



Streamlyne Reporting

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Introduction

As you use Streamlyne Research, the application makes additions, updates, and deletions to the data in the Streamlyne Research database. This database is then replicated in real time to a database specifically for use by Streamlyne Reporting.

Streamlyne Reporting is an agile Business Intelligence (BI) tool for creating reports and dashboards that is fully integrated to Streamlyne Research. In Streamlyne Reporting, you can create various types of reports and graphs, assemble your own dashboards, and share both reports and dashboards with other users.

This guide assumes the reader is familiar with the basic concepts of relational databases and query structure. It is not necessary for you to understand specific query language (SQL) syntax.

Before You Begin

Before you begin using Streamlyne Reporting, be sure:

1. Your subscription to Streamlyne Research includes Streamlyne Reporting.
2. Your roles are updated to ensure appropriate access within Streamlyne Reporting. See [Appendix A: Roles and Features](#) for a list of these roles. For example, you must have Report Writer or Report Administrator role to see the New Reports button.

Navigating in Streamlyne Reporting

Navigating in Streamlyne Reporting is straightforward and intuitive. This section will walk you through the basic screen components to ensure you can easily find what you need to be productive.

Logging In

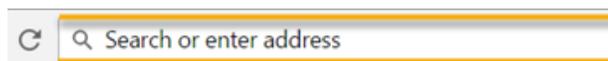
Once your implementation process is complete, it is very likely that your institution will implement a single sign-on (SSO) portal for you to log on to the application as you would any other.

If your institution is not using SSO, or if you are logging in to a non-production environment, follow these steps to log in:

1. Open a browser window.

Note Streamlyne Research is compatible with the two most recent versions of Chrome, Safari, Firefox, and Internet Explorer.

2. Type the URL for your institution's Streamlyne Research website and hit <Enter> on your keyboard.



3. Enter your **Username** and **Password**, and then click the Login button.



Welcome to Streamlyne. Please enter your username and password to login.

Username

Password

Login

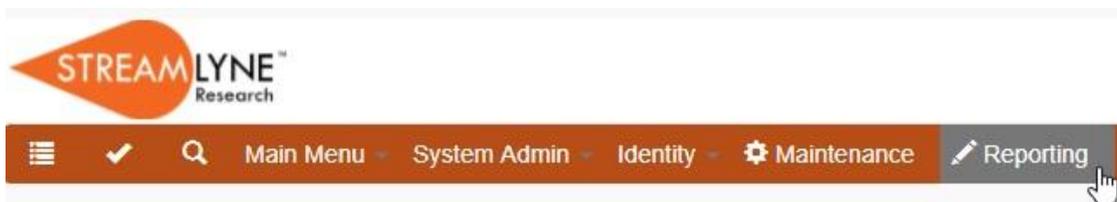
Note If you manually log out of Reporting or the timeout feature automatically logs you out, you will be directed to this screen.

Do not enter your credentials on this screen. Instead, use the [click here](#) hyperlink to move forward. This will route you to the correct login screen. Proceed as in Step 3.

The logo for Streamlyne Reporting, featuring the word "STREAM" in white inside an orange teardrop shape, followed by "LYNE" in black and "Reporting" in a smaller font below it.

Do not use this page to log in.
Please [click here](#) to log in.

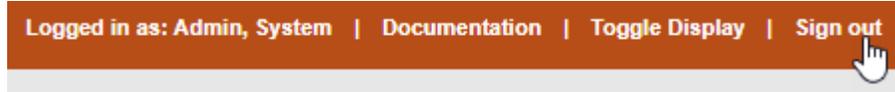
Login



4. Click the Reporting option on the menu bar to open Streamlyne Reporting in a new tab.

Logging Out

To log out of Streamlyne Reporting:



1. Click on Sign out on the banner in the top right area of the screen.
2. Close the browser tab. You can continue your work in any open Streamlyne Research tabs if needed.

Basic Navigation

Following are basic navigation instructions for Streamlyne Reporting.



When you click on the Reporting option on the Menu Bar, the Streamlyne Reports home page will open to Reports Home in a new browser tab.

| Report Title | Options | Favorite | Created by | Last Executed |
|--|--|----------|------------|---------------|
| <input type="checkbox"/> Streamlyne Active Awards IRB Using the Award View for Active Awards. | Launch Details | ★ | Admin, K | 2/20/18 |
| <input type="checkbox"/> Streamlyne Award Budget Forecast for Run Date Award budget information useful for Forecasting. | Launch Details | ★ | Admin, K | Never |
| <input type="checkbox"/> Streamlyne Inactive Awards Using the Award View for Inactive Awards. | Launch Details | ★ | Admin, K | Never |
| <input type="checkbox"/> Streamlyne Non-Federal Awards Using the Award View for Non Federal Awards. | Launch Details | ★ | Admin, K | Never |

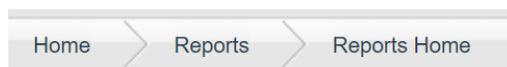
Banner



The banner at the top right corner of the page is always visible while in Streamlyne Reporting. Options below the banner will vary based on the role of the user. The screenshot above reflects Report Administrator access.

- Logged in as** This is a display-only item that shows the name of the logged-in user.
- Documentation** Clicking this option will direct you to the Streamlyne Knowledge Base where the latest documentation for Streamlyne Reporting is available.
- Toggle Display** From some screens, such as the Report Overview screen, clicking the Toggle Display option will switch between displaying Streamlyne Reporting column names and database field names in reports.
- Sign out** Click on this link to sign out of Streamlyne Reporting. Remember to close the tab in your browser as well.

Navigation Bar



The navigation bar shows the breadcrumbs for the screens that have been accessed. Each component of the navigation bar is a link that can be clicked to quickly go to that screen.

Report Listing

The Reports Listing in the main section of the Reports Home page shows the reports to which you have access.

Reports Home
Reporting Dashboard
Manage your Reports

[New Report](#) [Import Package](#)

Filter Reports

Clear Filter 47

- My Favorites 5
- My Reports 47
- Recently Added 2

Datasources

- Streamlyne_Research 47

Tags

- (empty) 46
- Streamlyne 1

Reports Listing

Search Reports

| Report Title | Options | Favorite | Created by | Last Executed |
|--|--|----------|------------|---------------|
| <input type="checkbox"/> Streamlyne Active Awards <small>Using the Award View for Active Awards.</small> | Launch Details | ★ | Admin, K | Tuesday |
| <input type="checkbox"/> Streamlyne Active Awards IRB <small>Using the Award View for Active Awards.</small> | Launch Details | ☆ | Admin, K | 8/8/17 |
| <input type="checkbox"/> Streamlyne Active Awards IRB Select Exp Date <small>Using the Award View for Active Awards IRB Select Date</small> | Launch Details | ★ | Admin, K | 8/21/17 |
| <input type="checkbox"/> Streamlyne Award Budget Forecast for Run Date <small>Award budget information useful for Forecasting.</small> | Launch Details | ☆ | Admin, K | 11/7/16 |
| <input type="checkbox"/> Streamlyne Awarded Awards <small>Using the Award View for Awarded Awards.</small> | Launch Details | ☆ | Admin, K | 4/14/17 |
| <input type="checkbox"/> Streamlyne Awarded Awards Expiration by Month <small>Using the Award View Reporting on Expiration by Month</small> | Launch Details | ★ | Admin, K | 3/8/17 |

Report Listing Quick Start Tips

- Click on either the report title or the Details link to see the report template.
- Click Launch to execute the report.
- Click the star in the Favorites column to favorite a report.
- Reference the Created By column and the Last Executed column to see which user created the report and when it was last run.
- Click a column header to sort the data by that column. For example, clicking the Favorites column twice will sort the reports tagged as favorites to the top of the list.

Finding Your Reports

If you know part or all a report title, you can search for it by typing in the Search Reports box. As you type, Streamlyne Reporting will begin to filter the list of reports to show those matching what you have typed.

Reports Listing

| Report Title | Options | Favorite | Created by | Last Executed |
|--|--|--------------------------|------------|---------------|
| <input type="checkbox"/> Streamlyne Active Awards <small>Using the Award View for Active Awards.</small> | Launch Details | <input type="checkbox"/> | Admin, K | Never |
| <input type="checkbox"/> Streamlyne Active Awards IRB Select Exp Date <small>Using the Award View for Active Awards IRB Select Date</small> | Launch Details | <input type="checkbox"/> | Admin, K | Never |
| <input type="checkbox"/> Streamlyne Awarded Awards <small>Using the Award View for Awarded Awards.</small> | Launch Details | <input type="checkbox"/> | Admin, K | Never |

Clear the filter by clicking Clear Filter.

Clear Filter

Filter Reports Panel

On the left side of the page, the Filter Reports panel displays report filters to narrow down the list of reports shown in the main Report Listing. Reports can be filtered by: My Favorites, My Reports, or Recently Added.

Other elements of the Filter Reports panel include:

Datasources A datasource is a specific database set up by Streamlyne or a Report Administrator. Reports can pull data from one or more datasources.

Tags When reports are created, tags can be added to help organize reports.

Filter Reports

[Clear Filter](#) 0

| | |
|-----------------------|----|
| My Favorites | 3 |
| My Reports | 49 |
| Recently Added | 1 |
| <hr/> | |
| ▼ Datasources | |
| Streamlyne_Research | 50 |
| <hr/> | |
| ▼ Tags | |
| (All Tags) | 50 |
| Streamlyne | 0 |
| Awards | 1 |
| Budget | 1 |

Creating Mappings

You must have the Report Administrator or Report Writer role to create mappings. See your Streamlyne Administrator if you do not have the proper role assignments to access the Mappings option.

The concept of mapping is specific to Streamlyne Reporting. Mappings act as intermediary layers between the tables/views in the datasource and the reports themselves. Mappings allow you to filter out unnecessary data from the source tables/views and facilitate joins to sister tables.

Important Highlights:

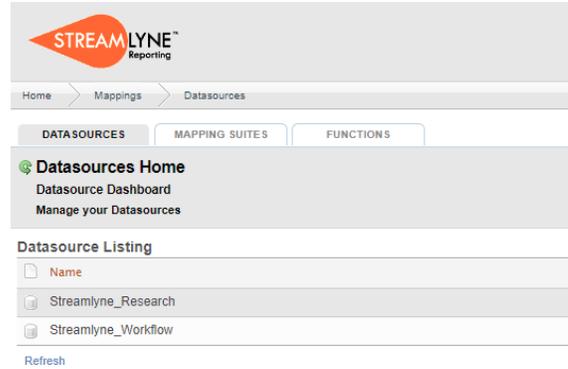
- Each report is built from a single mapping, but a single mapping can be reused again and again for multiple reports.
- Several mappings are delivered with Streamlyne Reporting, but you will need to create some of your own. For a complete list of delivered mappings and the table/view data they reference, see the Streamlyne Knowledgebase.
- Mappings should be created by someone with knowledge of query structure, join techniques, and SQL syntax.
- Once created, nontechnical staff can easily create and maintain their own reports by interacting with the mappings instead of the database elements themselves.
- Advanced users with knowledge of SQL syntax may bypass mappings by creating reports using SQL statements.

Create a Mapping

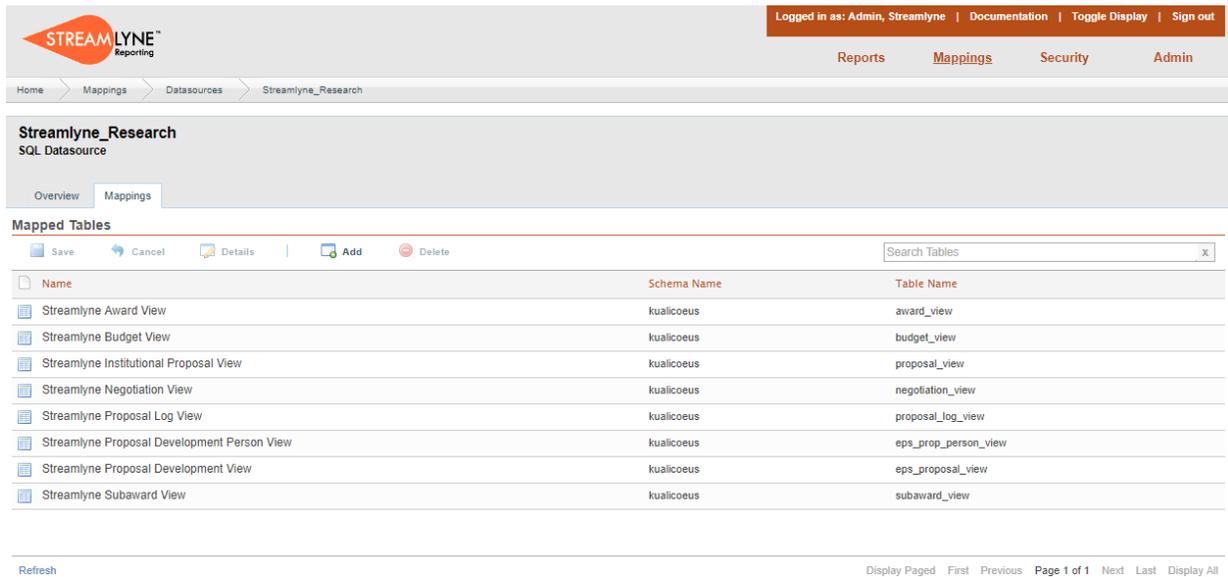
Navigation

Reports Home > Mappings

Result The screen will open to the Datasources Home page.

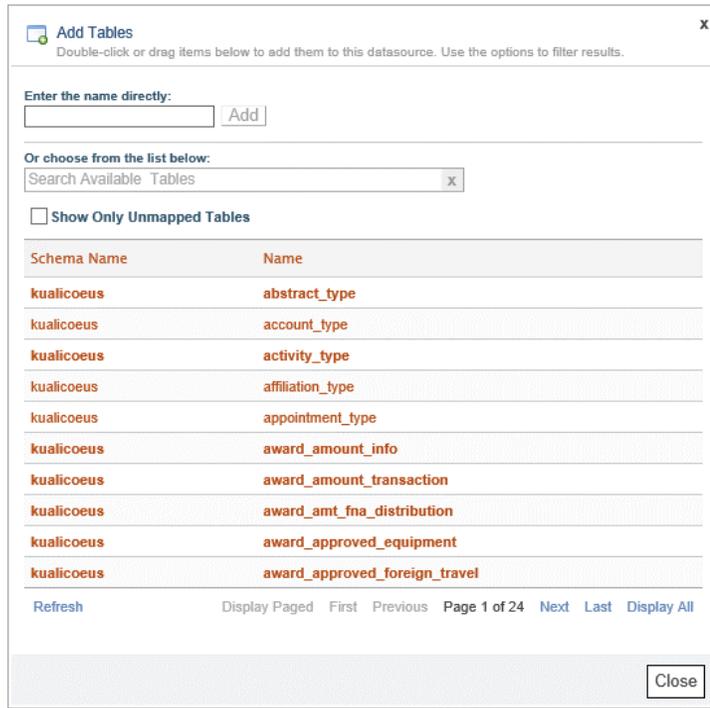


1. Click Streamlyne_Research in the Datasource Listing.
2. Streamlyne Reporting will open to the Mappings tab displaying the list of delivered mappings.



3. Click the Add button.  Add

Result Streamlyne Reporting displays the Add Tables window.



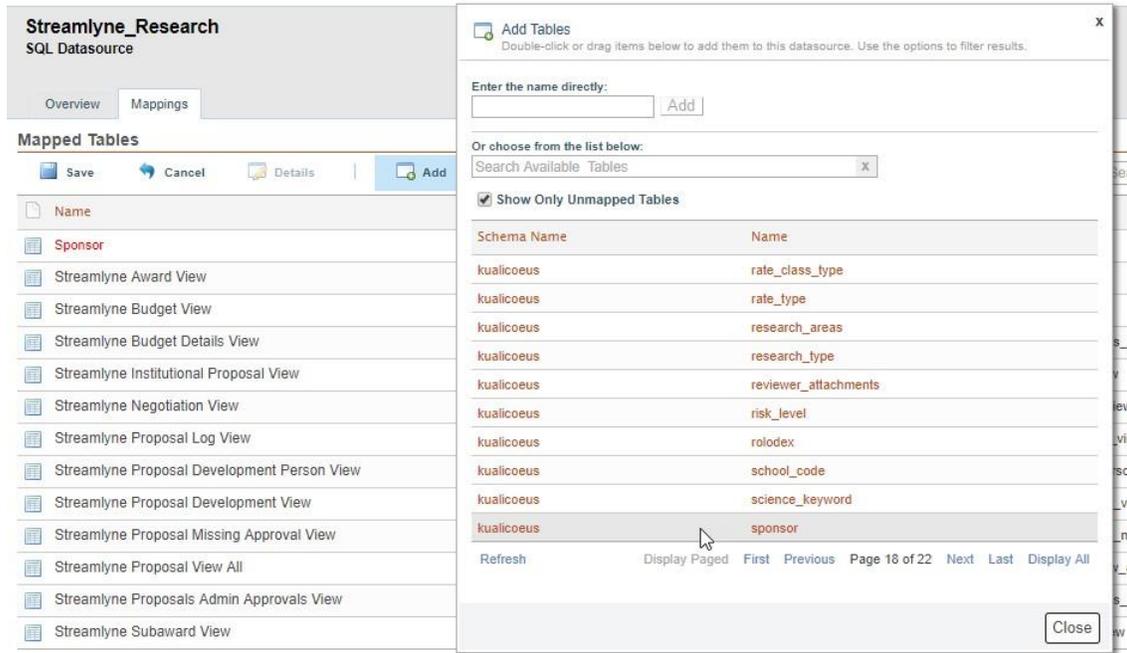
4. To filter out table/views that have already been mapped, click the **Show Only Unmapped Tables**. Otherwise proceed to Step 5.

5. If you know part or all of the name of the table/view you want to use, you can search for it by typing in the **Or choose from the list below:** field. As you type, Streamlyne Reporting will begin to filter the list of tables/views to show those matching what you have typed.

Alternatively, use the Next, Last and Display All navigation tools to find the table/view you want to select.

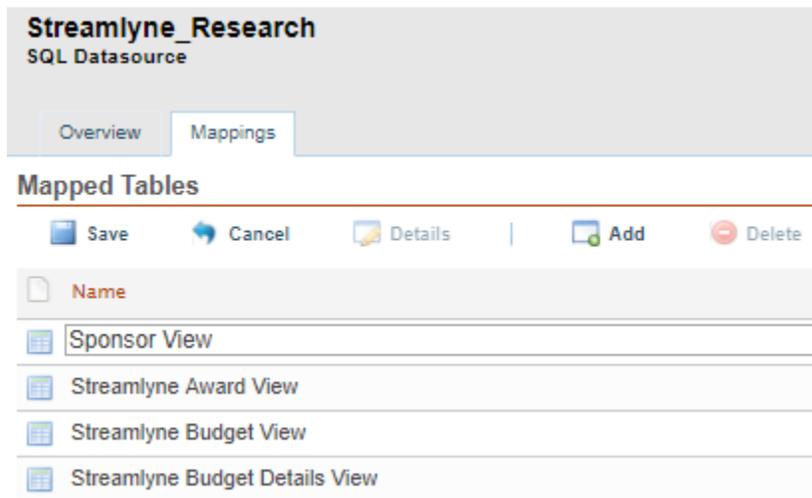
6. Double-click the table/view name you want map.

Result The table/view name will appear on the mappings list in red, meaning the table is not yet saved.



7. Click Close in the Add Tables window. 

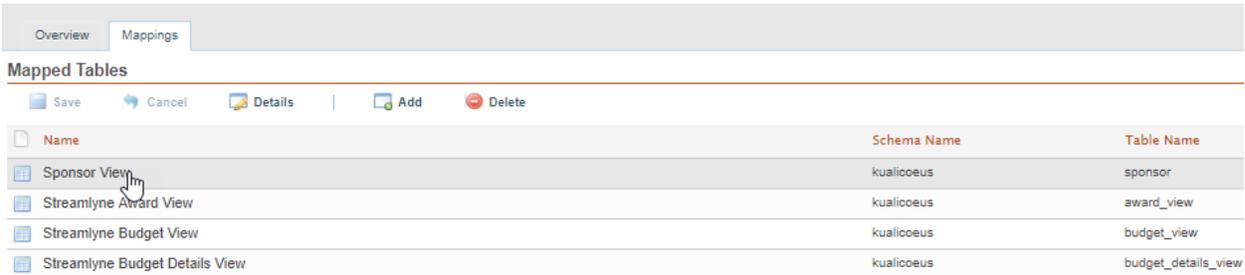
8. Streamlyne Reporting will automatically name your mapping to match the table you selected. Double-click the red Name of the mapped table you just added to rename the mapping.



