SPIRALOGICS
REPORT GENERATOR

ADMIN MANUAL

FOR SRT APPLICATION

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Spiralogics

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Abbreviations

SRT: Spiralogics Reporting Tool

OS: Operating System

PDF: Portal Document Format

CSV: Comma-Separated Values

XLSX: Microsoft Excel Open XML Spreadsheet

MySQL: My Structured Query Language

MS SQL: Microsoft Structured Query Language

Definitions

1. **Publish:** It is a feature to publish the reports to connected database.
2. **Clone:** It is a function of cloning the reports with exact configuration replicated from the original report.
3. **Aggregate:** An aggregate function is a mathematical computation involving a range of values that results in just a single value expressing the significance of the accumulated data it is derived from.

1. Executive Summary

1.1 Purpose of Document

This document assists Admin Users of SRT Admin Portal to configure and navigate through the portal. It provides the details about how the application can be configured for database connections. The document lays out detailed description of all the features available and step-by-step guide for creating and editing report on the portal along with how to use each feature.

1.2 Identification

Application URL	SRT Reporting (spiralogics.net)
OS	Windows, Linux, MacOS
Version	3.0
Browser	Google Chrome, Microsoft Edge, Mozilla Firefox

1.3 Scope

SRT admin portal assists admins in creating reports using SQL queries. Report creation is based on MS SQL database engine on current version of SRT. Flexibility will be added to work with more database engines such as PostgreSQL, MySQL. Reports can also be edited, cloned, deleted, and published.

2. Design Overview

2.1 Background Information

Spiralogics Reporting Tool (SRT) was initiated with a motive to solve generic reporting problem on enterprise applications. Its earlier version SRT 2.0 has been integrated with various client project platforms, and has been successfully used to generate report. The process of generating tabular reports paved the development towards more reporting features such as filters, sorting, aggregating values, and exporting records in various formats such as CSV, PDF and XLSX. Report generation on earlier version was dependent on stored procedure set up, and configurations for integrating the application had to be carried out manually by hard coding the necessary database connections on config files.

SRT 3.0 is released with an objective to build SRT as a stand-alone product to help its users directly deploy the application and generate the reports with queries.

2.2 Application overview

SRT admin portal is an application that receives records from the connected database and configures the reports to add filters, hide columns, aggregate values, and further generate reports on tabular format in client portals.

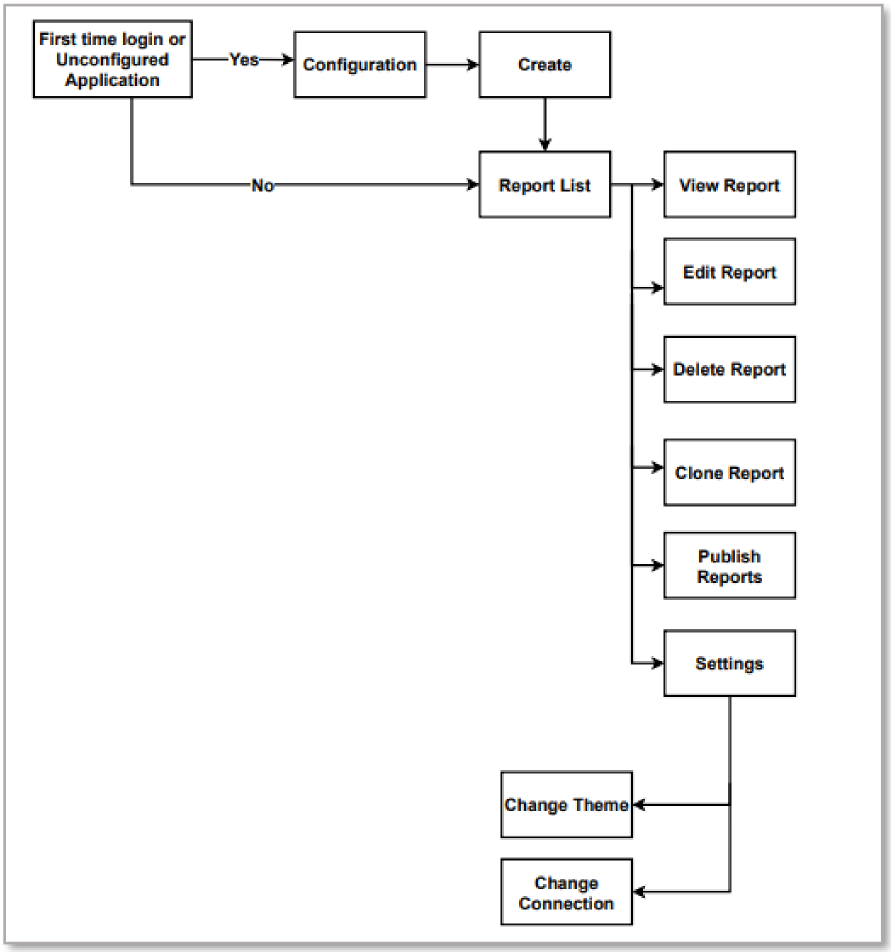

Image: Application Overview for SRT

Above flowchart gives an overview of SRT application. As shown, if the admin logs in for the first time or application is not configured with any database for the logged credential, it will direct user to configuration page. Only after configuration, admin will be able to proceed further to create report and go to report list, where user can perform actions, such as viewing, editing, deleting, cloning, and publishing report. If configuration is already set for the logged in credential, application will simply direct user to the report list page and they can further work with the report functions. User can also change database connections along with the theme for the client reports according to preference settings.

3. Getting into the system

When you open the application, you are taken to following page. On the page, you can enter the login credentials to log in to the application.

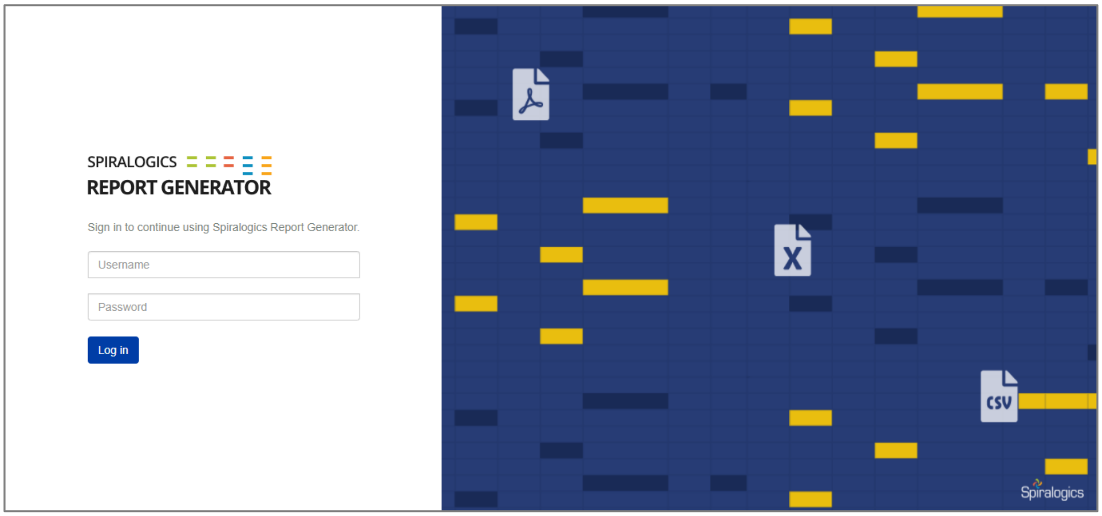

Image: Login page for SRT

Note: If you have not configured the database connection before, you will be taken to following page to configure the database connection after logging into the application.

