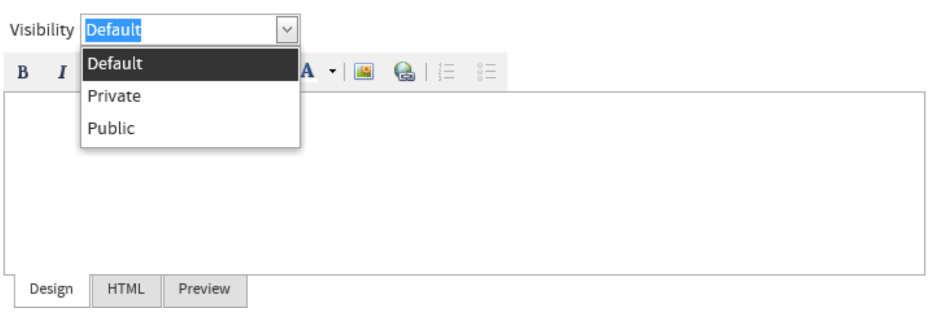
Additionally, a comment can be added to the task by clicking on the comment icon, which is available with each of the tasks. When this icon is clicked upon, a Add Comment dialog is available to users to add a new comment.





Adding a comment is executed by writing into the comment field and then pressing the **Save** button. You can use either the format functions from the design tab or use HTML tags in the HTML tab. The preview tab shows you how the comment will look like.

After the first comment is added to the task, the comment icon color is changed from gray to orange.



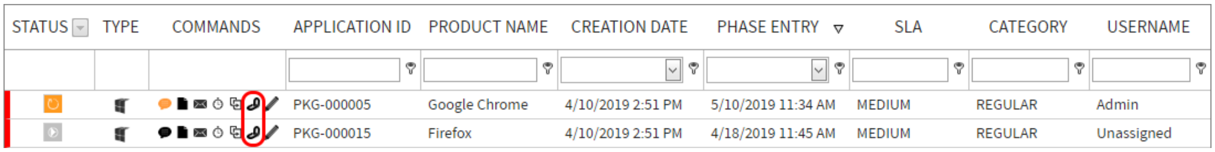
Comments can have different visibilities. These visibilities can be chosen using a dropdown menu:

- **Default**: If default is chosen as visibility for a comment, only accounts which have view access to a phase are able to see the comment.
- **Private**: If private is chosen as visibility for a comment, only the account which created the comment is able to see it.
- **Public**: If public is chosen as visibility for a comment, every user is able to see the comment, regardless if the user has access to the phase or not.

Copy Permanent Link to a Task

The link tool icon is shown along with each of the tasks in a phase. A user can right click upon these icons and copy link address. This link address is a combination of RayFlow server address, phase id and task id (e.g. `http://192.168.61.158/RayFlow/Phase?taskId=5ead5eea-`

8919-42f4-a091-19c8a57ceee3).

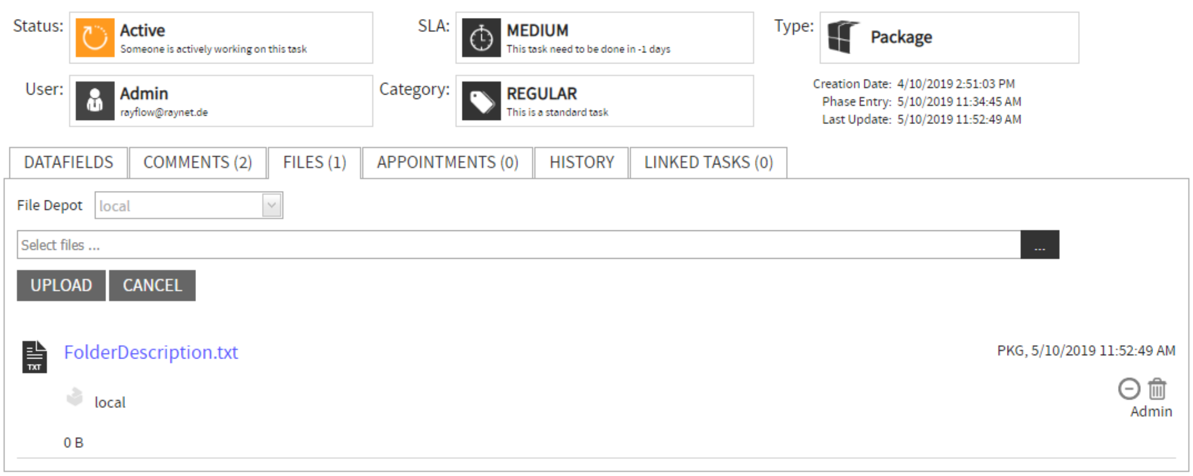


This link address can prove to be quite useful to RayFlow users, as they can copy it and use it to reference a task in team communication view email, appointment and other medium. When the target user receives this link, it can be directly used to load the task in browser.

It should be noted that, using link address to access a task does not skip the user permission verification to the project and respective phase. The user must have project and phase permission (phase in which the task is lying) to use the link address to directly open the task.

Up- and Downloads

If files need to be up- or downloaded, open a task and click the **FILES** tab. The number in brackets next to the tab name shows how many files have already been uploaded to the task.



To upload a file simply click on the input row **Select files...** or on the Browse [**...**] button at the end of the row. An explorer view opens where you can select the file or files you want to upload. Just select the file or files and click on **Open**. The selected file will be shown in the **Select files...** row. If more than one file is selected the text **x files are selected for upload** is shown instead.

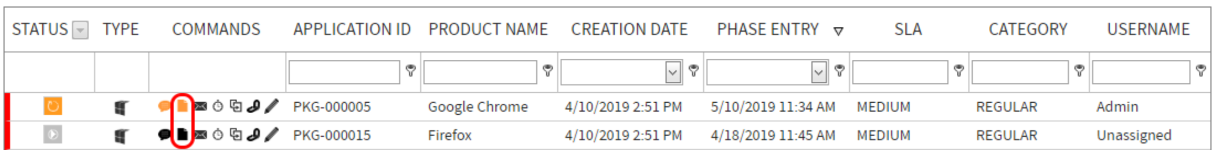
After clicking **UPLOAD**, the file or files will be uploaded and added to the list in chronological order with date, time and uploader name, last uploaded file first.

To download the uploaded file again, simply right-click the name of the file and select **Save target as...**

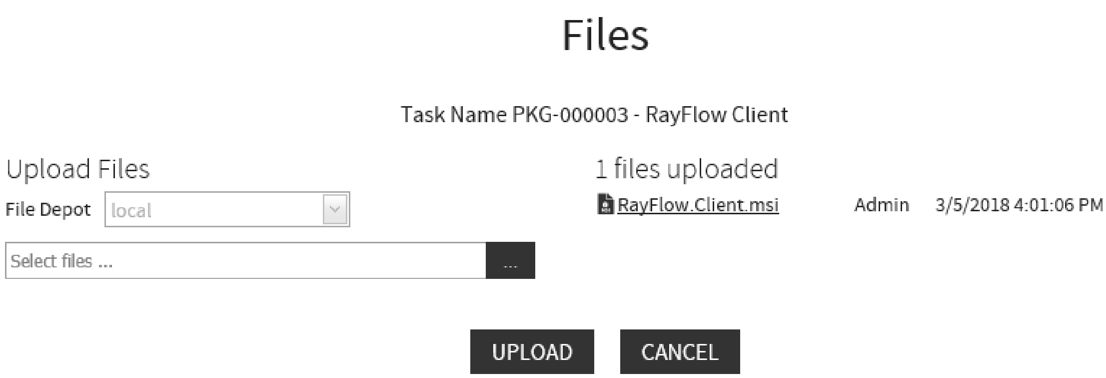
Note:
In order to be able to download a file, the user at least needs downloading rights in the phase where the files has been uploaded and at least view rights in the phase where he is trying to download the file.

Uploading and downloading files through the File icon

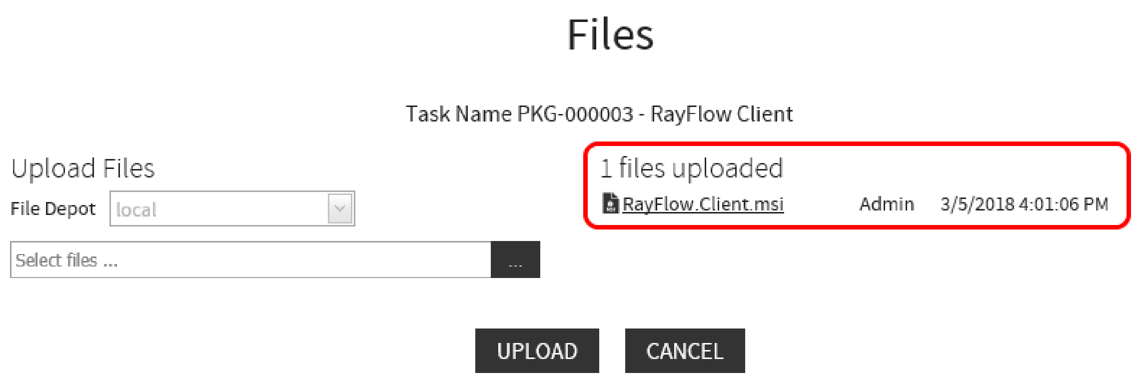
A user can directly upload a file to a task through the **File** icon. To achieve this, click on the **File** icon, which is available next to each of the task in the phase view.



Clicking on the **File** icon will open the **Files** dialog:



Click on the **File selection** icon, this will open the **file** explorer. Navigate to the target file to be uploaded and then click **Open** button after selecting it. After selecting the file, click on the **Upload** button. This will upload the file to the task. Additionally, to download an uploaded file from the task, click on the **File** icon and then click on the file, which is shown on the **Files** dialog.



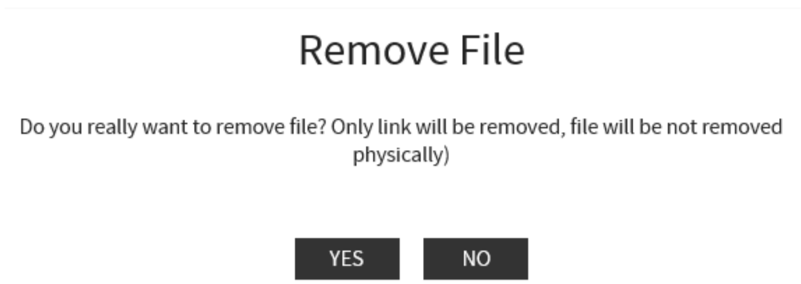
If a file is visible, it can always be downloaded. If a file is visible or not is determined by the phase where it has been uploaded. If the phase is hidden, the file will be hidden in all phases thereafter. If the phase is download, the phase is hidden but the file will be visible. If the phase is visible, the file will be visible. To upload files, edit rights for the current phase are needed.

Hide an Uploaded File

Uploaded files can be found by using the **hide**-button.

Note:
This button is only available to privileged users and only privileged users can restore a file!

After clicking on the **hide**-button a **Remove File** dialog is opened.



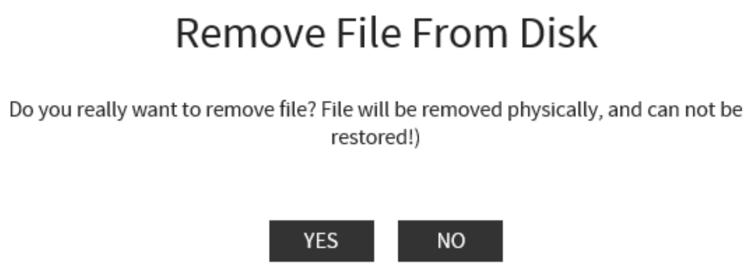
Using this option, only the link to the file will be removed, but the file itself will not be removed from the disk. Clicking on the **YES** button will remove the link, clicking on the **NO** button will abort the action.

Delete an Uploaded File

Uploaded files can be found by using the **delete**-button.

Note:
This button is only available to privileged users!

After clicking on the **hide**-button a **Remove File From Disk** dialog is opened.

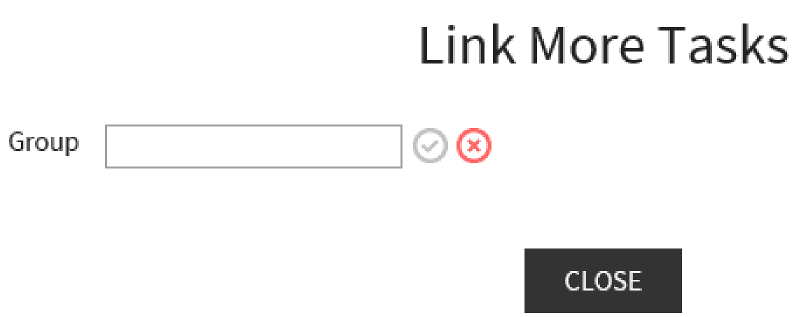


Using this option, the file will be removed from the disk and it will not be possible to restore the file. Clicking on the **YES** button will remove the file, clicking on the **NO** button will abort the action.

Linked Tasks

Create a New Task Group / Topic

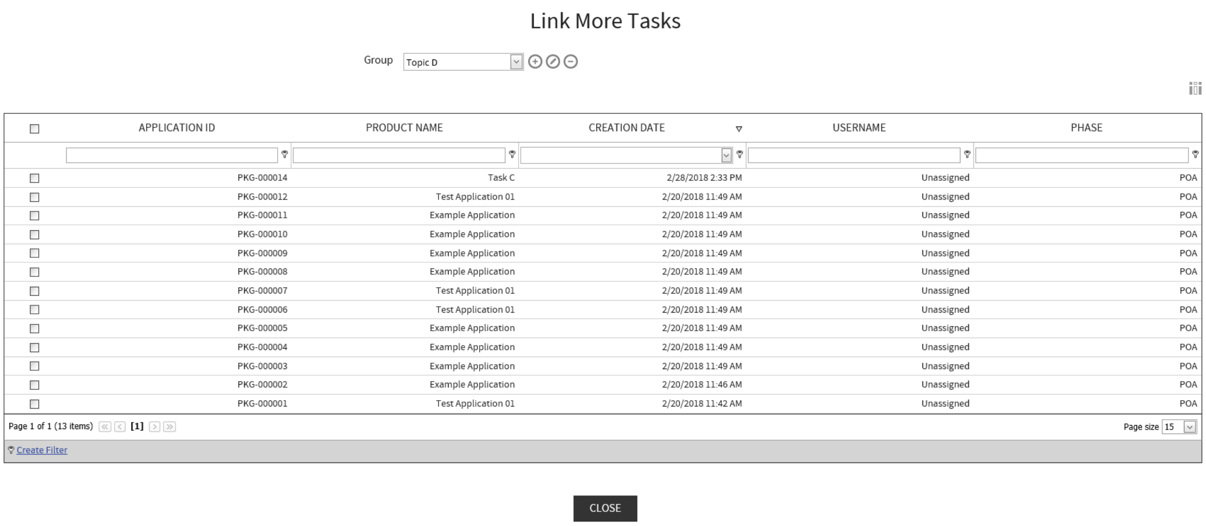
To create a new task group, also called a **Topic**, a task which should be part of the group needs to be selected. When the task is selected, if the task is not already part of a **Topic**, the option to create a new **Topic** is available in the **LINKED TASKS** tab. If there are already tasks which are linked to the selected task can be seen at the counter which is located after the tab name. The number in brackets represents the number of linked tasks. If the number is 0 there are no linked tasks and it is only possible to create a new **Topic** and a new **Topic** is created by clicking on the button.



The name of the new group can now be entered into the field. After a name has been entered the **Accept** button will turn green and can be clicked to proceed.

Be aware:
It is possible to create **Topics** with identical names if a task group with the same name already exists.

In the **Link More Tasks** screen, the tasks which should be part of the new topic can be selected by checking the checkboxes which are located on the left of the table.

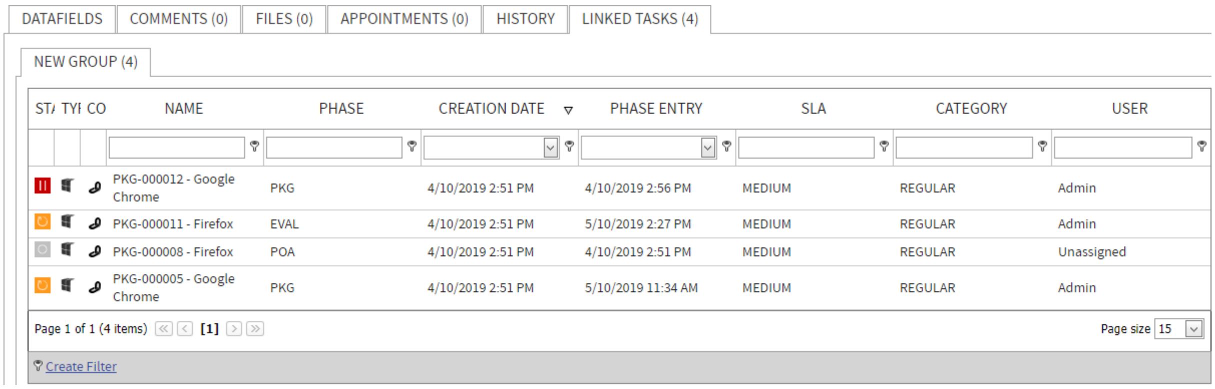


After all tasks have been selected, the **CLOSE** button can be used to return to the task view.

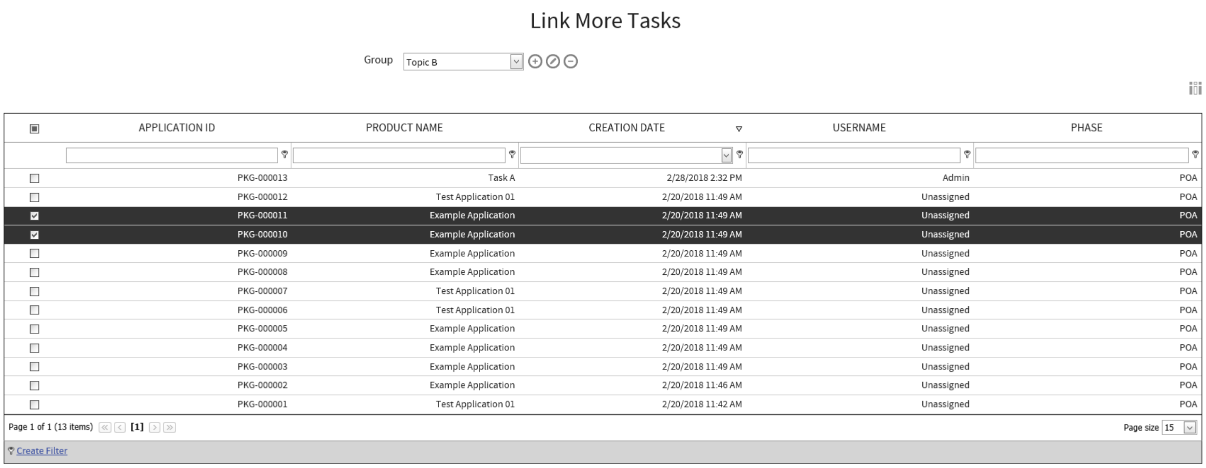
It is also possible to create another new **Topic** when in this view by clicking on the **Add** button (**+**). This button is also available if this view has been opened from a task which already has other tasks linked to it.

Adding / Deleting Tasks to / from an Existing Topic / Task Group

To add a task to an existing **Topic** it is necessary to select a task which is already part of the **Topic**. Then the **LINKED TASKS** tab needs to be selected. A new task can be added to the **Topic** by clicking on the ⊘ button. This button directly opens the **Link More Tasks** view.



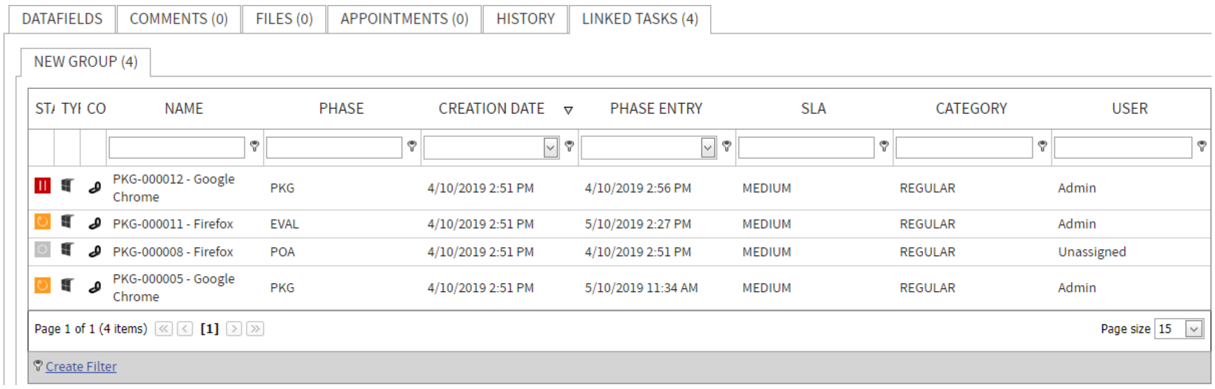
Tasks can be added or removed by clicking on the **Edit** button ⊘ .



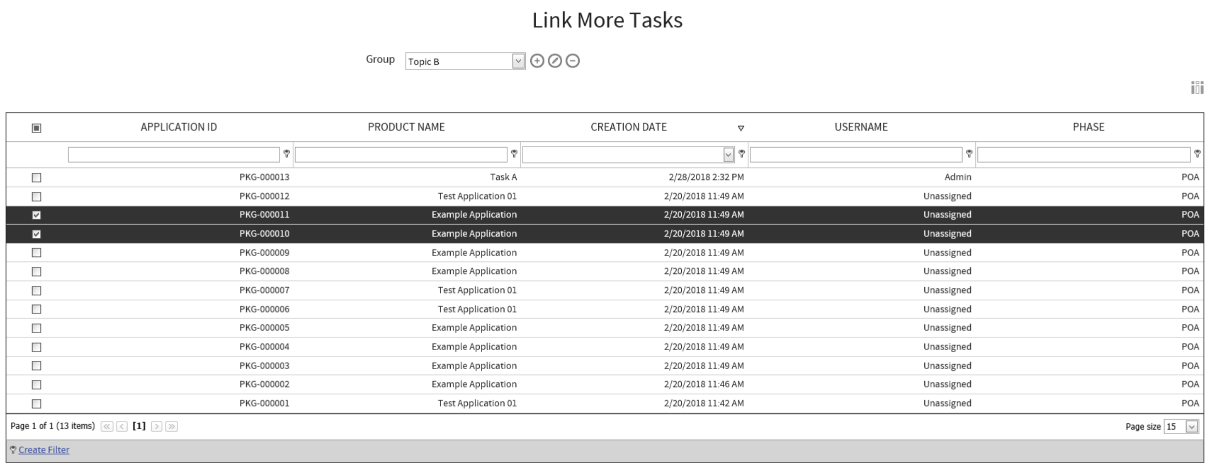
After clicking on the **Edit** button ⊘, task can be added or removed by checking or unchecking of the checkboxes on the left site. All changes are saved automatically. It is possible to return to the task by clicking on the **CLOSE** button.

Deleting an Existing Task Group / Topic

To delete an existing **Topic** it is necessary to select a task which is part of the **Topic**. Then the **LINKED TASKS** tab needs to be selected. A **Topic** can be deleted by clicking on the ⊘ button. This button opens the **Link More Tasks** view.



A Topic can be deleted by selecting the Topic using the dropdown menu and clicking on the **Delete** button (-)

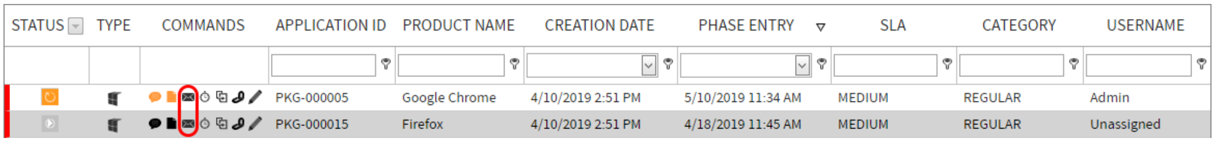


The selected **Topic** will be deleted without needing any further confirmation. If last Topic that is linked to the task is deleted, the following view will be shown.

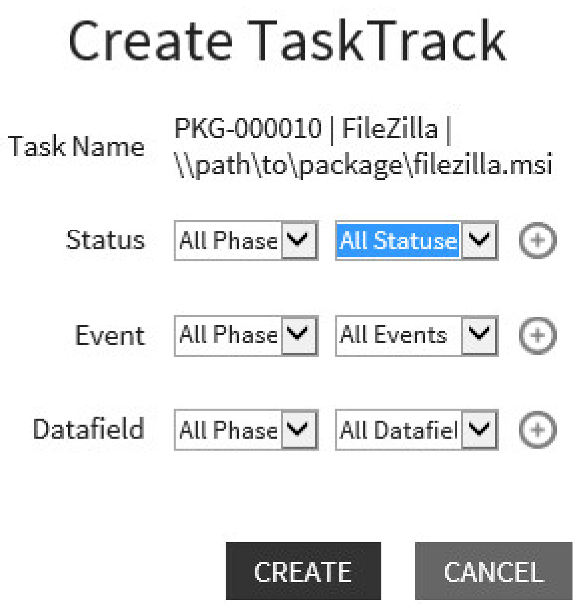
TaskTrack

The **TaskTrack** notification can be activated on a task within a phase to receive updates pertaining to the changes made to that task. When compared to the Notification feature in RayFlow, **TaskTrack** allows a user to receive notification pertaining to a particular task.

In order to create a **TaskTrack** the user chooses any phase (except **PO**) and clicks on the little mail icon at the end of a task row.

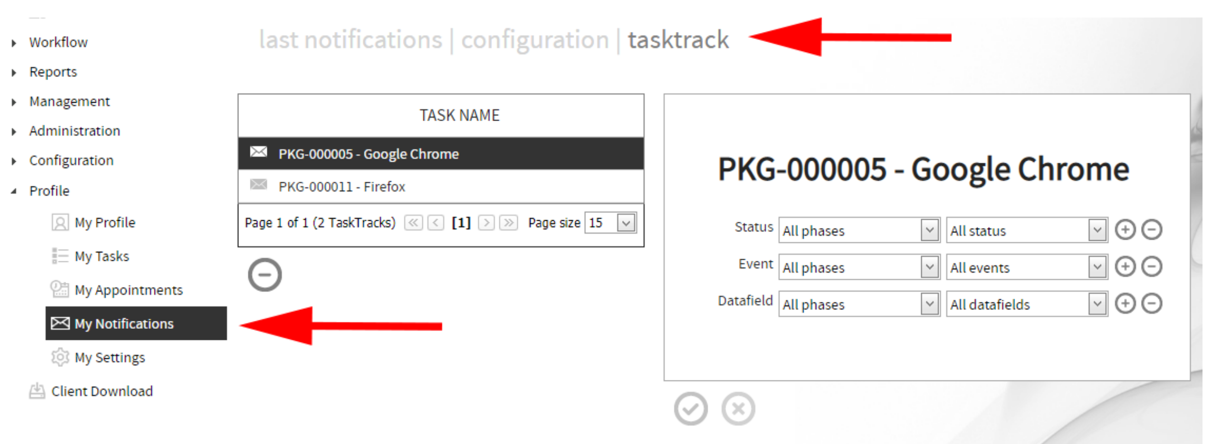


The **Create TaskTrack** dialog will open. The user can see the task name, for which this **TaskTrack** will be activated. The user can choose which phases and statuses/events/datafields should send out a notification on an update.



After a **TaskTrack** is created, the mail symbol at the end of a task row will change its color from gray to orange.

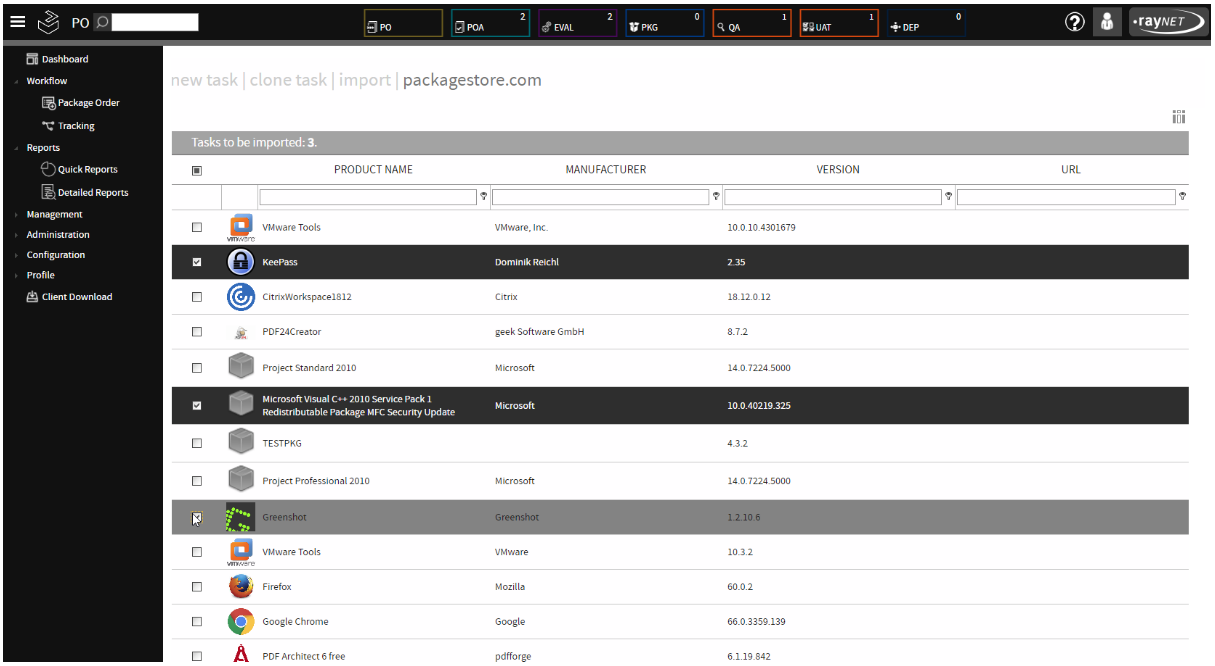
The user can view and edit his created **TaskTrack** by going to **Profile** -> **My Notifications** and selecting **Tasktrack**.



Packagestore.com

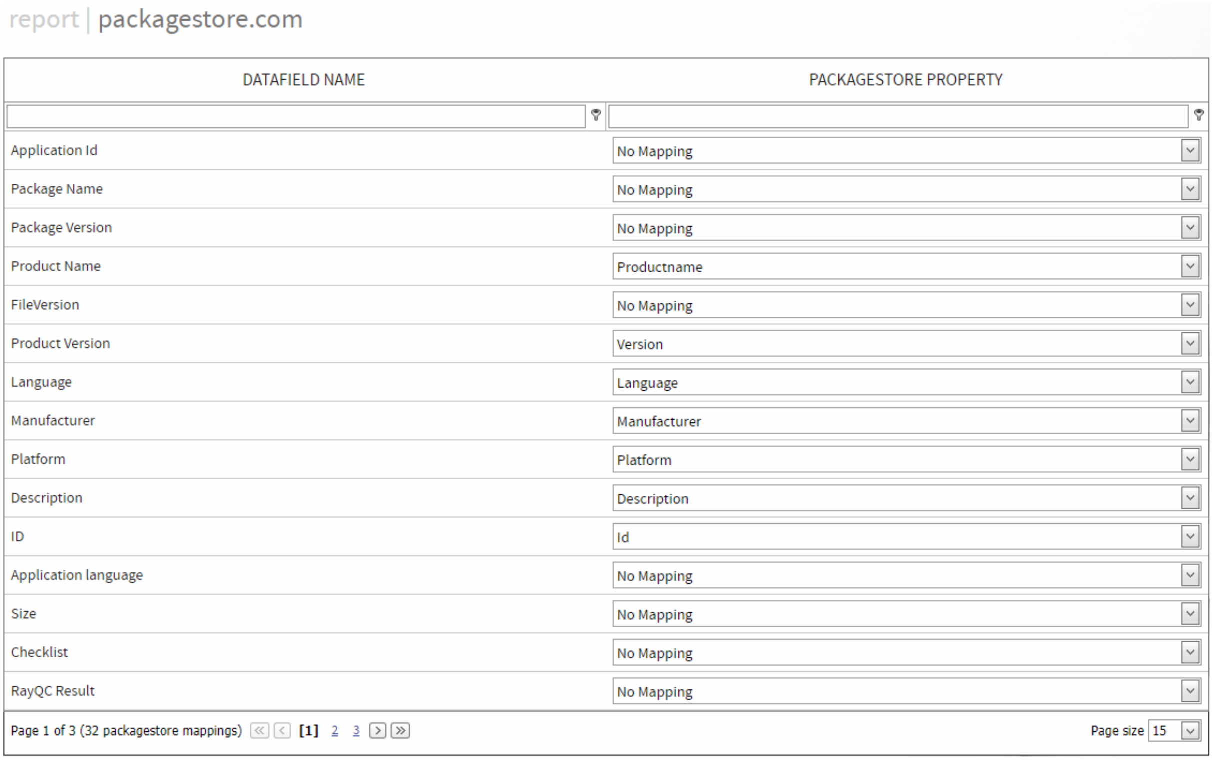
Import a Task Using the Packagestore

To import a task using the PackageStore, select the **packagestore.com** tab in **Package Order**. Select the package from the list that is shown by clicking on the checkbox on the left of the package. After all packages for import are selected, the import can be started by clicking on the **IMPORT SELECTION** button.



Map Datafields to Packagestore Properties

Datafields can be mapped directly to Packagestore properties. To do this, first go to the tab in the **Data Mappings** section of RayFlow.



report | packagestore.com

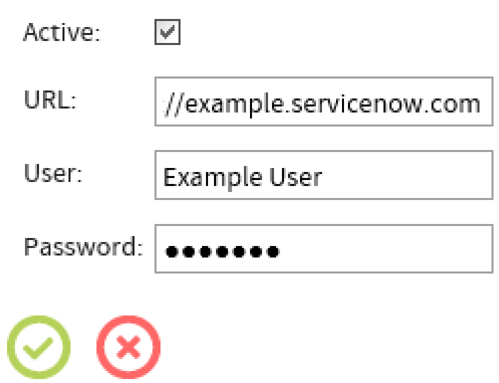
DATAFIELD NAME	PACKAGESTORE PROPERTY
Application Id	No Mapping
Package Name	No Mapping
Package Version	No Mapping
Product Name	Productname
FileVersion	No Mapping
Product Version	Version
Language	Language
Manufacturer	Manufacturer
Platform	Platform
Description	Description
ID	Id
Application language	No Mapping
Size	No Mapping
Checklist	No Mapping
RayQC Result	No Mapping

Page 1 of 3 (32 packagestore mappings) [1] 2 3 Page size 15

Datafields can be mapped to a Packagestore property by selecting the corresponding property by using the dropdown menu next to the datafield name.

ServiceNow

To import and update tasks using ServiceNow, first the connection to the ServiceNow instance needs to be configured. To configure the ServiceNow instance open **Configuration > ServiceNow**.



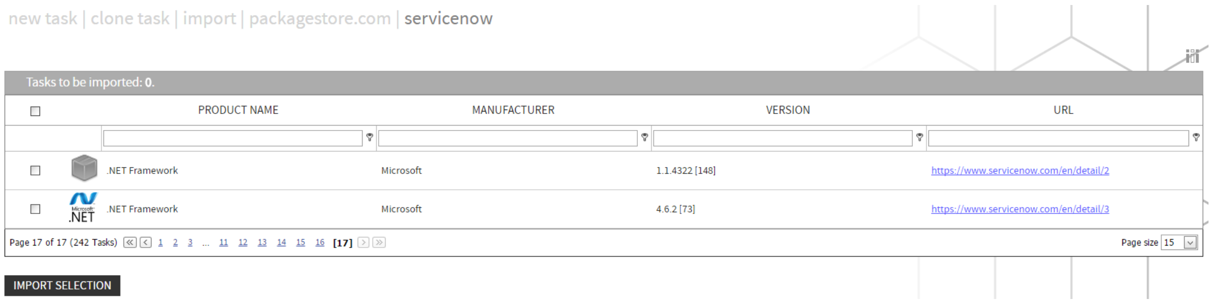
The following fields are available in this section:

- **Address**: The URL of the ServiceNow instance.
- **User**: The name of the user that is used for the login.
- **Password**: The password for the user.

If no information has been entered, the connection to ServiceNow will be inactive.

Import a Task Using ServiceNow

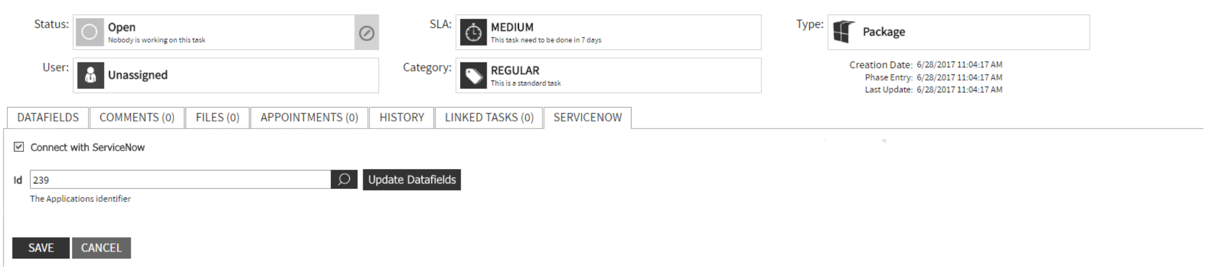
To import a task using ServiceNow, select the **servicenow** tab in **Package Order**. Select the package from the list that is shown by clicking on the checkbox on the left of the package. After all packages for import are selected, the import can be started by clicking on the **IMPORT SELECTION** button.



Be aware:
The ServiceNow Tab is only shown if ServiceNow has been configured for RayFlow.

Update Datafields Using ServiceNow

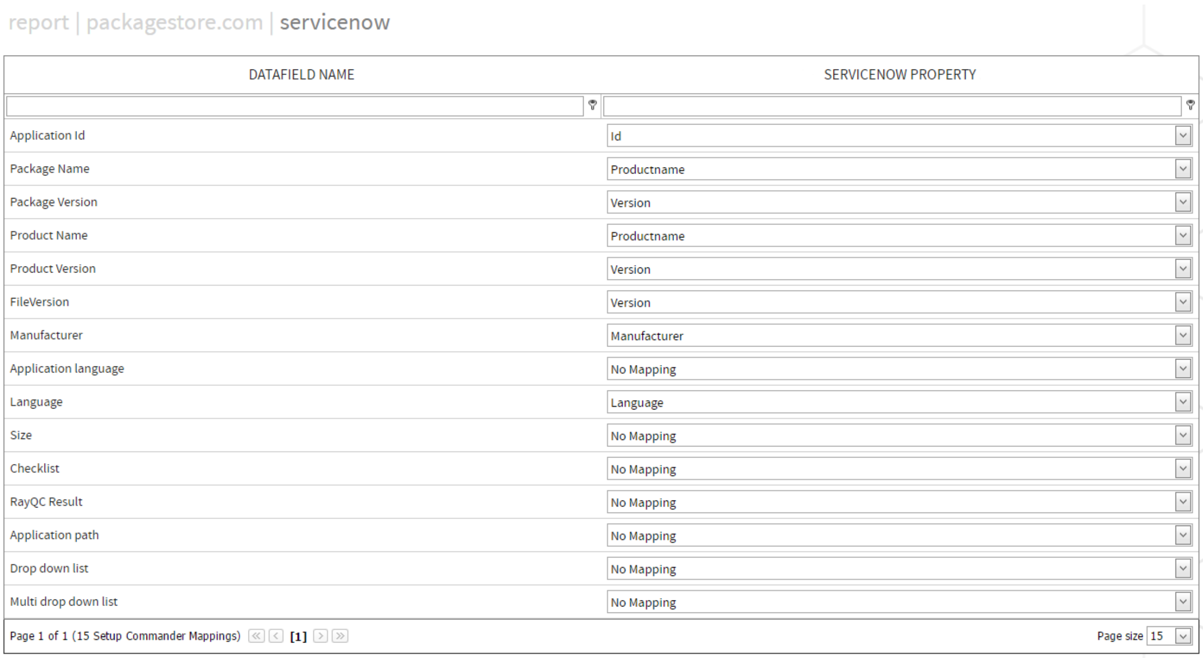
Datafields in tasks can be updated using ServiceNow. To do this, select the **SERVICENOW** tab in the **Task** view. The Connect with ServiceNow checkbox needs to be checked and the identifier of the application should have been set automatically. If not, enter the identifier manually. To update the datafields, click on the **Update Datafield** button. Changes can be saved by clicking on the SAVE button or discard the changes by clicking on the CANCEL button.



Be aware:
The ServiceNow Tab is only shown if ServiceNow has been configured for RayFlow.

Map Datafields to ServiceNow Properties

Datafields can be mapped directly to ServiceNow Properties. To do this, first go to the **servicenow** tab in the **Data Mappings** section of RayFlow.



report | packagestore.com | servicenow

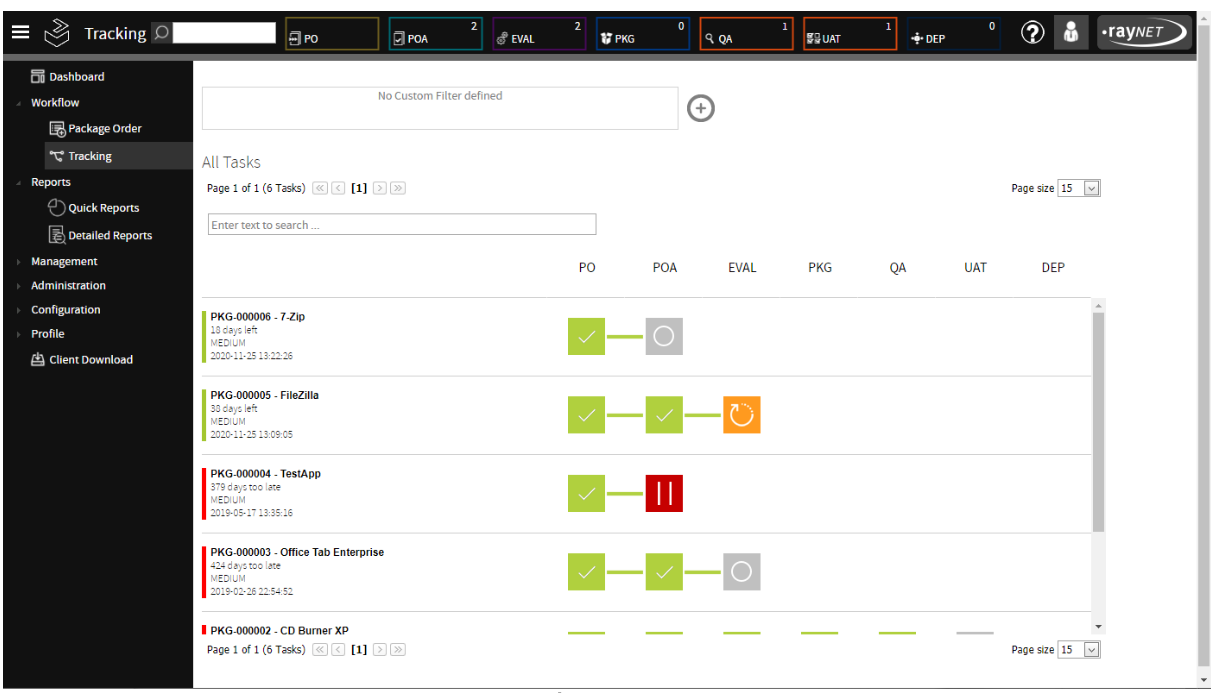
DATAFIELD NAME	SERVICENOW PROPERTY
Application Id	Id
Package Name	Productname
Package Version	Version
Product Name	Productname
Product Version	Version
FileVersion	Version
Manufacturer	Manufacturer
Application language	No Mapping
Language	Language
Size	No Mapping
Checklist	No Mapping
RayQC Result	No Mapping
Application path	No Mapping
Drop down list	No Mapping
Multi drop down list	No Mapping

Page 1 of 1 (15 Setup Commander Mappings) [1] Page size 15

Datafields can be mapped to a ServiceNow Property by selecting the corresponding property by using the dropdown menu next to the datafield name.

Tracking

The **Tracking** section gives an overview on packages on time, packages with expected delays and already delayed packages.



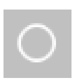
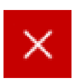
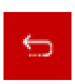
Tracking Overview

The task columns and their tracking options are shown to the user corresponding to their assigned user rights. If a user has no view rights on a phase, he will not see this particular phase in the **Tracking** view.

By default, tracking task name is created using the datafields which have the property visible. For more information refer on the *Datafields* chapter. The tracking task name can also be customized using the task name label. For more information on this refer to the *Basic* chapter.

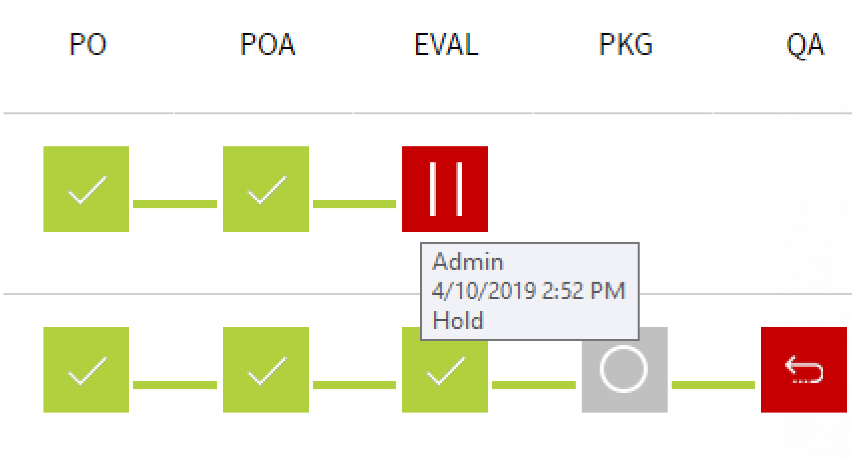
For faster searches the search field can be used. Any package information can be retrieved.

Also the single icons symbolize different status of the package. The meaning of each icon is listed in the following table:

Tracking Icons Overview		
Icons	**Name**	**Short Description**
	**Active**	Package is active (Someone is working on it)
	**Finished**	This phase is finished for this package
	**Open**	The package is not yet in process (Status Open / New Tasks)
	**Cancelled**	The package was cancelled
	**Hold**	The process of the package was set on hold
	**Reject**	The package was sent back to a previous phase

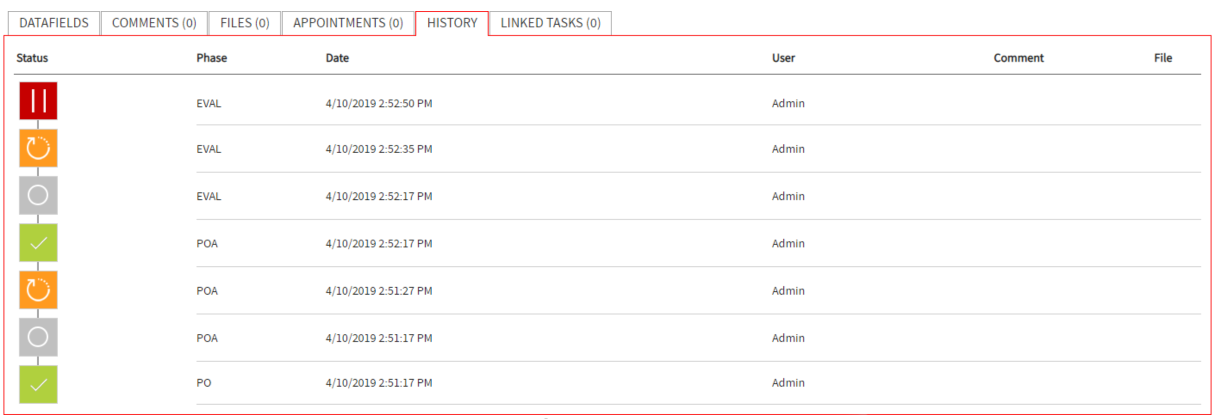
In the tracking overview tooltips, a small information window within the GUI, give the user further condensed information on an object. To see that information, please move the mouse over the icon. For each task the current owner, the date of the last event, and the last event is shown.

If the user clicks on an active (orange icon), open (grey icon), rejected (red icon with left pointing arrow), or hold (red icon with H) task, the relevant view is accessed.



Tooltip

Furthermore there is an option to view the history of a package. In order to do so, choose a package from any phase, select the "HISTORY" tab, and the complete process history of the package is shown, including the name of the users who worked on it, comments added, files uploaded, and the related tasks.



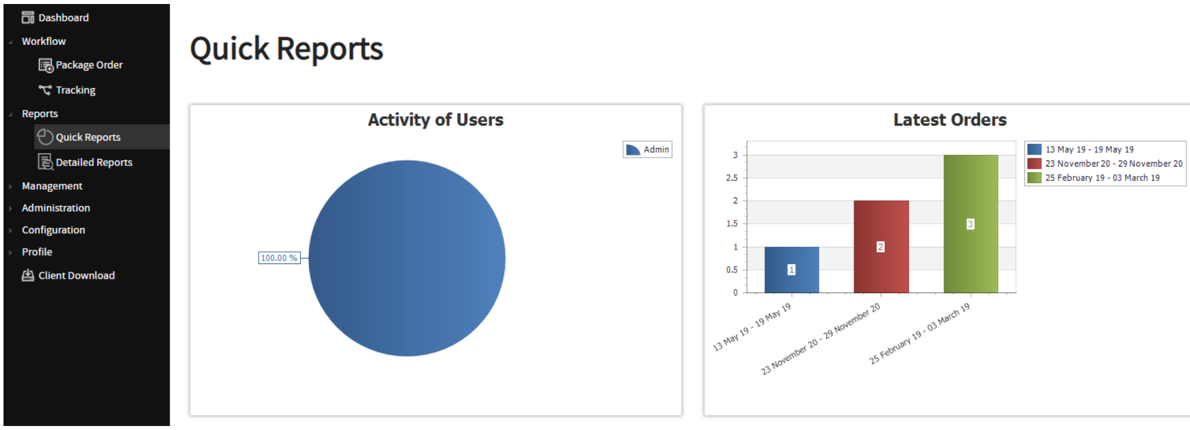
DATAFIELDS | COMMENTS (0) | FILES (0) | APPOINTMENTS (0) | HISTORY | LINKED TASKS (0)

Status	Phase	Date	User	Comment	File
	EVAL	4/10/2019 2:52:50 PM	Admin		
	EVAL	4/10/2019 2:52:35 PM	Admin		
	EVAL	4/10/2019 2:52:17 PM	Admin		
	POA	4/10/2019 2:52:17 PM	Admin		
	POA	4/10/2019 2:51:27 PM	Admin		
	POA	4/10/2019 2:51:17 PM	Admin		
	PO	4/10/2019 2:51:17 PM	Admin		

Tracking History View

Reports

The reports feature in RayFlow allows the user to get summarized/detailed information pertaining to the tasks within a specific project. This feature, which is available through the reports web page can be accessed either via the **Reports** item in the vertical navigation bar or by selecting the reports tile in the content section.



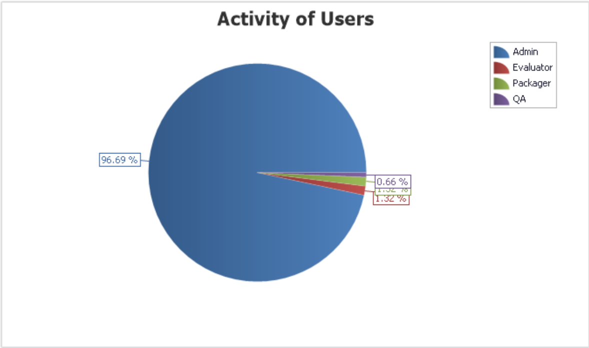
How are the detailed reports generated?

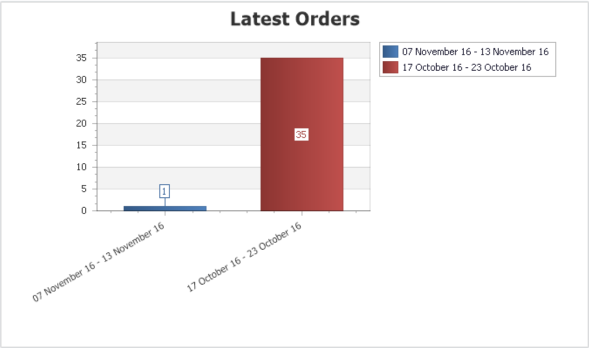
RayFlow stores the data related to the projects in its central database. Users can either use Crystal Reports or SQL Server Reporting Services tools to generate reports in the respective formats (`.rpt`/`.rdl`) and add them to the RayFlow Reports feature. Based on the report definition these reports can contain various types of information. By default **Reject**, **Status**, **Hold** and **Invoice** reports are available to the users as standard reports.

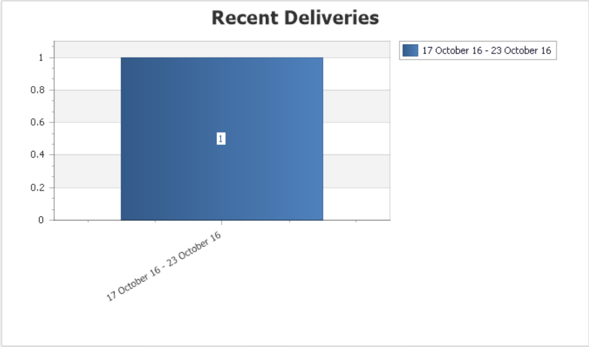
Quick Reports

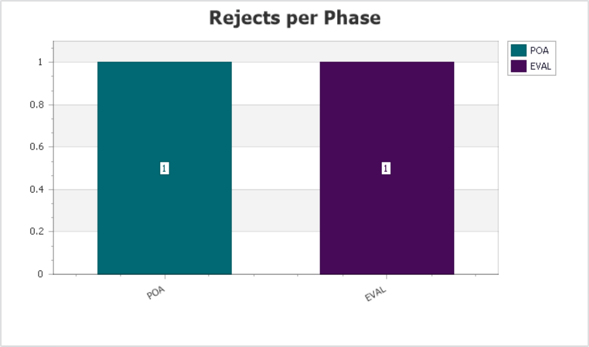
There are six different quick reports available. Since these **Quick Reports** are plugins of the `QuickReportSource` type they can be configured like all other plugins. For more on plugins and their configuration refer to the *Plugins* chapter and the *Plugin Configuration* chapter.

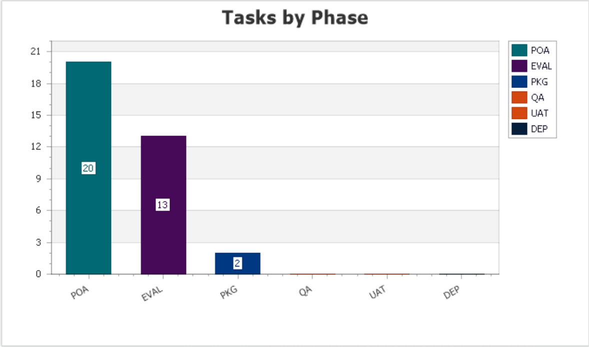
Quick Reports

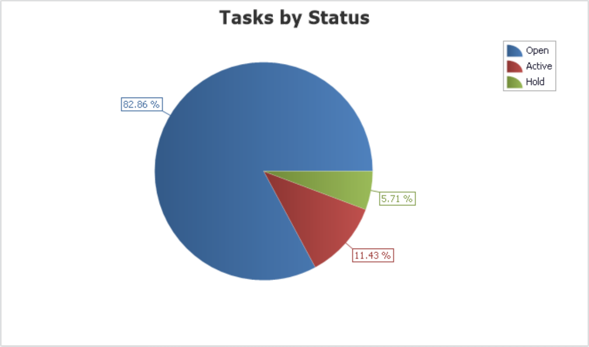




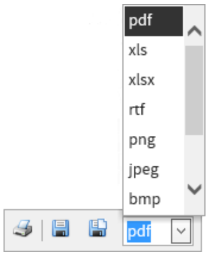




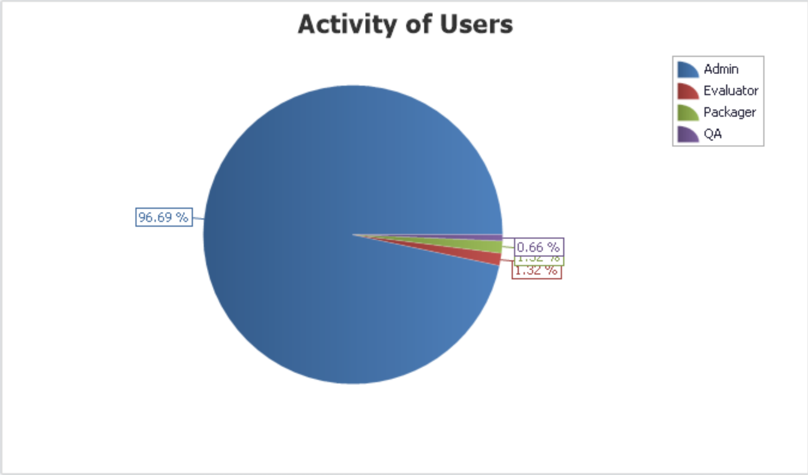




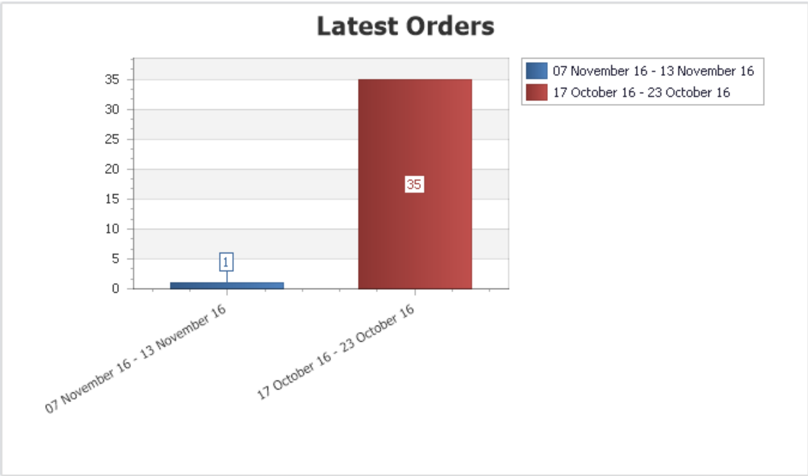
When the mouse tip is hovering over a quick report a menu will become available for the specific report.



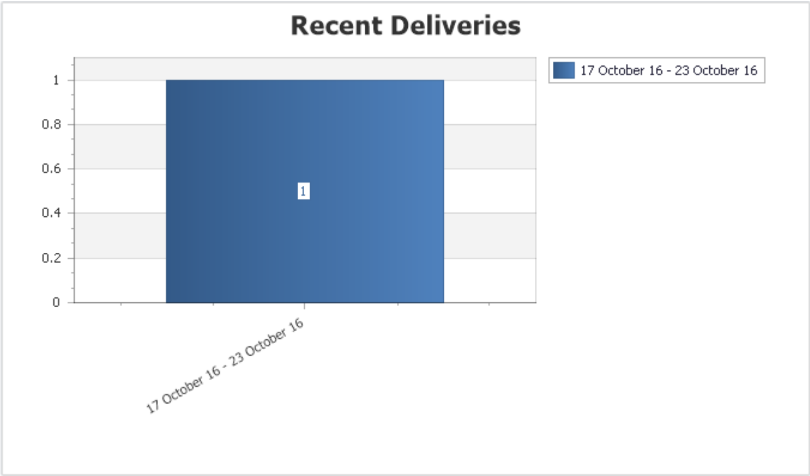
This menu can be used to export the data of the specific report. The chart can either be printed, saved to disk, or saved to disk and be shown in a separate window. The following formats are available and can be selected using a dropdown menu: `.pdf`, `.xls`, `.xlsx`, `.rtf`, `.png`, `.jpeg`, `.bmp`, `.gif`, `.tiff`, and `.mht`.



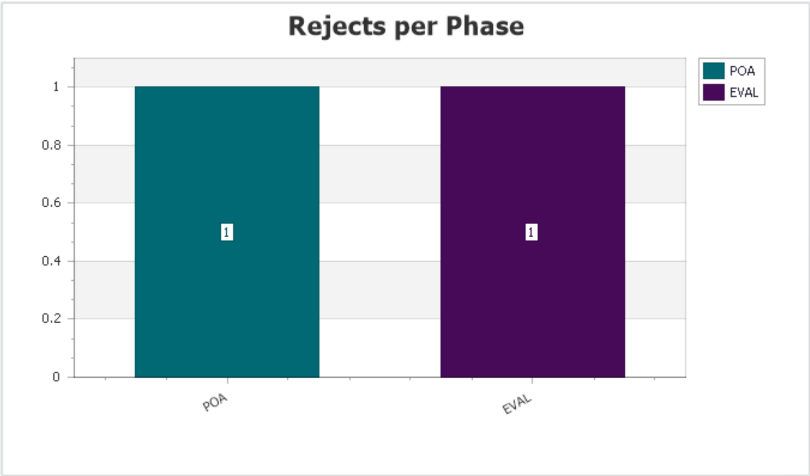
The **Activity of Users** quick report shows the activity of a given number of user in percentage. By default, this report is configured to show up to ten users.