9. Click Save. 

Add Table/View Columns to Mapping

In this step, you will identify which columns you wish to expose from the tables/views you selected in the previous process.



The screenshot shows the 'Mapped Tables' section of a software interface. It has a header with 'Overview' and 'Mappings' tabs. Below the header is a toolbar with 'Save', 'Cancel', 'Details', 'Add', and 'Delete' buttons. A table lists the mapped tables with columns for Name, Schema Name, and Table Name.

| Name | Schema Name | Table Name |
|--------------------------------|-------------|---------------------|
| Sponsor View | kualicoeus | sponsor |
| Streamlyne Award View | kualicoeus | award_view |
| Streamlyne Budget View | kualicoeus | budget_view |
| Streamlyne Budget Details View | kualicoeus | budget_details_view |

1. Click the mapping you want to add columns to.



The screenshot shows the 'Sponsor View' mapping configuration interface. It has a header with 'Overview', 'Properties', and 'Links' tabs. Below the header is a toolbar with 'Save', 'Cancel', 'Add', 'Add All', 'Add Function', and 'Delete' buttons. A search bar labeled 'Search Columns' is present. Below the search bar is a table with columns for Name, Description, Column Name, and Type. The table is currently empty, showing 'No results'.

| Name | Description | Column Name | Type |
|------------|-------------|-------------|------|
| No results | | | |

2. Click on Properties tab if it is not already selected.

This will reveal the columns available in the table/view. If you just created the mapping, the Columns section will be empty.

3. If you are creating this mapping to use in your own reports, it may be sufficient to simply click the Add All button to bring in all columns from the table/view. You can filter out these columns when you write the report using this mapping.

To add all columns, click the Add All button.  **Add All**

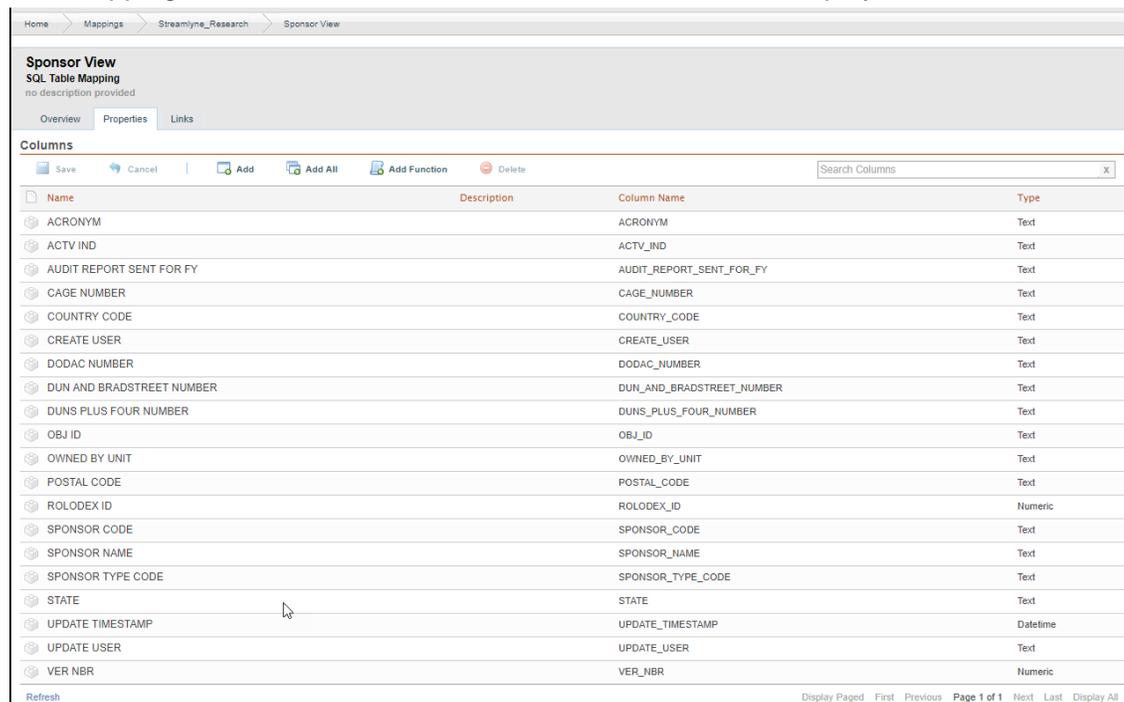
To add columns one at a time, skip to Step 5.

Result The Add all properties dialogue box will appear.



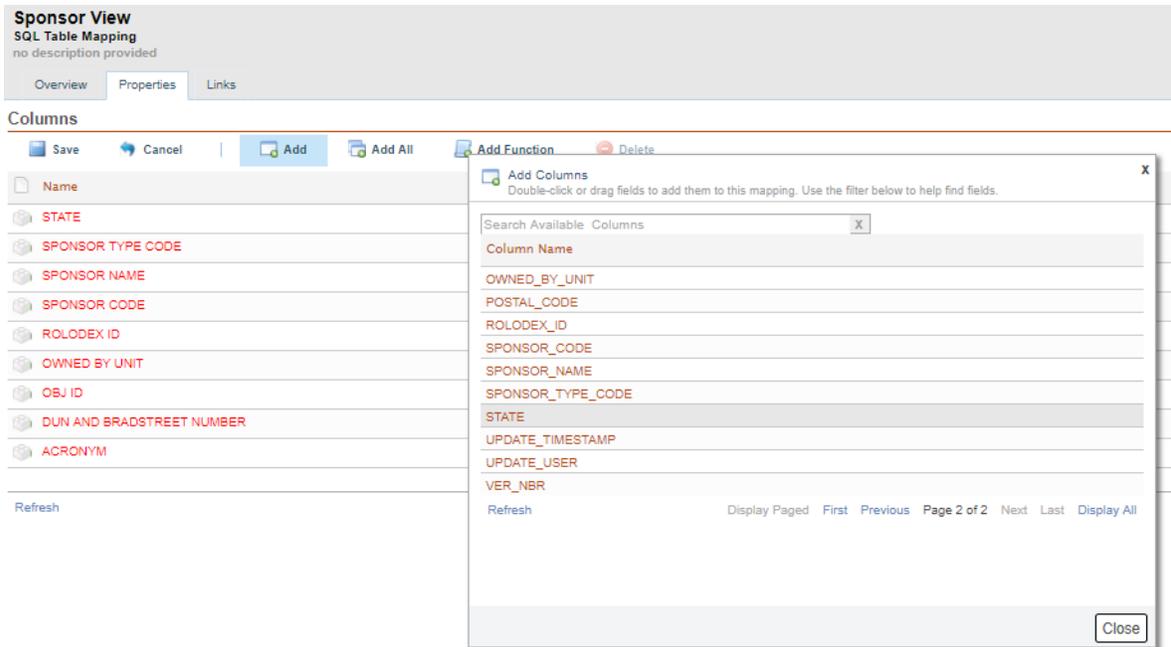
4. Click the Add All button. 

Result The mapping will be saved and all available columns will be displayed.



5. If you are creating this mapping for others to use, it may be preferable to create a mapping that contains no superfluous columns.

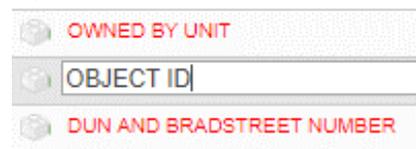
Click the Add button to open the Add Columns window. 



6. To carefully choose specific columns to add to your mapping, double-click or drag-and-drop Column Names to the Columns area. Use the navigation menu at the bottom of the Add Columns window to see all of the available columns.

7. Click Close when you are done adding columns. 

8. If it is necessary to rename column headers to eliminate ambiguity, double-click on any of the red items in the Name column to edit the column name.



Otherwise proceed to the next step.

9. Click Save.  Save

Result The Columns section automatically sorts your selections alphabetically by Name, which is either the default column name or the names you added in Step 7. The original Column Name (from the datasource) and the Type of data in each column are displayed as well.

Sponsor View
SQL Table Mapping
no description provided

Overview Properties Links

Columns

Save Cancel Add Add All Add Function Delete Search Columns X

| Name | Description | Column Name | Type |
|---------------------------|-------------|---------------------------|---------|
| ACRONYM | | ACRONYM | Text |
| DUN AND BRADSTREET NUMBER | | DUN_AND_BRADSTREET_NUMBER | Text |
| OBJECT ID | | OBJ_ID | Text |
| OWNED BY UNIT | | OWNED_BY_UNIT | Text |
| ROLODEX ID | | ROLODEX_ID | Numeric |
| SPONSOR CODE | | SPONSOR_CODE | Text |
| SPONSOR NAME | | SPONSOR_NAME | Text |
| SPONSOR TYPE CODE | | SPONSOR_TYPE_CODE | Text |
| STATE | | STATE | Text |

Refresh Display Paged First Previous Page 1 of 1 Next Last Display All

10. If you wish to join additional tables/views to the mapping, proceed to [Linking Mappings](#). Otherwise, proceed to [Adding Permissions to a Mapping](#).

Linking Mappings

A Link represents a defined relationship between two mapped tables. There are two types of links available:

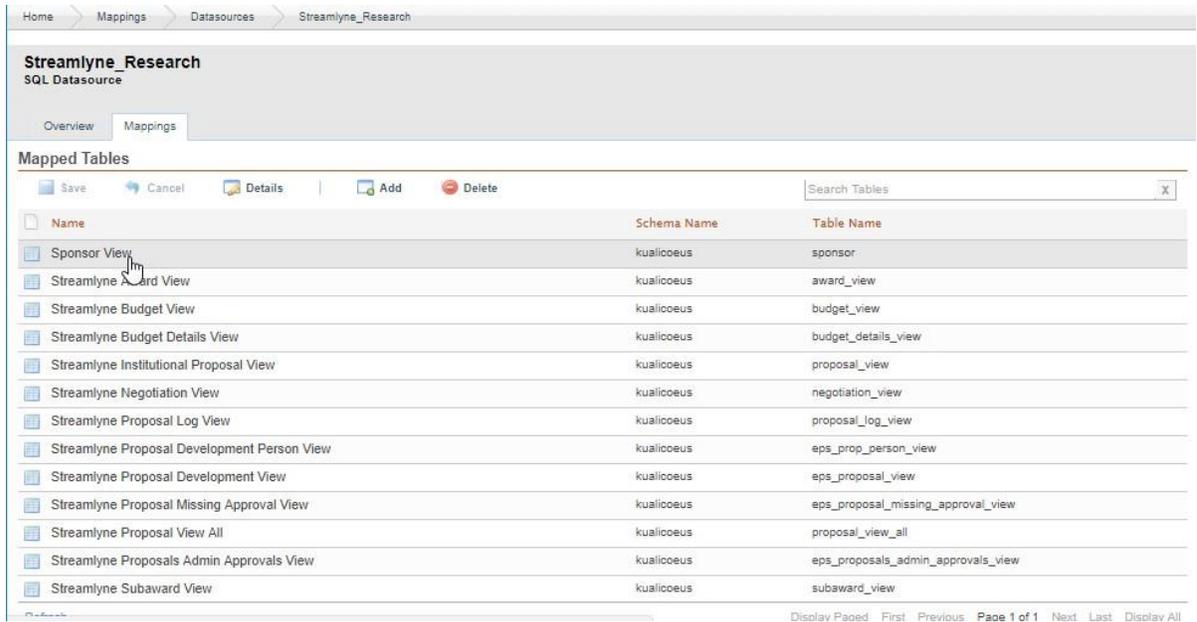
Local links Links two mapped tables from the same datasource.

Remote links Links two tables from different datasources.

Navigation

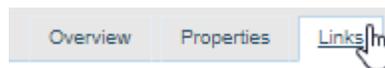
Reports Home > Mappings > Streamlyne_Research

The instructions here are to create a local link between two existing mappings using a field that is common to both mappings. This field is referred to as the foreign key



1. Select the mapping you want to add a Link to from the Mapped Tables.

2. Click on the Links tab.



3. Click the Add button to open the Add links window.



Add links
Add a new link to connect two mappings.

Name

Description

Links To

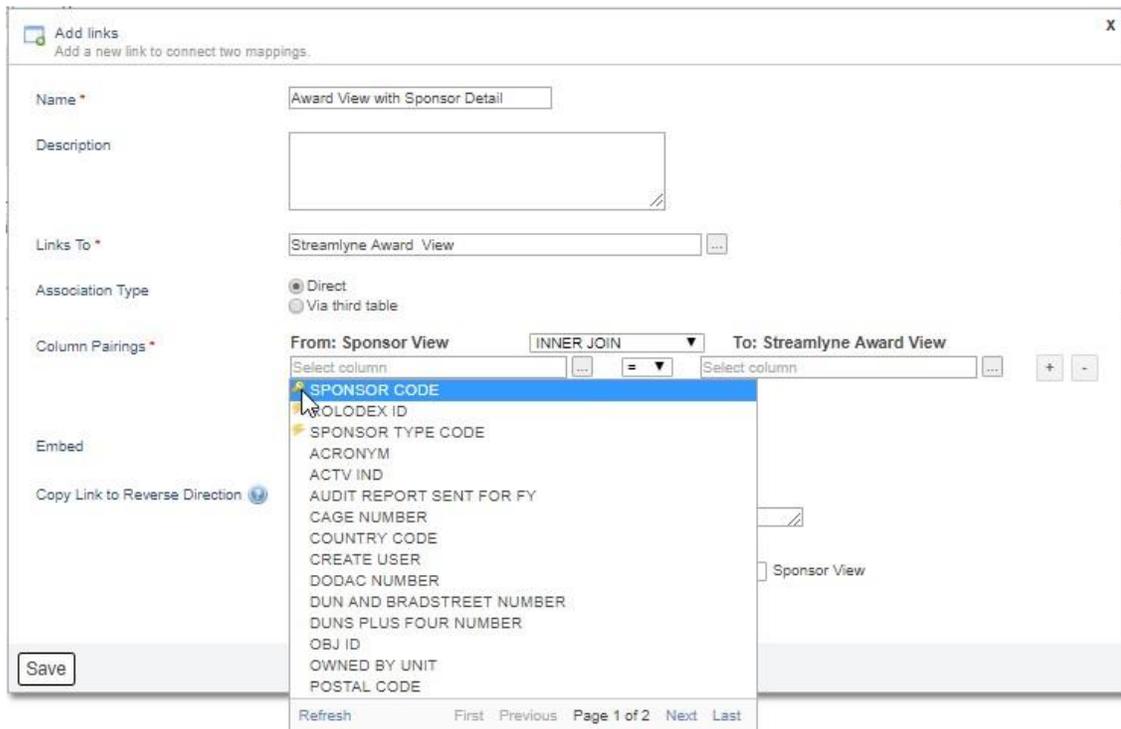
Association Type Direct third table

4. In the **Name** field, enter a name for the link that references the nature of the linked table's relationship to your mapping.

5. Enter an optional description in the **Description** field.

6. In the **Links To** field choose the existing mapping you wish to link to from the dropdown.

7. Leave the Association Type as Direct.



8. In the Column Pairing area, choose the type of join. For the Streamlyne Reporting database, the choices are LEFT OUTER JOIN, RIGHT OUTER JOIN, and INNER JOIN.

Left Outer Join Returns all rows from table on the left. Returns Nulls in columns of right table where no row matches.

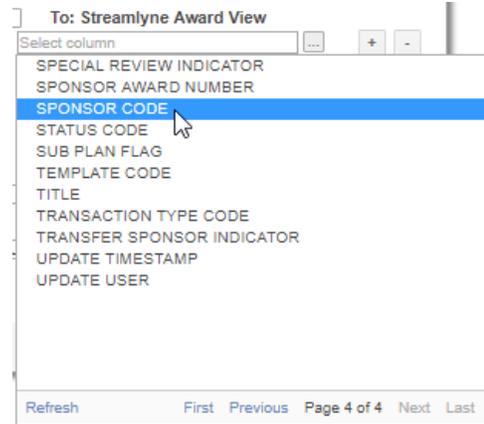
Right Outer Join Returns all rows from table on right. Returns Nulls in columns of left table where no row matches.

Inner Join Returns all rows from both tables as long as there is a match between the foreign key column.

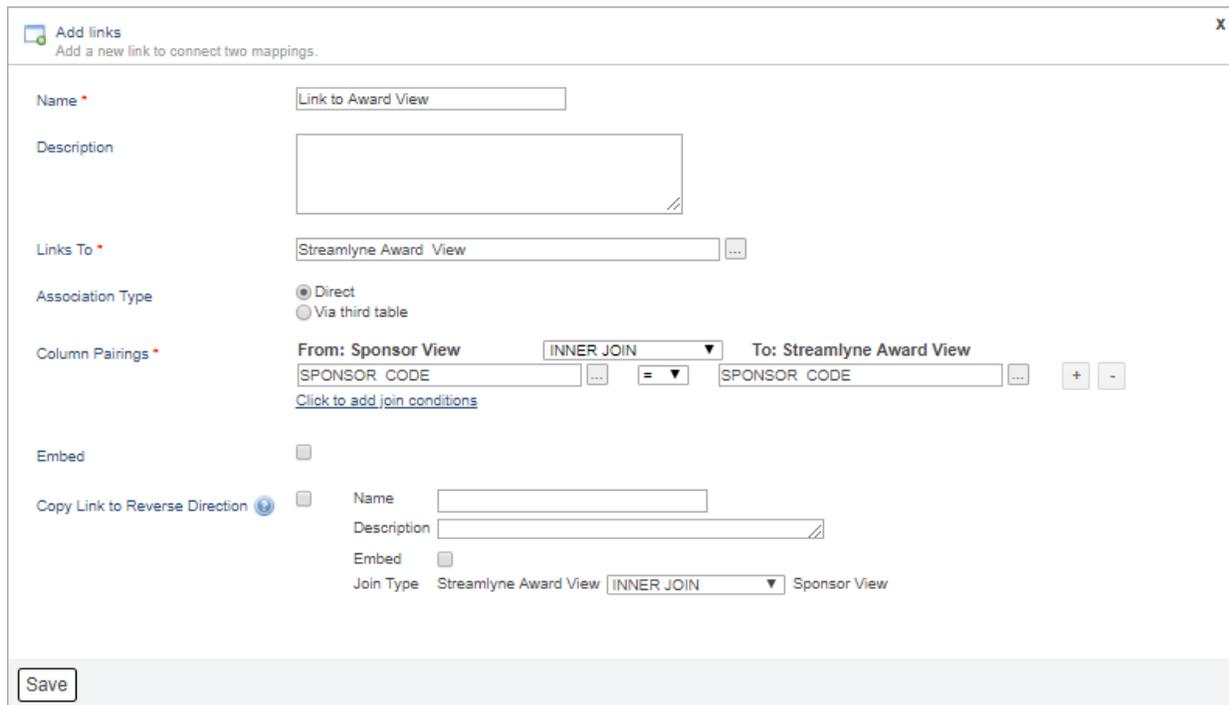
For the example above, INNER JOIN is selected.

9. Click the ellipses button  in the From: field and choose the field that contains the foreign key on the table/view you are linking. Fields that exist in the mapping you selected in Step 6 will appear with a key symbol  next to them.

10. Click the ellipses button  in the To: field and choose the same field.



Result In this sample, the settings reflect a link between the Sponsor View mapping and the Streamlyne Award View mapping using an inner join on the foreign key of Sponsor Code.



The screenshot shows the "Add links" configuration window. The "Name" field is "Link to Award View". The "Links To" field is "Streamlyne Award View". The "Association Type" is "Direct". The "Column Pairings" section shows a link between "From: Sponsor View" and "To: Streamlyne Award View" with an "INNER JOIN" on the "SPONSOR CODE" field. The "Embed" checkbox is unchecked. The "Copy Link to Reverse Direction" checkbox is also unchecked. The "Save" button is visible at the bottom left.

- If you wish to have the list of fields from the table on the right to appear under the name of the table on the left when they are presented for us in selecting criteria of choosing columns for output, click the **Embed** checkbox.

Otherwise, the two sets of fields will be presented for selection, but it will be evident to the user they are from two different table/views. If that is the preference, proceed to Step 12.

Note Use caution with the options in the **Copy Link to Reverse Direction** section. Selecting this Copy Link to Reverse Direction checkbox will create the same join, just in reverse, using the name, description, and embed values entered here. Adding this criterion will filter out all data except that where the join is true on both directions.

