opentext™

OpenText™ Documentum™ Content Management

# Reports for Client User Guide

Use the Reports feature in the Classic View interface of the OpenText Documentum Content Management (CM) client to build and run reports or dashboards.

EDCREP250400-UGD-EN-01

**OpenText™ Documentum™ Content Management**
**Reports for Client User Guide**
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**This documentation has been created for OpenText™ Documentum™ Content Management CE 25.4.**
It is also valid for subsequent software releases unless OpenText has made newer documentation available with the product, on an OpenText website, or by any other means.

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# Table of Contents

Chapter 1

# Introduction

This guide describes the steps necessary for building and running reports or dashboards in D2 using Documentum Reports.

This guide is intended for end users who will be configuring and executing the Documentum Reports application in D2 environment. Users may require knowledge of the systems being reported on. For example, Documentum.

DCTM-Reports is the short name for Documentum Reports.

## 1.1 Documentum Reports architecture

Documentum Reports is a reporting tool designed to be simple to use with a graphical approach to help you create and generate reports. Documentum Reports supports many common data sources such as Documentum DQL and searches, SQL.

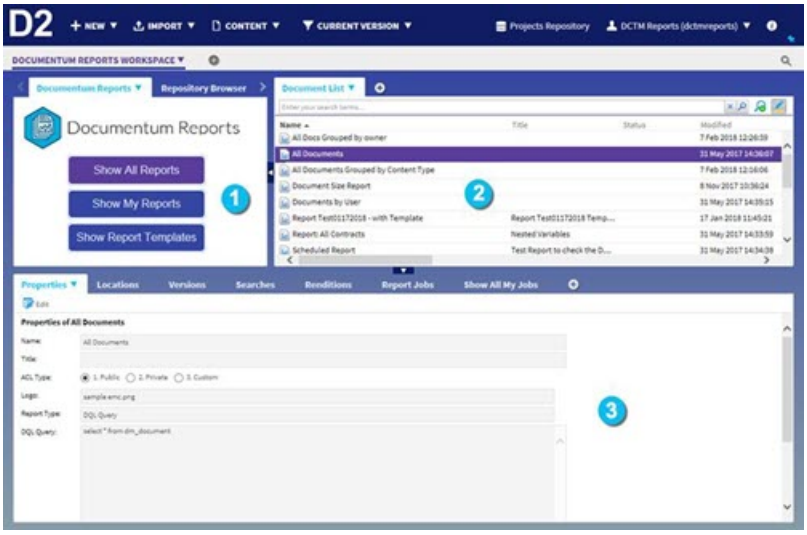
Chapter 2

# Documentum Reports workspace

## 2.1 Documentum Reports overview

The Documentum Reports module provides the capability to generate various kinds of reports with Documentum.

The Documentum Reports workspace is composed of three sections. To access this workspace, users must belong to the **dctm-reports-users** group.




**Section 1**: The Documentum Reports main menu has the following three buttons:

- **Show All Reports**: Shows all the Reports that you have permission to view.
- **Show My Reports**: Shows all the Reports that are owned by you.
- **Show Report Templates**: Shows list of pre-configured report templates available in the repository.

**Section 2**: The Document List view shows attributes information of the reports.

Following are some of the columns that are displayed in the Document List pane:

| Column name | Description |
|---|---|
| **Name** | This provides a user defined name of the report. |
| **Title** | This provides a user defined title of the report. |

| Column name | Description |
|---|---|
| **Created** | The date when the report was first created. |
| **Modified By** | Name of the user who last modified the report. |
| **Modify Date** | Defines when the report was last modified. |
| **Report Type** | This provides the type of report. There are two types of reports:<br>• Saved Search<br>• Query (DQL) |
| **Number of Jobs** | Shows the number of jobs that are scheduled for this report. |

**Section 3**: Contains other supporting widgets for Documentum Reports.

For example:

| Widget name | Description |
|---|---|
| **Properties** | Displays properties of the selected report. |
| **Locations** | Displays a list of directory locations in which the selected report is found. |
| **Versions** | Displays a list of the versions of the selected report. |
| **Searches** | Enables viewing, editing, and running past and saved searches. |
| **Renditions** | Displays a list of renditions of the selected report. |
| **Report Jobs** | Displays a list of jobs associated with the report. |

Documentum Reports makes use of the Right-Click (context) menu to interact with reports. If you need to create new, edit, execute, modify, or schedule a job for the report, select the desired report, right-click, and go to the options provided by the Documentum Reports menu item.

To **Create New Report**, select **DCTM-Reports (New)** menu.

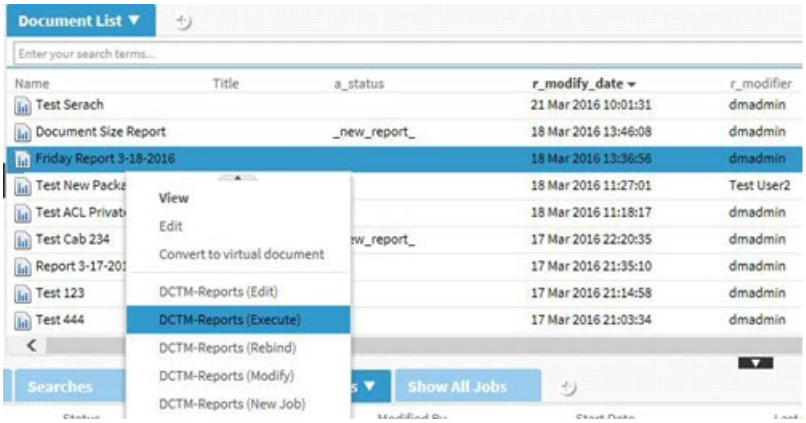
To edit, execute, update, or schedule a job for the report, select the following menu:

- **DCTM-Reports (Edit)**: Editing an existing report.
- **DCTM-Reports (Execute)**: Executing or running an existing report.
- **DCTM-Reports (Rebind)**: Updating the DQL query of an existing report.
- **DCTM-Reports (Modify)**: Rebuilding an existing report from scratch using the update DQL statement.

- **DCTM-Reports (New Job)**: Creating a Documentum Report job for the report.

Details on how to edit, execute, rebind, modify, and create a new job for Documentum Reports are described in the following sections of this guide:


- "Creating a dashboard" on page 21
- "Editing an existing report" on page 23
- "Executing a report or dashboard" on page 25
- "Rebinding a report or dashboard" on page 27
- "Modifying or reconfiguring a report" on page 29

Chapter 3

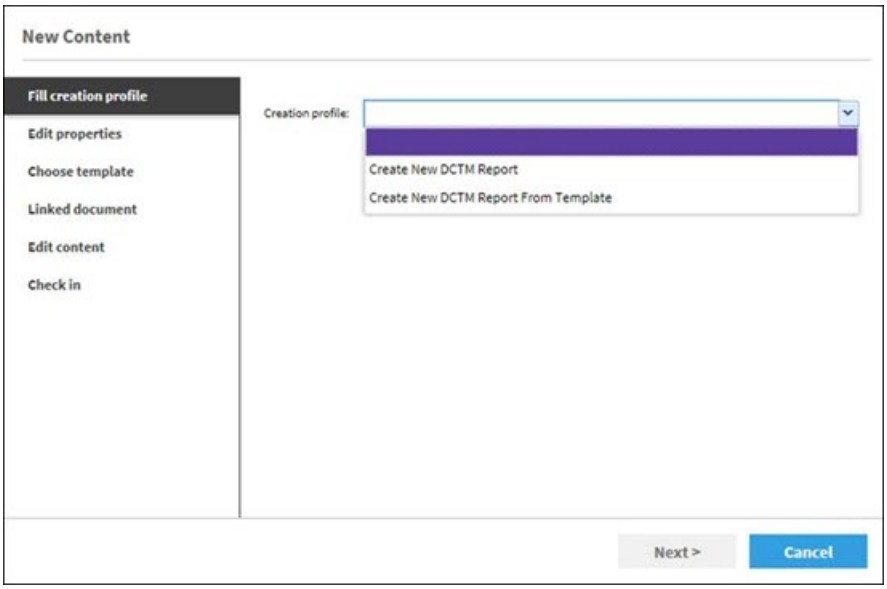
# Creating a report

This chapter describes steps to create a new report.

**Note:** This function is only available to the users in the **dctm-reports-designers** role.

1. To create a new report, select **New** > **Content**.
2. Select the appropriate creation profile from the **Creation Profile** list.
   - Select **Create New Report** to create a new report from blank.
   - Select **Create New Report From Template** to create a report based on a pre-configured template.

     **Note:** If you select **Create New Report From Template**, fields such as **Report Logo**, **Report Type**, **DQL Query**, and so on are not displayed on the **Properties** screen.




3. Select **Documentum Report** from the **DCTM-Reports Object Type Dictionary** list.
4. Click **Next**. The **Edit Properties** page opens.
5. Enter a **Name** for the report.
6. Enter the **Title** of the report.

7. Select the **ACL Type** for the report.
   - **Public**: Other users have read permission for the report.
   - **Private**: Only you have permission to view, edit, or delete the report.
   - **Custom**: Apply custom permission set to the report.
8. Select a logo from the list. This logo will be used in the report.
9. Select any of the following **Report Type** from the list:
   - DQL Query: If you select **DQL Query**, enter a DQL statement for the report.

     **Note:** If you are creating a report from a template, the DQL query will already be updated based on the selected template. Change the DQL query if required at this step.
   - Saved Search: If you select **Saved Search**, select a specific saved search from the list.
   - External Data Source: If you select **External Data Source**, add external data sources and other controls such as tables, charts, and indicators to filter and view specific data for more information.
   - External Database: If you select **External Database**, choose a connection name from the list and enter the query in the text field.
   - iHub Reports: If you select **iHub Reports**, choose an iHub connection name and save it with the selected default template. When you edit the **Properties**, select a specific report from within the selected connection and save the report.
10. After you select your report and specify the relevant information in the **Properties** page, click **Next**.

    A new report is created.
11. If you are creating a report from an existing template, select a template from the list of available templates and click **Next**.

    A new report is created.
12. Click **Show All Report** and the new report will be listed on the **Document List** pane.