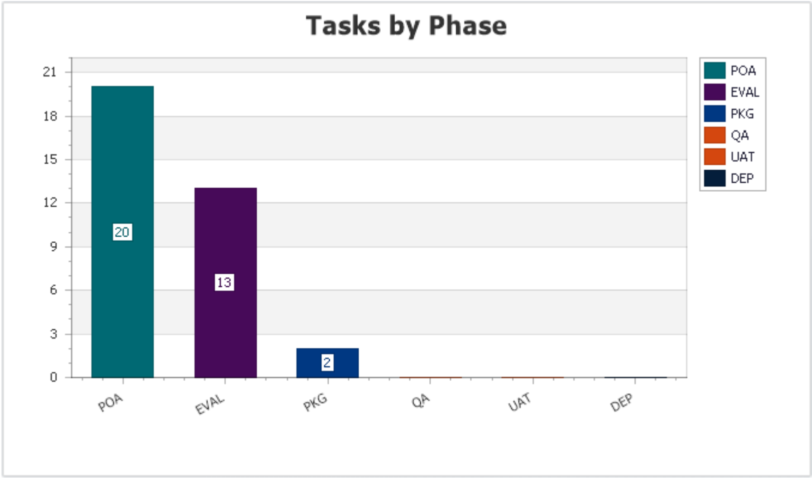
The **Latest Orders** quick report shows the number of orders per week that have been received in RayFlow in a given number of weeks. By default, this report is configured to show the number of orders received for the last 10 weeks.



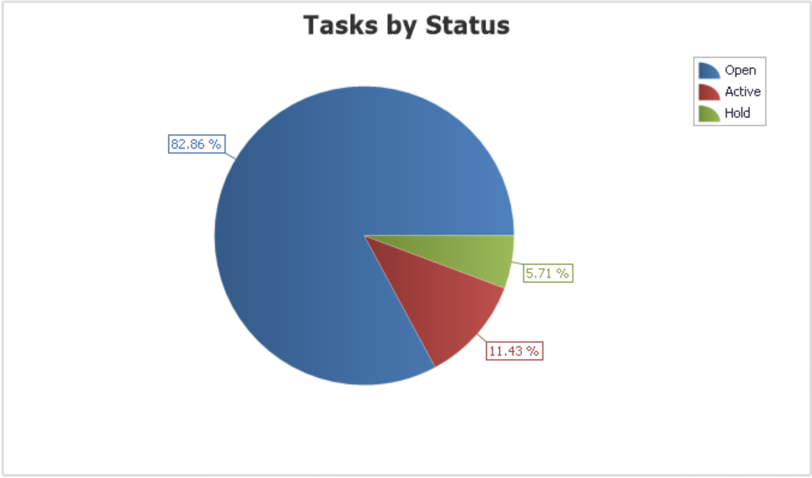
The **Latest Orders** quick report shows the number of orders per week that have processed the final phase in RayFlow in a given number of weeks. By default, this report is configured to show the number of orders processed the final phase during the last 10 weeks.



The **Rejects per Phase** quick report shows the number of rejects that occurred. By default, it is configured to show the number of rejected task regardless of the current status of the task, but it is also possible to only count rejected tasks that now have a specific status..



The **Tasks by Phase** quick report shows the number of tasks that are currently in the different phases.

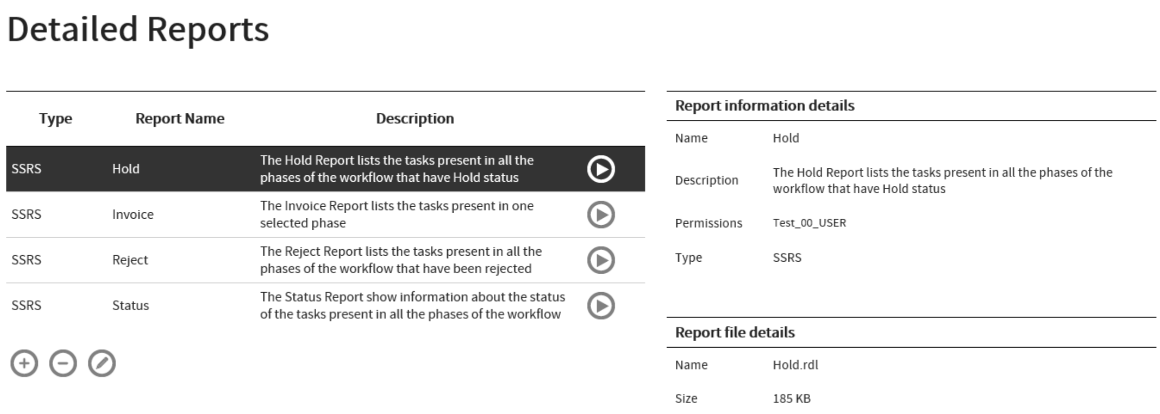


The **Tasks by Status** quick report shows the percentage of tasks that are currently in a specific status. By default, this report is configured to show ten different status.

Detailed Reports

How are the detailed reports generated?

RayFlow stores the data related to the projects in its central database. Users can either use Crystal Reports or SQL Server Reporting Services tools to generate reports in the respective formats (.rpt/.rdl) and add them to the RayFlow Reports feature. Based on the report definition these reports can contain various types of information. By default Reject, Status, Hold and Invoice reports are available to the users as standard reports.



By default for SSRS reports are available which can be edited to suit the special needs of a user.

Adding a new Report

RayFlow hosts all the reports (.rdl/.rpt) in the **Reports** folder, which is part of RayFlow binaries on the RayFlow server. RayFlow web application allows its user to either directly add an existing report in the aforementioned folder to the reports page or first upload a report to the server and then subsequently add it to the page.

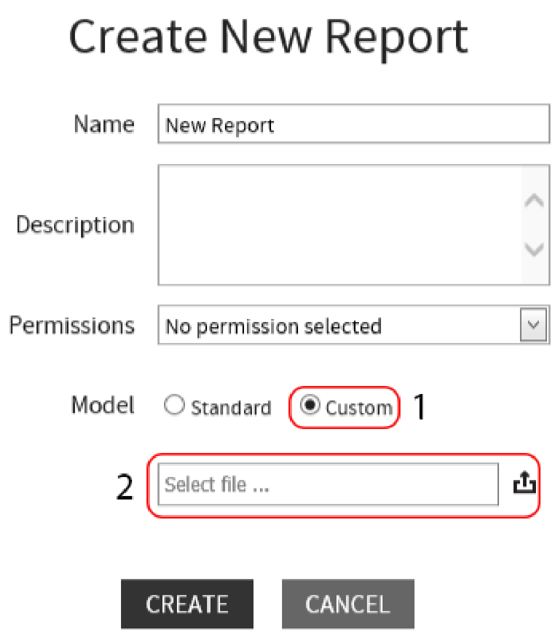
Upload a Report

To upload a report to the RayFlow server:

1. Load the **RayFlow Reports** page by clicking on the reports item either in the vertical navigation or main content section
2. On **RayFlow Reports** page, select the **Detailed Reports** item from the functional navigation menu on the left

   The detailed reports page is loaded with functional options and a list of existing reports

3. Click on the  Icon to create a new report
4. Select **Custom** for model and then click on the **Select file ...** field or the little upload button next to it.



5. After selecting the report file click on the **Open** to add the report.
6. Click on **CREATE**

To view/edit/delete a report

On the RayFlow **Detailed Reports** page a list of all the reports added by the user is shown. Visibility of a report is controlled by the permission group set for it. To view a report, simply click upon the **Play** button, which is available next to a report.

Properties of a report including its permission group can be changed by clicking on the  button. After making the changes, a user can either finalize the change by selecting "Save" button or reject them by selecting **Cancel** button.

Delete a report,by clicking on the  button.

Appointments

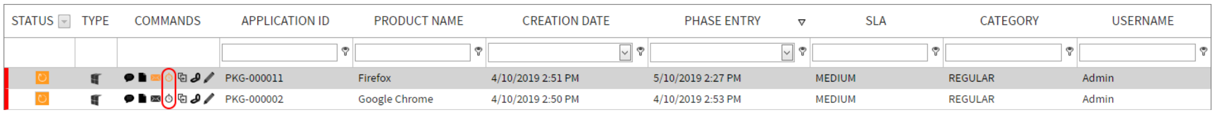
The appointments feature in RayFlow allows a user to schedule activities with respect to a task existing within a particular phase. This feature can either be accessed via the vertical navigation bar or by clicking upon the appointments tile in the main content section of the home page.

Setting up an appointment

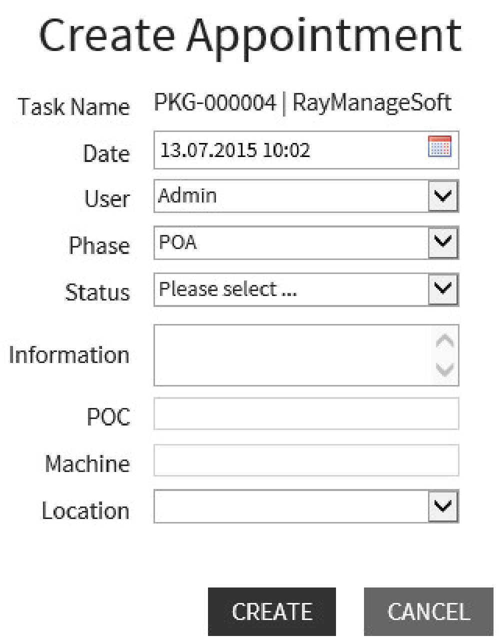
There are two ways to setup an appointment in relation to a task

Setting up an appointment directly from a task

An appointment related to a task can be created by clicking on the watch icon (shown in the image below). This icon is available for each of the task in all phases.



After pressing the icon, a view to create a new appointment is displayed.



Create an Appointment Interface

In this view, you select the date and time for the appointment as well as for which user, phase, or status this appointment applies to. A short note has to be filled in the **Information** field, which can subsequently be found in the vertical navigation menu. Now the date/time of the appointment needs to be defined.

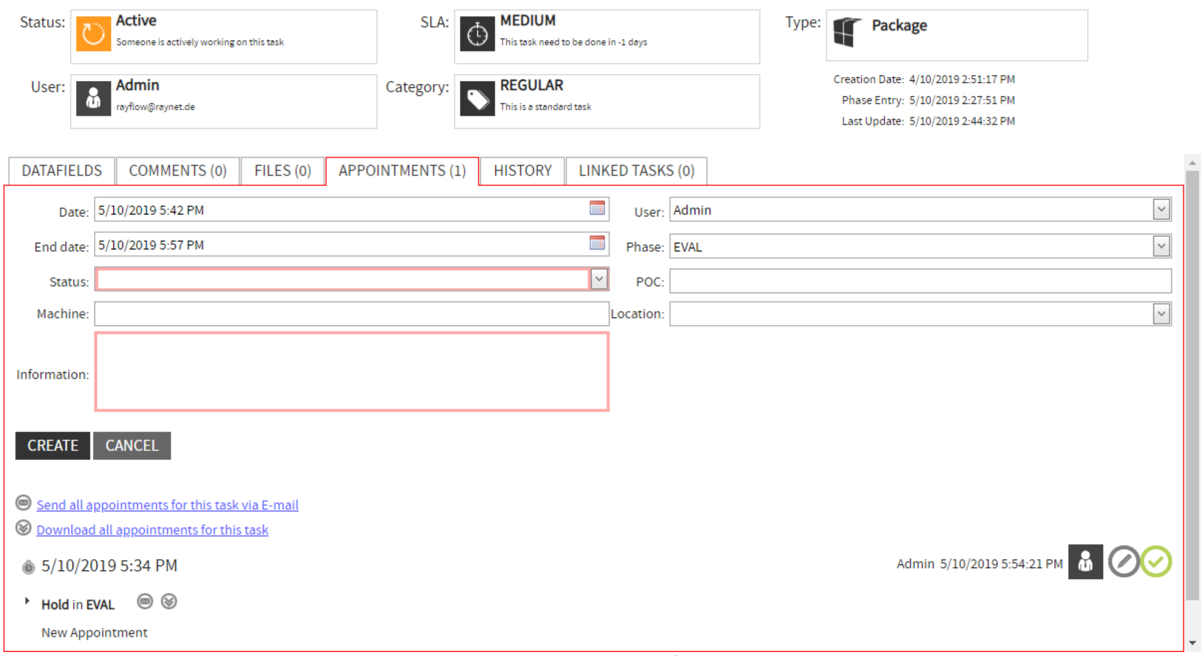
In the datafield **POC** (person of contact) the name of the person with whom the appointment scheduled (for example the „Application Owner“) should be filled in.

Once all data is filled in, the button **CREATE** needs to be clicked to create a new appointment.

As soon as an appointment is scheduled, the **Appointment** icon in the task view is changed to to show that there is a new appointment, if there has been no appointment before. The symbol will be orange, if there are already appointments for this task.

The second way to set up an appointment is to select a task and go to the "Appointments" tab.

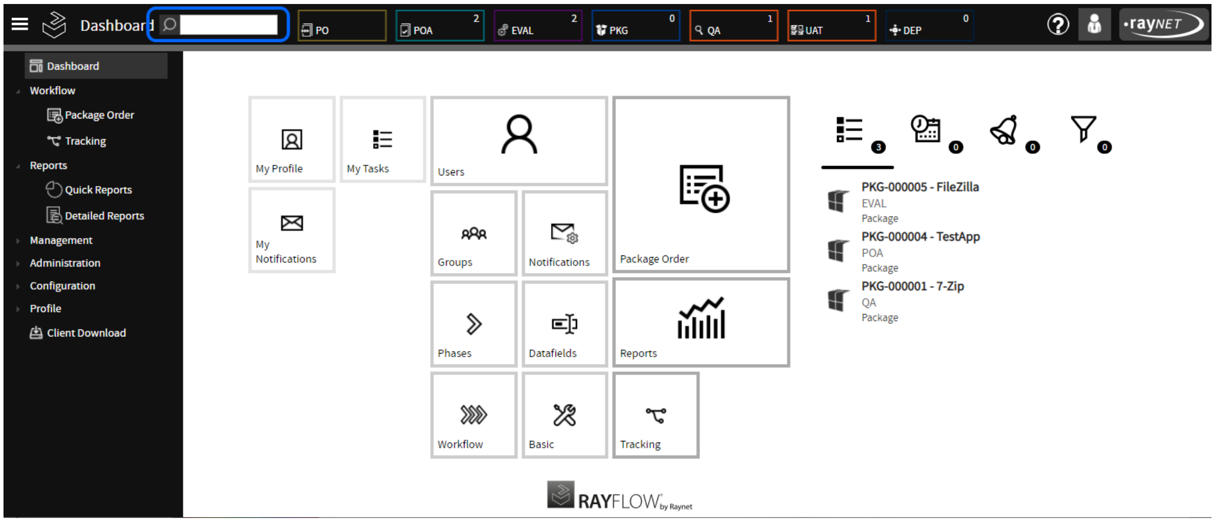
The steps are the same as before.



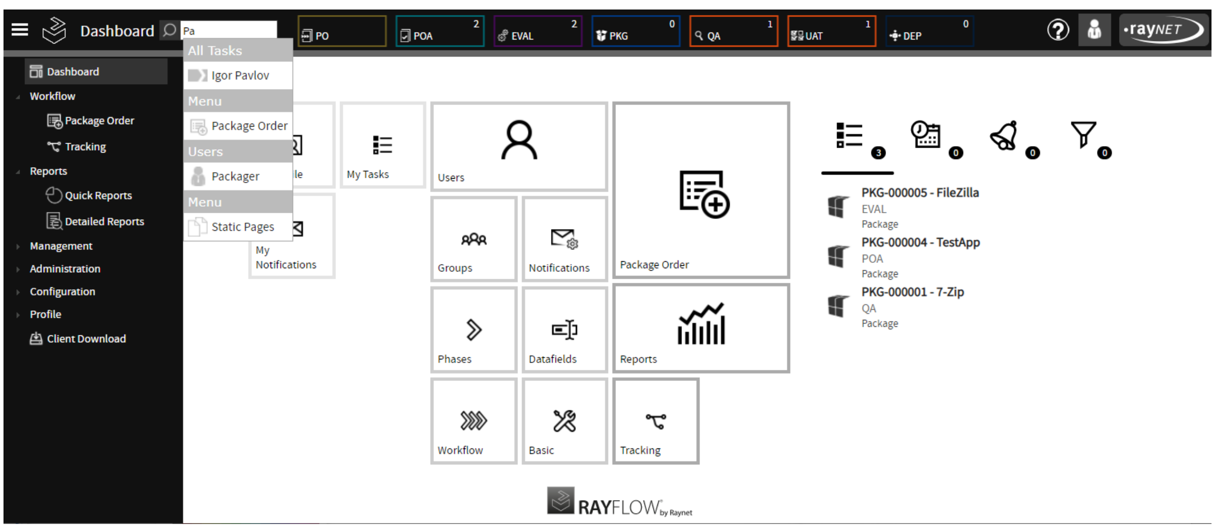
Appointments Tab

Global Search

The **Global Search** field is located next to the information where the user currently is.



To use the **Global Search** enter the search into the search field. After entering the first letter of the search a dropdown list will be opened showing possible results sorted by category. Select the entry that fits best by clicking it. It will now be opened in the current RayFlow instance.



The **Global Search** can also be used to find tasks which contain a multi-dropdown datafields by searching for the datafield values. It is possible to search for a combination of options.

For example, when a task contains a multi-dropdown datafield containing the values A, B, and C and A and C are selected, it is possible to enter `A | C` into the Global Search to find the task.

The syntax for searching for datafield values is as follows::

Option1 + Whitespace + Pipe + Whitespace + Option2 + ...

Example: Option1 | Option2

Typical Administration Workflows

Deployment of the RayFlow server is only the first step towards using this application. Before this application can go productive a typical administrator has the job to gather requirements from the stake holders and configure this application accordingly. The task of a RayFlow system administrator can vary from one company to another. However typical administrator tasks can be summarized as:

1. Setting up a new project
2. Phase and workflow configuration
3. Datafield creation and its assignment to different phases
4. Creating permission groups
5. Adding users and assigning them to the permission group
6. Tools integration and other feature configuration
7. Maintenance

Based on the nature of the task, RayFlow differentiates them into following categories:

- Administration
  - Adding Users and group assignment
  - Creating permission groups
  - Notification Profiles
  - Creating and Managing Projects
  - Login History
- Configuration
  - Phase Configuration
  - Data fields creation
  - Definition of status and workflow configuration
  - Basic Configuration
  - Clone Mappings
  - Data Mappings
  - Appointment
  - Static Pages
  - Categories
  - Email Templates for notification
- Management
  - SLA Configuration
  - Batch Processing

Administration

As described earlier, this part of the document describes the administrative features available with RayFlow web interface. Each of these features has been described in a chronological order complementing their arrangement in the RayFlow vertical navigation bar. Key features which are part of the RayFlow Administration include:

- **Users**: The **Users** page allows administrators to create new users and manage existing ones
- **Groups**: Permission group management is accomplished through this page
- **Notifications**: Notification profiles are defined using this page
- **Projects**: Project creation and management is part of the Projects feature of RayFlow
- **Plugins**: Project settings for plugins are defined using this page

Users

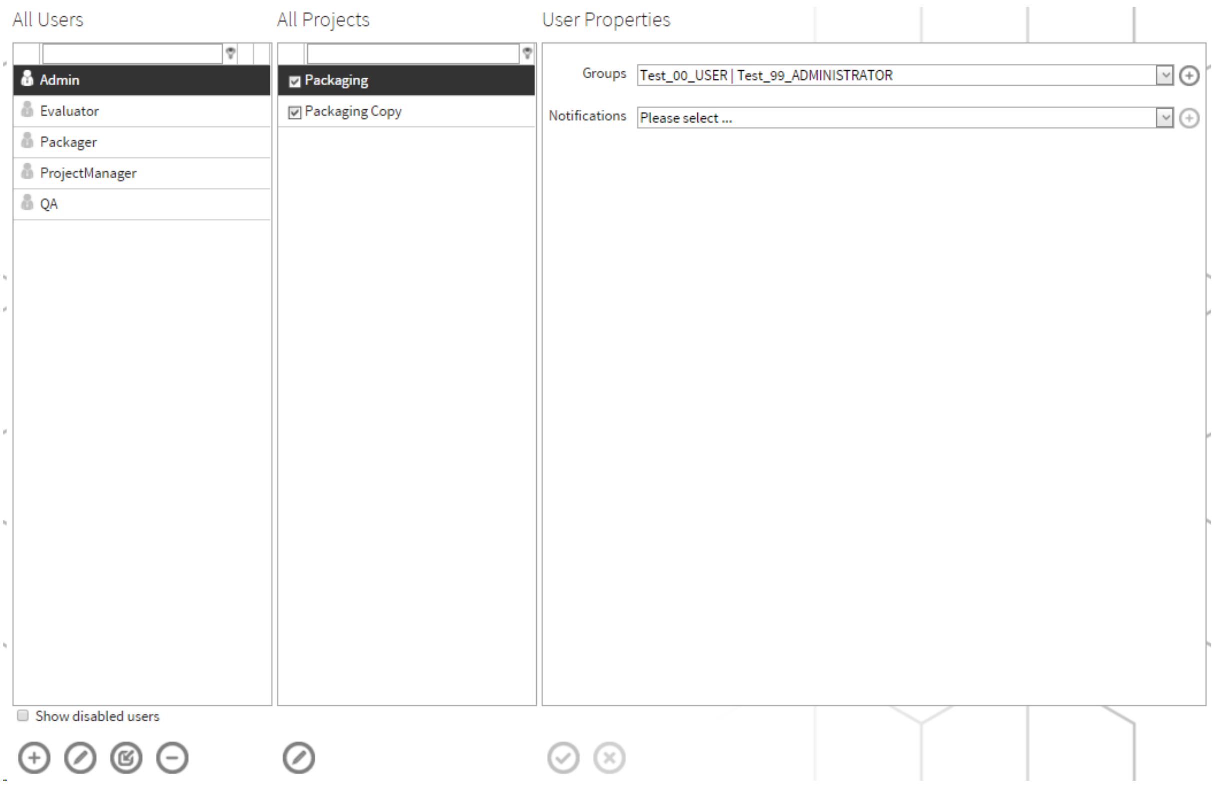
User management in RayFlow is done via the **Users** section of administration feature. This section provides its user with the necessary tools to accomplish following tasks:

- Adding new users
- Assigning a user to project
- Editing user properties
- Disabling an active user
- User Properties definition

"Users" section interface

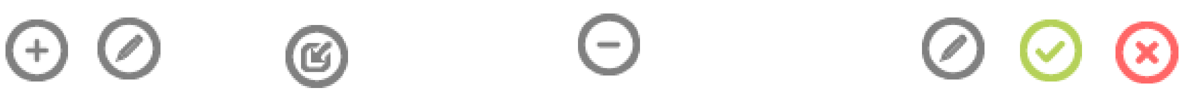
The Users section interface is divided into three major areas:

- **All Users:** All the users belonging to projects (to which the current logged in user (administrator)is a member) are listed under this area
- **All Projects**: All the Projects to which the logged in user is a member are listed under this area
- **User Properties**: Permission groups and notification e-mail profile can be assigned to a selected user, under this area



Tools

Tools for user management are present at the bottom of the users section.

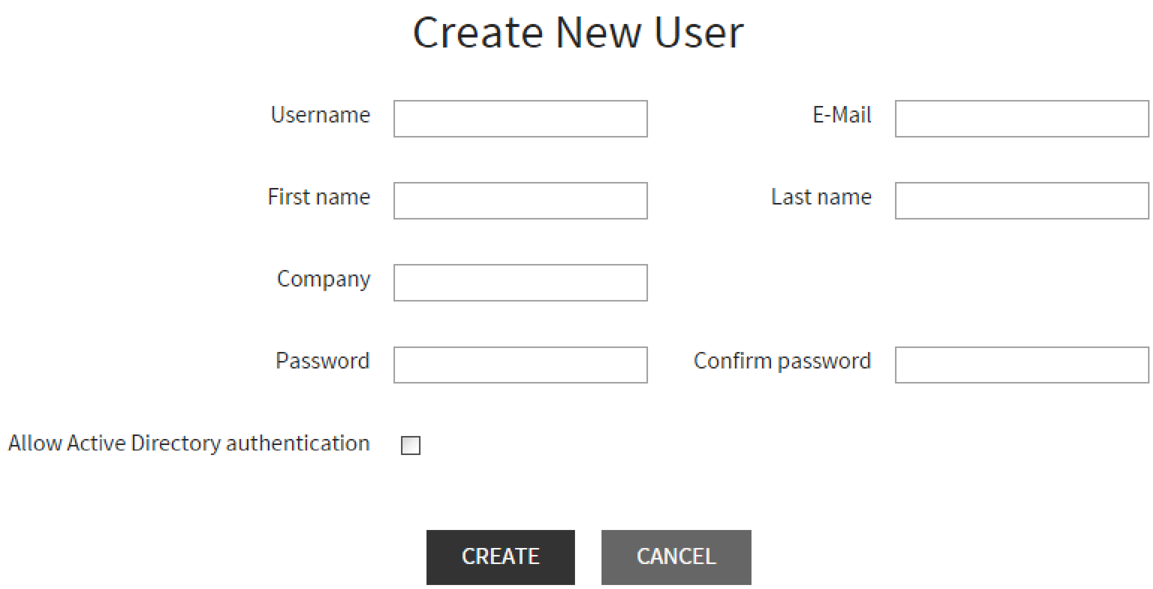


Create new user	**Edit user**	**Import User from AD**	**Disable user**	**Edit project**	**Save**	**Reset**

User Management

Adding new users

To add a new user, click on the **Create New User** tool. The **Create New User** wizard is shown:



A user needs to provide input to following properties in this wizard:

- **Username**: Login name of the user
- **First name**: First name of the user
- **Last name**: Last name of the user
- **Company**: Company of the user
- **E-mail**: E-mail ID of the user
- **Password**: Provide a password for this user
- **Confirm password**: Re-enter the password

Current password strength: Length must be a minimum of 8 and a maximum of 15 characters. Password must contain at least one special character. It may contain 0 or more alphanumeric characters.

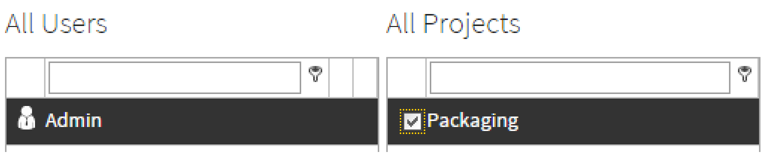
- **Allow Active Directory Authentication**: Enable user for active directory authentication

Click on the create button to finalize adding this user to the **All Users** list.

More information on active directory authentication can be found in Working with Active Directory Users chapter.

Assigning a user to project

To assign a user to a project, simply choose the user and then mark the checkbox next to the target project, which is listed under the All Projects area.

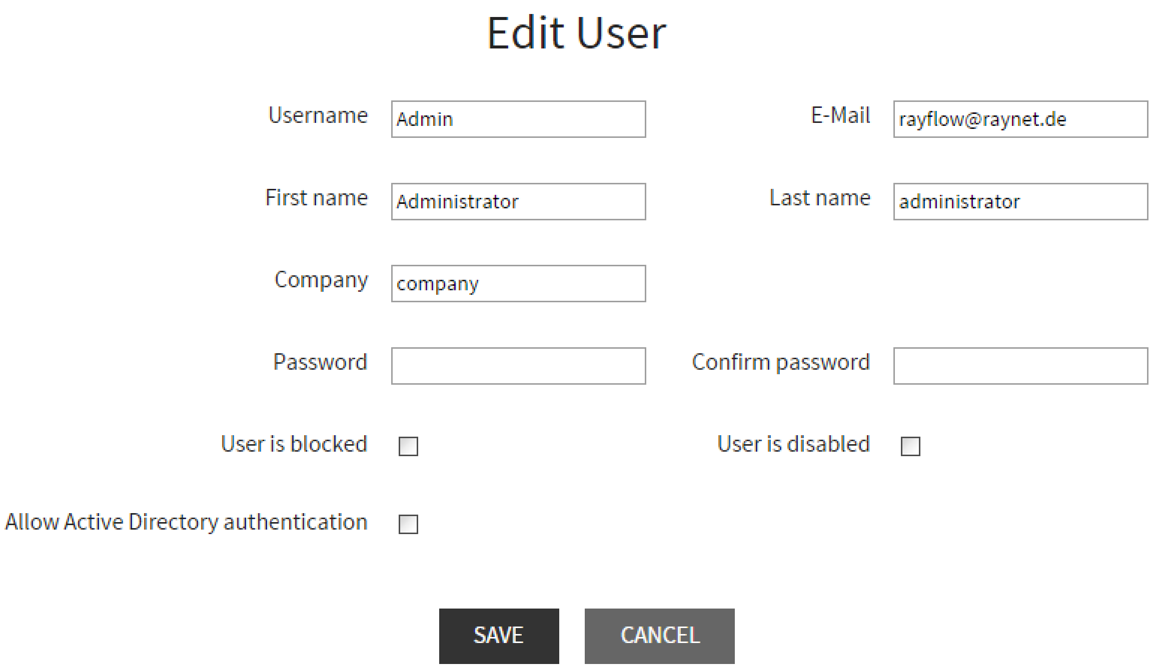


Editing user properties

There are two types of user properties:

- **Basic**: Basic properties refer to the general properties of the user. A user can enter these properties while creating a new user. These properties are also shown on the My Profile page
- **Advanced**: Advanced properties include permissions, groups, and notification profiles assigned to a user. Advanced properties are discussed under the User Properties topic of this chapter.

To edit the basic properties select the target user from the **All Users** list and then click on the **Edit User** tool. This will show the user properties in **Edit User** wizard.

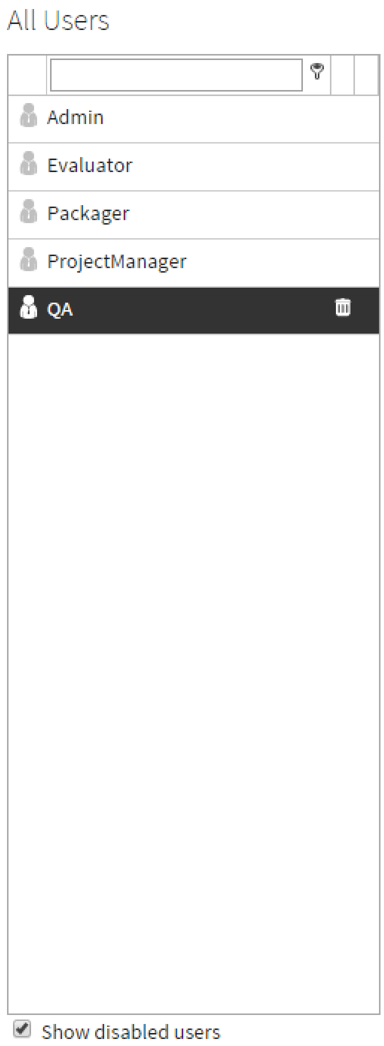


In addition to the properties defined in the **Create New User** wizard, additional properties are shown in the **Edit User** wizard:

- **User is blocked**: Enabling this property will block a user from logging in. After trying to log in with a wrong password for six consecutive times, a user is automatically blocked.
- **User is disabled**: Enabling this property will deactivate a user. The disabled user will no longer appear in the **All Users** list.

Disabling an active user

To show disabled users in the **All Users** list, enable the **Show disabled users** checkbox. Enabling this option will add all users to the **All Users** list that had been disabled. They will be identified by a black trashcan.



To disable a user select an active user from the **All Users** list and then click on the **Edit User** tool. Properties of the selected user are loaded in the **Edit User** wizard. The checkbox **Enable the User** has to be disabled to disable the user.

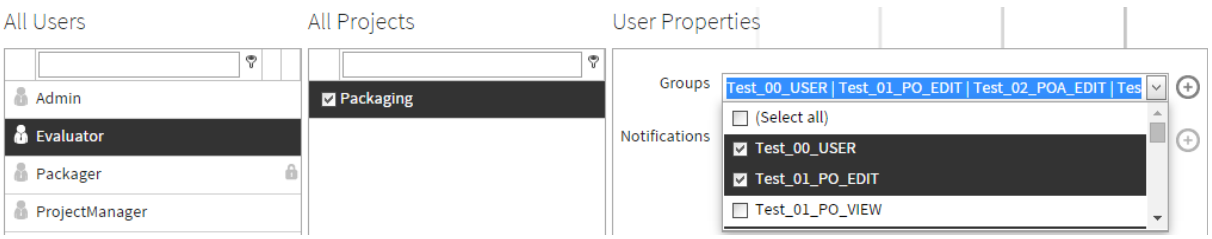
User Properties

Permission group and notification profile are part of the **User Properties** area. Administrators can assign a user to the permission groups. Additionally, a new user group can also be created directly via this area. Furthermore, a user can be added to a notification profile, hence enabling him to receive notification e-mails depending upon the trigger configured for the added profile.

Assigning a permission group to a user

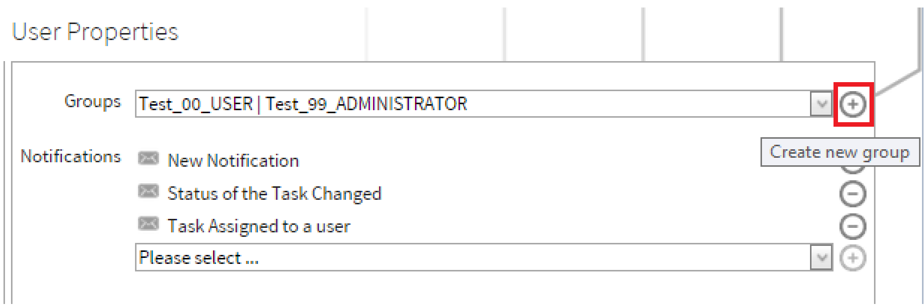
To assign a permission group to a user:

1. Select a user from the **All Users** list. Under the **User Properties** area and select the group(s) to be assigned.

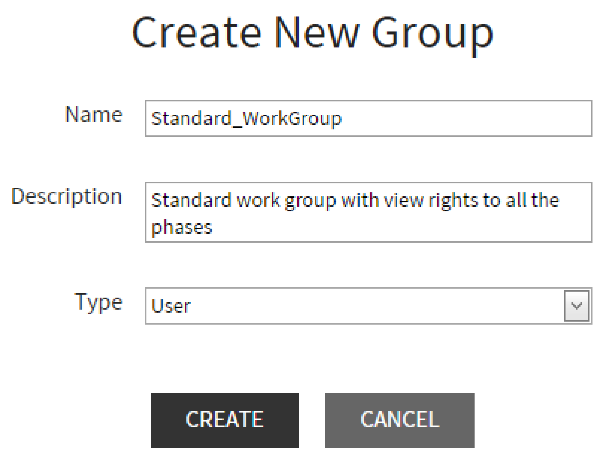


Creating new user group

To create a new user group from the **User Properties** area, select the add group tool, which is available next to the groups drop down menu.



This will show the **Create New Group** wizard.

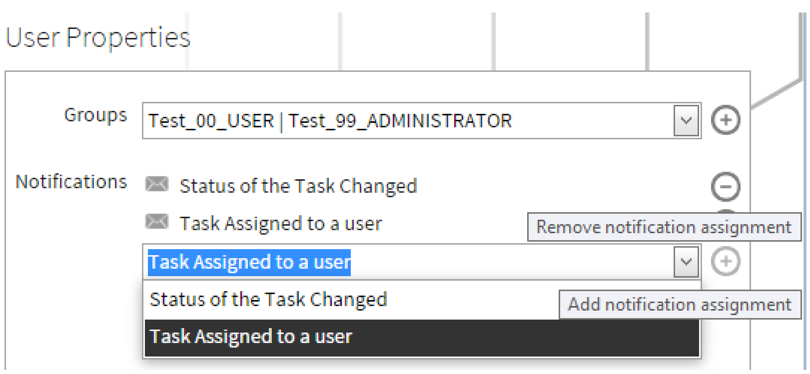


Specify the properties of the new group and click on the **Create** button to finalize adding the group to project. For more information on permission groups please refer to the *Groups* chapter of this document.

Adding user to a notification profile

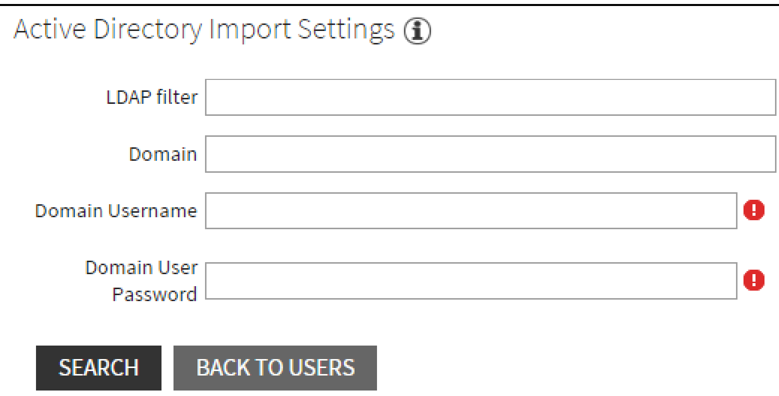
A notification profile defines the trigger for sending out the notification e-mail to target users. A user can create this profile either via the **Notifications** feature in administration or through the **My Notifications** feature under the profile.

Notification profiles created via the aforementioned features are available as drop down items in the **User Properties** section. A user can simply select the target profile from this drop down list and click upon the **Add Notification Assignment** icon to finalize the assignment. Contrarily, to remove an assigned profile, a user should click on the remove assigned profile icon, which is available to the left of each assigned profile.



Importing Users from Active Directory

It is possible for administrators to directly import users from the Active directory. This can be accomplished by first navigating to the **Users** page under the **Administration** section. On this page, when a user selects the tool **Import users through Active Directory Services**, then the **Active Directory Import Settings** page is shown:



- **LDAP filter**: A valid LDAP filter requires an input according to the format: `HostName[:PortNumber][/DistinguishedName]`. The left and right bracket characters ([]) indicate optional parameters.
- **Domain**: A user can specify the domain, which should be searched for the users. If not specified, then the default domain of the AD Server will be queried. When a domain is specified, RayFlow will query the AD Server configuring the `DistinguishedName` part of the LDAP filter with the inserted Domain.
- **Domain Username**: Username of the domain user. Input to this field is mandatory.
- **Domain User Password**: Password of the domain user. Input to this field is mandatory.

Be aware:
It is only possible to log in with imported AD user credentials, if they do not still have to change their initial AD password. If the configuration is set to default, this setting is preset when the AD user is created. Either change this function, or the user has to change his password before the RayFlow import service is being executed.

RayFlow will now get all users and the corresponding information from the active directory. Select either one or more specific users or all users for import. These users will now be added as RayFlow users.

Working with Active Directory Users

1. System requirements

- Server and client need to be in the same domain.
- The user needs to be on as an AD user on the client that launches RayFlow.

2. RayFlow configuration

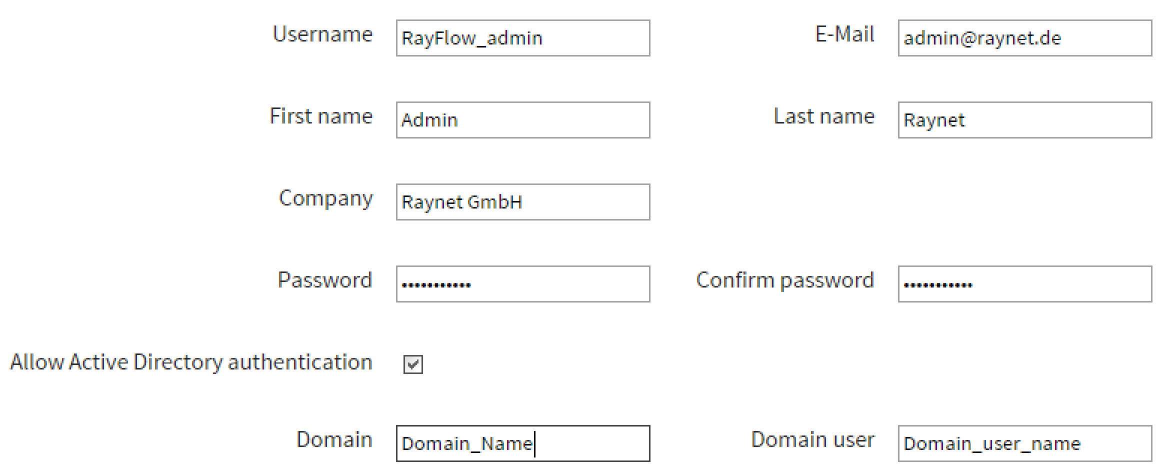
Follow the steps to configure RayFlow for Active Directory users

- Go to **Administration** -> **Users** section and click on the edit option for the user that receives permissions to log in as an AD user.
- Mark the **Allow Active Directory Authentication** checkbox.
- Enter the value for the datafield **Domain User**.

Note:
Only name of the user (without domain), e.g., username (NOT: `Raynet\username`)

- Enter the value for the datafield Domain

Note:
Name of domain without prefix, e.g. Raynet (NOT `raynet.local`)



Note:
No changes in RayFlow Server are required.

3. Logging in

To log on as AD user, you need to use the RayFlow username and the corresponding password of the AD account.

E.g., of user shown on the screen above:

Username: Admin
Password: AD_User_Password

Note:
To have a fully integrated active directory the RayFlow user naming convention needs to match exactly the AD usernames. Then any user can log in with their AD credentials.

Groups

A **Group** in RayFlow is an object that is used to define the type of access to other objects, including phases, menu, datafields, and others. This chapter of the document describes how a user can create new permission groups, assign users to it, and use it to control visibility of menu items and phases.

Groups User Interface

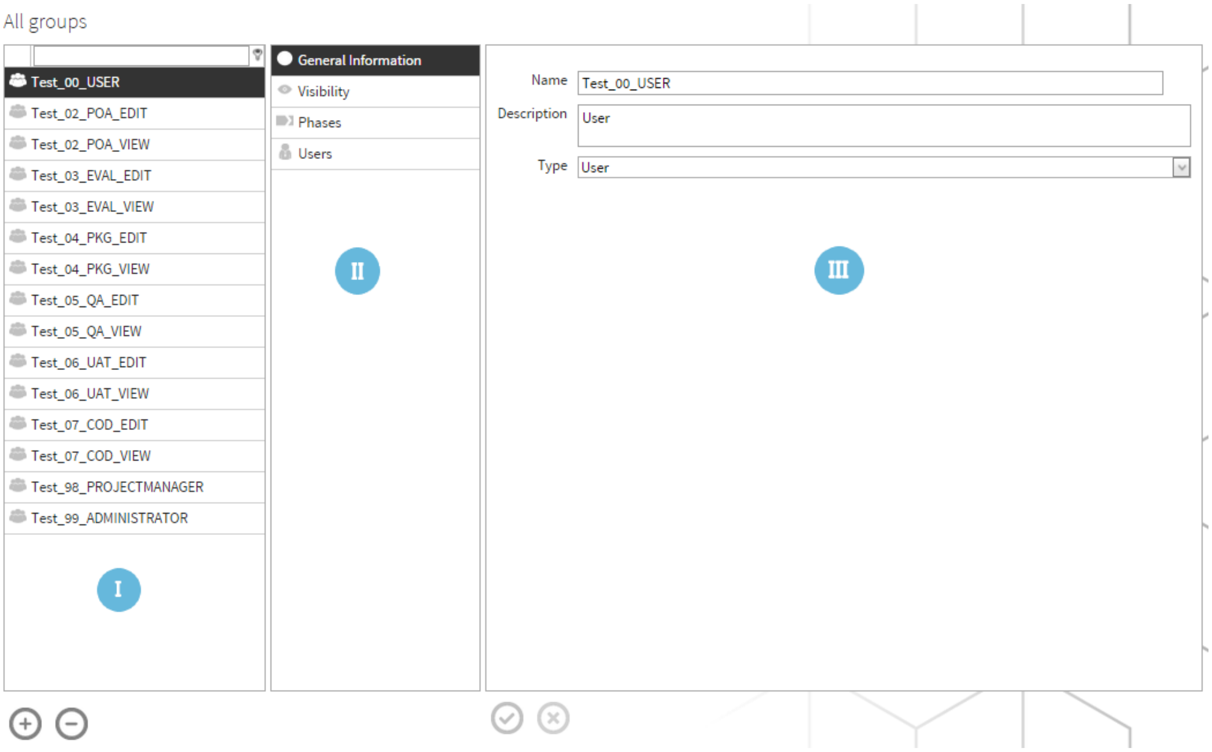
The **Groups configuration** page is divided into three areas including:

1. **All groups**: All the existing permission groups are listed under the **All groups** area.

2. **Categories**: To the right of the **All groups** area, the properties pertaining to each of the groups are categorized into following categories:

- **General Information**: General Information includes basic properties, including its name, description, and type, related to a selected permission group.
- **Visibility**: Allows a user to add/edit/remove menu items from a RayFlow project as well as to define visibility to them based on permission groups.
- **Phases**: A permission group can be assigned different permission types on phases in RayFlow.
- **Users**: Provides an ability to assign/remove users from a permission group

3. **Properties**: Properties and options pertaining to the selected category in categories are shown under this area


All groups
Test_00_USER
Test_02_POA_EDIT
Test_02_POA_VIEW
Test_03_EVAL_EDIT
Test_03_EVAL_VIEW
Test_04_PKG_EDIT
Test_04_PKG_VIEW
Test_05_QA_EDIT
Test_05_QA_VIEW
Test_06_UAT_EDIT
Test_06_UAT_VIEW
Test_07_COD_EDIT
Test_07_COD_VIEW
Test_98_PROJECTMANAGER
Test_99_ADMINISTRATOR
I
General Information
Visibility
Phases
Users
II
Name
Test_00_USER
Description
User
Type
User
III

Saving and discarding changes

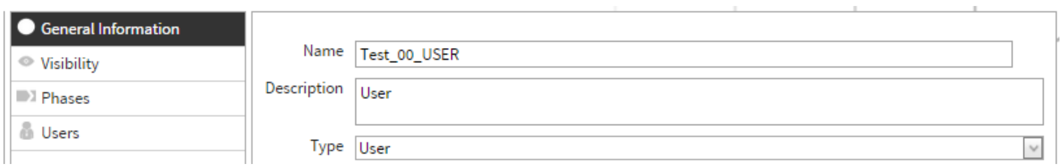
Any change made to a group property will active the **Save** icon and the **Reset** icon. To save changes made to the group property click on the **Save** icon. To discard changes click on the **Reset** icon.

Save

Reset

General Information

Basic information related to the selected permission group is shown as part of **General Information** category.



- **Name**: Name of the selected group
- **Description**: A brief description of the selected group
- **Type**: Currently a permission group can be of one of the following types:
  - **Root** (Only shown when the groups page is accessed by a root user)
  - **User**: A normal user group
  - **Manager**: View rights to all phases
  - **Administrator**

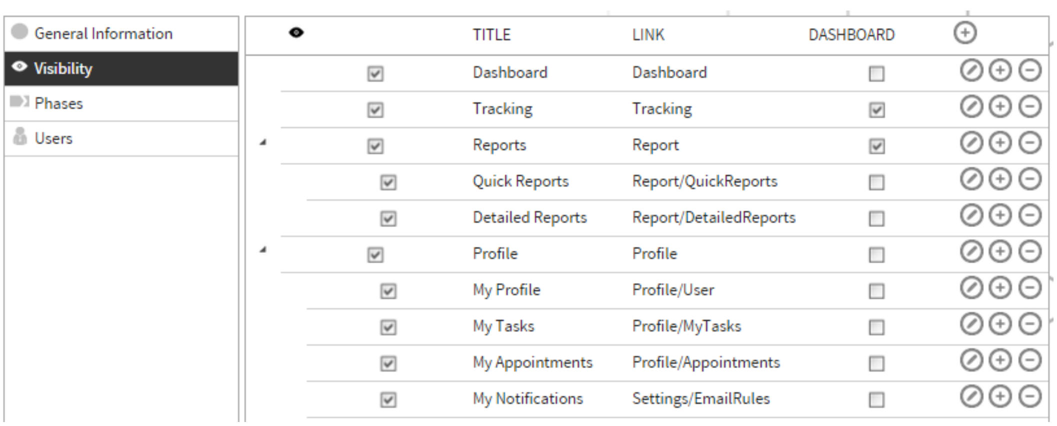
Following matrix shows permission matrix for the root, manager and administrator user:

	Manager	Administrator	Root
Access to Administration menu	No	Yes	Yes
Create/Edit/Delete User/ Set Password	No	Yes only users in projects where he has at least admin privileges, cannot modify root	Yes
Assign Projects to a User	No	Yes only projects where he has least admin privileges	Yes

Assign Groups to a User	No	Yes only groups from projects where he has at least amin privileges	Yes
Groups Configuration Page	No	Yes only groups from projects where he has at least admin privileges, only create/update/delete groups with the same or lower privileges	Yes
Clone Task Settings	No	Yes only show projects where he has at least admin privileges	Yes
Create/Copy projects	No	No	Yes
Assign Tasks to users	Yes	No	No
Configure SLA's, Category	Yes	Yes	No
Default access to reports	Yes	No	No

Visibility

RayFlow is a modular application with features available as menu item. Based upon the requirement and license, these menu items can be added to a RayFlow project. Furthermore, visibility of menu items can be controlled by permission group.



The existence of a menu entry decides if a member of this group is authorized to enter the related page or not. If the entry exists, he will be able to enter the page. If the entry does not exist, he cannot enter the page, instead he will be lead to a page which will state that he is not allowed to access the page.

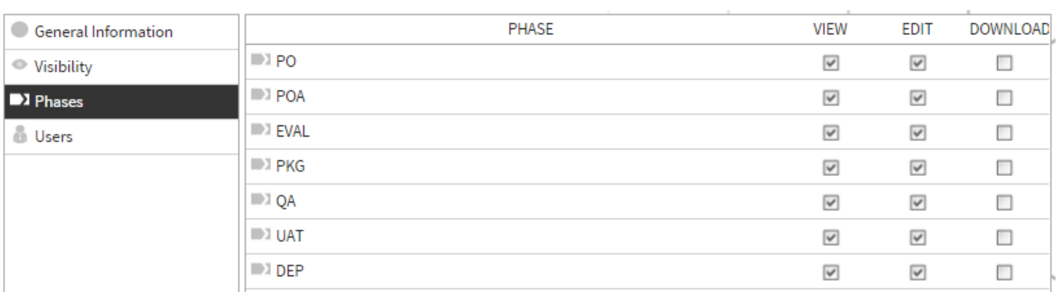
The **Visible** checkbox decides if the entry will be shown inside of the **Side** menu and if it can be found using the global search or not. If the checkbox is enabled, the entry will be shown in the **Side** menu and users will be able to find it using the global search. If the checkbox is not enabled, the entry will not be shown in the **Side** menu and the global search will yield no results.

The **Dashboard** checkbox decides if the item will be shown as a tile on the **Dashboard** page. If it is checked, the tile will be shown on the Dashboard. If it is not checked, there will be no related tile on the Dashboard.

Phases

Phases option allows administrators to define group permission on different phases. A permission group can have three kinds of phase permission:

- **View**: Users with view rights are able to see a phase. They can read and write comments and download files. They cannot change a status, SLA, category, or user assignment. Furthermore, all visible datafields and appointments are read-only.
- **Edit**: If a user has edit rights, the full scale of his rights depends on what kind of user he is.
    - **Admin/Projectmanager**: Projectmanagers and administrators with edit rights can read and write comments, up- and download files, see and create appointments, edit all datafields, assign and unassign task to all users with edit permissions for the phase, change SLA, Category, and type, and always change the status of a task.
    - **User**: Users with edit rights can read and write comments, edit their own appointments, up- and download files, edit the visible datafields, assign tasks to themselves but cannot unassign tasks, and they can change the status of a task if the task is unassigned or assigned to themselves.
- **Download/No permission**: If a phase is invisible for a user, it will not be shown anywhere.



Permission in a different phase
If a user had specific permissions in the phase A and is currently viewing phase B the following will be visible.

- **Edit**
    - Comments created in phase A are visible in phase B.
    - Files uploaded in phase A are visible in phase B.

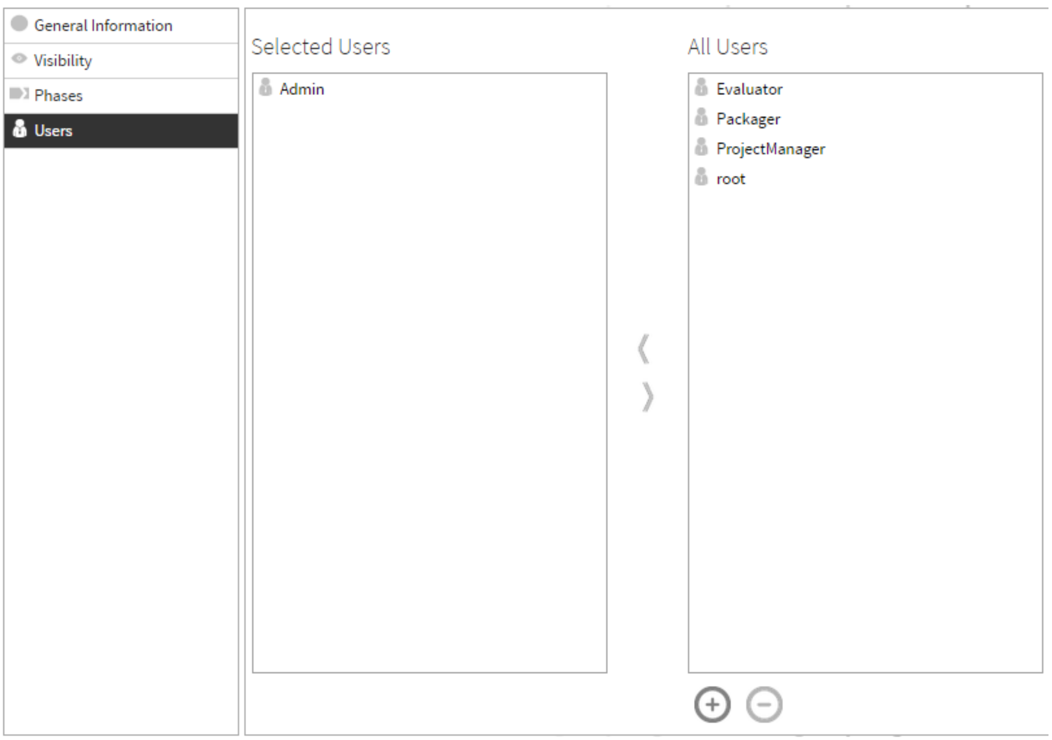
  - Appointments created in phase A are visible in phase B.
- **View**
  - Comments created in phase A are visible in phase B.
  - Files uploaded in phase A are visible in phase B.
  - Appointments created in phase A are visible in phase B.
- **Download**
  - Comments created in phase A are **not** visible in phase B.
  - Files uploaded in phase A are visible in phase B.
  - Appointments created in phase A are **not** visible in phase B.
- **No permission**
  - Comments created in phase A are **not** visible in phase B.
  - Files uploaded in phase A are **not** visible in phase B.
  - Appointments created in phase A are **not** visible in phase B.

Users

For a selected permission group, the **Users** option allows administrators to add user to or remove users from that group.

All the users who are part of a project are shown beneath the **All Users** section. They can be assigned to the group by clicking on the **Add User to the Group** icon.

Similarly, all the existing members of the group are shown under the **Selected Users** section. They can be removed from the permission group by clicking on the **Remove User from the Group** icon.



Beneath the **All Users** section, The **Add User** and the **Disable User** tools are available. Using them, a new user can be created and an existing one can be disabled.

Add user to group

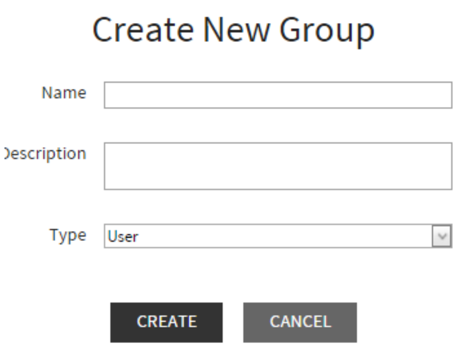
Remove user from group

Group Management

To Add a New Group

A new permission group can be created by clicking on the **Create new group** icon.

The **Create New Group** dialog is shown.



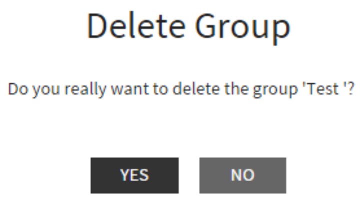
Specify the group properties:

- **Name**: Name of the permission group
- **Description**: Brief description of the group
- **Type**: the group role type is selected from the drop down list. Options available to a normal administrator creating the group include: User, manager, and administrator. An additional root item is added to the option for a root user.

To Delete an Existing Group

An existing permission group can be deleted by clicking on the **Delete group** icon.

A confirmation message is shown:



Click on the **YES** button to confirm deletion of the group. You can discard this action by clicking on the **NO** button.

To add new user via Groups page

It is possible to create a new user via the properties area of the **Users** category. Normally, user management is done via the **Users** page of RayFlow *Administration*, however, the possibility to add a new user via the **Groups** page is meant to provide a quick way of creating a new user and assigning it to a group.

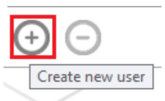
Follow the below mentioned steps to create a new user via the **Groups** page:

1. Go to **Administration** -> **Groups** item in the vertical navigation bar.

2. Select a group to which this new user will be added.

3. Select **Users** category from the Categories area.

4. Click on the **Create new user** icon, which is available at the bottom of the **All Users** area



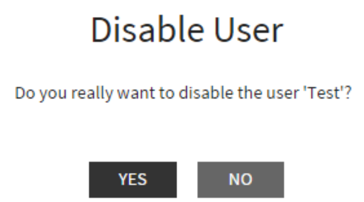
5. A **Create New User** dialog is shown. More information on this dialog can be found under the **Adding new user** topic.

6. After filling in the user properties, click on the **CREATE** button on this dialog to finalize creating this user.

Disabling an user from the group page

A user under the **All Users** section can be selected and disabled by clicking on the **Disable User** icon.

Clicking on this item will prompt a confirmation dialog. Clicking on **YES** will disable the selected user and contrarily clicking on the **NO** button will discard this action.



Menus

RayFlow tool is a combination of comprehensive and structured modules called Menus. These menus support different features and when combined together results in an efficient workflow tool. This modular structure of RayFlow makes it flexible when it comes to the customer specific requirements and when it comes to controlling the permission and rights with respect to the different sections and features of the tool individually.

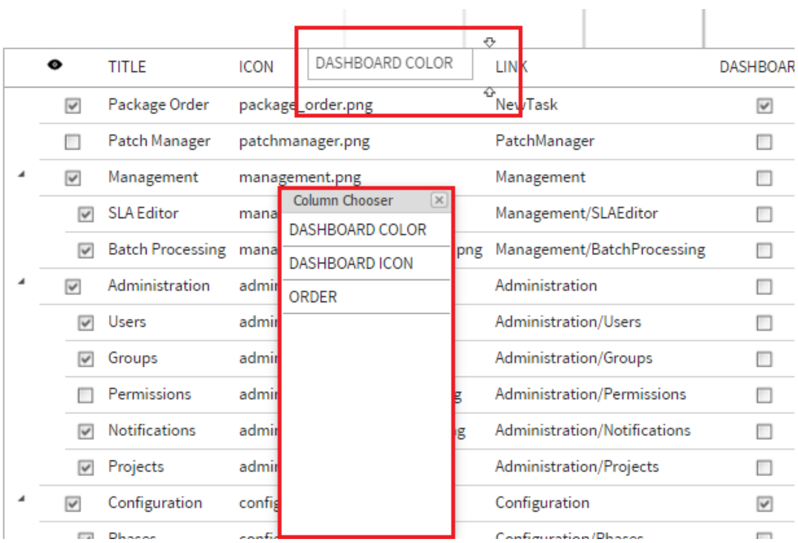
Each of the menu items is listed under the the properties area of a group's *visibility* category. Based upon the requirements, visibility of a menu item can be controlled for a specific permission group.

The Menu Editor

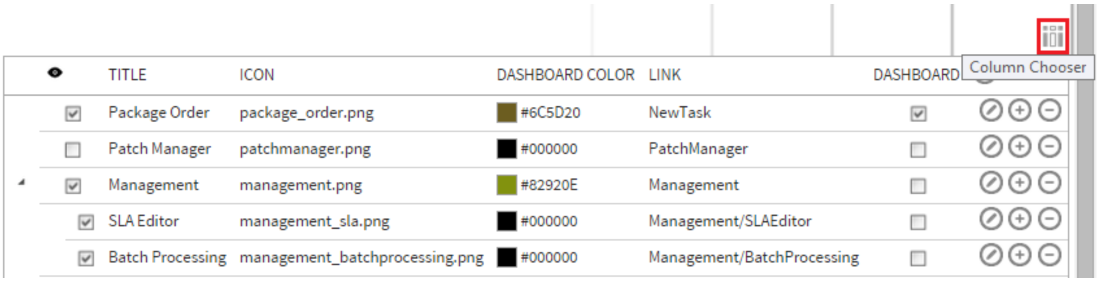
The properties area of the visibility area is not just a list of menus, but is essentially an editor which allows users to add customized menu items, to control visibility of an item for a certain permission group, to add a menu item to the dashboard, and to edit an existing menu item.

The menu editor interface

The menu editor lists menus and their properties under respective column headers. A user can customize this view by simply dragging and dropping the column headers to and from the **Column Chooser**.

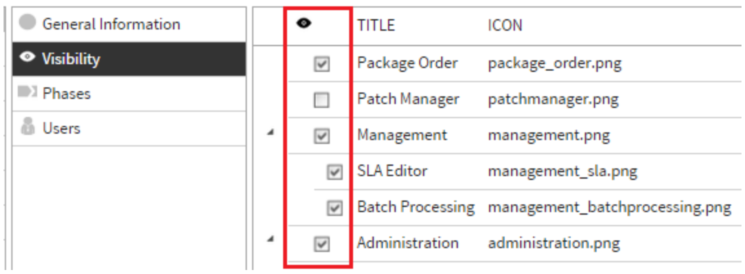


The **Column Chooser control** can be accessed by clicking on the **Column Chooser control** icon.