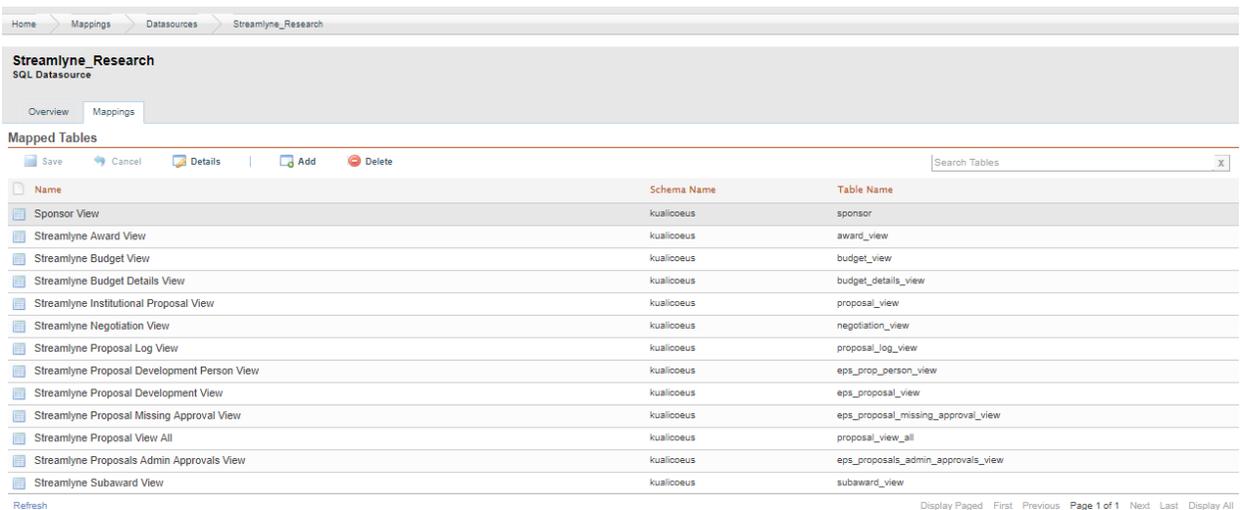
For instance, if you created a link from Table A to Table B where:

TableA.x_field joins to TableB.y_field

and chose to create the reverse form of this link, this will create a new join to the same table where

TableB.y_field joins to TableA.y_field

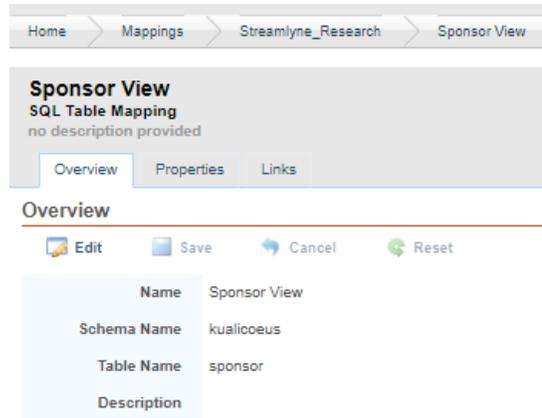
- Click the Save button. 



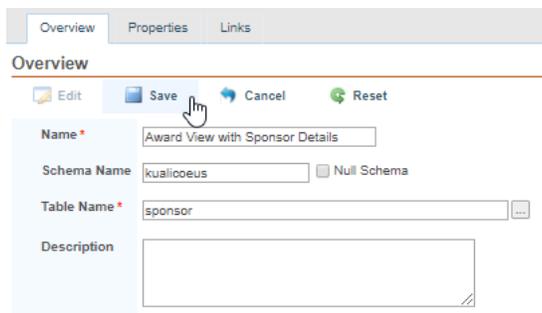
13. The system returns you the Mappings tab.

At this point, you may want to rename the mapping with the link in a way that describes the link. To do so, select the mapping from Mapped Tables list and select the Overview tab.

If this is not necessary, skip to the next process.



14. Click the Edit button.  Edit



15. In the **Name** field enter the new name for the linked mapping.

16. Click the Save button.  Save

Adding Permissions to a Mapping

Mapping Permissions expose the mapping to others for use in their reports. This is a required step. You may choose to expose this mapping to all report creators. Conversely, if a given mapping has sensitive data, you might choose to restrict access to that mapping.

Note that there are also additional permissions available at the report level, so you will add more specific sharing settings and row-level security later when you create reports from this mapping.

Navigation

Reports Home > Mappings > Streamlyne_Research > Mappings

Streamlyne Reporting

Logged in as: System Administrator | Documentation | Toggle Display | Sign out

Reports Mappings Security Admin

Home > Mappings > Datasources > Streamlyne_Research

Streamlyne_Research SQL Datasource

Overview Mappings

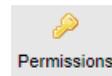
Mapped Tables

Save Cancel Details Add Delete Search Tables

| Name | Schema Name | Table Name |
|---|-------------|------------------------------------|
| Streamlyne Award View | kualicoeus | award_view |
| Streamlyne Budget View | kualicoeus | budget_view |
| Streamlyne Budget Details View | kualicoeus | budget_details_view |
| Streamlyne Institutional Proposal View | kualicoeus | proposal_view |
| Streamlyne Negotiation View | kualicoeus | negotiation_view |
| Streamlyne Proposal Log View | kualicoeus | proposal_log_view |
| Streamlyne Proposal Development Person View | kualicoeus | eps_prop_person_view |
| Streamlyne Proposal Development View | kualicoeus | eps_proposal_view |
| Streamlyne Proposal Missing Approval View | kualicoeus | eps_proposal_missing_approval_view |
| Streamlyne Proposal View All | kualicoeus | proposal_view_all |
| Streamlyne Proposals Admin Approvals View | kualicoeus | eps_proposals_admin_approvals_view |
| Streamlyne Subaward View | kualicoeus | subaward_view |

Refresh Display Paged First Previous Page 1 of 1 Next Last Display All

1. From the Mapped Tables list click the mapping you want to add Permissions to.
2. Click the Overview tab.
3. Click the Permissions button in the upper right area.



Result Streamlyne Reporting displays the Manage Permissions window.

Manage Permissions
Manage user and group permissions on this item

Add a user or group Reset

- EVERYONE
- OWNER

This mapping

- Full Control No
- View property and association metadata No
- Create a Report No

Properties

- View in a Report Column Yes
- Use in Report Criteria Yes

Reports

Save Close

Note Global permission defaults are managed on the Root Permissions tab in the Security area of Streamlyne Reporting. The two implicit principals, EVERYONE and OWNER, are defined by default in Root Permissions. Only the Report Administrator role has access to the Security area, however, users with Report Administrator and Report Writer roles can override permissions in each object of Streamlyne Reporting. (Mappings, reports and dashboards are examples of objects.) In the next step, you will override the global permission default for EVERYONE for a mapping you've created.

Click on the question mark icon to see detail about each Permission. 

For more information on Permissions, see [Appendix B: Groups and Permissions](#).

4. If you would like to expose the mapping to all report creators, highlight the EVERYONE Group.

Otherwise, highlight the group from the list that contains the users who should have access to this mapping.

5. In the Properties section, slide the toggles for View in a Report Column and Use in Report Criteria from No to Yes.

6. Use the scroll bar to move to the Reports section of the permissions and slide the toggle for Launch and View Settings from left to right to set to Yes.



7. Click the Save button. 

Creating Reports

There are two methods to create a Streamlyne Report:

1. Via Mappings: Interacting with the user interface (UI) to select views to include in the report, specific columns from within these views, and any grouping or mathematical criteria for one or more columns.
2. Via Native SQL Query Report: pasting pre-made valid SELECT query or Stored Procedure to create your report.

Note Row-level security (a feature of SQL tables that ensures that users can access only those data rows that are pertinent to their department) can only be applied to Streamlyne Reports via Mappings. Streamlyne Reporting allows for report results to be automatically filtered based on the person running the report. This is a useful feature in the example where a PI should only see records that are related to them. Instructions for incorporating row-level security to your Report are used as the examples in the section: [Adding Criteria Type: Simple Condition](#).

This section walks you through the steps to create a new Streamlyne Report via Mappings. Use this method in cases where:

- It is critical that row-level security is enforced for a given query, and/or
- The report creator is not familiar with SQL syntax.

Create a Report Through the UI

Navigation

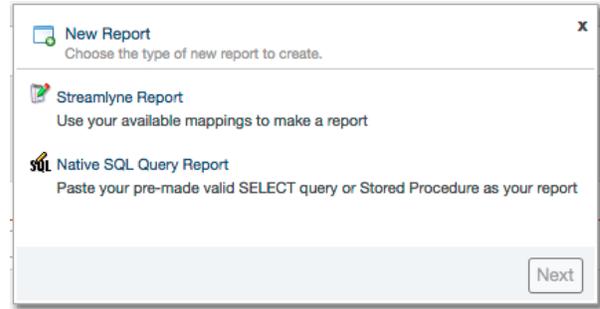
Reports Home > New Report

1. Navigate to the Reports Home page.
2. Click on the New Report button. 

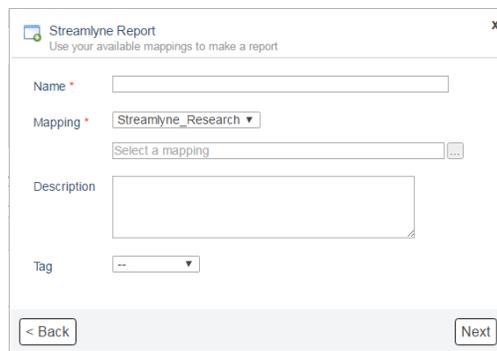
Note Permissions must be properly applied to your role to see this icon. See your Streamlyne Administrator if you think your permissions are not correct.

3. If you click the New Report button and do not see this popup, it means that you only have permission to create a Streamlyne Report, not a Native SQL Query Report. If this is the case, proceed to Step 4.

Otherwise, click on Streamlyne Report.



4. In the required **Name** field, enter a brief but descriptive report name. This will appear as the Report Title on the Reports Listing screen.



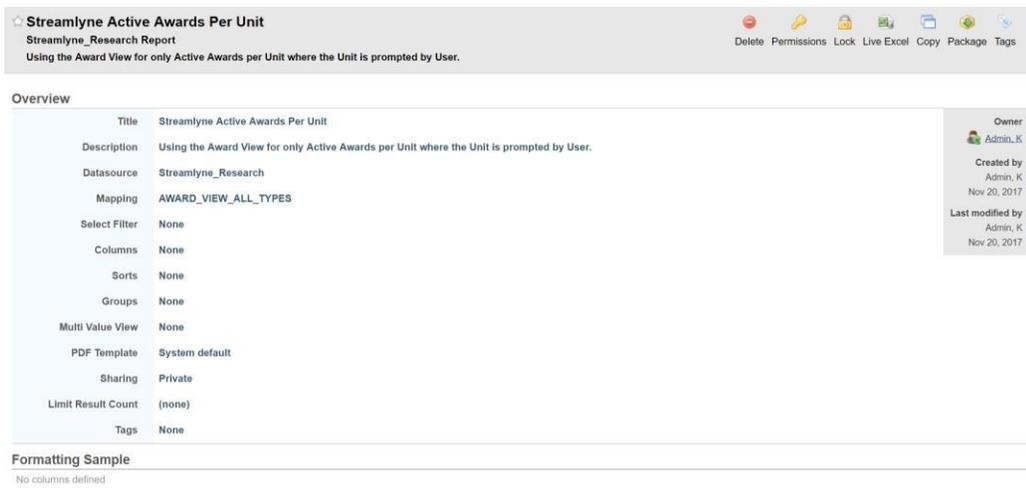
5. In the required **Mapping** field, specify the datasource by selecting the value from the dropdown menu. Streamlyne_Research is the common option.
6. Click the ellipses button  to see the complete list of mappings available based on the datasource selected in the previous step. Select a mapping from the list.
7. Enter a detailed description of the report in the optional **Description** field. This will appear under the report title in the report listing.
8. Tags provide a means to search for and organize reports as well as to filter the results in the report listing. In the optional **Tags** field, click the arrow and select an existing tag from the dropdown list.

If you do not add a tag, the report will be filed in the tag called (empty).

If you do not see a Tag appropriate for the report, refer to the instructions in the [Tags](#) section of this manual to create new Tags.

9. Click the Next button. 

Result The Report Details screen will appear.



| Streamlyne Active Awards Per Unit | |
|-----------------------------------|--|
| Title | Streamlyne Active Awards Per Unit |
| Description | Using the Award View for only Active Awards per Unit where the Unit is prompted by User. |
| Datasource | Streamlyne_Research |
| Mapping | AWARD_VIEW_ALL_TYPES |
| Select Filter | None |
| Columns | None |
| Sorts | None |
| Groups | None |
| Multi Value View | None |
| PDF Template | System default |
| Sharing | Private |
| Limit Result Count | (none) |
| Tags | None |

Owner
Admin, K

Created by
Admin, K
Nov 20, 2017

Last modified by
Admin, K
Nov 20, 2017

Formatting Sample
No columns defined

Determine Report Details

In the Report Details screen you will:

- Specify the limiting criteria for the data used in the report
- Define the report layout
- Manage the tags assigned to the report
- Specify who has access to the report.

About Filters

Filters allow you to place limiting criteria on the data in the table. For example, your results could be limited by status, (show only active Awards), or by unit (show all Awards for the Biochemistry Department). Refer to [Appendix C: A Bit About Logic](#) if you are not familiar with programming logic and conditional statements.

You will also use Filters to apply row-level security to a report. Row-level security restricts the data revealed in the report to only that data wherein the logged in user matches the username in the data.

As you proceed through these steps you will make choices about filters using Criteria Types. You will want to plan ahead to determine which to use. These are your options, and each is explained in detail in the following pages. You can use one or all or any combination:

Simple Condition A simple condition is used to execute a comparison of a single field against a value, for example, color = red. The value can either be a fixed literal value, or a prompt to enter the value when the report is run (called a run control).=. It is also possible to choose the value to equal the value of another field.

Compound Condition A compound condition is used to start a new parenthetically grouped set of simple conditions.

Aggregate Condition Aggregate conditions are used to perform mathematical operations on data elements, and include Count, Min, Max, Average, and Total. An aggregate condition is a comparison of an aggregate value against some other value. The aggregate value can be a count of records or an aggregation of values of a specific property. The comparison value can be either a literal value, a prompted value, or another property value.

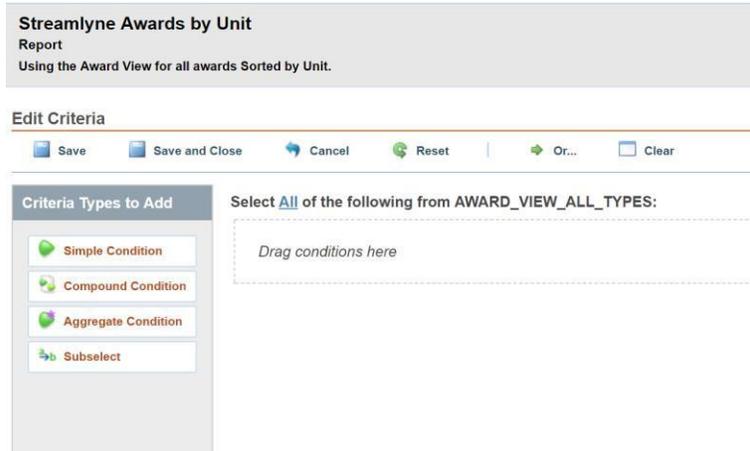
Subselect Also known as subqueries, subselects are a very powerful feature of SQL databases. There are three main reasons why you would use a subselect in your report:

- You want to see if a value occurs in a certain dataset.
- You want to see if a value does not occur in a certain dataset.
- You want to compare a value to an aggregate value from a certain dataset.

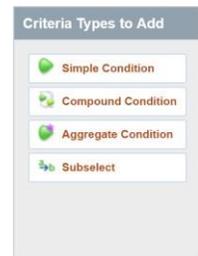
Edit Criteria Types (Filters)

1. In the Report Overview section, click the hyperlink next to Select Filter to open the Edit Criteria screen.





2. Use the Criteria Types to Add panel to specify the kind of criteria you wish to apply. The options may vary depending on your security settings.

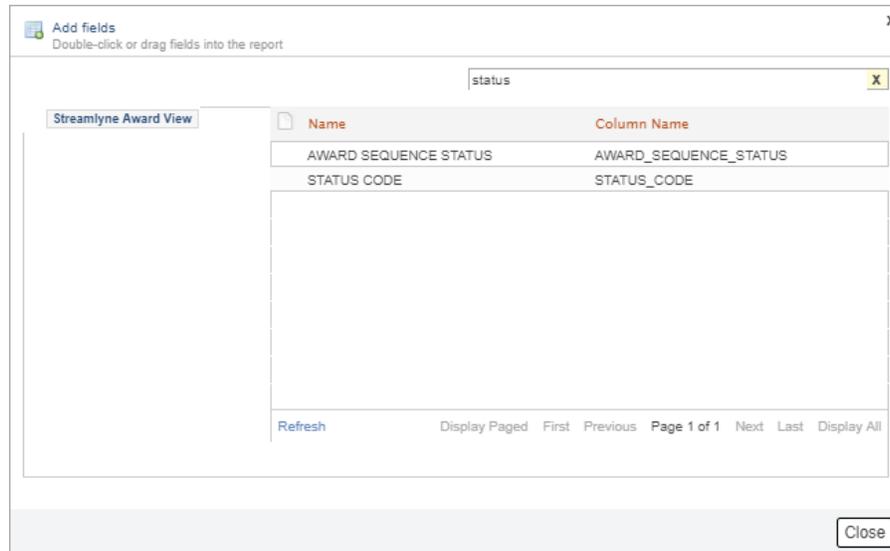


Adding Criteria Type: Simple Condition

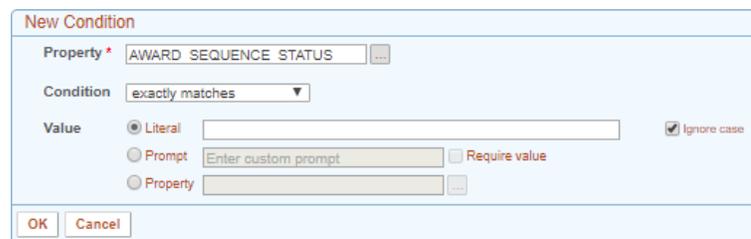
1. To add a Simple Condition, click the Simple Condition menu item. The system displays the New Condition panel.



2. In the required **Property** field, search for and select the Name of the column to be used in the condition by clicking the ellipses button .

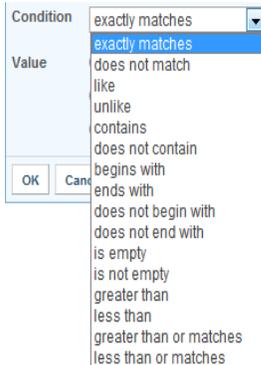


3. Use the Search Fields tool or the Next, Last, Display All links to find the **Property** field you want to use.
4. Double-click your selection to populate the **Property** field.

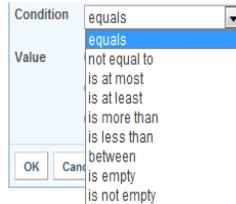


5. In the **Condition** field, click the arrow and select the appropriate operator from the dropdown list. Note that each Property type (text, numeric, date, and time) has its own set of condition operators so this dropdown will vary depending on the Property you chose, as shown here:

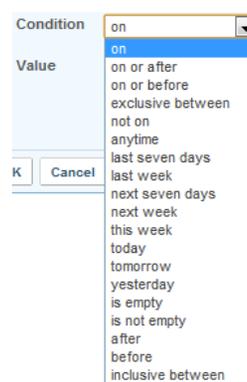
Text Conditions



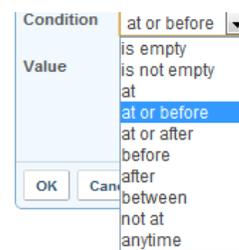
Numeric Conditions



Date Conditions



Time Conditions



6. Streamlyne Reporting requires you to indicate the type of Value: literal, a prompted value (a value entered at report runtime), or another property.

If you know the exact value you would like to use in your simple condition, select the **Literal** radio button.

Otherwise, skip to Step 9.

7. Enter a **Literal** value as free-text and/or user-specific keywords.

User-specific keywords can be referenced using the syntax `{user.keyword}`. Examples of user-specific keywords are *username*, *firstName*, and *lastName*. For a complete list of user-specific keywords, see [Appendix D: User-Specific Keywords](#).

You can also use date-specific keywords. For a complete list of date-specific keywords, see [Appendix E: Date-Specific Keywords](#).

8. If present, check the **Ignore case** box to make the value comparison case insensitive. Otherwise, skip to Step 16.

Note You can also enter a list of values, separated by commas, in your condition. Use caution when using lists of literal values in conjunction with negative Conditions, such as 'does not match' or 'does not contain'.

9. If you would like a user to enter a value at runtime, click the **Prompt** radio button.

The user running the report will be asked to provide the value(s) when the report is launched. As with literal values, free-text can be used as well as keywords and value lists.

Otherwise skip to Step 12.

10. Enter the wording for the prompt in the **Enter custom prompt** field.

11. If users should be required to provide a Value in the run control, click the checkbox next to **Require value**. Leaving this box unchecked means that the user could run the report without filtering any data on this particular condition.