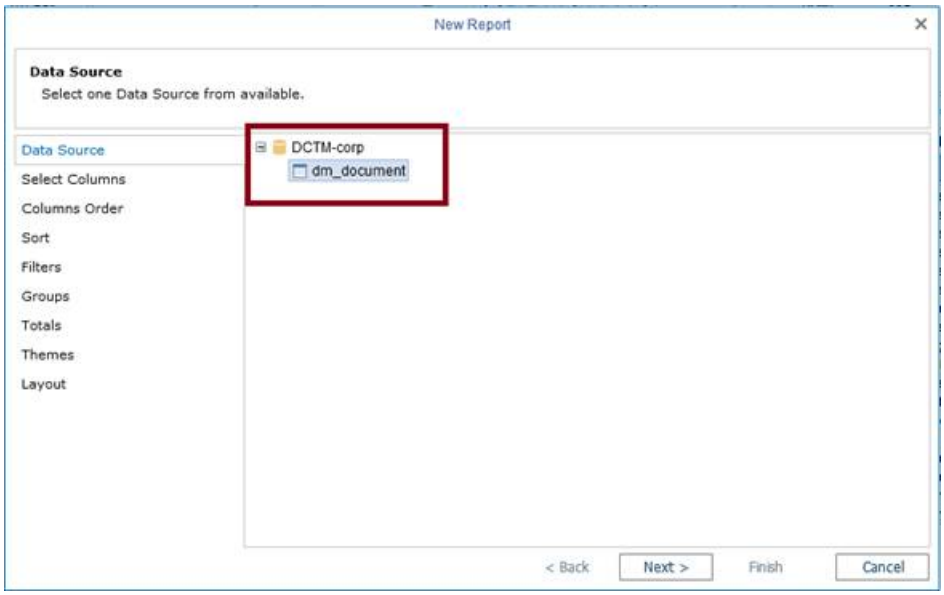
    **Note:** If you have created a report using an existing template, skip the following steps in this section and follow the instructions from the "Editing an existing report" on page 23.
13. Right-click on the Report object and select **DCTM-Reports (New)** from the context menu.

    The **Reports Designer** opens in the **New Report** window.
14. Select a data source from the available options.

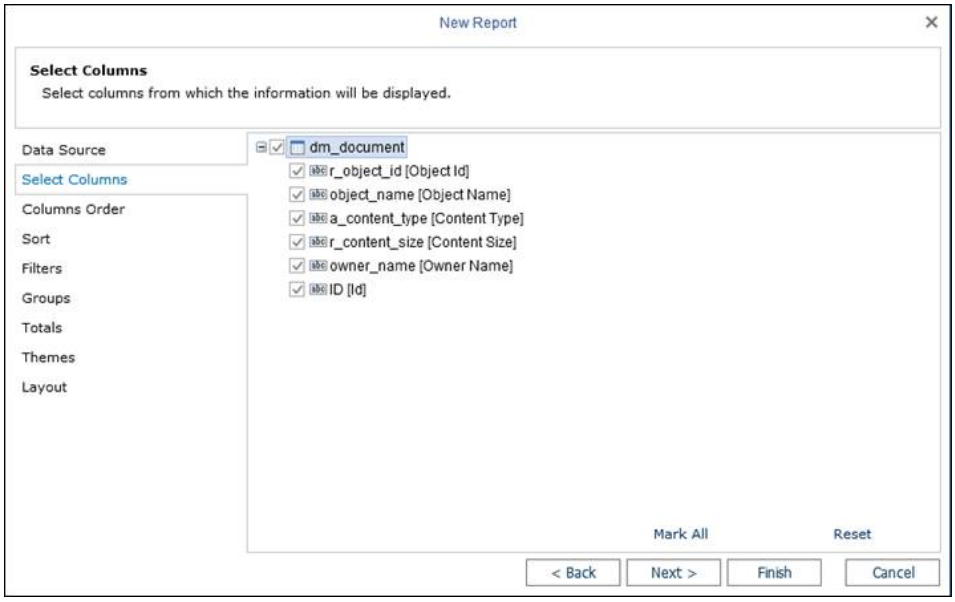
**Note:** If the data source is blank, it is either an issue with the DQL statement or the number of results returned is 0.

Note that you are creating a DQL Query Report from the statement.

Select *r_object_id*, *object_name*, *a_content_type*, *r_content_size*, *owner_name* from **dm_document**.




15. Click **Next** after you select the data source.
16. Select the columns (or data) you want to display in the report.



a. In this example, since you are running a report with selected attributes on **dm_document**, the columns to choose from are restricted to those attributes specified in the query. If you want to include additional attribute from the object type, use `Select * from <name of object_type>` instead.

b. If you want to select all columns, you can manually select all of them. Select **Mark All** or select the check box next to the top level item, which in this example is **dm_document**. If you want to reset what columns you had selected, click **Reset** to clear all check boxes.

c. After you select the columns, you can either click **Next** (which will proceed to the **Columns Orders** tab) or click **Finish** to generate the report using all the default settings. If you do not want to create a report, click **Cancel**. If you want to go back and choose a different data source, click **Back**.

17. After you have selected the columns, click **Next**.

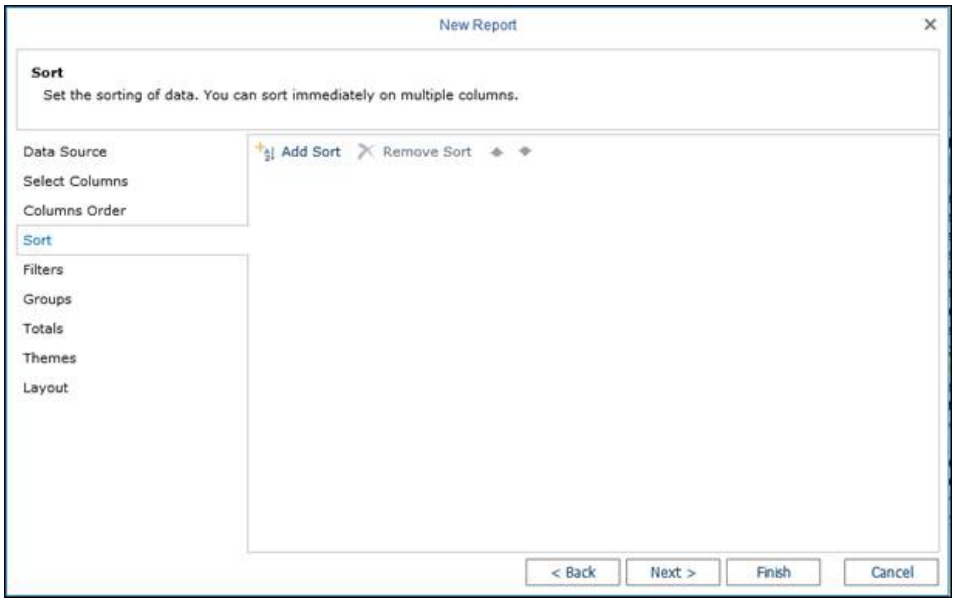
18. If you want to arrange your columns in a particular order on the report, do the following steps:

    a. Select the column you want to move.

    b. Click the **Up** or **Down** arrows to move it accordingly.

> **Note:** You can click **Finish** at any time to finish your design on the report. It will use the default settings for the remaining selections. You can also go to the previous page or exit the designer.

19. After you have arranged the columns, click **Next** to advance to the Sort configuration screen.

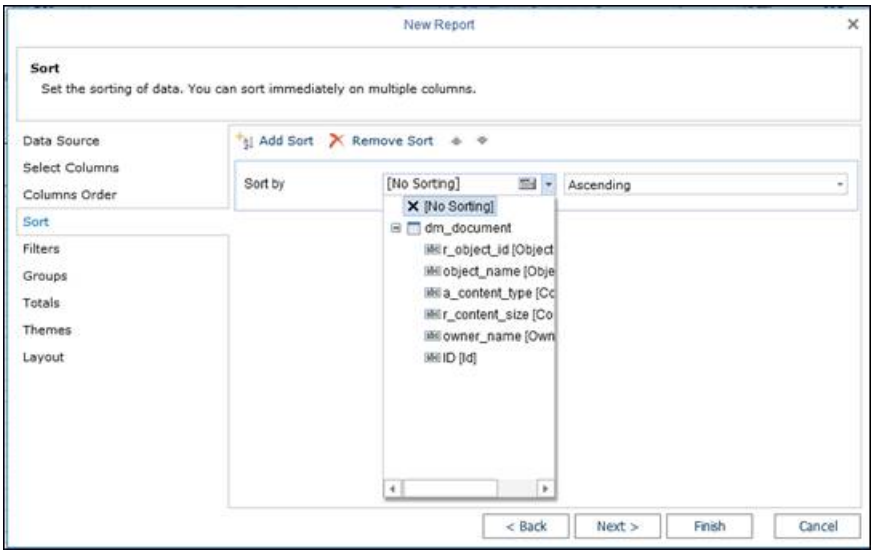



20. Configure the sort order for your data in the report on the following screen by doing the following:

a. Click **Add Sort**.

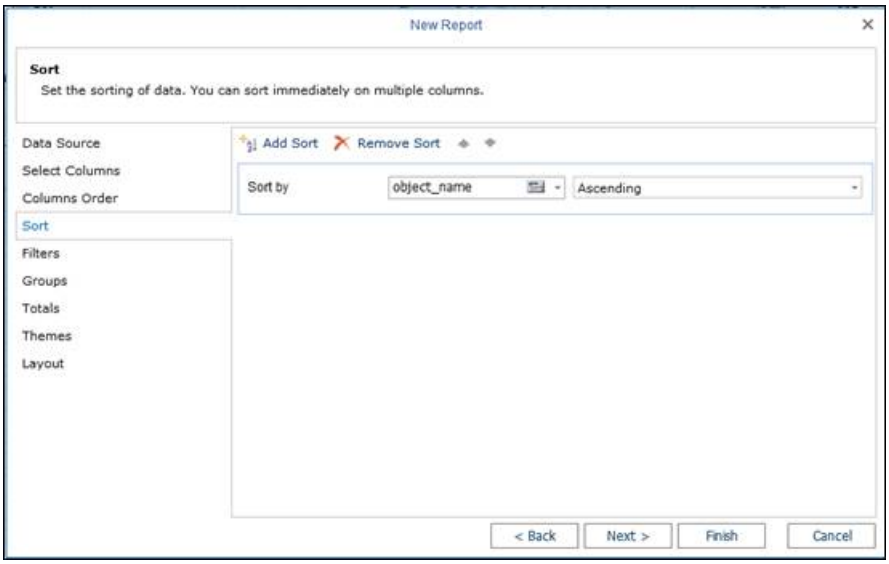
This adds a row in which you can set up sorting. If at any time you want to remove a sorting field, select the down arrow and move the field you want to remove to the bottom of the list and click **Remove Sort**.

b. You can sort any columns that you have selected from the **Select Columns** tab. Click the down arrow and select the attribute you want to sort. Find the column in the list and double-click it to add it to the **Sort By** window.