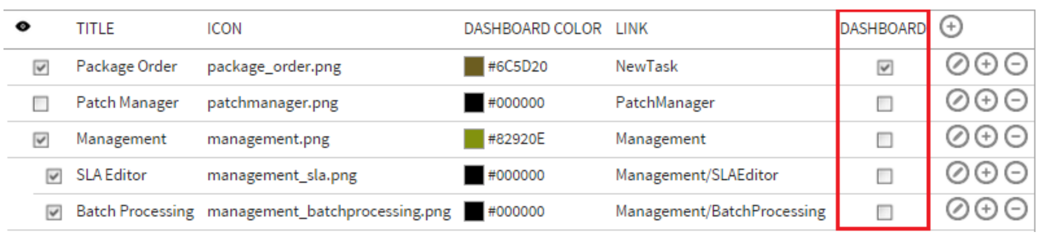
Controlling the visibility of a menu item

A menu item can be made accessible for a specific permission group by activating the visibility checkbox for that menu item. This checkbox is available for each of the menu items beneath the eye icon.

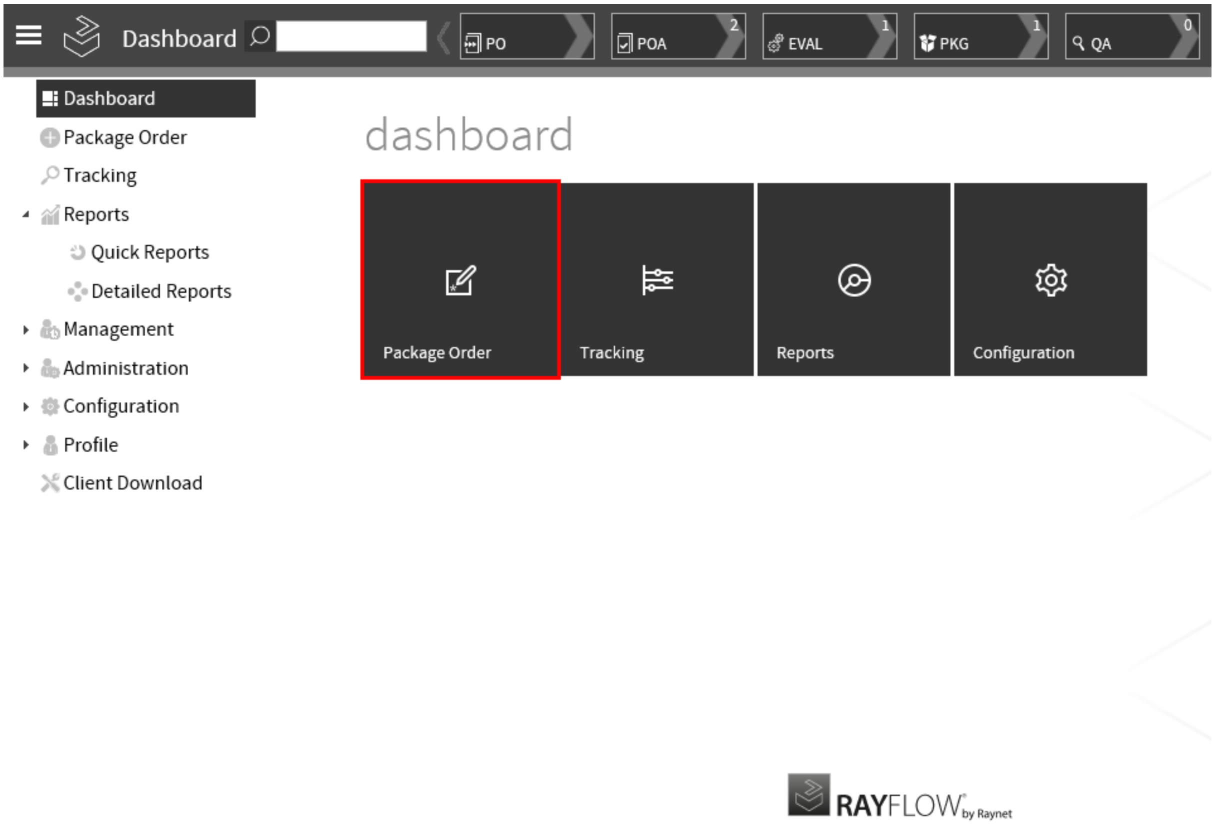


Adding a menu item to RayFlow Dashboard

A menu item can be made available on the **Dashboard** by activating the **Dashboard** checkbox for it.



Based upon the dashboard configuration for a menu item, the item will be shown on the RayFlow dashboard



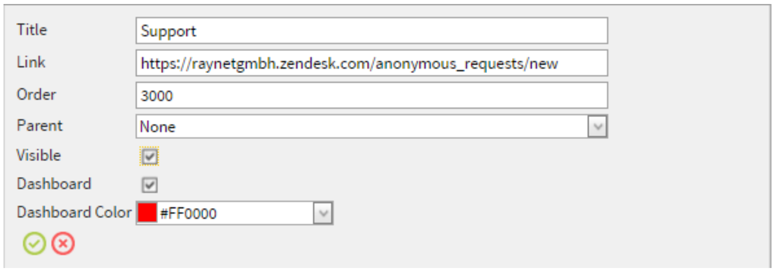
Adding a new menu item

A possibility exists to add custom menu items to RayFlow. A custom HTML page can be created, put in the source folder of RayFlow, and be used as a custom menu item.

To add a new menu item select a group on the Groups page, then select the Visibility category under the categories area. Click on the Create menu item icon in the menu editor.

Specify the menu properties:

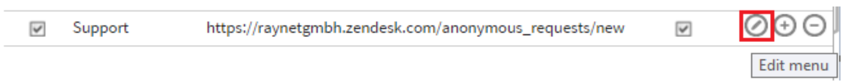
- **Title**: Title of the menu item.
- **Link**: Link to the menu item. If it is a custom menu page, then name of the page, e.g., CustomPage or a web link.
- **Order**: Order number of the menu item. This order number will determine the menu item position in relation to other menu items.
- **Parent**: In the vertical navigation bar, a menu item can either be added to an existing menu as a parent item or as a child item.
- **Visible**: Enable or disable the checkbox for menu item to be shown in the UI.
- **Dashboard**: When enabled the menu item will be shown on RayFlow dashboard.
- **Dashboard Color**: Select the color of the menu tile on the dashboard



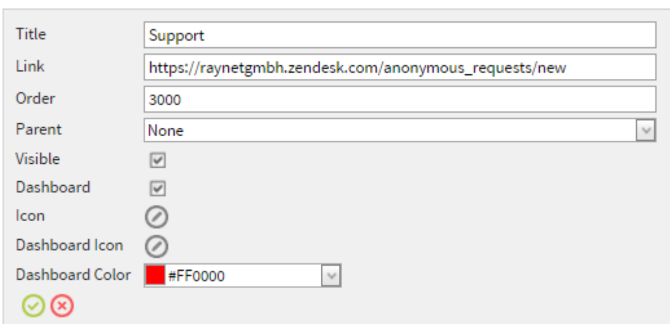
After specifying the menu properties click on the save icon to finalize adding the menu.

Editing and deleting an existing menu item

The properties of a menu item can be edited by clicking on the Edit menu icon for the target menu.



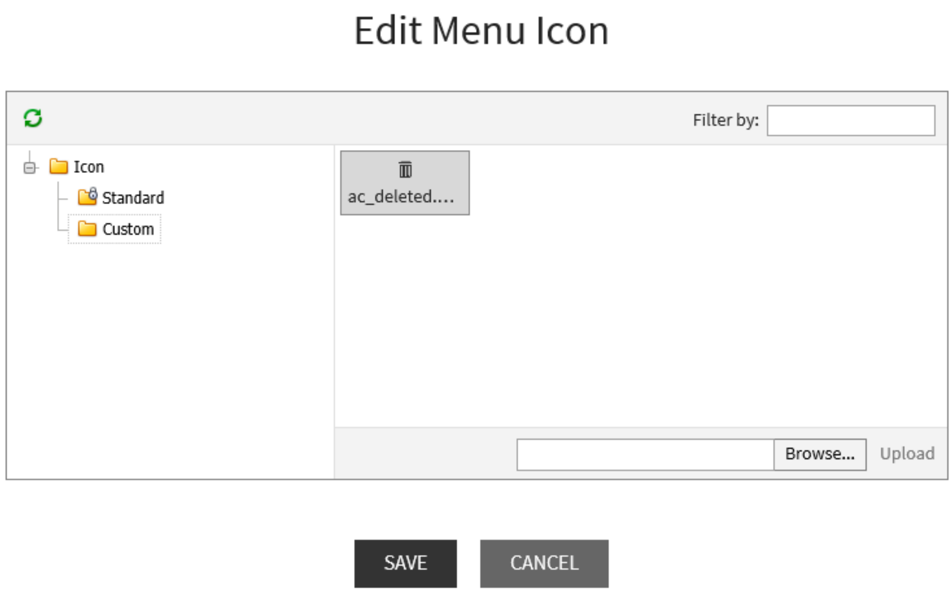
The menu item will be available in edit mode:



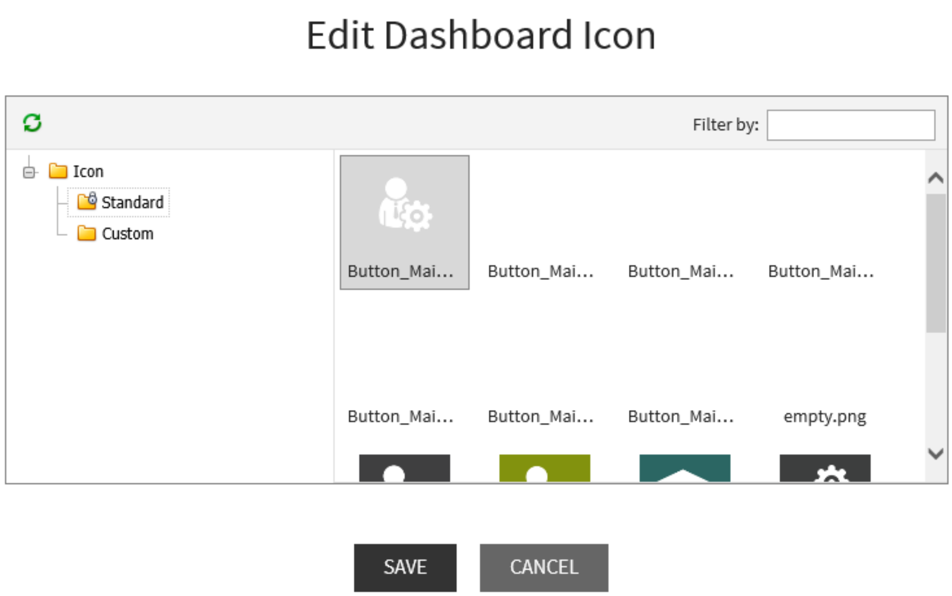
When compared to properties available while creating a menu item, following additional properties are available:

Icon: An icon can be specified for the menu item in the vertical navigation bar. The icon property comes with an edit icon. When clicked upon, an **Edit Menu Icon** dialog is available. Through this dialog, a user can either pick a standard icon for the menu item or can upload and use a custom item.

The recommended icon size is 20x20 pixels.



Dashboard Icon: This property allows a user to select an icon for the menu item tile on the RayFlow Dashboard. This property comes with an edit icon. When clicked upon, **Edit Dashboard Icon** dialog is available to the user.



This dialog allows a user to either pick a standard icon for the menu item or to upload and use a custom one.

The recommended icon size is 153x153 pixels.

Notifications

The **Notifications** feature offers its users the possibility to configure and receive e-mails pertaining to the updates within a project. Based upon the trigger and target recipient different notification profiles can be created. It should be noted that it is also possible to create new notifications.

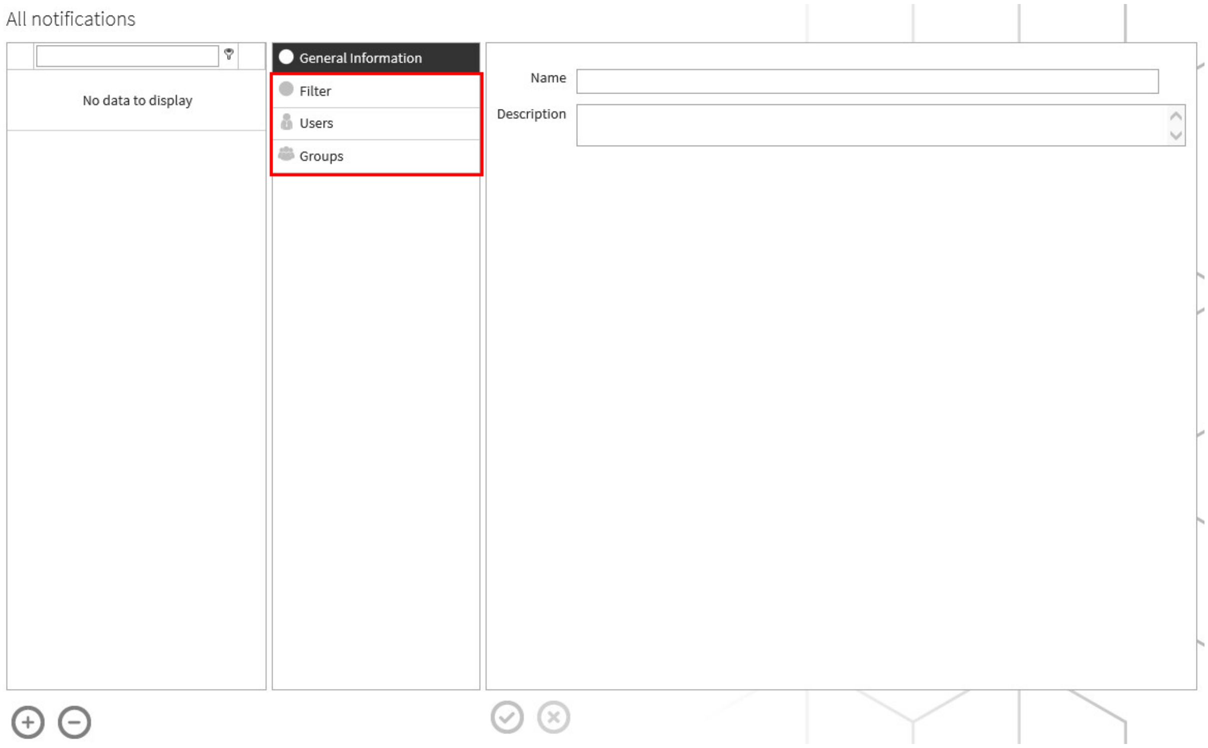
Using this feature a user can define recipients of the e-mail based on different target types and the rules according to which the sending of e-mail will be triggered. To access the Notifications go to **Administration** -> **Notifications** in the functional navigation bar on the left.There are three types of notifications: **Global**, **local**, and **TaskTrack**. This Rayflow function works only with a license for notification.

- **Global:** Global notification rule can be only created by a user with Admin role or higher. It consists of five parts **Status**, **Events**, **Conditions**, **Category**, and **data field**. Mentioned parts are more detailed in chapter notification filter. Initially a new global notification rule has no user or/and group assignments, but an admin user can add user(s) and/or group(s) to it.

- **Local:** Local notification rule can be created by every user that has permission to get into **My Notifications** view. It consists also from five parts: **Status**, **Events**, **Conditions**, **Category**, and **data field**. Initially a new local notification rule is assigned to user which created such rule, but an admin user or higher user type can add a role(s) and group(s) to.

- **TaskTrack:** TaskTrack notification rule can be created in the phase view by clicking on the envelope icon in a task row. Such notification consists of three parts: **Status**, **Events** and **data field**. This type of notification rule can only be deactivated and changed by current user.

Configuration of notification e-mail is based on the selected target type. Currently three target types are offered in this feature: **Groups**, **Users**, and **Filters**.



Groups / Users Assignment

A global notification rule is initially not assigned to any user or group. A local notification rule has initial assignment to user which has created the rule. A local notification user/group assignment can be changed over Administration of notifications rules. A **TaskTrack** notification rule is always assigned to its creator and cannot changes the assignment to another user or group.

Filter

It consists also of five parts **Status**, **Events**, **Conditions**, **Category**, and **data field** with exception of **TaskTracks** which has no filter category and conditions. The single parts are sets that result a logical conjunction to each other. Single sets can be built of many elements and are built as logical disjunction. Every single element is built from a phase and associated selection. That allows to restrict notification filter to specific phases. For example all open tasks in phase A.

Status: Status selection contains a list of configured status.

Events: Event selection is a selection of action triggers, described below.

- **All Events** - no restrictions
- **New comment** – a new comment is added to task
- **Package reassigned** – task is reassigned to another user or empty task was assigned
- **New file** – a new file is added to task
- **Status changed to** – status of task is changed to another one
- **Data fields edited** – a value of a field is changed

Conditions : Condition is relation between receiver and task. Conditions filter cannot be used for TaskTrack notifications.

- **All conditions** - no restrictions
- **I am Involved** - user was/is assigned to the task or made changes.
- **I am Owner of Package** - user is currently assigned to the task.
- **I am Creator of Package** - user has created the task.
- **My Selected Packages** - the current user tracks the task (see "TaskTrack").
- **All Packages** - no restrictions

Category: Category selection contains a list of configured categories.

Data field: Data field selection contains a list of configured data fields.

E-Mail Distribution

E-Mail-Address and language is defined in user profile and can be defined over **My Profile** for a current user or **Administration** for any users. E-Mail contents are depending of e-mail-templates of selected language. If two or more user has same e-mail-address, e-mail will be sent only once independent of number of activated notification rules and multiple notification assignments. The only exception is if this users have different languages definition. In case of missing e-mail templates in defined language English templates are chosen then.

Task Behavior and Notification

- **Activate accept buttons**: The task is assigned to current user. Status of task is changed to active. This action triggers three notifications: **User-Reassignment** and **Status-Change**. See more in Change status chapter.
- **De-acceptance of a task**: Activating open status for an assigned task is opposite of accept function. This action triggers three notifications: **User-Reassignment** and **Status-Change**. See more in Change status chapter.
- **Change status**: Status is changed via event trigger (for example event combo box in phase view). This action triggers two notifications for any status change because notification rule consider old and current status.
- **Change value of a field**: Saving a task after data field value changes triggers one notification for every member of activated notification rule.
- **Adding comment**: Saving a comment in a task triggers one notification for every member of activated notification rule.
- **Adding file**: After file upload for a task one notification, for every member of activated notification rule, is sent.

Notifications configuration

To configure e-mail notification to be sent to a group of users:

1. Select the **Notifications** item from the **Functional Navigation** bar under **Administration** -> **Notifications**
2. Select the notification from the list under **All notifications** or create a new notification by clicking on 

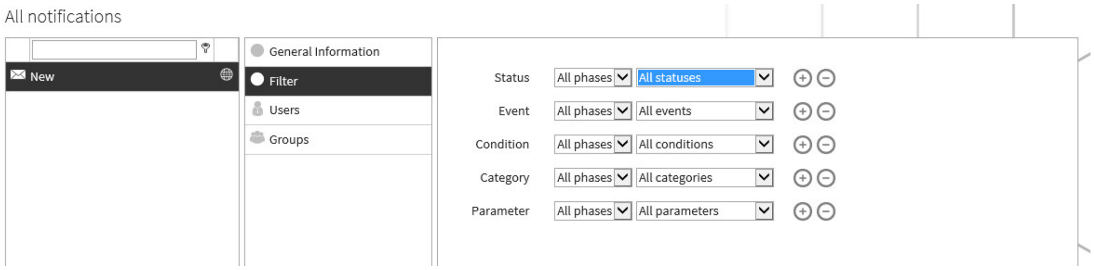
   a. If you create a new notification, enter a name and description and click on **CREATE**

3. Select **Group** and/or **Users** and add and remove groups and/or users by simply selecting an item from the lists and press the left or right arrow.

4. Click on the **checkmark icon**

5. To add phases to different task statuses, events, conditions, categories or parameters select **Filter**.

6. Select the phases for adding messaging rules



7. After defining the messaging rules click on the **checkmark** icon to apply the changes to the profile.
8. To make changes to the rule simply go to one of the options (Filter, Users, Groups) and make the necessary changes. To delete the rule click the  icon.

Projects

The Projects page is part of the RayFlow Administration feature. This page allows a user to create new projects and modify properties of an existing project. Creating a new project is the first step towards starting to use RayFlow as a standard workflow tool in an enterprise environment.

In RayFlow, only a root user has an ability to create a new project and execute *project cleanup* on an existing project. A normal administrator to a project has the ability to modify properties related to the projects he is assigned to.

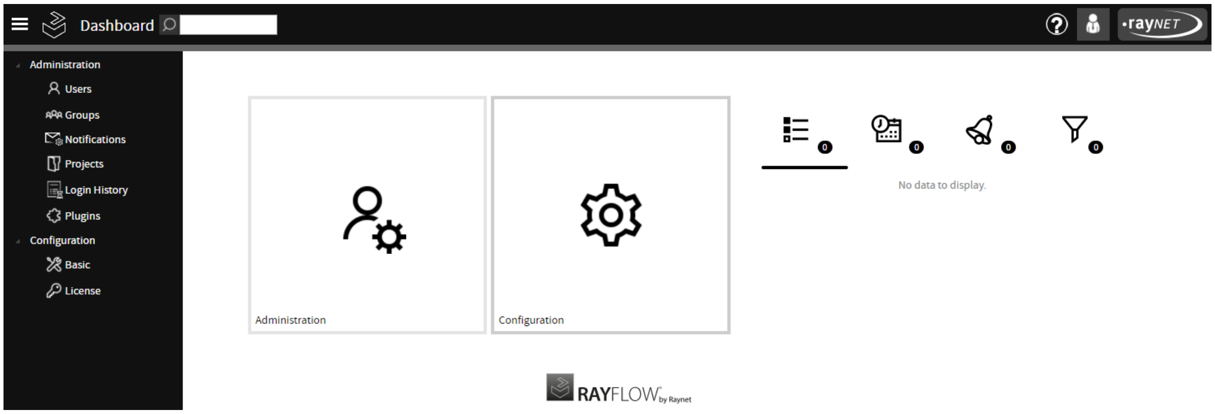
This chapter has been further divided into three sections:

- **Default Project & Root User**: Introduces a user to the RayFlow default project and root user. A root user is like a super administrator with exclusive rights to execute certain actions through the default project. This section elaborates on these actions and possibilities
- **Creating a new project**: Introduces readers with possibilities available to setup a new project
- **Project Cleanup**: This feature in RayFlow, allows a root user to delete tasks from a selected project

Default Project and Root User

Default project is the parent project which is created as part of the RayFlow installation. This project acts as a base framework on which new projects can be created and configured. Compared to the other projects, a default project cannot be copied to a new project. By default, the root user is assigned to the default project.

The image below shows the home screen of the default project with the root user logged in.



Key properties of the root user:

- The root user is the default user of a RayFlow instance.
- He is automatically created during the installation of RayFlow.
- He has the ability to create new projects in addition to administration user functions.
- He has the ability to execute project cleanup actions.

- The default password for the root user is root. After installation, it is highly recommended to change this password.

A complete list of the initial users and their default passwords can be found in the chapter Initial RayFlow Users..

Key properties of the default project:

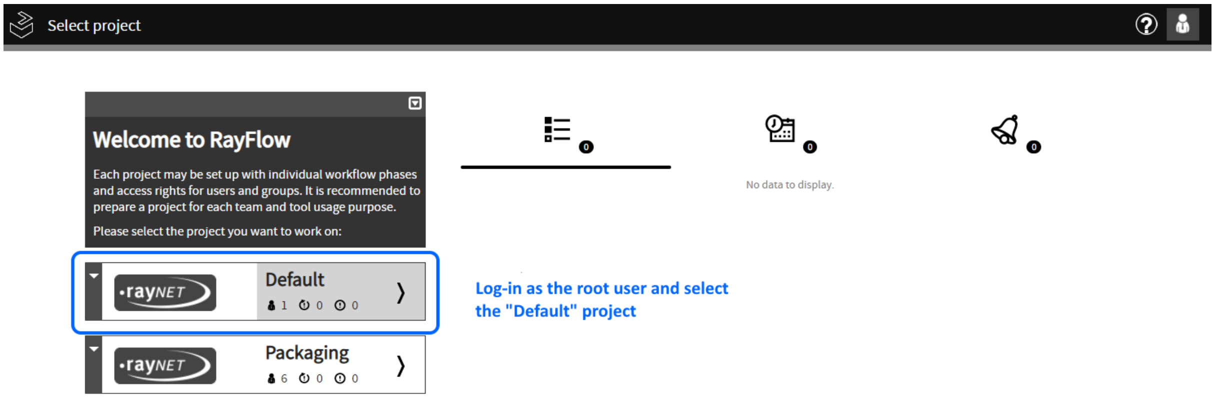
- The default project is a framework on which other projects in RayFlow are created.
- It is created during the installation of RayFlow
- The root user is the only user assigned to this project
- It cannot be used with the copy project function
- Modifications to this project are not recommended

Creating a New Project

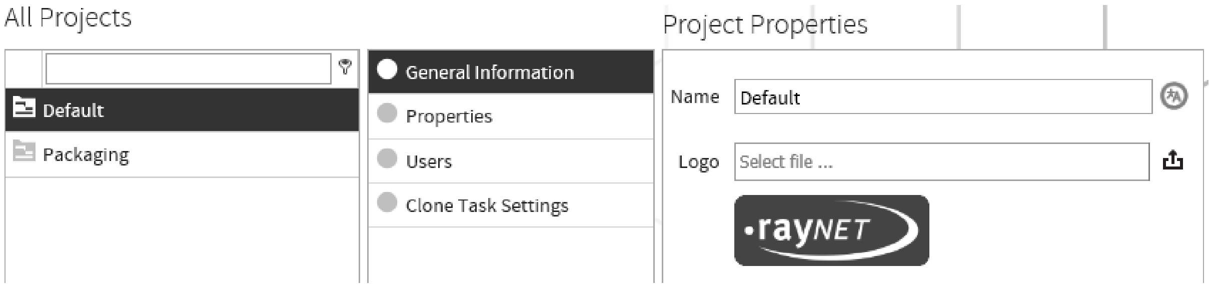
The possibility to create a new project in RayFlow is available through the **Projects** page of the **Default** project. RayFlow offer its users, three options for creating a new project:

- *Create a new project*
- *Import a project*
- *Copy an existing project*

To create a new project a user needs to log in to the **Default** project as root user.



After logging into the **Default** project, navigate to the **Projects** page in the **Administration** section. This section can either be accessed by selecting the **Administration** tile on **RayFlow Dashboard** or by the vertical navigation bar.

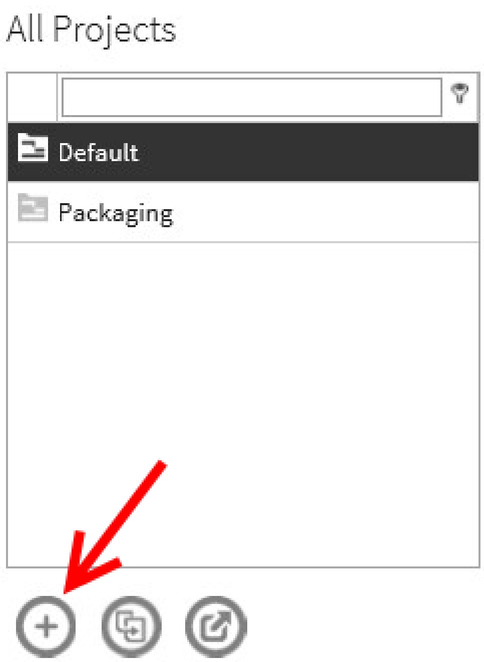


The **Project** page is divided into three areas:

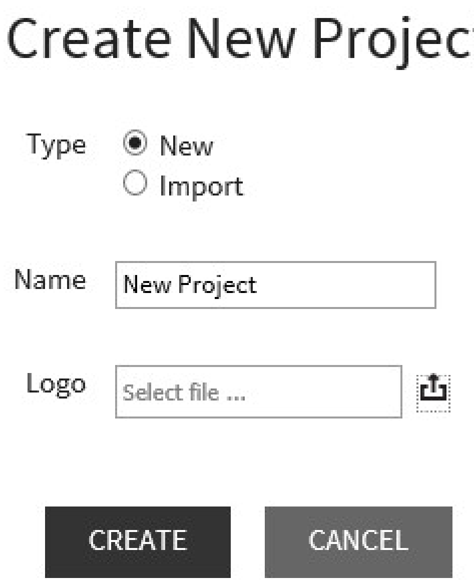
- **All projects**: All the existing projects are listed under the **All Projects** area.
- **Property category**: For each of the projects in the **All Projects** area respective properties are categorized into **General Information**, **Properties**, **Users**, and **Clone Task Settings**. More information on properties related to a project can be found in the Project Properties section of this document.
- **Project Properties**: Properties belonging to different categories are shown under the properties area.

Create a new project

Click on the **+** icon at the bottom of the projects list to add a new project.



Enter the project name and browse to the file of the logo.



The logo file has to be put in the images folder of the RayFlow Installation root directory before it can be used for the project. The logo can be in `.gif`, `.jpg`, or `.png` format.

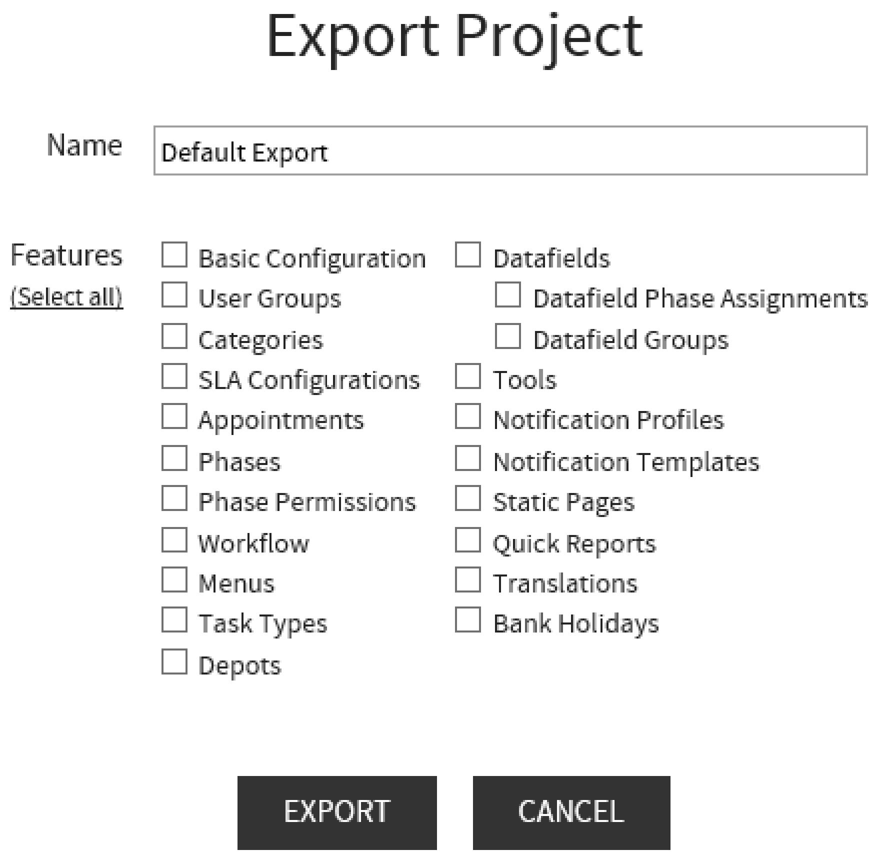
Be aware:
The maximum file size for a logo is 4 MB. If the file used as logo is bigger, the default logo will be used instead!

The project created by this method is just a shell and it cannot be accessed until a *user* and a *group* have been assigned to it.

Import a project

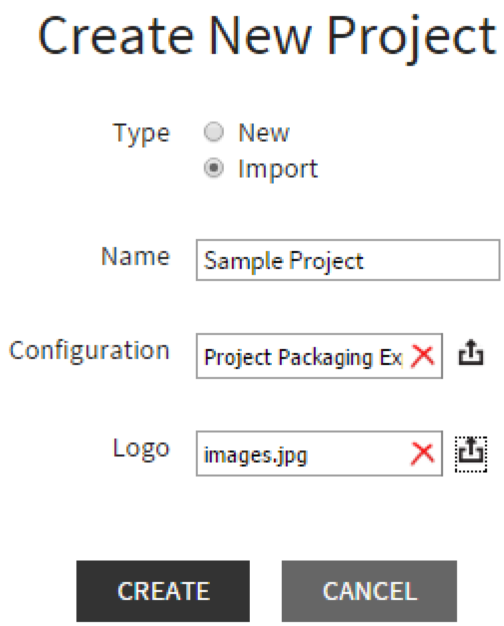
Users can export projects into a XML file by clicking on the **Export project** icon.

As with copy project the user can select the items he wants to be exported. As with copying a project, some items need others as a prerequisite and will be selected automatically.



A click on **EXPORT** generates the XML file which can be edited further.

The edited XML file can be imported as a new project. To import such a XML file, click on the **Create new project** icon, the **Create New Project** dialog will be available.



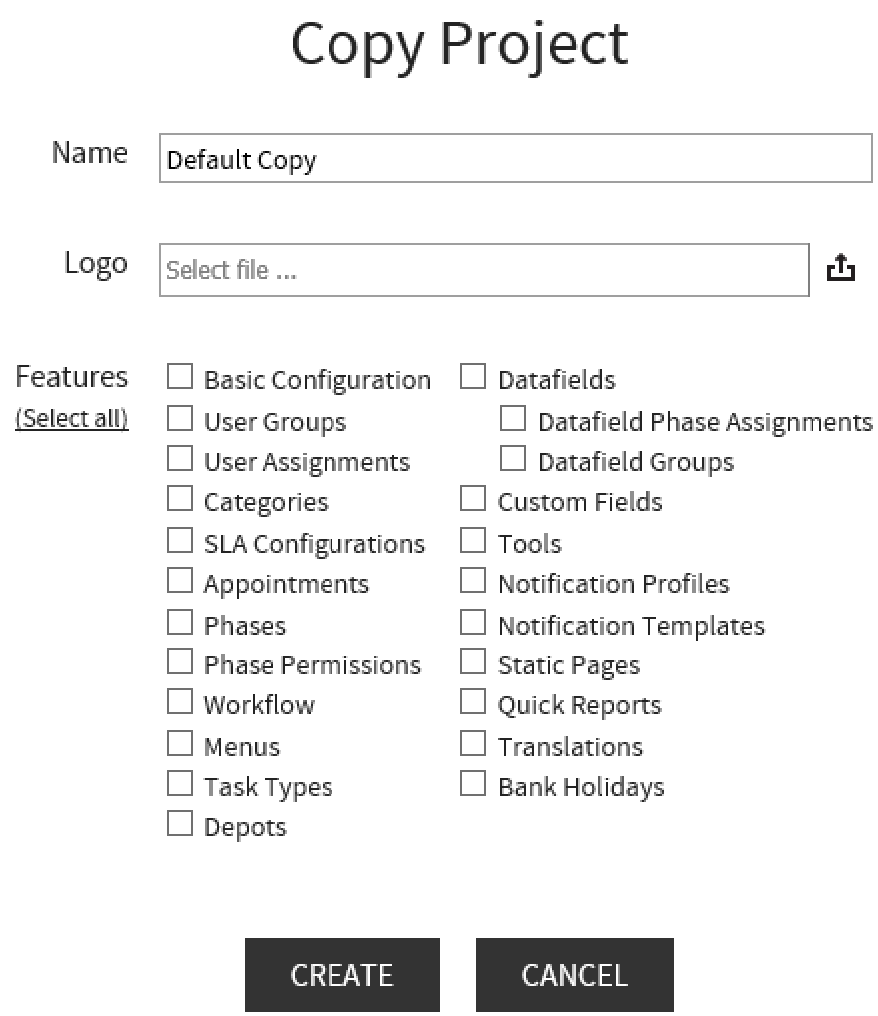
Provide name and logo for this new project, and then select the project configuration file. Click on the **CREATE** button to finalize creating this new project.

Keep in mind that user assignments cannot be copied over. The reason for this is, that users can only be assigned by their name which is not reflective of the actual user. After exporting tasks and importing them into a different instance this may lead to rights escalation. Therefore it is only possible to copy structural information, but not assignments to **Projects**, **Groups**, **Notifications**, and **Appointments**.

Copy an existing project

RayFlow provides the possibility of copying the settings and configuration from an existing project.
To do so, select the project from the list and click on the **Copy Project**.

A list of items is shown for copying. Select the items which are required to be copied from the existing project to the new project. Some items require others to be selected as well. Those will be selected automatically and will be shown with a grayed out icon which cannot be unselected as long as items that require them are still selected.



Project Properties

Properties related to a project can be accessed via the Projects page of RayFlow Administration. These properties are categorized into four categories:

- **General Information**
- **Properties**
- **Users**
- **Clone Task Settings**

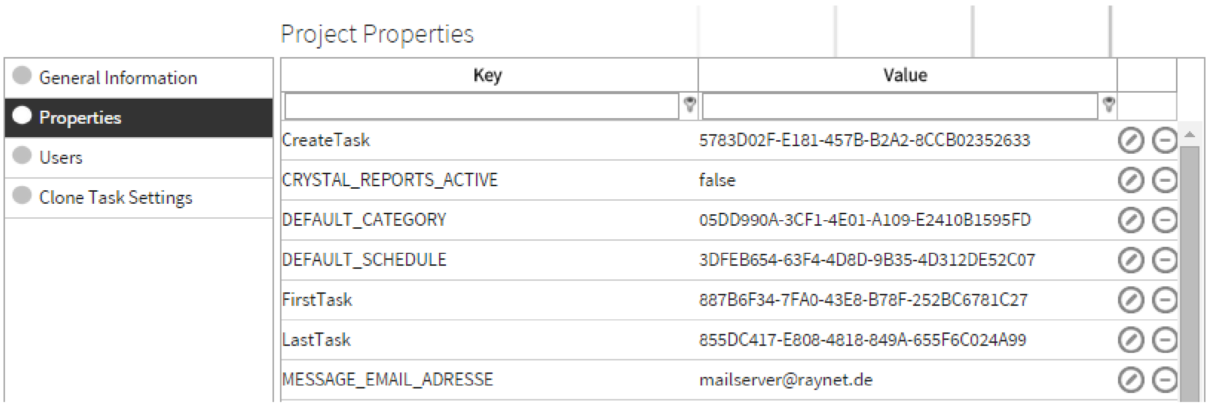
General Information

Under the General Information category, project properties including Name and Logo for the project can be provided/edited.

When logged in as root and with **TestMode** property in **Basic configuration** set to **True**, an additional **Clean project** option is available. This option can be used to execute **Project Cleanup** action on the selected project.

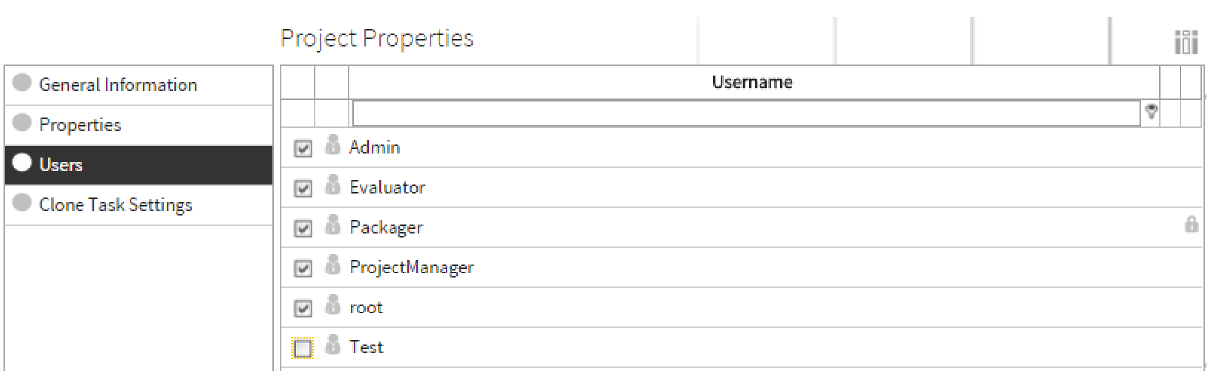
Properties

The properties category, lists all the basic configuration properties related to the selected project. More information on basic configuration and their use can be found in the **Basic** section of the *Configuration* chapter.



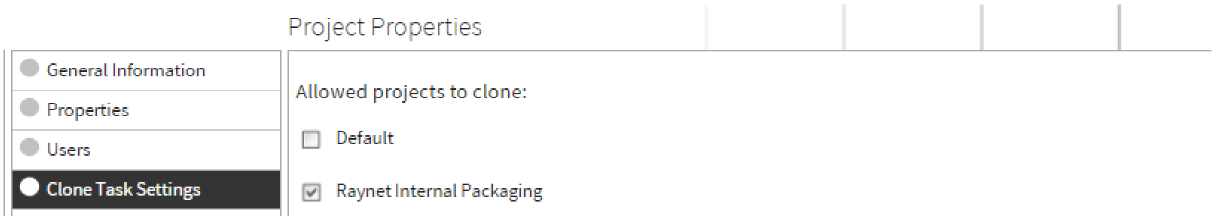
Users

Users category lists all the users who can be assigned or deassigned from the selected project by simply checking/unchecking the checkbox which is available next to each of the users. Information on how to create new users can be found in the *Users* chapter.



Clone Task Settings

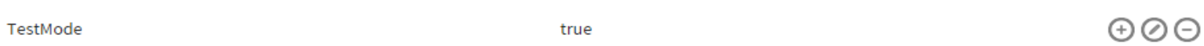
The **Clone Task Settings** category lists Projects which can be selected for task cloning. More information on task cloning can be found in *Clone Mappings* and *Creating a new task* chapter.



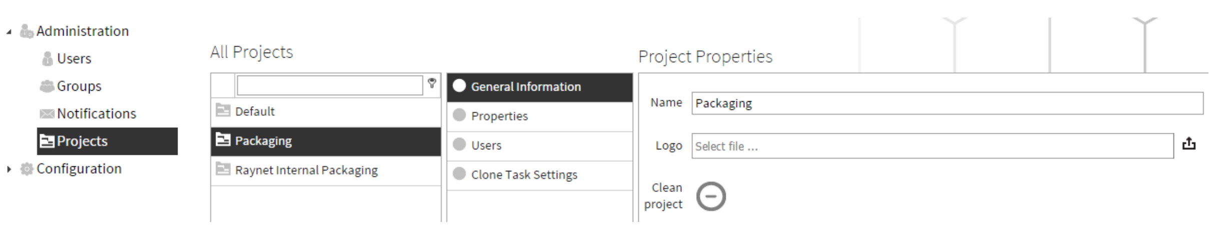
Project Cleanup

Apart from acting as the framework, the root project has got a special permission which allows it to delete all the tasks from a project. To use this feature:

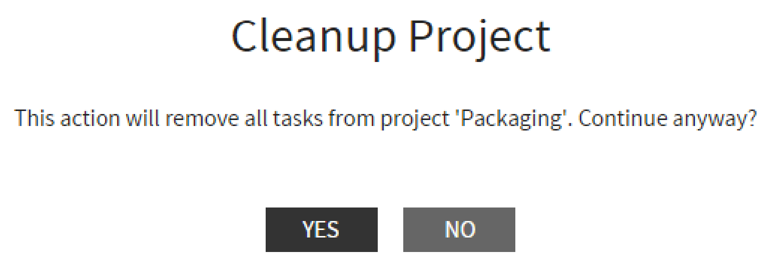
1. Log into the project from which the tasks have to be deleted
2. Go to **Configuration** -> **Basic**
3. Select the **Properties** category and then add **TestMode** property
4. Set the value of **TestMode** property to **True**



5. Log into the default project as root user
6. Select **Administration** -> **Projects** item from vertical navigation bar
7. Select the project to be cleaned and then the **General Information** tab
8. Click on the **Clean Project** icon



9. A warning is shown



10.Click on the **YES** button to confirm the deletion of tasks from the project

Login History

All the login attempts and log out actions are logged by RayFlow and is available to an user via the **Login History** page. Based upon user permission to access this page, the page is available under the **Administration** section of a RayFlow project.

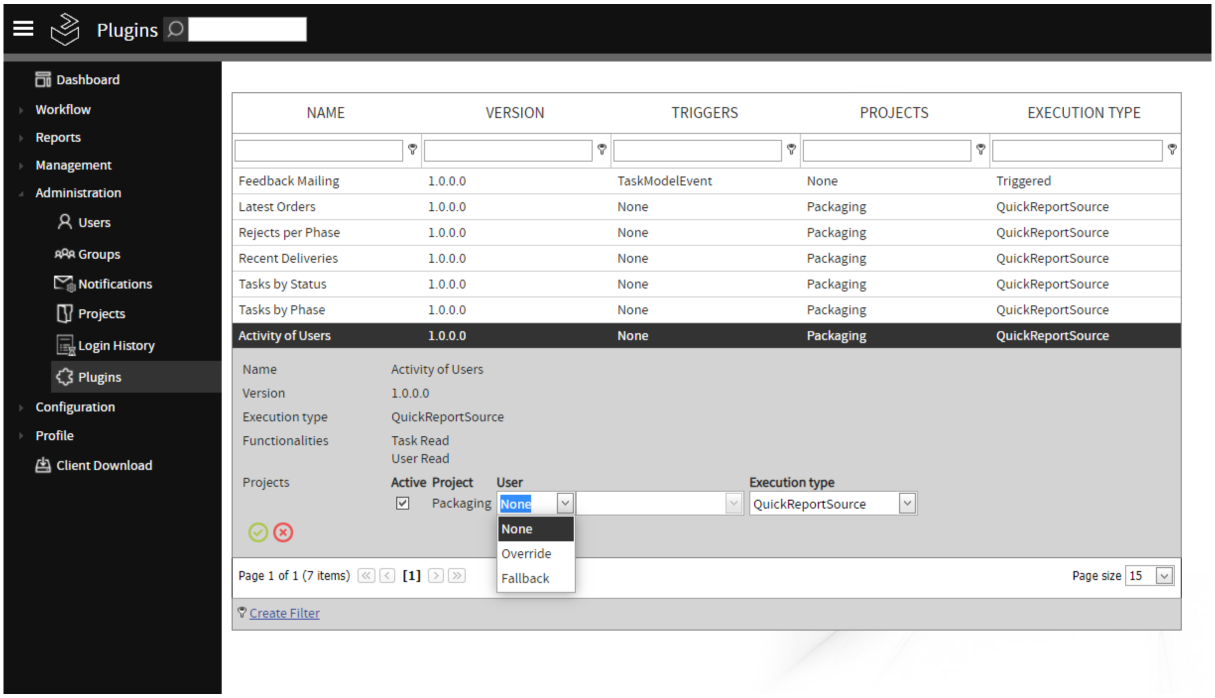
TRY DATE	USER NAME	IN OUT	RESULT
10/1/2015 9:10 PM	Admin	LOGIN	✓
10/1/2015 3:48 PM	Admin	LOGIN	✓
10/1/2015 1:47 PM	Admin	LOGIN	✓
10/1/2015 12:27 PM	Admin	LOGIN	✓
10/1/2015 12:24 PM	Admin	LOGIN	✓
10/1/2015 12:20 PM	Admin	LOGIN	✓
10/1/2015 9:53 AM	Admin	LOGIN	✓
10/1/2015 9:51 AM	Admin	LOGIN	✓
9/30/2015 1:12 PM	Admin	LOGIN	✓
9/30/2015 1:12 PM	ProjectManager	LOGIN	✗
9/30/2015 1:12 PM	ProjectManager	LOGIN	✗
9/30/2015 1:11 PM	packager	LOGIN	✗
9/30/2015 1:11 PM	Admin	LOGOUT	✓
9/29/2015 10:35 AM	Admin	LOGIN	✓
9/28/2015 2:09 PM	QA	LOGIN	✓

Page 1 of 2 (17 items) [1] 2 Page size 15

The history stores last 30 days of entries. You can increase or decrease this limit by adjusting the value of the DATABASE_CLEANUP_LOGIN_PERSIST_PERIOD property. For more information, refer to the Properties section.

Plugins

In the **Plugins** section of the **Administration** section it is possible to configure plugins per project..



When selecting a plugin Information about name, version, execution type, functionalities, and projects are shown. Plugins have exactly those functionalities which are listed in this view. The only editable fields are the fields for the projects. These are used to configure the plugins for the projects.

A project is defined as active by checking the **Active** checkbox of the project. It can be deactivated for a project by unchecking the checkbox for the project.

Be aware:
A plugin will only be shown in a project if it is set to active for the project and if a valid execution type is set.

It is also possible to define a user which is used for the plugin for a project. There are three different options available.

- **None**: The active user is always the user that is used for the plugin.
- **Override**: The user chosen in the dropdown menu next to this menu is always the user that is used for the plugin.
- **Fallback**: The user chosen in the dropdown menu next to this menu will be used as user for the plugin if it is not possible to identify a user that can be used for the plugin in the current session.

The last dropdown menu can be used to select which valid execution type of a plugin should be used. If multiple execution types for a plugin are available all available execution types can be used. There are five different kinds of plugin which are defined by their execution type.

- **Triggered**: Triggered plugins can be either event or timer triggered. They will trigger when the defined event/date occurs.

- **Direct**: Direct plugins can be executed by clicking on the Execute button that is available for a **Direct** plugin.
- **Batch**: Batch plugins can be found in **Batch Processing** where they are added as an additional tab.
- **TaskAttached**: Plugins which are `taskattached` can be found as a new tab in **Task Details**.
- **QuickReportSources**: `QuickReportSources` plugins can be found as **Quick Reports** in the **Report** section of RayFlow.

Warning:
Do not change the **Quick Report Key**! If this key is changed, RayFlow will no longer be able to find the report!

Configuration

This part of the document provides information for RayFlow administrators to configure and manage projects on their RayFlow instance. To achieve desired system state, requirements related to a project should be gathered before starting with the project configuration.

This chapter of the document is divided into sub-chapters which describes configuration of various features in a chronological order. Following are the configuration options available:

- **Phases**: This section of the document describes how to create new phases and assign datafields to them.
- **Datafields**: Information pertaining to creating and managing datafields, field groups, and custom fields can be found in this section of document.
- **Task Types**: In this section new types which can be selected as type for new orders can be created and existing types can be edited.
- **Status**: The status of a task represents its state. Within this chapter a user will find information on different status types and how to create custom status types for their projects.
- **Workflow**: Events and actions leading to movement of a task between phases and change their statuses are defined via the workflow configuration.
- **Basic**: Properties which are required to be defined for certain features to work are configured under the basic configuration page.
- **Category**: Defines different task types to be used within the workflow process.
- **Clone Mapping**: It is possible to clone tasks between projects. To achieve this, a mapping between different datafields of the projects is required to be established.
- **Data Mapping**: With data mapping default field types in the RayFlow reports can be mapped to the data fields in the RayFlow project.
- **Tools**: This section of the document describes how to integrate tools to the RayFlow application
- **Email Templates**: Email templates are used by the notification email feature. This section of the document describes how a user can define or edit templates for various events.
- **Appointment**: Appointment locations can be added in this section. Furthermore it is possible to add a new and edit an existing appointment status.
- **Static Pages**: Static pages for which a tile on the dashboard will be created can be added and edited in this section.
- **License**: Information about the license is shown on this page. Only the root user will be able to see the license information. All other users will only see if there is an activated license.
- **Translations**: This is where translations for everything that can be customized are configured.

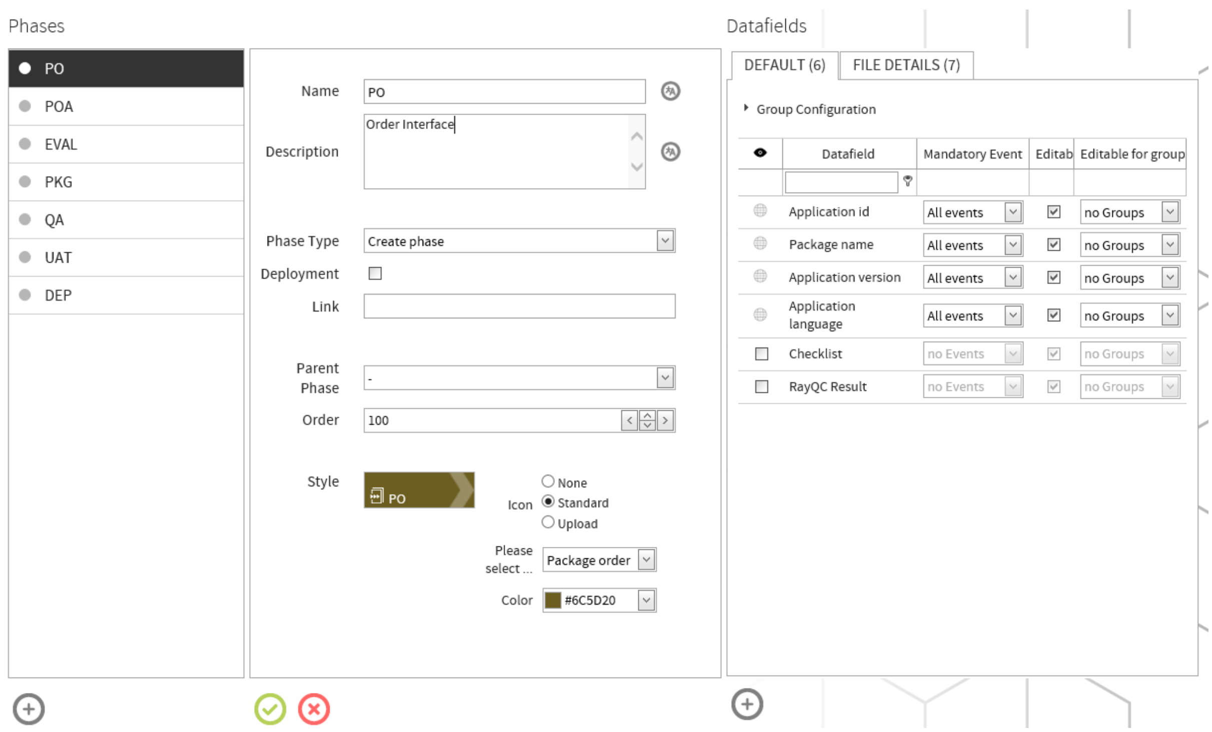
- **File Depots**: On this page the location of the **File Depots** can be configured.

Phases

Phases are the key object in a workflow process. They describe the steps through which a task goes through to achieve the target state. Hence it is very important to recognize these steps, sub-steps and dependencies between them, before starting with the phase configuration.

Phases configuration page

The **Phases configuration** page in the RayFlow web interface is divided into two areas: **Phases** and **Datafields**.



As shown in the image above, under the **Phases** area the existing phases within a project are shown. When a phase from this list is selected, its related configuration is shown to the right. Under the **Datafields** area a list of datafields is shown. Here a user can define behavior properties of the datafield within that selected phase.

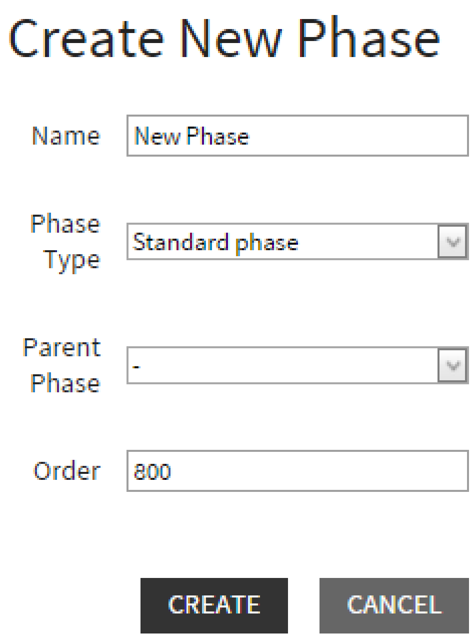
Phase Management

This section of the chapter describes how a new phase can be created, the phase configuration options, and the datafield configuration for a phase.

Creating a new phase

Create a new phase by clicking on the “Create new Phase” icon. This icon is available at the bottom of Phases area.

Clicking on this icon will show the “Create New Phase” dialog. Specify properties of the phase in this dialog.



- **Name**: Short name of the phase. This name is shown on the phase in *process navigation bar*.
- **Phase Type**: The type of the phase is required to be selected from the drop down list. A phase can have one of the following types:

Create Phase

Create Phase or **Data Entry phase** is a unique phase and is only used to fill in the required data as the initial entry point for tasks into the workflow process.

First Phase

As the name suggests, the **First Phase** represents the first phase of a workflow process.

Standard Phase

All the subsequent phases and sub-phases represented in RayFlow as tasks and sub-tasks are classified as **Standard Phase**.

Last Phase

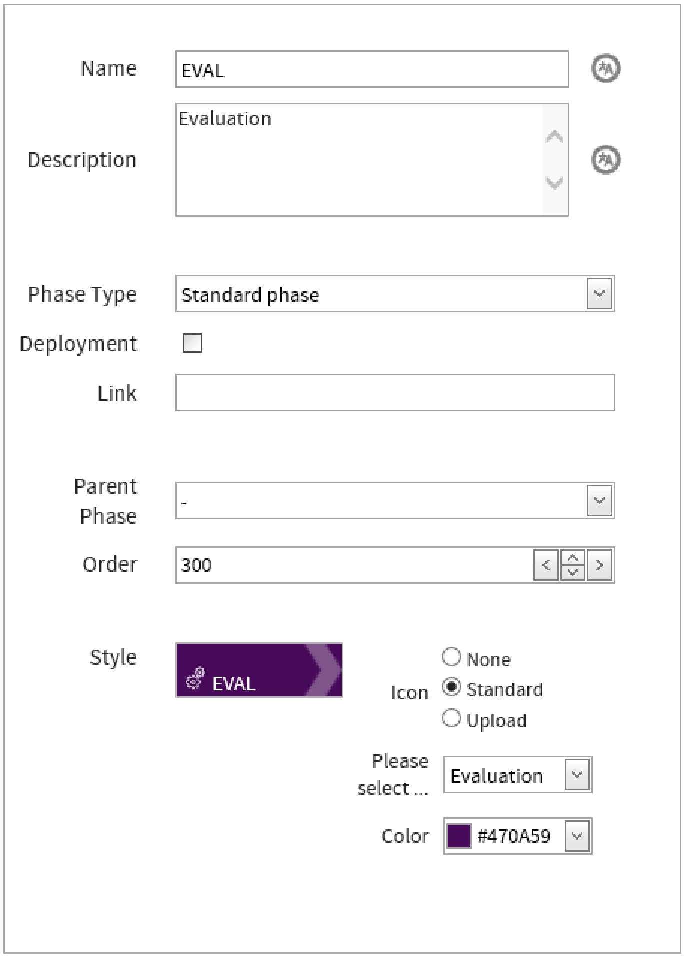
Last phase is a standard phase which represents the last step in a workflow process

- **Parent Phase**: In case of a sub-phase, a parent phase of the sub-phase is selected. This property is available as a drop down field with all existing phases shown as options.
- **Order**: The order number of the phase. This order number represents the position of the phase in a workflow process.

After specifying the properties of the new phase, click on the **Create** button to add this new phase to the **Phase**” list. Additional configuration options for a phase are described under the *Phase Configuration* topic.

Phase Configuration

When a phase is selected from the phase list which is available under the Phases area, the related phase properties are shown on the right side.



In addition to the properties defined while creating the task, two additional properties are available to be configured:

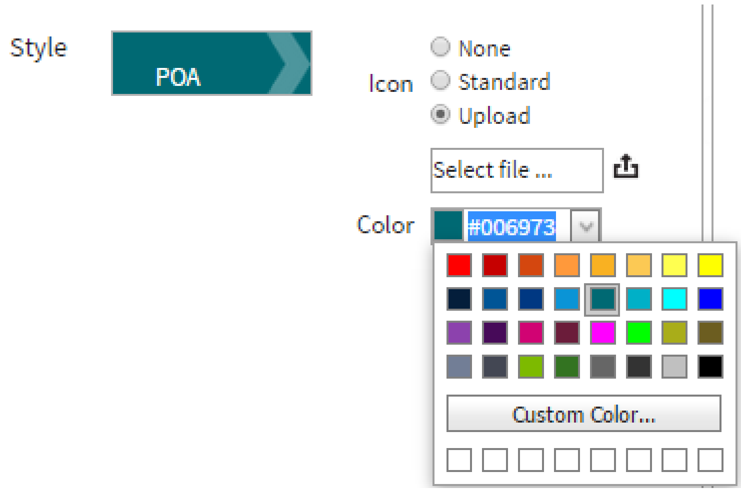
Description: Allows a user to provide a brief description of the phase. As the name of the phase is shown in the phase icon, it cannot be too long. Hence there is a description of the phase, which provides more information on it.

Deployment: When the deployment checkbox is activated for a phase, then a deployment icon is added to each of the files added to the task within that phase. If the **Deployment Settings** are correctly configured, then clicking on this icon will send the file to the deployment agent for distribution to the target clients.

Style: This configuration item allows a user to define the visibility style of a phase within the process navigation bar. This item has two parts:

- **Icon**: A user can use an icon that should be shown in the phase tile. It is not mandatory to provide an icon, but if desired, a user can either select an icon from the built-in icons or upload and use a custom icon image.

- **Color**: Allow a user to select the color of the phase tile. This item is supported by a color selector tool.