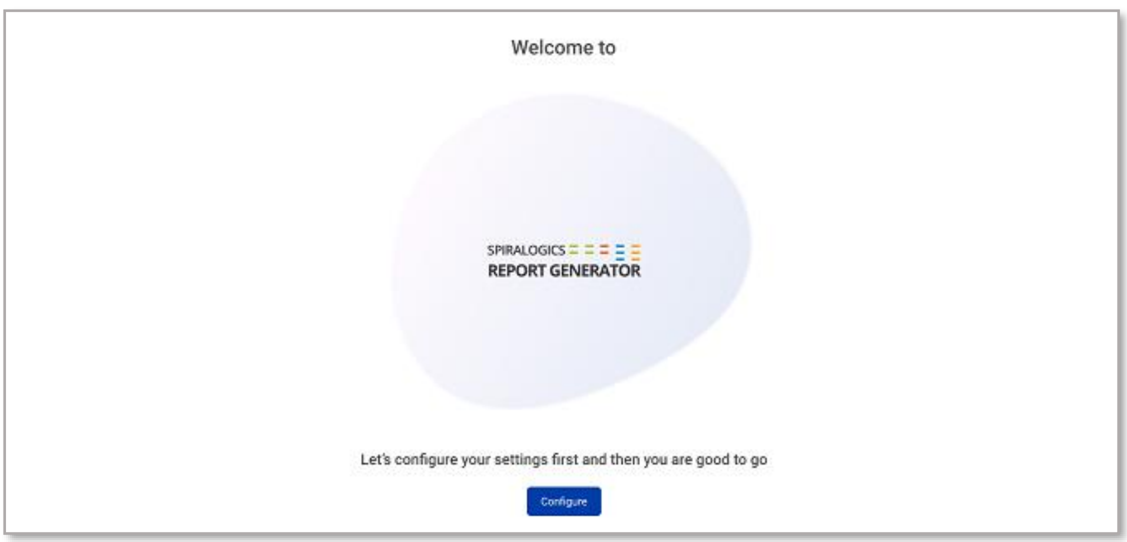

Image: Splash screen for Configuration

Click on 'Configure' and you will be taken to the configuration page. You must make a valid connection to move forward in the application.

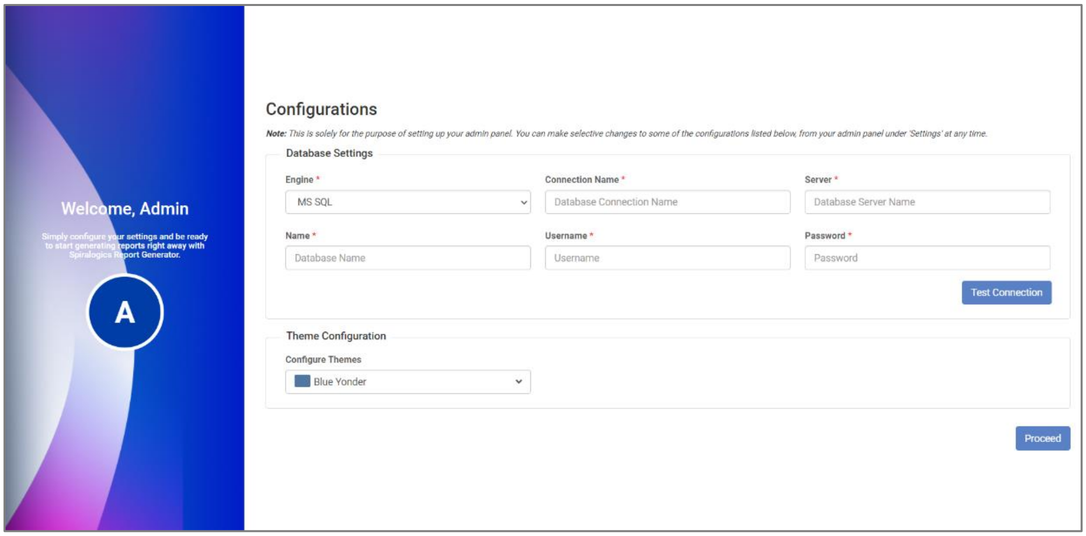

Image: Configuration's page

You can also select a theme for an application and click on 'Proceed'.

Note: If you have configured the database connection before, you will be taken to 'Report List' page after logging into the application.

4. Using the system

4.1 Create

This is the page that allows you to create a new report in the application. After setting up the database connection, you will be redirected to this page to create your first report.

Note: You can navigate to this page by clicking on 'Create' from the Nav Bar.

4.1.1 Engine

On the page, there are two fields: Report Title and Report Name. You can enter a name for the report title. The report title cannot contain any special character. The report name is automatically generated by the application according to report title.

Note: Capital letter from report title is replaced by small letter and spaces are replaced by underscore '_' while generating a report name.

Clicking on 'Next' takes you to Database tab in the application.

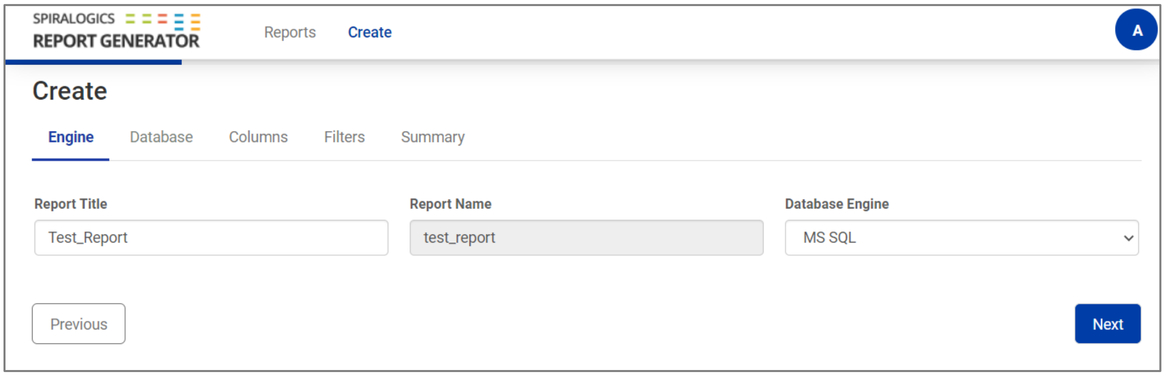

Image: Engine tab for creating report

4.1.2 Database

This tab allows you to enter database query to generate report. The application fetches data from the database configured earlier and from the table based on the entered valid query.

You can enter the query and click on 'Next' to continue.