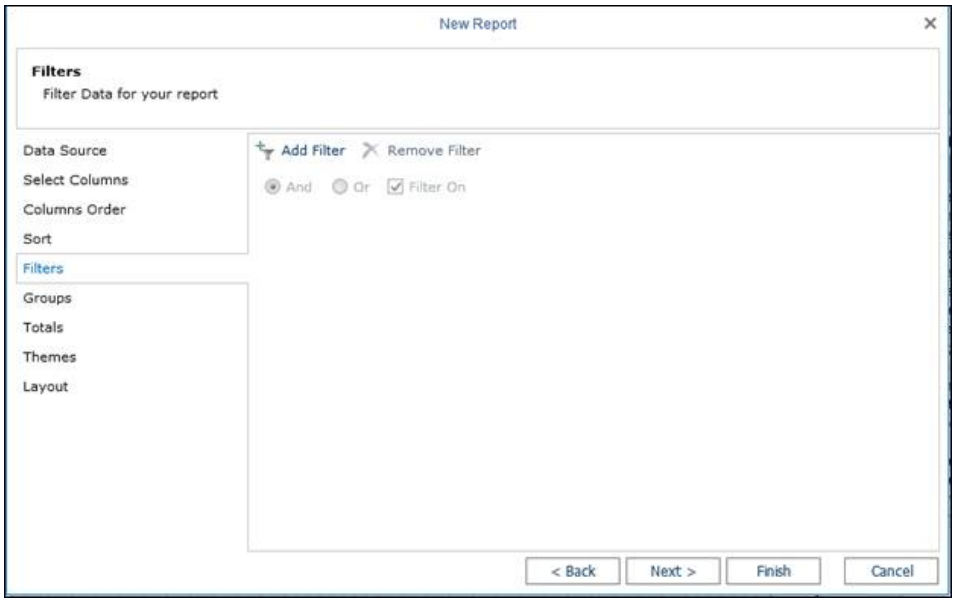

You can sort by either ascending order (default) or descending order.

In this example, the data in the report is sorted by object name in ascending order.

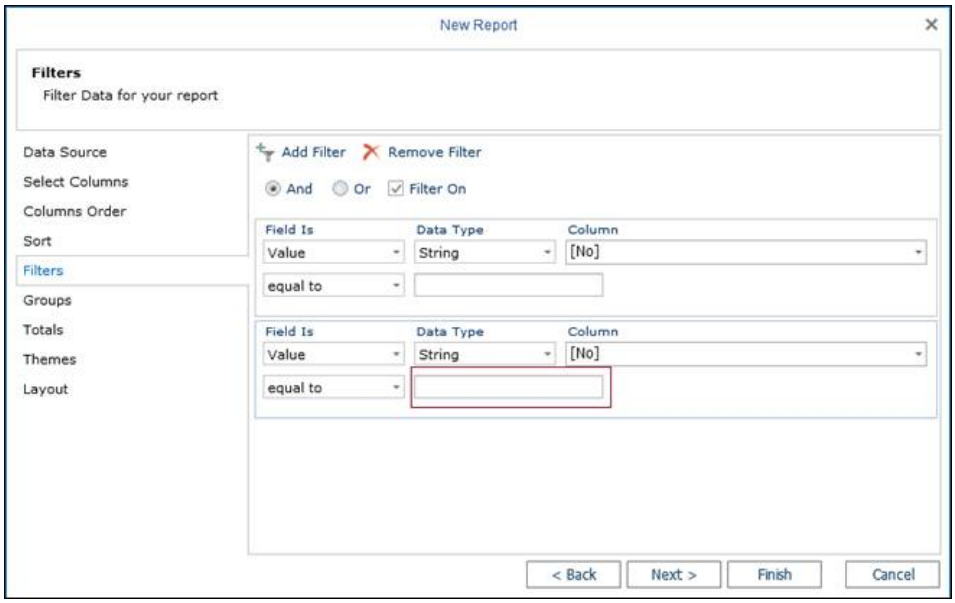


21. After completing the sort configurations, click **Next**.

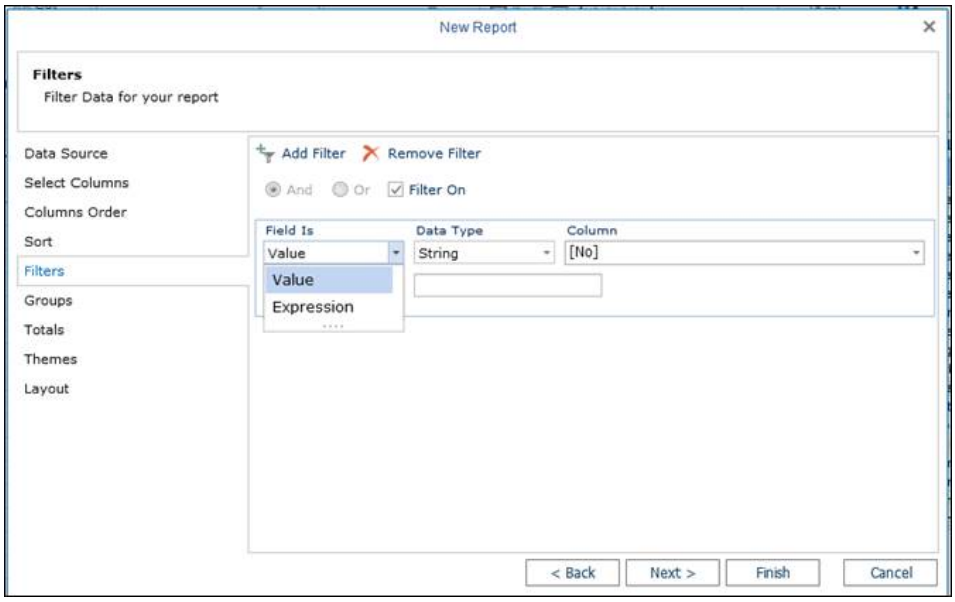
**Note:** You can apply filters to the data in your report.




22. Click **Add Filter** to add a filter to the report. If you want to remove a filter at any point, place the cursor in the text box and click **Remove Filter**.

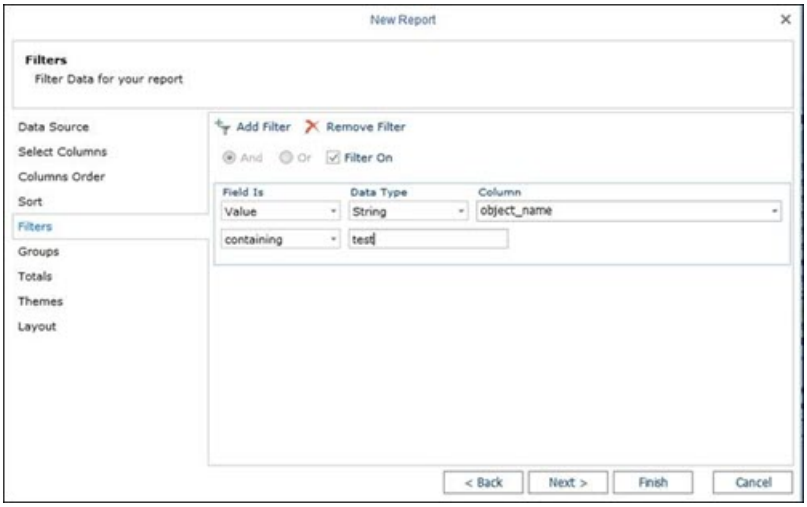



23. Select the relevant options in the **Field Is** column if you need to filter by a value or expression.




a. If you select value, click the **Data Type** list and select the data type from the available data types.

b. Click the **Column** list and select the column from which you want to filter the data.



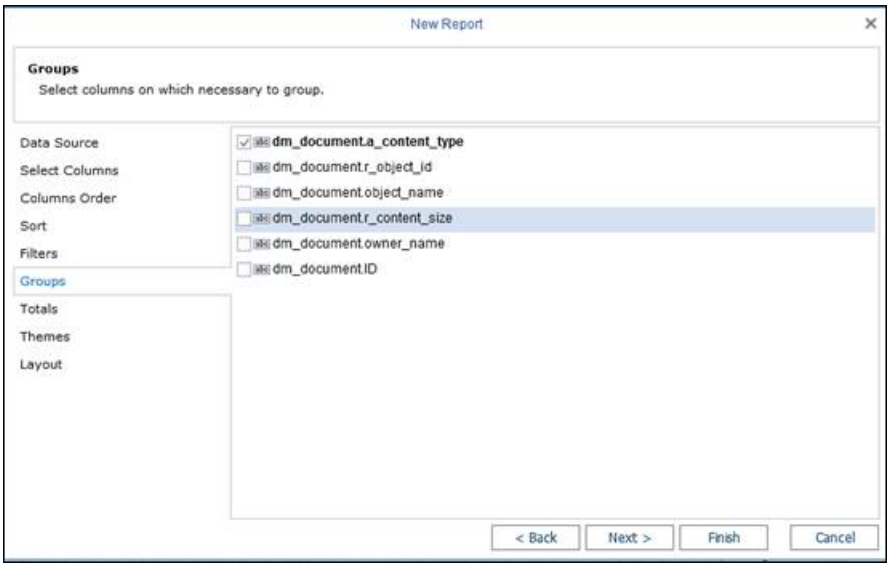

In this example, it is configured to filter all dm_document whose object name contains 'test'.

c. Click **Next**.

**Note:** You can group similar data together in an ascending order. In the case of Documentum, if you were returning the *a_content_type* attribute, you can group all documents together by content type.

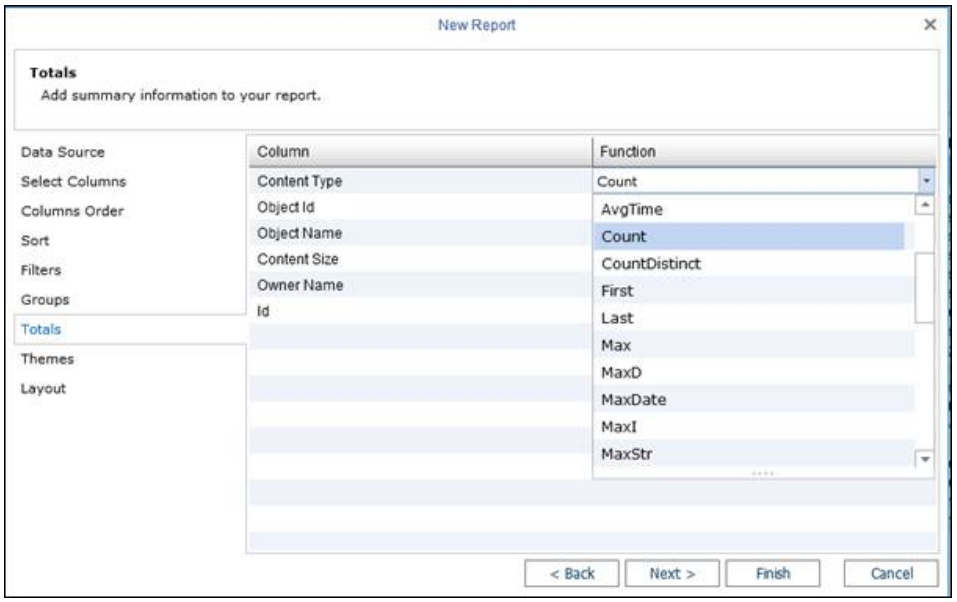
d. Select the column you want to group.

e. Click **Next**.