Skip to Step 16.

The screenshot shows a 'New Condition' dialog box with the following configuration:

- Property ***: Lead Unit Name
- Condition**: contains
- Value**:
 - Literal
 - Prompt: Enter the Lead Unit Name for this report
 - Property
- Require value
- Ignore case

12. Click the **Property** radio button if you would like the condition to compare a Property against another Property.

For example, if you want a report of Principal Investigators that are also Department Chairs, your condition may look like this:

13. In the required **Property** field, search for and select the Name of the column to be used in the condition by clicking the ellipses button .
14. Use the Search Fields tool or the Next, Last, Display All links to find the **Property** field you want to use.
15. Double-click your selection to populate the **Property** field.
16. Click the OK button to add this filter. 

Adding Criteria Type: Compound Condition

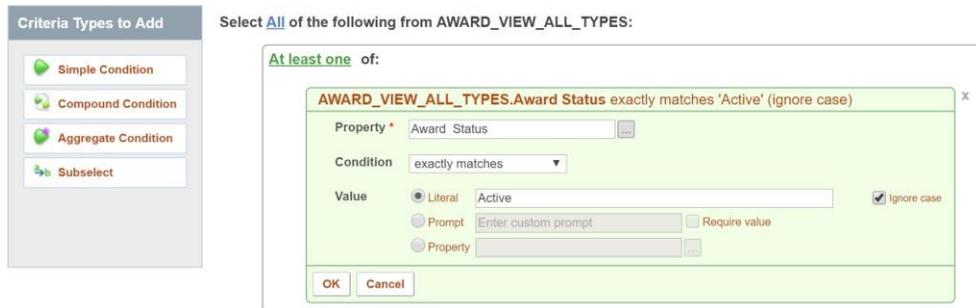
Compound Conditions are groupings of Simple Conditions. For example, you may want a report of Awards that are Active and of a specific type that are in a specific Unit.

1. To add a Compound Condition, click the **Compound Condition** menu item.



This opens a panel to group simple conditions.

- Click on Simple Condition to open a New Condition panel inside the Compound Condition panel.



- Complete the Simple Condition fields as in [Adding Criteria Type: Simple Condition](#) above.
- To add another condition, click on Simple Condition or drag an existing condition you already created into the Compound Conditions panel.
- Verify your inner and outer operators.

Streamlyne Reporting defaults the Compound Conditions operator to “or”. To change the “or” to “and”, click on the link “At least one” and choose “All”. Or, to negate the conditions, choose “None”.



The same should be done to the outer condition, where the default is “and”.



6. To save your work and continue adding conditions, click the Save button.  Save
7. To edit a condition, click on the collapsed syntax representing the Condition. Make changes and click OK.
8. To remove a condition, click on the X in the top right corner of the Condition panel.
9. When finished with Criteria Types, click the Save and Close button.  Save and Close

Adding Criteria Type: Aggregate Conditions

An aggregate condition is a comparison of an aggregated number against some other number. The aggregated number can be a count of records or an aggregation of numbers in a specific property. The comparison value can be either a literal value, a prompted value, or another property value.

1. To add an aggregate condition, click the Aggregate Condition menu item.



2. In the **Aggregate** fields, choose the applicable calculation type from the dropdown (count, min, max, average or total) and use the ellipses button  to choose the field name containing the data you wish to use to aggregate.
3. In the **Use Distinct** field, use the dropdown to select whether you want to only see distinct rows of values or allow multiple rows with the same values.

No Allow multiple rows with the same values

Yes Allows distinct rows based on the columns that are in the output of the report.

Yes and Convert Nulls Allows nulls to be in the result set as a row and requires the user to choose a number to to replace the null for the purposes of this condition only.

4. Use the dropdown in the **Condition** field to choose the operator for the comparison. Each data type (text, numeric, data and time) has its own applicable set of condition operators.
5. In the **Value** field, enter the value that you wish to compare against the aggregate column. See Steps 6 – 16 in [Adding Criteria Type: Simple Condition](#) for more detail on selecting a Literal, Prompt or Property value type.

Sample This sample would result in all Awards where the Anticipated Total Amount is \$200,000 or higher and would show all rows meeting that criteria.

Total of: AWARD_VIEW_ALL_TYPES.Anticipated Total Amount is at least '200000'

Aggregate * Total of: Anticipated Total Amount

Use Distinct No

Condition is at least

Value

Literal 200000

Prompt Enter custom prompt Require value

Property

OK Cancel

6. Click Ok to save the Aggregate Condition.

7. To save your work and continue adding conditions, click the Save button.

8. When finished with Criteria Types, click the Save and Close button.

Adding Criteria Type: Subselect

Subselects are a complex feature of Streamlyne Reporting and may require the expertise of your Reporting Administrator to set up initially.

Subselects are also known as subqueries. Use a subselect if:

- You want to see if a value occurs in a certain dataset.
- You want to see if a value does not occur in a certain dataset.
- You want to compare a value to an aggregate value from a certain dataset.

See if a value occurs in a certain dataset

Normally you would use simple conditions and mappings with links to determine if a value occurs in a dataset; however, there may be times when linking in a condition will reveal a one-to-many relationship that generates more rows than you need. Using a subselect would prevent the one-to-many relationship.

Example: List all Units with Awards of a Total Value of more than \$100,000.

Since there is a way to link Awards to Award Budget Details using the Award ID, we could use a simple condition that compares the Total Value from Award Budget Detail. Unfortunately, that would return a row for every line item for a given Award for the Unit that had Awards with a Total Value of over \$100,000. Since we only want the unique list of Units, we will use a subselect instead.

See if a value does not occur in a certain dataset

This is the opposite of the first example.

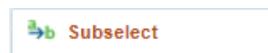
Example: List all Units that do not have any Awards of at least a Total Value of \$100,000.

Compare a value to an aggregate value from a certain dataset

Subselects also allow you to compare a value to an aggregate value from the dataset.

Example: List all Awards that have Total Values that are more than the average Total Value of all Awards.

1. To add a Subselect, click the Subselect menu item.



This will open a New Condition panel.

2. Complete the fields in the window.
3. To save your work and continue adding conditions, click the Save button.  Save
4. When finished with Criteria Types, click the Save and Close button.  Save and Close

Adding Row-level Security

The sample below is used to demonstrate how row-level security can be applied using a Simple Condition so that report results will automatically be filtered based on the person running the report. Normally, this would be used in addition to other Conditions.

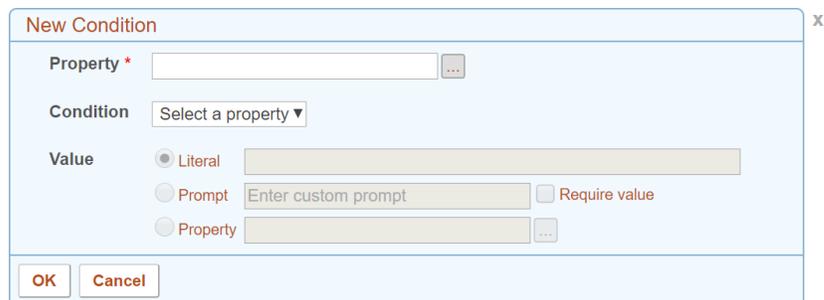
1. In the Report Overview section, click the hyperlink next to Select Filter to open the Edit Criteria screen.



2. Click the Simple Condition menu item.

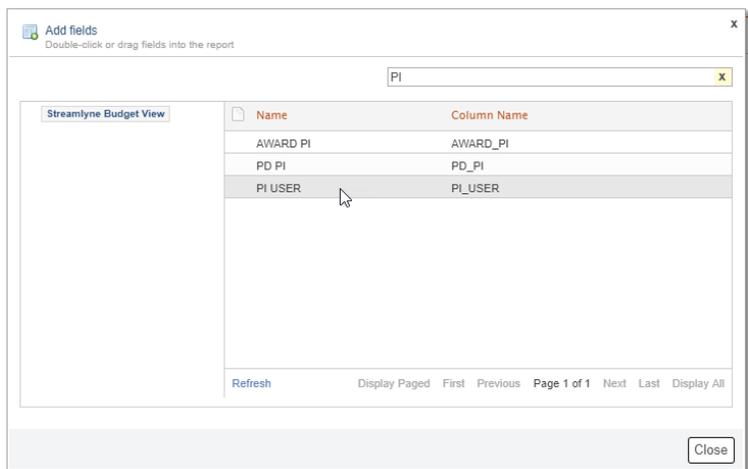


The system displays the New Condition panel.

A dialog box titled "New Condition" with a close button (x) in the top right corner. It contains the following fields:

- Property ***: A text input field with an ellipsis button to its right.
- Condition**: A dropdown menu with the text "Select a property".
- Value**: Three radio button options:
 - Literal**: Selected. Next to it is a wide text input field.
 - Prompt**: Next to it is a text input field with the placeholder "Enter custom prompt" and a "Require value" checkbox.
 - Property**: Next to it is a text input field with an ellipsis button to its right.
- At the bottom are "OK" and "Cancel" buttons.

3. In the required **Property** field, search for and select the Name of the column to be used in the comparison by clicking the ellipses button .
4. Use the Search Fields tool or the Next, Last, Display All links to find the **Property** field you want to use.

A dialog box titled "Add fields" with a close button (x) in the top right corner. It contains the following elements:

- A search bar at the top with the text "Pi" and a clear button (x).
- A table with the following data:

| Name | Column Name |
|----------|-------------|
| AWARD PI | AWARD_PI |
| PD PI | PD_PI |
| PI USER | PI_USER |

A mouse cursor is pointing at the "PI USER" row.
- At the bottom are "Refresh", "Display Paged", "First", "Previous", "Page 1 of 1", "Next", "Last", "Display All", and "Close" buttons.

5. Double-click your selection to populate the **Property** field.

6. In the **Condition** field, click the arrow and select the 'exactly matches' operator from the dropdown list.
7. Click the **Literal** radio button to apply row-level security so that report results will automatically be filtered based on the person running the report, use the **Literal** filter with user-specific keywords.

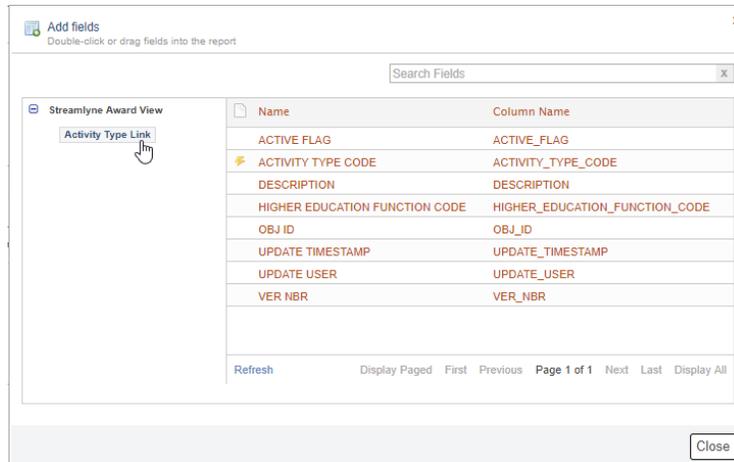
8. Enter the **Literal** value as {user.username}.
9. Click the OK button to add this filter. 

Adding Fields (Columns)

Now that we have specified the conditions for the report, we need to add data to the report.

1. From the Overview page, click the Columns link.  
2. In the Edit Columns screen, click the Add Fields button to see all the fields in the mapping. 

All fields in the mapping are listed here. In this sample below, the primary table/view and the linked/joined table are shown on the left panel. The linked table has been clicked to reveal the columns available from that view.



3. To add a field to the report, double-click the field name, or drag the field onto the report. Repeat this until all columns are included.
4. Click Close when done adding fields. 
5. To save your work and continue editing columns, click the Save button. 
6. Rearrange the order in which the columns are displayed by dragging the column heading to the appropriate position.
7. If you want to make changes to the way the column displays in the current report, click the column heading and refer to the [Column Display Editor](#) table that appears.
Otherwise, proceed to Step 10.

The Column Display Editor contains fields that are used to modify the column display.

Column Display Editor

OK Apply Cancel Remove

Column Header * Award Status

Alias award_status

Property * Award Status

Alignment Left Center Right

Width Auto

Format

Style

B I U

Additional CSS:

Hidden

Show in row body

Use Distinct Values No

8. Click Apply to see how the change will look.



9. Click OK to save your changes to the Column Display Editor.



10. When finished with the Edit Columns screen, click the Save and Close button.

Understanding the Column Display Editor

Use the following chart to understand how to use the fields in the Column Display Editor. To access the Editor, simply click on a Column Header.

| Field Name | Field Description | Additional Details |
|----------------------|---|--------------------|
| Column Header | Required field. Edit this text to change the header displayed above the column on the report. | |
| Alias | This is the name used to reference the field in calculated columns. This should not be changed. | |

| Field Name | Field Description | Additional Details |
|------------------------|--|--|
| Property | The field or column in the database where the data is pulled. | |
| Alignment | Changes the justification of the data on the report. | |
| Width | Specify how wide the column should be on the report. Options are: | <p>Auto – Streamlyne Reporting will automatically calculate the best width for the column.</p> <p>Percent – The column width will be a percentage of the available space in the browser or the page size (for PDF output).</p> <p>Pixels – The number of pixels to allocate for the column width.</p> <p>Characters – The number of characters to allocate for the column width.</p> |
| Format | Changes the style of the column on the report. | You can bold, italicize, or underline the data, as well as add any cascading style sheet (CSS) code to format the data. |
| Format: Numeric | If the field is numeric, there are additional formatting options available | <p>Decimal Places – Controls the number of decimal places to display.</p> <p>Use 1000 Separator – Displays the default separator (comma for U.S.).</p> <p>Currency – Specify the currency symbol to use.</p> <p>Negative Numbers – Specify how negative numbers are to be displayed.</p> |

| Field Name | Field Description | Additional Details |
|----------------------------|--|--|
| Format: Dates | Dates also have their own formatting options: | Date Format – Select the format you prefer. Time Format – Choose None for no time format or select one from the dropdown list. |
| Hidden | Removes the column from the report row, but the column is still available for use in sorting or calculated columns. | |
| Show in row body | Displays the data below the report row. | |
| Use Distinct Values | Allows the list of values to be distinct based on the column setting. If you have a list of values where there are duplicates in the result set, you can set this parameter to Yes, and it will result in a distinct list of values. | Choose from No, Yes, or Yes and Convert to Nulls. The option of Yes and Convert Nulls allows nulls to be in the result set as a row and the user chooses what the null value will be. The default is No. |

About Calculated Columns

Calculated columns provide you with the flexibility of performing calculations and advanced functions. There are two types of calculated columns: Template and Script.

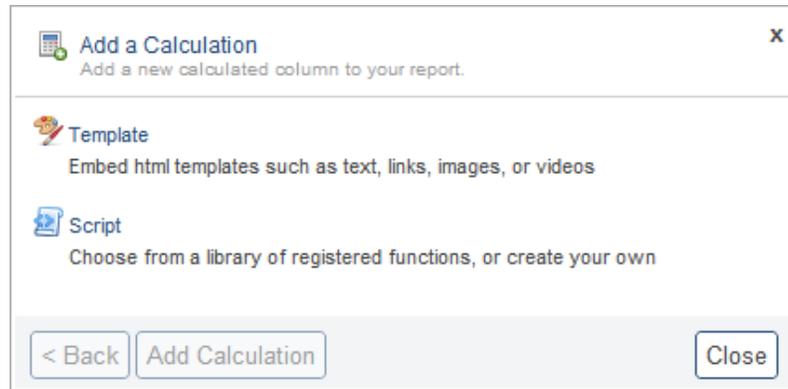
Template calculated columns are written using simple plain text and/or HTML. They are used to format data or concatenate values together. Column values can be referenced using placeholders, much like a mail merge refers to values in a document. They cannot be used to do calculations (such as addition and subtraction), conditional statements (if something is true do this otherwise do that) and they cannot refer to multi-value fields.

Script calculated columns are written using JavaScript. They can do all the things a Template can do as well as calculations, conditional statements, and referring to multi-value fields.

For more information on using JavaScript, go to <http://www.w3schools.com>.

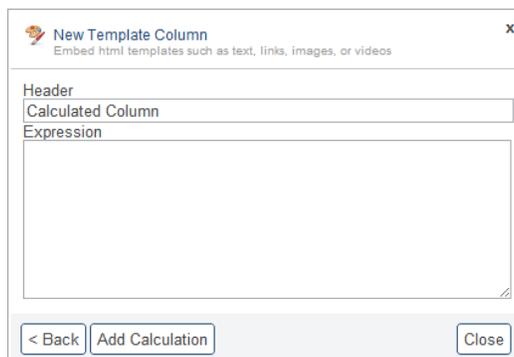
To add a calculated column using Template:

1. Click the Add Calculations button.  Add Calculations

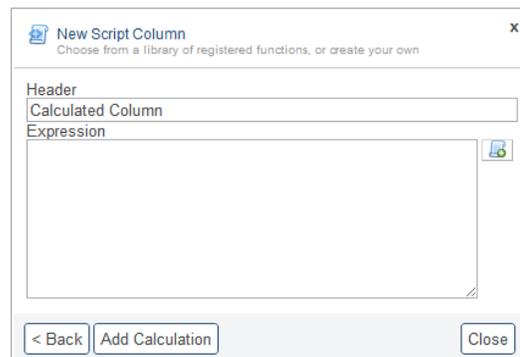


2. Select the type of calculated column you wish to add.

Template Expression Window

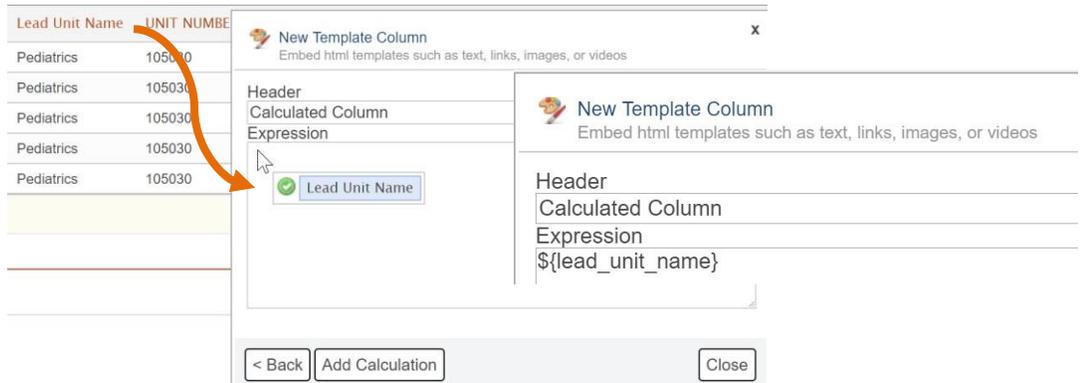


Script Expression Window



3. In the **Header** field enter a name for the calculated column.

4. Type your calculation code in the **Expression** field. Refer to the column names using their aliases. If you do not know the alias, drag the column header onto the Expression area, and Streamlyne Reporting will add the alias for you.



Example To concatenate the Lead Unit Name and Unit Number together:

Template Code:

```

${lead_unit_name}
${UNIT_NUMBER}

```

Script Code:

```

lead_unit_name + " " +
UNIT_NUMBER;

```

If you are using the Script Expression, you have most of JavaScript functionality at your fingertips. For example, you can refer to an object's methods and properties:

lead_unit_name.length returns the length of the lead unit name.

lead_unit_name.substr(0,1) – returns the first character of the lead unit name.

5. Click the Add Calculation button when finished.

Add Calculation

Adding Aggregate Functions

You can add aggregate functions to the report to provide aggregate values such as count, minimum, maximum, average, and total for any numeric, monetary, or date (Min and Max only) column on the report. Aggregates will summarize a report to the lowest level of detail on the report.

1. Click the Add Aggregates button.  Add Aggregates
2. Select the appropriate **Function** from the dropdown list. The **Header** field will change according to your selection.

 Add an Aggregate Function
X

Add a new aggregate function to your report. Aggregate functions cause results to group by database fields in the report.

Header

Function Property
 of: ...

3. Click the ellipses button  next to the **Property** field to choose the field you wish to aggregate.

4. Click Add Aggregate button.

Adding Sorts

As described in [Using Reports: Adjusting the Report Results: Changing the Sort Order](#), you can change the sort order of the report on the fly by clicking the column heading while viewing the report. You can also specify the initial sort order by going into Sorts from the report definition.

1. From the Overview page, click on the Sorts link.  
2. Use the dropdown to select the initial the **Sort** field.
3. Click radio button to specify **Ascending** or **Descending**.
4. Repeat Steps 2 and 3 to add additional sort fields if needed. You can add as many sort fields as there are fields on the report.