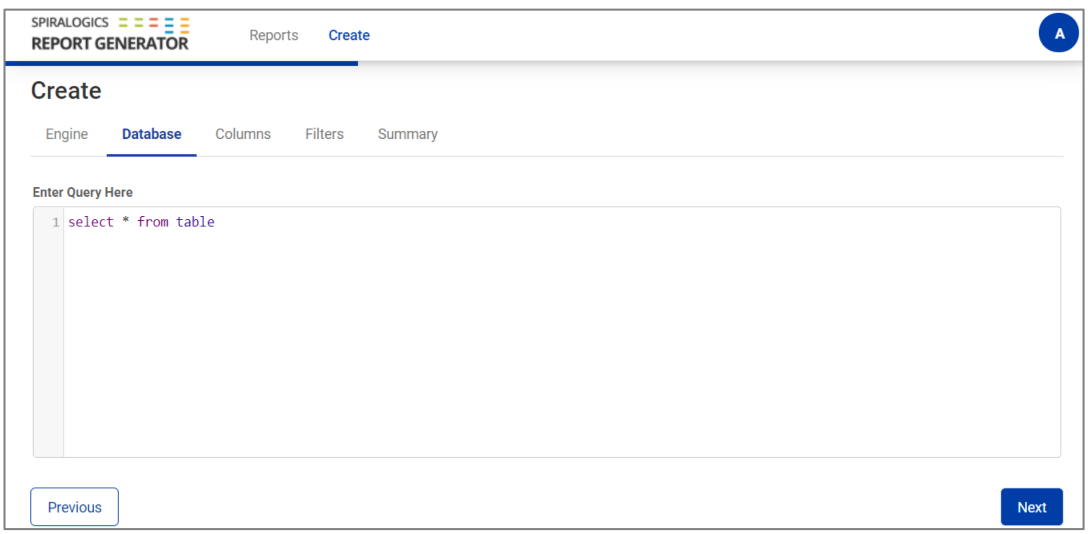

Image: Database tab for creating report

In case the query is incorrect or empty, application sends an error message.

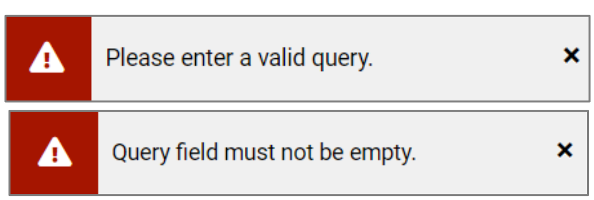

Image: Toast messages for incorrect or empty query entry

4.1.3 Columns

This tab allows you to configure filters, aggregates, and set captions for the columns that appear in the report. All the columns fetched from the database table are displayed in the box as highlighted below. You can also add a column name manually by typing its name in the box and clicking on 'Go'.

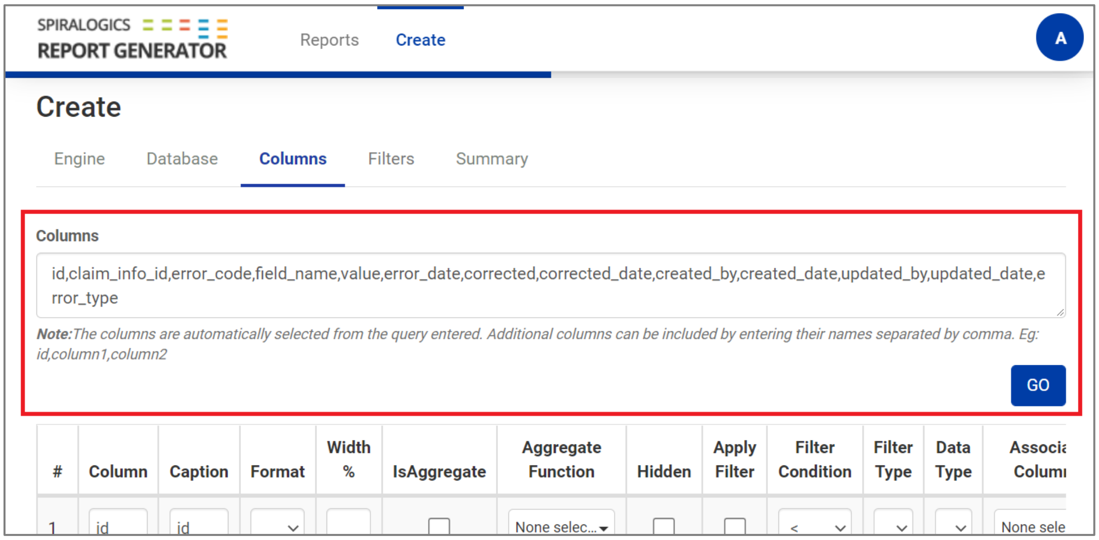

Image: Columns tab for creating report

It also has a table with all the column names and option to apply different features. Following table headers are present in the table:

a. Column

It displays name of all the columns fetched from database. It is not recommended to change them.

b. Caption

If you want to display column with a different name than its name in the database, you can give a custom caption.

c. Width

You can specify the width that a column will occupy in the report.

Note: You can leave all the fields empty under the column width. But it is mandatory to define width for all the columns if you specify for one. Defining width for only one column will disrupt the column size for other columns in the reports.

d. IsAggregate

If you want to display the aggregate values for a column, you can tick on the checkbox. After ticking on checkbox, you have to select the aggregate function and its position to display aggregate values.

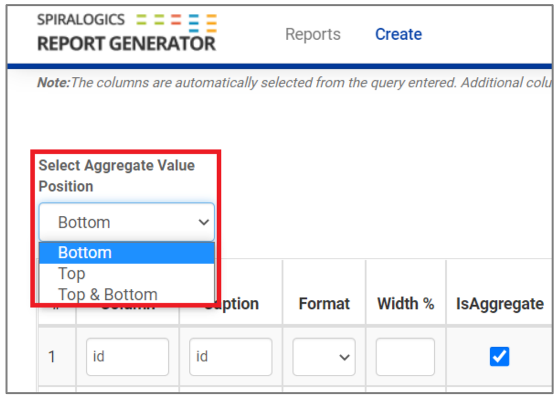

Image: Select Aggregate Value Position dropdown

e. Aggregate Function

It displays all the aggregate functions available in application. You can select the required aggregate functions to be displayed in the report from available options.