You can assign totals to your report. There is a variety of total expressions to choose from. One of the most common expressions is “Count”. This provides a total count of the number of object IDs for each document.

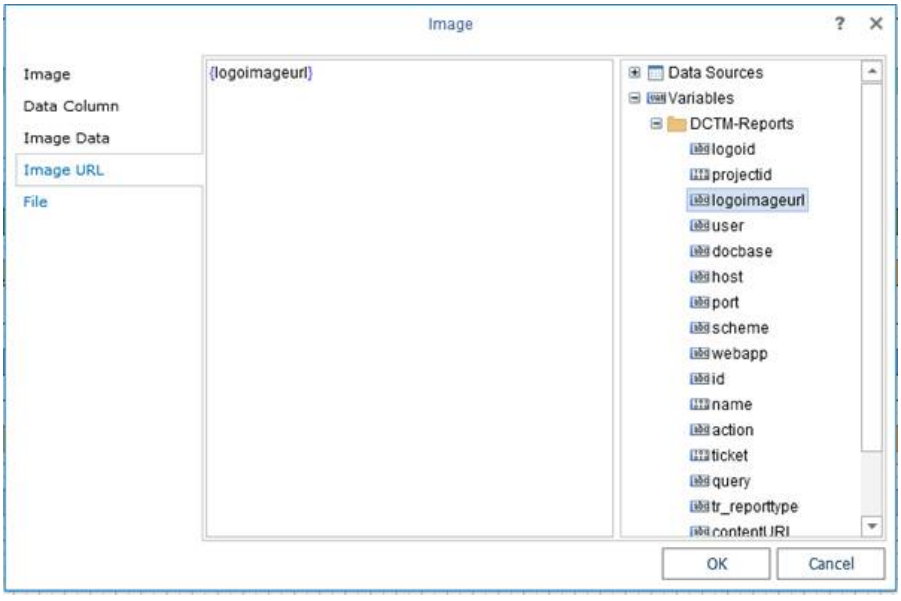
24. To choose a total expression to use, click **none** in the **Function** column for the row you want to total. A list of available functions appears. Select the expression.



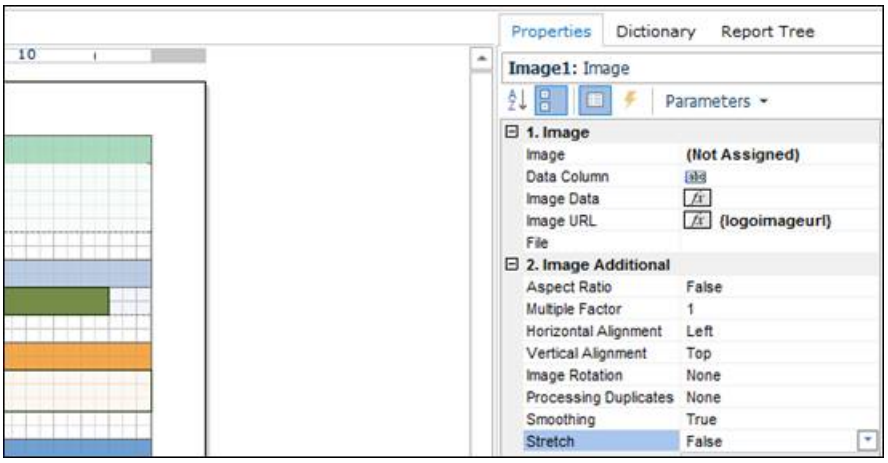

25. Click **Next**.

26. Select the theme for the report and click **Next**.
27. Select Portrait or Landscape orientation for your report.
28. Click **Finish** when complete to preview the report in the Designer.
29. If you want to modify the title of the report such as *dm_document*, double-click the field you want to modify.
30. Edit the title and click **OK**. The new title appears in the designer.
31. If you want to rearrange the display of the report, you can drag and drop any of the fields and column headers in order to rearrange them.
32. To add a logo to your report, click the **Image** icon from the toolbar on the left.
    a. Select a location where you want to place the logo. For example, the top left corner of the report.
    b. Draw a rectangle and the **Image** dialog box appears.
    c. Click **Image URL**.
    d. In the right hand pane, click **Variables** > **DCTM-Reports** and double-click **logoimageurl**.

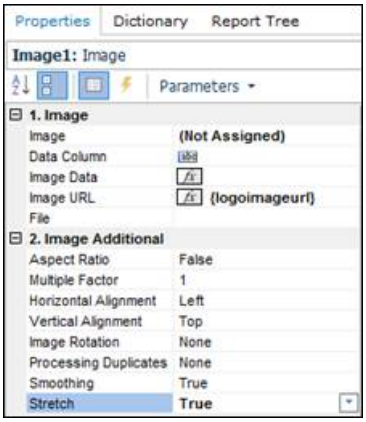
       The *logoimageurl* parameter is displayed as the value of the Image URL.




    e. Click **OK**.
    f. On the right hand pane, select **Properties** > **Stretch**.




g. Change the value from **False** to **True**.




33. Click **Preview** tab to preview the report.
34. Select the **Page 1** tab and click **Save Report** in the top left hand corner.
35. When complete, close the **Designer** Window or tab to exit the designer.
36. Go to Documentum. Click **Show My Reports** to refresh data in the **Document List** pane. The Report you generated will be listed on the screen.

Chapter 4

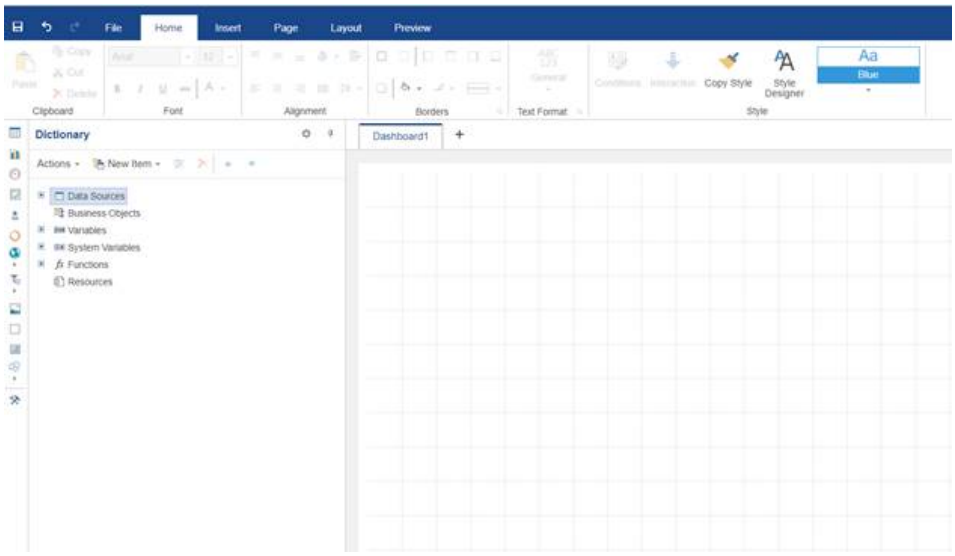
# Creating a dashboard

**Note:** This function is available only to users assigned to the **dctm_reports_designer** role.

Only HTML5 framework is supported for dashboards.

You must create a report before creating a new dashboard. See the first few steps in Creating a Report to create a new report.

1. If you are creating a report from a blank template, the **Report Designer** is displayed in a new report window.
2. Close this window and select **Blank Dashboard** or any other predefined dashboard templates and click **OK**.
3. Click **Save** and provide a name for your dashboard, preferably ending with "dashboard" to easily identify it from other reports. For example, my_dashboard.




4. Add external data sources and other controls such as tables, charts, and indicators to filter and view specific data. For more information, see Adding External Data Sources.

Chapter 5

# Editing an existing report

**Note:** This function is available only to users assigned to the **dctm_reports_designer** role.

Documentum Reports allows you to edit any of your reports after creation.

1. Go to the **Report Document List** view.
2. Select the required report, right-click, and select **DCTM Reports (Edit)** from the context menu.

   Report opens in the designer where you can make updates to it.
3. If you want to modify any of the column headers displayed in the Header section of the report such as rename Content Type to Type of Content, double-click the field you want to modify and enter the text.
4. Click **OK** when finished.

   The new column name appears in the designer.
5. Click the **Preview** tab to preview the report.
6. After you edit the report, click **Save Report** on the top left hand corner.
7. Close the Designer window or tab to exit the designer.

Chapter 6

# Executing a report or dashboard

Documentum Reports allows you to execute any report that is created. When you execute a report, the report is generated and displayed in the web browser.

Executing a report is different from editing and viewing because the report does not open in the designer, but instead is generated and displayed on the web page.

To execute a report, go to the **Report Document List** view and select the report you want to execute.

Chapter 7

# Rebinding a report or dashboard

This function is only available to the users in the **dctm-reports-designers** role.

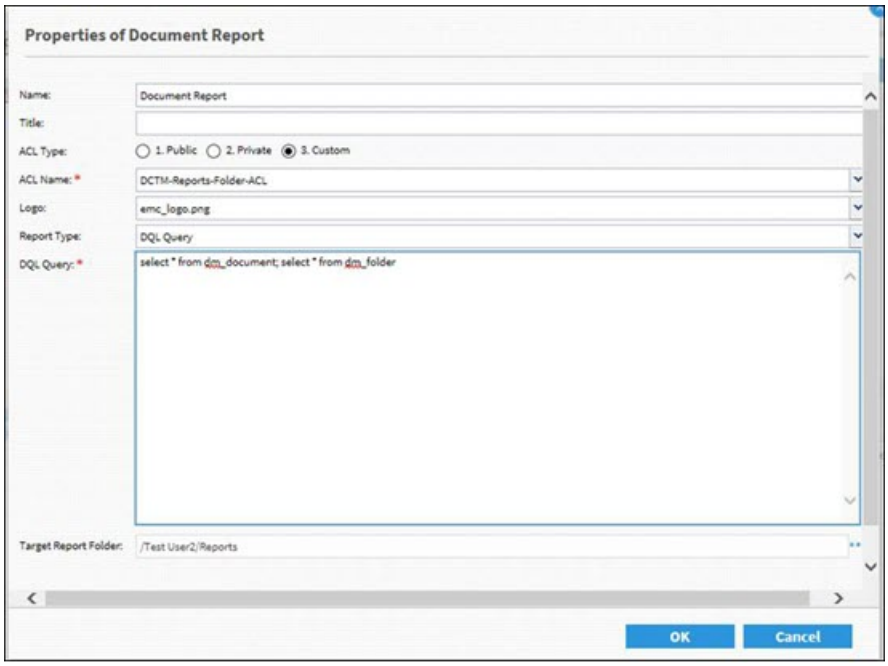
**Note:** This chapter is not applicable for iHub reports.

Documentum Reports allows you to modify the DQL statement(s) as well as update the report that has already been created.

After you create your report, if you want to add another DQL statement or change the query of the report, you can make this change very easily by using the rebind function, instead of having to create the report from the beginning.