Using Groups

You can group your data by any field on the report.

1. From the Overview page, click on the Groups link.  

2. Use the dropdown to select the **Group by** field.
3. Click the appropriate radio button to specify **Ascending** or **Descending**.
4. Click checkboxes for Calculations if desired. Aggregate functions are offered where applicable.
5. Click the **Summary Only** checkbox if you want to run the report in summary only mode.
6. Click the **Display Calculations** checkbox if you want to display group calculations automatically without the user having to expand the group. If left unchecked, the user can expand the groups by clicking on the plus sign.

Note When the report is run, the groups can be expanded by clicking on the plus sign.

The screenshot shows the 'Streamlyne Awards By Sponsor Report Results' interface. It includes a title bar, a subtitle 'Using the Award View for all award by Sponsor.', and three tabs: 'Report Results', 'Analytics', and 'Charting'. Below the tabs, there are buttons for 'Refresh', 'Clear Filter', and 'Aggregate Option'. The main content area shows a table with columns 'Award ID' and 'Seq Nbr'. The data is grouped by 'Sponsor Name', with three groups visible: 'Alfred P. Sloan Foundation (3 items)', 'Bill & Melinda Gates Foundation (1 item)', and 'Cornell University (10 items)'. Each group has a plus sign icon to its left, indicating it can be expanded.

Using a Multi Value View

For SQL datasources, you can collapse a set of records with some fields repeating to simulate the view shown for U2 datasources with multi valued data. You can think of Multi Value View as “un-normalizing” the data.

Edit Multi Value View

Save and Close Cancel Reset Refresh Sample

Select Columns for grouping/collation

- AWARD_VIEW_ALL_TYPES
 - AWARD ID
 - Sequence Number
 - Award Sequence Status
 - Award Status
 - Sponsor Award Number
 - Lead Unit Name
 - UNIT NUMBER
 - Account Number
 - Sponsor Name
 - Sponsor Code
 - Pi Name
 - Proposed Start Date
 - Proposed End Date
 - Anticipated Total Direct
 - Anticipated Total Indirect
 - Obligated Total Direct
 - Obligated Total Indirect
 - Amount Obligated To Date
 - Oblig Distributable Amount
 - Proposal Number

| AWARD ID | Sequence Number | Award Sequence Status | Award Status | Sponsor Award Number | Lead Unit Name | UNIT NUMBER | Ac |
|---------------|-----------------|-----------------------|--------------|----------------------|----------------|-------------|----|
| 000023-00001A | 3 | ACTIVE | Active | | Pediatrics | 105030 | |
| 000039-00001A | 1 | ACTIVE | Active | | Pediatrics | 105030 | |

Check the boxes next to the values you want collapsed, which are the values that repeat like the Lead Unit Name above. The fields that are not checked become multi valued and are handled like multi valued fields. This may require you to tweak or rewrite some calculated columns.

Set the PDF Template

Streamlyne Reporting gives you the option to set the PDF Template you want to use for a specific report. It will automatically use the System default template if none is chosen. Users designated as administrators will have rights to create new PDF templates as detailed in the [PDF \(Export\) Templates](#) section of this manual.

- From the Overview page, click on the PDF Template link.  This will open the Edit General Information page.

Edit General Information

Name *

Mapping *

Description

PDF Template

Limit Result Count

2. Use dropdown to select a **PDF Template**.

3. Click the Save and Close button to save your changes and return to the Overview screen.



Sharing

When reports are created, they are by default designated as private, meaning that only the report creator and users with the Report Administrator role would have access to the report. For other users to view or launch a report created by another user, the report needs to be shared with them, with a security group they are part of, or be made public.

1. From Overview page, click on Sharing link.



2. Click the appropriate radio button.

Private will allow the report to appear for the report creator and administrators only.

Public will allow the report to appear to anyone with access to Streamlyne Reporting module.

If you want to select specific groups or users, proceed to Step 3. Otherwise skip to Step 11.

3. Click the radio button for **Available only to groups and users listed below**:

4. Enter user or group names in the **Allowed users or groups** field to begin filtering for matches.

You can also click on the ellipsis button  to open a Principal Search window.

5. In the Principal Search window, click the appropriate radio button to search for **Users**, **Groups** or **Users and Groups**.

6. Enter text into the appropriate search fields and click the Search button. 

7. Click on the correct match to add to list.

8. Repeat if necessary.

9. Click the Close button when done using the Principal Search window. 

10. To remove a User or Group from the Sharing list, click to select the user or group and then click the Remove button. 

11. Click the Save and Close button to save your changes and return to the Overview screen. 

Limit Result Count

Limiting the result count allows the user to run the report with only a selected amount of records to return in the results.

1. From the Overview screen, click on the Limit Result Count link. 

This will open the Edit General Information page.

Edit General Information

Save and Close Cancel Reset

Name * Streamlyne Active Awards Per Unit

Mapping * Streamlyne_Research
AWARD_VIEW_ALL_TYPES

Description Using the Award View for only Active Awards per Unit where the Unit is prompted by User.

PDF Template Use default

Limit Result Count 0

2. In the **Limit Result Count** field, enter the number of rows to limit the result count to. An empty value or the value of 0 means no limit.

3. Click the Save and Close button to save your changes and return to the Overview screen.  Save and Close

Tags

Tags are used to organize reports in Streamlyne Reporting. It is beneficial to establish how you would like to organize your reports before you start building tags. Examples of tags could include departments, divisions, or functions. If there is no tag assigned to the report, it will be deposited into the (empty) category in the list of tags.

1. From the Overview page, click on the Tags link or click on the Tags button.



This will open the Manage tags window.

Manage tags
And or remove tags on the selected reports

Create Delete Reset Uncheck All Collapse

All Tags

Streamlyne

Save Close

2. To add new tags, click the Create button. Otherwise, proceed to Step 5.



3. Enter the new tag in the field that appears and click Apply.



A small dialog box with a text input field containing the text "New Tag". To the right of the input field is an "Apply" button. Further to the right is a small "x" icon, likely for closing the dialog.

4. Click checkboxes to apply any of the tags.

5. When done, click the Save button. 

6. Click the Close button. 

Using Reports

In this section, we will cover:

- [Launching a report](#)
- [Aggregating Report Results](#)
- [Navigating Report Results](#)
- [Adjusting Report Results](#)
- [Distributing Reports](#)
- [Archiving Report Results](#)
- [Analytics](#)
- [Charting](#)

Launching a Report

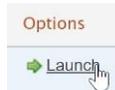
There are two ways to launch a report.

1. Navigate to Reports Home.



2. Use the **Search Reports** field or scroll through the Reports Listing to find the report you want to launch.

3. Click on Launch in the Options column.



Alternatively, click on the report title to open the Report Template page.

4. Click on the Data tab.



5. If the report has Runtime Parameters, you will be prompted to enter criteria to filter the results properly. Otherwise, skip to Step 8.

- If you want Streamlyne Reporting to ignore the case of the text you enter, check the box by **Ignore case**.
- If the report you are running utilizes a file from a mapping suite, you will be asked to select the appropriate table set from within the suite.

Choose Table

Once all runtime options have been selected, Streamlyne Reporting may generate the report and display the results automatically. If not, proceed to Step 8.

- Click the Launch Report button.
- Review the results on the screen.

Aggregating the Report Results

- To use Aggregate Options, click the Aggregate Options button.  **Aggregate Options**
- Click the checkbox(es) corresponding with aggregate options available. Aggregate columns can be for any numeric field including linked fields from other files.

Streamlyne Active Awards
Report Results
Using the Award View for Active Awards.

Report Results | Analytics | Charting

Report Results

Clear Filter | Drag columns here to group

| Award ID | Seq Nbr | Award | <input type="checkbox"/> Check All | <input type="checkbox"/> Min | <input type="checkbox"/> Max | <input type="checkbox"/> Total | <input type="checkbox"/> Average |
|---------------|---------|-------|---|------------------------------|------------------------------|-------------------------------------|----------------------------------|
| 000023-00001A | 3 | ACTIV | <input type="checkbox"/> Count | | | | |
| 000039-00001A | 1 | ACTIV | <input type="checkbox"/> Seq Nbr | | | | |
| | | | <input type="checkbox"/> Project Start Date | | | | |
| | | | <input type="checkbox"/> Project End Date | | | | |
| 000038-00001A | 1 | ACTIV | <input type="checkbox"/> Anticipated Direct | | | <input checked="" type="checkbox"/> | |
| 000041-00001A | 1 | ACTIV | <input type="checkbox"/> Anticipated Indirect | | | <input checked="" type="checkbox"/> | |
| | | | <input type="checkbox"/> Anticipated Total | | | <input checked="" type="checkbox"/> | |
| 000044-00001A | 3 | ACTIV | <input type="checkbox"/> Anticipated Distributable Amount | | | | |
| 000046-00001A | 2 | ACTIV | <input type="checkbox"/> Obligated Direct | | | | |
| 000086-00002B | 1 | ACTIV | <input type="checkbox"/> Obligated Indirect | | | | |
| | | | <input type="checkbox"/> Obligated Total | | | | |
| 000086-00003B | 1 | ACTIV | <input type="checkbox"/> Obl Distributable Amount | | | | |

- Click anywhere off the aggregate options window to close it. The aggregate results will appear at the bottom of the report.

| Anticipated Direct | Anticipated Indirect | Anticipated Total |
|---------------------|----------------------|------------------------|
| \$0.00 | \$0.00 | \$250,000.00 |
| \$0.00 | \$0.00 | \$519,408.89 |
| \$0.00 | \$0.00 | \$220,000.00 |
| \$0.00 | \$0.00 | \$354,875.24 |
| \$0.00 | \$0.00 | \$95,000.00 |
| \$0.00 | \$0.00 | \$210,000.00 |
| \$315,050.00 | \$305,050.00 | \$18,503,354.87 |

- If desired, click Summary Only. As seen below, when that option is chosen, the report output will display the summary of the aggregate selections.

Report Results

Summary Only
 |

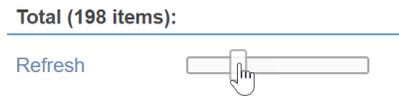
| Anticipated Direct (Total) | Anticipated Indirect (Total) | Anticipated Total (Total) |
|----------------------------|------------------------------|---------------------------|
| \$315,050.00 | \$305,050.00 | \$18,503,354.87 |

Navigating the Report Results

Below the report results, Streamlyne Reporting lists the number of records returned, the number of pages in the report, along with paging controls.

| | | | | | | |
|---------------------------|----------------------|-----------------------------|---------|----------------------|-------------|-----------------------|
| 1501000350 | test 2 | N | FACULTY | Criminal J Professor | FACULTY | Expedited |
| Total (198 items): | | | | | | |
| Refresh | <input type="text"/> | Records 1 through 25 of 198 | | | | |
| | | Display Paged | First | Previous | Page 1 of 8 | Next Last Display All |

- Use the page slider to quickly page through the report. Click on the slider button and move the mouse to the right or left to flip through the report several pages at a time.
- Use the Previous and Next hyperlinks to page through the results one page at a time.
- Click the First and Last hyperlinks to jump to the first page or the last page of the report.
- To display all the records on one page, click Display All.
- To switch back to a paged view, click Display Paged.



Adjusting Report Results

Once you have the report displayed, you can change the results by:

- [Changing the sort order](#)
- [Reordering the columns](#)
- [Grouping the results](#)

Changing the Sort Order

Follow these steps to change the order in which the report is sorted:

1. Click on the column header you wish to sort the values in descending order.
2. Click on the column header again to sort the values in ascending order.

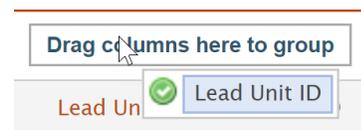
Reordering the Columns

Change the order that the columns appear in the report by dragging the column header to the new location.

Grouping the Results

You can group data by dragging columns.

1. Click and drag the column heading you want to group by to the block labeled Drag columns here to group.



- Streamlyne Reporting will immediately group the results according to field you selected.

Report Results

Refresh Clear Filter Aggregate Options Summary Only | Drag columns here to group | Search

Groups: UNIT NAME

| UNIT NAME | LEAD UNIT NUMBER | CURRENT ACCOUNT NUMBER | PROPOSAL ID | PI FULL NAME | PI PRNCPL NM | SPONSOR NAME | PRO |
|---|------------------|------------------------|-------------|-------------------|------------------|-----------------------------|-----|
| + UNIT NAME: Biochemistry (8 items) | | | | | | | |
| + UNIT NAME: Child Neurology (1 item) | | | | | | | |
| + UNIT NAME: Criminal Justice (3 items) | | | | | | | |
| - UNIT NAME: Network Management (2 items) | | | | | | | |
| Network Management | 103010 | | 88 | Network Professor | networkprofessor | National Science Foundation | 1 |
| Network Management | 103010 | | 653 | Network Professor | networkprofessor | National Science Foundation | 1 |

Refresh

+ UNIT NAME: Pediatrics (57 items)

To expand a group to view its detail, click on the plus sign next to the group.

- If there are more than ten records in the group, use the paging controls to navigate through the remaining records.
- To collapse the group, click the minus sign next to the group.
- You can change the order of the group by clicking on the grouped field.
- Click the Remove button beside the group to remove the grouping from the report.

Groups: Lead Unit ID

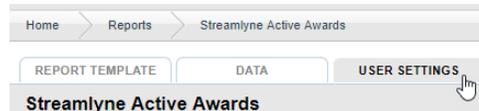
| Award ID | Seq Nbr | Award Sequ |
|---------------------------------|---------|------------|
| + Lead Unit ID: 101010 (1 item) | | |

Groups: Lead Unit ID

User Settings

User settings allow you to customize a report according to your personal preferences. Settings allow you to add and remove columns from a report, and to set sorting, grouping, and normalizing options as well – all without affecting the base report definition.

1. To access the User Settings page, click on the User Settings tab while viewing report results or an archived report.



2. Refer to the [Adjusting the Report Results](#) section to manage columns, sorts, groups, and normalizing options.

Once user settings have been applied, you will see a banner at the top of the Overview screen.

This indicates that you have made your own custom version of the report in the User Settings tab.

Note Once you have applied your user settings, any change to the report template will not be reflected in your own report. Any changes made to the Report Template will also need to be made to your User Settings.

3. If you wish to make your version of the report available to others, create a new report from your user settings using the Copy as a New Report button.



4. If desired, clear your User Settings using the Clear Settings button.



Distributing Reports

Once the report is generated, you may need the output in some other form, such as an Excel spreadsheet or a PDF document. Streamlyne Reporting will export to several formats. The following are covered in this manual:

- [Excel CSV file](#)
- [Adobe PDF](#)

The following export types are not covered in detail in this manual but use similar settings as the Excel CSV file and Adobe PDF.

- Webpage (HTML)
- Delimited text with customized delimiter
- Tab-delimited text
- XML
- Fixed Length Columns

Note A brief description regarding the Live Excel spreadsheet export option is described below without detail as it is typically not available to most users.

The most commonly used formats are Excel CSV, and Adobe PDF. These options are detailed here.

Distributing in Excel Comma Separated Values (.csv) Format

1. Click the Export Results icon in the report results screen.  This will open the Export Results window.
2. Click on Excel Comma-separated Values (.csv).
3. The **Output Filename** field defaults to the report name. If you wish to rename the .csv file, enter an appropriate filename.
4. The **Show Column Headers** field defaults to checked. Uncheck the **Show Column Headers** box if you wish to remove the column headings in the output.

5. To maintain the original formatting of dates in the report, uncheck the **Format dates for recognition in Excel** option in the **Date Format** field. Leave this checked to convert the dates to a format recognized by Excel.
6. If your report has a Multivalue view setting, in the **Multivalue Handler** field, select the radio button that fits your choice.
 - List one value per row – Multivalues are exploded into separate rows in the Excel report.
 - List by new line – Multivalues are listed in a single cell.
 - List by comma – Multivalues are listed in a single cell, separated by commas.If you do not have a Multivalue view setting, proceed to Step 7.

7. In the **Document Encoding** field, select ANSI or UTF-8.
8. In the **Zip resulting file?** field, check the box if you want the results to be converted to a Zip file upon Export.
9. Use the dropdown list in the **Multiple Documents** field to generate multiple files based on the column selected. For example, if you have a PI Name column, each PI can have their own report export file. All files will be zipped up.
10. Choose one or both:
 - Click the Export button to export the .csv file and follow your systems prompts to save the exported file. 
 - Click the Email button and complete the fields in the next screen and click Send Email(s) button. 

Distributing in Adobe PDF Format

1. Click the Export Results icon in the Report Results screen. 
This will open the Export Results window.
2. Click on Adobe PDF to reveal the settings for exporting to PDF.

3. The **Output Filename** field defaults to the report name. If you wish to rename the PDF file, enter an appropriate filename.
4. When exporting to PDF, you may enter a free text value in the **Export Heading** field that will show up in the template anywhere the keyword “`{exportHeading}`” is used.
5. In the **Column Headers** field, uncheck the **Show Column Headers** box if you wish to remove the column headings in the output.
6. Click the box in the **Row Body** field to choose Export “Show in Row Body” fields if you want to suppress the values of your field into a collapsible row beneath the standard row listing.

Note The **PDF Templates** field will default to the Use default option. Templates allow you to specify how you want the PDF formatted, such as margins, default headings, font settings, watermarks, etc. Creating and editing PDF Templates is discussed in detail in the [Creating a PDF Export Template](#) section of this manual.

7. Use the dropdowns on the **Font Name** and **Font Size** fields to change the font settings.

8. The **Page Orientation** field defaults to Automatic, which instructs Streamlyne Reporting to automatically adjust the page orientation depending on the amount of data listed in the report.

Alternatively, you may specify Portrait or Landscape layout here if you so desire.

9. Adjust the **Page Size** field and **Page Margins (inches)** fields to the appropriate values.

10. In the **Grouping** field, leave Page Break in Groups checked to force a page break before each new group in the document.

Uncheck this option to remove the page break.

11. In the **Zip resulting file?** field, check the box if you want the results to be converted to a Zip file upon Export.

12. Use the dropdown list in the **Multiple Documents** field to generate multiple files based on the column picked. For example, if you have a PI Name column, each PI can have their own report export file. All files will be zipped up.

13. Choose one or both:

Click the Export button to export the .csv file and follow your systems prompts to save the exported file.

Export

Click the Email button and complete the fields in the next screen and click the Send Email(s) button.

Send Email(s)

Live Excel Spreadsheet

Exporting to Live Excel is an advanced feature that may not be available to all institutions and is assigned based on permissions and security. If you do not see this feature but think you should, contact your Streamlyne Administrator.

A Live Excel Spreadsheet can present a security risk in that it allows a person who receives this Excel file (for example, via email) to generate Streamlyne Reporting reports from within Excel without having access to Streamlyne Research or Streamlyne Reporting. A user does not need to have a login to Streamlyne Reporting to use a Live Excel spreadsheet once it has been created. The report is run in Streamlyne Reporting as the user who created the Live Excel file. Each time a user accesses the Live Excel spreadsheet, the data on the report can be refreshed. It will also prompt the user for any parameters required by the report when first opened.

Archiving Report Results

Archiving allows you to save off a history of data snapshots for a given report over time. Each time a report is run, the report results are stored on the Streamlyne Reporting server.

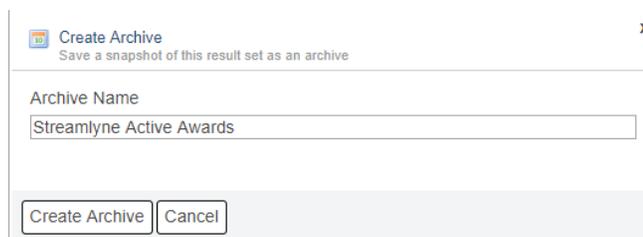
Access to the archives, as well as what data can be viewed on the archived report, is controlled by group and user security settings. Any security set on the report does not automatically carry over to the archive. Archives maintain their access security apart from the original report.

Creating an Archived Report Result

1. Click on the Archive icon while viewing the Report Results.



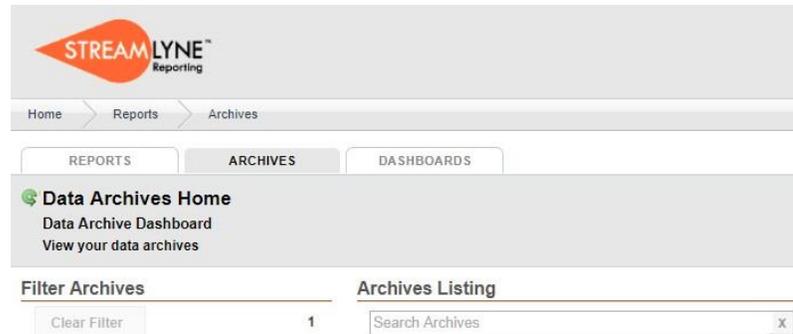
This will open the Create Archive window.