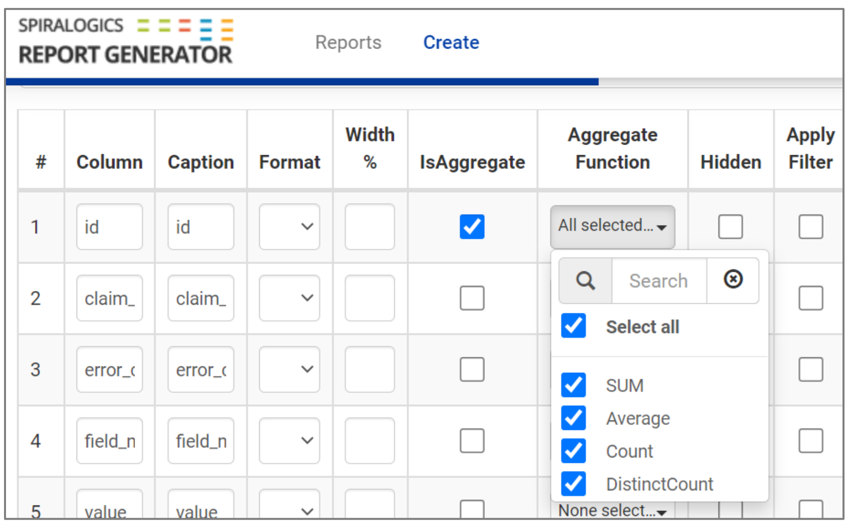

Image: Aggregate Function

Selecting Aggregate checkbox combined with Aggregate function gives following result in report:

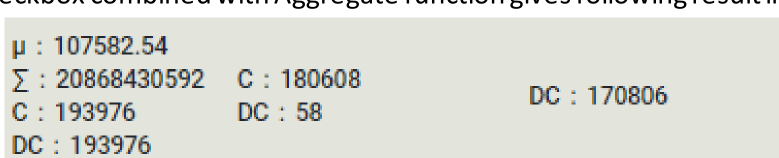

Image: Aggregate Value result on Tabular Reports

Where,

μ = Mean Σ = Sum

C = Count DC = Distinct Count

f. Hidden

Selecting Hidden checkbox hides column from appearing in the report. However, you can manually choose to unhide or show the columns later from the report page even if it is set to hidden from this tab.

g. Apply Filter

This allows you to apply a filter condition in the report. You can enable the filter option in a report by ticking the checkbox.

h. Filter Condition

It displays all the filter conditions that can be applied with filter type combination.

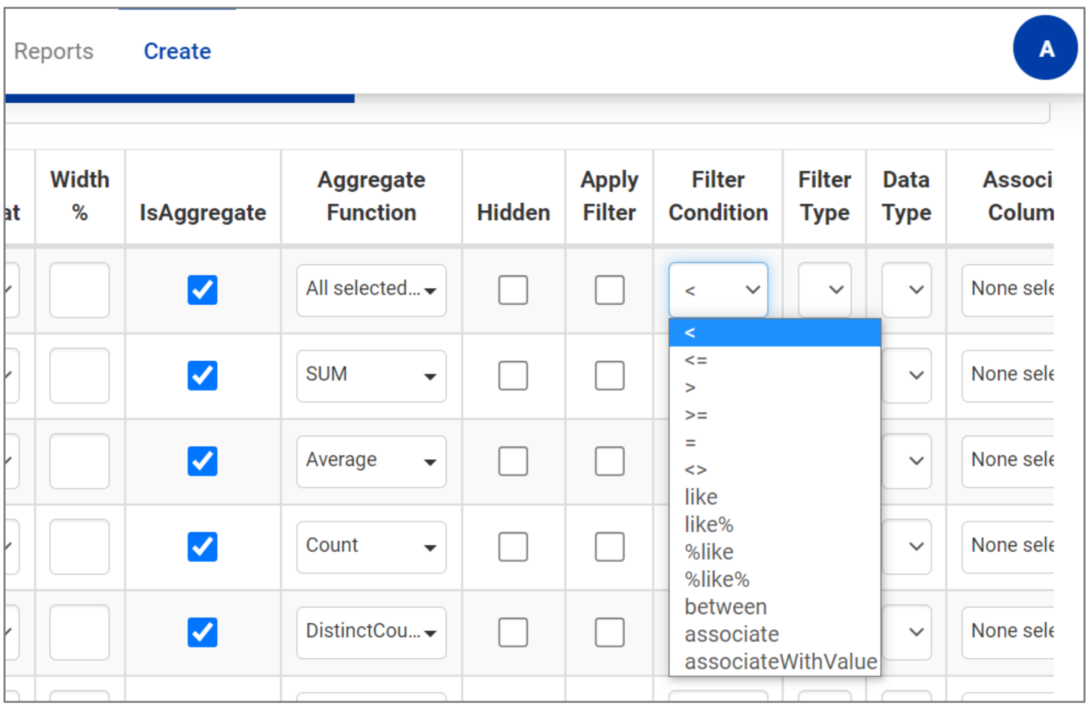

Image: Filter Condition

i. Filter Type

Based on type of data stored in database for a particular column, different types of filters can be applied to the report. You can choose any one of the Filter Types combined with the Filter Condition to create a filter feature in the report.

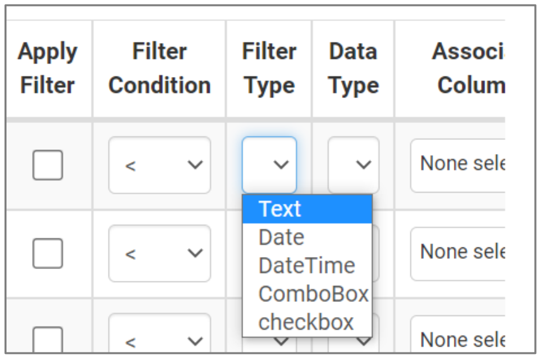

Image: Filter Type

Selecting different filter combinations creates a different type of filter in the report.
You can use following filter combination:

- Text with '='
- Date with 'between'
- Combo Box with '='

Here are some of the sample filters that are displayed on tabular reports from the filter combinations:

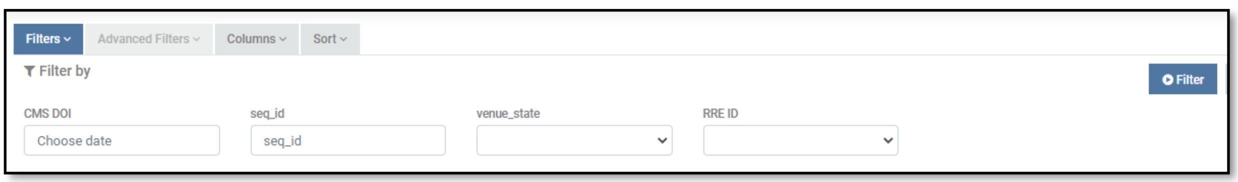

Image: Available filter options on Client Reports

Image: Text filter on Client Report configured as condition "="

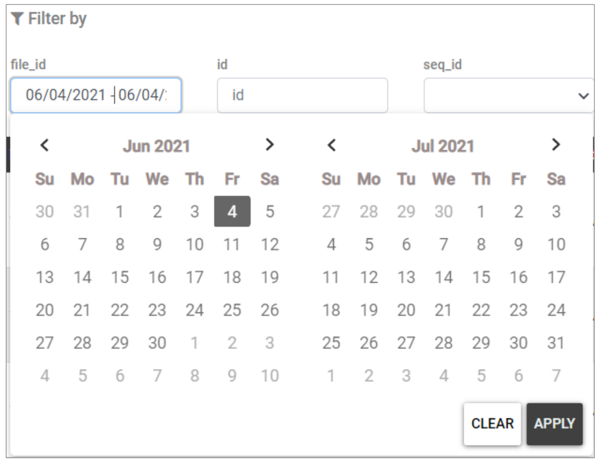

Image: Date filter on Client Report configured as condition "between"

Note: Filter by options shown above are only visible while viewing the report.

j. Associate Columns

Associate Columns displays a multi-selectable dropdown menu of all available columns. Upon choosing the columns, you will be able to apply associate filters and associate the columns under one column. However, you must select "associate" as Filter Condition, "Combo Box" as Filter Type, and choose the associate columns you prefer for an associate filter to fully work.