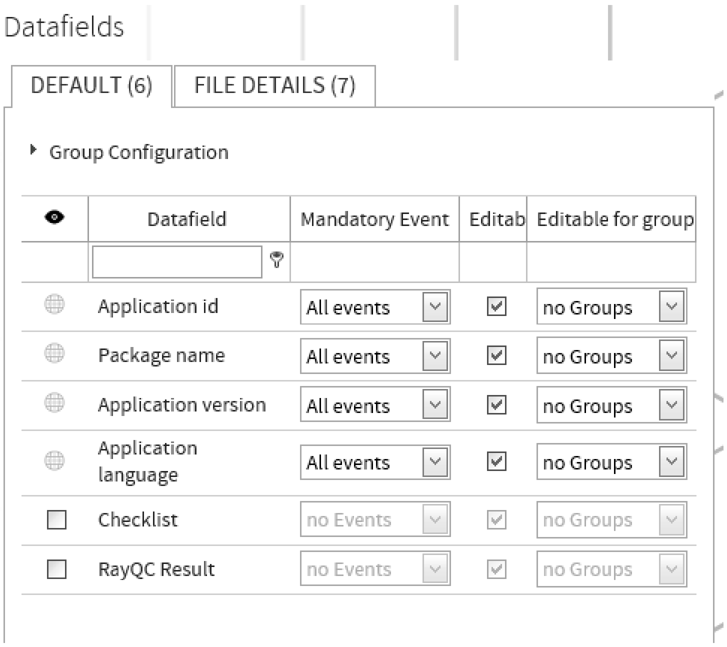
Saving and discarding the changes

Save changes in the phase configuration by clicking on the **Save changes** icon. This icon is only activated when a change is made to any of the phase property.

Discard the changes by clicking on the **Reset changes** icon.

Datafield assignment

A list of datafields is shown under the datafields area of the **Phases configuration** page. This area allows the user to define the behavior of a datafield within the selected phase. Additionally, datafields which are not global in nature can also be assigned to the selected phase through this area. More information on datafields and its visibility options can be found in the *Datafields* chapter of this document.



Visibility of a datafield

A global datafield is shown in all phases of the workflow process. Such datafields are shown with a globe icon. A datafield which is not global is shown with a checkbox. Selecting this checkbox will assign the datafield to the selected phase.

More information on datafields and its *properties* can be found in *Datafields* chapter of this document.

Mandatory Event

For a datafield, selecting an event from the drop down list under the **Mandatory Event** column will make the datafield mandatory for that particular event, e.g., in case a user wants input to a datafield to be mandatory, if a user wants to change its status to finished. For more information on events, please refer to the *Workflow* chapter of this document.

Editable

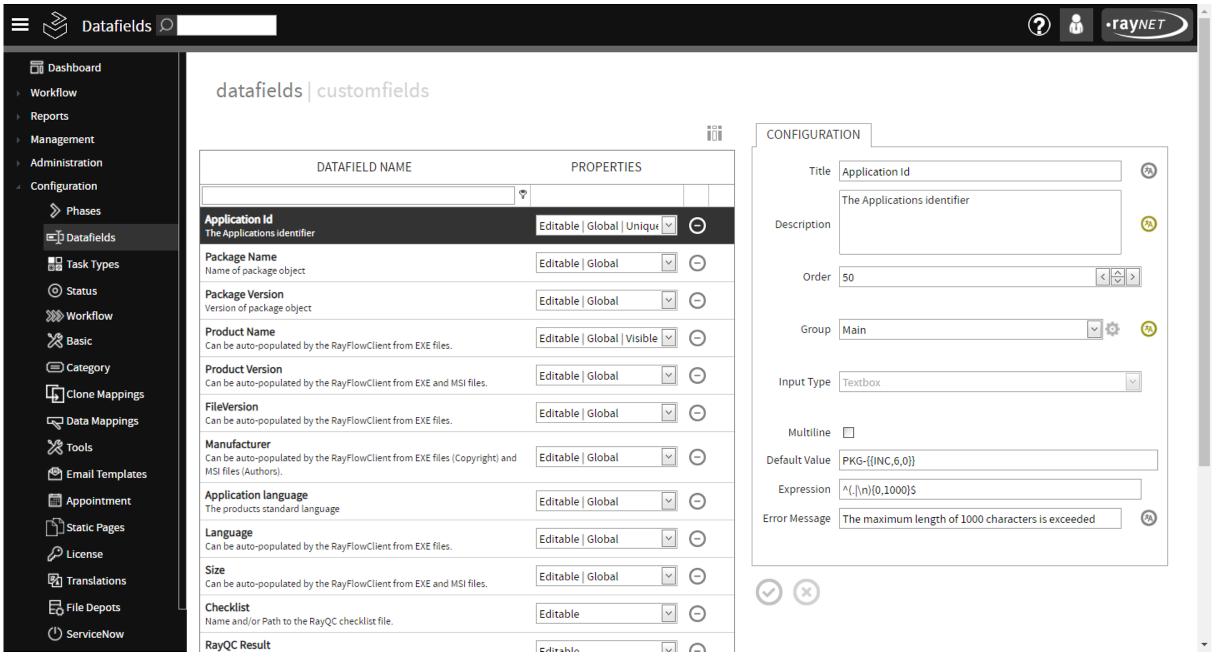
A user can control the possibility to edit a datafield within a phase. A datafield for which the **Editable** property is not set cannot be edited in the selected phase. An editable datafield can be edited by all users with edit permission to the selected phase. However, if only a certain permission group is selected from the **Editable for groups** drop down menu, then only that user group will be able to edit that datafield and others will not.

Datafields

The **Datafields** page in RayFlow web interface allows a user to define datafields and custom fields to be used within the project. This section of the document describes how a user can create and manage normal datafields for a project. Information of custom fields is available in the *Custom Fields* section of this document.

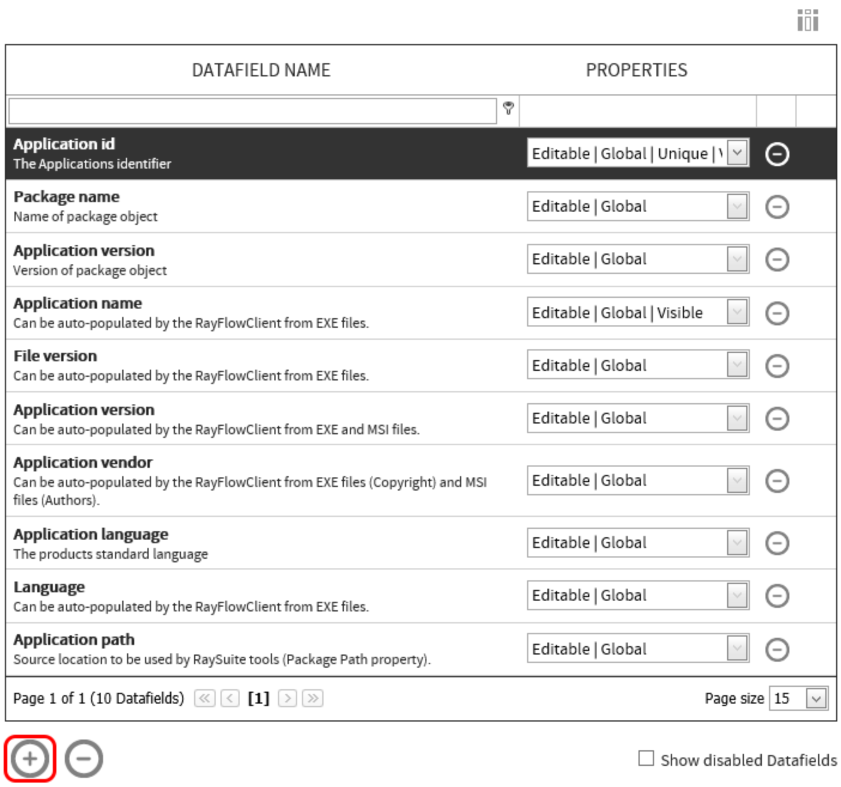
A datafield defines a user input field which can either be used within each phase or in one or more phases. Currently RayFlow supports datafields of the types text box, drop-down list, and multi-drop-down list.

The user interface for this feature is divided into two areas: **Datafield** list and Configuration. The **Datafield** list shows already existing datafields and its properties. Configuration related to a datafield that is selected from the datafield list is shown under the **Configuration** area.

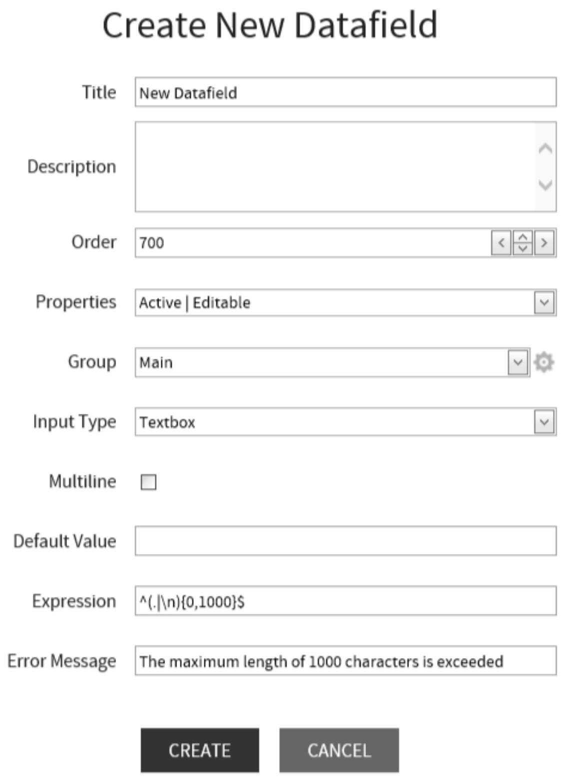


Creating a datafield

To create a new data field click on the **Create new Datafield** icon. This icon is available at the bottom of the data fields this.



The **Create New Datafield** dialog is shown. Configuration properties for the datafield are provided via this dialog. After specifying the datafield properties, click on the **Create** button to finalize adding the datafield to the datafield list.



- **Title**: Name of the datafield.
- **Description**: Brief description of the datafield.
- **Order**: Order number of the datafield. This order number defines the order in which the datafield would appear in relation to other datafields.
- **Properties**: Properties of the datafield can be selected from the drop down list. The following properties are available:

  - **Active**: Defines if a field is enabled or not. This option is only available in the **Create New Datafield** dialog.
  - **Autocomplete**: Remembers previously entered values.
  - **Path selection**: The datafield will offer a **Browse** button (the Browse button is only available in RayFlow Client).
  - **Editable**: In all phases the datafield is editable by default.
  - **Email**: The datafield is listed by the `$DATA_FIELD$` e-mail placeholder.
  - **Global**: The datafield is available in all phases.
  - **Unique**: Enforces that the field value cannot be same as an already existing value.
  - **Visible**: When a datafield is visible it will be available as acolumn in the default phase tables. Be aware, that the visible datafield property differs from the phase visiblity of local datafields.

Note:
The tracking task name is created by the datafields with the visible property. If no data mapping has been set, the name in the tracking comes from the data mapping and additionally from the custom fields.

- **Group**: Allows the association of the datafield to a field group. This configuration item only allows an existing group to be selected. For information on how to create new group, please refer to the *Group* section of this chapter.

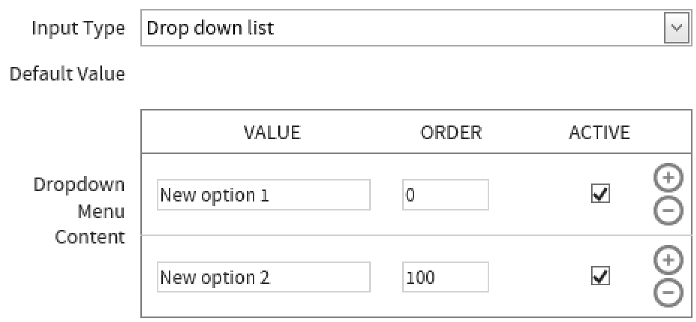
- **Input Type**: Defines the type of the datafield. RayFlow allows a user to create data field of types: Text, Drop-down menu, Drop-down menu multi and checkbox.

Following configuration items are only shown for a datafield of the type text box:

- **Multiline**: Allows multiple line input to the datafield when checked.
- **Default Value**: A default value for the datafield can be defined. The given value can also use regular expression.
- **Expression**: Regular expression to control the input value to the datafield can be defined.
- **Error Message**: An error message that will be shown if the input to the datafield is not in accordance with the regular expression.

The following option is shown for the datafield of the types drop down menu and multi drop down menu.

- **Dropdown Menu Content**: This option is provided for uses to define options for the drop down list.



New options can be added by clicking on the **Add new datafield option** icon. And an existing option can be removed by clicking on the **Delete this datafield option** icon. An option for which the Active checkbox is not checked, that option will not be shown in the drop-down list.

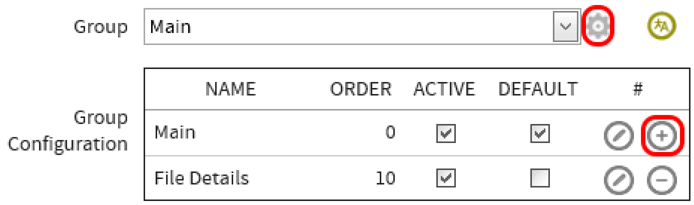
Group

This allows for grouping of datafields within a phase. At least one datafield needs to be associated with it, in order for the group to be displayed within the phase. Main is the default group to which all the datafields are added. Please note, that in case a project has got multiple field groups, then only one of them can be a default group and this group will always be shown first within the phases.

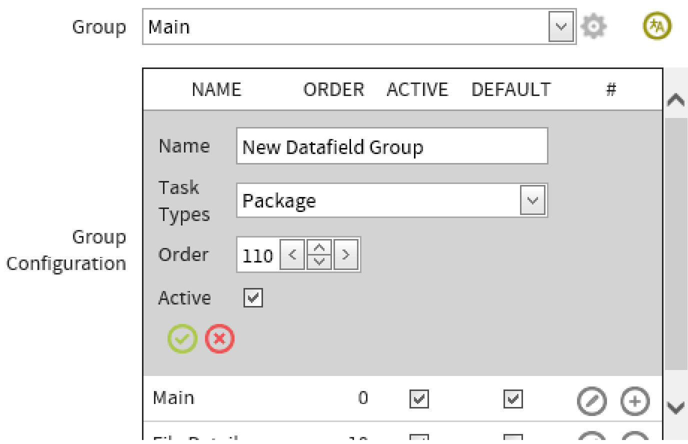
To add a datafield to a new group:

1. Select the datafield from the **Datafields** list. The related configuration is shown under the configuration area

2. In the configuration area, locate the group configuration property. Next to this property is a cog-wheel icon. This icon will show the **Group Configuration** item when selected.

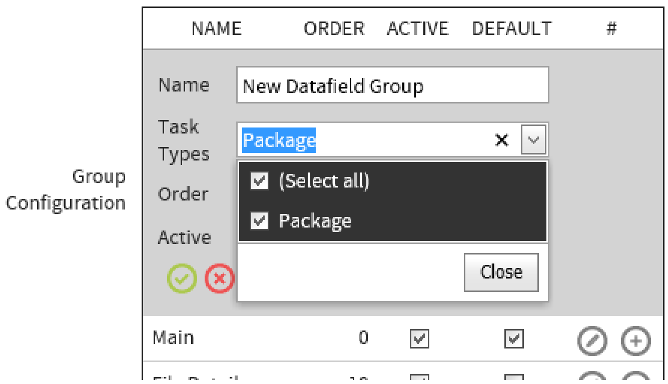


3. Click on the **Create New Datafield** group icon to add a new group. This will show the group creation dialog.



4. Specify following properties of the group:

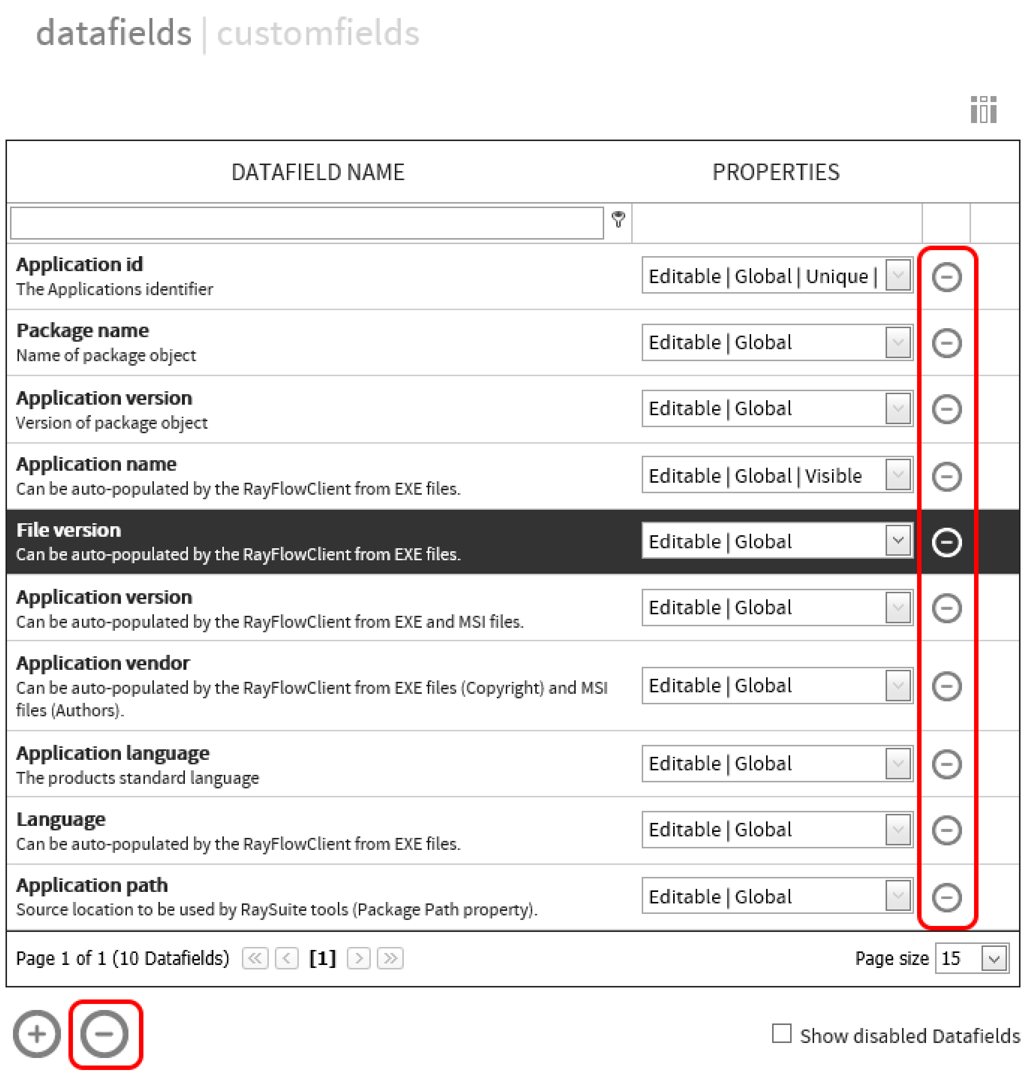
- **Name:** Name of the Group
- **Task Types:** Task Types can be added to the selected group by using the dropdown menu.
- **Order:** Order number of the group. The order number controls the order in which this group will be shown in relation to other groups. The default group will always be shown first
- **Active:** A datafield can only be added to an active group



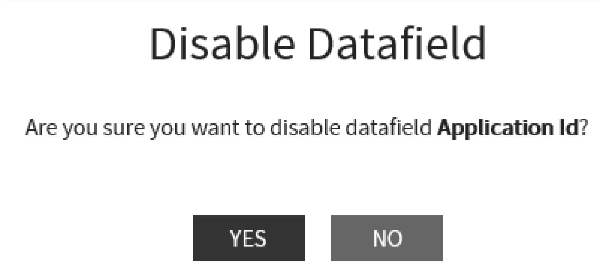
5. Click on the **Save** icon to finalize creating the new group

Disable a Datafield

A datafield cannot be deleted from the database. However, a datafield can be disabled within a project. A datafield can be disabled by using the **Disable Datafields** icon.

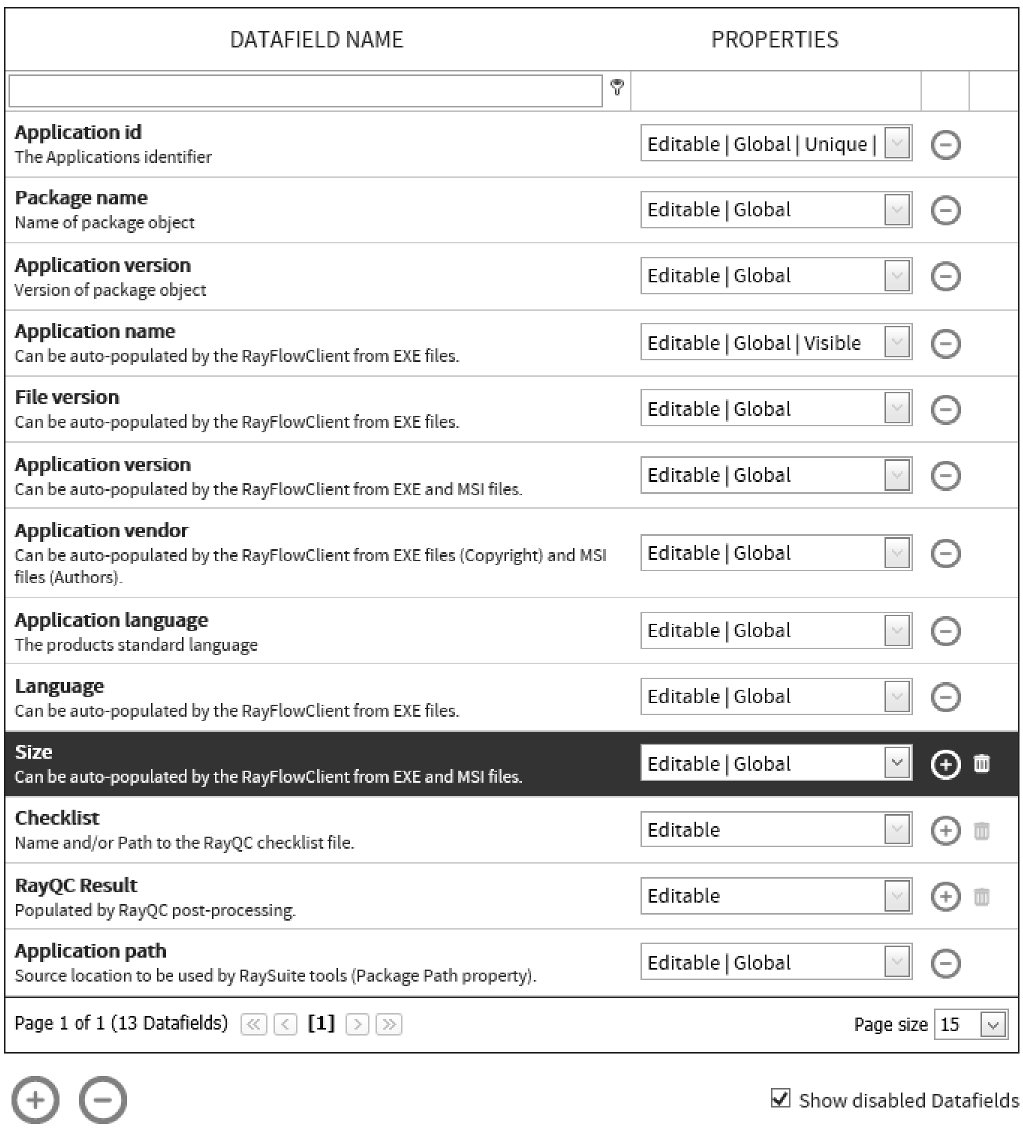


After selecting a datafield from the datafield list, when a user clicks upon the **Disable Datafields** icon, a confirmation notification is shown.



Click on the **YES** button to disable the datafield.

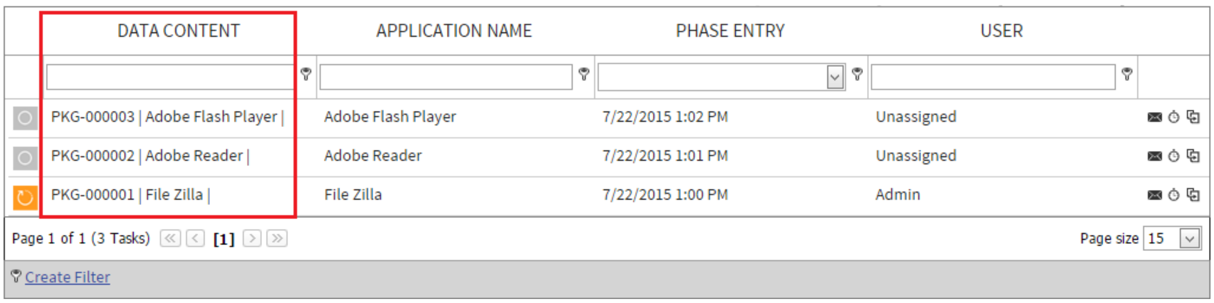
A disabled datafield is not shown in the datafields list. They can be shown in the list by activating the **Show disabled Datafields** checkbox. Disabled datafields are shown in the list with a gray trashcan icon.



Custom Fields

The **Custom Field** feature allows a user to define column headers for which the content beneath it is dynamically updated from the backend database. These fields utilize SQL queries to fetch data from the RayFlow database.

Normal column headers are basically datafields, which have been defined for the project by a user. Values shown under these column headers are static properties a user has defined for each of the respective packages or tasks. On the other hand, a custom field based column header has an ability to combine data from different database table and show it within phases as task property.



DATA CONTENT	APPLICATION NAME	PHASE ENTRY	USER
PKG-000003 | Adobe Flash Player |	Adobe Flash Player	7/22/2015 1:02 PM	Unassigned
PKG-000002 | Adobe Reader |	Adobe Reader	7/22/2015 1:01 PM	Unassigned
PKG-000001 | File Zilla |	File Zilla	7/22/2015 1:00 PM	Admin

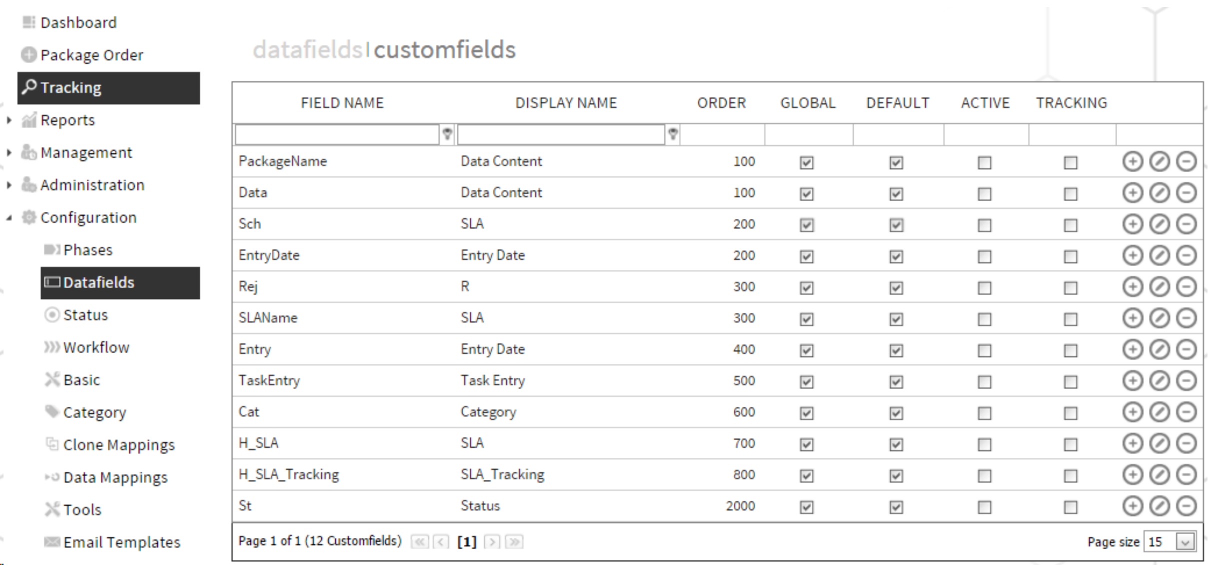
A custom field can also be used to show information on the *Tracking* page. It should be noted that a single custom field can either be used within phases as column header or to display information on the tracking page but not both.

This part of the document describes how to add and use custom fields within a project.

Working with Custom Fields

The Custom Fields Section1

The custom fields section is part of the **Datafields configuration** page. This section can be accessed by navigating to **Configuration** -> **Datafields** item and then selecting the **customfields** tab on the datafields page.



FIELD NAME	DISPLAY NAME	ORDER	GLOBAL	DEFAULT	ACTIVE	TRACKING
PackageName	Data Content	100	☑	☑	☐	☐
Data	Data Content	100	☑	☑	☐	☐
Sch	SLA	200	☑	☑	☐	☐
EntryDate	Entry Date	200	☑	☑	☐	☐
Rej	R	300	☑	☑	☐	☐
SLAName	SLA	300	☑	☑	☐	☐
Entry	Entry Date	400	☑	☑	☐	☐
TaskEntry	Task Entry	500	☑	☑	☐	☐
Cat	Category	600	☑	☑	☐	☐
H_SLA	SLA	700	☑	☑	☐	☐
H_SLA_Tracking	SLA_Tracking	800	☑	☑	☐	☐
St	Status	2000	☑	☑	☐	☐

This section allows a user to add, modify, and delete a custom field. Existing custom fields are listed in this section. Their properties, **Field Name**, **Query Name**, **Order**, **Global**, **Default**, **Active**, and **Tracking**, are shown under the respective column headers.

- **Global**: A custom field of type **Global** is available for all the active users within the project. If this property is not selected, then the custom field will only be available to the user who has created it
- **Default**: A custom field for which this property is active, will be available as column header within the task view
- **Active**: Allows enabling and disabling a custom field
- **Tracking**; When selected, the custom field information is shown in the **Tracking** view. It should be noted that a custom field can either be used within the task view or tracking. Hence **Default** and **Tracking** should not be selected together

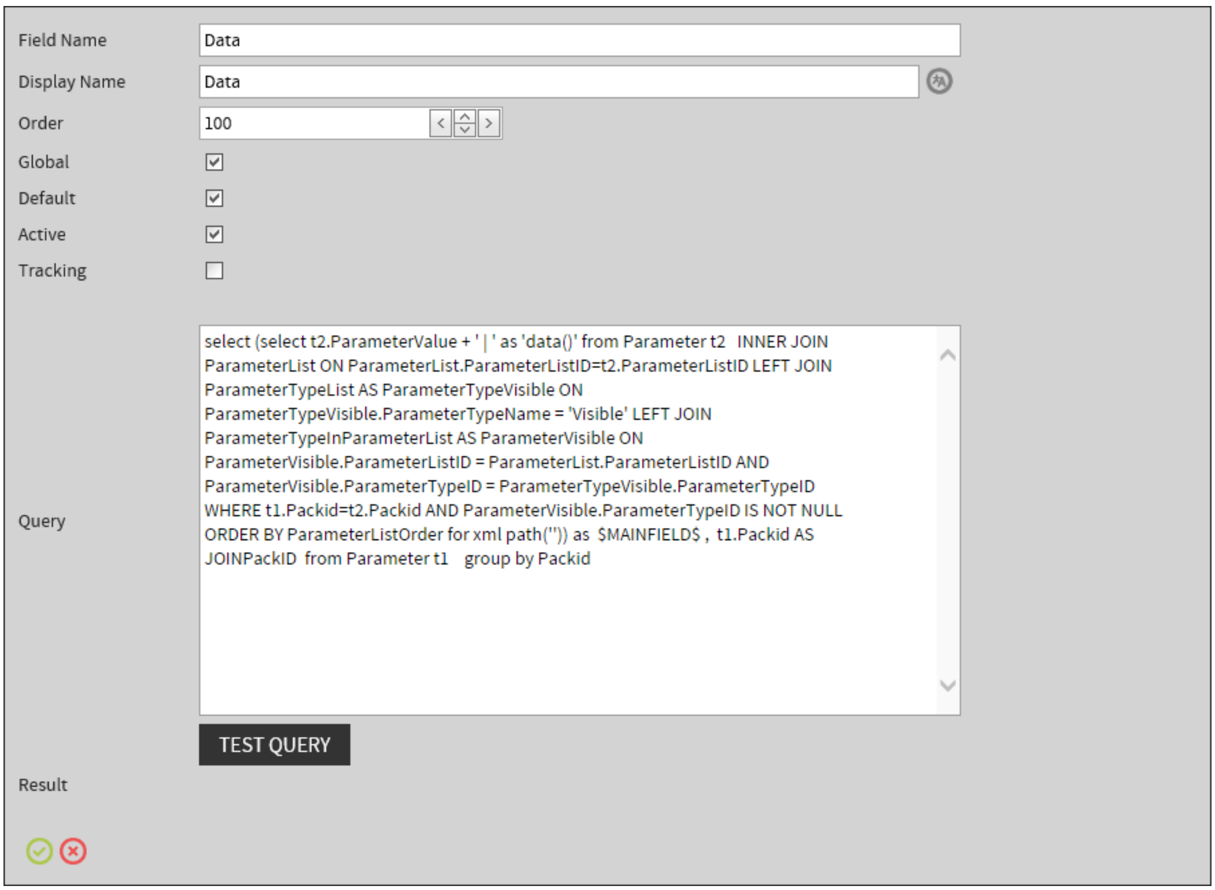
It should be noted, that creating a custom field will require knowledge of the RayFlow database schema and SQL scripting skill.

Adding a new custom field

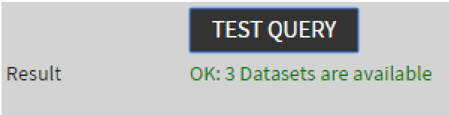
1. Go to **Configuration** -> **Datafields** and select customfields:
 Custom Field Editor is now opened

2. Click on the **Add** button

3. Enter the properties of the custom field as shown in the image below and the SQL query which will be used to fetch data from the RayFlow database.



4. Click on the **Test Query** button to check if the query is working.

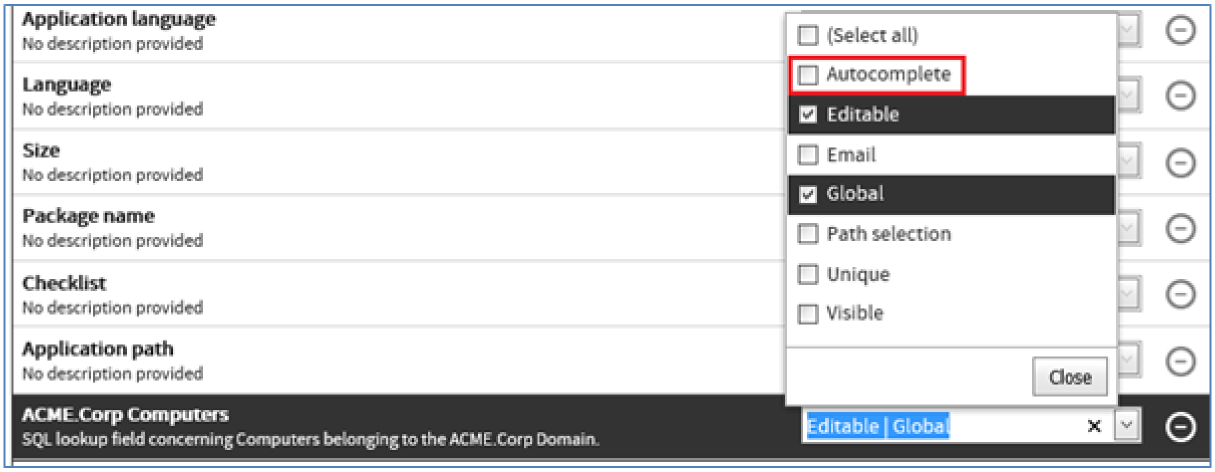


5. Click on the **Save** button to finalize adding the custom field to the view.

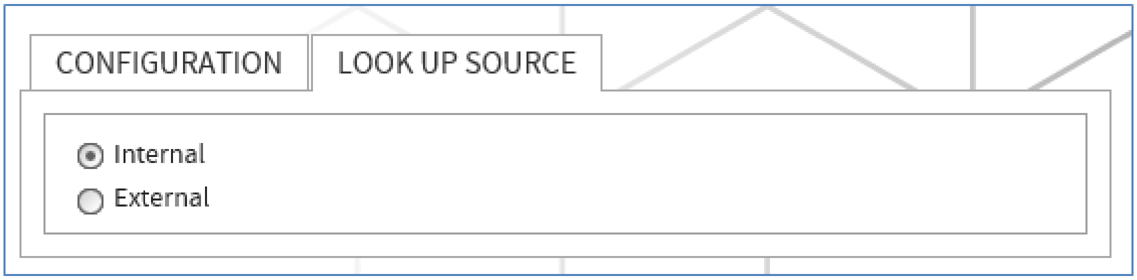
Datafield Look Up Source Configuration

The following chapter describes how to configure the **Look Up Source** of a datafield of the text type. By changing the **Look Up Source** a datafield can be configured to offer values that are derived from a SQL query.

To gain access to this feature, a text datafield must be given the **Autocomplete** datafield property.

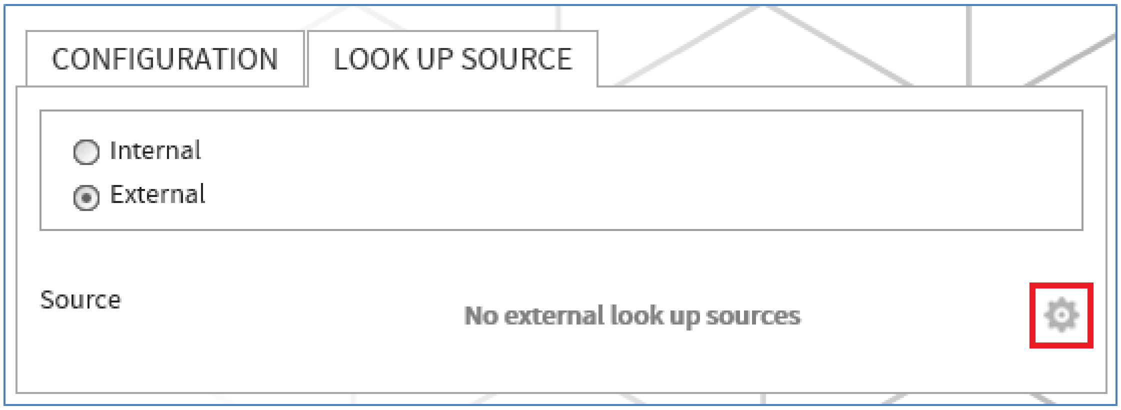


After enabling this option, the **LOOK UP SOURCE** tab is shown next to the **CONFIGURATION** tab.

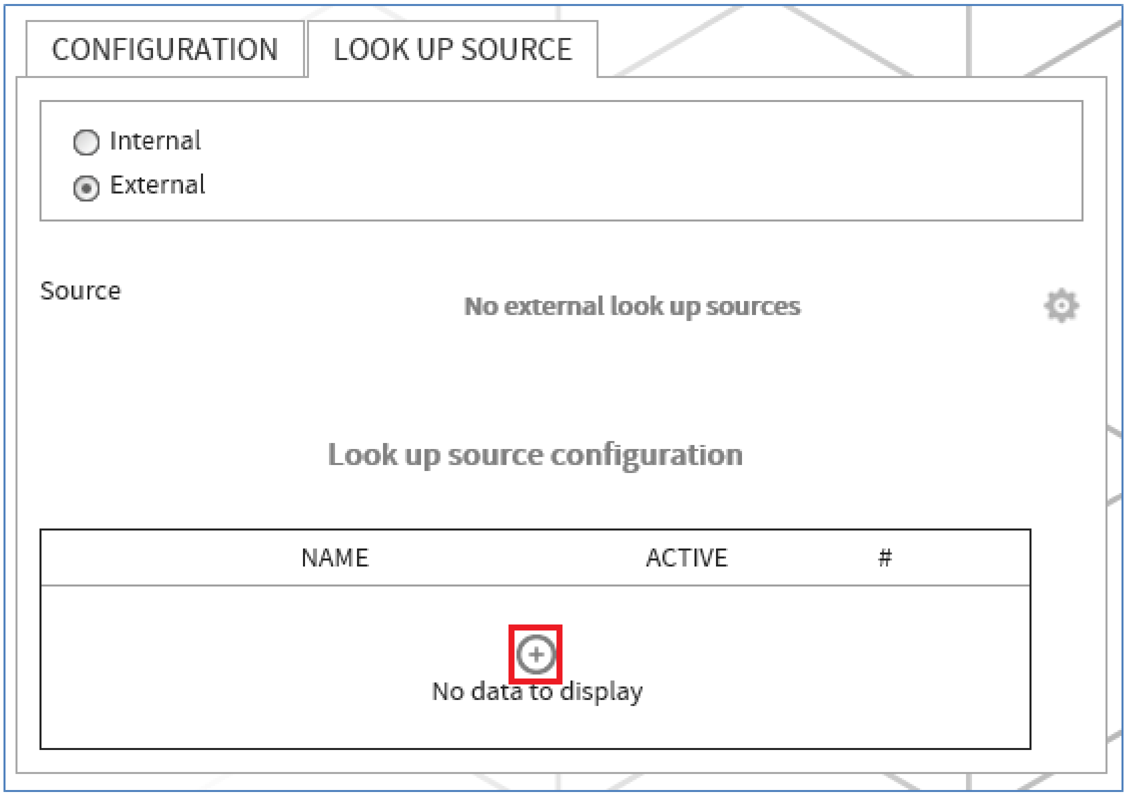


If the **Internal** option is selected, the datafield will function in its normal autocomplete mode, remembering all values that are entered into it when a task is either created or edited.

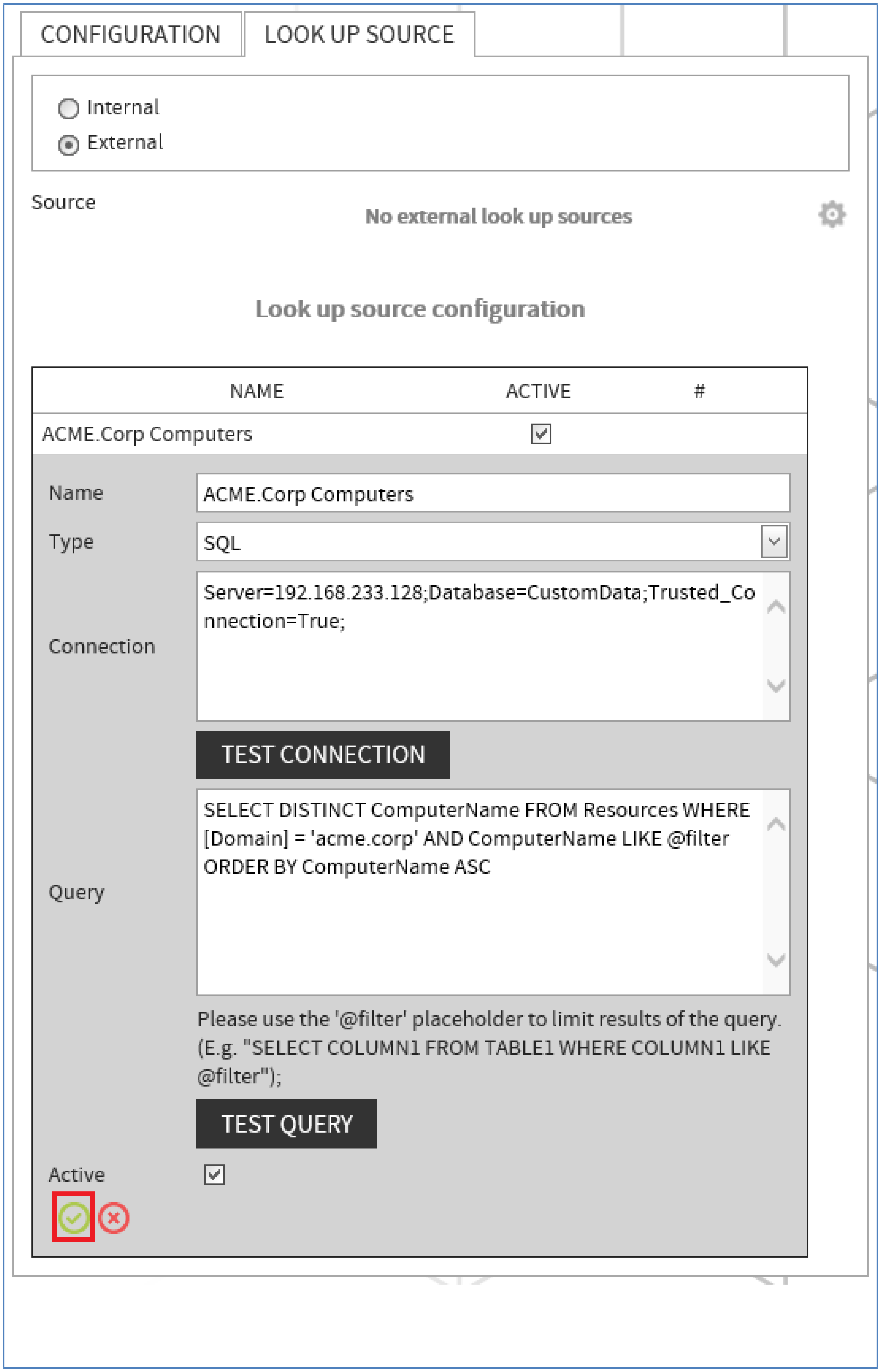
Selecting the **External** radial button displays any existing external look up sources.



Pressing the **Edit look up source** icon displays the **Look up source configuration** panel.



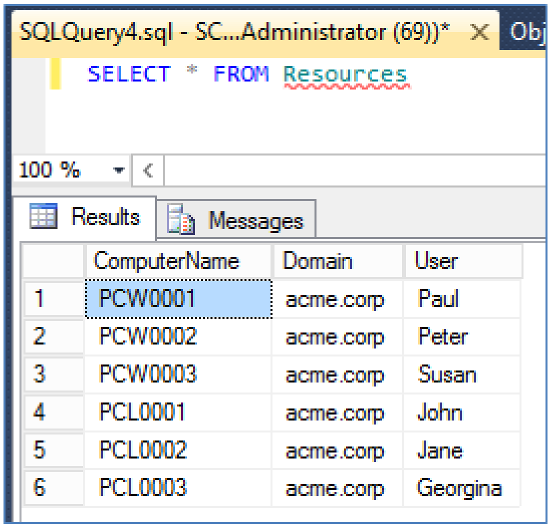
Pressing the **Create new Datafield Group** icon allows for the creation of a new SQL query based look up source.


CONFIGURATION
LOOK UP SOURCE
Internal
External
Source
No external look up sources
Look up source configuration
NAME
ACTIVE
#
ACME.Corp Computers
Name
ACME.Corp Computers
Type
SQL
Connection
Server=192.168.233.128;Database=CustomData;Trusted_Connection=True;
TEST CONNECTION
Query
SELECT DISTINCT ComputerName FROM Resources WHERE [Domain] = 'acme.corp' AND ComputerName LIKE @filter ORDER BY ComputerName ASC
Please use the '@filter' placeholder to limit results of the query. (E.g. "SELECT COLUMN1 FROM TABLE1 WHERE COLUMN1 LIKE @filter");
TEST QUERY
Active

The following is possible using a SQL query:

- The database can either reside locally on the same server as RayFlow or on a seperate server.
- Both authentication methods, SQL and Windows authentication, can be used.
- Queries that merge multiple columns within the **SELECT** statement can be utilized to display the merged values as look up result within the datafield.
- The connection string and the query can both be tested before the configuration is saved.

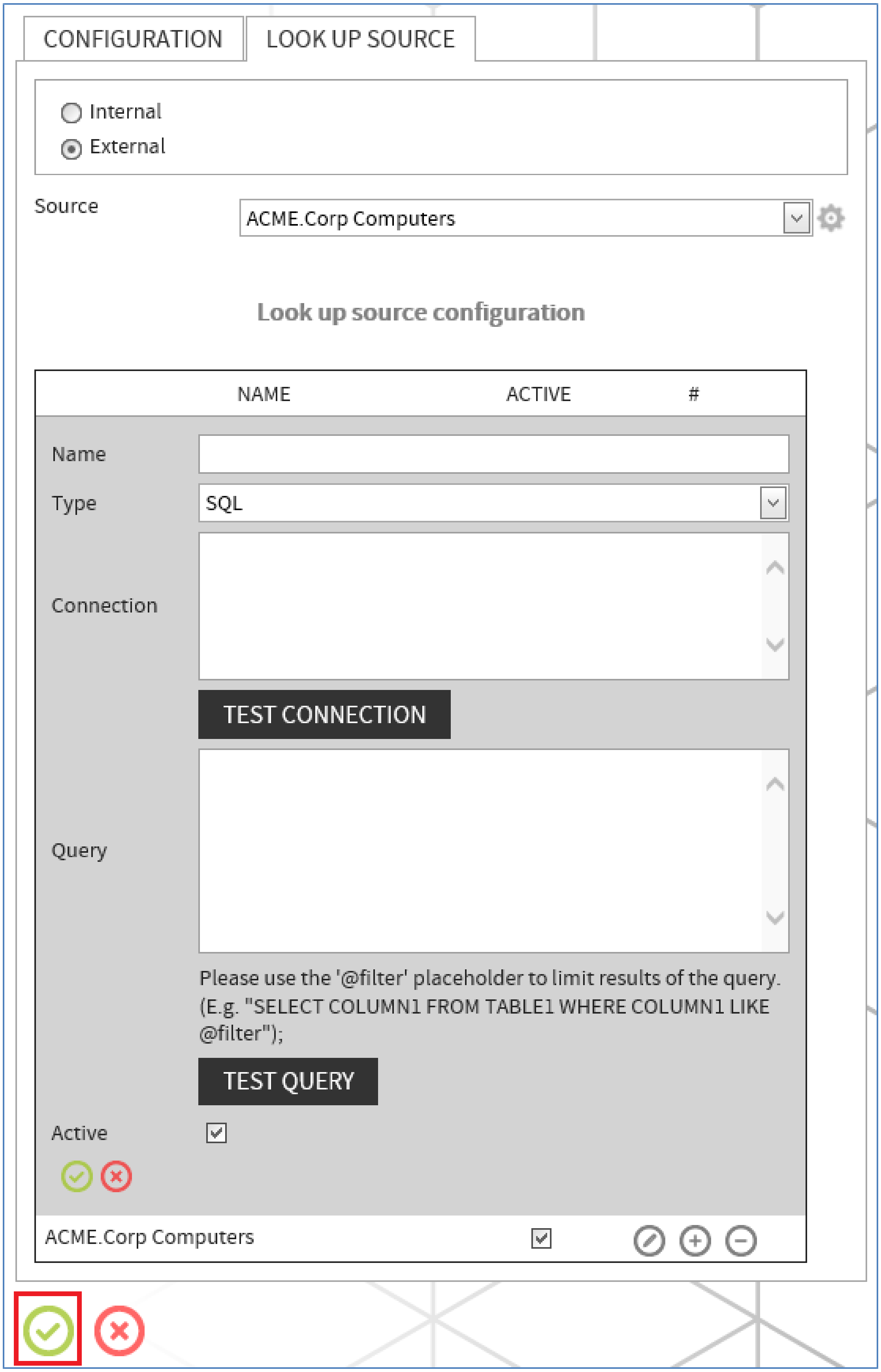
The following example database which only contains a single table is targeted by the query above:



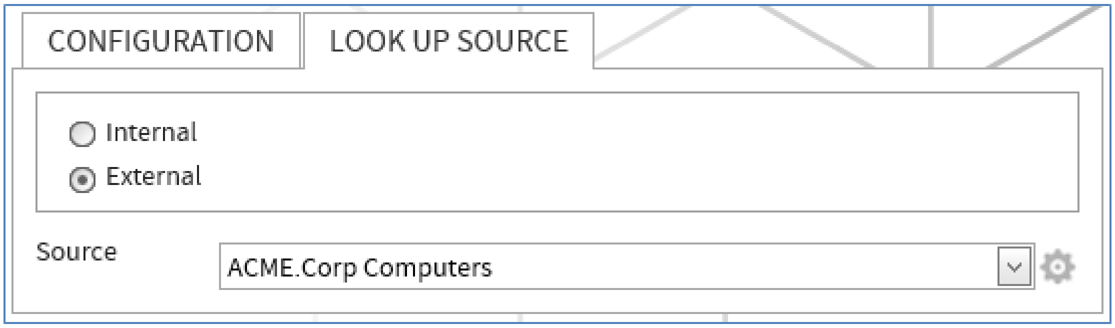
	ComputerName	Domain	User
1	PCW0001	acme.corp	Paul
2	PCW0002	acme.corp	Peter
3	PCW0003	acme.corp	Susan
4	PCL0001	acme.corp	John
5	PCL0002	acme.corp	Jane
6	PCL0003	acme.corp	Georgina

Click on the **Save** icon to save the look up source.

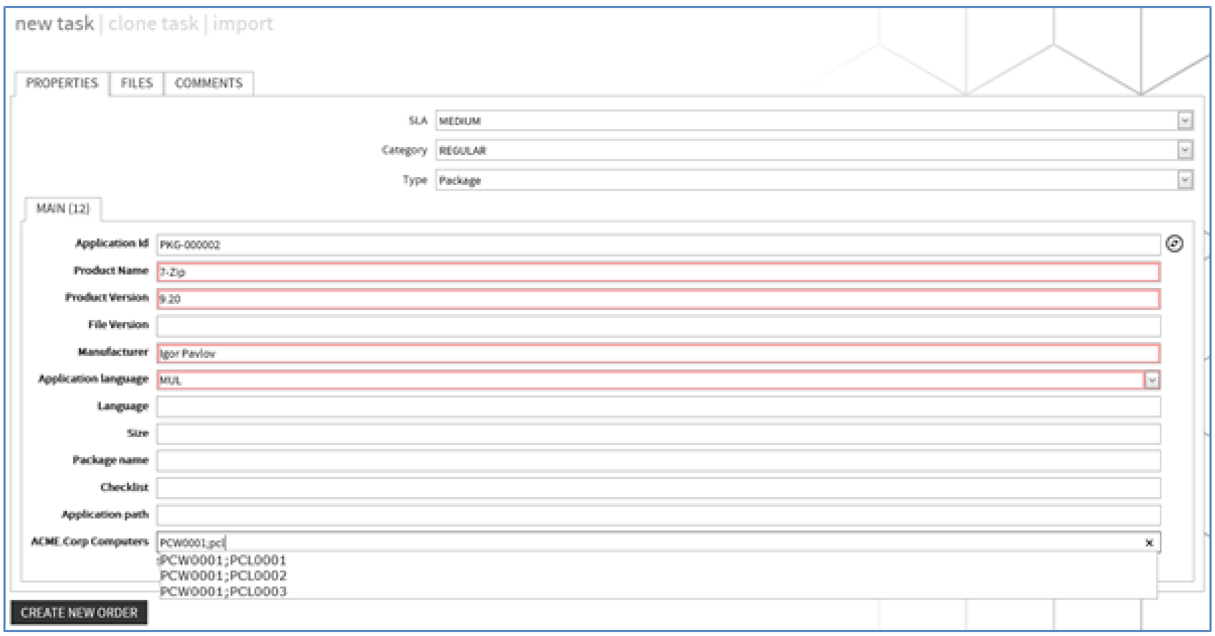
Either option will allow for the creation of another source or finally saving or canceling the datafields recent configuration.


CONFIGURATION
LOOK UP SOURCE
Internal
External
Source
ACME.Corp Computers
Look up source configuration
NAME
ACTIVE
#
Name
Type
SQL
Connection
TEST CONNECTION
Query
Please use the '@filter' placeholder to limit results of the query. (E.g. "SELECT COLUMN1 FROM TABLE1 WHERE COLUMN1 LIKE @filter");
TEST QUERY
Active
ACME.Corp Computers

To save the configuration of the datafield click on the **Save** icon.



After three characters have been entered in the datafield, look up results will be offered.



Multiple values can be added by entering a semi-colon after one of the look up results has been selected.

Datafield Value to Command Line Argument Interpretation

This chapter describes how datafield values from RayFlow are passed into a command line as argument or as part of an argument. The RayFlow server interprets datafield values as is described below.

Single Datafield Usage

A single datafield value that does not contain any white space characters is directly passed as an argument. Those datafields that contain one or more white space characters are interpreted as argument and therefore automatically embraced with quotation mark characters. Therefore, it is not necessary to enter quotation marks into a datafield value. This is shown by the following examples.

Example 1:
Datafield1 = Value1; Argument1 = #Datafield1# = Value1

Example 2:
Datafield2 = Value 2; Argument2 = #Datafield2# = "Value 2"

It is possible to embrace the argument placeholders by quotation marks hard-coded inside the Tools configuration. If this is done, the quotation marks are always set.

Example 3:
Datafield1 = Value1; "Argument1" = "#Datafield1#" = "Value1"

Example 4:
Datafield2 = Value 2; "Argument2" = "#Datafield2#" = "Value 2"

Be aware:
If a datafield value is about to be used as an argument, entering quotation marks into the datafield might lead to an error because the quotation marks will be doubled!

Combining Multiple Datafields in an Argument

Different datafield values can be combined into one bundled argument. For example, this can be used if a path should be passed into a command line. If this is the case, the bundle of argument placeholders need to be embraced by quotation marks inside the related Tools configuration.

Example:

Datafield1 = `C:\Windows`
Datafield2 = `notepad.exe`
Datafield3 = `Spaced name\notepad.exe`

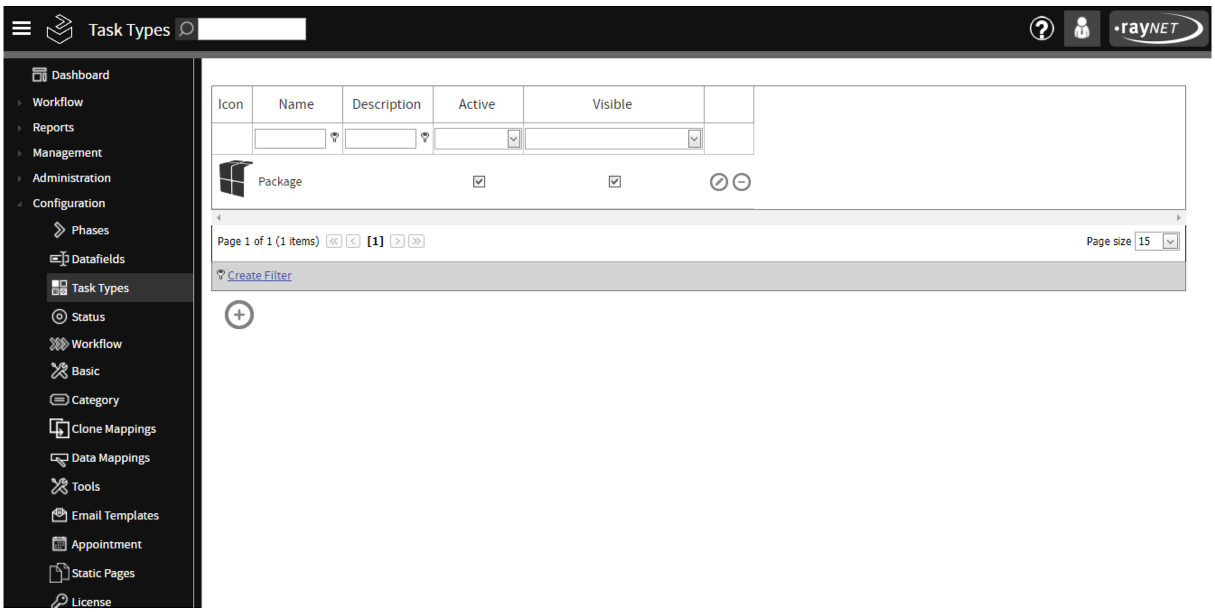
"Argument3" = "#Datafield1#\#Datafield2#" = "`C:\Windows\notepad.exe`"
"Argument4" = "#Datafield1#\#Datafield2#" = "`C:\Windows\Spaced name\notepad.exe`"

Note:
When an argument which contains white spaces is used inside a multi-datafield expression which is embraced by quotation marks, RayFlow will realize this and no

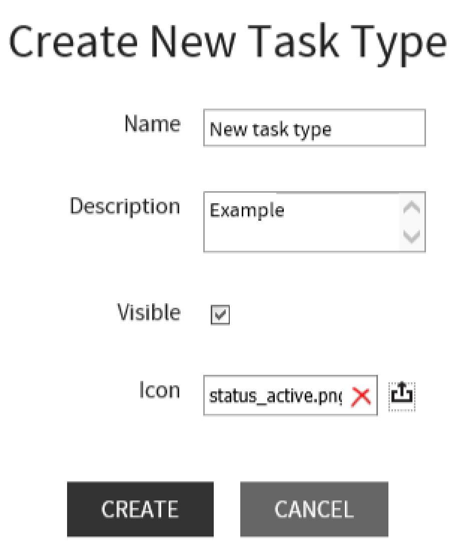
additional quotation marks will be used inside of the combined argument bundle.

Task Types

The **Task Types** configuration section enables users to create and configure the task types which are available in a project. The types configured in this section are available in the **Type** dropdown menu when ordering a package.