A screenshot of a "Create Archive" dialog box. The title bar says "Create Archive" and "Save a snapshot of this result set as an archive". There is a close button (X) in the top right. The main area has a label "Archive Name" above a text input field containing "Streamlyne Active Awards". At the bottom, there are two buttons: "Create Archive" and "Cancel".

2. The name in the **Archive Name** field defaults to the title of the report. Change the name if desired.
3. Click the Create Archive button.



Streamlyne Reporting will create an archive of the report that can be accessed from the Archives tab on the Streamlyne Reporting landing page.



Note Archived reports do not maintain the security of the report from which they were created. Archives maintain their access security apart from the original report. To set security on the archived report, proceed to [Sharing an Archive \(Setting Permissions\)](#) section of this manual.

Viewing Archived Report Results

The archives listing will display all the archives to which you have access as well as the date the archive was created, the person who created it, the number of records on the report, and the size of the archive file.

Depending on the level of security you have been given for archives, you can share, export, or delete the archive.

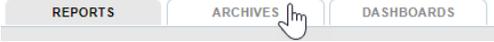
You can also perform analytics and charting on the archived report. These features are covered later in the training guide.

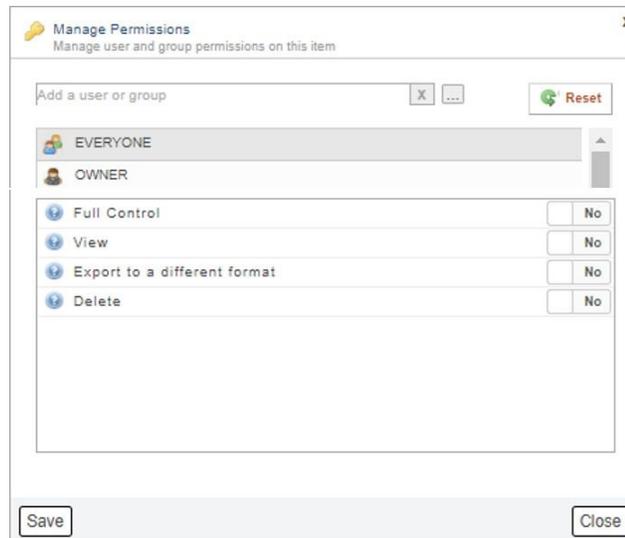
Sharing an Archive (Setting Permissions)

This is a required step. Access to the archives, as well as what data can be viewed on the archived report, is controlled by group and user security settings. Any security set on the report does not automatically carry over to the archive. Archives maintain their access security apart from the original report, meaning that only the archive creator and users with the Report Administrator role would have access to the archive.

Access can be given to individual users or to groups of users. Permissions control what the user or group can do with the archive.

To specify who can view the archive, you must have Full Control access to all archives or the specific archive to set permissions. Follow these steps:

1. Navigate to Reports Home. 
2. Click on the Archives tab. 
3. Click on an Archived Report.
4. Click on the Permissions icon.  This will open the Manage Permissions window.



5. To find a user or group to grant permissions to, start typing the user or group name in the input field. Streamlyne Reporting's auto-complete feature will start listing users and groups that contain what you type.
Click on the user or group name to add them to the list. If you can not find the user or group you are looking for, continue to Step 6.
Otherwise, skip to step 12.
6. Click the ellipsis button  next to the input field to open the Principal Search window.
7. In the Principal Search window, click the appropriate radio button to search for Users, Groups or Users and Groups.
8. Enter text into the appropriate search fields and click the Search button. 
9. Click on the correct match to add to list. Repeat if necessary.

10. Click the Close button when done using the Principal Search window to return to the Manage Permissions window. 
11. With the user or group highlighted, select the Permission you want to grant.
12. To change the default permission, slide the toggle from left to right to set to Yes for the Permission you want to give.

Click on the question mark icon to see detail about each Permission. 

Note The padlock icon indicates that the default permission has been overridden.

In this example, the user would be able to view the archived report results only.

| | |
|--|---|
|  Full Control | <input type="checkbox"/> No |
|  View  | <input checked="" type="checkbox"/> Yes |
|  Export to a different format | <input type="checkbox"/> No |
|  Delete | <input type="checkbox"/> No |

13. Click the Reset button to reset the the selected items to their default inherited permissions.



14. Click the Save button to save the permission settings, or click the Close button to undo any changes without saving.

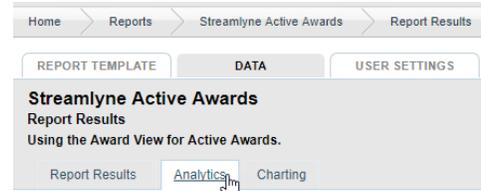


For more information on Permissions, see [Appendix B: Groups and Permissions](#).

Analytics

The analytics feature of Streamlyne Reporting allows you to summarize and aggregate the data on your report in a pivot-table-like format. This tool becomes especially useful when you need to create summaries of data in a very large report. The analytics data can be sorted, arranged, exported, and archived like any other report.

1. To access the analytics page, click on the Analytics tab while viewing report results or an archived report.



Result On the left side of the analytics panel is the list of fields used on the report, regardless of whether they are visible or hidden.

Numeric fields can be aggregated into totals, averages, minimums and maximums.

| Report Results | Analytics | Charting |
|----------------------------------|--------------------------|----------|
| Account ID | <input type="checkbox"/> | |
| Anticipated Total | <input type="checkbox"/> | |
| Total | <input type="checkbox"/> | |
| Average | <input type="checkbox"/> | |
| Maximum | <input type="checkbox"/> | |
| Minimum | <input type="checkbox"/> | |
| Anticipated Direct | <input type="checkbox"/> | |
| Total | <input type="checkbox"/> | |
| Average | <input type="checkbox"/> | |
| Maximum | <input type="checkbox"/> | |
| Minimum | <input type="checkbox"/> | |
| Anticipated Distributable Amount | <input type="checkbox"/> | |
| Total | <input type="checkbox"/> | |
| Average | <input type="checkbox"/> | |
| Maximum | <input type="checkbox"/> | |
| Minimum | <input type="checkbox"/> | |
| Anticipated Indirect | <input type="checkbox"/> | |
| Total | <input type="checkbox"/> | |
| Average | <input type="checkbox"/> | |
| Maximum | <input type="checkbox"/> | |
| Minimum | <input type="checkbox"/> | |

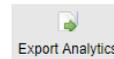
2. To add a column to the Analytics page, click the checkbox next to the field. Streamlyne Reporting will list the unique values from the column.

| Report Results | | Analytics | Charting |
|----------------------------------|-------------------------------------|---------------------------------------|------------------------|
| Analytics | | | |
| Account ID | <input type="checkbox"/> | <input type="checkbox"/> Clear Filter | |
| Anticipated Total | <input checked="" type="checkbox"/> | | |
| Total | <input type="checkbox"/> | Lead Unit | Investigator |
| Average | <input type="checkbox"/> | Biochemistry | Biochemistry Professor |
| Maximum | <input type="checkbox"/> | Biochemistry | Biochemistry Professor |
| Minimum | <input type="checkbox"/> | Biochemistry | Biochemistry Professor |
| Anticipated Direct | <input type="checkbox"/> | Biochemistry | Biochemistry Professor |
| Total | <input type="checkbox"/> | Biochemistry | Biochemistry Professor |
| Average | <input type="checkbox"/> | Biochemistry | Biochemistry Professor |
| Maximum | <input type="checkbox"/> | Biochemistry | Biochemistry Professor |
| Minimum | <input type="checkbox"/> | Biochemistry | Biochemistry Professor |
| Anticipated Distributable Amount | <input type="checkbox"/> | Biochemistry | Biochemistry Professor |
| Total | <input type="checkbox"/> | Biochemistry | Biochemistry Professor |
| Average | <input type="checkbox"/> | Biochemistry | Biochemistry Professor |
| Maximum | <input type="checkbox"/> | Biochemistry | Biochemistry Professor |
| Minimum | <input type="checkbox"/> | Biochemistry | Biochemistry Professor |
| Anticipated Indirect | <input type="checkbox"/> | Biochemistry | Biochemistry Professor |
| Total | <input type="checkbox"/> | Biochemistry | Biochemistry Professor |
| Average | <input type="checkbox"/> | Biochemistry | Biochemistry Professor |
| Maximum | <input type="checkbox"/> | Biochemistry | Criminal J Professor |
| Minimum | <input type="checkbox"/> | Biochemistry | Pediatrics Professor |
| Award Sequence Status | <input type="checkbox"/> | Cardiology | Cardiology Professor |
| Award Status | <input type="checkbox"/> | Child Neurology | Child Professor |
| Award ID | <input type="checkbox"/> | Criminal Justice | Criminal J Professor |
| Award Title | <input type="checkbox"/> | Criminal Justice | Criminal J Professor |
| Investigator | <input checked="" type="checkbox"/> | Criminal Justice | Criminal J Professor |
| Lead Unit | <input checked="" type="checkbox"/> | | |
| Lead Unit ID | <input type="checkbox"/> | | |

Records 1 through 25 of 68 Display Paged First Previous Page 1 of 3 Next Last Display All

3. To add an aggregate value, click the checkbox next to the appropriate function.

4. To export the analytic report, click on Export Analytics button.



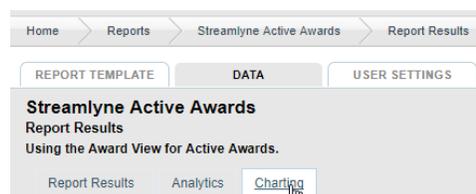
This will open the Export Results window. See instructions for exporting results in the [Distributing Reports](#) section above.

Note Fields that are hidden on the report will not export, even though they are available in the analytics panel.

Charting

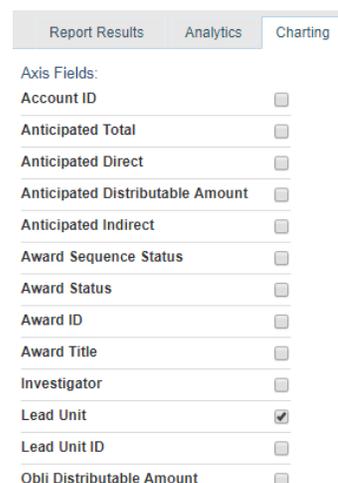
Charting works in much the same way as analytics, except the output is in chart form instead of report form.

1. To access the Charting page, click on the Charting tab while viewing report results or an archived report.



Note The default chart shows a total count of the records on the report.

2. To choose the field that will be used on the X-axis of the report, click the checkbox by the appropriate field.



3. In the **Value** dropdown, choose the field and aggregate function to be used for the Y-axis.



4. Streamlyne Reporting provides for three different chart formats: Bar, Pie or Line
Click the appropriate chart type to change the chart.

5. By default, Streamlyne Reporting will display the top ten values in the chart.

To adjust this setting, use the **Show** field to change the number of values to display, or change the dropdown from top to either all or bottom. Change the number of values if desired.



6. Click on the Download Image button in the top right corner of the graph to print or download the file.

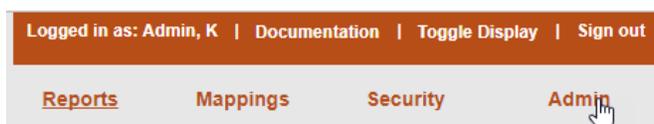


Creating a PDF Export Template

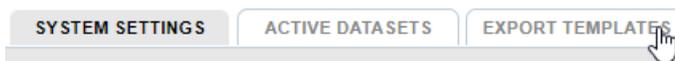
Streamlyne Reporting allows users with the Report Administrator role to create and manage export templates. Export templates provide standardized formatting for a report exported using the PDF Export option described in [Distributing in Adobe PDF Format](#) above.

To manage export templates:

1. Navigate to the Admin section by clicking on Admin in the menu underneath the banner in the top right corner of the screen.



2. Click on the Export Templates tab.

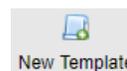


Note Streamlyne Reporting is delivered with a Default Template installed, which you cannot delete or modify. Because it cannot be modified, the Default Template does not appear on the Export Templates page. The system will use this template until you create one of your own.

Once you create a Template that reflects your organization's branding, identify it as your Default Template in the Admin > System Settings screen.

3. To edit an existing template other than the Default Template, click the name of the template in the list and skip to Step 11. Otherwise, proceed to the next Step.

4. To create a new template, click the New Template button.



This will open the New Pdf Template window.

5. Enter the name of your template in the **Template Name** field.
6. Select the printed page size in the **Page Size** field.
7. Enter the appropriate margin width in inches to apply to your template in the **Page Margins (inches)** field.

8. Use the dropdown in the **Page Orientation** field to select the best orientation for the printed page. The Automatic option will generally choose the best orientation to fit the contents, but you can adjust if needed.
9. Check the **Grouping** box if the results exported to this template contain groups and you want the exported document to insert page breaks after each group.
10. Click Next to enter edit mode for the newly created template. 
11. Use the Sample tab to preview a sample document using the settings you have defined for your template.
12. Click the Page Setup tab to edit the template name, page size, page margins, page orientation, and grouping options. Click Save to save your changes or Reset to return to previously saved settings.
13. Click the Page Styles tab to edit font specifications such as color (more information on hexadecimal color values can be found [here](#)), size, and family. These values are applied as the Page Style, with optional overrides for Even and Odd Row modifications. Additionally, there are advanced options for style specifics, including adding custom CSS. (CSS stands for Cascading Style Sheets. It is a markup language that controls the appearance of HTML elements on a web page.)
14. Click on the Header and Footer tab to add header and footer information, if applicable. In the Template Designer, drag and drop from the Add Elements panel to create new sections of your template including new rows, text cells, and image cells. As you drag elements onto the designer, or when you double click an existing element, an editor dialog for that element type will appear, allowing for element-specific modifications.

A Text Cell allows you to define text elements to appear on each page. Text elements can be dynamic based on the execution using the variables provided in the **Select a Keyword** dropdown. For example, if you execute a report titled "Weekly Invoices," the text element Title: \${reportTitle} will resolve to: 'Title: Weekly Invoices' at runtime.

The Image Cell allows you to upload an image from your desktop to include in the template.
15. Click Save to save your changes or Reset to return to previously saved settings.

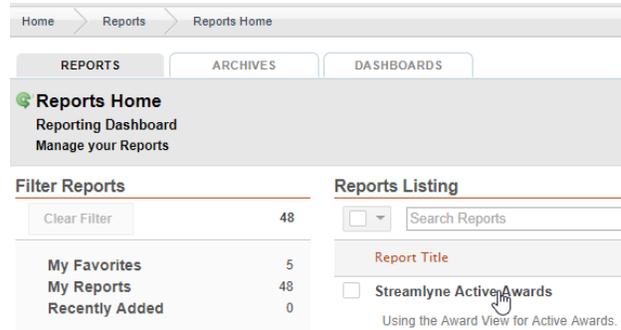
16. Click the Watermark tab to specify a watermark and associated opacity level to appear on each page of the exported document.
17. Click Save to save your changes or Reset to return to previously saved settings.

Locking Reports

Streamlyne Reporting allows the owner of the report the ability to lock the report so that no other users can make changes except when using the User Settings tab. Depending on the security permissions given to the user, they may not be able to make changes either way.

To lock the report:

1. Navigate to the Reports Home page and selecting a report from the Reports Listing.



2. Ensure you are on the Report Template tab.
3. Click on the Lock button in the top right area of the Report Template page.



A message will appear on a report when it has been locked by the owner of the report.



4. To unlock the report, click the Unlock button.



Creating Dashboards

For a Dashboard to be seen by others, it must be shared properly. Generally, a Dashboard cannot be shared to an audience that is wider than the audience of the mappings and reports on which a dashboard is built.

Note that there is a setting described below called View on Demand that will allow the user to “drill down” and see the underlying data that makes up the visualizations.

This option will ignore any security settings the user may have in the rest of the application, and will give access to all the data.

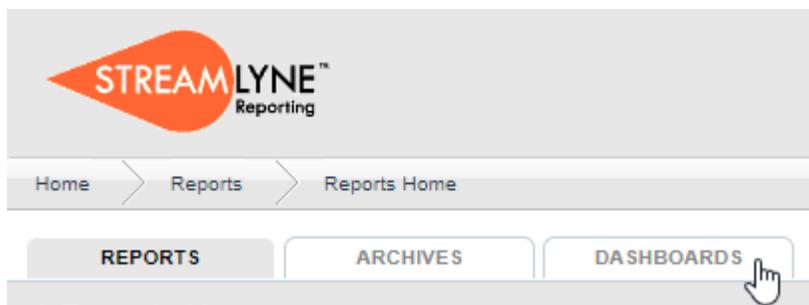
Further, the Dashboard’s Report Writer must edit the settings to indicate the Dashboard is shareable in order for a Report Consumer to share the Dashboard with others. For more detail on sharing, see [Sharing and Setting Permissions on Dashboards](#).

There are three main components to creating dashboards:

1. Data – Establishing the data provider, or source report for the dashboard.
2. Visualizations – Choosing the right image to reflect the data.
3. Input Controls – Adding filter tools to the dashboard to provide analytical tools at runtime.

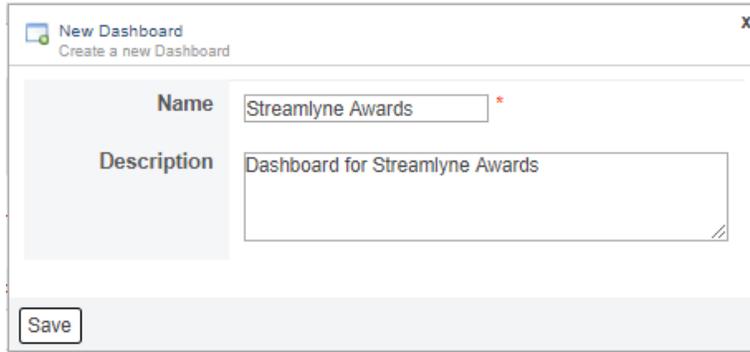
Let’s begin!

1. Click on the Dashboards tab on the Reports Home page.



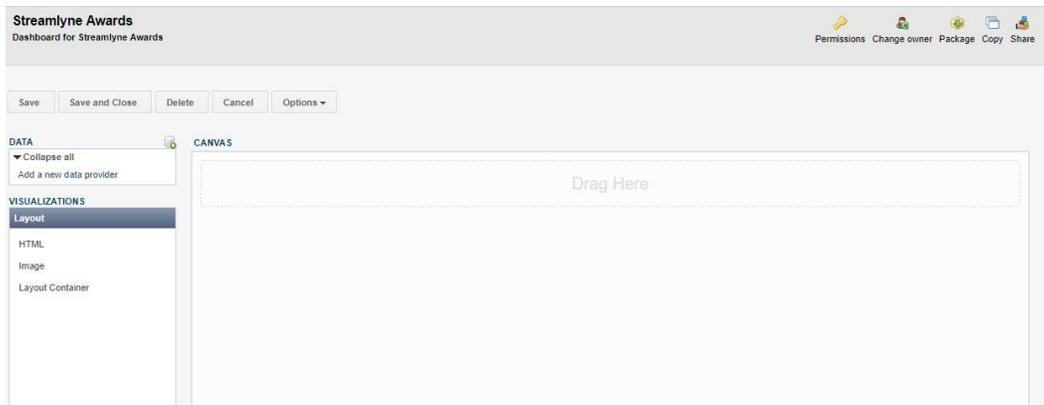
2. Click on the New Dashboard button.





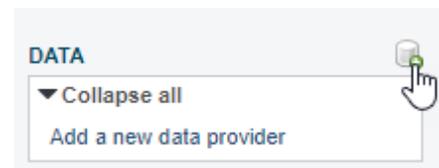
3. Enter a name for the dashboard in **Name** field.
4. Enter a description for the dashboard in the **Description** field. The description will appear under the name in the Dashboard Listing screen.
5. Click Save. 

Result This will open the dashboard screen with three panels: DATA, VISUALIZATIONS and CANVAS.

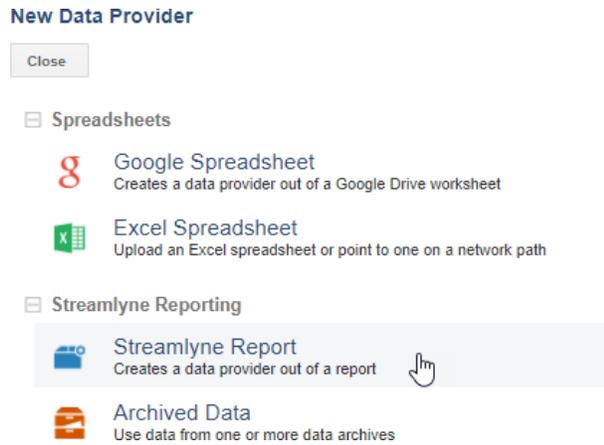


Selecting Data Provider

1. To select a data provider containing the data you want to display, click on the canister icon in the DATA section of the dashboard screen.