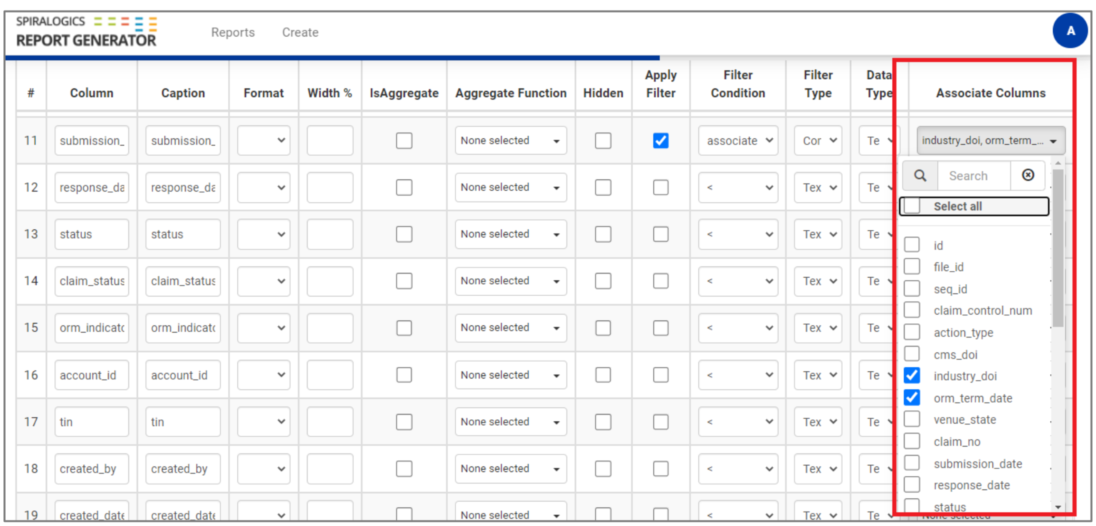

Image: Associate Columns

Note: Upon choosing associate columns and applying an associate filter for a particular column, in Filter tab, Source will be auto-filled with Custom text/Value, and Query/Value will be auto-filled with chosen associate columns.

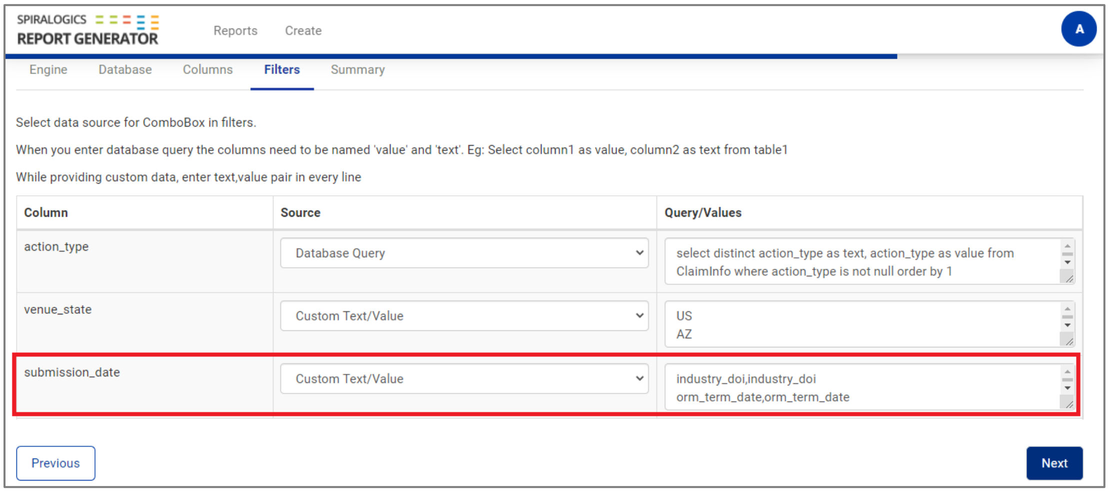

Image: Custom Text/Value on Filter tab for Associate columns

4.1.4 Filters

This tab allows you to choose the source type and value to use for the combo box dropdown for the specific column.

Note: This tab is accessible only if you have selected combo box in the filter type. If not, you will be taken to Summary tab.

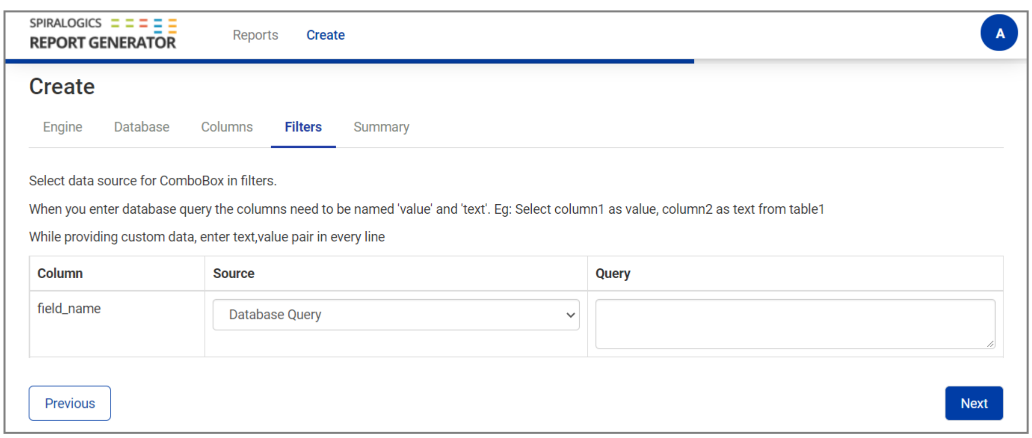

Image: Filter tab for creating report

Dropdown for Source has two options: Database Query and Custom Text/Value. You must provide a valid query for the Query field if you choose Database Query as Source. You can manually enter preferred dropdown options if you choose Custom Text/ Value as Source.

4.1.5 Summary

Summary tab shows report title and columns that will be displayed in the report table. Names of columns are based on caption provided earlier.