Complete the following steps to rebind an existing report to an updated data source/ DQL query:

1. Go to the **Report Document List** view and select the required report to rebind the data.
2. Right-click and select **Properties** from the context menu.
3. Update the DQL statement in the **DQL Query** field.

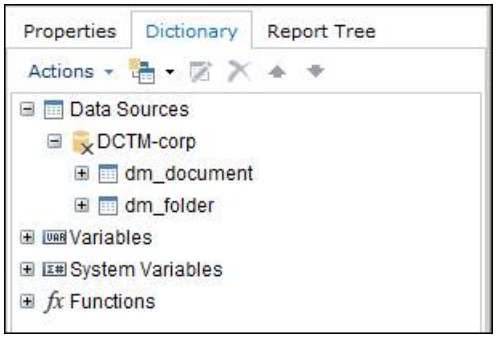



4. Click **OK** to save the properties. Go to the **Report Document List** view and select the report for which you just changed the DQL query.

5. Right-click and select **DCTM-Reports (Rebind)** from the context menu.

   The report is opened in the designer where you can make updates.

6. Select **Dictionary** > **Data Sources** > **DCTM-corp (Name of the Repository)** in the right panel. There are two object types that you can use to design your report.




7. Use the steps described in **Creating a Report** to complete the report configuration.

Chapter 8

# Modifying or reconfiguring a report

This function is only available to users in the **dctm-reports-designer** role.

After you have configured the report, if you want to re-format the report using the same report object, you can perform it using the **Modify** action.

Re-format an existing report using the following steps:

1. Go to the **Report Document List** view and select the report you want to modify.
2. Right-click and then select **DCTM-Reports (Modify)** from the context menu. The **Reports Designer** displays the **Create a New Report** window.
3. Complete the report configuration using the process described in Creating a Report.

Chapter 9

# Adding external data sources

You can add an external data source while creating or editing a report or dashboard.

To add an external data source, do the following:

1. Click **New Data Source** and select the type of connection from the list of options.
2. Enter a name for the connection and provide the following details in the connection string box relevant to the selected connection:
   - Server Address
   - Database name
   - Username
   - Password
3. Select the **Test connection** check box alongside the connection string box to test a successful connection.
4. Select the data to display from the data source and click **OK**.
5. Preview the data and click **Finish** to complete adding an external data source.

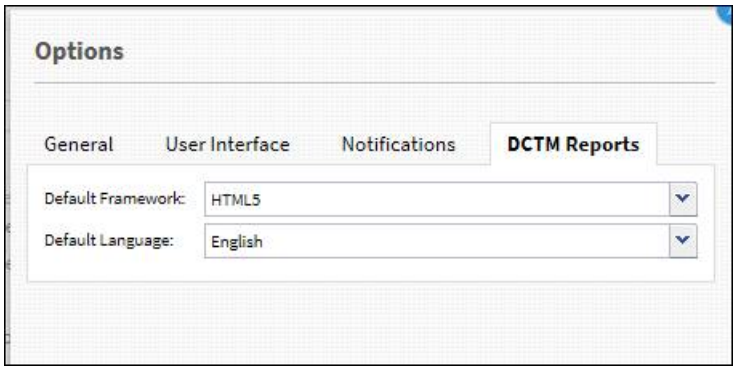
Chapter 10

# Configuring user preferences

Documentum Reports allows you to set your user preference on the Report Designer.

You can set the language and the type of framework viewer you want to use. By default, Documentum Reports uses the Flash Framework.

1. Login to D2.
2. Click **User Settings**.
3. Select the **DCTM-Reports** tab.




4. Click the **Default Framework** list and select the required default framework for the Designer.
5. Click the **Default Language** list and select the required default language to be used in the Designer.
6. Click **OK** when complete.

## 10.1 Creating an iHub connection

iHub is integrated into Documentum Reports and the reports created using the iHub designer can be viewed or executed within Documentum Reports using the iHub Viewer.

To create an iHub connection, do the following:

1. Login to D2 and go to **DCTM Reports (dctmreports)** in the left pane.
2. Click **User Settings** and select the **DCTM-Reports** tab.
3. Select the **iHub Connection Configuration** tab.

4. Update the following fields to add a new connection or edit an existing one:
   - Connection Name
   - iHub Server URL (iPortal) (Example: http(s)://<host>:<port>)
   - REST URL (Example: http(s)://<host>:<REST port>)
   - User Name
   - Password
5. Select the blank value from the **db_type dropdown** menu in the **DB Connection Configuration** tab.
6. Click **OK** to save the connection.

**Note:** You must provide a valid iHub user credentials to view an executed report.

## 10.2 Creating an external database connection

You can create an external database to create a report to be viewed within Documentum Reports.

To create an external database connection:

1. Login to D2 and go to **DCTM Reports(dctmreports)** in the left pane.
2. Click **User Settings** and select the **DCTM-Reports** tab.
3. Select the **DB Connection Configuration** tab.
4. Update the following fields to add a new connection or edit an existing one:
   - Connection Name
   - DB Type – Select from the following databases:
     - Oracle
     - SQL Server
     - MySQL
     - PostgreSQL
   - DB Host
   - DB Port
   - DB Name/ServiceName (Oracle)
   - DB Username
   - DB Password
5. Click **OK** to save the connection.

Chapter 11

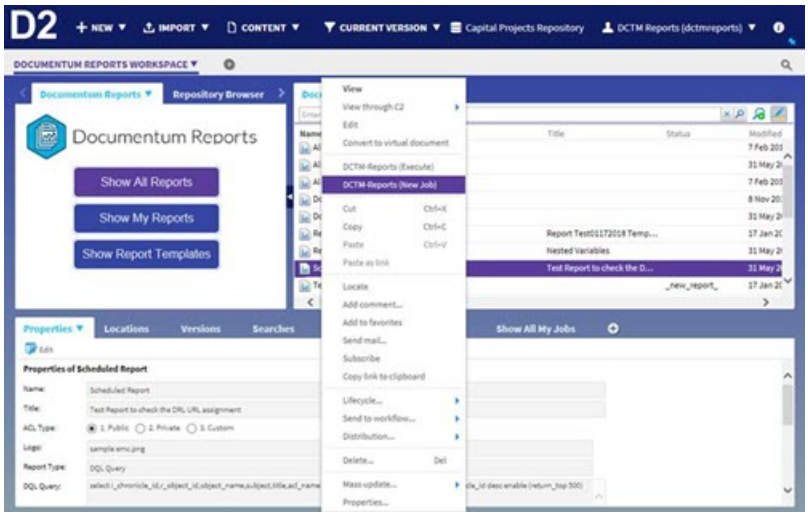
# Configuring a report to run as scheduled Job

Documentum Reports allows you to execute any existing report as a scheduled job. You must be a member of the Documentum Reports Job Role (**dctm_reports_job**) to configure a report to run as a job.

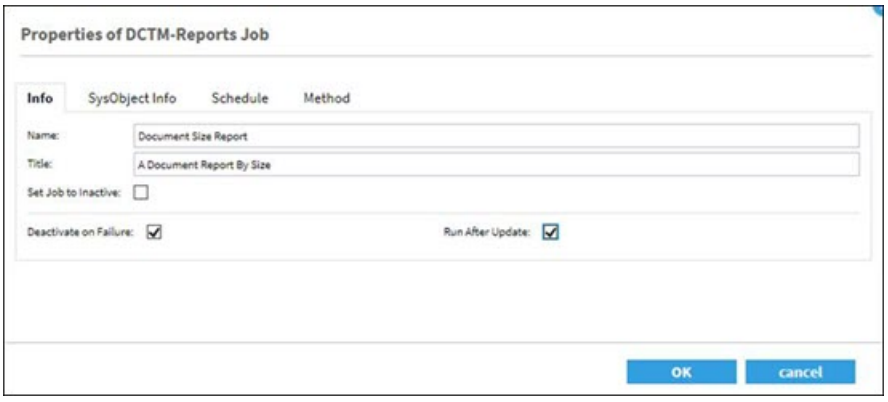
**Note:** This chapter is not applicable for iHub reports.

Perform the following steps to configure a report to run as a scheduled job:

1. Go to the **Report Document List** view and select the required report to create a new report job.
2. Right-click and select **DCTM-Reports (New Job)** from the context menu.




3. **Job Properties** dialog box opens.
   a. The **Name** of the job is pre-populated. You can update it if necessary.
   b. Enter the **Title** of the job.
   c. For the **Set Job to Inactive** check box, decide if you want this to be an active or inactive job. Active is the default setting.
   d. For the **Deactivate on Failure** check box, decide if you want the job to deactivate if a failure has occurred.
   e. For the **Run After Update** check box, decide if you want to run the job after updating the properties of the job.




4. Select the **SysObject Info** tab.

   a. By default, the **Report Object** type is set to **dm_document** object type. Select the Documentum object type that you want to save the results as, when the report is executed as a job.

      In this example, there are two values in the **Report Object Type** list. These values are configured using the **DCTM-Reports Job Rendition Object Type dictionary**.

      **Note:** If the custom object type has any mandatory attributes, perform the following steps, otherwise proceed directly to step 4.j.

   b. In this example, a custom object type **Controlled Document** is selected.

   c. Notice **Rendered Reports Attribute Name(s)** and **Rendered Reports Attribute Value(s)** list boxes are displayed.

   d. Click the button next to **Rendered Reports Attribute Name(s)**. **List Assistance** dialog box opens.

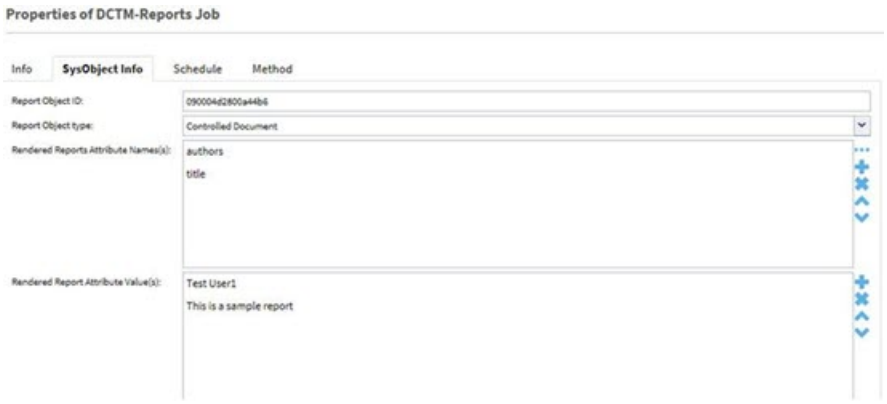
   e. The value(s) in the list box are configured using the DCTM-Reports Rendered Reports Mandatory Attributes Dictionary object.

   f. Click the button to move all values to the right.

   g. Click **OK**.

   h. Click the button to add attribute value(s).

   i. Click **OK**.