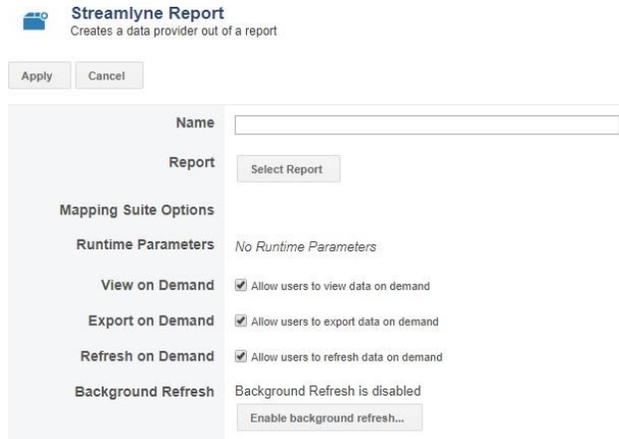


2. Click on Streamlyne Report.

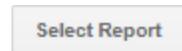


3. Enter a name in the **Name** field if you wish.

If you leave this field blank, the name of the report you select in the next step will autofill in this field.



4. Click on the Select Report button to see the reports available.



The screenshot shows the 'Streamlyne Awards' dashboard. A 'Select a Report' dialog is open, allowing users to choose a report to use as a data provider. The dialog includes a search bar, a list of reports with radio buttons for selection, and an 'Apply' button. The 'Streamlyne Award' report is currently selected.

| Report | Options | Last Executed |
|--|-------------------------|---------------|
| <input type="radio"/> Pending Proposal Missing Approvals | Details | Friday |
| <input type="radio"/> Pending Proposals | Details | Friday |
| <input type="radio"/> Proposal w/Administrative Approvals | Details | Friday |
| <input type="radio"/> Proposals in Progress (aka Short Report) | Details | Friday |
| <input checked="" type="radio"/> Streamlyne Award | Details | Friday |
| <input type="radio"/> Streamlyne Budget | Details | Never |
| <input type="radio"/> Streamlyne Budget Details | Details | Monday |
| <input type="radio"/> Streamlyne Institutional Proposal | Details | Never |
| <input type="radio"/> Streamlyne Negotiation | Details | Friday |
| <input type="radio"/> Streamlyne Proposal | Details | Never |
| <input type="radio"/> Streamlyne Proposal Log | Details | Never |
| <input type="radio"/> Streamlyne Proposal Development | Details | Never |
| <input type="radio"/> Streamlyne Proposal Development Person | Details | Monday |
| <input type="radio"/> Streamlyne Proposal Missing Approval | Details | Never |
| <input type="radio"/> Streamlyne Proposals Admin Approvals | Details | Monday |

5. Select the radio button next to the report you wish to use as a data provider.

6. Click Apply. 

7. Edit the Name of the data provider if you wish. Otherwise, proceed to the next step.

The screenshot shows the 'Streamlyne Report' configuration dialog. It includes a 'Name' field, a 'Report' dropdown menu, and several options for data access and refresh. The 'Streamlyne Award' report is selected, and the 'View on Demand', 'Export on Demand', and 'Refresh on Demand' options are checked.

| | |
|------------------------------|---|
| Name | Streamlyne Award |
| Report | Streamlyne Award |
| Mapping Suite Options | No Mapping Suite options |
| Runtime Parameters | No Runtime Parameters |
| View on Demand | <input checked="" type="checkbox"/> Allow users to view data on demand |
| Export on Demand | <input checked="" type="checkbox"/> Allow users to export data on demand |
| Refresh on Demand | <input checked="" type="checkbox"/> Allow users to refresh data on demand |
| Background Refresh | Background Refresh is disabled |

8. If the report you selected has runtime parameters, the panel will display fields to complete those parameters. If completed here, the dashboard will always reflect those parameters.

If left blank, the user can add the parameters to the dashboard at a later time.

If the parameter is required in the report, it will be required in the data provider. There will be a red asterisk * to indicate that it is required.

9. Check the **View on Demand** box to indicate whether or not the users are allowed to view the data on demand. When checked, the user will be allowed to “drill down” and see the underlying data that makes up the visualizations.

Note This option will ignore any security settings the user may have in the rest of the application, and will give access to all the data.

10. Check the **Export on Demand** box to allow a user to export data to a .csv or .pdf after they have drilled down into the data of the visualization.

11. Check the **Refresh on Demand** box to indicate whether or not the users will be allowed to refresh the data on demand. (If the report houses a huge amount of data, it might be more beneficial to uncheck this box and create a schedule for refreshing the data).

12. Enabling Background Refresh allows the dashboard owner (or user with Edit capabilities) to schedule the background refresh of the data to update visualizations.

To enable, click the Enable background refresh button.

Enable background refresh...

Otherwise, proceed to Step 15.

Result The Configure Component window appears.

The screenshot shows the 'Configure Component' dialog box. At the top, there are 'Apply' and 'Cancel' buttons. Below them are three input fields: 'Start Date' with the value '2/28/18', 'Start Time' with the value '8:49 AM', and a 'Schedule' section. The 'Schedule' section has a list of radio buttons: 'Fixed Interval' (selected), 'Daily', 'Weekly', 'Monthly', 'Yearly', and 'Custom'. To the right of the radio buttons, there is a text input 'Every' followed by a numeric input '1' and a dropdown menu 'Hour(s)'.

Note There is the option to customize your schedule by using Cron expressions. If you choose Custom, and click on the help button, there is a drop down list of sample Cron expressions, however, any Cron expressions can be utilized.

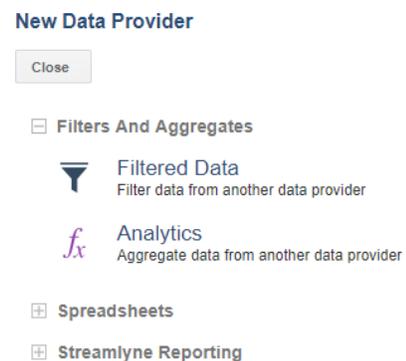
13. In the Configure Component panel, complete the fields to set a schedule for the data to be refreshed.

14. When done setting a schedule, click Apply. 

15. When done with the settings on the Streamlyne Report panel, click Apply. 

Result The New Data Provider window appears.

Once a data provider has been added to the dashboard, you have the ability to create a data provider made up of a subset of data from the existing data provider.



There are two choices: Filtered Data and Analytics

Filtered Data The Filtered Data option allows the user to break the data into smaller subset of data.

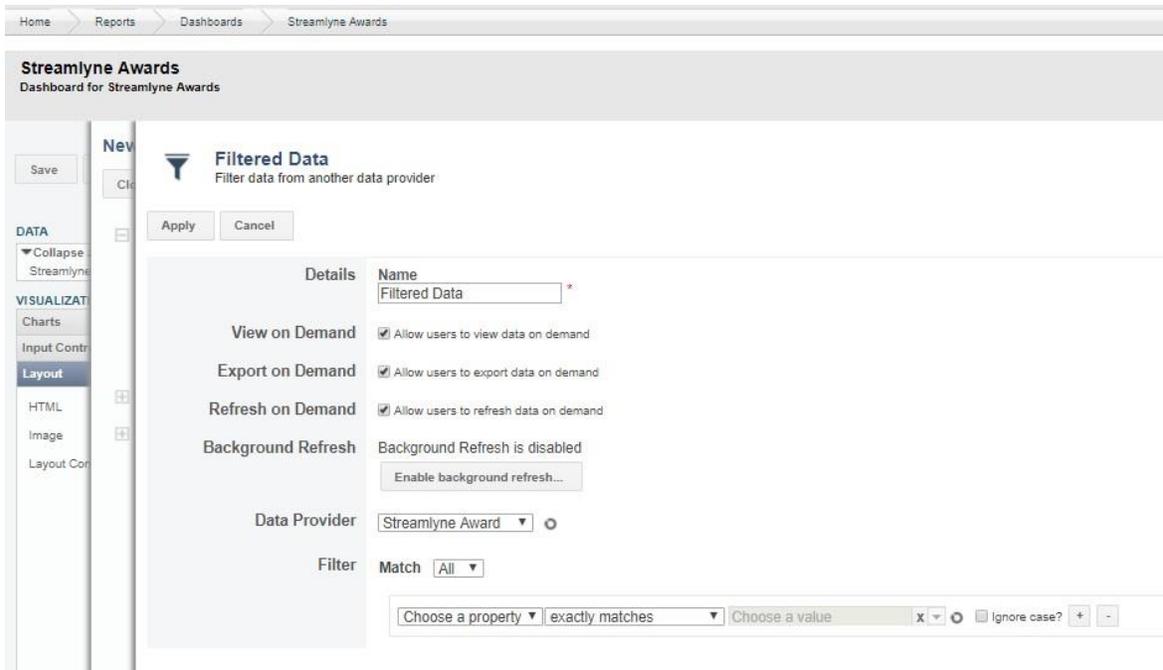
Analytics Analytics creates aggregate sets of data which then allows you to build a dashboard just on the aggregated data.

16. To use filtered data, click on the Filtered Data option and proceed to Step 17.



To use analytics for aggregated data, skip to Step 20.

To add the data provider without using Filtered Data or Analytics, proceed to Step 24.



17. Use the dropdown in the **Data Provider** field to select the data provider you created.

18. Complete the Filter fields.

19. Click Apply. 

20. To choose analytics, click on the Analytics option.



21. The Analytics window appears.

Check the **View on Demand** box to indicate whether or not the users are allowed to view the data on demand. When checked, the user will be allowed to “drill down” and see the underlying data that makes up the visualizations.

This option will ignore any security settings the user may have in the rest of the application, and will give access to all the data.

Check the **Export on Demand** box to allow a user to export data to a .csv or .pdf after they have drilled down into the data of the visualization

22. Choose the columns that you want to group by and the type of aggregate.

23. Click Apply. 

24. Click Close. 

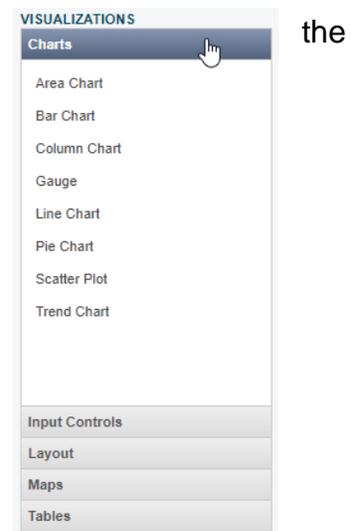
Result Your data provider is shown in the DATA panel on the dashboard screen.



Adding Visualizations to Dashboard

The next step is to create the dashboard by adding different images reflecting the data from the chosen report using Charts, Input Controls (filters), Layout, and Table options.

1. In the Visualizations panel, click on Charts to expand options.



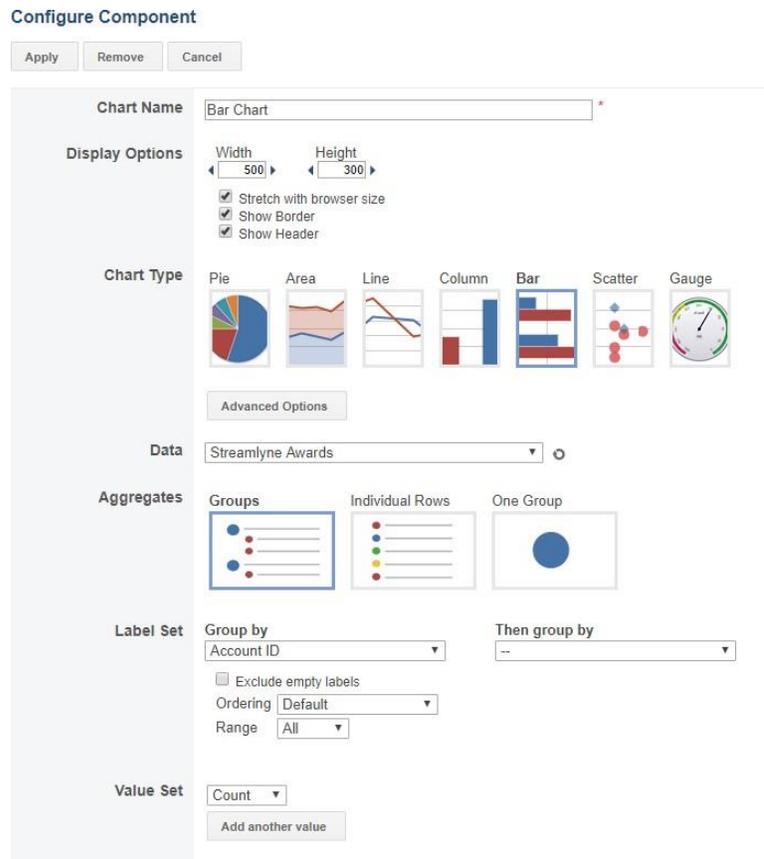
2. Click and drag an option to the portion of the Canvas panel marked Drag Here.

3. Click on the gear icon next to the Visualization to configure the component.

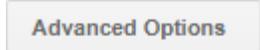


- Use the Configure Component panel to set the parameters of the chart, by choosing a title, size, chart type, data source, Aggregate Functions, Groups, Ordering, Range and the Value Set.

You must at least choose a Value to group by in order to see any data in the Visualization you selected.



- Click the Advanced Options button for additional formatting for each chart type. The options will vary depending on the chart type selected.
- Click Apply when finished with Configure Component panel settings.



Adding Input Controls

- In the Visualizations panel, click on Input Controls to expand the options.



2. Drag and drop the type of input control needed on to the dashboard. It can be placed anywhere on the dashboard.

Note There are eight Input Controls to choose from. You can hover over each one in the Input Controls menu for more detail.

| | |
|---------------------------|---|
| Auto-suggest box | Filter a property with an auto-suggest box. |
| Date Range | Filter a date property with a date range. |
| Number Range | Filter a numeric property with a number range. |
| Number Slider | Filter a number property with a number slider. |
| Property Filter Container | Group multiple property filters into one. |
| Select Box | Filter a property in a select box by providing a list of value/description pairs. |
| Text Box | Filter a property in a text box using * for a wildcard. |
| Time Range | Filter a time property with a time range. |

3. Click on the gear icon next to the Input Control to configure the component.



4. Use the Configure Component panel to set the parameters of Input Control. The options will vary depending on the chart type selected.
5. Click Apply when finished with Configure Component panel settings.

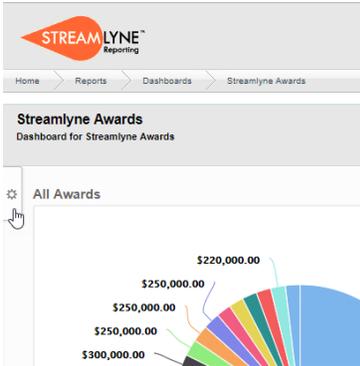


Editing an Existing Dashboard

Navigation

Reports Home > Dashboards > Dashboard Listing

1. Navigate to the Dashboard you wish to edit.
2. Click on the gear in the upper left corner of the dashboard located below the title of the dashboard.
3. Click the Edit button to edit dashboard elements.



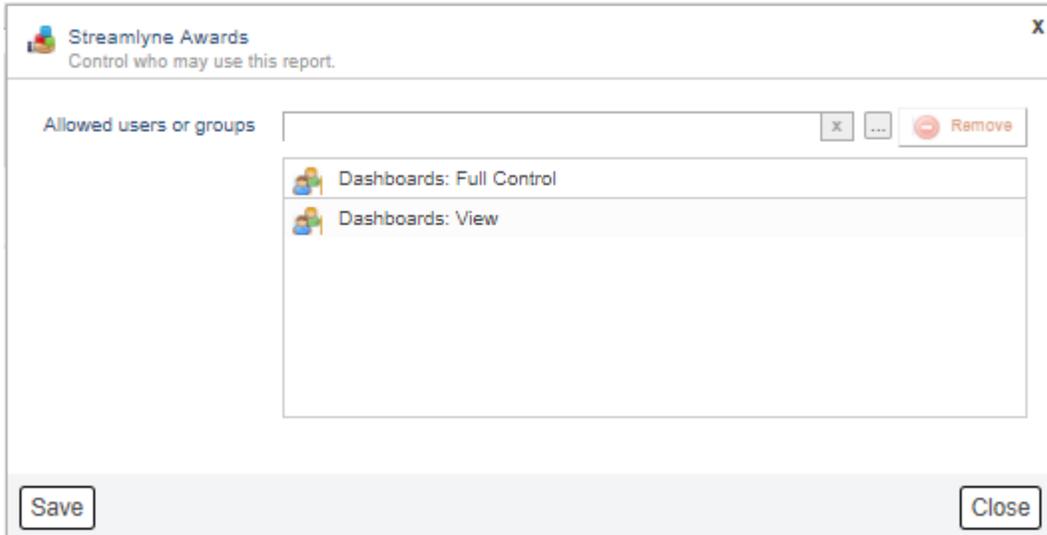
Note Click Save after each edit. Clicking Apply from the configuration screen will not save the changes.

Sharing and Setting Permissions on Dashboards

For a Dashboard to be seen by others, it must be shared with Permissions applied correctly. Further, the Dashboard's Report Writer must edit the settings to indicate the Dashboard is shareable in order for a Report Consumer to share the Dashboard with others.

1. Navigate to the Dashboard you wish to share.
2. In the top right area of the screen click the Share icon.

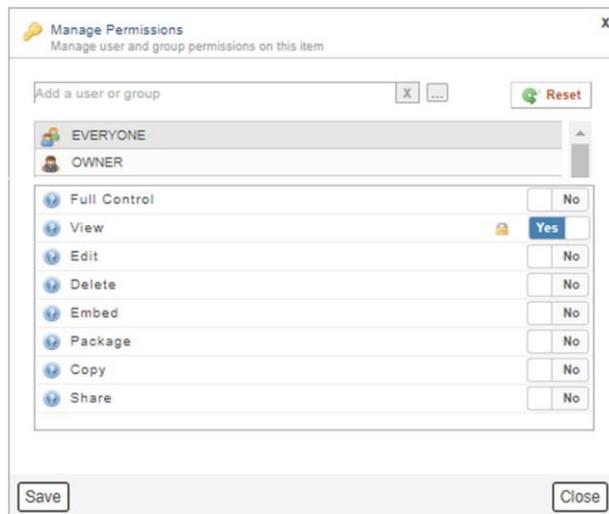




3. Click Save.

4. Click the Permissions icon. 

Result Streamlyne Reporting displays the Manage Permissions window.



Note Global permission defaults are managed on the Root Permissions tab in the Security area of Streamlyne Reporting. The two implicit principals, EVERYONE and OWNER, are defined by default in Root Permissions. Only Report Administrator has access to the Security area, however, users with Report Administrator and Report Writer roles can override permissions in each object of Streamlyne Reporting. (Mappings, reports and dashboards are examples of objects.) In the next step, you will override the global permission default for EVERYONE for a dashboard you've created.

Click on the question mark icon to see detail about each Permission. 

For more information on Permissions, see [Appendix B: Groups and Permissions](#).

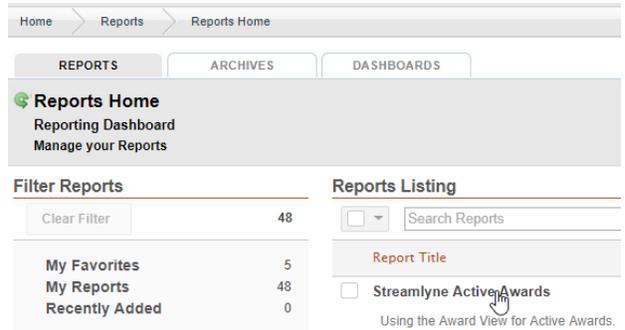
5. With the Group EVERYONE highlighted, slide the toggle from left to right to set to Yes for View as in graphic above.
6. Click Save. 

Scheduling Reports

The Streamlyne Reporting scheduler allows you to run a report on a recurring basis, or one time, offline.