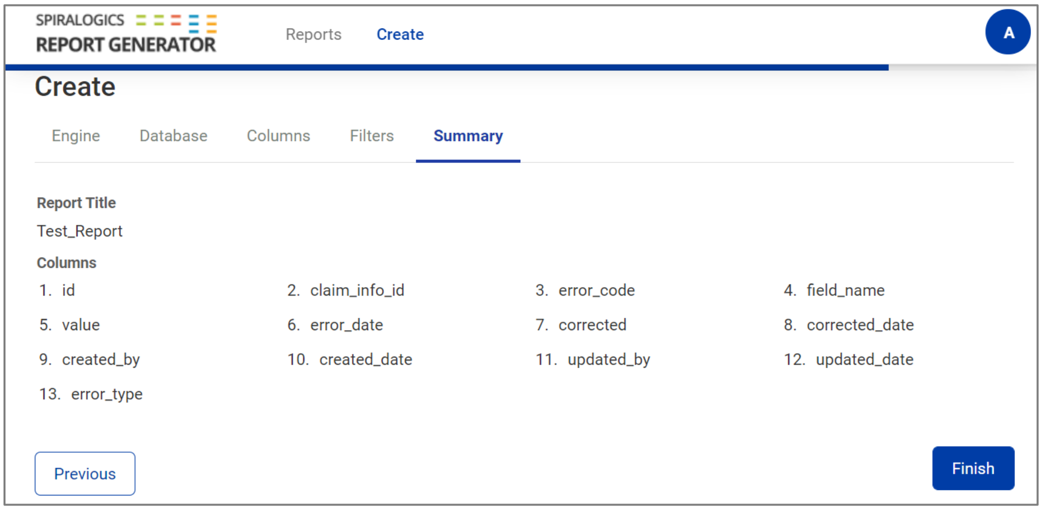

Image: Summary tab for creating report

4.2. Reports

This page lists all the reports you have generated in the application. You will be redirected to this page upon successful login, if you have created reports earlier. You can open this page by clicking on "Reports" menu on the navigation bar.

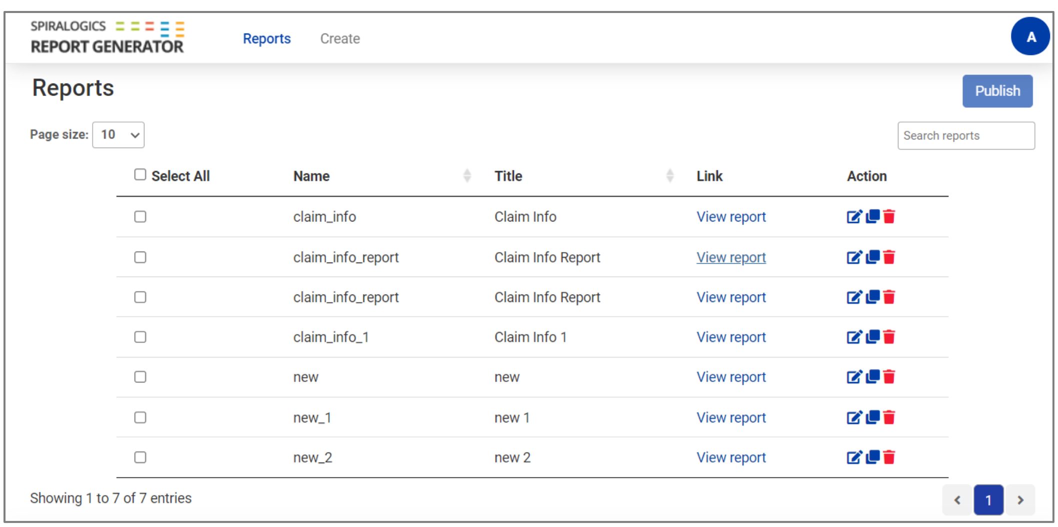

Image: Report list view

On the page, you can see a list of all reports you created along with their name, title, and action options. You can click on view report link to view the report.

Three action buttons can be used to manipulate the report, which are listed below:

4.2.1 Clone

It lets you clone an existing report with its features and customization. To clone a report, you can click on the copy icon as indicated in the picture which opens a popup, where you can enter a new report name and click on 'Submit'.

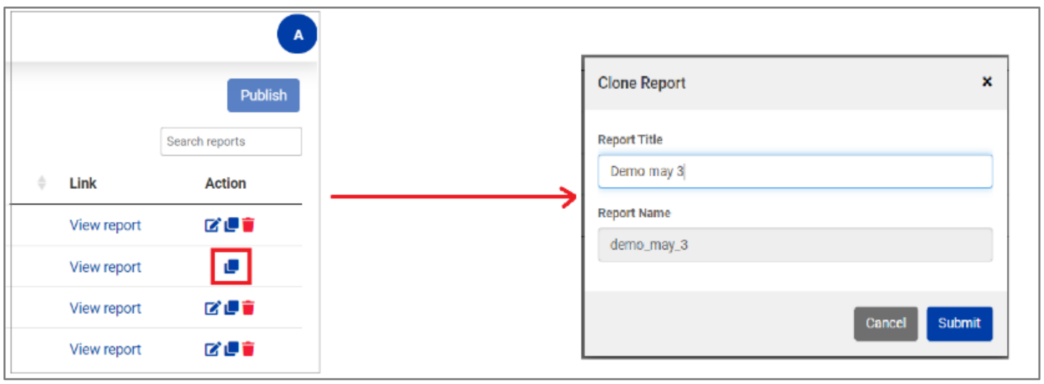

Image: Clone Report

In case the report title is empty or the same title already exists, you are notified with following messages:

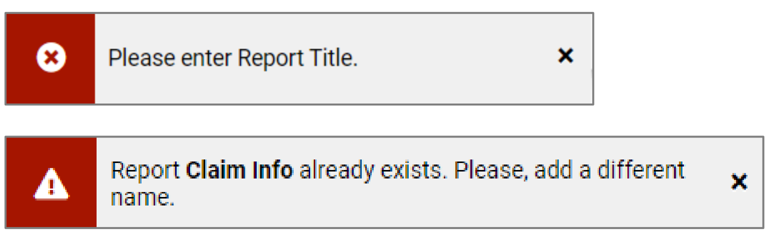

Image: Toast messages for empty or existing Report Title

4.2.2 Delete

It lets you delete a report from the application. Clicking on delete icon pops out a confirmation box, where you can confirm to delete the report.

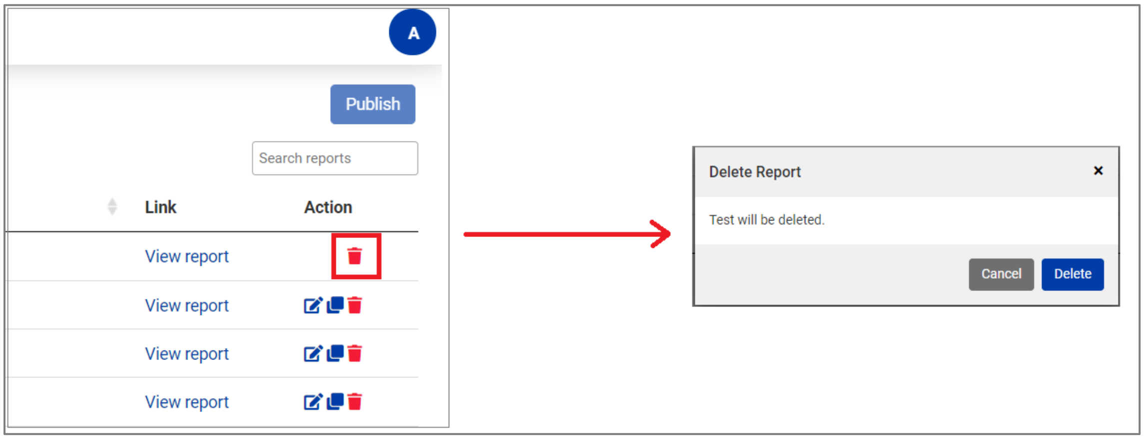

Image: Delete Report

4.2.3 Edit

It allows you to edit the report. After clicking on edit, you will be taken to the edit page which is similar to create page, which is covered in *[4.1. Create]*. You can follow the same steps mentioned in the create page to edit reports.