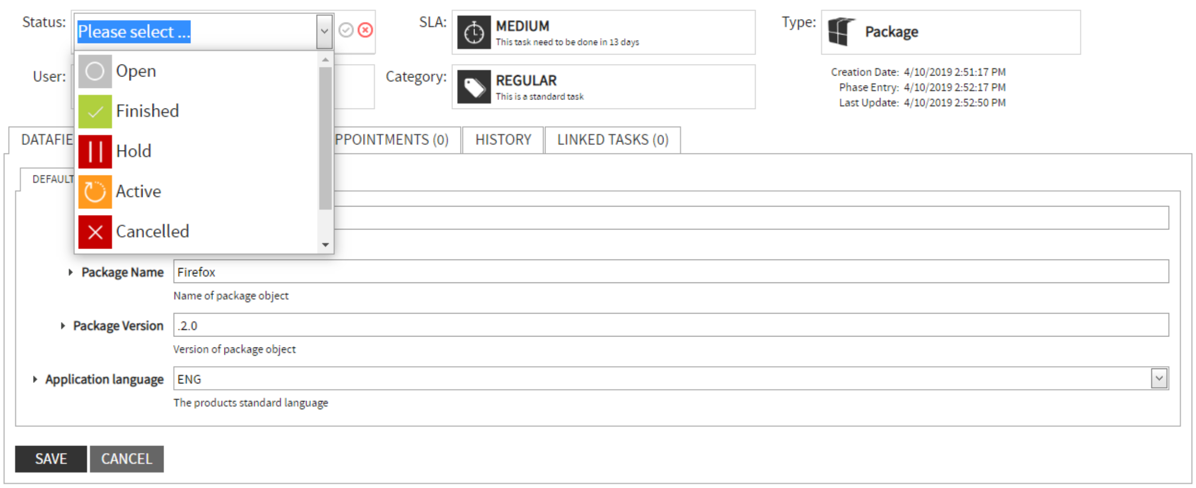
A new task type can be created by clicking on the button. An existing task type can be edited by clicking on the button and deleted by clicking on the button.



The following settings are available when creating a new task: **Name**, **Description**, **Visible**, and **Icon**. The Name of the task type will be listed in the **Type** dropdown menu when ordering a package. The visibility of the type can be configured using the **Visible** checkbox. Be aware, that an icon is necessary to create a new task type. If the **Icon** field is left empty, it will not be possible to create a new task.

Status

Status defines the current state of a task within a phase. The status configuration page of RayFlow allows its users to define different statuses a task can hold within their RayFlow project. Depending upon the *workflow definition* a change of the status of a task in a particular phase is an event which triggers a certain action, e.g., user assignment, deletion of task, etc.

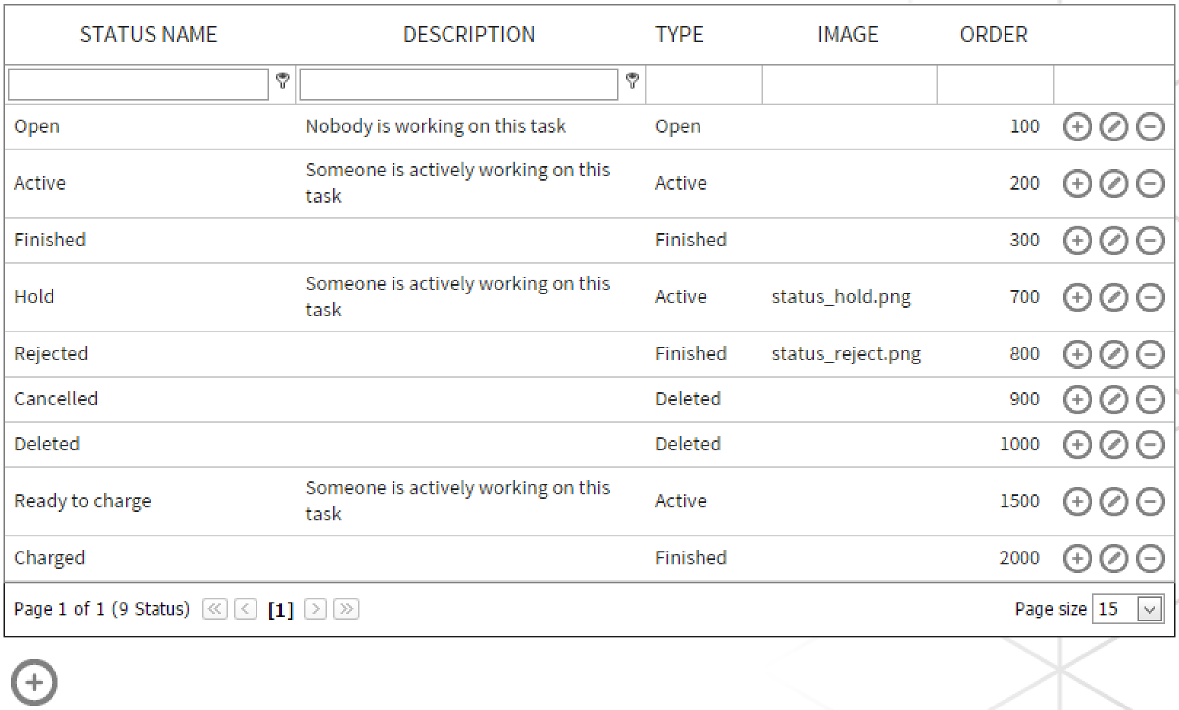


Status Types

Primarily a status can be of one of the following types:

- **Open**: Task is currently not assigned to any user.
- **Active**: Task is assigned and is being worked upon.
- **Delete**: Task is deleted from the workflow.
- **Finished**: Task has been completed.

Using the aforementioned status types a user can define a custom status for their workflow, e.g., **Rejected**, **Charged**, **Ready to charge**. Because of the fact that movement of a task is regulated by a change in its status, definition of statuses is one of the primary steps in project configuration.

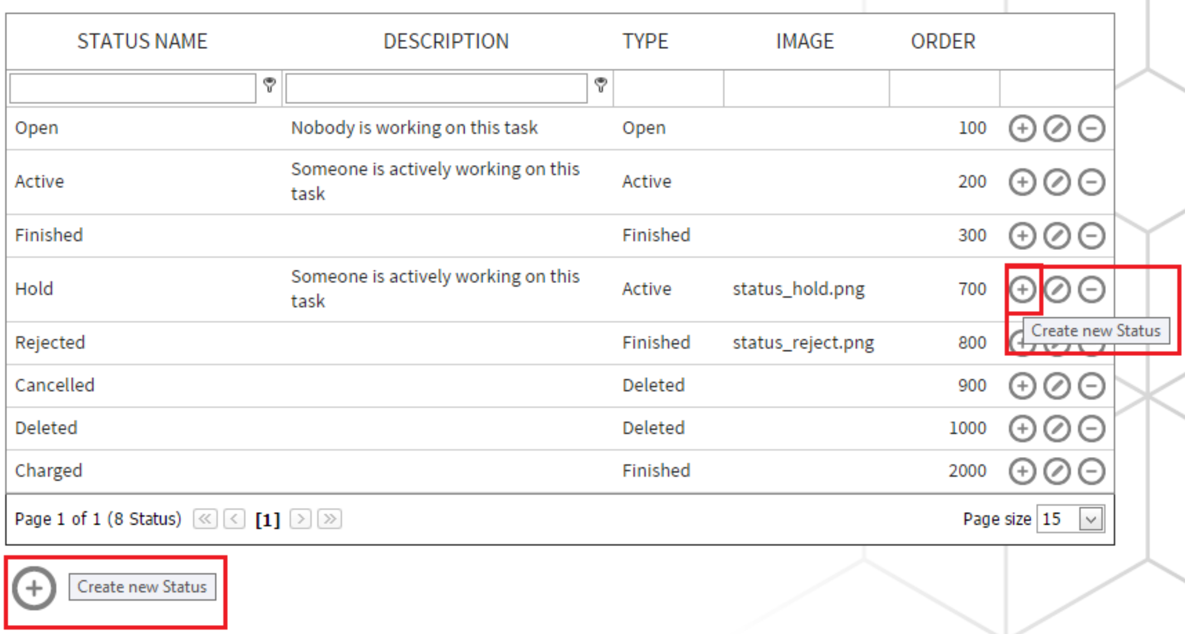


STATUS NAME	DESCRIPTION	TYPE	IMAGE	ORDER	
Open	Nobody is working on this task	Open		100	
Active	Someone is actively working on this task	Active		200	
Finished		Finished		300	
Hold	Someone is actively working on this task	Active	status_hold.png	700	
Rejected		Finished	status_reject.png	800	
Cancelled		Deleted		900	
Deleted		Deleted		1000	
Ready to charge	Someone is actively working on this task	Active		1500	
Charged		Finished		2000	

Page 1 of 1 (9 Status) [1] Page size 15

Creating a New Status

Click on the **Create new status** icon to add a new status.



STATUS NAME	DESCRIPTION	TYPE	IMAGE	ORDER	
Open	Nobody is working on this task	Open		100	
Active	Someone is actively working on this task	Active		200	
Finished		Finished		300	
Hold	Someone is actively working on this task	Active	status_hold.png	700	Create new Status
Rejected		Finished	status_reject.png	800	
Cancelled		Deleted		900	
Deleted		Deleted		1000	
Charged		Finished		2000	

Page 1 of 1 (8 Status) [1] Page size 15

Create new Status

This will open create new status dialog

Specify the properties of the new status:

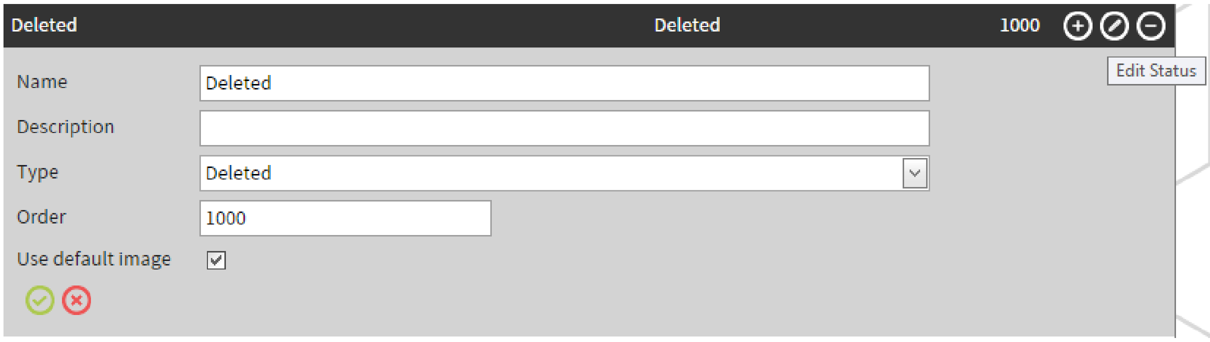
- **Name**: Name of the status
- **Description**: Brief description of the status
- **Type**: Select the type of the status. **Status types** were defined *here* previously.

- **Order**: Order number of the status
- **Use Default image**: Selecting the default image will use a native image for the status. A user can also upload a custom icon image for the status. Deselect the **Use default image** checkbox to use a custom icon. This will show the image upload option. Recommended icon size is 43x43pixels.

Finalize the creation of the new status by clicking on the "**Save**" icon.

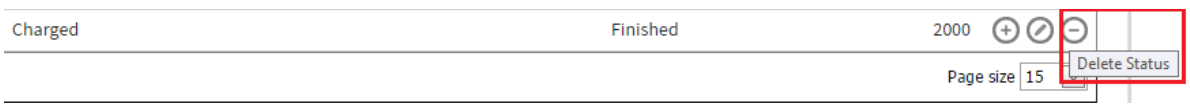
Editing a Status

Click on the **Edit Status** icon to edit an existing status in the status list. The status property fields will be available in the edit mode. Click on the **Save** icon to save the changes made. Click on the **Cancel** icon to discard the changes.



Deleting a Status

A status can be deleted by clicking on **Delete Status** icon for the selected status. Please note, that no confirmation is shown after clicking on this icon and this will permanently delete the status. Also, if the target status is in use within the events and actions definition, an exception error will be shown.



Workflow

The workflow configuration section of the RayFlow is used to establish relationship and dependencies between two phases of a workflow process. The workflow configuration is ruled by three objects including status, events and actions.

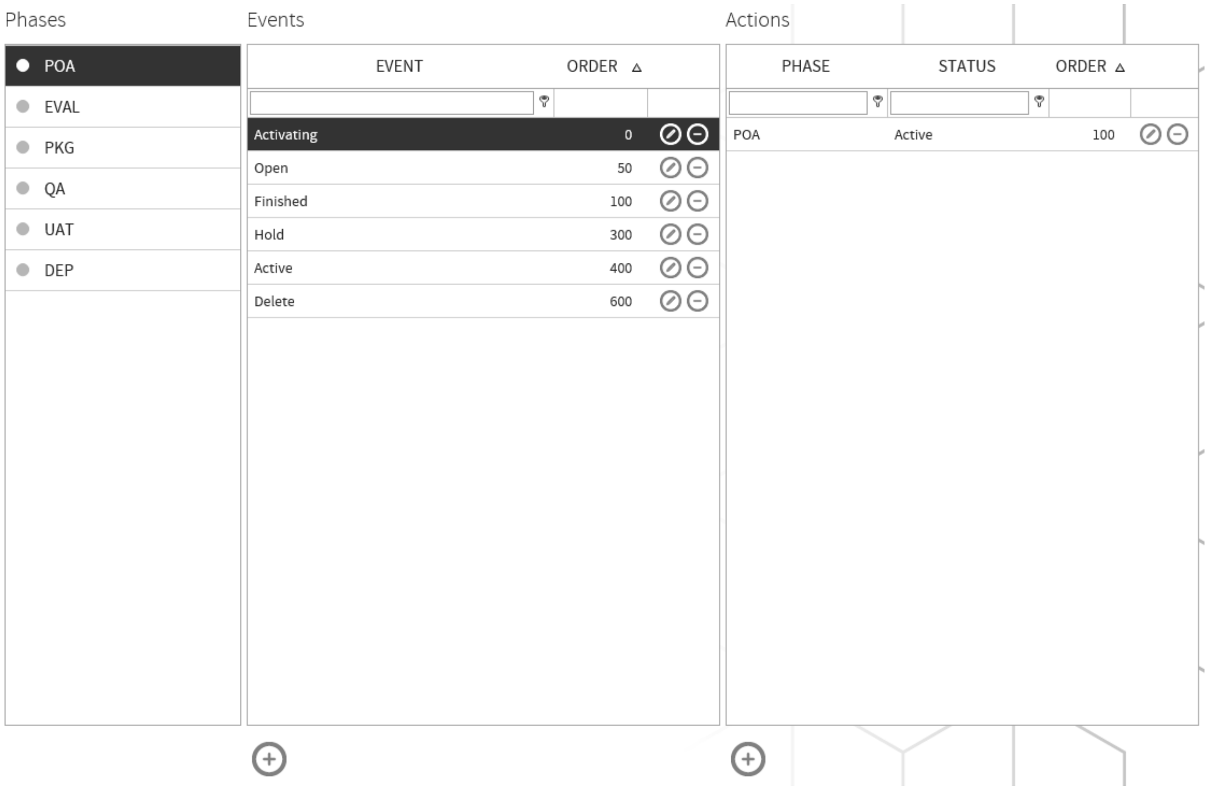
- **Status**: Status of a task defines the current state of the task. More information on status can be found in the *Status* chapter of this document.
- **Events**: An event is an action or circumstance which triggers a certain action. In terms of RayFlow a change in task status can be called as an event which will trigger an action on a task.
- **Actions**: An action is a reaction to certain event.

Workflow Configuration

This part of the chapter introduces users to the workflow editor and provides information on how to define events and actions for a certain phase.

Workflow Editor

The workflow editor is an intuitive tool which allows users to create events and actions for phases. This editor is divided into three areas, which includes phases, events, and actions. Under the phases area, all the phases which are part of the project are listed. Under the events area, a user will see the list of events which are defined for the selected phase in the phases area. In the actions area, the actions that should be taken for the selected event are shown. Tools present in the events and actions area allow users to add, edit, and delete an existing event and related action.



This part of the chapter describes how to create new events and actions for phases.

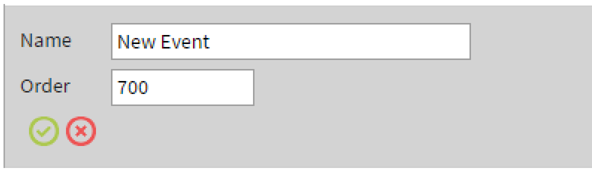
Events

For phases, excluding the **Create** phase which cannot be configured in this tab, the default event is **Activating** and this event is used by RayFlow to accept a task coming from another phase and to set its new status to **Active**. This event is not shown in the task properties.

Adding a New Event

To add a new event, first select the phase for which the event is to be created, then click on the **Create new Event** icon. This icon is available at the bottom of the events area.

The event editor is shown:



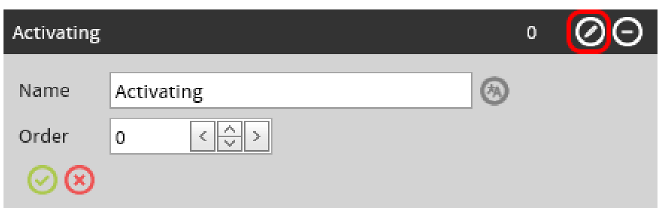
Specify the name and order number of the event and then click on the **Save** button to finalize the creation of event.

For a standard phase in a project the following events are important but not mandatory:

Activating: This is the default event used by RayFlow. Mandatory for all phases except the create phase.
Active: An active event means that a user has been assigned to the task.
Open: An open event means that the task is currently open to be assigned to a user.
Hold: The hold event means that the task is currently active but on hold for some reason.
Finished: Finished means the task is finished in the current phase.
Delete: Delete means that the task is deleted from the workflow.

Editing an Event

An event can be edited by clicking on the **Edit Event** icon which is available for each of the events in the event list under the events area.



Clicking on the **Save** icon will save the changes. Clicking on the **Cancel** icon will discard the changes.

Deleting an Event

An event can be deleted by clicking on the **Delete Event** icon.

In case an event has a certain action defined for it, an error will occur. Hence, before deleting an event, make sure that there is no action associated with it. Since no warning is shown before the deletion of an event a user must be careful before clicking on this icon.

Actions

Actions are the steps taken when an event occurs. Based on the actions defined for an event a task can be deleted, its status could be changed in the current phase, or it could be moved to another phase and a new status is set for it.

Adding a new Action

Click on the **Add new Action** icon to add a new action. This icon is available at the bottom of the actions area.

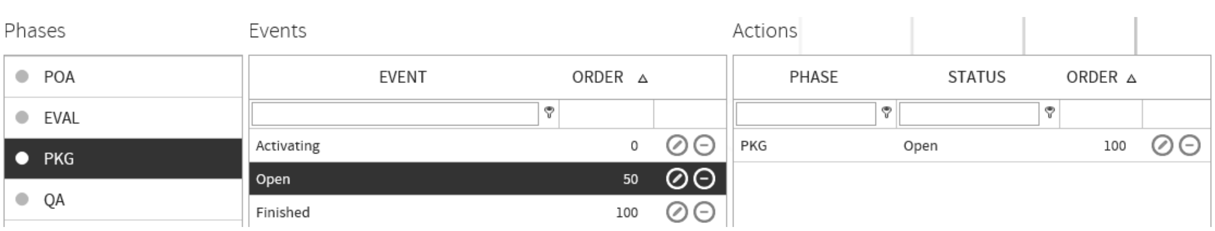
Clicking on the **Create new Action** area will show the **action creation** dialog.

Following properties for the action must be provided:

Phase: Select the phase which gets affected by this action from the drop down list.
Status: Select the status this action sets for the task in the selected phase from the drop down list. The statuses shown in the drop down list come from the statuses defined on **Status** page.
Order: The order in which the action should be executed. If a particular event contains multiple actions, then this order number defines the serial execution of the actions.

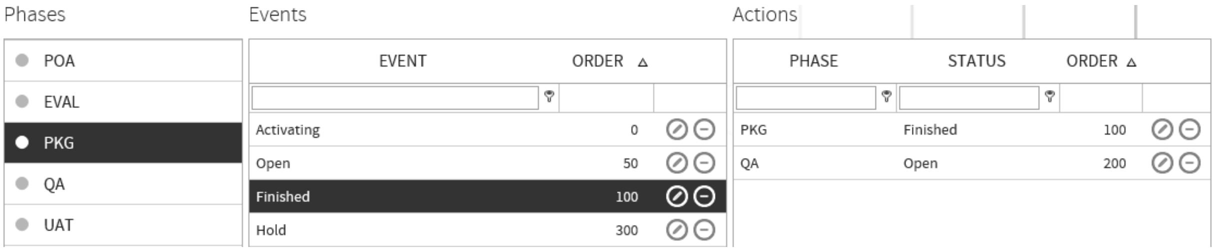
Standard examples:

Example 1: For an open event the defined action should set the status of task to open in the current phase

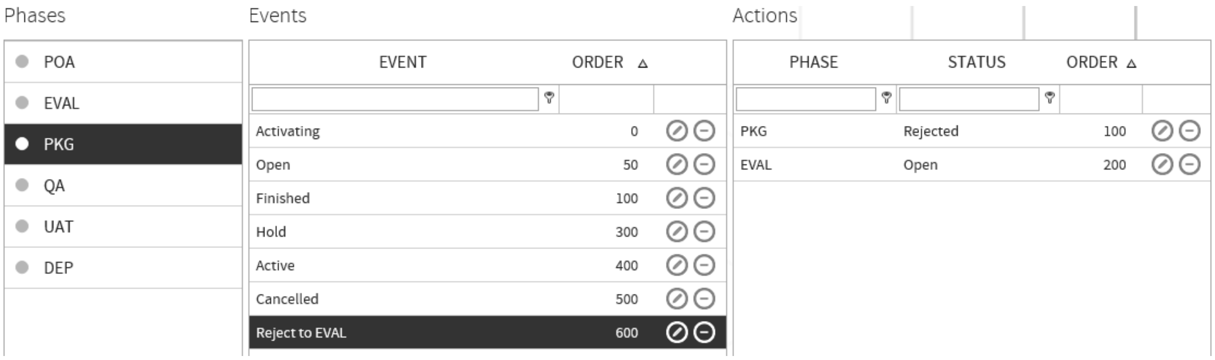


Example 2: For a finished event there will be two actions. The first action should set the status of the task to finished and then the next action should set the status of task to open in the next phase. The order in which

these actions are executed is important. Hence, the order number should be set accordingly.

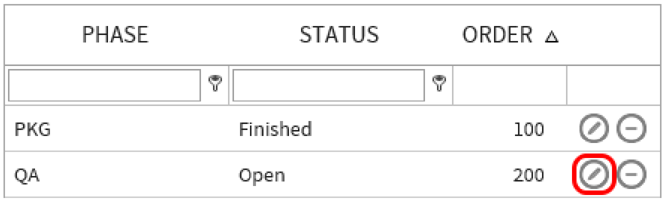


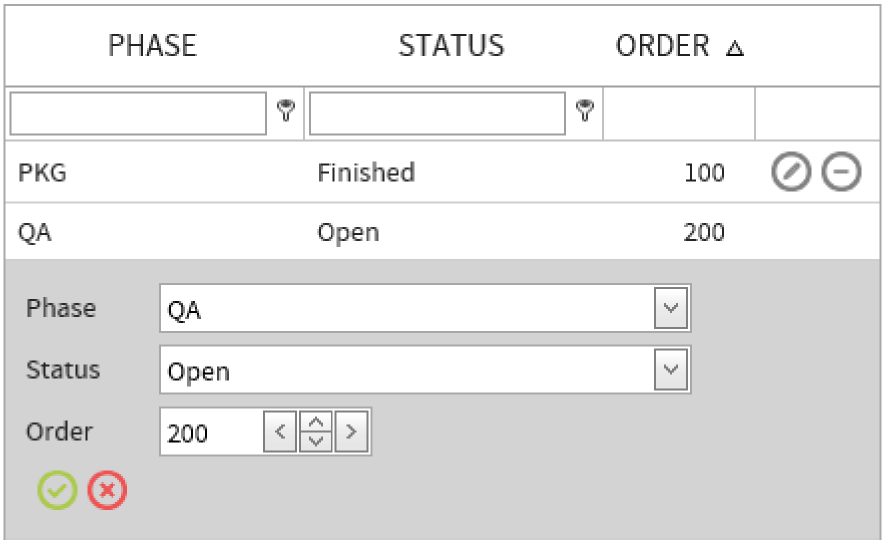
Example 3: For a reject event the first action should set the status of task in current phase to reject (type finished) and then set the task status to open in the previous phase. The order in which these actions are executed is important. Hence, the order number should be set accordingly.



Editing an Action

An action can be edited by clicking on the **Edit Action** icon which is available for each of the actions in the action list under the actions area.

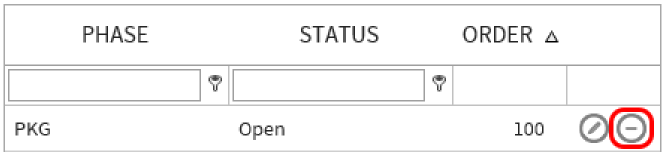




To save the changes, click on the Save icon and to discard click on the **Cancel** icon.

Deleting an Action

An action can be deleted by clicking on the **Delete Action** icon.



Basic

The basic configuration page of RayFlow server allows a user to define the basic project properties. Properties defined under this page are required by other RayFlow features including **Tools**, **Notifications**, **SLA** etc.

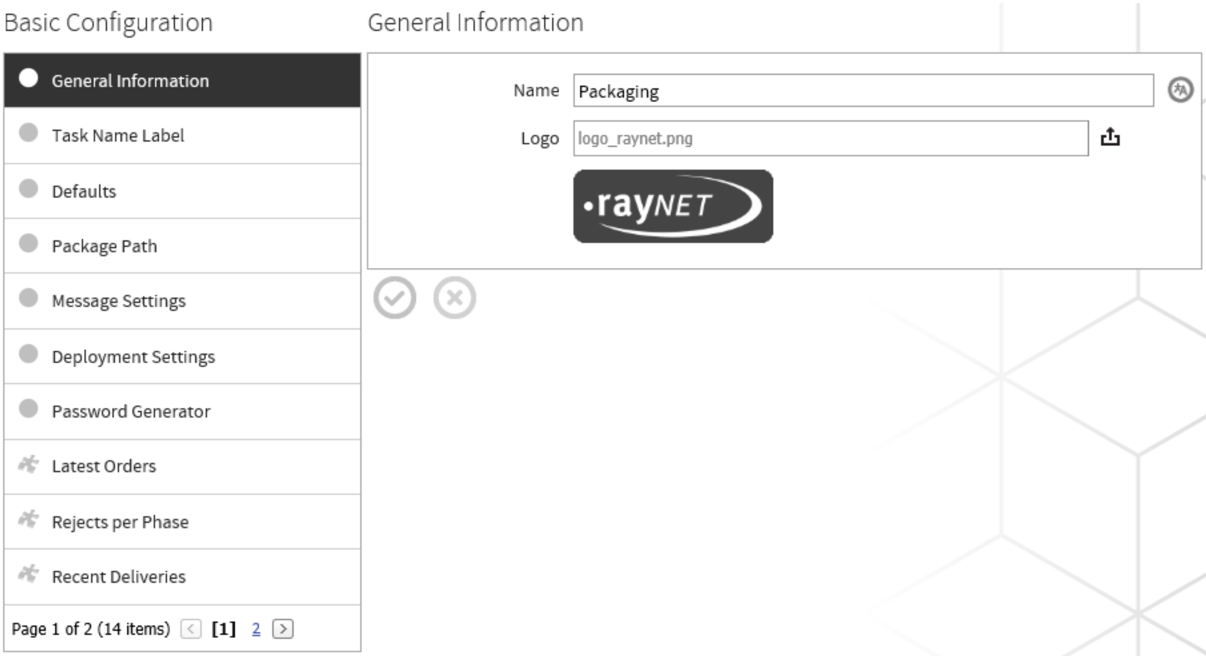
This page can be accessed by selecting the **Configuration** -> **Basic** item from the RayFlow web console tree. The properties which can be defined under this page, are divided into following categories:

- **General Information**
- **Task Name Label**
- **Defaults**
- **Package Path**
- **Message Settings**
- **Deployment Settings**
- **Password Generator**
- **Properties**
- **Plugins**

This chapter of the document describes the properties which can be defined as part of the basic configuration and also how these properties are utilized by other features of this application.

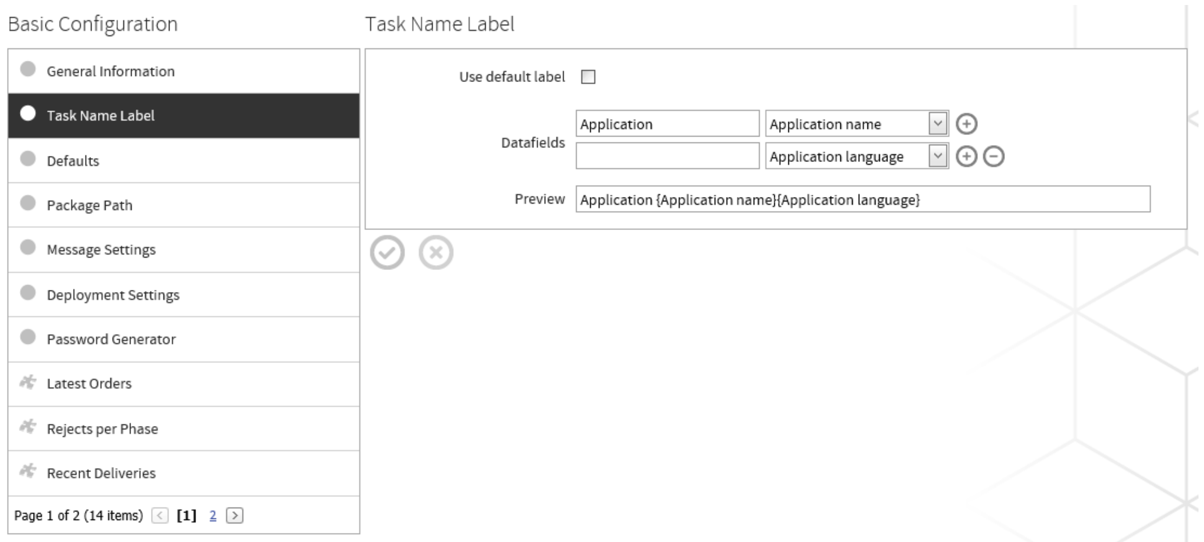
General Information

As part of the general information, a user can modify the name of a project and can apply a logo to the same.


Basic Configuration
General Information
General Information
Task Name Label
Defaults
Package Path
Message Settings
Deployment Settings
Password Generator
Latest Orders
Rejects per Phase
Recent Deliveries
Page 1 of 2 (14 items) [1] 2
Name
Packaging
Logo
logo_raynet.png
•rayNET

Task Name Label

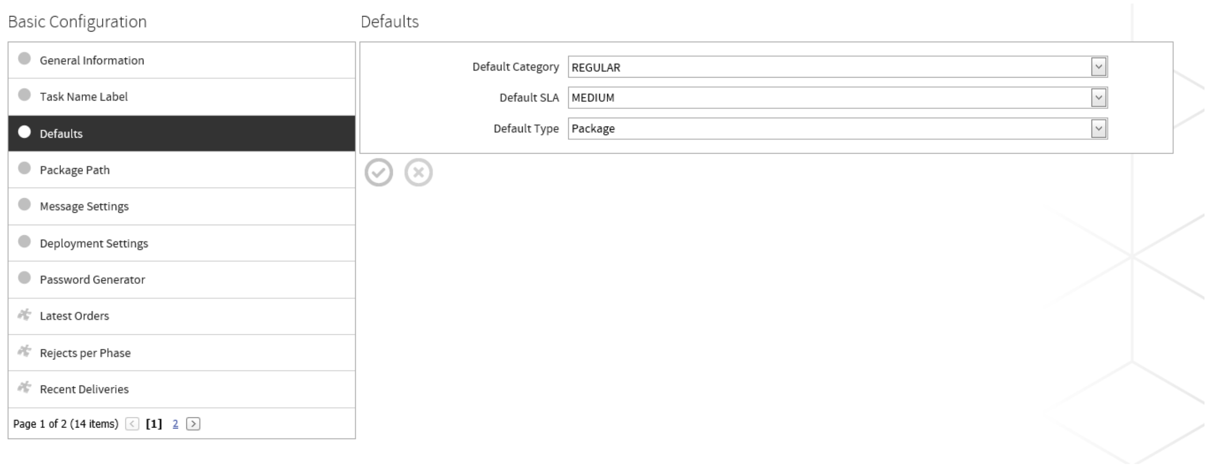
The task name label can be configured here. The task name label is, on some of the pages (for example the tracking page), used for the naming of the tasks. By default, the first datafields will be combined, but it is also possible to configure other datafield combinations.



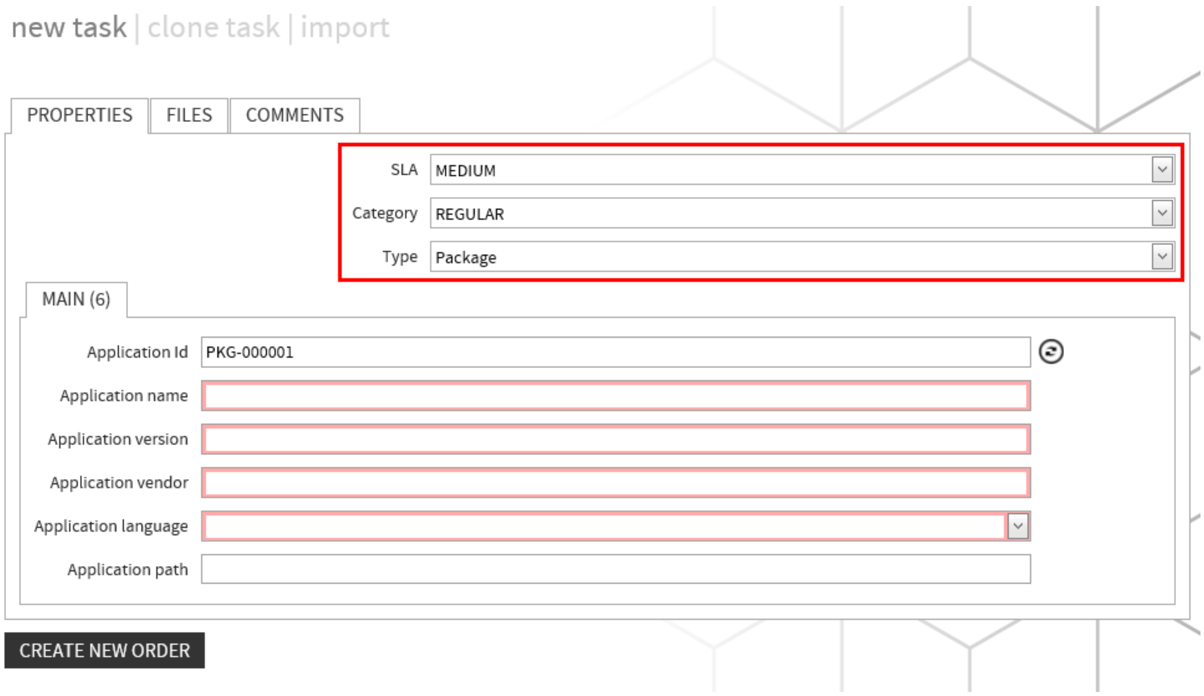
After unchecking the **Use default label** checkbox one or more **Datafields** can be selected. These will then be used as task name label. The given example will use "Application [Application name][Application language]" as task name label. For example, Application RayQC ENG if the value of **Application name** is "RayQC" and the value of **Application language** is "ENG". This is also shown in the preview.

Defaults

Under the **Defaults** property, a user can specify a default category and SLA for the tasks within a project.

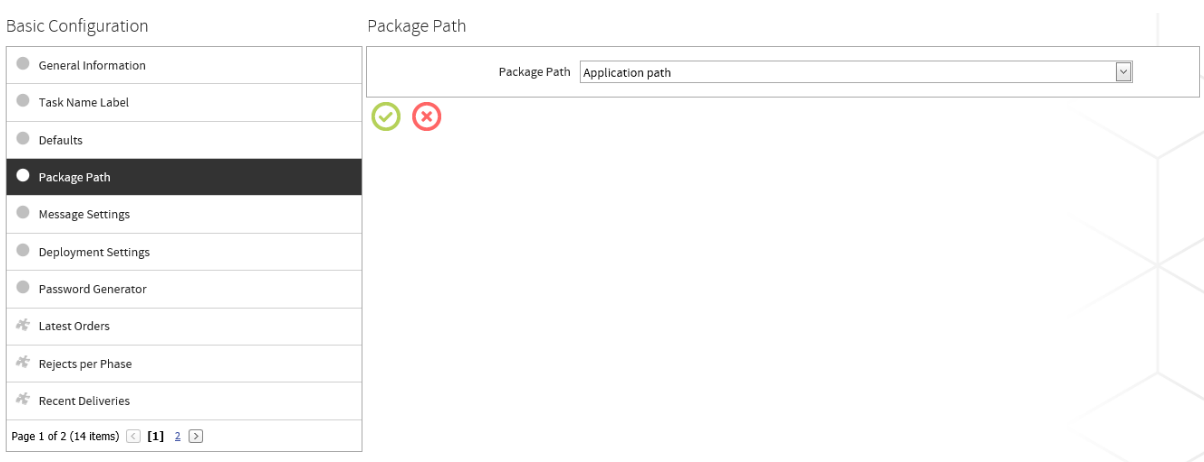


These properties are required to be selected, while creating a new package order.



Package Path

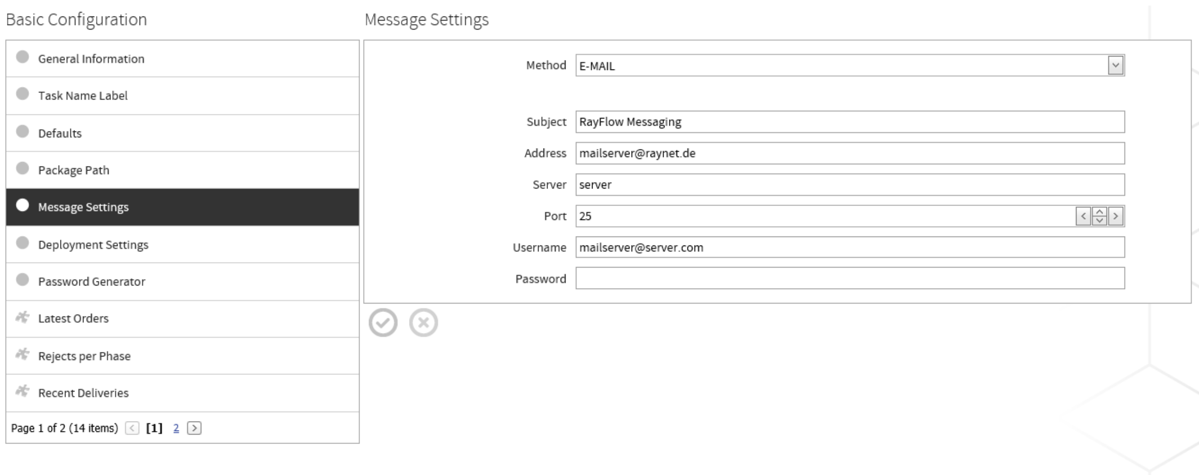
Specifies which active text box datafield the RayFlow desktop client will use for the package source location required by the tool. A browse button is automatically added to this datafield in RayFlow desktop client, so there is no need to enable the browse property for this datafield.



Additional details on tools configuration can be found in *Tools* chapter of this document.

Message Settings

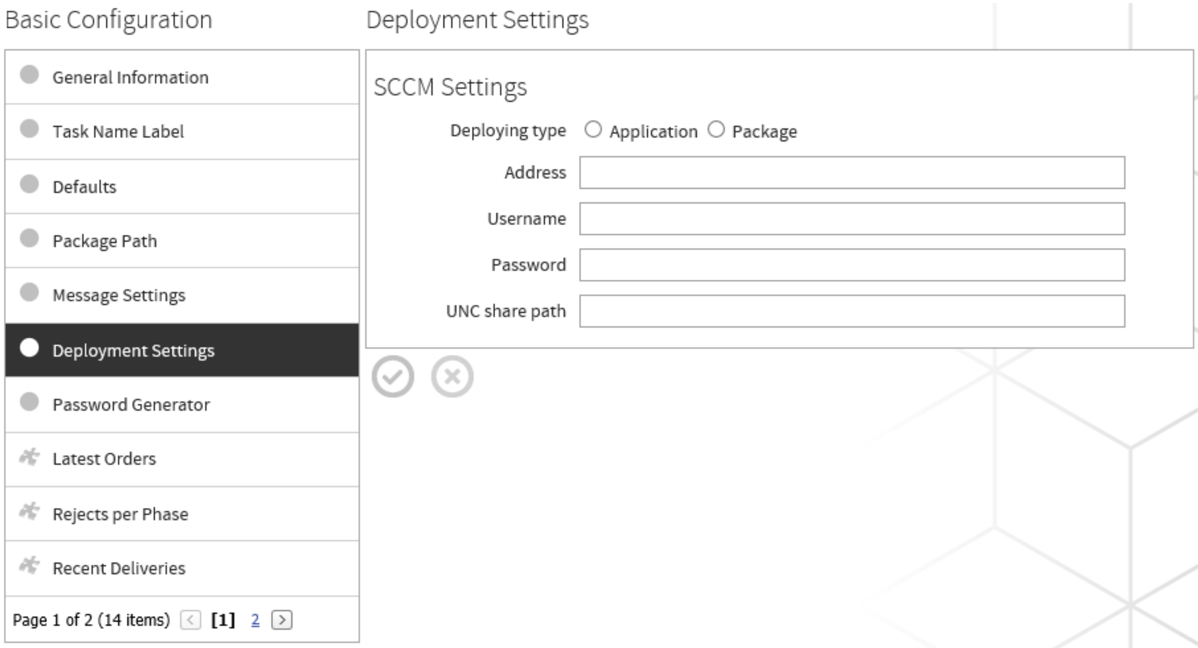
The **Message Settings** area of the **Basic Configuration** page allows a user to define settings related to the e-mail server. These properties are required by features including **TaskTrack** and **Notification** to send e-mail notifications to the configured recipients.



Deployment Settings

The Deployment Settings area of the Basic Configuration, allows a user to define connection properties to the deployment agent i.e. RayManageSoft, which in turn enables a user to deploy software packages directly from RayFlow to the client machine.

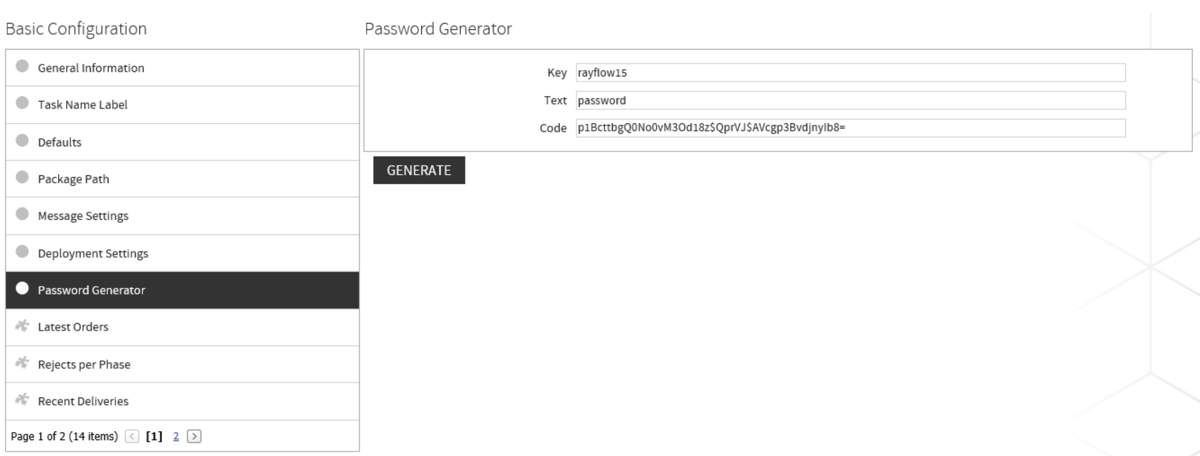
Based upon the connection properties specified, a connection is established between RayFlow Server and the deployment agent. The package is then imported into the Software Library of the agent, and from there based upon the distribution policy, the package is distributed to the target clients.



Further information pertaining to how a user can active deployment of task from a phase, please refer to the *phase configuration* chapter of this document. The **To RMS** and **To SCCM** sub-menus of the **Deploy** context menu item will only become active after the task moves into a phase that has the **Deployment** checkbox checked as part of its configuration setting.

Password Generator

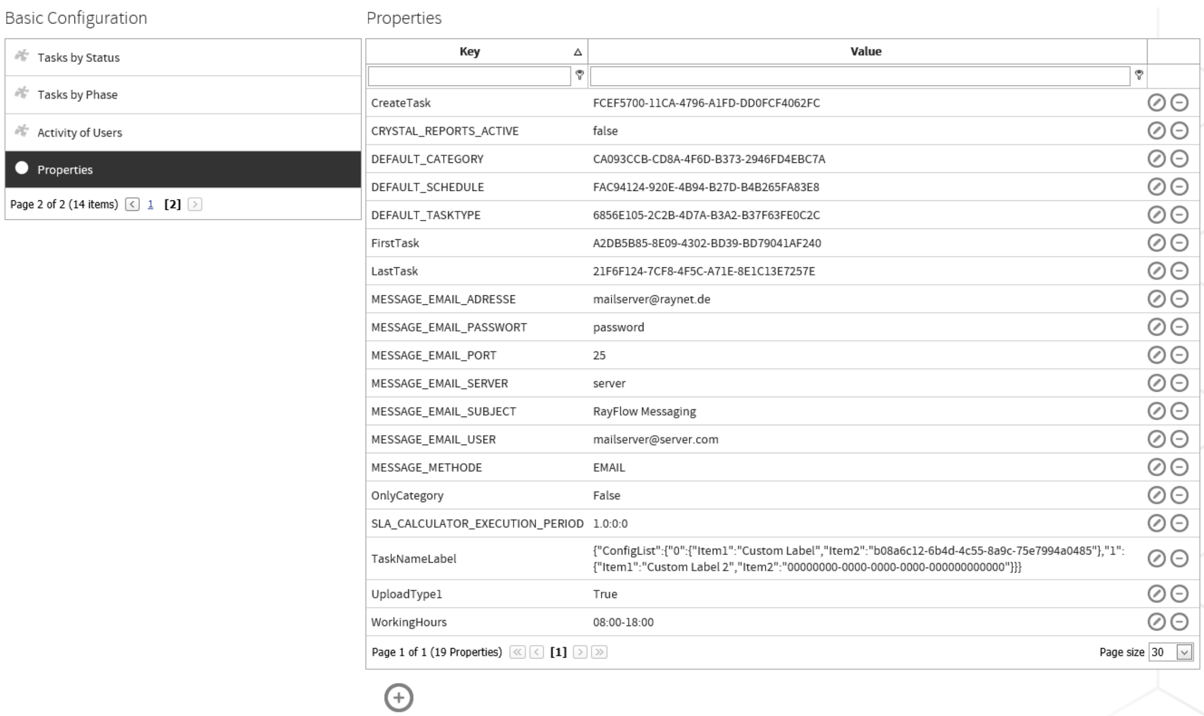
Password generator allows a user to generate an encrypted password, which can become handy, if a user wishes to preconfigure the RayFlow desktop client `config.xml` file without actually running the client and entering the password via the **settings** page.



Currently, RayFlow only accepts passwords, which have been generated with the rayflow15 key.

Properties

Properties defined as part of the basic configuration are used by different features in RayFlow e.g. **Notification**, **SLA**, **Tools** etc. Each of the property consists of a key and its related value.



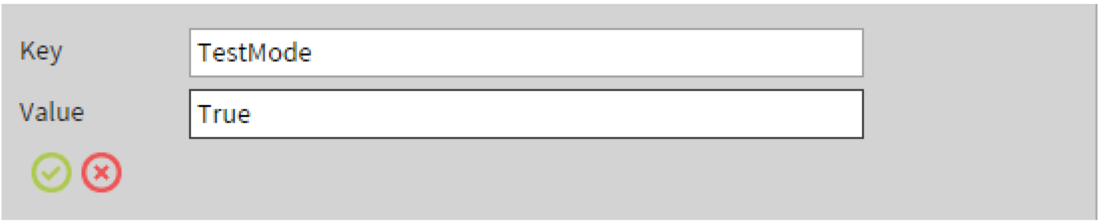
Key	Value
CreateTask	FCEF5700-11CA-4796-A1FD-DD0FCF4062FC
CRYSTAL_REPORTS_ACTIVE	false
DEFAULT_CATEGORY	CA093CCB-CD8A-4F6D-B373-2946FD4EBC7A
DEFAULT_SCHEDULE	FAC94124-920E-4B94-B27D-B4B265FA83E8
DEFAULT_TASKTYPE	6856E105-2C2B-4D7A-B3A2-B37F63FE0C2C
FirstTask	A2DB5B85-8E09-4302-BD39-BD79041AF240
LastTask	21F6F124-7CF8-4F5C-A71E-8E1C13E7257E
MESSAGE_EMAIL_ADRESSE	mailserver@raynet.de
MESSAGE_EMAIL_PASSWORT	password
MESSAGE_EMAIL_PORT	25
MESSAGE_EMAIL_SERVER	server
MESSAGE_EMAIL_SUBJECT	RayFlow Messaging
MESSAGE_EMAIL_USER	mailserver@server.com
MESSAGE_METHODE	EMAIL
OnlyCategory	False
SLA_CALCULATOR_EXECUTION_PERIOD	1.0:0:0
TaskNameLabel	{"ConfigList":{"0":{"Item1":"Custom Label","Item2":"b08a6c12-6b4d-4c55-8a9c-75e7994a0485"},"1":{"Item1":"Custom Label 2","Item2":"00000000-0000-0000-0000-000000000000"}}}
UploadType1	True
WorkingHours	08:00-18:00

To the right of each property, there exist icon based tools to add a new property, edit and delete the selected property.

Add property **Edit property** **Delete property**

A new property can also be added by clicking on the **Add Property** icon at the bottom of properties list.

Clicking on the **Add property** icon will open the add property wizard.



Provide input for **Key** and its **Value** and then click on **Save** icon to finalize adding of the property.

The table below lists properties which can be added.

Property	**ValueCfg**
Task Information (Set automatically)	
CreateTask	`81de0942-95bf-4ce1-9460-2a64c5c0d0c1`
FirstTask	`ef15defd-3f2b-4981-be72-ac39168115f3`
Cleanup settings	
DATABASE_CLEANUP_EXECUTION_PERIOD	`7`
DATABASE_CLEANUP_JOBS_PERSIST_PERIOD	`15`
DATABASE_CLEANUP_LOGIN_PERSIST_PERIOD	`30`
Email Settings (Required by Mail Notification Feature)	
MESSAGE_EMAIL_ADRESSE	`mailserver@company.com`
MESSAGE_EMAIL_PASSWORT	`password`
MESSAGE_EMAIL_PORT	`25`
MESSAGE_EMAIL_SERVER	`12.34.567.891`
MESSAGE_EMAIL_SUBJECT	`RayFlow Email Subject`
MESSAGE_EMAIL_USER	`mailserver@company.com`
MESSAGE_METHODE	`EMAIL`
Type of installation ('Project' OR 'Factory') Factory operate in one view with all projects	
RayflowType	`Project`

Upload Type - (UploadType1 – direct, UploadType2 – Agent&WebUI, UploadType3 - Agent	
UploadType1	True
UploadType2	True
UploadType3	True
Working hour for SLA calculation	
WorkingHours	08:00-18:00
SLA_CALCULATOR_EXECUTION_PERIOD **The time period of the complete project sla calculator job is set initially to 1 day. It can be modified by editing the property SLA_CALCULATOR_EXECUTION_PERIOD of a project (formatting using the following pattern: [d.]hh:mm:ss[.fffffff] which stands for d-days, hh-hours, mm-minutes, ss-seconds, fffffff- one ten-millionth of a second). The change is visible after the next execution of the job calculator.**	
SLA_CALCULATOR_EXECUTION_PERIOD	1.0:0:0
TestMode: When this property is set to true for a project, then all the packages within a project can be deleted via the Administration page of Default project by a root user	
TestMode	False
OnlyCategory: When set to true, then users will only see Category field in the PO or Create phase and not SLA field. For this to work, SLA and Categories defined should be identical	
OnlyCategory	False
PACKAGE_PATH_ID: Used by the RayFlow desktop client to identify the datafield containing the path to application. Automatically set after user selects the datafield under Package Path tab	
PACKAGE_PATH_ID	44584dff-d178-45ca-92aa-c237841fb8d7
CRYSTAL_REPORTS_ACTIVE: Activate and deactivate crystal reports in RayFlow	
CRYSTAL_REPORTS_ACTIVE	True
EmailTemplate_PlaceholderName: Used to define Custom Place Holder for Notification Email Template	
EmailTemplate_PlaceholderName	CustomPlaceholder
Custom Login Properties: These properties are used to customize the login page	
AdditionalLogoImage	customaddlogo.png
AdditionalLoginText	Custom Text for Login Screen.
LoginBackColor	#DFDFDF white

LoginBackImage	customimage01.png
LogoImage	customlogo.png
FontColor	#DFDFDF white
LoginPortrait	CustomPortrait.png
Custom Project Properties: These properties are used to customize the layout of a project	

WelcomeMessageHeaderBackgroundColor	white
	#ffffff
	#f00
	rgb(128, 80, 200)
	rgb(100%, 100%, 100%)
	hsla(240, 25%, 50%, .5)

WelcomeMessageSubtitleBackgroundColor	white
	#ffffff
	#f00
	rgb(128, 80, 200)
	rgb(100%, 100%, 100%)
	hsla(240, 25%, 50%, .5)

WelcomeMessageHeaderTextColor	white
	#ffffff
	#f00
	rgb(128, 80, 200)
	rgb(100%, 100%, 100%)
	hsla(240, 25%, 50%, .5)

WelcomeMessageSubtitleTextColor	white
	#ffffff
	#f00
	rgb(128, 80, 200)
	rgb(100%, 100%, 100%)
	hsla(240, 25%, 50%, .5)

BodyBackgroundImage	custombackground.png custombackground.jpg custombackground.gif custombackground.svg custombackground.webp

MainHeaderBackgroundColor	white
	#ffffff
	#f00
	rgb(128, 80, 200)
	rgb(100%, 100%, 100%)
	hsla(240, 25%, 50%, .5)

SubHeaderBackgroundColor	white
	#ffffff
	#f00
	rgb(128, 80, 200)
	rgb(100%, 100%, 100%)

	`hsla(240, 25%, 50%, .5)`

HeaderTextColor	`white`
	`#ffffff`
	`#f00`
	`rgb(128, 80, 200)`
	`rgb(100%, 100%, 100%)`
	`hsla(240, 25%, 50%, .5)`

Customization of the Login Screen

The following properties can be used to customize the login page. None of these settings is mandatory. These properties can only be set using the root user. These properties can also be found in the table above.

- **AdditionalLogoImage**

This represents the logo that will be displayed on top of the login form. The file needs to be located in the `Content/CustomLogin` directory. If this property is not set, no image will be displayed.

Size: The image needs to be exactly 500 Px x 180 Px.

Format: All graphic formats that are supported by the browser can be used, but Raynet recommends to use the .png format.

Be aware:
If the folder Content/CustomLogin does not yet exist, it needs to be added manually!

- **AdditonalLoginText**

This is a custom text that can be displayed beneath the login form. If this property is not set, no image will be displayed.

- **LoginBackColor**

This property represents the background color of the login form. All color descriptors which are accepted for CSS can be used. For example, both `black` or `#000000` are valid values.

- **LoginBackImage**

This property stands for the background image of the whole login page. The file needs to be located in the `Content/CustomLogin` directory. If this property is not set, the default RayFlow login background will be displayed.

Size: The image needs to be at least 1920 Px x 1200 Px.

Format: All graphic formats that are supported by the browser can be used, but Raynet recommends to use the .png format.

Be aware:
If the folder Content/CustomLogin does not yet exist, it needs to be added manually!

- **LogoImage**

This is the image that is displayed on the bottom of the login page. The file needs to be located in the `Content/CustomLogin` directory. If this property is not set, the default RayFlow logo will be displayed. This property can also be set to the value `none` to display no logo at all.

Size: The image needs to be exactly 200 Px x 50 Px.

Format: All graphic formats that are supported by the browser can be used, but Raynet recommends to use the .png format.

- **FontColor**

This property defines the color of all default text and the additional login text. All color descriptors which are accepted for CSS can be used. For example, both `black` or `#000000` are valid values.

- **LoginPortrait**

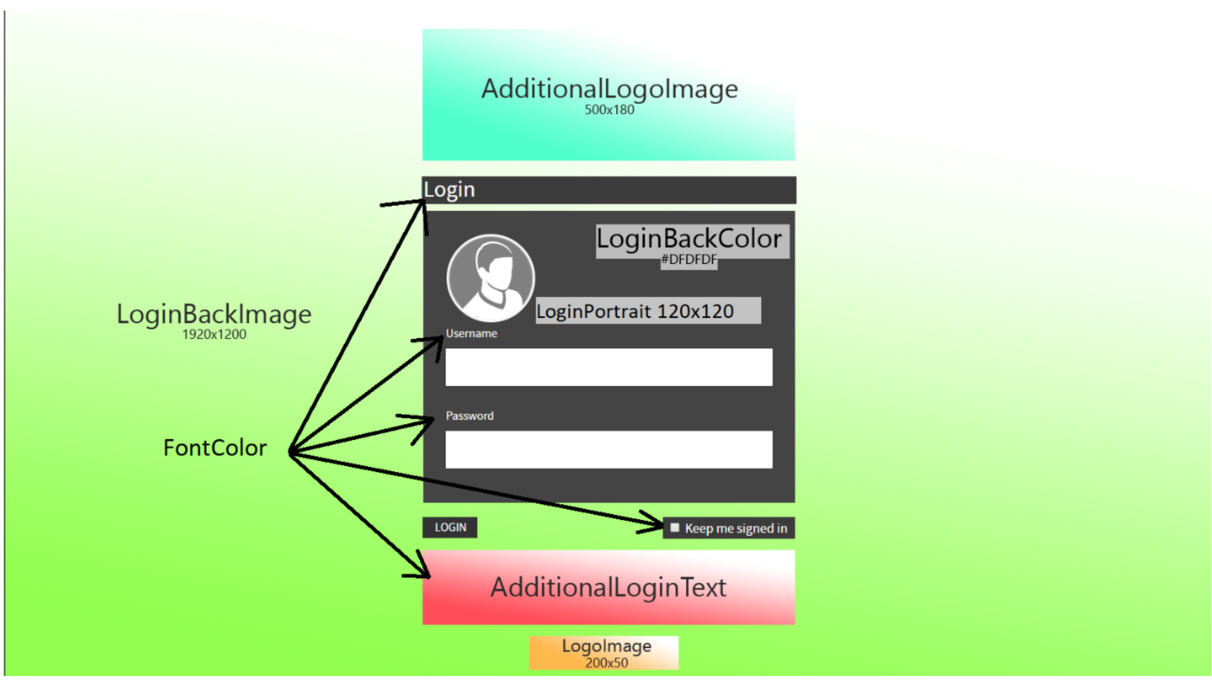
This image is displayed between the login header and the entry field of the username. The file needs to be located in the `Content/CustomLogin` directory. If this property is not set, the default RayFlow portrait will be displayed.

Size: The image needs to be exactly 120 Px x 120 Px.

Format: All graphic formats that are supported by the browser can be used, but Raynet recommends to use the .png format.

Be aware:
If the folder `Content/CustomLogin` does not yet exist, it needs to be added manually!

The image below shows the exact customization options for the login page.



The following properties can be used to customize a project and the **Welcome** screen. None of these settings is mandatory. These properties can also be found in the table above.

- **WelcomeMessageHeaderBackgroundColor**
The background color of the header in the **Welcome Message** screen can be changed by this. All color descriptors which are accepted for CSS can be used. For valid examples look in the table above.

- **WelcomeMessageSubtitleBackgroundColor**
The background color of the subtitle in the **Welcome Message** screen can be changed by this. All color descriptors which are accepted for CSS can be used. For valid examples look in the table above.

- **WelcomeMessageHeaderTextColor**
The color of the text in the header of the **Welcome Message** screen can be changed by this. All color descriptors which are accepted for CSS can be used. For valid examples look in the table above.

- **WelcomeMessageSubtitleTextColor**
The color of the text in the subtitle of the **Welcome Message** screen can be changed by this. All color descriptors which are accepted for CSS can be used. For valid examples look in the table above.

Note:
These properties (`WelcomeMessageHeaderBackgroundColor`, `WelcomeMessageSubtilteBackgroundColor`, WelcomeMessageHeaderTextColor, and `WelcomeMessageSubtitleTextColor`) are meant to be set by the **root** user in the default project only!.

- **MainHeaderBackgroundColor**
The background color of the header of a project can be changed by this. All color descriptors which are accepted for CSS can be used. For valid examples look in the table above.

- **SubHeaderBackgroundColor**
The background color of the subheader of a project can be changed by this. All color descriptors which are accepted for CSS can be used. For valid examples look in the table above.

- **HeaderTextColor**
The color of the text in the header of a project can be changed by this. All color descriptors which are accepted for CSS can be used. For valid examples look in the table above.

- **BodyBackgroundImage**
This is the background image that will be used throughout an entire project.

Format: The following formats are allowed: PNG, SVG, JPG, GIF, and WEBP.

Note:
These properties (`MainHeaderBackgroundColor`, `SubHeaderBackgroundColor`, `HeaderTextColor`, and `BodyBackgroundImage`) can be set either by the **root** user in the default project or by the **Admin** for each single project. If it is changed by the root user in the default project it is also changed for the **Project Selection** view. If it is changed by the **Admin** user, the color is only changed within a single project.