**Note:** Ensure that the value added in this list corresponds to the attribute names list.

j. Click the button next to the **External User(s)** field to enter the email address for the external user(s) who should receive the Report after this job has completed successfully.

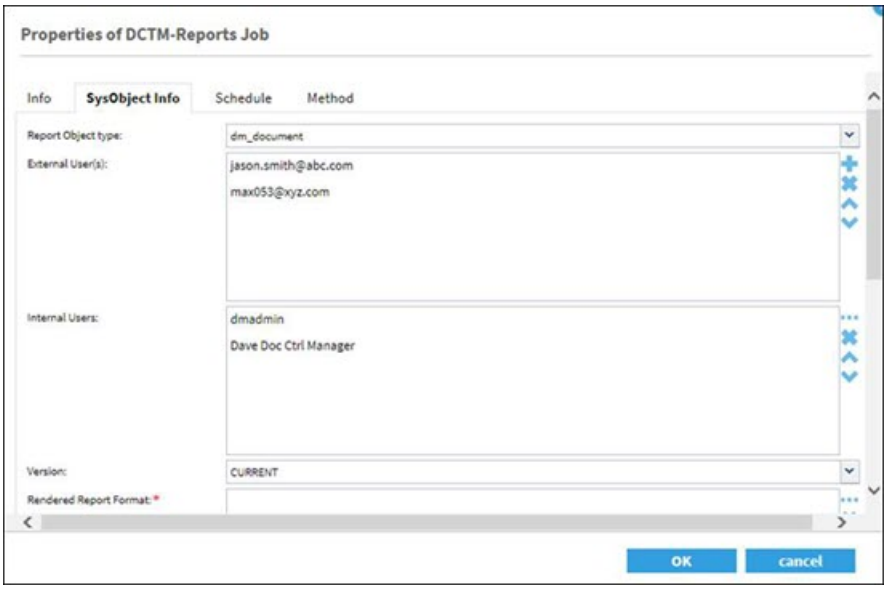
k. Enter the email address of the recipient and click **OK**.

l. Repeat the preceding steps to add more email addresses if you want to send the report to multiple recipients. When the job is executed successfully, the report(s) generated in all requested formats will be sent as an attachment(s) to this distribution list.

m. Click the button next to **Internal Users**. **User Selection** dialog box displays.

n. Select the Documentum user(s)/group(s) you want to send the report notifications to from the list on the left and add them using arrow buttons in the middle. You can enter the first few letters of the name of the user in the filter field to search for specific user(s).

o. Click **OK** after you select internal users to notify. A DRL/Link for the report document stored in the repository will be sent to all internal users when the Report job is successfully executed.




p. Click the button next to **Rendered Report Format**. **List Assistance** dialog box opens.

q. Select all the formats in which you want to save the reports results from the list and click the right arrow to add it to the selected formats table.

r. Click **OK** when complete.

s. Click the button next to **Target Report Folder** to launch the folder selection dialog box.

t. Select the folder location where you want to save the renditions of the report.

u. Click **OK** when you have completed the repository folder selection.

5. Select the **Schedule** tab.

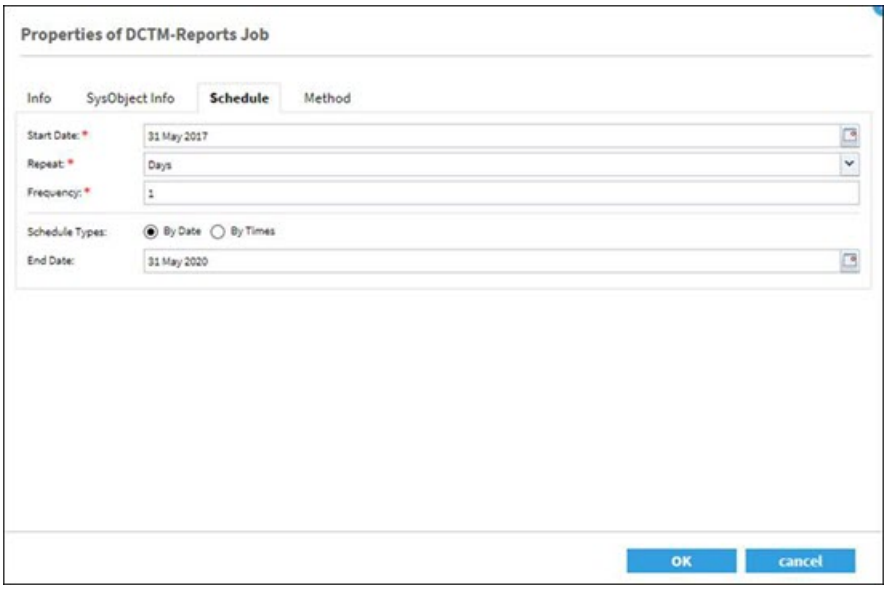
a. Select a start date for the job to start executing. Click the calendar icon and a calendar displays to assist in selecting a date.

b. Select the frequency at which you want to run the job from the **Repeat** list. You can select Minutes, Hours, Days, Weeks, Months, or Years.

c. Select/Enter the desired value for the **Frequency** field. This is treated as a unit of the repeat parameter. If the **Repeat** is set to Minutes and **Frequency** is set to 45, the job will automatically run every 45 minutes.

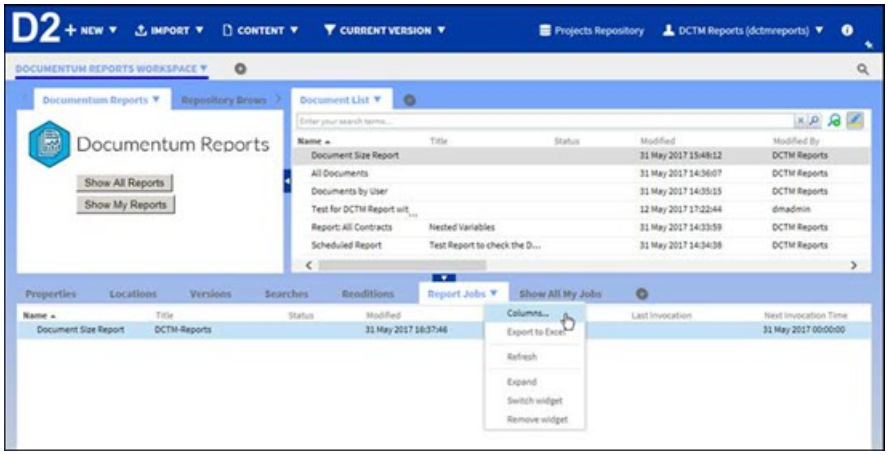
d. Select the appropriate options from the scheduled types if you want to end the job at a particular date or after a certain number of runs.

e. Based on the preceding selection, enter a specific date if you want to stop job execution on that date or enter the numeric value if you want to stop the job execution after the job has run a certain number of times. If no value is entered in this field, the job will continue to run indefinitely at the selected frequency.




f. Click **OK** to finish the job configuration.

6. Click **Show All Reports**.
7. Select the report object in the **Report Document** list pane.
8. You can verify that the newly created report job is listed in the **Report Jobs** widget.
9. You can add more attribute columns related to the job by right-clicking on the Report Jobs widget header and selecting columns from the context menu.




10. If you have access to the Documentum Administrator (DA) tool, you can login and verify if the jobs have been scheduled.
11. Select the **Jobs** node and either select **DCTM-Reports** from the filter list or search for the name of the job you have set up.

12. After the report job has executed, go to the location you selected for your rendered report to be created.

Chapter 12

# Migrating reports between repositories

Documentum Reports can be migrated from one environment to another by importing them to a Composer Project and install the DAR file in a different Documentum repository.

Chapter 13

# Advanced configurations

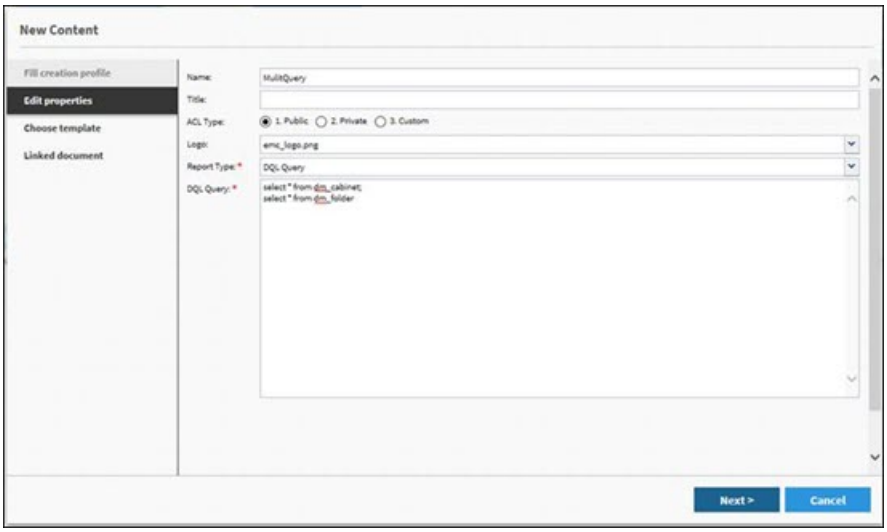
## 13.1 Multiple queries

You can specify multiple queries in the DQL query/External Database window by separating them with a semicolon (;) and prefixing them with a label in curly braces ({}). If you are creating two different queries with the same table name, label them uniquely to distinguish between them. The following sample shows that two queries will be executed and provided as separate data tables in the data source.

If you wish to name the result data table, prefix the name before the query with curly braces ({}).

By default, the names are the table names used in the queries.

One for **dm_document** objects and one for **dm_folder** objects.

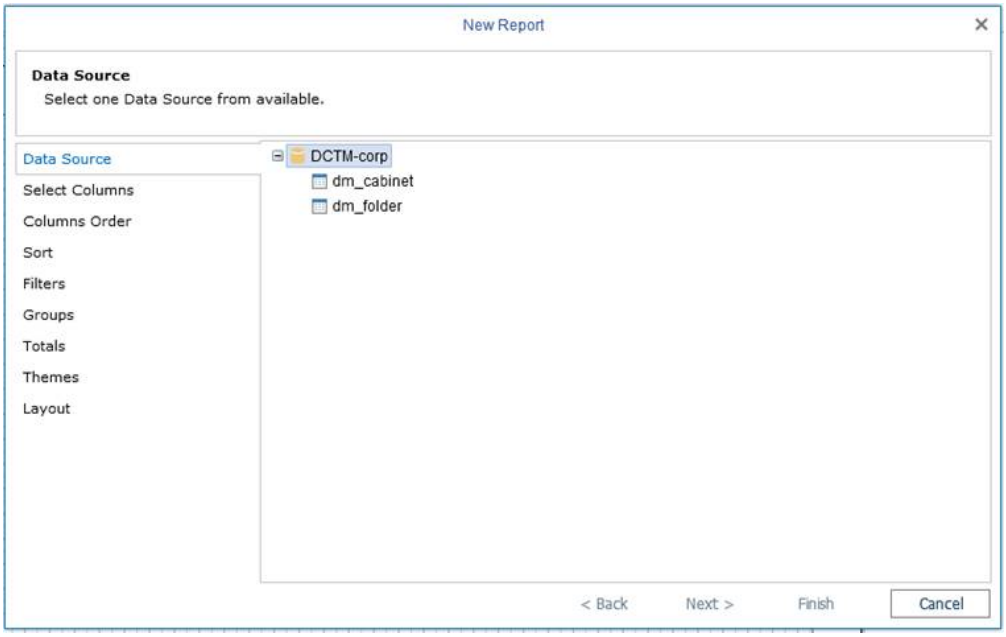



**Note:** A semicolon is not required after the last DQL query.

After you open the Report Wizard, each object type will show up and is available for selection.