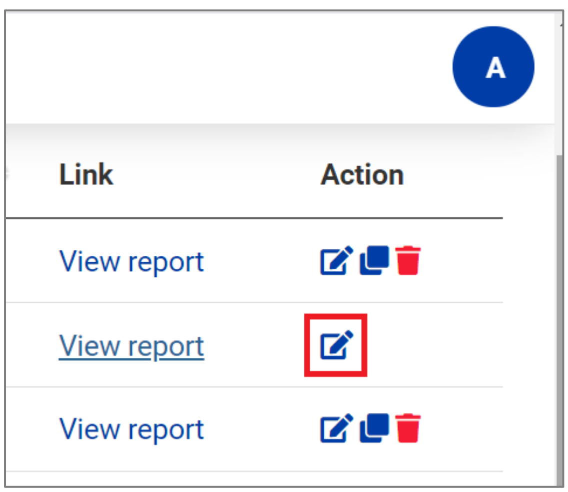

Image: Edit Report

Following additional actions can be done within Reports:

4.2.4 Search

It allows you to search for a particular report from the list of reports. You can click on search box and type the report name, which displays all the matching reports.

Image: Search Report

4.2.5 Sort

It allows you to sort report according to ascending or descending order. You can click on the table header or up and down icon to sort the report list. Icon next to the table header indicates the order of sorting.

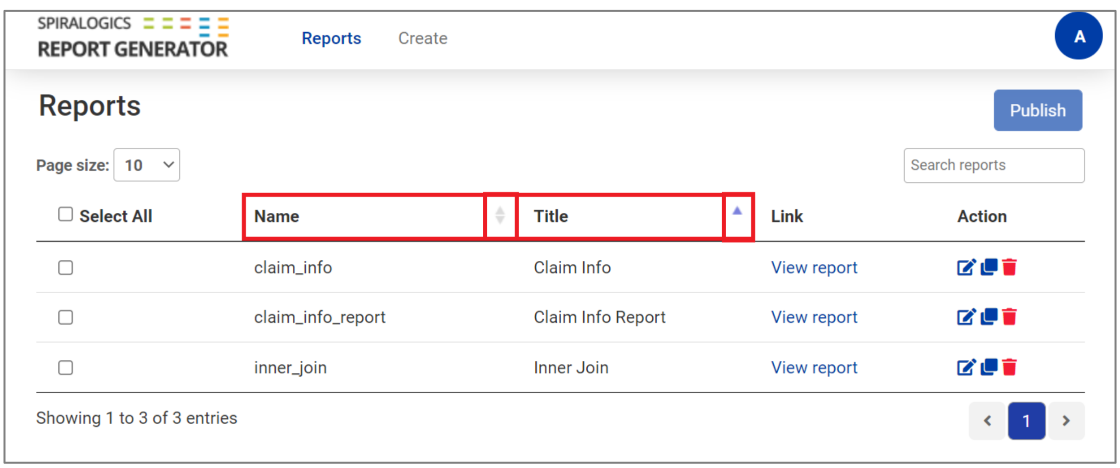

Image: Sort Report

4.2.6 Page size

It allows you to select total number of reports that can be displayed on a single page. You can select different options from dropdown.

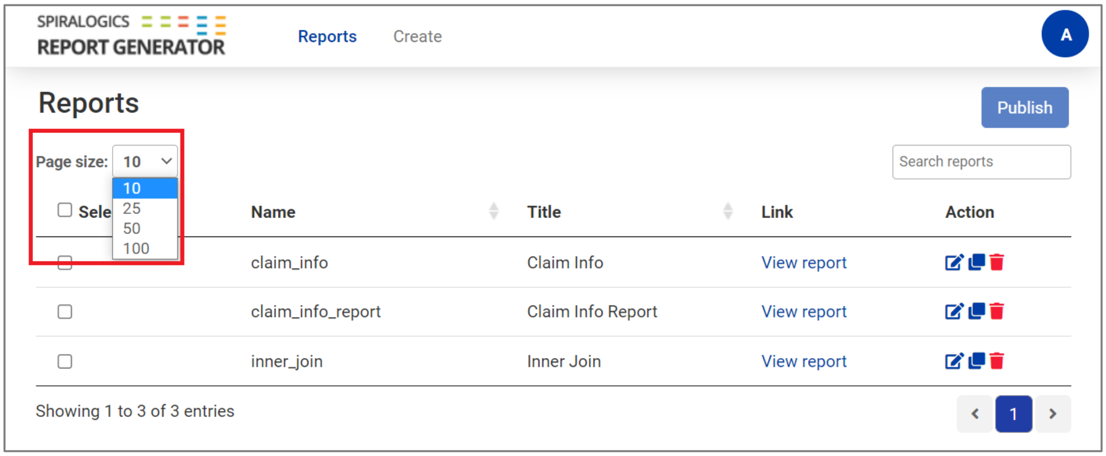

Image: Page Size for Reports list view

Note: You can navigate to different pages using pagination located at bottom.

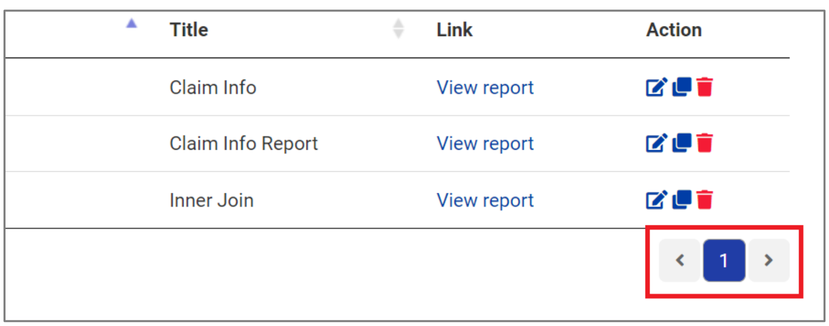

Image: Pagination for Reports list view

4.2.7 Publish

This feature enables you to publish report to client portal. To publish a report, you have to select the report you want to publish and then click on 'Publish' as shown in the image below. Number on the button indicates number of reports selected for publish.

After clicking on 'Publish', you will be asked to confirm your action. Clicking on 'Publish' on the popup publishes the selected reports into the client portal.