To schedule a report:

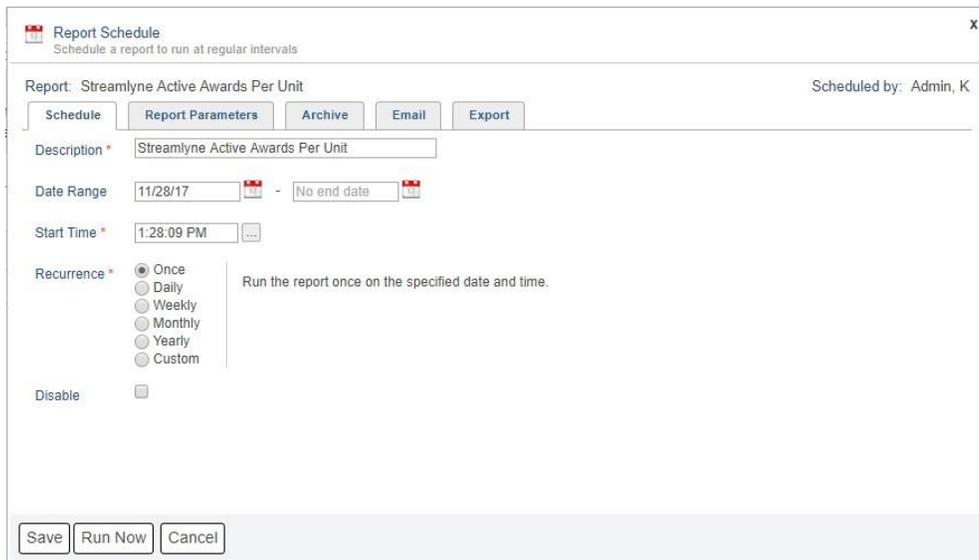
1. Navigate to the Reports Home page and selecting a report from the Reports Listing.



2. Click on the Schedules tab.
3. Click the New Schedule button.



The Report Schedule window will open.



4. The first tab on the schedule window allows you to set the actual schedule for the report – when and how often you want to run the report.

In the **Description** field, enter the description for the schedule. The default is the report name.

5. In the **Date Range** fields enter the starting date of when you want the report to begin running. You can optionally enter an end date to stop the report running after the given date.

Note Do not schedule reports during your database maintenance. If the database is down for maintenance, the report will not run.

6. In the **Start Time** field, enter the time you wish to the report to run.

7. In the Recurrence section, choose the appropriate option.

- Once – Runs the report one time.
- Daily – Runs the report every n days, or every weekday.
- Weekly – Runs the report on specific days of the week.
- Monthly – Run the report on a specific day of the month (the 1st, 15th, 30th, etc.) or on an occurrence of a day (first Tuesday, last Friday, etc.)
- Yearly – Run the report every year on a specific date.
- Custom – Use a cron expression to specify the report schedule.

8. If the report prompts for filter criteria or a mapping suite table, click on the Report Parameters tab and enter the parameter. (If the report does not prompt for these items, this tab will not be present.)

Report: Streamlyne Active Awards Per Unit

Enter the Lead Unit name for the report *

9. If you wish to export the scheduled report output to an Archive, select the Archive tab. Otherwise, proceed to Step 13.
10. Select the Create a new archive radio button. Optionally, specify a minimum number of records that must appear on the report before the report archive is created.

11. The **Archive Name** field defaults to the name of the report; however, you can optionally change the name of the archive.

Note Archives are never overwritten, regardless of the name.

12. If desired, share the archive to other users or groups of users. Enter the name of the group or user in the input box or use the ellipsis  button to search for a group or user. You can also optionally send an email to the shared users letting them know a new archive exists.

13. Clicking the Run Now button will execute the schedule immediately while maintaining the Next Fire Time. 

To save the schedule, click the Save button. 

14. If you wish to export the scheduled report output to email, select the Email tab. Otherwise, proceed to Step 16.

15. Complete the various Email options. Notice there are Format, Message Contents, Recipients and Burst Settings.

16. Clicking the Run Now button will execute the schedule immediately while maintaining the Next Fire Time. 

To save the schedule, click the Save button. 

Editing an Existing Schedule

To edit an existing schedule for a report, go to the Schedules tab for the report, highlight the schedule and click Edit.

Deleting an Existing Schedule

To delete an existing schedule for a report, go to the Schedules tab for the report, highlight the schedule and click Delete.

Managing Groups of Users

A user with the Report Administrator role can create groups, add users to those groups and assign permissions to those groups.

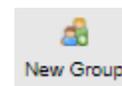
Users in Streamlyne Reporting are maintained via LDAP or Active Directory, so it is not necessary nor recommended to create users in Streamlyne Reporting. Changes made to users in an external source code are reflected immediately within Streamlyne Reporting.

Navigation

Reports Home > Security > Groups

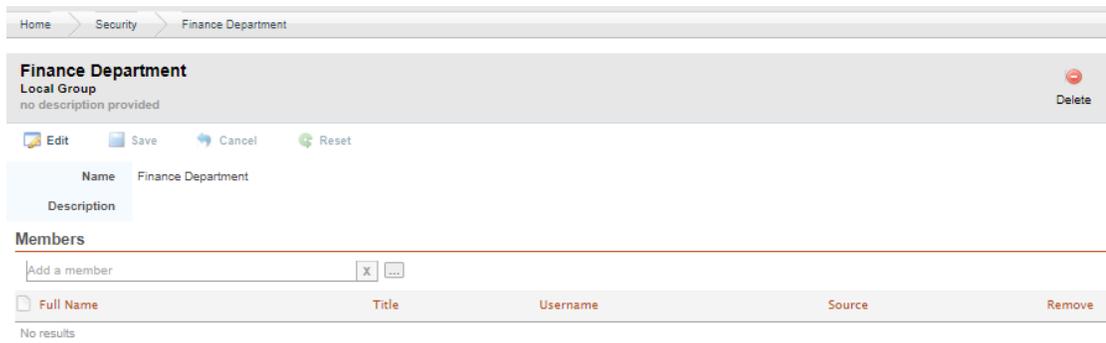
Create a New Internal Group

1. Navigate to the Groups Home page.
2. Click on the New Group icon in the top right area of the page to open the New Group window.

A screenshot of a "New Group" dialog box. The title bar contains the text "New Group" and "Create a new Local Group" with a close button (X) on the right. The main area has two input fields: "Name" with a red asterisk and a text box containing "Finance Department", and "Description" with a larger text area. At the bottom, there are two buttons: "Save" on the left and "Close" on the right.

3. In the **Name** field, enter a name for the group.
4. In the **Description** field, enter an optional description for the group.
5. Click the Save button. 

Result The new group name will appear on a page where you will be able to add members and view associated group details.



6. Click the ellipses button [...] to the right of the **Add a member** field to open the Principal Search window.



Click the Search button to bring up the full list of names the first time you use the Principal Search window.



Principal Search
Search for users and groups

First Name

Last Name

Username

Email

Search

Name

- Admin, K
- Admin, Streamlyne
- Admin, System
- Administrator, Accounting
- Administrator, AccountingII
- Administrator, Conflicts
- Administrator, ConflictsII
- Administrator, GCO
- Administrator, GCOII
- Administrator, IACUC

Refresh First Previous Page 1 of 15 Next Last

Close

7. Use the available search fields to find a user you want to add to the group. You may use * as a wildcard in these fields.

Use the Previous and Next links to page through the results one page at a time or use the First and Last to jump to the first page or the last page of the list.

8. To add the user to the group, double click their name.
9. Repeat Steps 7 and 8 until all users are added to the group.
10. Click the Close button to close the Principal Search window when you are finished adding names to the group.

Close

Result The Group Details page will list the users you added automatically sorted alphabetically by Full Name.

Home > Security > Finance Department

Finance Department
Local Group
no description provided

Edit Save Cancel Reset

Name Finance Department
Description

Members

Add a member [X] []

| Full Name | Title | Username | Source | Remove |
|-----------------------------|-----------------------------|--------------------|----------|--------|
| Administrator, Accounting | Administrator, Accounting | accountingadmin | External | Remove |
| Administrator, AccountingII | Administrator, AccountingII | accountingadmin2 | External | Remove |
| Director, Accounting | Director, Accounting | accountingdirector | External | Remove |

11. You can click the Remove button in the far right column of any row to remove a user from the group. 

Note Your changes to the group are saved automatically and are effective immediately. A user added to a group may need to log out and log back in to see the change.

Using a New Group to Manage Permissions

When you create a new group of users in Security: Groups, that group will not automatically appear in the Manage Permissions window when you are in an Object context. An Object is a Mapping, Report or Dashboard. To use a new group, you will search for it and add it. Additionally, for it to remain on the Manage Permissions list, you must change at least one permission so that it differs from an existing group, such as EVERYONE.

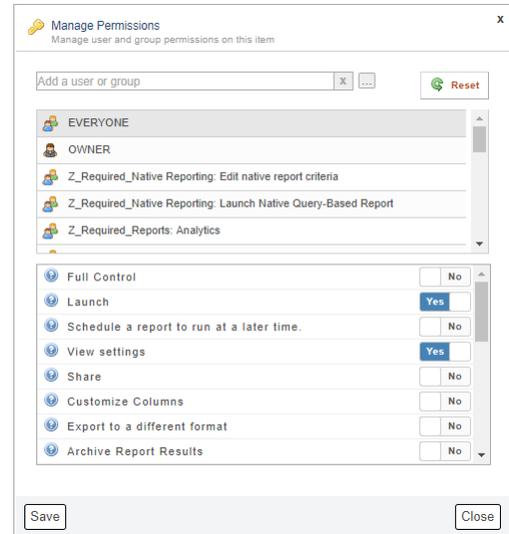
1. Select the Mapping, Report or Dashboard you wish to apply Permissions to.

In this example, a Report is used.

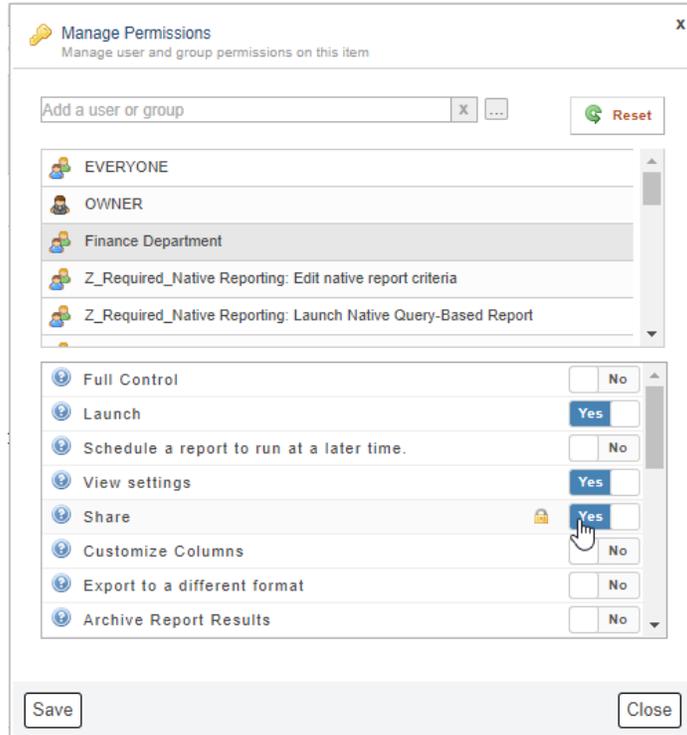
2. Click the Permissions icon.



Result The Manage Permissions window will appear.



3. Click the ellipses button  to the right of the **Add a user or group** field to open the Principal Search window.
4. Click the Groups radio button and then click the Search button. 
5. Use the Previous and Next links to page through the results one page at a time or use the First and Last to jump to the first page or the last page of the list until you find the Group you created.
6. To add the group, double click the Name of the group.
7. Click the Close button. 



8. With the new group highlighted, slide the toggles for each permission that applies to that group from left to right to set to Yes or from right to left to set to No as needed.

Permissions will be different depending on the Object they are being applied to. The example above contains permissions pertinent to a report.

9. Click the Save button to apply the permissions in the new group. 

Delete a Group

Only internal groups created from and maintained within Streamlyne Reporting by users with the Report Administrator role should be deleted.

Note Do not delete any Group with the prepended characters “Z_Required_”. These are required for Reporting module configuration to work properly.

1. Navigate to the Groups Home page.
2. Click the Search button to bring up the full list of names the first time you use the Principal Search window. 

Use the **Search Groups** field to find a user you want to add to the group. You may use a * for a wildcard in this field.

You can also use the Display All or Previous and Next links to page through the results one page at a time or use the First and Last to jump to the first page or the last page of the list.

3. Select the group you want to delete to open the Group Details page.

4. Click the Delete icon in the top right area of the page.



5. Click the Delete button on the confirmation window to delete the group and all references to it. 

Appendices

Appendix A: Roles and Features

| User Type | Features | Streamlyne Research Role |
|---|--|--|
| Streamlyne Administrator: User(s) responsible for Streamlyne Research application setup and configuration. | | |
| Report Administrator: User(s) responsible for Streamlyne Reporting setup and configuration. | This Role confers the following permissions: Can also create mappings, reports and dashboards and share them with others. | Namespace: KR-REPORTS Role Name: Report Administrator |
| Report Writer: User(s) responsible for creating mappings, reports and dashboards, and for sharing them with other users. | | Namespace: KR-REPORTS Role Name: Report Writer |
| Report Consumer: All Streamlyne Research users have read-only access to | | N/A |

| | | |
|--------------------------|--|--|
| view reports by default. | | |
|--------------------------|--|--|

| Role | Report Administrator | Report Writer | Report Consumer | SL Only |
|--------------------------------|----------------------|---------------|-----------------|---------|
| Adding a Datasource | | | | • |
| Creating Mappings | • | • | | |
| Linking Views | • | | | |
| Creating Reports | • | • | | |
| Manage Tags | • | | | |
| Using Reports | • | • | • | |
| Distributing Reports | • | • | | |
| Archiving Report Results | • | | | |
| Scheduling Reports | • | | | |
| Creating a PDF Export Template | • | | | |
| Locking Reports | • | • | | |
| Creating Dashboards | • | • | | |
| Using Dashboards | • | • | • | |
| Distributing Dashboards | • | • | | |
| Live Excel | • | | | |
| Native SQL Query Report | • | | | |

Appendix B: Groups and Permissions

Root Permissions

Streamlyne Reporting uses cascading permissions to determine if a particular user has access to a particular feature. This determination is made at the most granularly defined access value. Meaning, if a user belongs to a group which does not have access to delete reports, you can override that permission and allow that feature access to that particular user. These global permission defaults are managed on the Root Permissions tab in the Security module. The two implicit principals, EVERYONE and OWNER, are defined by default in Root Permissions. This set of permissions is not editable by any role. If you have questions or concerns about these settings, contact the Streamlyne Service Desk.

Object Permissions

Each securable object (mapping, report or dashboard) in Streamlyne Reporting contains a Permissions icon in the top right area of its associated detail page. Whereas Root Permissions defines what a user can do globally within the system, each individual system object can override this setting. For example, a user may be granted the ability to create Live Excel spreadsheets through the Root Permissions panel, but the Report Administrator or Report Writer roles can restrict that user and others from doing so on a specific report.

Object permissions also define what specific reporting data a user is allowed to access within Streamlyne Reporting. This data security is accomplished through assigning object permissions on datasources, mappings, and properties. For example, if you only want your HR user group to have access to the SSN field in a Person table, you would:

1. Browse to the SSN property detail page
2. Open its Manage Permissions dialog
3. Select the EVERYONE group and deny access to all permissions
4. Add the HR group to the Principals list
5. Select the HR principal and grant access to all permissions
6. Save and close the Manage Permissions dialog.

Appendix C: A Bit About Logic

Most of the time, report criteria are simple. It may be a single condition:

 Birthday equals 10/01/1963

 Last name equals Smith

 Sales greater than or equal to \$1,000.00

Or it can be a combination of conditions:

 Birthday equals 10/01/1963 and Last Name equals Smith

Notice the 'and' that joins the conditions. This means that both conditions must be true for the entire condition to be true. So, in this example, only people with a last name of Smith who have a birthday on 10/01/1963 would be included.

Change the 'and' to 'or', and it changes the outcome.

 Birthday equals 10/01/1963 or Last Name equals Smith

'Or' means that only one of the conditions must be true for the entire condition to be true. So, you would get anyone whose birthday is on 10/01/1963, along with everyone whose last name is Smith.

An easier way to think through complex logic is to use truth tables.

| AND | True | False | OR | True | False |
|-------|-------|-------|-------|------|-------|
| True | True | False | True | True | True |
| False | False | False | False | True | False |

Let's use our 'and' example first. This is our record:

| <u>Birthday</u> | <u>Last Name</u> |
|-----------------|------------------|
| 10/01/1963 | Smith |

The table will list our conditions at the top, and then whether the field value meets the condition (True) or not (False).

| | | |
|-----------------------|-----|-------------------|
| Birthday = 10/01/1963 | and | Last Name = Smith |
| True | | True |

Since we used 'and' to join our conditions, and both conditions are True, the entire condition evaluates to True.

Let's now assume our record to be:

Birthday Last Name
10/01/1963 Jones

| | | |
|-----------------------|------------|-------------------|
| Birthday = 10/01/1963 | and | Last Name = Smith |
| True | | False |

Because one of the conditions is False, the entire condition is False.

Now let's look at the 'or' condition.

Birthday Last Name
10/01/1963 Smith

| | | |
|-----------------------|-----------|-------------------|
| Birthday = 10/01/1963 | or | Last Name = Smith |
| True | | True |

An 'Or' statement requires only one condition to be true for the entire condition to be true. So, in this example, both conditions evaluate to True; therefore, the entire condition is true.

If we change our record again:

Birthday Last Name
10/01/1963 Jones

| | | |
|-----------------------|----|-------------------|
| Birthday = 10/01/1963 | or | Last Name = Smith |
| True | | False |

This would still evaluate to be True, because at least one of the conditions is True. For the entire condition to be False, both conditions would have to be False.

Birthday Last Name
8/2/1923 Jones

| | | |
|-----------------------|----|-------------------|
| Birthday = 10/01/1963 | or | Last Name = Smith |
| False | | False |

Because both conditions are false, the entire condition is False.

When using multiple conditions, the left-most condition is evaluated first, the next condition second, and so on. There may be times when combining more than two conditions with 'and' and 'or' you do not get the expected results.

Let's add first name to our database and condition

Birthday Last Name First Name
03/31/1980 Smith John

| | | | | |
|-----------------------|-----|-------------------|----|-------------------|
| Birthday = 10/01/1963 | and | Last Name = Smith | or | First Name = John |
| False | | True | | True |

In this example, we want anyone with a birthday of 10/01/1963, as well as anyone with the last name of Smith or a first name of John. Evaluating the conditions from left to right, this would result in a True condition, even though the birthday is not 10/01/1963.

To fix this, we could move the 'or' condition to the front so it is evaluated first, but there will be times when you are using a more complex set of conditions and will not necessarily be able to reorder them. It would be better to say that we want to evaluate the 'or' condition first before the 'and' condition without reordering our statement. To do that, we would use parenthetical grouping.

Parenthetical grouping means placing parenthesis around the conditions to force them to be evaluated first. It is the same principle that you learned in algebra where the mathematical operation inside the parenthesis is performed first. So, in our example, our condition would be

Birthday = 10/01/1963 and (Last Name = Smith or First Name = John)

The conditions in the parenthesis would be evaluated first and then that result would be combined with Birthday using 'and'. Given our example above, the entire condition would be False.

False and (True or True)

= False and True

= False

Appendix D: User Specific Keywords

User specific keywords include the following variables in the form {user.keyword}, where “keyword” can be any of the terms listed below:

- id
- firstName
- lastName
- email
- title
- username
- active

Appendix E: Date Specific Keywords

Use the date keywords below in your selection criteria. (+/- n) means days before or after the keyword. You may also use (+/- nM) to mean months before or after the keyword. For example, "TODAY – 7" evaluates to seven days prior to the current day. To specify one month in the future, use "TODAY + 1M".

| Keyword | Meaning |
|--------------------|--|
| TODAY (+/-n) | Will put the value of the date the report is run (plus or minus n number of days). |
| WEEK_BEGIN (+/-n) | Will put the value of the date of the beginning of the week the report is run. |
| WEEK_END (+/-n) | Will put the value of the date of the end of the week the report is run. |
| MONTH_BEGIN (+/-n) | Will put the value of the date of the beginning of the month the report is run. |
| MONTH_END (+/-n) | Will put the value of the date of the end of the month the report is run. |
| QTR_BEGIN (+/-n) | Will put the value of the date of the beginning of the quarter the report is run. |
| QTR_END (+/-n) | Will put the value of the date of the end of the quarter the report is run. |
| YEAR_BEGIN (+/-n) | Will put the value of the date of the beginning of the year the report is run. |
| YEAR_END (+/-n) | Will put the value of the date of the end of the year the report is run. |

| Keyword | Meaning |
|-----------------------|---|
| MONTH_AGO (+/-n) | Will put the value of the date of one month before the report is run. |
| MONTH_FROM_NOW (+/-n) | Will put the value of the date of one month after the report is run. |
| YEAR_AGO (+/-n) | Will put the value of the date of one year before the report is run. |
| YEAR_FROM_NOW (+/-n) | Will put the value of the date of one year after the report is run |