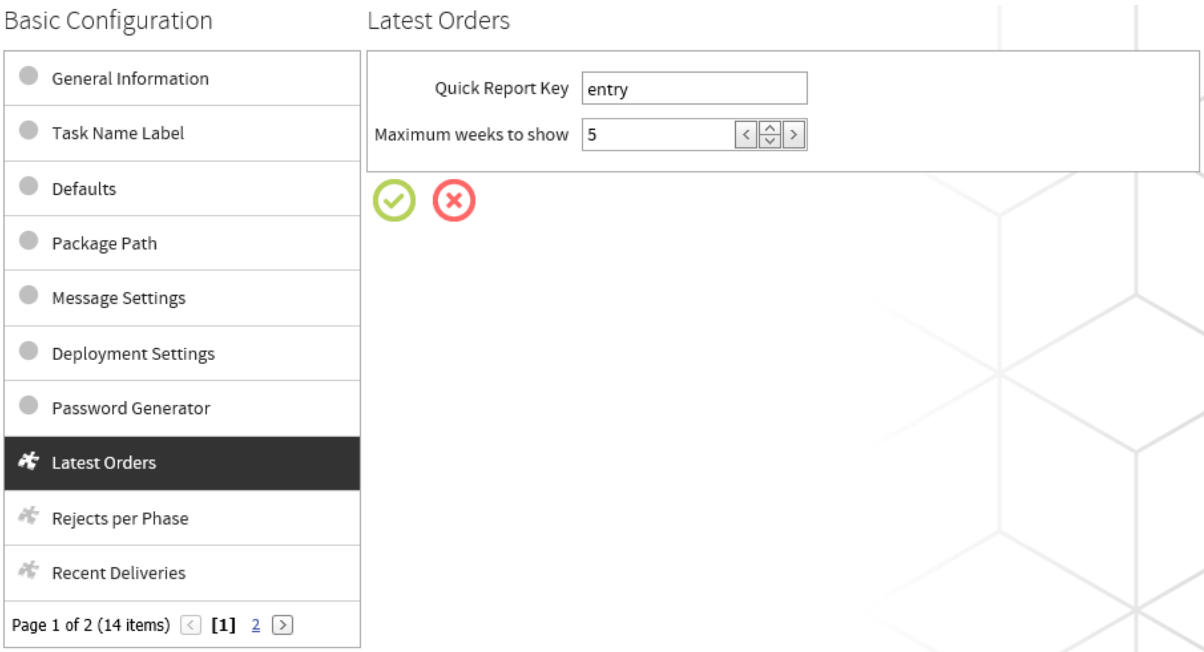
Plugin Configuration

Plugins are also configured in the Basic section of RayFlow. By default, all six default **Quick Reports** are shown here. Plugins can be identified by the icon that varies from the icon used for the other basic settings that can be configured in this section.

Warning:
Do not change the **Quick Report Key**! If this key is changed, RayFlow will no longer be able to find the report!

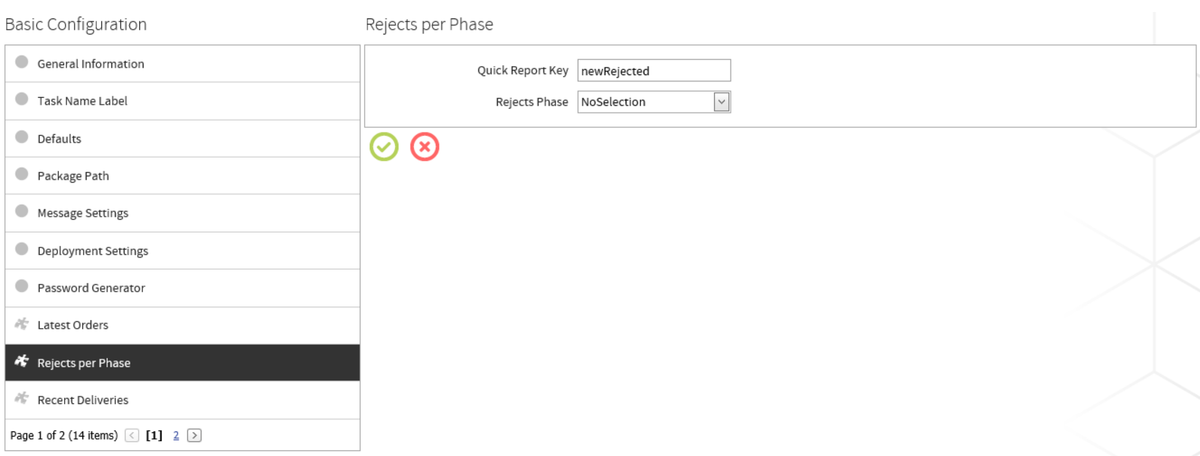
Latest Orders

The **Latest Orders** quick report can be configured here. The arrow buttons can be used to add or subtract weeks to the report.



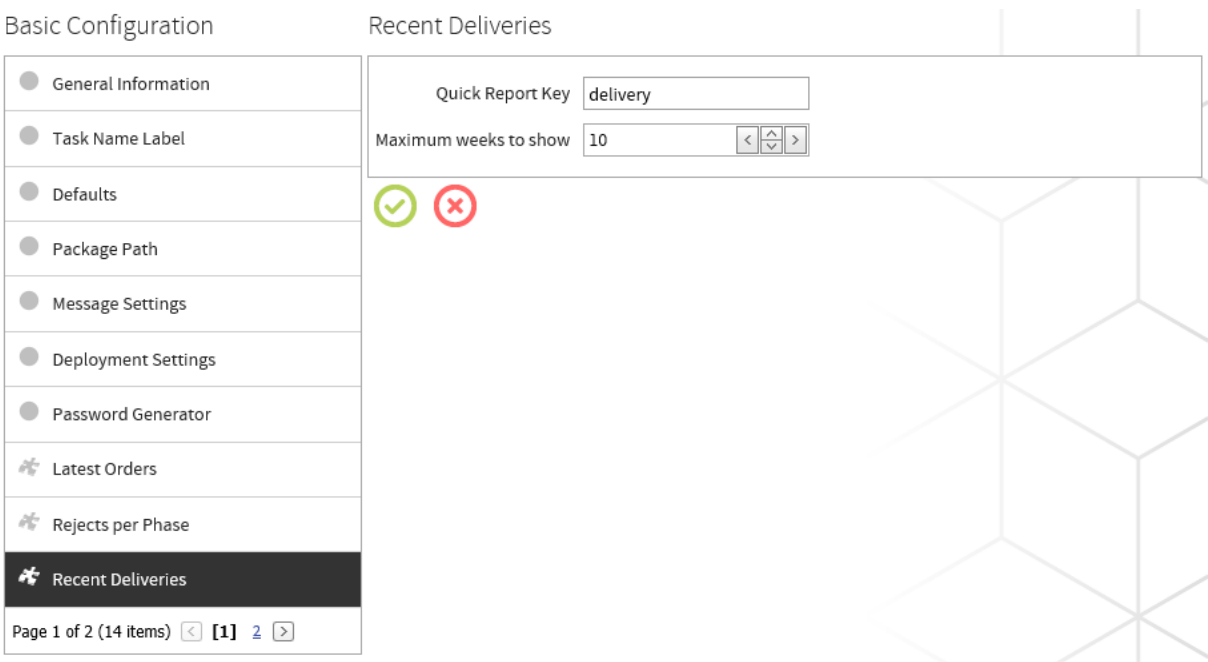
Rejects per Phase

This is where the **Rejects per Phase** quick report can be configured. It is possible to show either all rejects or just tasks that have been rejected and currently are in a specific status. The status can be selected using a dropdown menu.



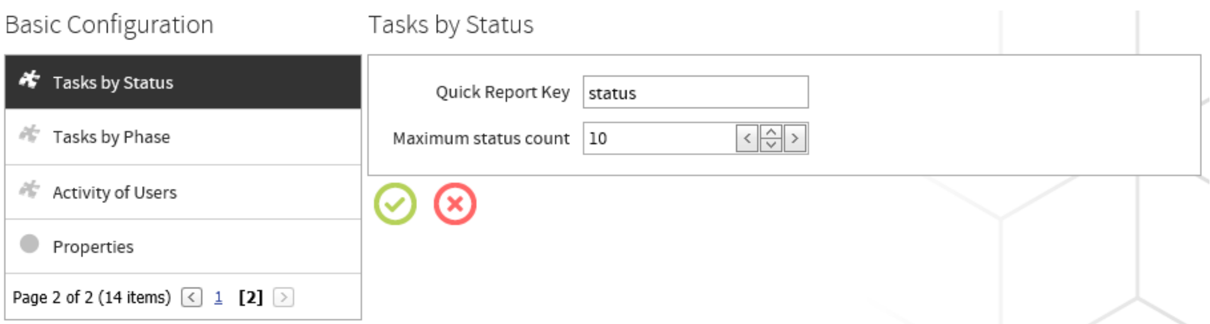
Recent Deliveries

The **Recent Deliveries** quick report can be configured here. The maximum number of weeks can be edited using the arrow buttons.



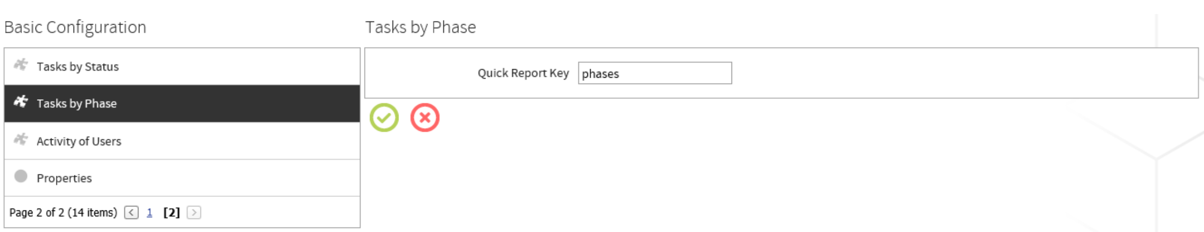
Tasks by Status

This is where the **Tasks by Status** quick report is configured. The maximum number of status that will be considered can be adjusted using the arrow buttons.



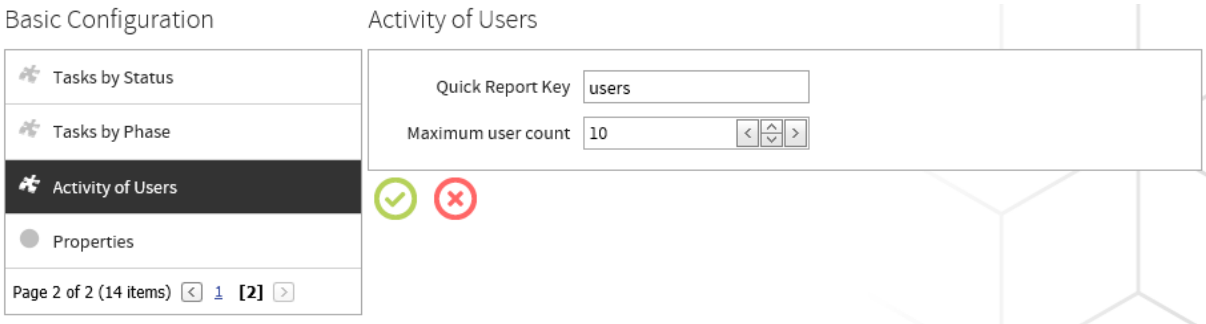
Tasks by Phase

Currently, there is now configuration option for the **Tasks by Phase** quick report.



Activity of Users

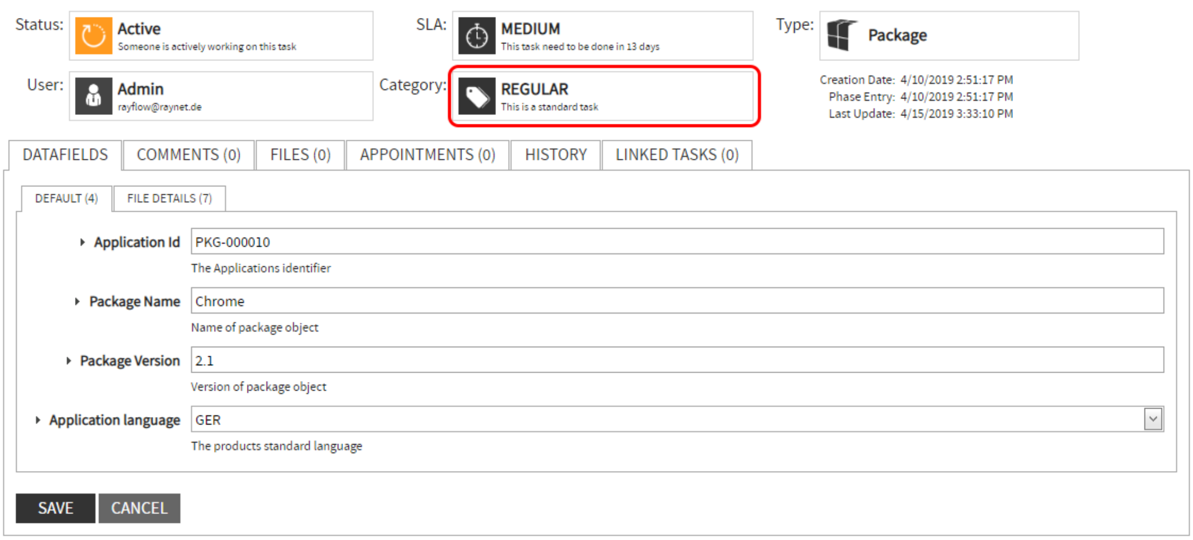
The **Activity of Users** quick report can be configured here. To add or subtract users to the number of users that will be considered for the report, the arrow buttons can be used.



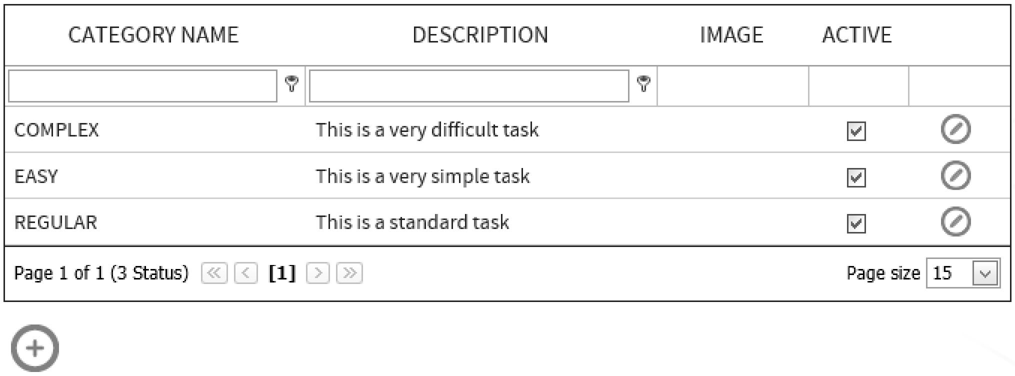
For more information on how the quick reports work refer to the *Quick Reports* chapter.

Category

Categories define different task types to be used within the workflow process. The **Category** type is one of the default properties of a task, which is selected in the task creation phase.



Within the **Category Configuration** page, categories are listed with their properties shown under the respective column headers.

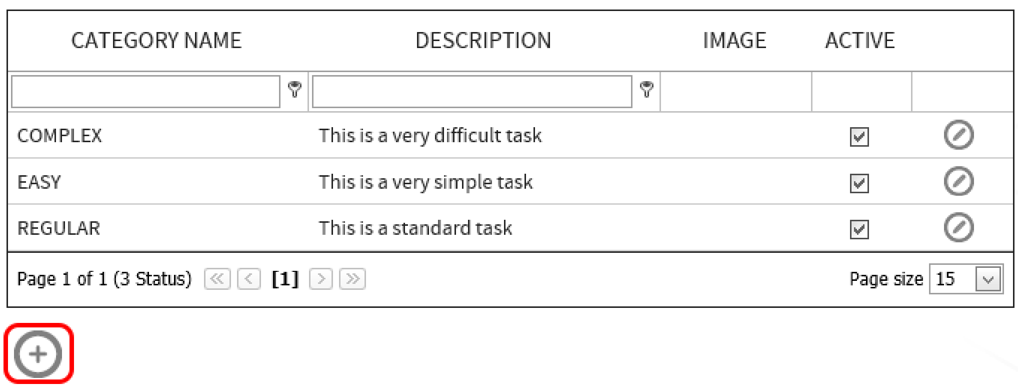


Each of the categories holds the following properties:

1. **Category Name**: Name of the category
2. **Description**: Brief description for the category
3. **Image**: Icon image to be shown within task properties section. Users have the possibility to either use default image or upload and use a custom image
4. **Active**: When disabled the category is not available

Add new Category

To add a new category, click on the **Create new category** icon.



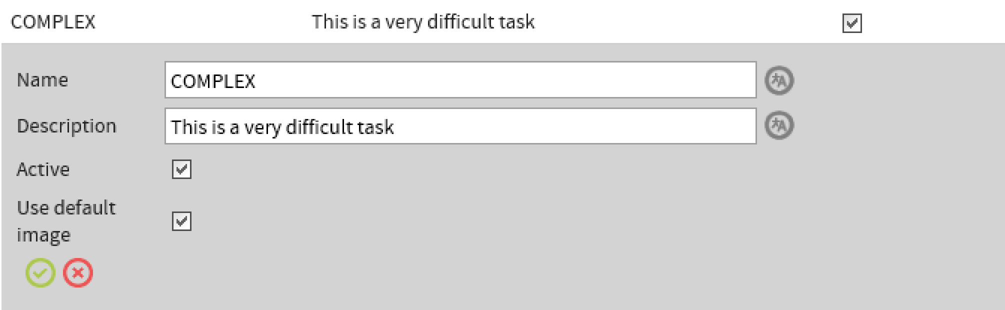
This will open the category editor.

Specify the category properties and then click on the **Save** icon, to finalize the creation of the new category.

Edit a Category

To edit an existing category, click on the **Edit Category** icon next to the category, required to be edited.

The properties of the selected category are available in edit mode.

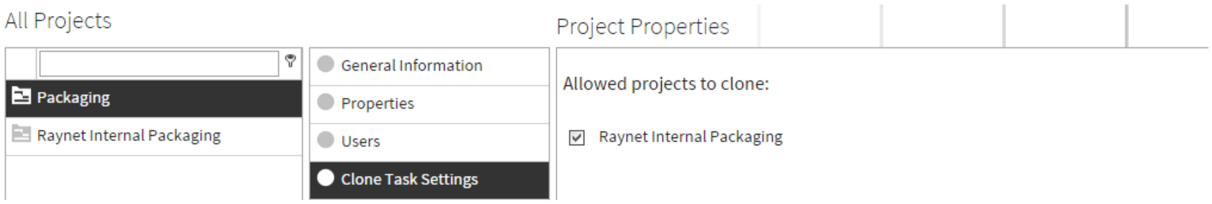


Make changes to the category properties and then click upon the **Save** icon to apply the changes. Otherwise click on the **Cancel** icon to discard the changes.

Clone Mappings

RayFlow has an ability to clone tasks between projects. The Project to which the cloned task belongs can be called the source project and the project to which this task is being cloned can be called the target project. To be able to clone tasks a mapping between the datafields of the target and the source project has to be established. This part of the document describes how this mapping can be achieved.

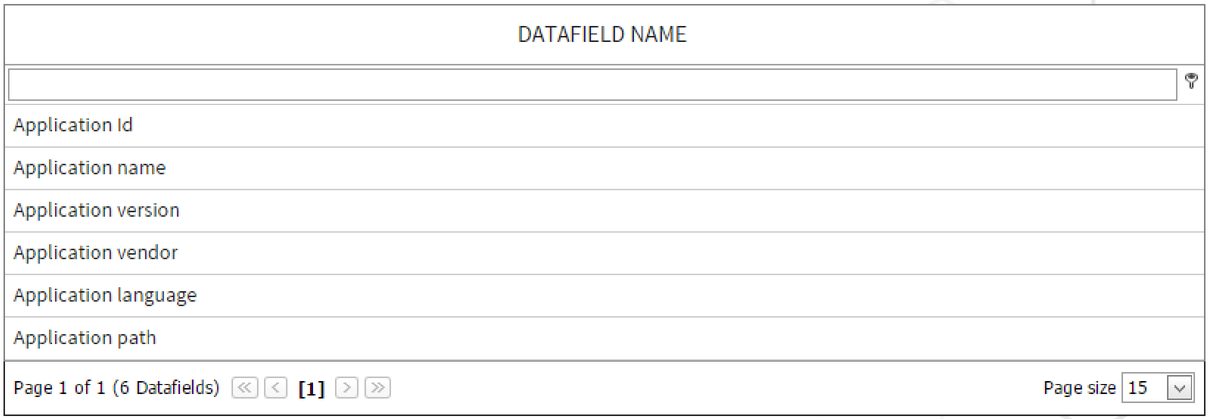
Before starting with the mapping of datafields, a user needs to select the source project(s) from where the tasks will be cloned. This is done via the **Projects** settings of the RayFlow **Administration** feature. More details on this can be found in the *Projects* chapter of this document.



After selecting the source project(s) for the package clone go to the **Configuration** -> **Clone Mappings** page to create this mapping. It is important to note that selecting a source project for a task cloning will only allow cloning packages from that project to the target project and not vice-versa.

Clone Mappings Interface

The **Clone Mappings** interface is a dynamic area which gets extended by the new selection of source projects for task cloning. When no source project is selected only the datafields from the target project are shown. A user can use the search field on top of the list to filter these datafields.



As soon as a source project is selected for task cloning, the source project is added to the interface.

DATAFIELD NAME	RAYNET INTERNAL PACKAGING
Application Id	NO MAPPING
Application name	NO MAPPING
Application version	NO MAPPING
Application vendor	NO MAPPING
Application language	NO MAPPING
Application path	NO MAPPING

Page 1 of 1 (6 Datafields) [1] Page size 15

Mapping of datafields

A map is created between a datafield of the target project to one of the source project. While task cloning, this map tells RayFlow to clone information from the cloned task to the specific datafield in the target project.

Datafields from the source target project are shown under the **DATAFIELD NAME** column header. Next to each of the datafields there is a drop down list. This drop down list contains datafields of the source project. Simply select the source datafield for each of the target datafields from the drop down list.

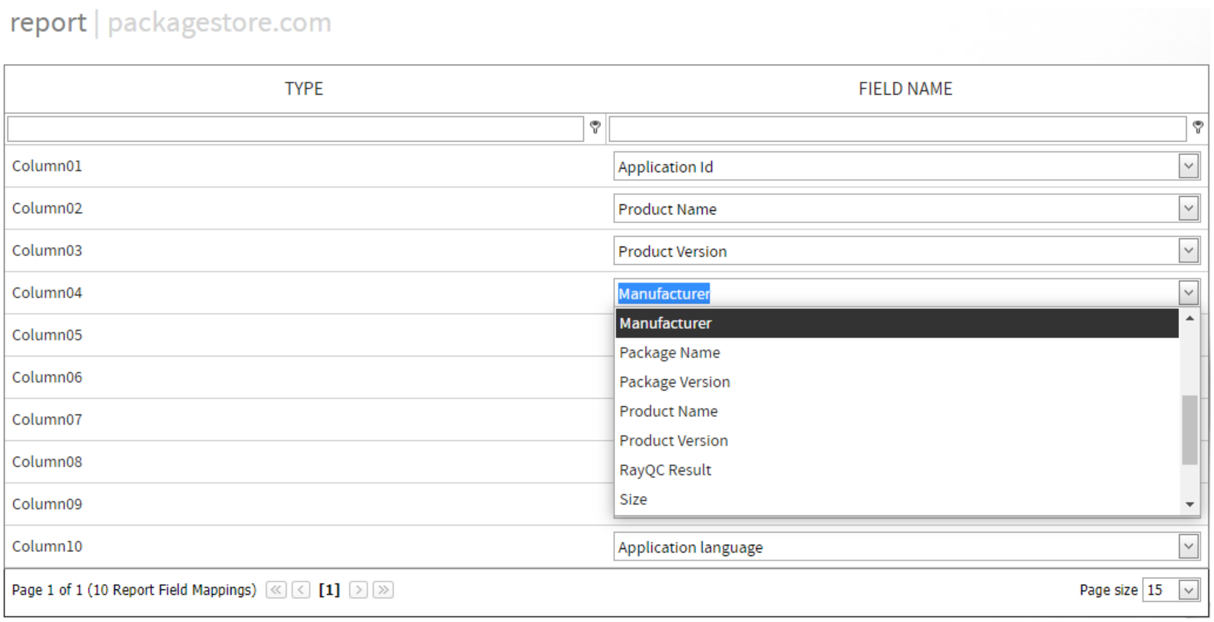
DATAFIELD NAME	RAYNET INTERNAL PACKAGING
Application Id	PGK-ID
Application name	Anwendungsname
Application version	Version
Application vendor	Hersteller
Application language	Sprache
Application path	Setup Pfad

Page 1 of 1 (6 Datafields) [1] Page size 15

Data Mappings

Data mapping allows a user to map the columns in the RayFlow reports to the data fields in the RayFlow project. When compared to directly using data fields from the database, this option allows a user to reuse reports in different projects. This can be achieved by simply mapping the data fields in other projects to the default types.

To create a mapping between the default types and a data field, simply select the data field from the drop down list and RayFlow will automatically save the changes into the database.

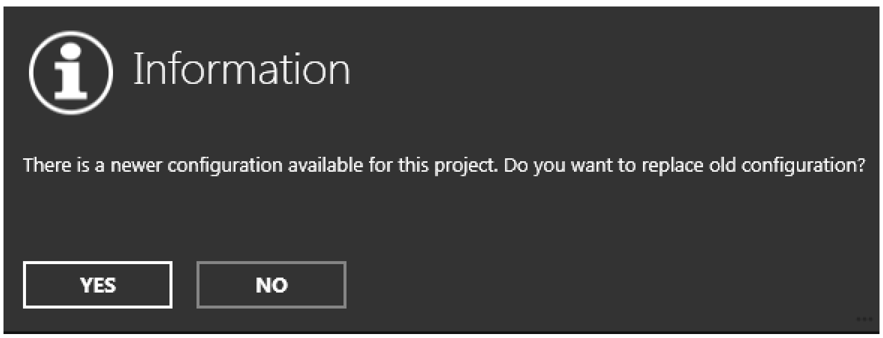


Tools

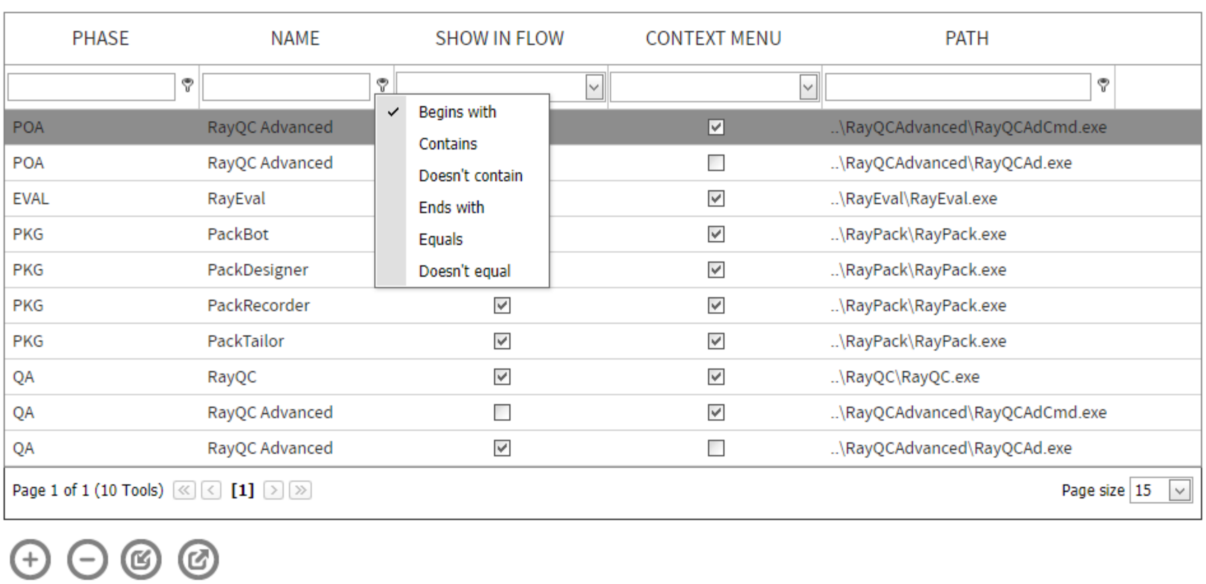
RayFlow allows users to integrate RaySuite and other third-party products via the tools section of the configuration page. RayFlow desktop client uses this configuration to interact with other tools. This part of the document describes how new tools can be added and an existing ones can either be modified or deleted.

Tools Section Interface

The tools section of the configuration page lists all the configured tools in a list manner. The order in which these tools are shown depends upon the assigned order number of the tools. Each of the tools configuration property is defined under a predefined column header.



A user has an ability to filter tools based upon an individual property. This can be achieved using the search field available beneath each of the column headers. The search criteria can be further modified by using the search modifier tool, which is available to the right of the search field.



Working with the Tools Section

To add a new tool

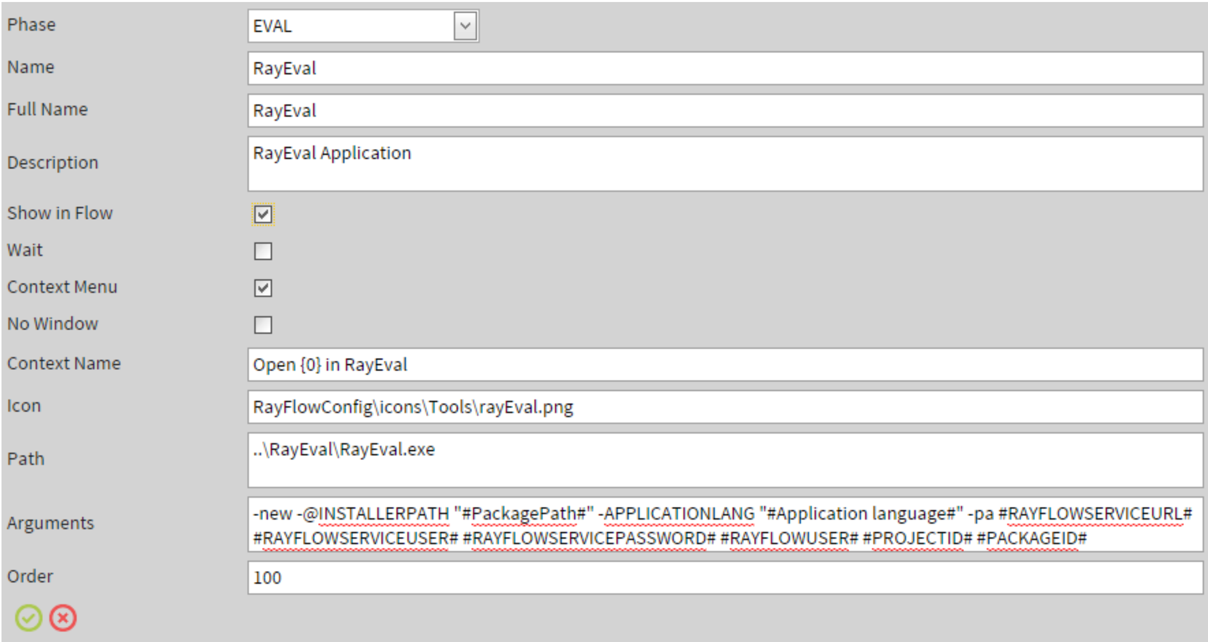
1. Go to **Configuration** -> **Tools**

2. Click on the **Create new tool** button to add a new tool. This button is available at the bottom of the view

A list of tool property fields are now available

- **Phase:** Select the phase within which this tool will be used from the drop down list.
- **Name:** Short name of the tool
- **Full Name:** Full name of the tool
- **Description:** Description of the tool
- **Show in flow:** Makes the tool available within the RFC's workflow process. This way it can be run in standalone mode.
- **Wait:** Waits for user input and prevents access to the RFC.
- **Show in context menu:** Allows the tool to be used via a task within a phase including the value from a specific datafield.
- **No window:** Hides the console window if a tool is executed via a window.
- **Icon:** Path to the tools icon file. Normally it is stored under the following path: `path\RayFlowClient\bin\RayflowConfig\icons\Tools\`.
- **Path:** Path to the tool. Relative paths and Windows environment variables can be used as part of the path.
- **Arguments:** Arguments passed on from RayFlow client to the tool, if launched via context menu.
- **Order:** Order number of the tool

3. Enter values for the properties



4. Click on the **Save** button to finalize adding the tool. Select the **Cancel** button to discard the changes.

**Save button**

**Cancel button**

After saving the changes, the new tool is now shown as part of the tool list.

Editing a Tools Configuration

Configured tool properties can be edited by clicking on the edit button. For each of the tools this button is available on the right after tool property Order.

Deleting an existing Tool

Click on the **Delete** button, which is available next to the edit option, to delete the tool.

Exporting and Importing Tools Configuration

Some of the tools have standard configuration, which can be used for different projects and instances of RayFlow. Creating each of these tools manually and then configuring them is high manual effort.

RayFlow Tools configuration page allows user to export existing tools configuration as `.xml` file and then import it to another project.

Exporting Tools Configuration

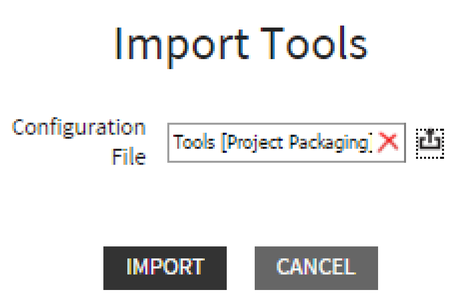
To export tools configuration from a project, first navigate to Tools Configuration page. At the bottom of this page is Export Tools button. Selecting this button will export the tools configuration in a `.xml` format file.

Export Tools

Importing Tools Configuration

To import a list of tools with their configuration into a project, select the Import Tools button. This will pop-up a Import Tools dialog. Specify the path to configuration path and then click upon Import button. When successfully imported, a success message will be shown at the bottom and the tools configuration page will be populated with the imported tools.

Import Tools



Additional Information

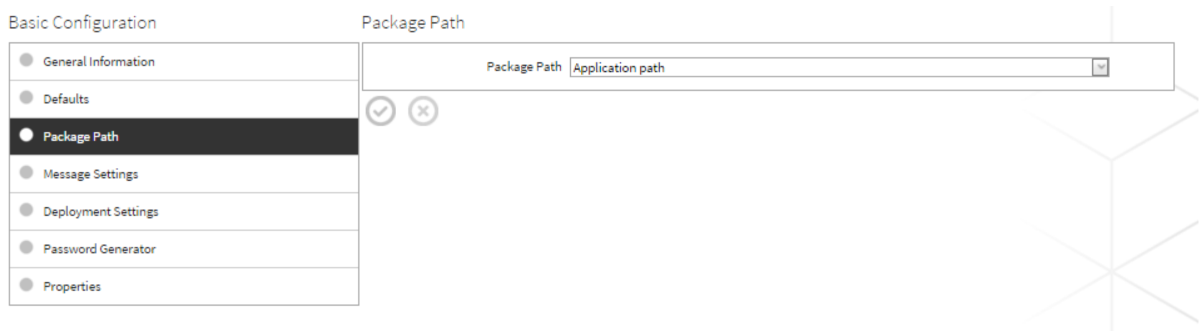
Database

Information pertaining to tools configuration is stored in the `dbo.Tools` table of the RayFlow database.

Tools and Package Path

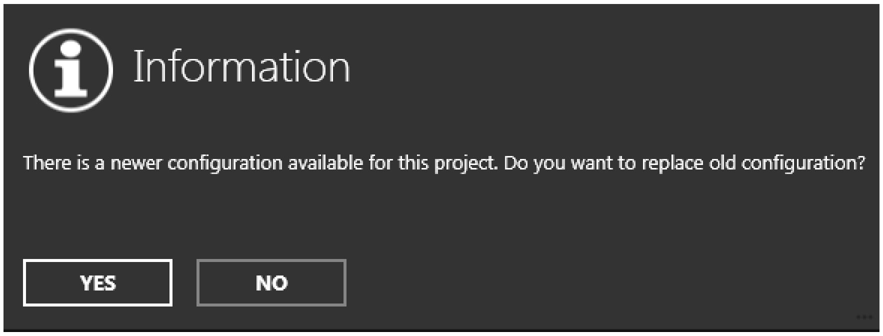
Package Path property links to the datafield, which actually holds the path to the package, which is linked to the current task. This property is important to be set because, when using RaySuite tools, the argument Application Path/ Package Path, gets its value from the same field.

Where can this be set?
The Package Path property can be set under the **Basic Configuration** page.



Tools and RayFlow Client

Every time RayFlow loads a project by connecting to the database (log in, project selection and refresh); the client using its web service checks the version of configuration in the RayFlow database. If a new version is available, it prompts user to accept and download the new configuration information from the database.



Important Files:

`Config.xml` file:

Located under `%Appdata%\Roaming\Raynet\Rayflow\Config and DIR\RayFlowClient\Config` folder

This file contains following information:

- `RayFlowServer="http://172.189.xxx.xx/rayflowserver"`
- `RayFlowAdmin="Admin"`
- `RayFlowPassword="xxxxxxxxxxxxxxxxx"`
- `AskWhereToSaveBeforeOpening="No"`
- `StartFullScreen="Yes"`
- `RememberLogin="Yes"`
- `RecentLogin="Admin"`
- `PathFieldName="Application Path"`
- `TimeOut="100000"`

´

`RayFlowConfiguration.xml` file

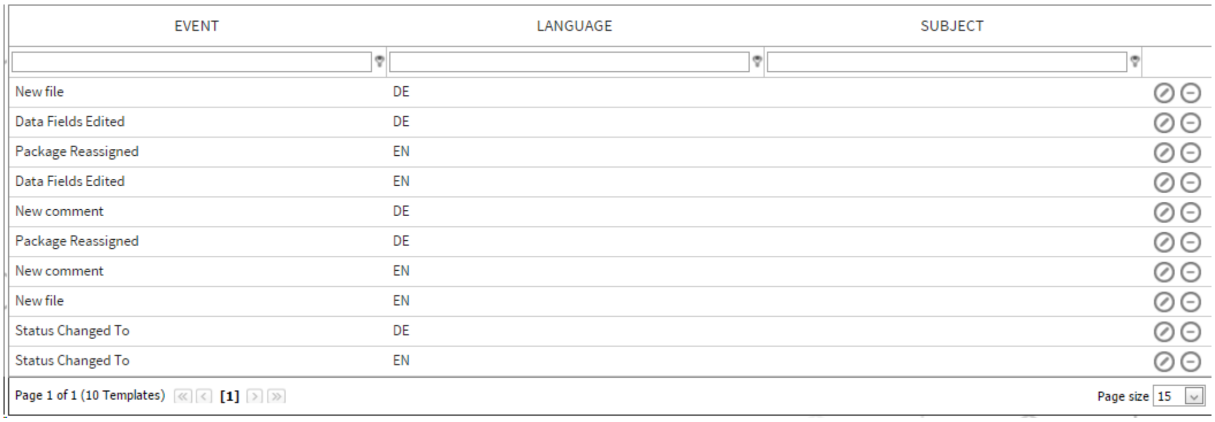
Located under the `%Appdata%\Roaming\Raynet\Rayflow\Config` directory
RayFlow client downloads and stores the tool configuration in this file.

For more information on RayFlow client and how it uses the configuration to interact with other tools, please refer to the *RayFlow Client User Guide*.

Email Templates

The **E-mail Templates** configuration allows users to edit HTML based templates, which are used by the **Notifications** and **TaskTrack** feature. These templates utilize placeholders to obtain data from the database.

A datafield can be used as a place holder in a template, if **E-mail property** is activated for it. Currently a user can customize existing templates for only five predefined events.



EVENT	LANGUAGE	SUBJECT
New file	DE	
Data Fields Edited	DE	
Package Reassigned	EN	
Data Fields Edited	EN	
New comment	DE	
Package Reassigned	DE	
New comment	EN	
New file	EN	
Status Changed To	DE	
Status Changed To	EN	

Page 1 of 1 (10 Templates) [1] Page size 15

Custom placeholders can be defined by adding a property `EmailTemplate_PlaceholderName` within the **Basic configuration** page. The value of this property can then be addressed by using `$PlaceholderName$` in the e-mail template.

The following predefined placeholders will be replaced with information from RayFlow:

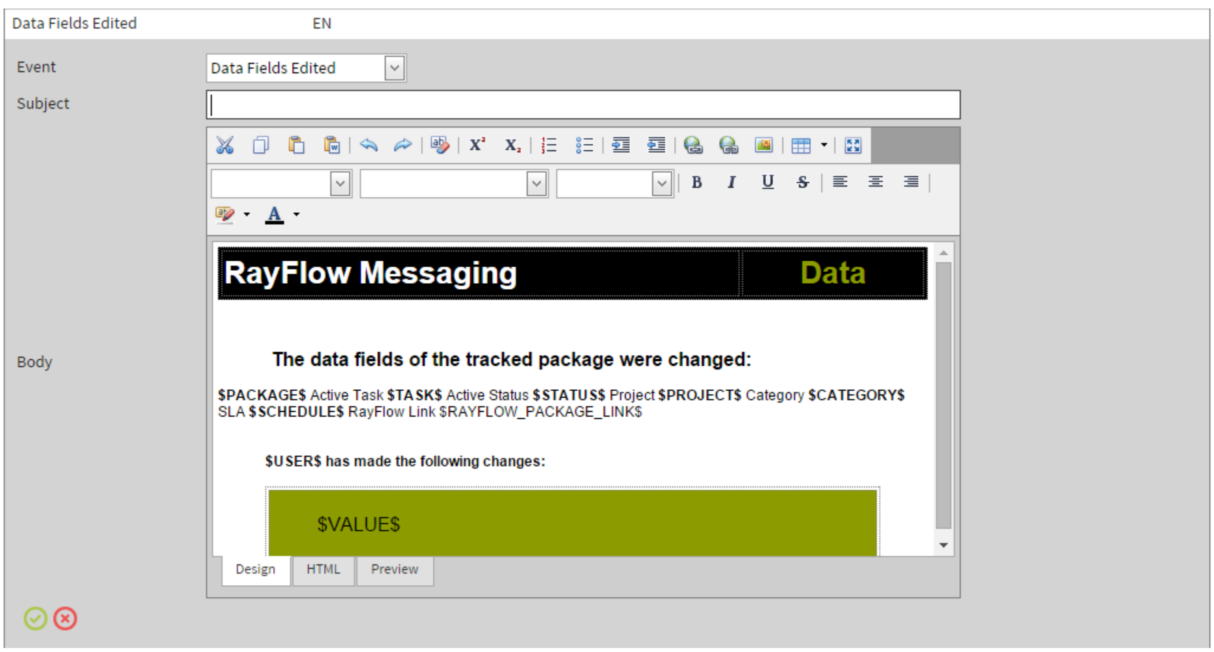
Placeholder	Supported Formats	Function
$CATEGORY$	Text	Category name
$DATA_FIELD$	Text or list	List of all datafields with the enable Email property
$EVENT$	Text	Name of the event which was triggered
$PACKAGE$	Text	Task name (datafields mapped for `ApplicationName` type in report mapping or connection of all datafields with the visible property)
$PACKAGE_ID$	Text	Unique identifier of the active task
$PROJECT$	Text	Project name
$RAYFLOW_LINK$	Text	HTML link to the RayFlow base URL
$RAYFLOW_PACKAGE_LINK$	Text	Direct HTML link to the active package (only if logged into the RayFlow instance)
$SCHEDULE$	Text	SLA name
$STATUS$	Text	Active status name
$TASK$	Text	Active phase name
$TASK_ID$	Text	Unique identifier of the active phase

Placeholder	Supported Formats	Function
`$TASKTYPE$`	Text	Name of the task type.
`$USER$`	Text	Name of the user who made the change
`$VALUE$`	Text or list	Values which have been changed

Note:
The standard and the custom email placeholders can also be used in the **Basic Configuration Message Settings** subject term if the related email template subject terms are left blank.

Editing an Email Template

To edit an e-mail template, click on the **Edit this template** icon. This will open the template in edit mode.

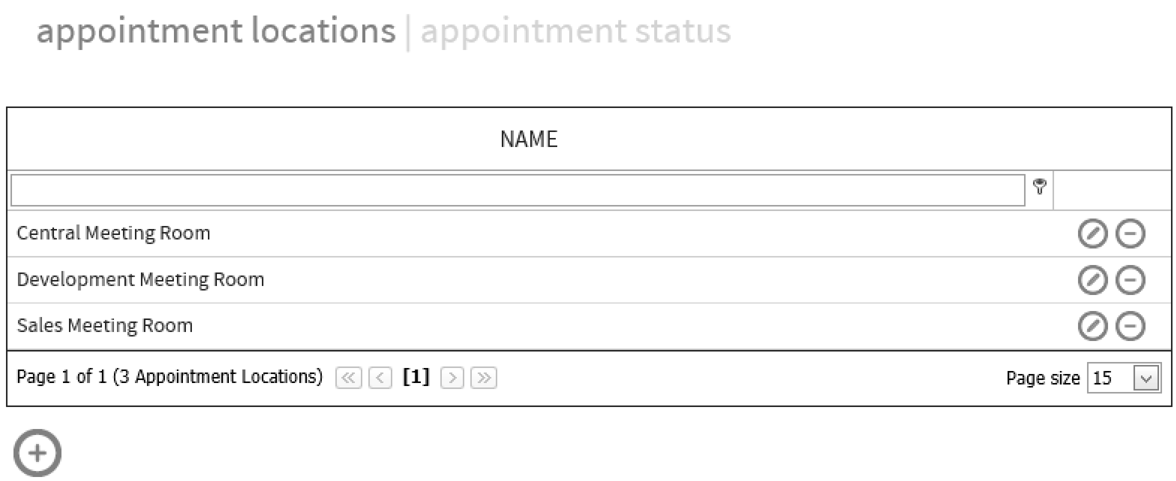


- The events are predefined
- The `MESSAGE_EMAIL_SUBJECT` property which is set in the Basic configuration is used to populate the subject field.
- The e-mail body can be created either in design or HTML mode
- To review the changes, before saving the changes made to the template, select the preview mode.

Be aware:
Do not use placeholders which also support other formats than text (like `$DATA_FIELD$` and `$VALUE$`) inside of the subject field!

Appointment

While creating a new appointment a user needs to specify location and status of that appointment. These properties are of type drop-down menu and a user can define options for them using the **Appointment** page of **RayFlow Configuration** section.



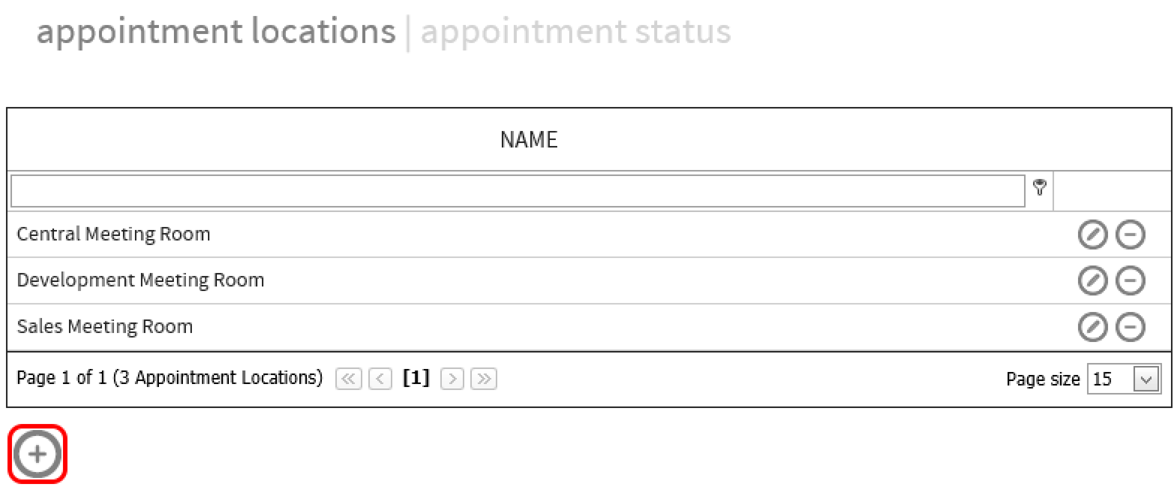
More information on how to create a new appointment can be found under the **Appointments** section of *Typical User Workflows* chapter of this document.

Appointment location

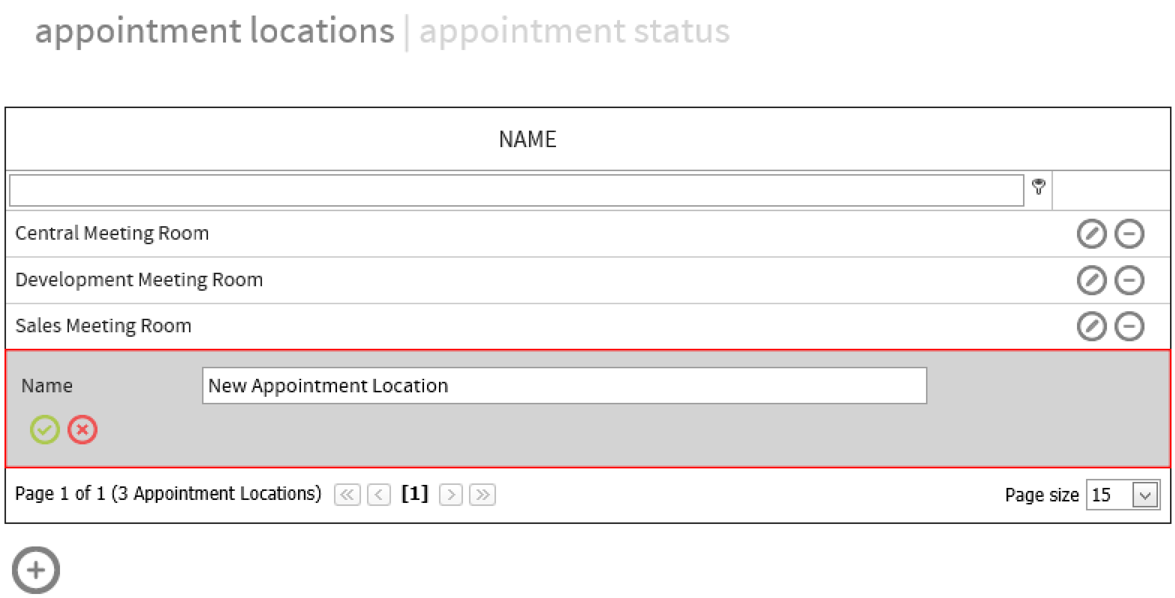
As part of appointment location, a user can define custom locations for the scheduled appointment to take place.

Create a new appointment location

To create a new appointment, click on the Create new appointment location icon. This icon is shown both under the appointment locations list and next to each of the existing location options.

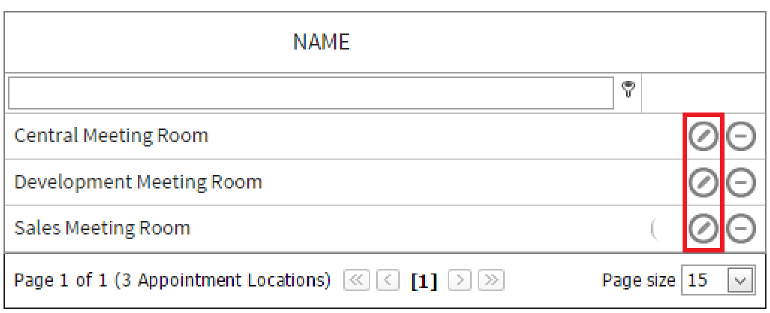


When clicked upon, a new appointment location is shown in edit mode. Specify a name for the new appointment location and then click on the **Save** icon. Contrarily, to discard the changes, click on the **Cancel** icon.



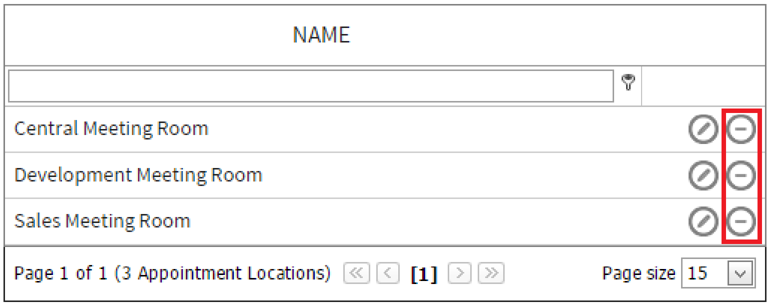
Edit an existing appointment location

A user can edit and change the name of an appointment location by clicking on the **Edit Appointment Location** icon. This icon is present next to each of the appointment locations in the list.



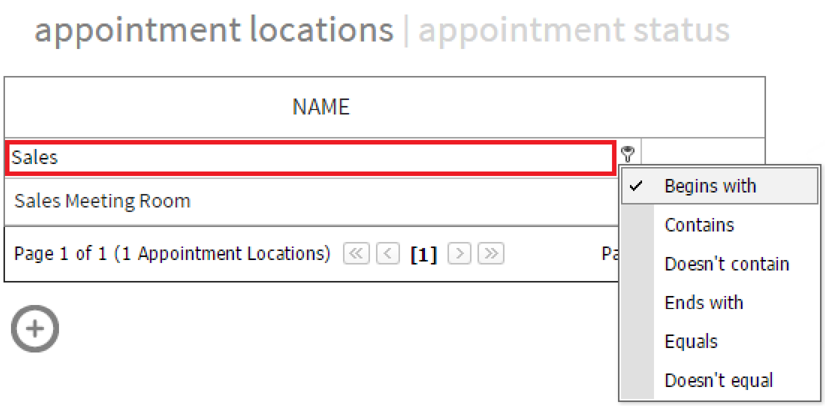
Delete an existing appointment location

To delete an existing appointment location, click on the **Delete Appointment Location** icon. This icon is present next to each of the appointment locations in the list.


NAME
Central Meeting Room
Development Meeting Room
Sales Meeting Room
Page 1 of 1 (3 Appointment Locations)
[1]
Page size
15

Search for an appointment location

A user can search for a location from the list by providing a search keyword in the search field. Additionally, a user can specify the search criteria by clicking on the key icon. This icon is available just next to the search field.



Appointment status

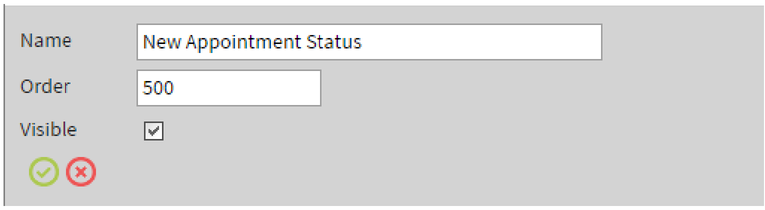
Appointment status section of the Appointment configuration page allows a user to create and manage status options for appointment.

Create a new appointment status

To create a new status option, click on the **Create new appointment status** icon. This icon is shown both at the bottom of the appointment status list and next to each of the existing options.

When clicked upon, a new appointment status is shown in edit mode. Specify following properties for the new status and then click on the **Save** icon.

- **Name**: Name of the appointment status
- **Order**: Order in which the status is shown with respect to other status options
- **Visible**: This option defines if an appointment is handled as an active (visible) appointment or a finished appointment.

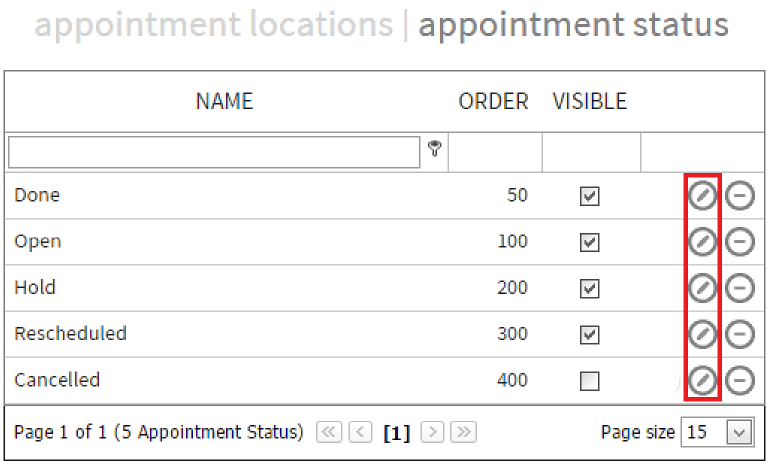


To discard the changes made, click on the **Cancel** icon.

Edit an existing appointment status

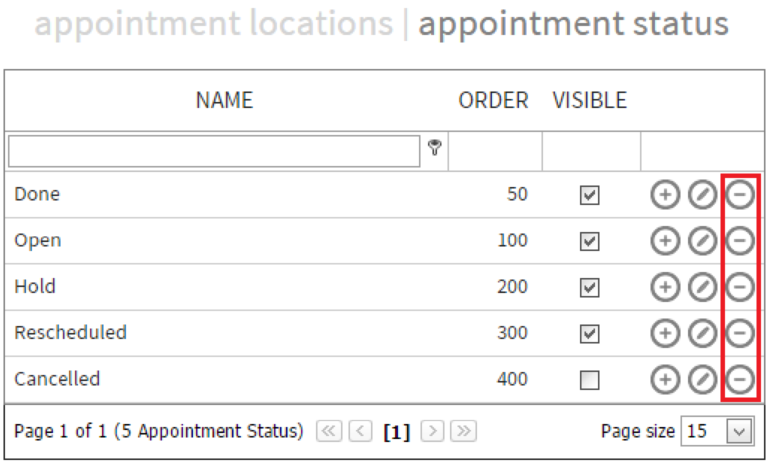
A user can edit and change the name of an appointment status by clicking on the **Edit**

Appointment Status icon. This icon is present next to each of the appointment status in the list.



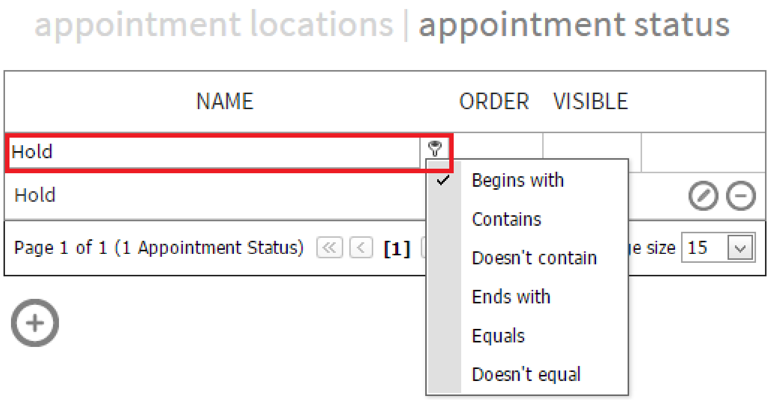
Delete an existing appointment status

To delete an existing appointment status, click on the **Delete Appointment status** icon. This icon is present next to each of the appointment status in the list.



Search for an appointment status

A user can search for a status from the list by providing a search keyword in the search field. Additionally, a user can specify the search criteria by clicking on the key icon. This icon is available just next to the search field.


appointment locations | appointment status
NAME
ORDER
VISIBLE
Hold
Hold
Page 1 of 1 (1 Appointment Status)
[1]
15
Begins with
Contains
Doesn't contain
Ends with
Equals
Doesn't equal

Static Pages

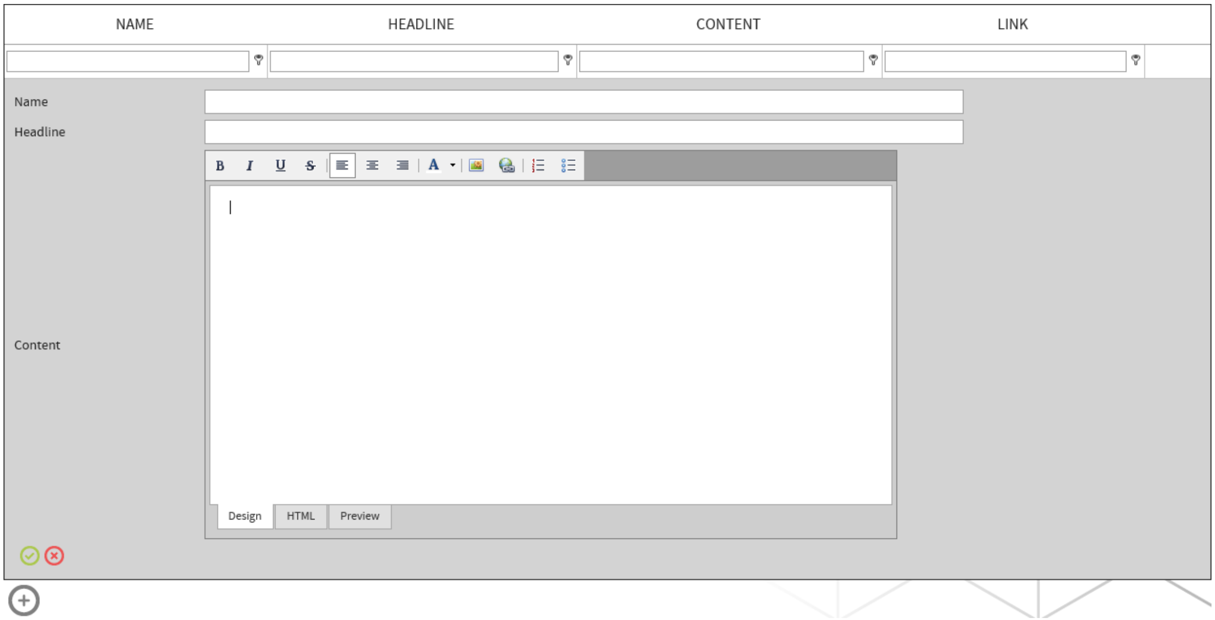
Static pages allow static contents to be accessible from the RayFlow web interface. Adding a new static page to the RayFlow is a three step process:

1. *Create a new static page*
2. *Create a new menu item for the page created*

Creating a new static page

1. Log into a RayFlow project as an Administrator
2. Go to **Configuration** -> **Static Pages** in the left side-bar
3. Click on the **Create new Static Page** icon

4. The Static Page editor is shown



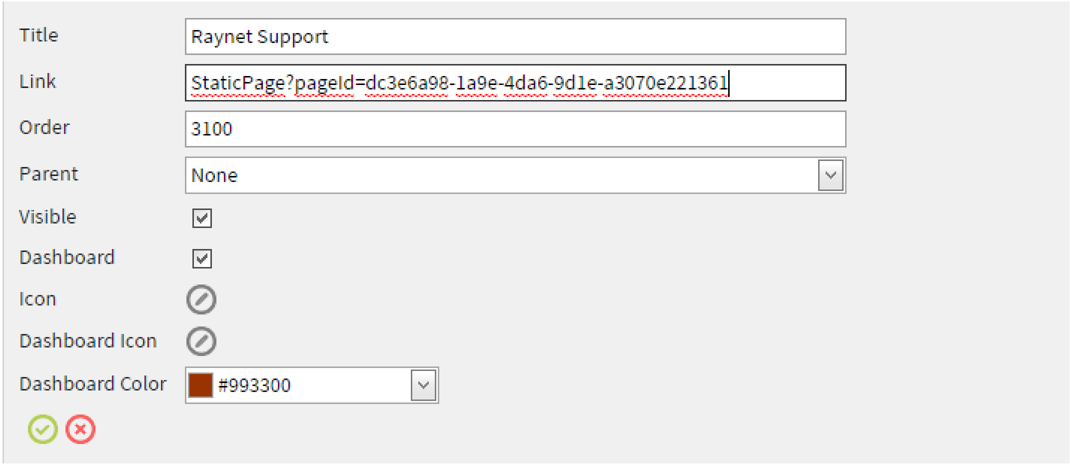
5. Specify the properties of the new static page:

- **Name**: Name of the static page
- **Headline**: Header name of the static page. This name is shown in the RayFlow header section.
- **Content**:Static content for the page. The content section is divided into three sections: **Design**, **HTML**, and **Preview**.