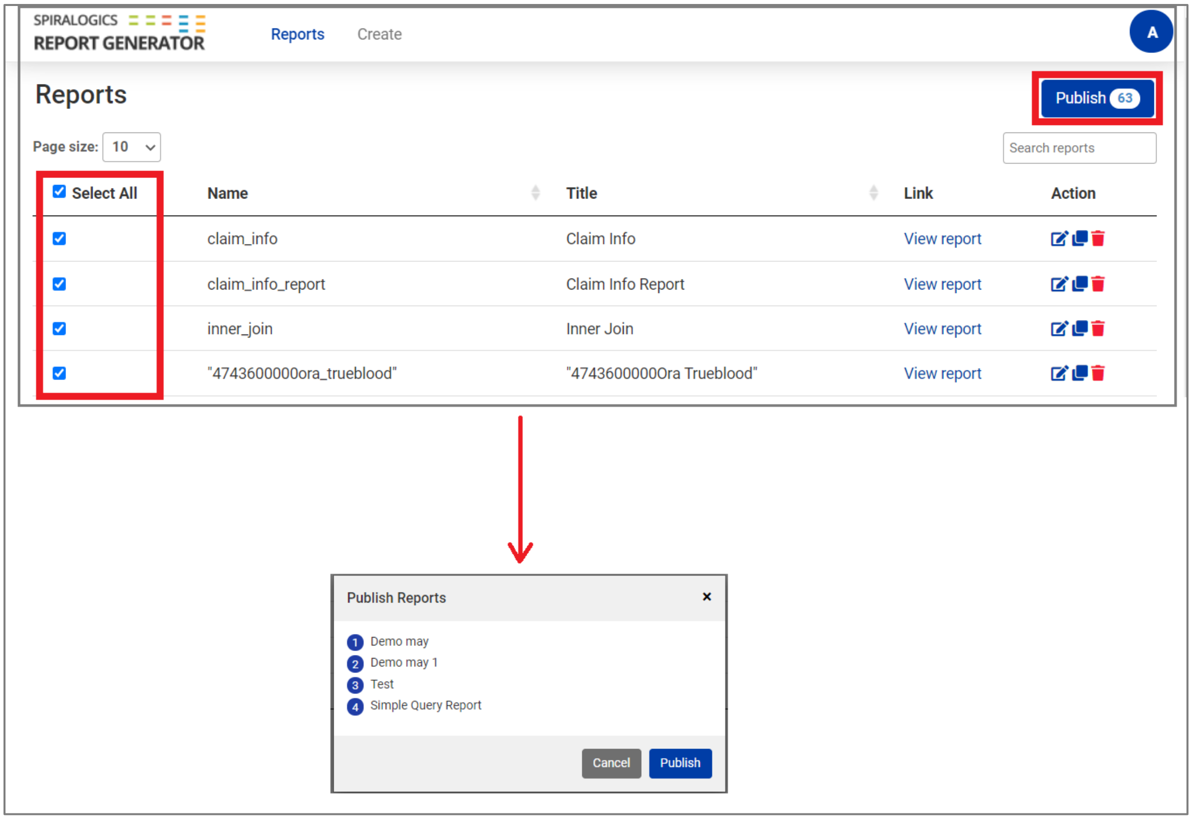

Image: Publish Report

4.3 Account

You can navigate to this page from the application by clicking on profile icon located at top right corner of the display. The letter on icon represents first letter of your username. It displays the username and email associated with the account. It also has two buttons ‘Settings’ and ‘Log Out’.

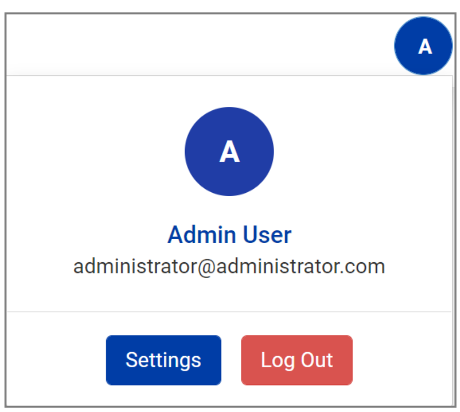

Image: Account Settings

4.3.1 Settings

Clicking on 'Settings' takes you to following screen, which allows you to change database settings and theme configuration of the report.

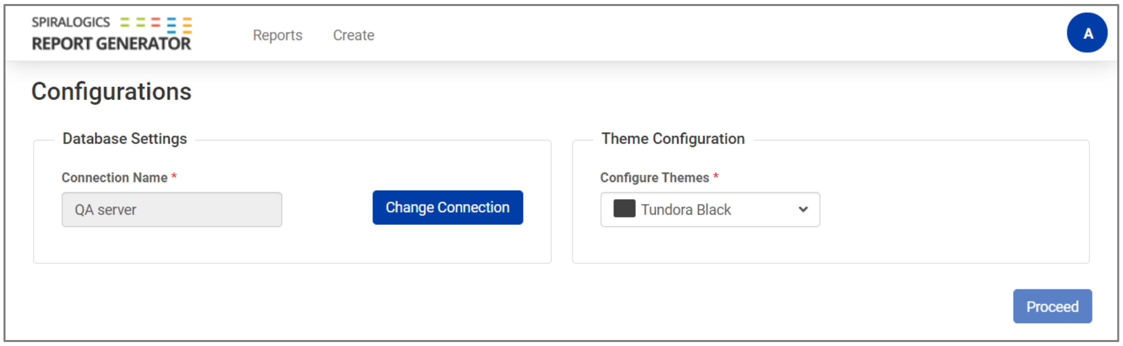

Image: Settings for Configurations

After clicking on 'Change Connection', a popup appears where you can enter the database and server credential to connect to another database.

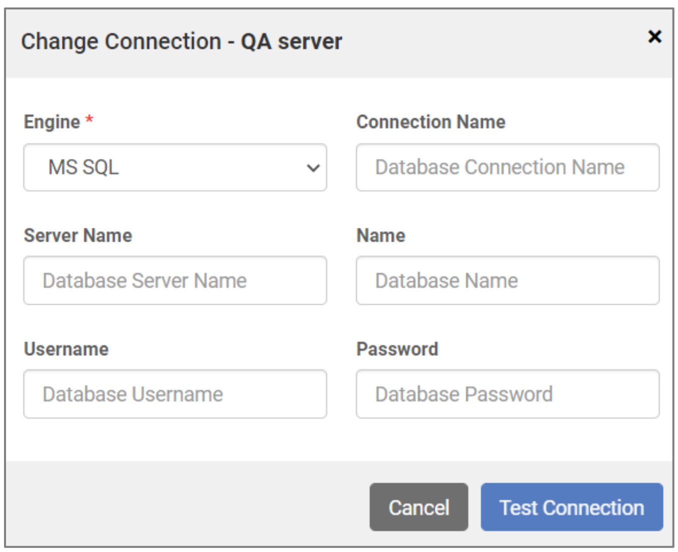

Image: Change Connection Pop-up

Note: After changing the connection, the application will be connected to the entered database. The reports created using the previous database will be on report list but it will not work if database connection is changed.

4.3.2 Log Out

You can log out of the application by clicking on 'Log Out'. You will be redirected to the login page after logging out of the application.