The following dialog box shows two data sources from the preceding two objects queried.

Either data source can be used in the report.




In addition, you can rename the data source by using {}. For example, `{Cabinet}select * from dm_cabinet;`.

**Note:** The name of the data source inside the {} cannot have a space.

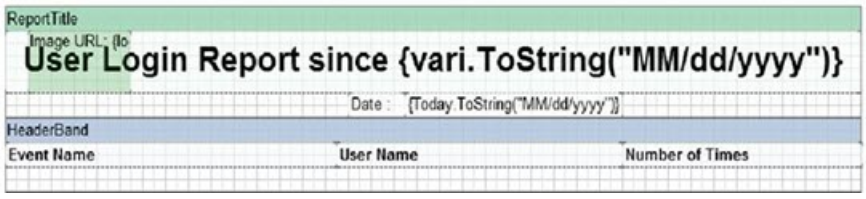
## 13.2 Format Date string

By default, the Date string will include a time stamp.

If you want to remove it, use the following syntax:

```
{...ToString("MM/dd/yyyy")}
```

In the following example, the Today date is being modified to show just the date. Thus {**Today.ToString("MM/dd/yyyy")**}.




The timestamp is removed as follows:


## 13.3 Parametric Query

Parametric Queries are a special syntax that Documentum Reports extends to the DQL queries to allow parameters to be used as part of the query and it can be prompted for, while running the report.

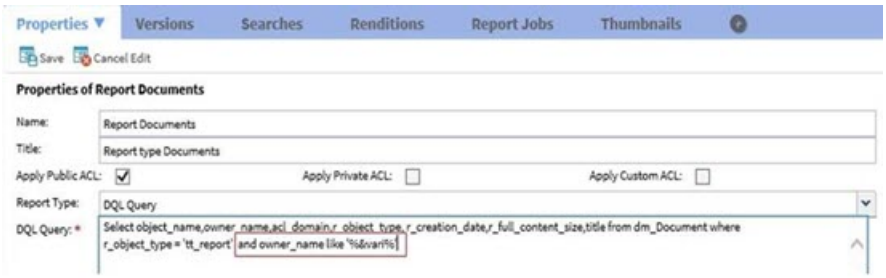
A sample query with parameters is shown as follows:

To create a report with Parameterized DQL, you must first create a normal report as shown earlier in this document.

If you have designed and created the report without any DQL Parameter, then you can edit the report to add a parameter in DQL.

1. Select **Report in Document List**, go to the **Properties** tab, and click **Edit**.

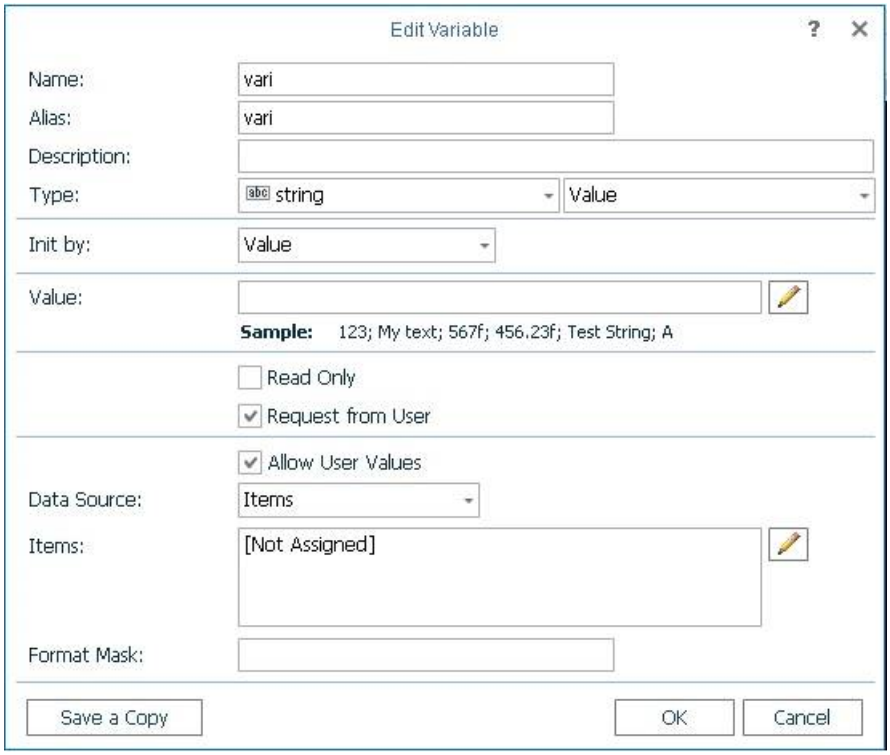

2. Add a new condition or append a condition in the existing DQL as follows and click **Save**.



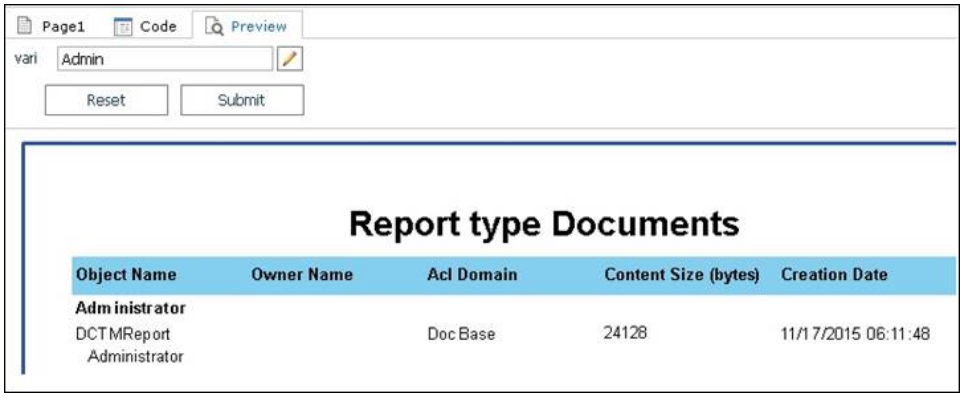

3. As condition here is shown as an example of **like**, we can also use "**=**" and can remove "**%**" from it. For example, *owner_name = '&vari'* where "**&**" is must to identify parameter name and **&vari** can be renamed to **&owner_name**.

4. Right-click on the report in the **Document List** tab and click on **DCTM-Reports (Rebind)** as we have updated the DQL.

5. The Report is in Edit mode. Go to **Dictionary** > **Variables** and create a new variable with the same name of the parameter used in DQL as follows:



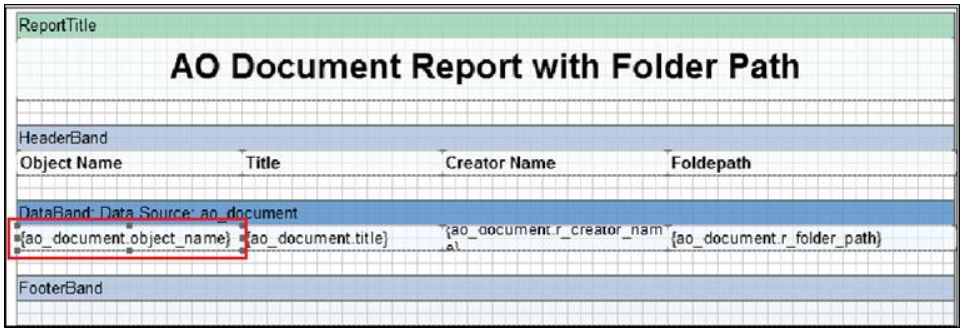

6. Select the **Preview** tab and specify the parameter.



## 13.4 Add hyperlink

You can add a hyperlink on the document name and it will display the content of the document object.

1. Select the field where you want to use the hyperlink.



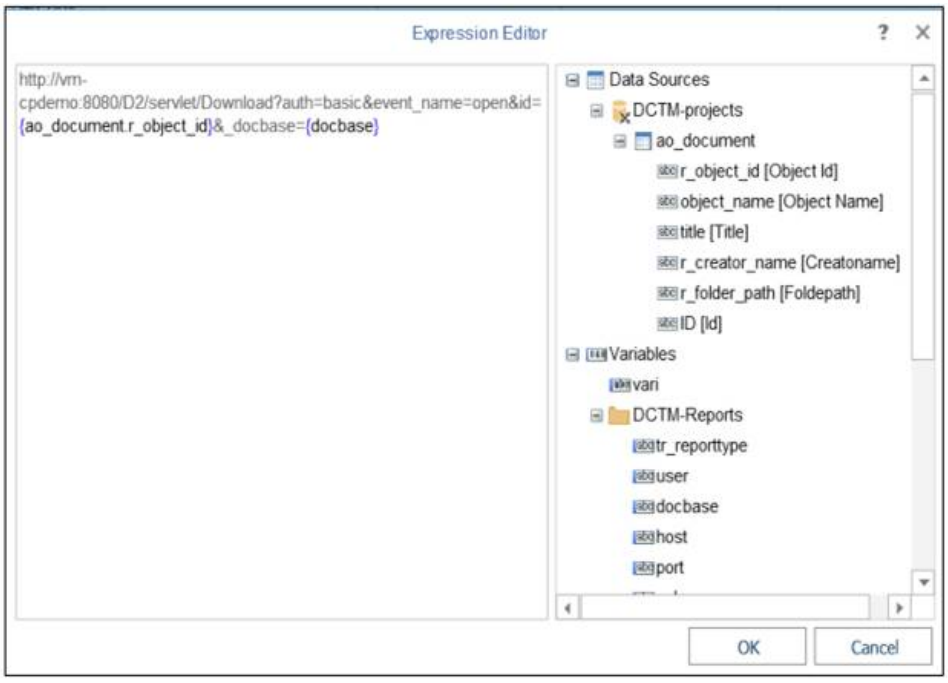

2. Go to **Properties** > **Interaction** > **Hyperlink** in the right panel.

3. Click the  button and add the following URL to the field:

   `http://<hostname>:<port>/D2/servlet/Download?auth=basic&event_name=open&id={ao_document.r_object_id}&_docbase={docbase}`

   Update the <*hostname*> and <*port*> number with appropriate values in the preceding URL.