6. After specifying the properties of the static changes, click on the **Save** icon to finalize creating the static page.

Creating a new menu item for a static page

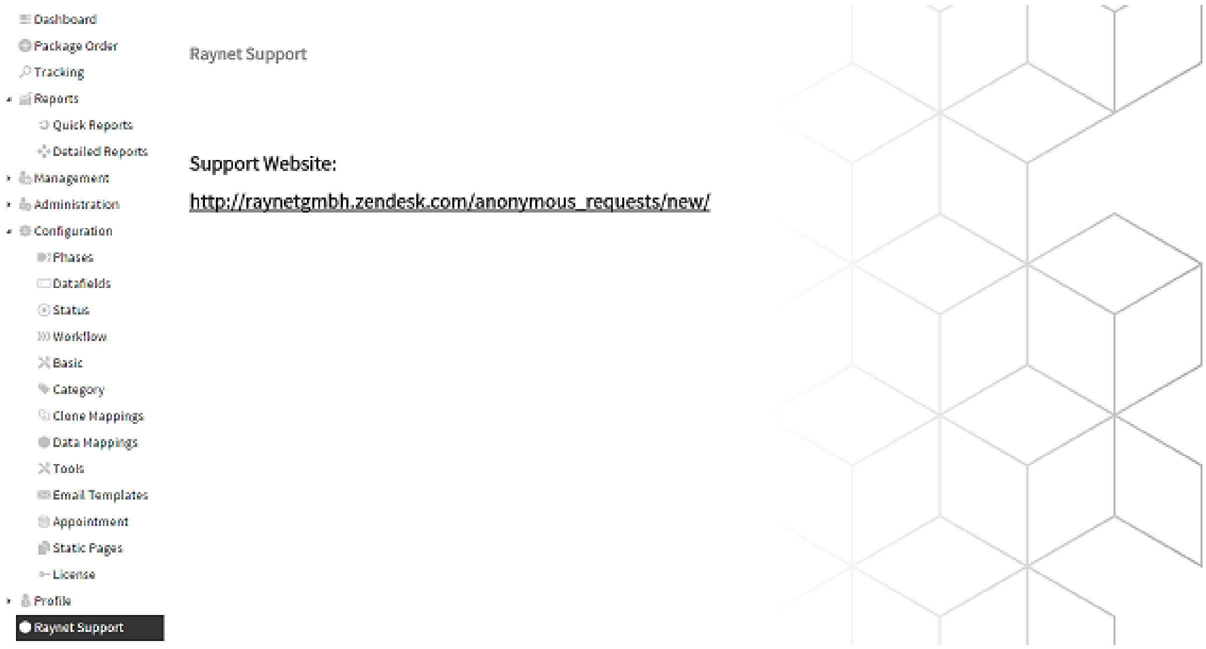
To make the static page accessible to the RayFlow users, the link to this static page is required to be connected with a menu item. This can be done through the **Groups** page of RayFlow Administration.



For more information on how to add new menu items and define user permission to it, refer to the *Menus* topic of the *Groups* chapter.

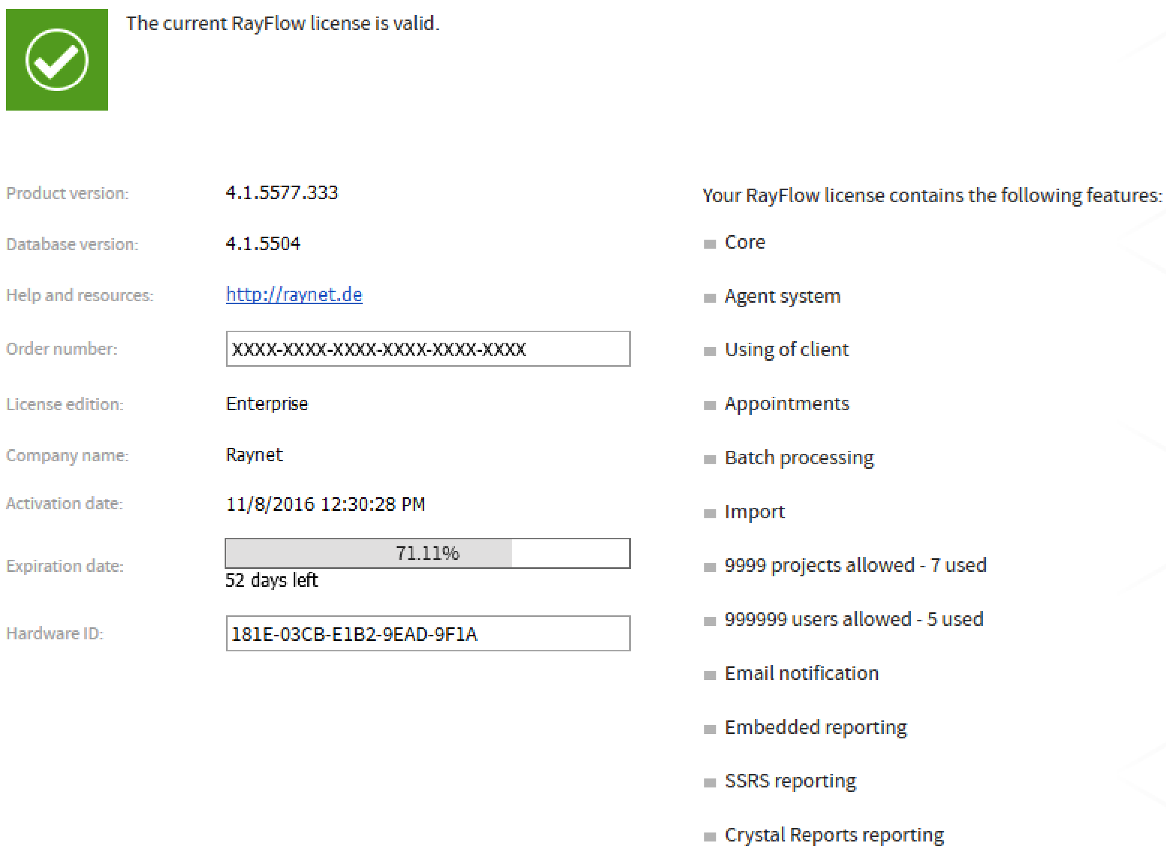
A new tile is added to the RayFlow Dashboard.

When clicked upon this new tile, the configured static page will be loaded into the view:


Dashboard
Package Order
Tracking
Reports
Quick Reports
Detailed Reports
Management
Administration
Configuration
Phases
Datafields
Status
Workflow
Basic
Category
Clone Mappings
Data Mappings
Tools
Email Templates
Appointment
Static Pages
License
Profile
Raynet Support
Raynet Support
Support Website:
http://raynetgmbh.zendesk.com/anonymous_requests/new/

License

The **License** page that is available as part of RayFlow configuration, provides information pertaining to the RayFlow product and the license file currently used for it. Additionally, as RayFlow has a modular architecture, various additional features can be added to RayFlow. Availability of these features is controlled via the license file. This page provides information on which features are allowed to be used by the currently applied license file.

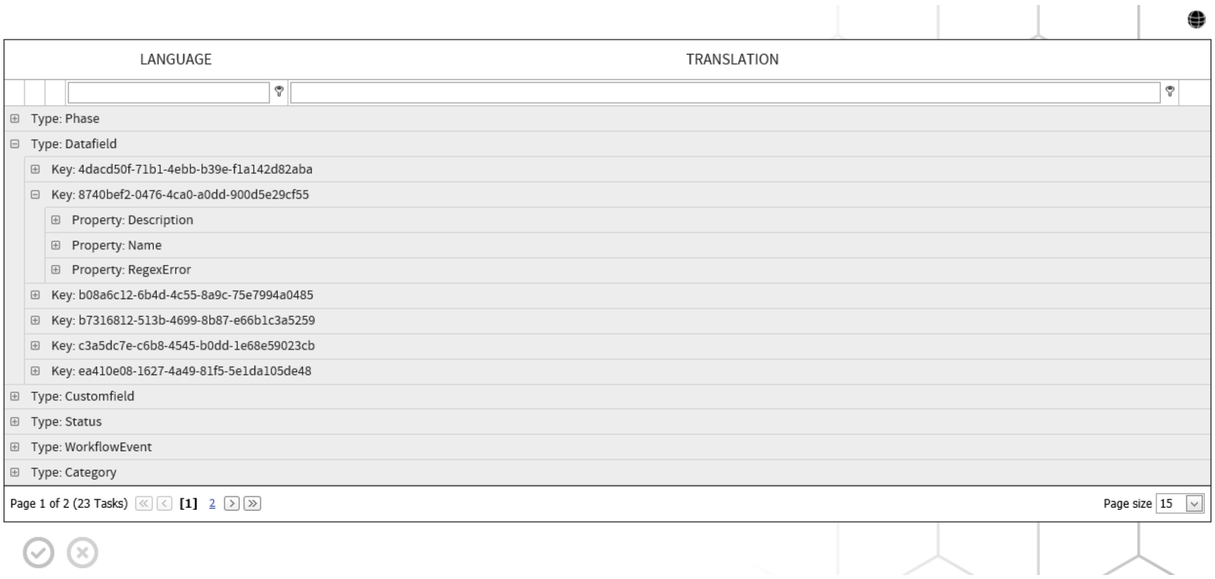


Please note that full details related to the license (as shown in the above image) is only shown to the root user. For other users with permission to this page, only information pertaining to the validity of license is shown and not more.

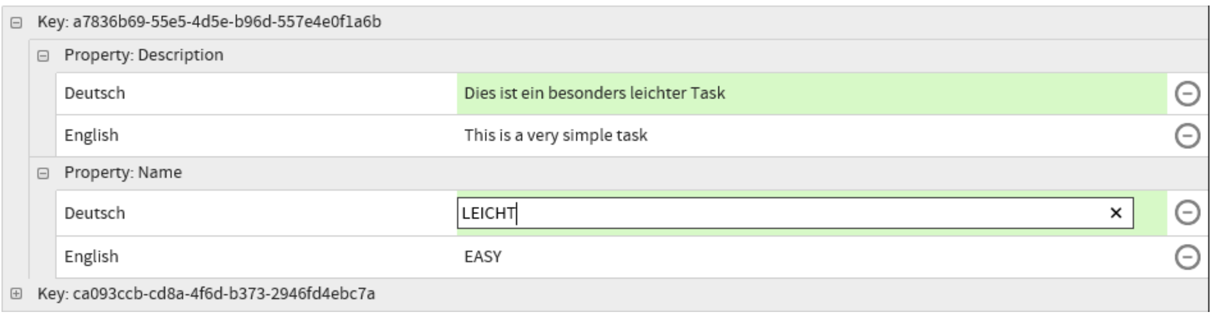
For more information on license and product activation, please refer to the *Product Activation* chapter of this document.

Translations

In the translations section, the translations for all that has or can be customized can be added to RayFlow. To add translation, the **Collect translations** button (🌐) needs to be clicked. RayFlow will then collect all entries that can be translated.



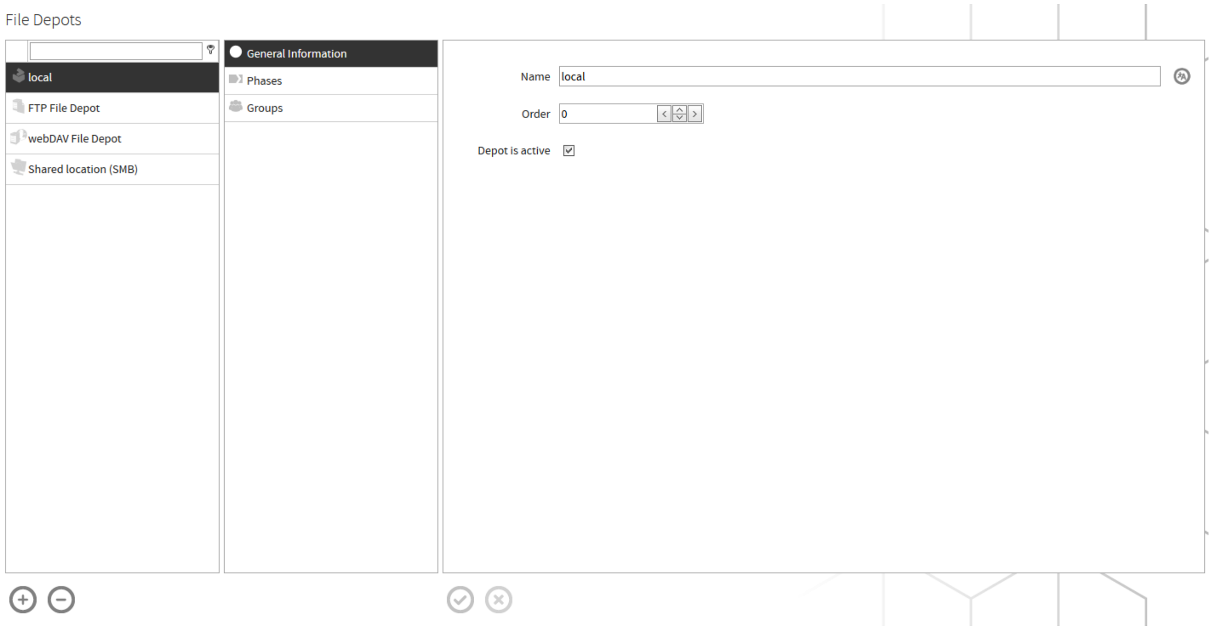
In order to translate an entry, the entry needs to be expanded. After expanding the entry, depending on the entry, it will be possible to enter a translation for the Name and / or the description into the field of the corresponding language.



As shown above, changes will be marked in green. After all translations have been entered, click on the **Save changes** button at the bottom of the page to save the translations that have been added or changed.

File Depots

This is where **File Depots**, which can be used as an alternative target instead of the RayFlow Server, can be configured.



On the **File Depots Configuration** page there are three different tabs available:

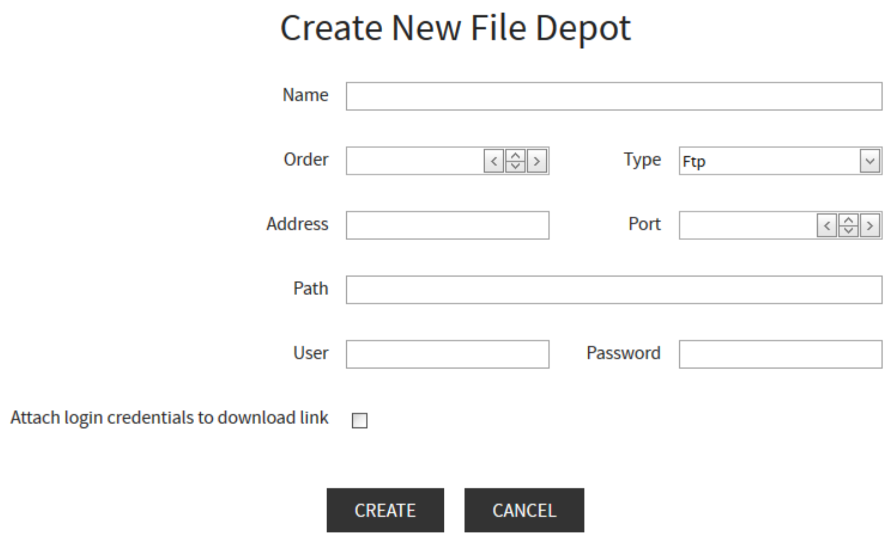
- **General Information**: This is where the general information for a selected file depot can be configured. These information are identical to the information that can be configured during the creation of the file depot.
- **Phases**: In this tab the phases during which the file depot will be available can be configured.
- **Groups**: In this tab the groups for which the file depot will be available can be configured.

In order to create a new file depot, click on the **Create new file depot** button on the bottom of the page.

There are different types of file depots that can be created. The types of file depots that can be created are:

- **FTP (File Transfer Protocol)**
- **FTPS**
- **webDAV (Web-based Distributed Authoring and Versioning)**
- **webDAVSSL**
- **SMB (Server Message Block)**

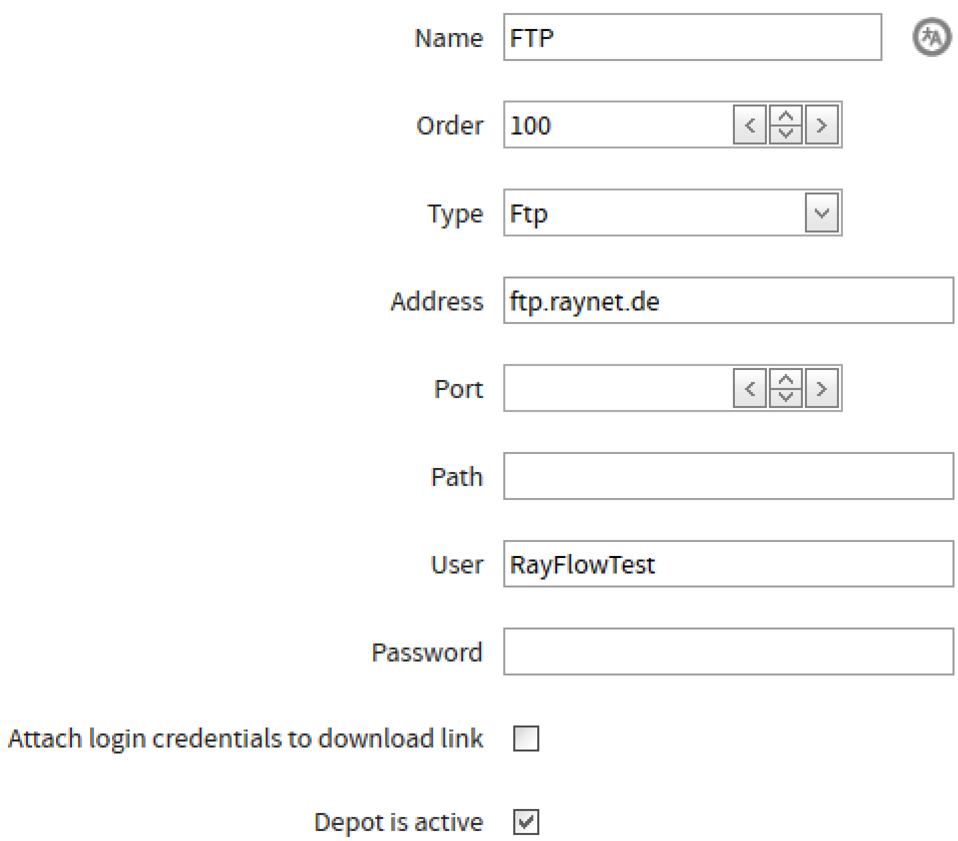
File Depot: FTP



The **Create New File Depot** window will open. Enter all data which is necessary to access the file depot. At least Name and Order have to be entered in this window, further information like path, etc. can also be configured later.
After all mandatory fields have been entered, click on the **CREATE** button to create the file depot.

- **Name**: The name that is chosen for the file depot. The name of the server must be part of the address.
- **Order**: This field defines the position in which the file depot will be shown in the dropdown list.
- **Type**: The type of the file depot, in this case FTP, can be defined here. Select the type using the dropdown menu.
- **Address**: The address of the server where the file depot is located. The name of the server must be part of the address.
- **Port**: The port that has to be used.
- **Path**: The path on the RayFlow server. RayFlow will automatically add the path if it does not exist.
- **User**: The username that is used to access the file depot.
- **Password**: The password for the username used to access the file depot.
- **Attach login credentials to download link**: This checkbox needs to be checked in order to attach the login credentials to the download link.

FTP File Depot Configuration

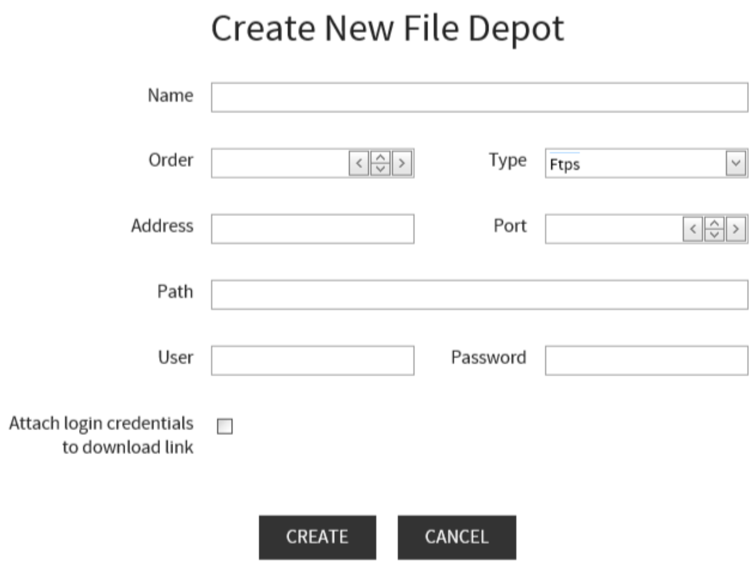


If the selected Type is FTP the following fields are available on the File Depots Configuration page:

- **Name**: The name that is chosen for the file depot. The name of the server must be part of the address.
- **Order**: This field defines the position in which the file depot will be shown in the dropdown list.
- **Type**: The type of the file depot, in this case FTP, can be defined here. Select the type using the dropdown menu.
- **Address**: The address of the server where the file depot is located. The name of the server must be part of the address.
- **Port**: The port that has to be used.
- **Path**: The path on the RayFlow server. RayFlow will automatically add the path if it does not exist.
- **User**: The username that is used to access the file depot.

- **Password**: The password for the username used to access the file depot.
- **Attach login credentials to download link**: This checkbox needs to be checked in order to attach the login credentials to the download link.
- **Depot is active**: The depot can be activated or deactivated using this checkbox.

File Depot: FTPS



The **Create New File Depot** window will open. Enter all data which is necessary to access the file depot. At least Name and Order have to be entered in this window, further information like path, etc. can also be configured later.
After all mandatory fields have been entered, click on the **CREATE** button to create the file depot.

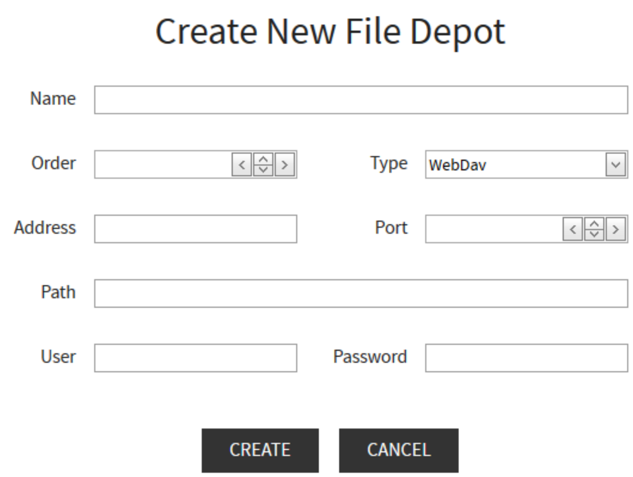
- **Name**: The name that is chosen for the file depot. The name of the server must be part of the address.
- **Order**: This field defines the position in which the file depot will be shown in the dropdown list.
- **Type**: The type of the file depot, in this case FTPS, can be defined here. Select the type using the dropdown menu.
- **Address**: The address of the server where the file depot is located. The name of the server must be part of the address.
- **Port**: The port that has to be used.
- **Path**: The path on the RayFlow server. RayFlow will automatically add the path if it does not exist.
- **User**: The username that is used to access the file depot.
- **Password**: The password for the username used to access the file depot.
- **Attach login credentials to download link**: This checkbox needs to be checked in order to attach the login credentials to the download link.

FTPS File Depot Configuration

If the selected Type is FTPS the following fields are available on the File Depots Configuration page:

- **Name**: The name that is chosen for the file depot. The name of the server must be part of the address.
- **Order**: This field defines the position in which the file depot will be shown in the dropdown list.
- **Type**: The type of the file depot, in this case FTPS, can be defined here. Select the type using the dropdown menu.
- **Address**: The address of the server where the file depot is located. The name of the server must be part of the address.
- **Port**: The port that has to be used.
- **Path**: The path on the RayFlow server. RayFlow will automatically add the path if it does not exist.
- **User**: The username that is used to access the file depot.
- **Password**: The password for the username used to access the file depot.
- **Attach login credentials to download link**: This checkbox needs to be checked in order to attach the login credentials to the download link.
- **Depot is active**: The depot can be activated or deactivated using this checkbox.

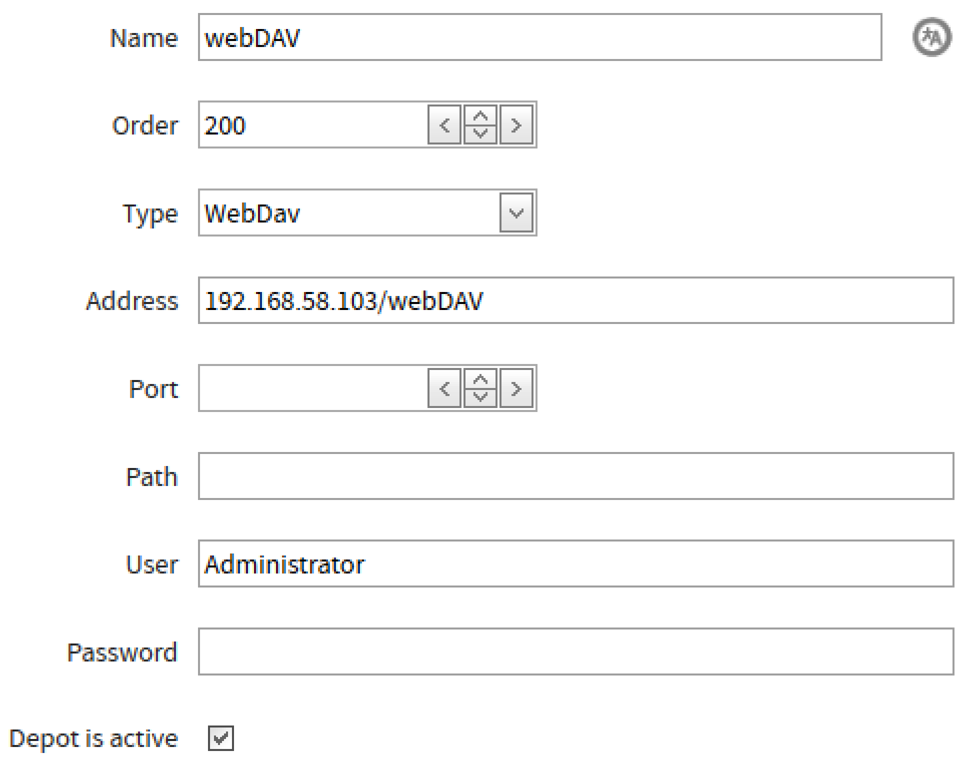
File Depot: webDAV



The **Create New File Depot** window will open. Enter all data which is necessary to access the file depot. At least Name and Order have to be entered in this window, further information like path, etc. can also be configured later.
After all mandatory fields have been entered, click on the **CREATE** button to create the file depot.

- **Name**: The name that is chosen for the file depot. The name of the server must be part of the address.
- **Order**: This field defines the position in which the file depot will be shown in the dropdown list.
- **Type**: The type of the file depot, in this case WebDav, can be defined here. Select the type using the dropdown menu.
- **Address**: The address of the server where the file depot is located. The name of the server must be part of the address.
- **Port**: The port that has to be used.
- **Path**: The path on the RayFlow server. RayFlow will automatically add the path if it does not exist.
- **User**: The username that is used to access the file depot.
- **Password**: The password for the username used to access the file depot.

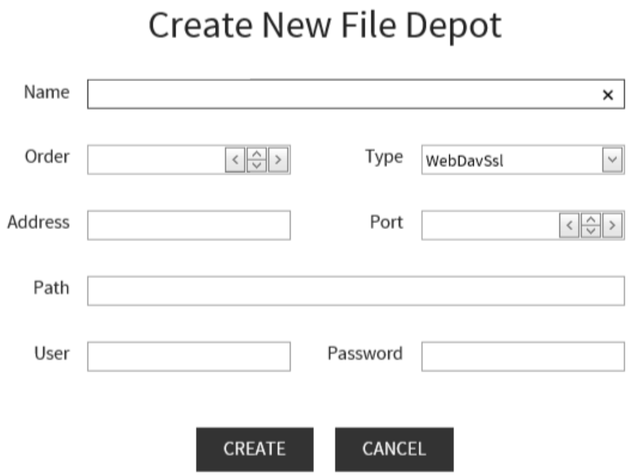
WebDav File Depot Configuration



If the selected Type is WebDav the following fields are available on the File Depots Configuration page:

- **Name**: The name that is chosen for the file depot. The name of the server must be part of the address.
- **Order**: This field defines the position in which the file depot will be shown in the dropdown list.
- **Type**: The type of the file depot, in this case WebDav, can be defined here. Select the type using the dropdown menu.
- **Address**: The address of the server where the file depot is located. The name of the server must be part of the address.
- **Port**: The port that has to be used.
- **Path**: The path on the RayFlow server. RayFlow will automatically add the path if it does not exist.
- **User**: The username that is used to access the file depot.
- **Password**: The password for the username used to access the file depot.
- **Depot is active**: The depot can be activated or deactivated using this checkbox.

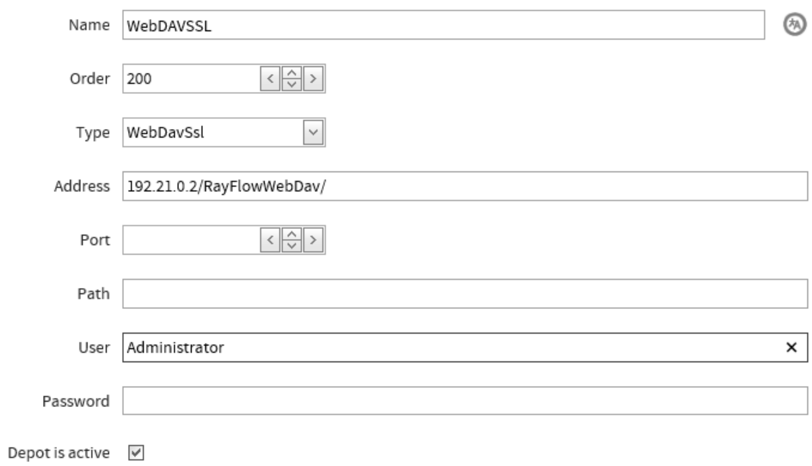
File Depot: webDAVSSL



The **Create New File Depot** window will open. Enter all data which is necessary to access the file depot. At least Name and Order have to be entered in this window, further information like path, etc. can also be configured later.
After all mandatory fields have been entered, click on the **CREATE** button to create the file depot.

- **Name**: The name that is chosen for the file depot. The name of the server must be part of the address.
- **Order**: This field defines the position in which the file depot will be shown in the dropdown list.
- **Type**: The type of the file depot, in this case WebDavSSL, can be defined here. Select the type using the dropdown menu.
- **Address**: The address of the server where the file depot is located. The name of the server must be part of the address.
- **Port**: The port that has to be used.
- **Path**: The path on the RayFlow server. RayFlow will automatically add the path if it does not exist.
- **User**: The username that is used to access the file depot.
- **Password**: The password for the username used to access the file depot.

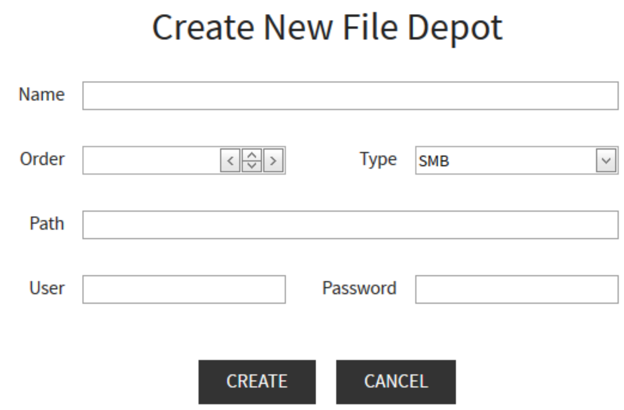
WebDAVSSL File Depot Configuration



If the selected Type is WebDavSSL the following fields are available on the File Depots Configuration page:

- **Name**: The name that is chosen for the file depot. The name of the server must be part of the address.
- **Order**: This field defines the position in which the file depot will be shown in the dropdown list.
- **Type**: The type of the file depot, in this case WebDavSSL, can be defined here. Select the type using the dropdown menu.
- **Address**: The address of the server where the file depot is located. The name of the server must be part of the address.
- **Port**: The port that has to be used.
- **Path**: The path on the RayFlow server. RayFlow will automatically add the path if it does not exist.
- **User**: The username that is used to access the file depot.
- **Password**: The password for the username used to access the file depot.
- **Depot is active**: The depot can be activated or deactivated using this checkbox.

File Depot: SMB

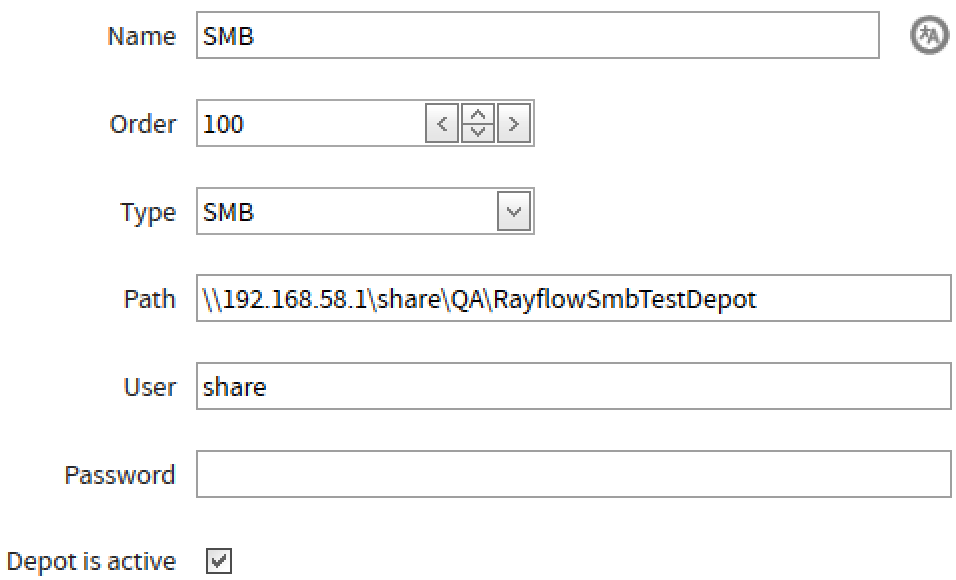


The **Create New File Depot** window will open. Enter all data which is necessary to access the file depot. At least Name and Order have to be entered in this window, further information like path, etc. can also be configured later.
After all mandatory fields have been entered, click on the **CREATE** button to create the file depot.

- **Name**: The name that is chosen for the file depot. The name of the server must be part of the address.
- **Order**: This field defines the position in which the file depot will be shown in the dropdown list.
- **Type**: The type of the file depot, in this case SMB, can be defined here. Select the type using the dropdown menu.
- **Path**: The path on the RayFlow server. RayFlow will automatically add the path if it does not exist.
- **User**: The username that is used to access the file depot.
- **Password**: The password for the username used to access the file depot.

Warning:
SMB File depots can only be used when using Internet Explorer 11 as browser.

SMB File Depot Configuration



If the selected Type is SMB the following fields are available on the File Depots Configuration page:

- **Name**: The name that is chosen for the file depot. The name of the server must be part of the address.
- **Order**: This field defines the position in which the file depot will be shown in the dropdown list.
- **Type**: The type of the file depot, in this case SMB, can be defined here. Select the type using the dropdown menu.
- **Path**: The path on the RayFlow server. RayFlow will automatically add the path if it does not exist.
- **User**: The username that is used to access the file depot.
- **Password**: The password for the username used to access the file depot.
- **Depot is active**: The depot can be activated or deactivated using this checkbox.

File Depot: Local

If the selected Type is local the following fields are available on the File Depots Configuration page:

- **Name**: The name that is chosen for the file depot. The name of the server must be part of the address.
- **Order**: This field defines the position in which the file depot will be shown in the dropdown list.
- **Depot is active**: The depot can be activated or deactivated using this checkbox.

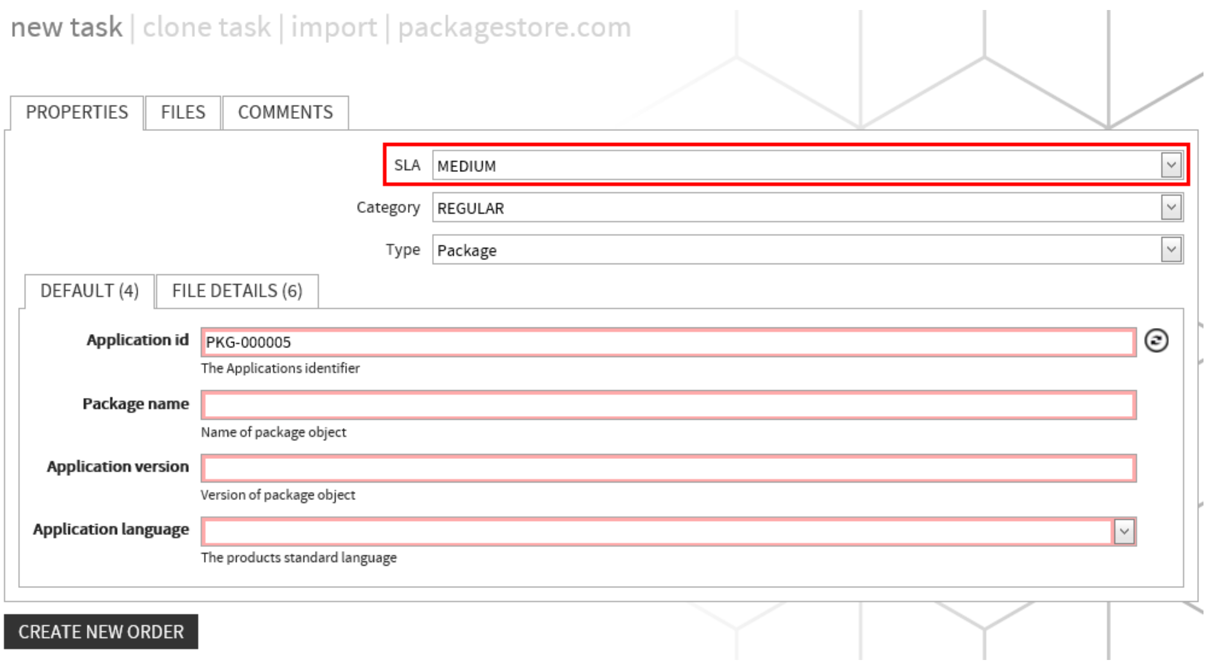
Management

The management part of RayFlow includes features that can help users with the management of tasks. One of the most important features covered by this is the SLA configuration. SLA time management is very essential for vendors to ensure timely completion and delivery of results.

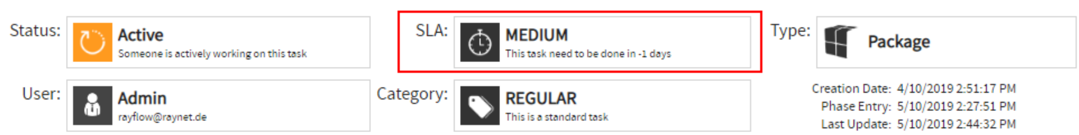
Based upon the service level agreement between a vendor and a customer, the SLA timing can be configured in various formats including date, work days and project days. More information on this can be found in the SLA chapter of this document.

SLA Editor

The SLA Editor in RayFlow is basically a scheduling tool that allows a user to define different schedule types for the tasks within a project. This helps in ordering of the tasks and prioritizing them for resource allocation. Furthermore, the SLA Editor offers a configuration platform for the Service Level Agreement (SLA) computation. This feature can be accessed by clicking on Management in the functional navigation bar. SLA type is one of the default properties of a task and a user needs to select the SLA type while creating a new task.

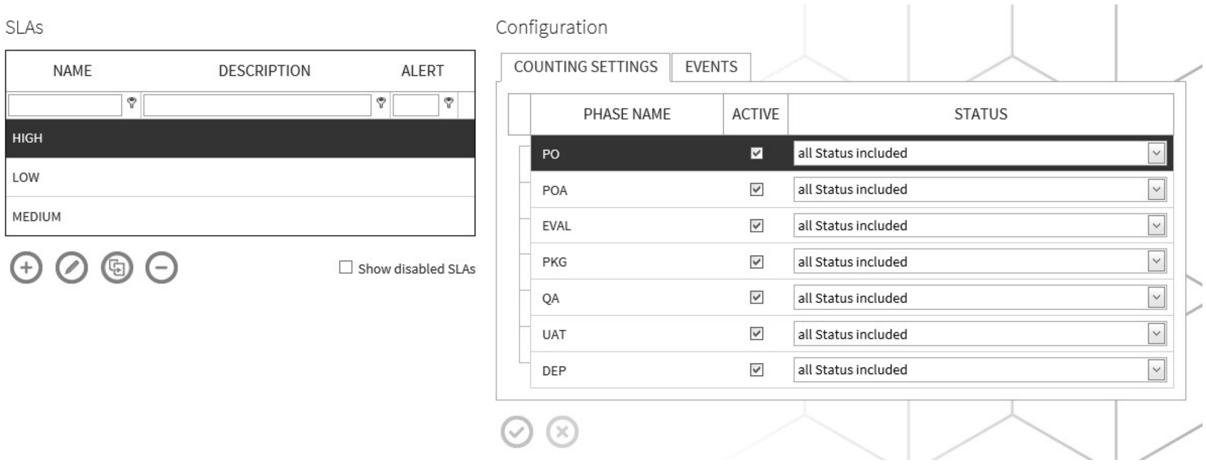


The defined SLA type is shown as one of the task property within phases.



SLA Configuration

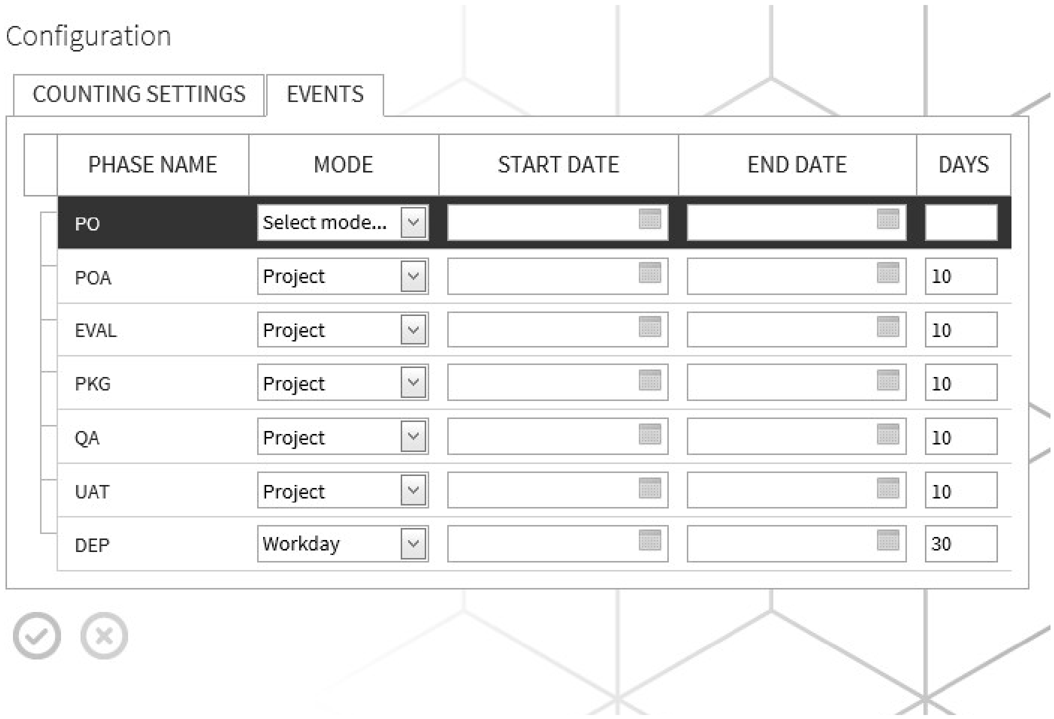
The homepage of SLA provides a dual-platform to view and edit the configuration related to the selected SLA. A list of defined SLAs is shown on the left side of the page under SLA section. When a user selects a SLA from this list, related configurations are shown in the Configuration section on the right. The configuration section is divided into two tabs: COUNTING SETTINGS and EVENTS.



Under the Configuration section a user can edit/change the SLA computation criteria for the selected SLA. To finalize and save the changes a user needs to click upon the checkmark icon (the checkmark icon will be green if changes have been made), which is available beneath the Configuration section. A user can discard those changes by clicking upon the X icon (X icon will be red if changes have been made), which will consequently restore the original event state of the SLA.

In the **COUNTING SETTINGS** tab you can set which status should be considered for which phase.

In the **EVENTS** tab you can set the actual time for the SLAs.



Working with the SLA Section

Creating a SLA

To create a new schedule:

1. Go to the **SLA** page.
2. Click upon the ⊕ button.
   The **SLA Settings** page is now available.

3. Specify a name for the SLA. A user can choose to receive visual alerts related to the SLA by specifying number of days in the **Days for alert** field.

4. You can add a description for you SLA in the Description field.

5. Click on the **Create** button to save the changes.

6. Select the newly created SLA on the SLA page. Specify the phases and statuses under the **Counting Settings tab** and the events under the **Events** tab after selecting the SLA.

7. An event can be of following three types: **Workdays**, **Date**, **Projectdays**.

   Date: Each phase needs a start and end date. SLA calculation is based on the number of days between the start and end dates, excluding the weekends.

   Workday: Each phase needs to have a day's value. SLA calculation is based on the WorkingHours basic configuration property, excluding hours outside of that period as well as weekends. The value of this property is expected to be in the format hh:mm-hh:mm, i.e., 08:00-18:00. This defines the beginning and the end of a workday.

   Weekends are excluded from the calculation. Any time a package spends in a phase which is not in the working hours is also excluded, i.e., a package enters a status at 7:00 and leaves it at 10:00, the SLA time for this action will only be 2h.

   Project: The total project days should be divided into X # days per phase. SLA calculation is similar to that used by the Workday mode. However, project days are accumulated throughout the workflow. E.g., you have a SLA configuration with project days, 3 phases with 5 project days each. A package goes through the phases and spends one full day in each phase. In phase 1 5 days are allowed until the SLA is violated, in phase 2 it is 9 days (+4 days left from phase 1) and in phase 3 it is 13 days (+4 days left from phase 2).

   If the selected event type is Workdays or Projectdays, then specify the number of work days or project days for respective cases. If the selected mode is Date then use the calendar to select start and end date.

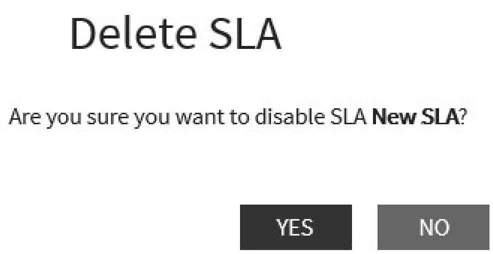
8. Click on the **checkmark** icon to save the changes made.

Duplicating a SLA

To duplicate a SLA, select the SLA which you want to clone on the SLAs page. After selecting the SLA click upon the **Duplicate** icon . This will open the new SLA in the **SLA Settings** page with Counting settings from the duplicated SLA. Click on the **Copy** button to finalize the creation.

Delete a SLA

To delete a SLA, simply select the SLA from the SLAs section and then click on the button. A warning is shown.



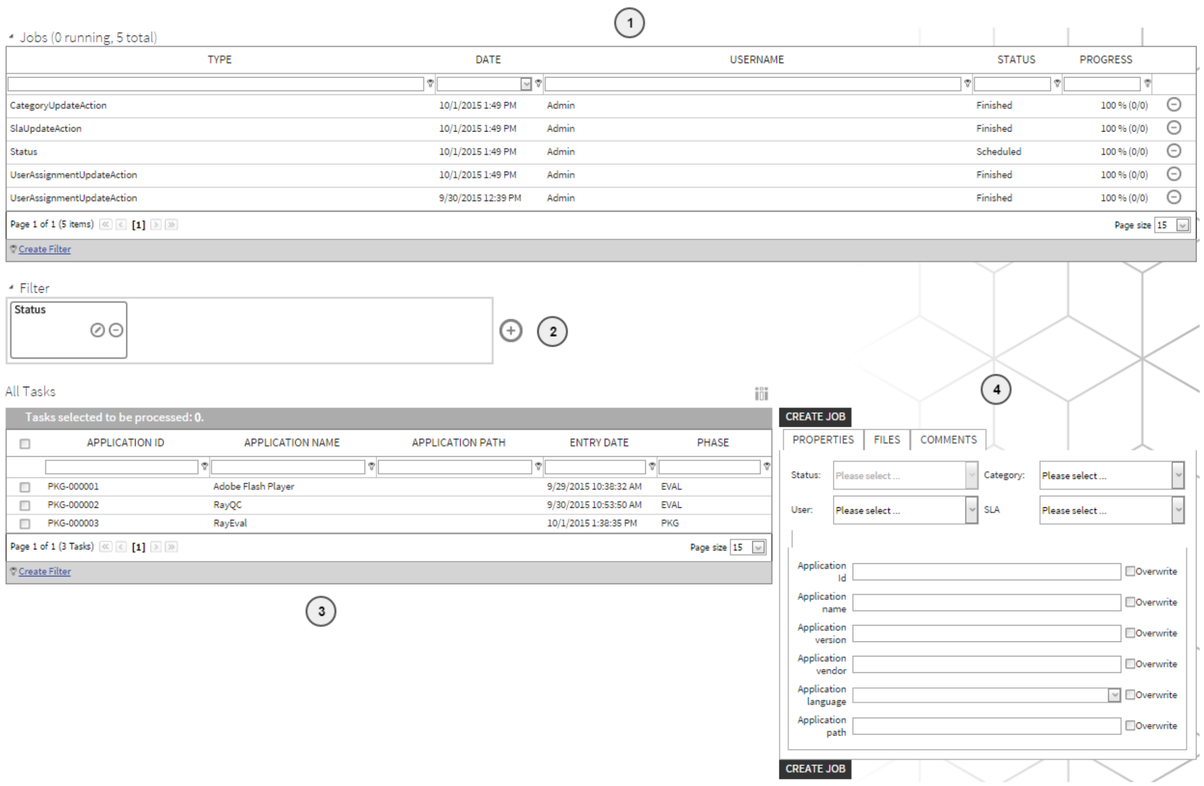
Click on the **Yes** button to confirm the deletion.

Batch Processing

The batch processing functionality allows multiple tasks to be edited at once. Each of the action to be executed via batch processing is called as job and each of them is executed in a sequential manner.

This functionality can be accessed via the Batch Processing item, which is available under the Management item in the left sidebar. The **Batch Processing** page is divided into four areas:

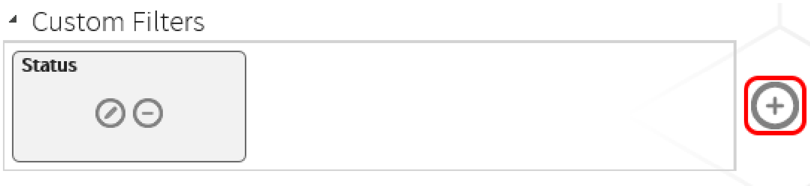
1. **Jobs**: All the batch processing jobs including the ones currently running and historical are listed under this area
2. **Filter**: User defined filters are shown under this area
3. **All Tasks**: Tasks are listed under this area. Based upon the filtering criteria, this area is updated with appropriate tasks
4. **Create Job**: Under this area, a user can define the actions to be executed as part of a job



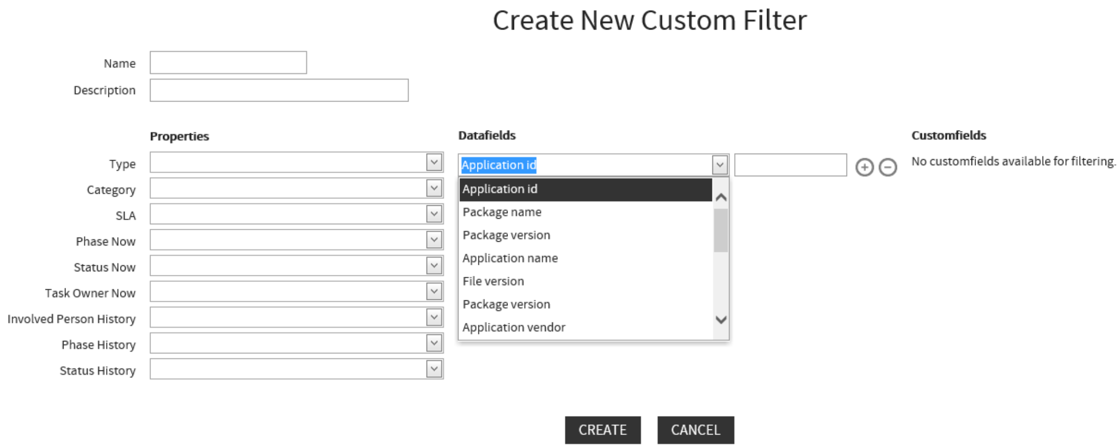
Creating New Custom Filter

Follow the steps to create a new custom filter for the tasks:

1. Click on the **Create new Custom Filter** icon



2. The **Create New Custom Filter** dialog is shown:



3. Specify the properties for the new custom filter and define a criteria for filtering tasks:

Filter Properties:

- **Name**: Name of the custom filter
- **Description**: Description of the custom filter

Filter Criterias:

- **Category**: Category of the task
- **SLA**: SLA type of the task
- **Phase Now**: Phase in which the task is currently lying
- **Status Now**: Current status of the task
- **Task Owner Now**: User to whom the task is currently assigned
- **Involved Person History**: Historical users involved with the tasks
- **Phase History**: Previous phases in which the task was lying
- **Status History**: Status which a task may have held previously
- **Data Field**: Data fields used within the project can be added to the filtering criteria and a user can specify a value for it

To add a new data field to the filtering criteria click on the **Add new datafield filter** icon. This will add a new drop-down item with all the existing data fields within the project as options. Contrarily, a user can delete a data field from the filter by clicking on the **Delete datafield filter** icon.

A user can specify a combination of properties to be used as the filtering criteria. After defining the criteria, click on the **Create** button to finalize creating the new task filter.

Creating a batch processing job

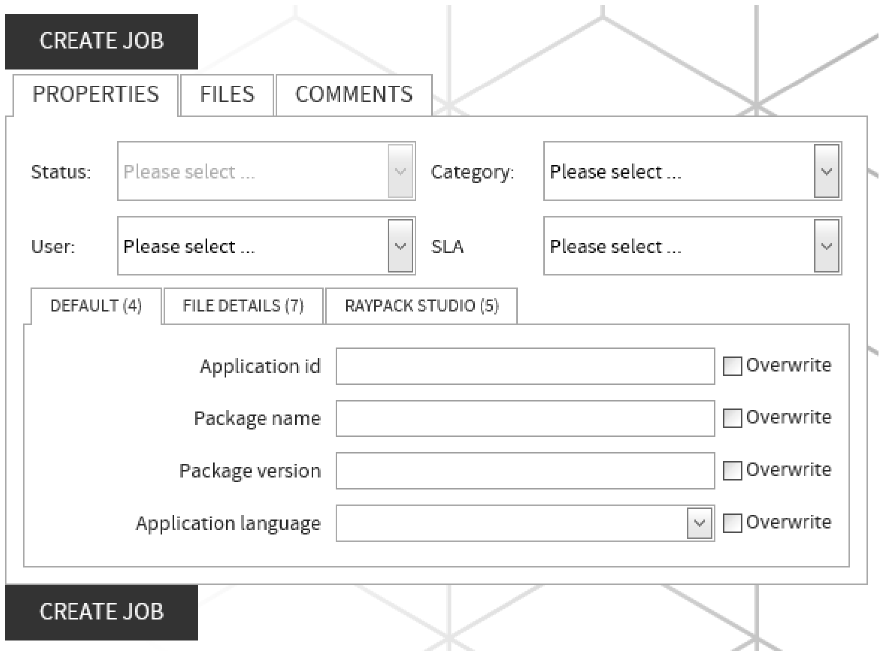
To execute a job on a set of tasks:

1. Filter tasks:

Initially all the tasks within the RayFlow project are listed under the All Tasks area. Select a filter from the Filter area to filter tasks to be processed.

2. After the task list is filtered, select from the filtered list, the tasks on which the job will be executed

3. Under the job area, define the actions which will be executed on the tasks:



Under the properties tab, a user can select following properties to be changed as pert of the job:

- **Status**: Select from the drop down the status which should be set for all the tasks being processed
- **Category**: Select the category which should be set for all the tasks
- **User**: Select the user to whom all the selected tasks should be assigned to
- **SLA**: Select the SLA type, which should be set for all the tasks being processed

Additionally, a user can set value for a particular data field using this option. If the selected data field is empty for the tasks then the value provided will be set as result of the job execution. If a value already exists for the data field within the task then the new value will only be set if user selects Overwrite option with the field.

Also under the Files and Comments tab, a user can choose to upload files to all the tasks being processed or a comment to them.

After specifying the actions to be taken as part of the job, click on the Create Job button to initialize the batch processing of tasks. The actions taken as part of the job are listed under the Jobs area.

Jobs (0 running, 5 total)

TYPE	DATE	USERNAME	STATUS	PROGRESS
CategoryUpdateAction	10/1/2015 1:49 PM	Admin	Finished	100 % (0/0)
SlaUpdateAction	10/1/2015 1:49 PM	Admin	Finished	100 % (0/0)
Status	10/1/2015 1:49 PM	Admin	Finished	100 % (0/0)
UserAssignmentUpdateAction	10/1/2015 1:49 PM	Admin	Finished	100 % (0/0)
UserAssignmentUpdateAction	9/30/2015 12:39 PM	Admin	Finished	100 % (0/0)

Page 1 of 1 (5 items) [1] Page size 15

Create Filter

Bank Holidays

The **Bank Holidays** view in RayFlow, allows a user to define location specific bank holidays. This information is used by RayFlow SLA calculator to provide an accurate estimation and calculation of SLA time with respect to a task. This user interface of this view is available in two display modes

- **Calendar**: In this mode, this view is available as a monthly calendar, and bank holidays are shown as a square box with holiday name as its property
- **List**: In the list mode, all the bank holidays are shows as a list

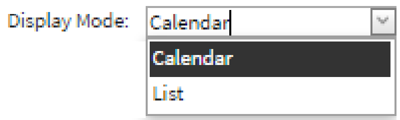
This view not only allows a user to manually create and edit holidays, but also import them as `.ics` file.Additionally, a user also has an ability to export these bank holidays in the same format.

Tools Bank Holidays View

The **Bank Holidays** view provide to its users, various tools to customize its view and work with its functionality.

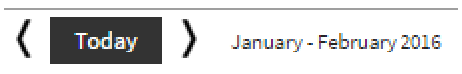
Display Mode Switch

Available as a drop-down menu, this tools allow users to switch between list and calendar view.



Navigation Tool

The navigation tool allows a user to go change the month periods of the calender mode. Additionally, selecting the Today button will highlight the current date in this mode.



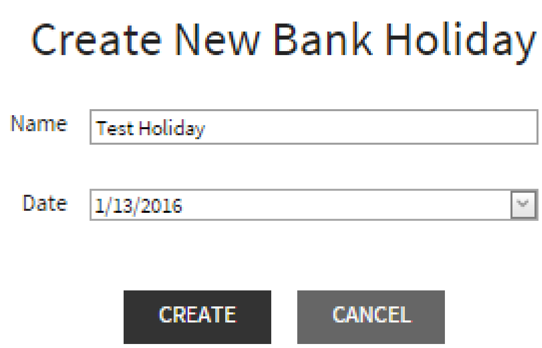
Functional Tools

Below each of the display modes of **Bank Holidays** view, there are three functional tools:

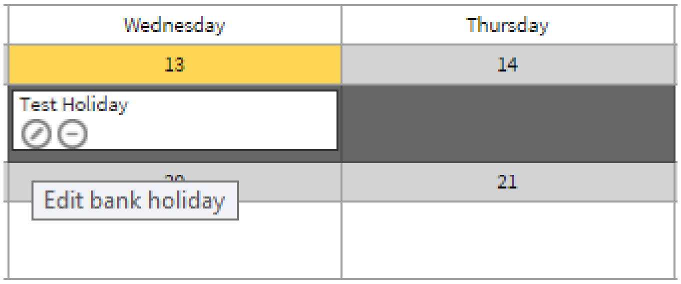
1. **Add new Bank Holiday**: Allows a user to manually create a new bank holiday
2. **Import Bank Holidays**: Allows a user to import bank holidays in .ics format
3. **Export Bank Holidays**: Allows a user to export the list of bank holidays in `.ics` format

Creating and Editing a Bank Holiday

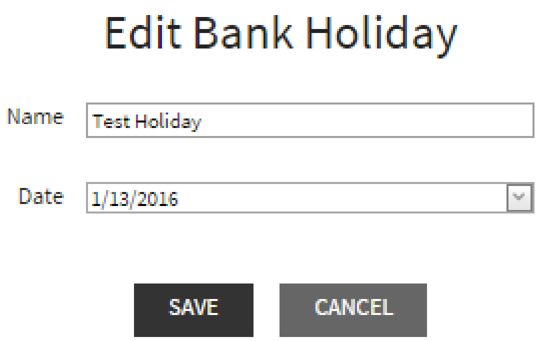
To manually create a bank holiday, click on the **Create new bank holiday** tool. This will open the **Create New Bank Holiday** dialog. In this dialog, provide a name and date for the holiday and then select **Create** button to finalize creating this holiday.



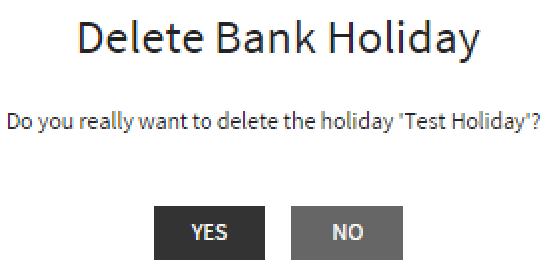
An existing bank holiday can either be edited or deleted. This can be done in both list and calendar display mode. With each of the holiday, there are two functional tools available as icon i.e. edit and delete.



Selecting the edit tool will open the holiday in edit mode. A user can then either rename the holiday or provide a new date for it.

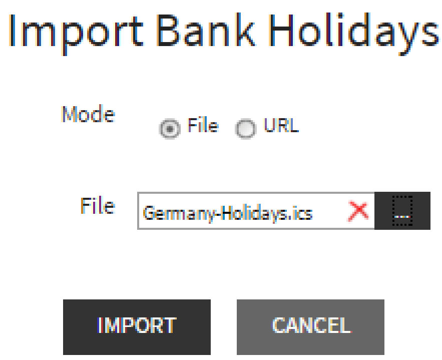


Similarly, clicking on the delete tool will pop up a confirmation dialog, asking users to confirm the deletion of the holiday. If a user selects **Yes** in this dialog, then the holiday will be permanently deleted from the view.



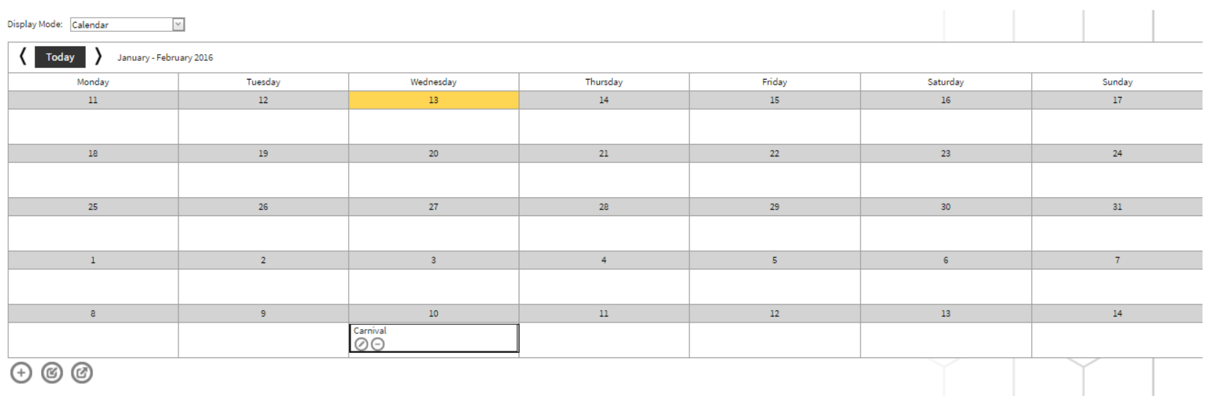
Importing List of Bank Holidays

Creating holidays manually requires a lot of effort on the user part, hence Bank Holidays view allows user to import a list of bank holidays in `.ics` format. To use thin function , a user needs to first select **Import Bank Holidays** tool, this will open the **Import Bank Holidays** dialog. In this dialog, a user can either specify the direct path of the `.ics` file or can provide a URL.

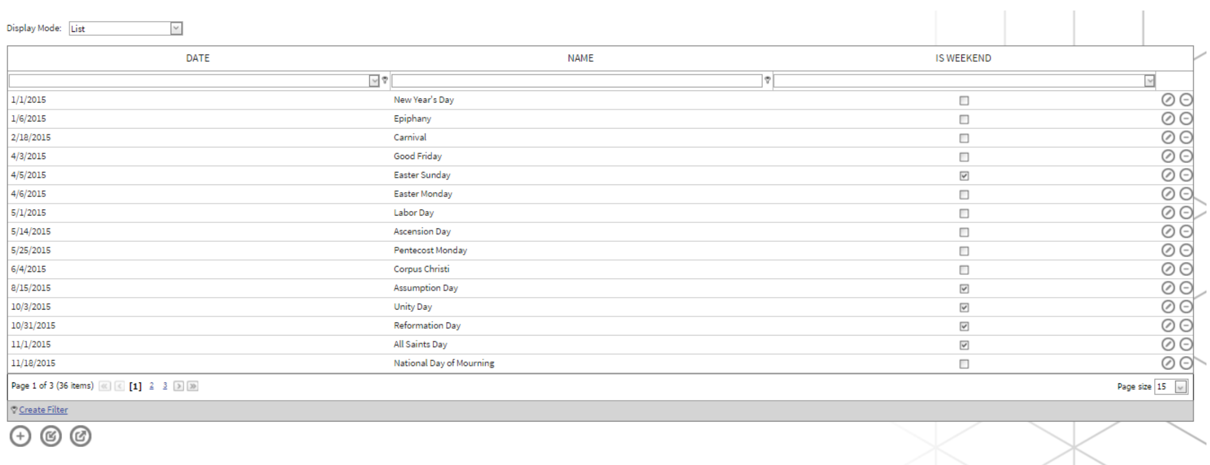


After selecting the location of file, click on the Import button to finalize importing the holidays. A user can switch between calendar and list display modes to view the result.

The image below shows the bank holidays in calendar display mode.



Using the **Display Mode** switch, a user can change the display mode to list. The image below shows a list of imported bank holidays in **List** display mode:



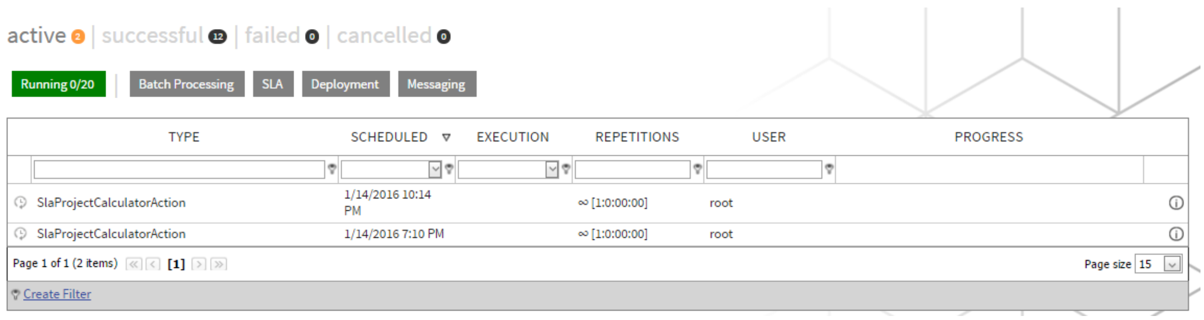
Exporting Bank Holidays

Using the export bank holidays tool, a user can export the list of bank holidays from RayFlow to an `.ics` file.

Jobs

The Jobs feature in RayFlow allow its users to keep an eye on the status of various tasks/jobs being executed by the application in background. These tasks can range from SLA time calculation to batch processing jobs.

This feature comes with an enriched user interface, allowing users to get detailed information pertaining to all the active and historical tasks and their execution history. The view of this feature can be divided into 4 major areas:



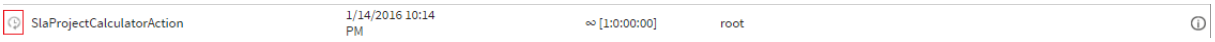
1. **Job Status**: Arranged as tabs, they represent the four states a job can be in. Hence for each of the job types, a user can select a state and based upon this the jobs are listed in the Job list area.
2. **Running/Paused Jobs**: When selected, all the jobs which are currently running/paused under various job types are listed in the job list ares.
3. **Job Types**: By default, RayFlow recognizes four types of primary jobs, they are **Batch Processing**, **SLA**, **Deployment**, and **Messaging**.
4. **Job List**: Is the area where all the jobs are listed, based upon the user selection of job status and its type.

Job Status

A job can have one of the following four states:

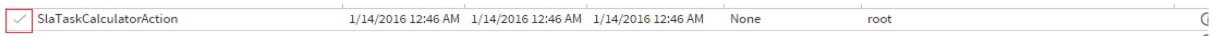
- **Active**

An active task is one, which is still waiting to be executed. In the job list, an active job can be recognized by the active icon, which is shown preceding the job name.



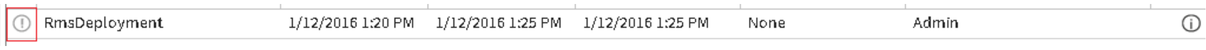
- **Successful**

The state of a job is set to successful, once it has been successfully executed. It is recognized by the success icon in the job list.



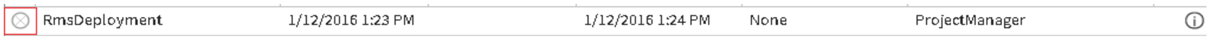
- **Failed**

A job state is set to failed, once there is an error or exception during its execution. It is recognized by the failed state icon.



- **Canceled**

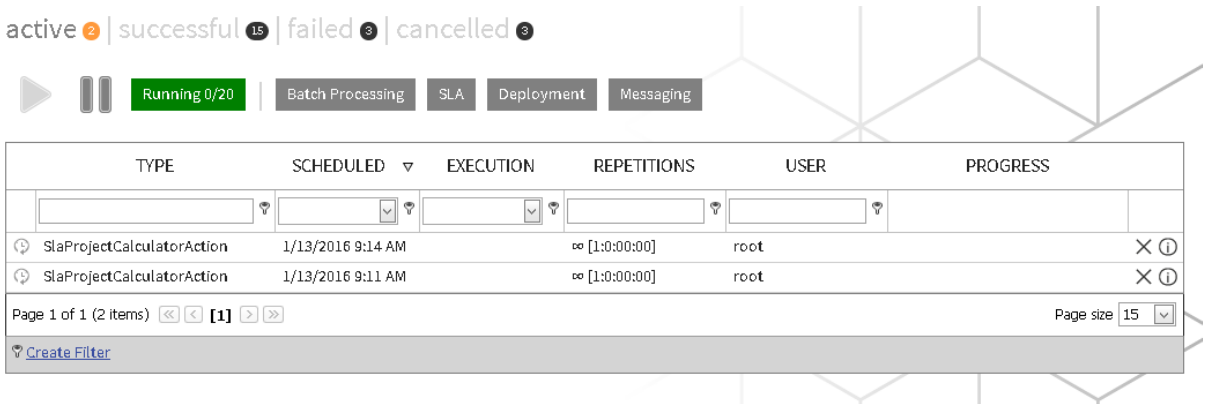
A state of a job is set to canceled, once its execution is interrupted or stopped while waiting in the active state.



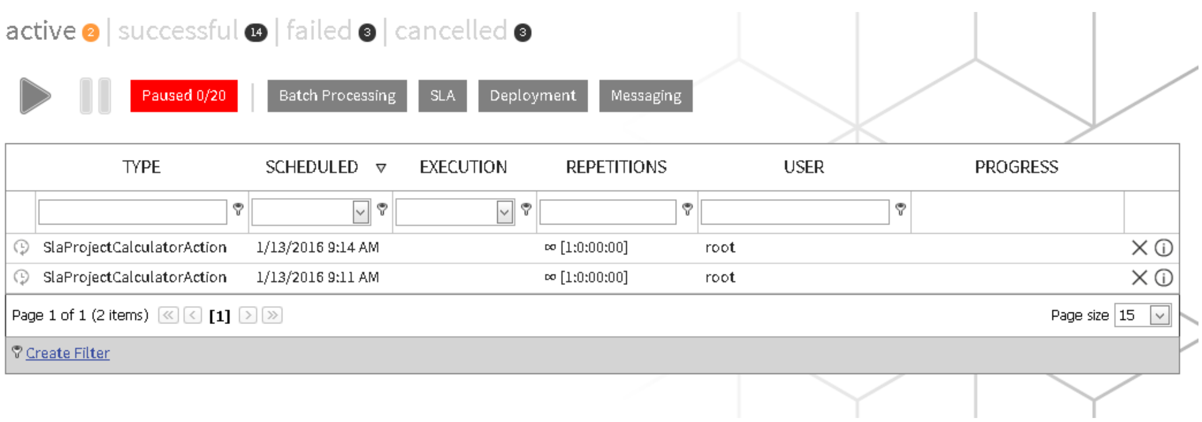
Running/Paused Jobs

Each of the job has an user property. This property defines the user who has created this job. For example, the SLA calculator runs under the root user. A root user can run or pause the execution of jobs.

The image below shows a list of running jobs:



The image below shows jobs which has been paused for execution



Job Types

A job can be of one of the following types:

- **A batch processing job**, this job is also visible through the **Batch Processing** page.
- **A SLA calculation Job**: The SLA calculator which is embedded within the RayFlow application calculates the SLA time for tasks in a predefined iteration. Result of each of the execution iteration is available under the respective Job status.
- **Messaging**: RayFlow uses its notification email feature to send out notification email to its subscribed users. For more information on notification email and rules for which a notification email can be configured, refer to the *Notification Email* chapter of this document.
- **Deployment**: RayFlow in integration with RayManageSoft deployment agent, allows software packages to be deployed on client machines. Each of the deployment job created is shown under this job type.

Job List

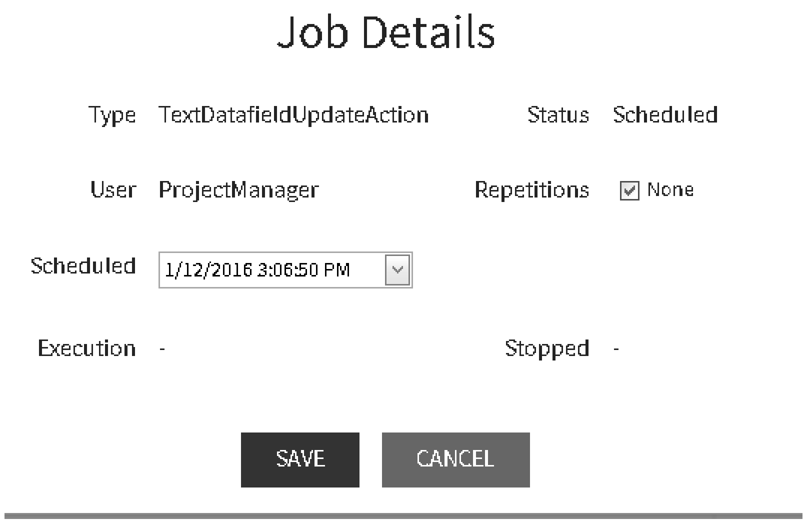
Based upon the user selection of job status and its type, jobs are listed in the Job list area. Each of the job has default properties, which makes the job list column header. These properties includes:

- **Type**: Name of the job
- **Scheduled**: Next execution time of the job
- **Execution**: Last execution of the job
- **Repetitions**: Job execution iteration rule defined by the user
- **User**: User account under which the job runs
- **Progress**: Progress of the job

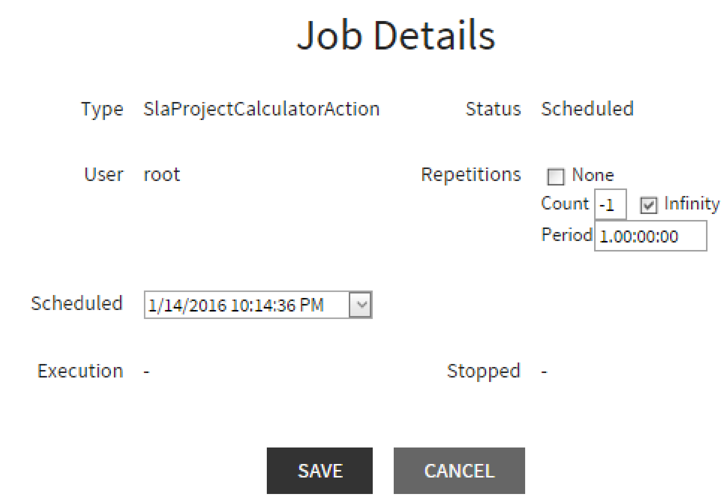
Under the progress header, there exist a details icon. Clicking on this icon shows the detail of the job. This detail is shown in the edit mode, if the job is in active state and has been clicked upon by the user account under which the job runs.

ⓘ Details icon

Job Details:



Job Details in Edit Mode:



Additionally for the jobs in active state, under the progress header, a cancel icon is shown. Clicking on this icon will set the state of the task to canceled and the future execution of the job will be stopped.

× Cancel Icon

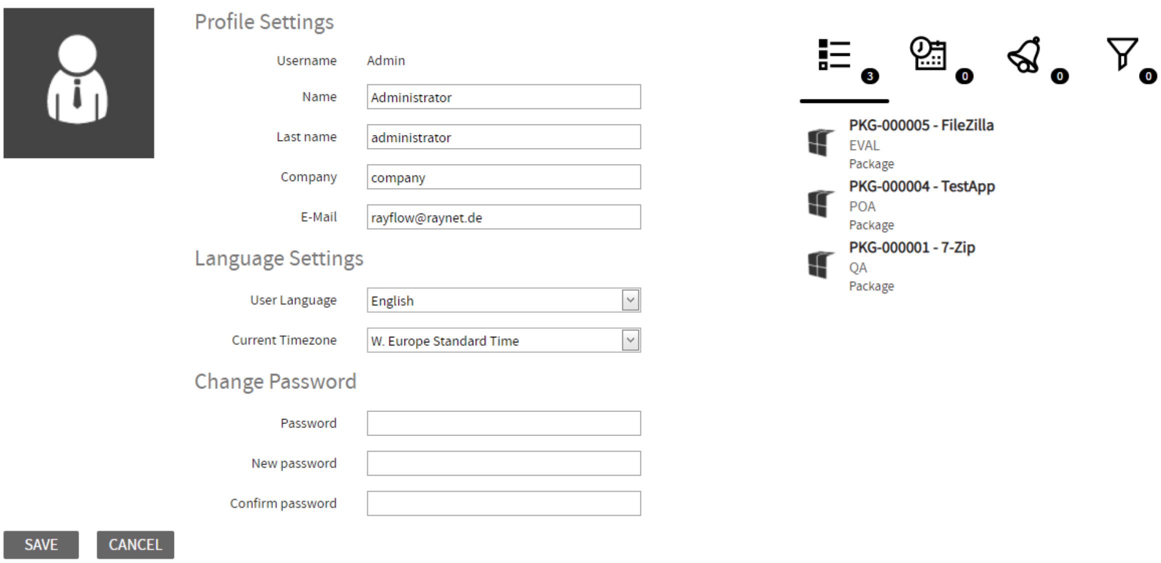
Profile

The profile section of the RayFlow web interface contains information which is relevant to the logged in user. This section is divided into four major areas:

- **My Profile**: Contains a profile of the current user. It additionally provides the ability to change his password through this page to a user.
- **My Tasks**: Shows a list of tasks which are currently assigned to the current user.
- **My Appointments**: Shows the scheduled appointments of the current user.
- **My Notifications**: Shows notifications related to tasks, received by the current user.
- **My Settings**: Settings for plugins and custom filters for the current user can be configured here.

My Profile

The **My Profile** view gives the user the possibility to edit personal information, profile image and the password.



Profile Settings

To change the personal information just type in the new value. Personal information which is editable is name, last name, company and e-mail address. The username which is just to login into a RayFlow project cannot be changed. If there is a need to change the username please contact your system administrator. Users with permission to administrate projects are allowed to change usernames. For more information please read the section **Administration** > **Users**.

Save the changes by clicking on the **Save** button on the bottom of the page.

Language Settings

As part of language settings, a user can personalize the application by specifying the user interface language and time zone. Currently, RayFlow web application is only available in English and German language.
It should be noted that the changes made to the language settings will only come into effect, after the page has been reloaded into the view.

Change user password

To change your personal password you must enter your current password in the textfield with the title **Password**. Additionally enter your new password twice in the next two textfields.
Save the changes by clicking on the **Save** button on the bottom of the page.

Change user profile image

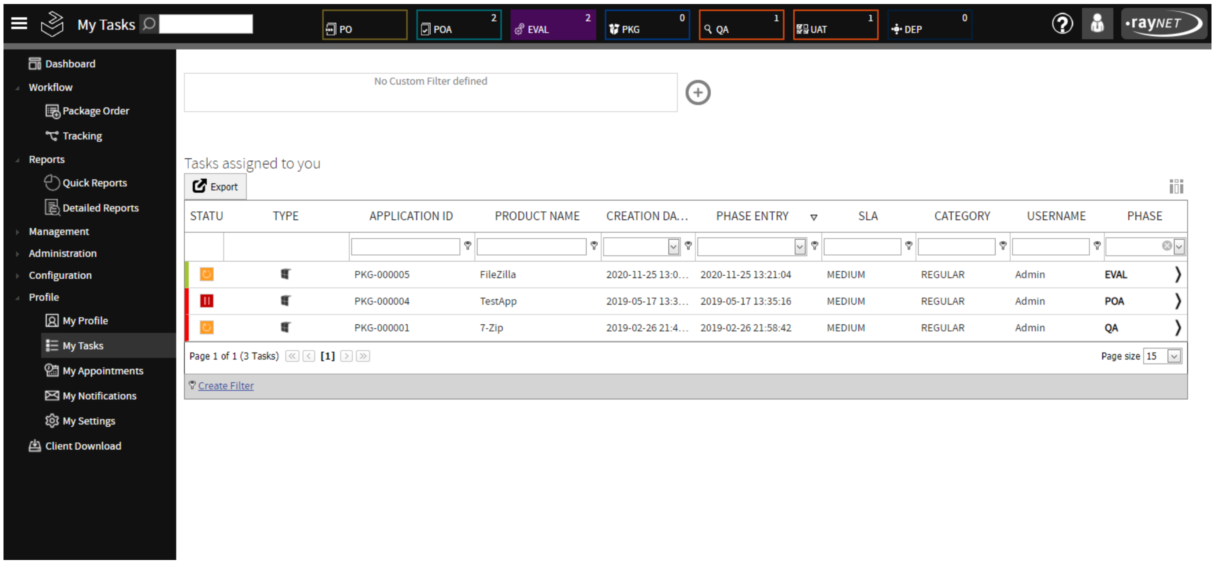
Click on the profile image to change the user profile image. An browser default upload dialog will open. Choose the image file and confirm the dialog by pressing open. RayFlow supports the image formats PNG and JPEG.

Save the changes by clicking on the **Save** button on the bottom of the page.

Be aware:
The image should have an ideal resolution of 150 x 150 px. Images with another ratio than 1:1 can be uploaded but it will be cropped in the header and some other views.

My Tasks

The **My Task** view provides the user with an overview of all the tasks in all the phases of the selected project to which he is assigned to. In addition the user can export the list in several formats.



Tasks assigned to you

In this area a list of all tasks to which the user is assigned to is provided. The user can filter the list like in the phase view (for more information see *Working with Phases*). In addition the user can see in the last column **Phase** in which phase the task is. To edit a task the user can click on the last column to be forwarded to the phase view with the selected task.

Custom Filter

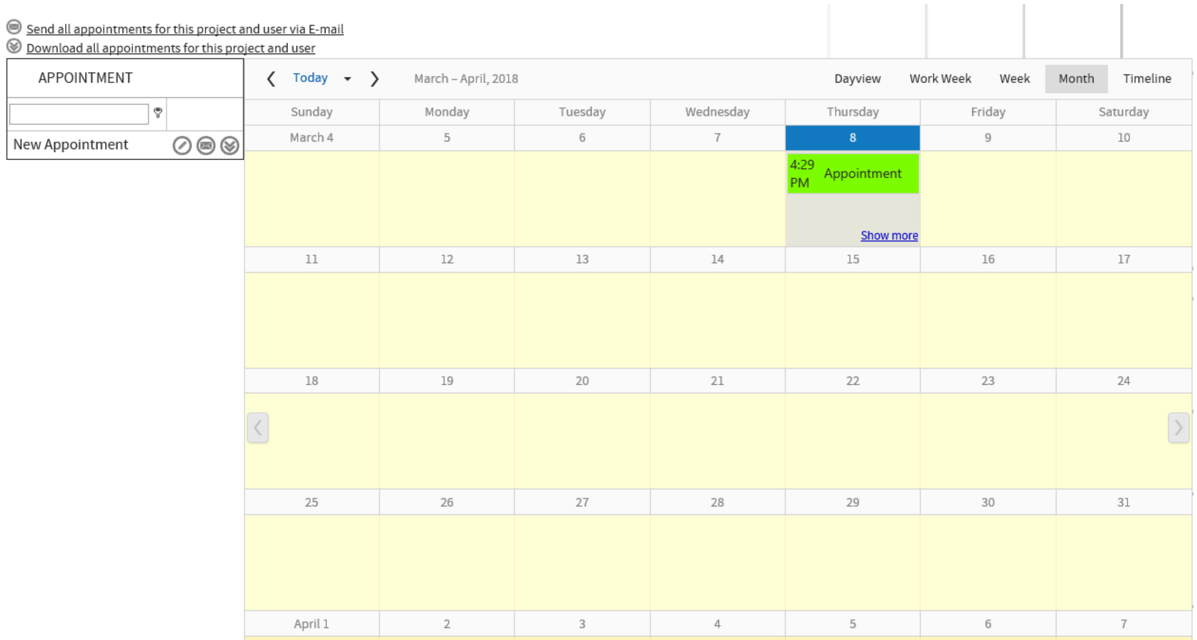
The custom filter functionality on this page allows a user to predefine custom filtering criteria for the task list. When a criteria is selected, the task list is automatically filtered based upon the filtering rules for the selected criteria.
For more information on how to define new custom filter criteria's, refer to the *Create New Custom filter* topic in the *Batch Processing* chapter.

Export my Tasks

This feature gives the user the possibility to download the complete list of tasks the user is assigned to in several formats. Supported formats are PDF, XLS, XLSX, TRF, and CSV. To use the feature the user first chooses the target format in the drop down element. To download the file the user presses the button right to the drop down element. A browser default download dialog will appear.

My Appointments

The **My Appointments** view provides a calendar view with the scheduled appointments of the current user.



Appointments List

All outstanding scheduled appointments are listed in the list on the left site. They can be filtered by using the filter element on top of the list. Additionally with each of the appointments, there are three functional options:

Allows a user to edit the appointment properties

Selecting this option will send the selected appointment to the user via email

Provides an ability to download the selected appointment in .ics format

Calendar View

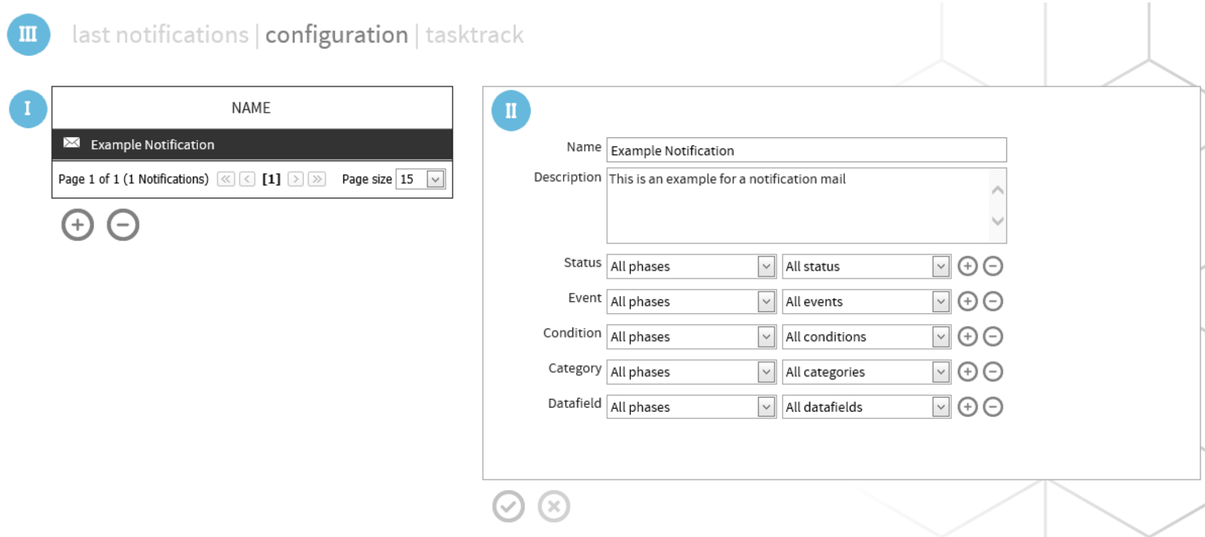
The calendar view includes all scheduled appointments of the current user. The user can change the view in the upper right area to day, work week, week, month, or timeline.

Additional Functions

On top of the appointments list, there are two functional option. These options allows a user to either send all the appointments for the current user via email or download the appointments in `.ics` format. For the email function to work, make sure that the *message settings* are correctly set and the email address of the user is correct.

My Notifications

The **My Notifications** view gives the user the possibility to create and edit notifications related to tasks.



Section 1 - my Notification List

All notifications the current user receives are listed on the left site. Notifications marked with a world icon are global notifications, which were created by an administrator of the current project. A selected notification can be edit in the right site area (Section 2).

Be aware:
Even a global notification can be deleted by any user who is assigned to it.

Section 2 - Configuration

The selected notification can be edited in this area. A user can configure on which events a notification mail should be send:

Status - every time a task in the configured phase has changed his status into the configured status.
Event - every time a configured event was triggered in the configured phase.
Datafield - every time a configured datafield was edited in the configured phase.

In addition a user can define conditions:

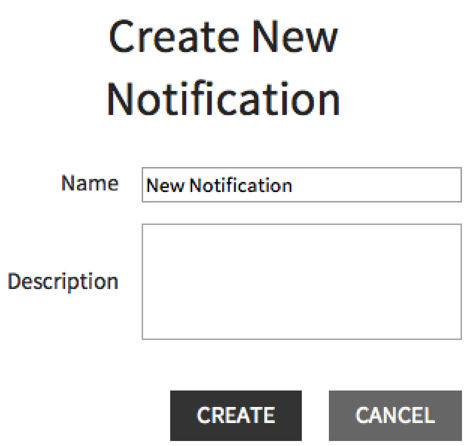
- **All conditions** - no restrictions
- **I am Involved** - the current user was assigned or is assigned to the task.

- **I am Owner of Package** - the current user is currently assigned to the task.
- **I am Creator of Package** - the current user has created the task.
- **My Selected Packages** - the current user tracks the task (see **TaskTrack**).
- **All Packages** - no restrictions

Create a new notification

To create a new notification a user can click on the **Plus** button under the **my Notification List** (Section 1). A popup will show up and provide input fields for name and description. After pressing the **Create** button, the new notification is created.

Be aware:
Only administrators can add users or user groups to receive a notification. An administrator can also add users and user groups to notifications which were created by another user.



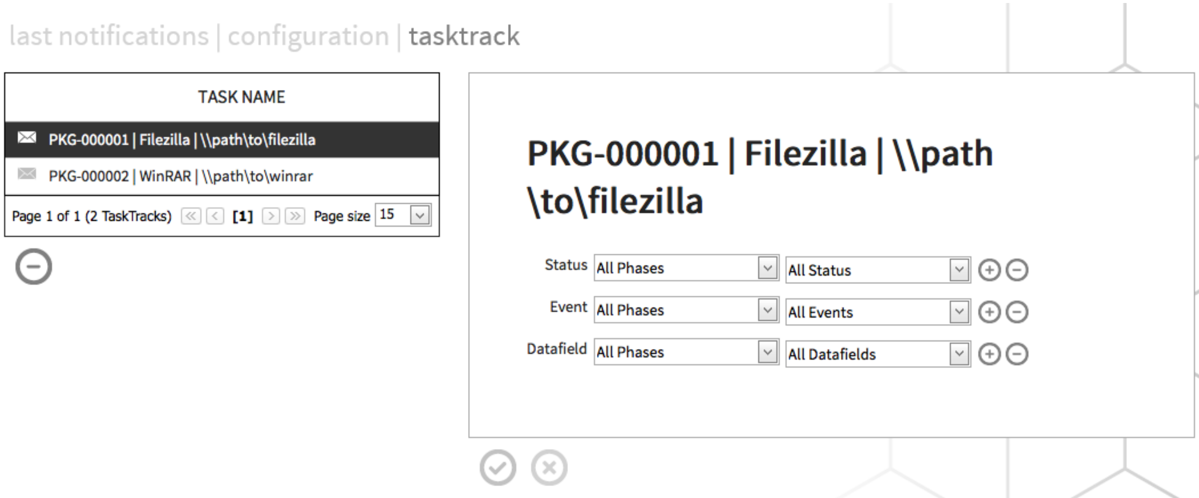
Section 3 - Changes View to tasktrack or last notifications

On the top a sub navigation bar gives access to the **TaskTrack** View.

tasktrack

TaskTrack has a similar functionality to the standard notifications: A user can configure status, events, and datafields per phase to trigger the sending of a notification mail. In contrast to the standard notification the **TaskTrack** notification is focused on one task. All tracked tasks of the current user are listed on the left site. To add a new notification to the list a user can click on the **TaskTrack** icon in the phase view.

A user selects a notification from the list and presses the minus button to delete a notification.



last notifications

last notification shows a list of the recent notifications.

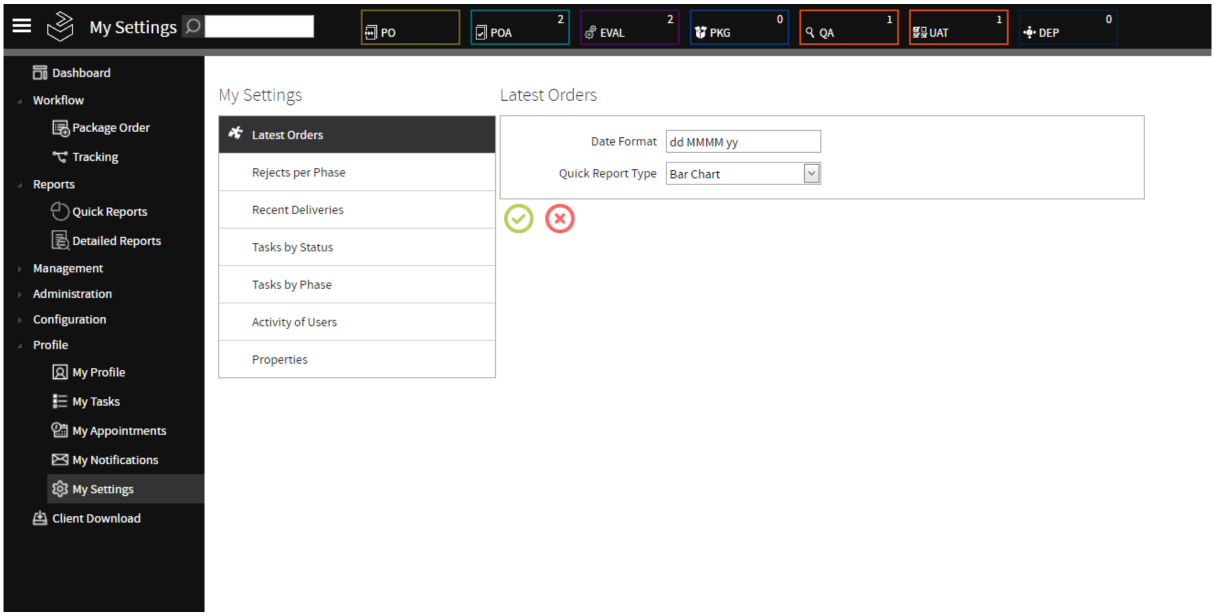
last notifications | configuration | tasktrack

TASK	EVENT	DATE	USER	LINK
PKG-000001	Task reassigned	3/23/2017 4:26:17 PM	Evaluator	❭
PKG-000001	New file	3/23/2017 4:26:13 PM	Evaluator	❭
PKG-000001	New comment	3/23/2017 4:26:02 PM	Evaluator	❭
PKG-000001	Datafields edited	3/23/2017 4:25:52 PM	Evaluator	❭
PKG-000001	Status changed to	3/23/2017 4:25:31 PM	Evaluator	❭
PKG-000001	Task reassigned	3/23/2017 4:25:31 PM	Evaluator	❭
PKG-000002	Task reassigned	3/23/2017 4:25:08 PM	ProjectManager	❭
PKG-000002	New file	3/23/2017 4:24:40 PM	ProjectManager	❭
PKG-000002	Status changed to	3/23/2017 4:24:24 PM	ProjectManager	❭
PKG-000002	Task reassigned	3/23/2017 4:24:24 PM	ProjectManager	❭
PKG-000004	Status changed to	3/23/2017 4:21:08 PM	Admin	❭
PKG-000004	Task reassigned	3/23/2017 4:21:08 PM	Admin	❭
PKG-000004	Status changed to	3/23/2017 4:20:40 PM	Admin	❭
PKG-000004	Task reassigned	3/23/2017 4:20:40 PM	Admin	❭
PKG-000004	Status changed to	3/23/2017 4:20:40 PM	Admin	❭

Page 1 of 2 (23 Notifications) [1] 2 Page size 15

My Settings

In **My Settings** it is possible to make some configurations regarding plugins and the properties for the user. For example, for the **Latest Order** plugin the **Date Format** and the type of the chart that is to be used can be configured. Settings which are configured here are only valid for the currently logged in user.



When selecting a plugin or the Properties tab, the different options for configuration, as well as the current configuration of the plugins will be shown.

To change a configuration, depending on which configuration should be changed, either fill in the new value or select a new value from a dropdown menu and click on the **Save changes** button.

Appendices

The following sections are designed to give more detailed information about some of the functions, the usage, and the configuration of RayFlow.

Package Path Autofill Function

The **Package Path Autofill Function** enables users to autofill custom datafields with values from an EXE or MSI file by selecting the file in RayFlow. The following section describes how to setup RayFlow to enable users working with the RayFlow Client to use this feature.

In order to use this function, a package path datafield which is needed to access the file and datafields that should be filled with the file property information need to be created.

Package Path Datafield

First a datafield of the type textfield needs to be created. For information on how to create a datafield refer to the *Datafields* section in this guide.

The newly created datafield must be set as **Package Path** inside of the Basic configuration. For information on how to set a **Package Path** refer to the *Basic* section in this guide.

This datafield must be available in at least one phase, because the user needs this datafield to be able to select the MSI from which the file property information will be extract and automatically filled in the other datafields.

File Property Datafields

File Property Datafields which will be autofilled can be created for each entry that exists in the **Property** table of the target MSI file. File Property Datafields must fulfill the following requirements. They must be **Textbox** datafields and they have to be named equal to the corresponding property.

After all the datafields that are necessary have been configured, users will be able to autofill the **File Property Datafields** by selecting an MSI file when using RayFlow client by using the Browse button [**...**] that will be shown in the **Package Path Datafield** and selecting the target MSI file.

If a textfield is not empty at the time that the Package Path Autofill function is used by a user, the user will receive the following message:

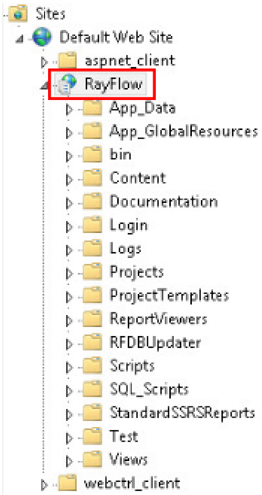
Examples of properties inside an MSI table that could be used as file **Property Datafields** are: `Manufacturer`, `ProductVersion`, `ProductName`, and `ProductCode`.

Virtual Directories as Storage Point

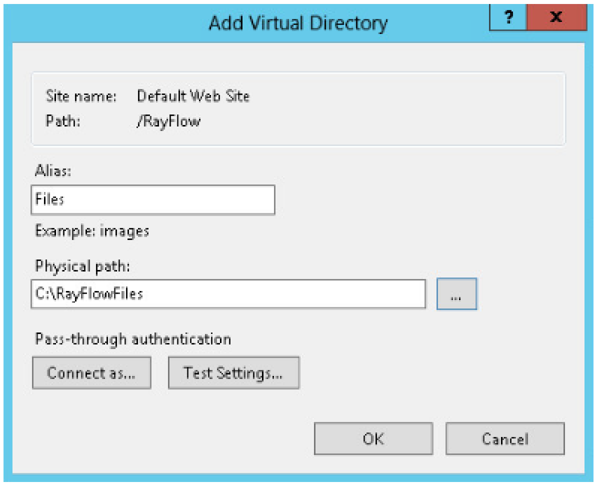
To use a virtual directory as a storage point, first a virtual directory needs to be created. In order to do this execute the following steps..

Rename the `Files` folder which is located in the `RayFlowRootFolder` into something else (for example into `old_Files`).

Open the Internet Information Services (IIS) Manager which is located on the RayFlow server.



Browse to **Sites** -> **Default Web Site** -> **RayFlow** and right-click on the RayFlow entry. The context menu will be opened. Select the **Add Virtual Directory...** entry from the context menu.



The **Add Virtual Directory** window is opened. The following options are offered:

Alias: Enter **Files** into this field. This is necessary, because RayFlow will put files into the **Files** folder in the root directory by default. Therefore, the virtual directory also needs this alias name.
Physical Path: Enter `C:\RayFlowFiles` into this field.

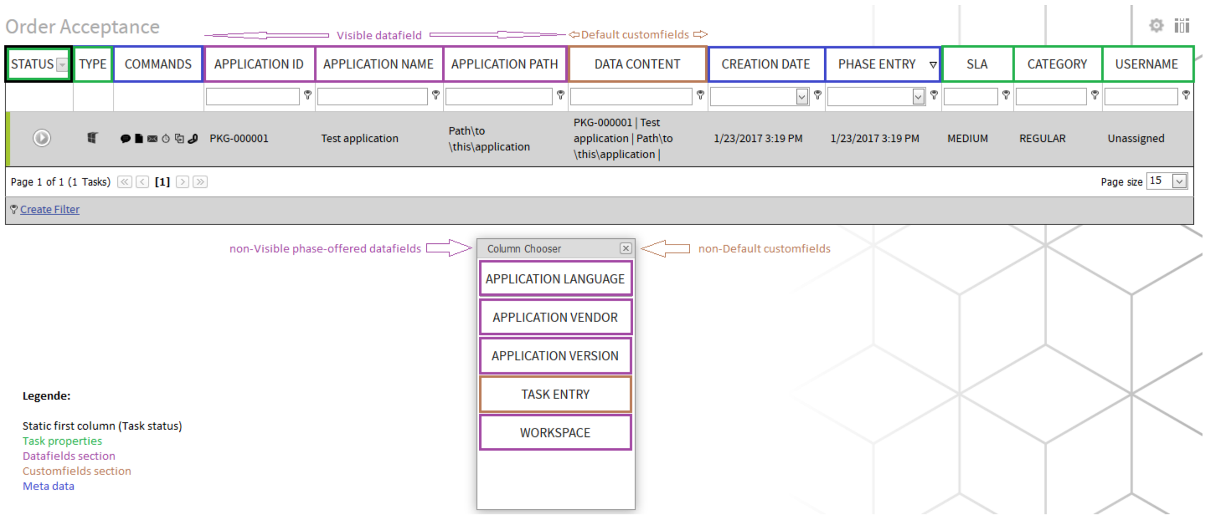
Click on the **OK** button to create the virtual directory and close the window.

Task Table Layout

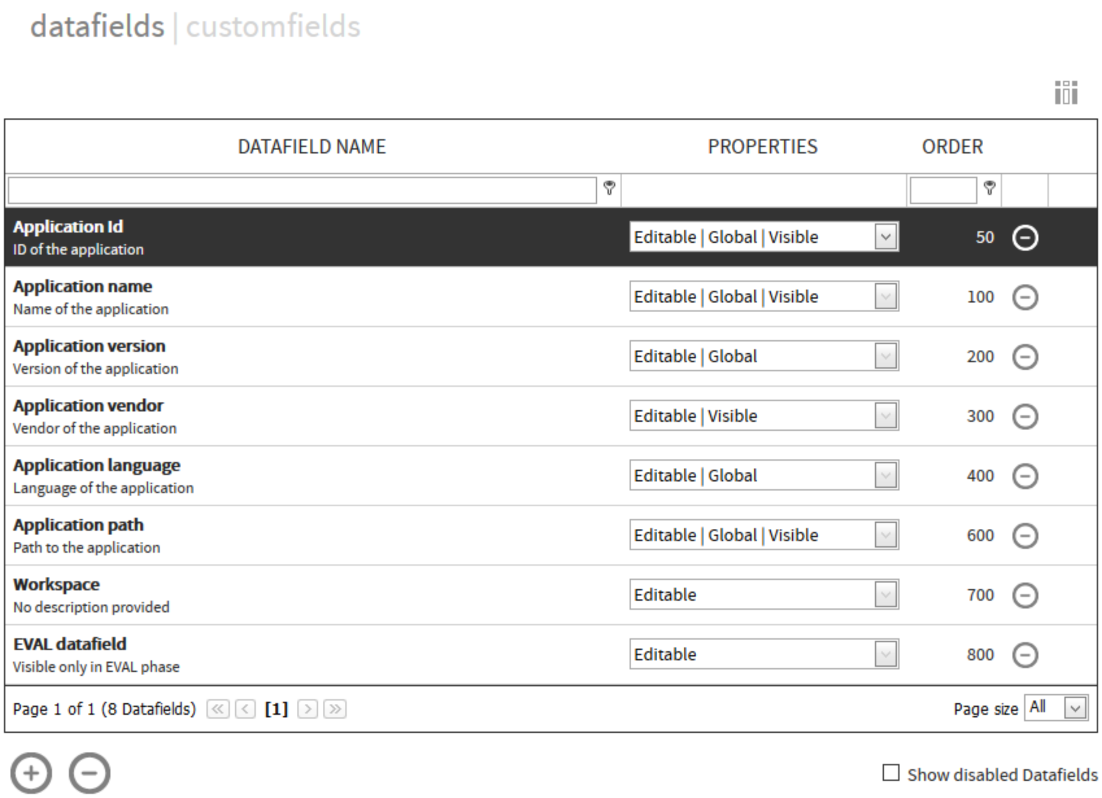
The following section explains in detail how to individualize the task table layout.

In an unfiltered state, all tasks located in a phase are listed inside of a task table when in the phase view.

When using a phase view for the first time the default layout of the task table is used. The default phase view contains several static columns (**STATUS**, **TYPE**, **COMMANDS**, **CREATION DATE**, **PHASE ENTRY**, **SLA**, **CATEGORY**, and **USERNAME**) and two additional dynamic column sections which list all datafields of the visible type and all customfields of the default type in the order of their order numbers (only if they are configured to be visible in the selected phase).



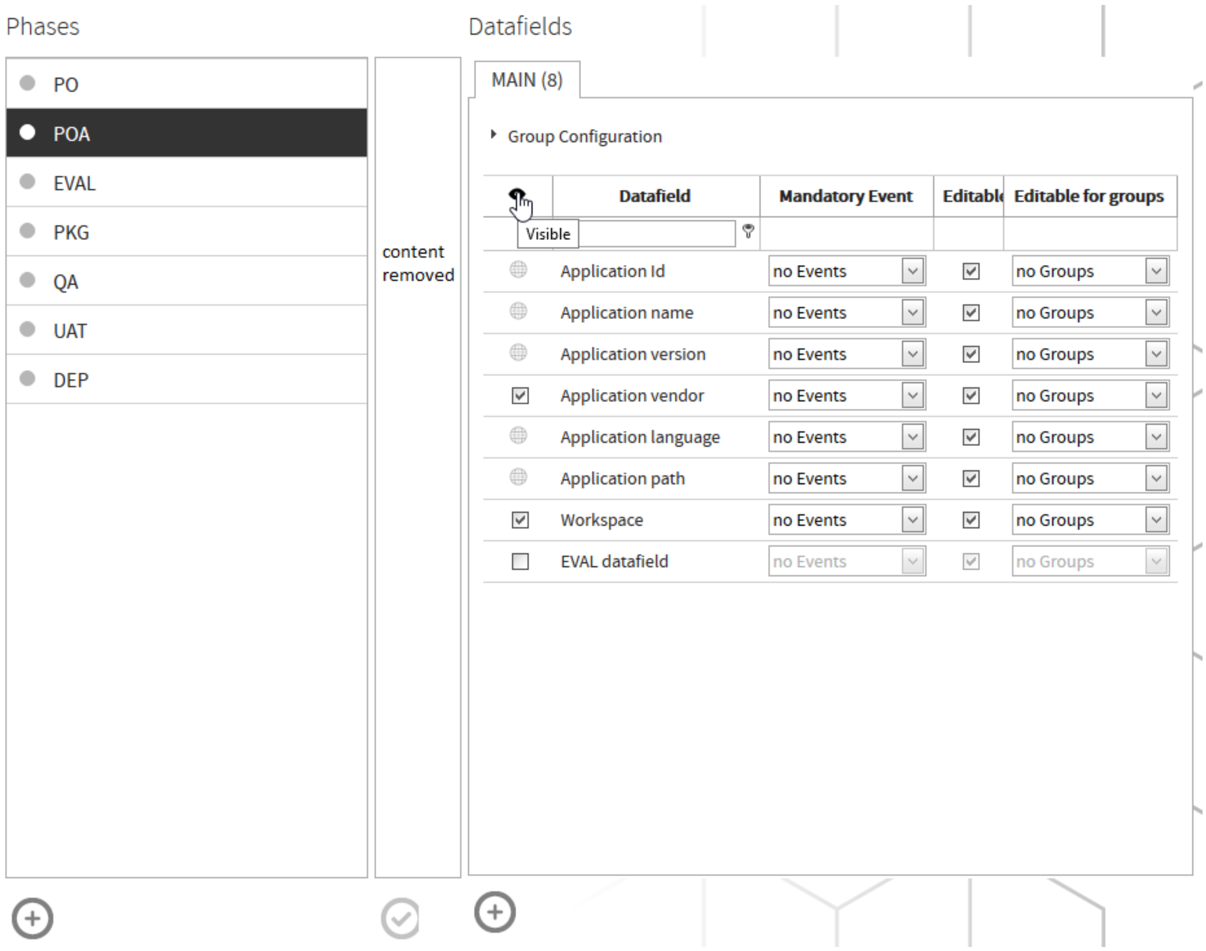
Datafields that are configured as **Global** (visible in all phases) are automatically added to the context of all phases. In the second step, the **Visible** property decides if the related datafield will be added to the table directly (enabled state) or if it will be stored inside of the **Column Chooser** (disabled state) by the default layout.



In the screenshot above, the **Application ID** datafield shows the **Global** and the **Visible** property. Therefore, this datafield is added to the default table. Because it has the lowest order number, it will take the first position inside of the datafield section.

The **Application version** is missing the **Visible** property, therefore the datafield will be added to the **Column Chooser** instead and can be added to the table by the individual user. Inside of the **Column Chooser** the datafields and the customfields are listed in alphabetical order.

Non-global (local) datafields are only added to the phase context if they are configured to be **Visible** in the configuration context of a phase.

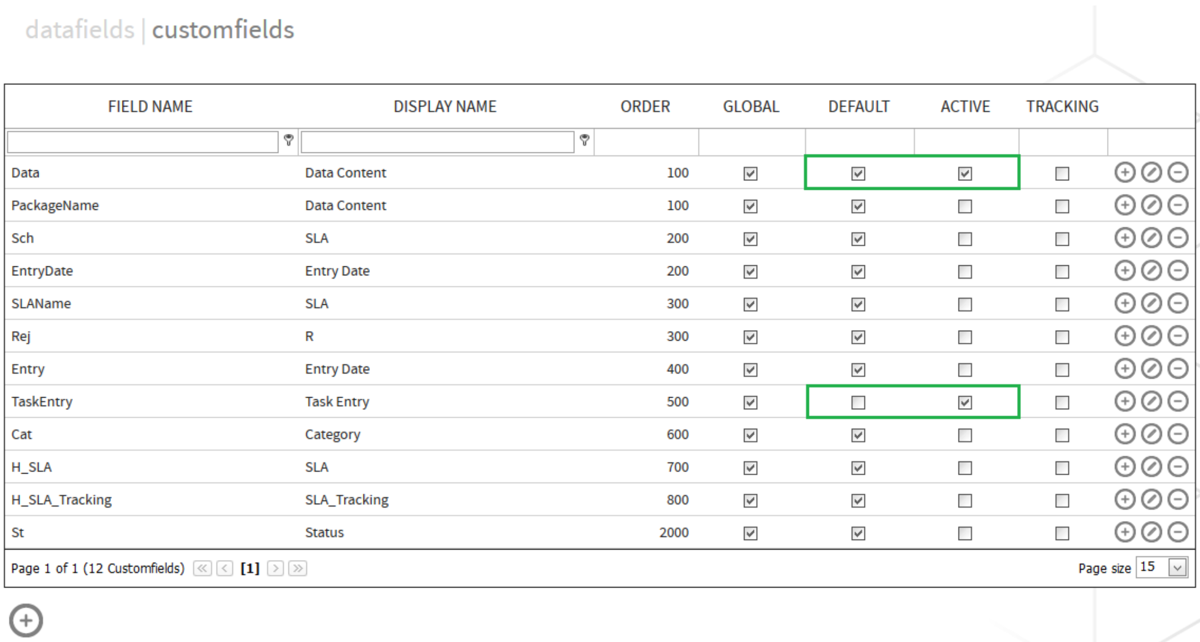


The **Application vendor** and the **Workspace** datafield are both added to the **POA**-phase context but the first one is added to the default table (**Visible** datafield property) and the second one is added to the **Column Chooser** (no **Visible** datafield property).

The **EVAL** datafield on the other hand is not added to the **POA**-phase context, therefore it is neither part of the default table nor of the **Column Chooser**.

A similar behavior is shown by the customfields. They are added to the default table if the **Default** property is set (enabled **Default** property) or to the **Column Chooser** (disabled **Default** property).

Note:
Customfields cannot be configured to be local. They are either **Active** in all phases of a project or not.



FIELD NAME	DISPLAY NAME	ORDER	GLOBAL	DEFAULT	ACTIVE	TRACKING
Data	Data Content	100	☑	☑	☑	☐
PackageName	Data Content	100	☑	☑	☐	☐
Sch	SLA	200	☑	☑	☐	☐
EntryDate	Entry Date	200	☑	☑	☐	☐
SLAName	SLA	300	☑	☑	☐	☐
Rej	R	300	☑	☑	☐	☐
Entry	Entry Date	400	☑	☑	☐	☐
TaskEntry	Task Entry	500	☑	☐	☑	☐
Cat	Category	600	☑	☑	☐	☐
H_SLA	SLA	700	☑	☑	☐	☐
H_SLA_Tracking	SLA_Tracking	800	☑	☑	☐	☐
St	Status	2000	☑	☑	☐	☐

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In the example shown above the **Data Content** customfield (**Data**) is configured to be **Active** and **Default**. Therefore, it will be added to the default table for all phase views.

The **Task Entry** customfield (**TaskEntry**) is configured to be **Active**, but it is not configured to be **Default**. Therefore, it will be added to the **Column Chooser** for all phase views, but it will not be added to the default table.

All other customfields in the example screenshot are missing the **Active** property. Therefore, they are not added to any phase context.

The table layout can be reorganized individually by each user. It can be organized on the **My Tasks** page or in each individual phase view.

The following changes to the view are possible:

- Adding or removing columns in the table view by using drag and drop. The columns can be added by dragging them from the **Column Chooser** to the table view. They can be removed by dragging them from the table view to the **Column Chooser**.
- Changing the positions of columns by dragging the column header from one position inside of the table view to another.
- Ordering the tasks by a selected column by clicking on the column header.
- Filtering the content of the table for tasks with specific content in the displayed columns.
- Specify the number of tasks which are displayed per page.

The individual table layouts are automatically saved when switching to another page or another view.

The individual table layout can be set back to the default layout by using the **Phase layout settings** button. Additionally, specific table layouts for users can be defined by administrative users by using this button.

Initial RayFlow Users

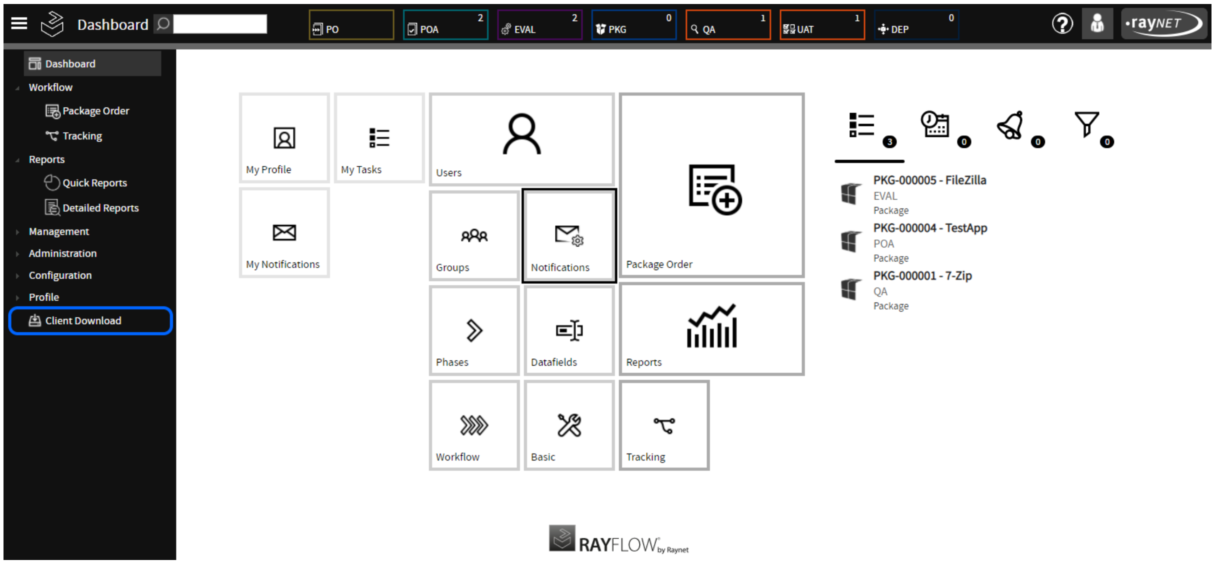
The following represents a list of the initial users that are automatically created when installing RayFlow and the default passwords that are automatically created for each user.

User	Password	Group/Role
root	root	Root
Admin	Admin	Administrator
ProjectManager	ProjectManager	Manager
Evaluator	Evaluator	User
Packager	Packager	User
QA	QA	User

Warning:
It is highly recommended to change these default passwords as soon as possible!

Download RayFlow Client

The RayFlow Client can be downloaded directly from the RayFlow Server.



To download the RayFlow Client click on the Client Download tab. The download of the RayFlow Client will start automatically.

Additional Information

Visit https://rayflow.raynet.de/ for further information regarding the product and current community incentives. It is also recommended to take a look at additional resources available at the Knowledge Base for Raynet products: https://Raynet.de/Support/.

Raynet is looking forward to receiving your feedback from your RayFlow experience. Please contact your Raynet service partner or use our Support Panel to add your ideas or requirements to the RayFlow development roadmap!

Help & Support

Request RayFlow support

Our Raynet support team gladly assists you on any questions or issues you encounter regarding RayFlow. Feel free to sign in and open incidents via our Raynet support panel.

Join the RaySuite community

The RaySuite community resides within our Knowledge Base: https://raynet.de/Support/. Once you have signed up for access to the Raynet support panel, you automatically have access to the Knowledge Base, too.

You will surely come to a point where you would love to suggest a new feature for the future development of RayFlow. Maybe you need to find some tips & tricks to hit your target right. The RaySuite community is your place for discussing such topics, for sharing and expanding your own experience.

Step in contact with Raynet's testers, evaluators, and consultants in order to learn how to polish your quality assurance activities to a level of highest quality standards. Since Raynet has years and years of experience, we know what to do, and how to do it. Do not row your boat alone when you have the chance to join our RaySuite community for free.

Contact your Raynet sales representative

Our sales team is the right contact for any license or edition question you might encounter. You would like to benefit from a professional RayFlow training? Ask for dates and locations to find the fitting training occasion. You are highly welcome to step in contact via sales@raynet.de.

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