4. Replace *`{ao_document.r_object_id}`* with your *`<object_type>.r_object_id`* from Data Sources > DCTM-Reports.




5. Click **OK**.
6. Save and preview the report.
7. When you position the mouse pointer over the object name, you can click to open the document. The document will be opened. You may be prompted for authentication.

## 13.5 Create relation

The relation describes the relationship between data sources.

For example, in the sample Report, there are two DQL statements:

select * from dm_document where a_content_type in (&vari);

select * from dm_format order by name

Preview the report and you will see the name of the content type field.

**Document Report**

| Object Name | Owner Name | Content Type |
|---|---|---|
| Default XML Application | dmadmin | xml |
| delete.xml | dmadmin | xml |
| cancelcheckout_dm_message_archive.xml | dmadmin | xml |
| checkin_dm_message_archive.xml | dmadmin | xml |

If you want to display the full name of the content type, we will setup a relation between the *dm_document* and *dm_format* data sources.

1. Open the Report Designer to edit the report.
2. Select the **Dictionary** tab on the right panel.
3. Click the ⊞ button next to the **Data Sources** node.
4. Click the ⊞ button next to the **DataSource Type** node and select the appropriate data source node.

   There are two data sources for this report.

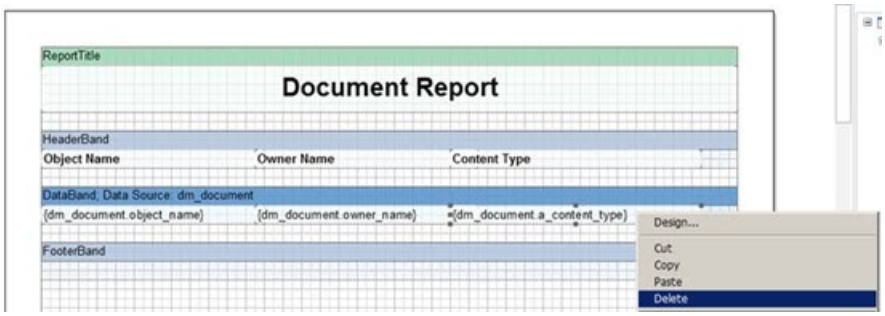
   **dm_document**: displays all the attributes that you can use from the *dm_document* object type.

   **dm_format**: displays all the attributes that you can use from the *dm_format* object type.

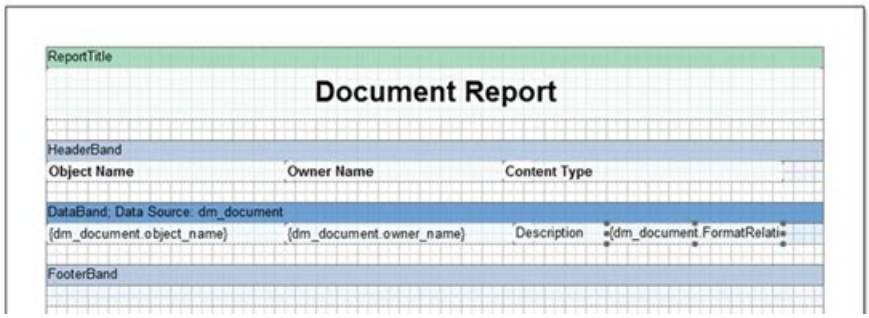
   The *dm_document* data source consists of the *a_content_type* data column. We can display the full name of *a_content_type* in the report by looking up the description in the *dm_format* data sources.

   Go to **Data Sources** > **DCTM-projects** and expand the **dm_document** node.
5. Right-click on **dm_document** and select **New Relation** from the context menu.
6. Enter a value for the following fields:

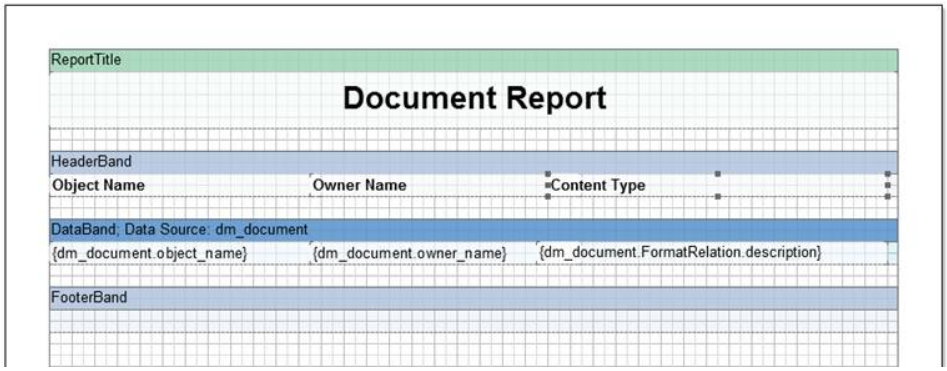
   - **Name in Source**: FormatRelation.
   - **Name**: FormatRelation.
   - **Alias**: FormatRelation.
   - **Parent Datasource**: select **dm_format** from the list.
   - **Child Datasource**: select **dm_document** from the list.
   - **Parent Columns**: select the name attribute value from the right and move it to left list box.
   - **Child Columns**: select **a_content_type** attribute value from the right and move it to the left list box.
7. Click **OK** when complete.
8. Go to **Content Type** column in the report.
9. Remove the **dm_document.a_content_type** field from the Databand.




10. Select the **Dictionary** tab and go to the **FormatRelation** node.
11. Select the **Description** field and drag it to the report under the **Content Type** column header.




12. Select the **Description** header and click **Delete**.
13. Expand the data source so that it matches the size of the column.




14. Format the cell by changing the following settings:

    - **Font**: Arial; 8pt
    - **Vertical Alignment**: Center
    - **Text Quality**: Wysiwyg
    - **Word Wrap**: True

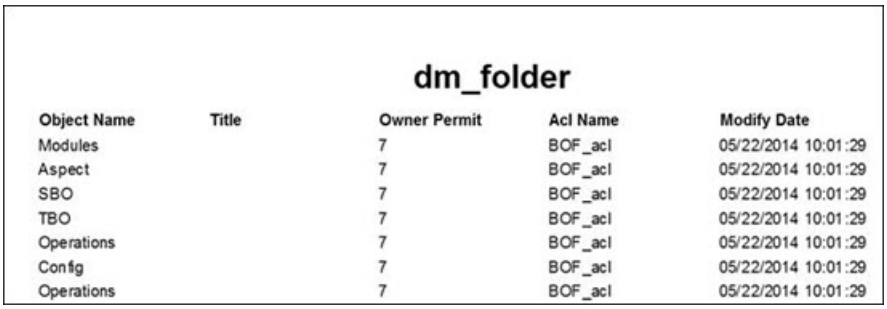
- **Border**: none
- **Component Style**: none
- **Can Grow**: True
- **Grow to height**: True

15. Select the **Preview** tab to view the changes. The **Description** field is displayed in the report.

## 13.6 Switch statement

Switch programming shortcut function allow us to change value in the report based on condition.

In the following example report, the **Owner Permit** is displayed as a number instead of the actual name value:



dm_folder

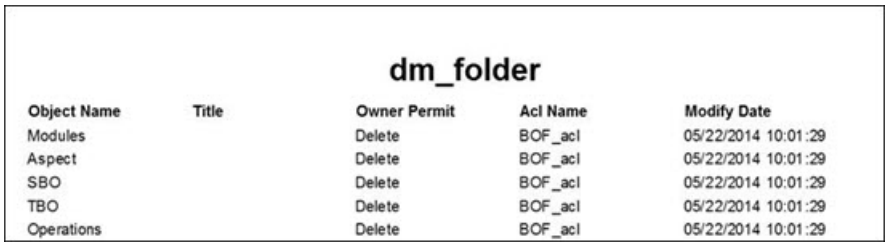
| Object Name | Title | Owner Permit | Acl Name | Modify Date |
|---|---|---|---|---|
| Modules | | 7 | BOF_acl | 05/22/2014 10:01:29 |
| Aspect | | 7 | BOF_acl | 05/22/2014 10:01:29 |
| SBO | | 7 | BOF_acl | 05/22/2014 10:01:29 |
| TBO | | 7 | BOF_acl | 05/22/2014 10:01:29 |
| Operations | | 7 | BOF_acl | 05/22/2014 10:01:29 |
| Config | | 7 | BOF_acl | 05/22/2014 10:01:29 |
| Operations | | 7 | BOF_acl | 05/22/2014 10:01:29 |

This can be updated by adding a switch statement.

1. Select the **dm_folder.owner_permit databand** field and click **Design** from the menu.
2. Select the **Expression** tab on the left.
3. Update the expression statement from `{dm_folder.owner_permit}` to the switch expression as follows:

   ```
   {Switch(dm_folder.owner_permit.equals("7"),"Delete",dm_folder.owner_
   permit.equals("6"),"Write",dm_folder.owner_permit.
   equals("5"),"Version",dm_folder.owner_permit.equals("4"),"Relate",dm_
   folder.owner_permit.equals("3"),"Read",dm_folder.owner_permit.
   equals("2"),"Browse",dm_folder.owner_permit.equals("1"),"None")}
   ```

   Preview the report:



dm_folder

| Object Name | Title | Owner Permit | Acl Name | Modify Date |
|---|---|---|---|---|
| Modules | | Delete | BOF_acl | 05/22/2014 10:01:29 |
| Aspect | | Delete | BOF_acl | 05/22/2014 10:01:29 |
| SBO | | Delete | BOF_acl | 05/22/2014 10:01:29 |
| TBO | | Delete | BOF_acl | 05/22/2014 10:01:29 |
| Operations | | Delete | BOF_acl | 05/22/2014 10:01:29 |

## 13.7 Tips and tricks

Use of HTML5 Viewer and Designer is recommended for the live reports when the report is expected to include large number of records. It is also recommended to use HTML 5 Viewer and Designer if the report contains nested variables or filters.

- If the report is expected to include 100,000 plus records, it is recommended to schedule a report job to generate the report in the desired format. Requesting an online Report that may contain a large number of records may result into very long delays in producing the report or session timeouts at times. It is recommended to schedule it as a job to run in the background. Each job saves a report in the repository which can be viewed when required.
- Keep Name and Description of the report in Report Properties. That name will appear as Export file.
- If configuring report that may result into large record set, for online viewing, it is recommended to create multiple reports using DQL with `"enable (return_range <start> <end> <'column name ASC/DESC'>)"`. Thus , if there are 1,000,000 records, then create two reports with range from 1 to 500,000 and 500,001 to 1,000,000 (without the commas).
- Manage report timeout in the *`|inetpub|wwwroot|DCTM-Reports|Web.config "ServerTimeout"`* tag.
- Apply boundaries to report fields while dealing with Export to Excel to get better row results.