Aranda Query Manager

Aranda QUERY MANAGER Aranda Query Manager (AQM) is a tool designed to create and manage reports of the data generated by Aranda products, with the option to use ready-to-run pre-designed formats and adapt them in a different way. according to your needs.

You will be able to create and modify reports using multiple objects such as tables, data graphs, images, and data matrices by making simple designs or and facilitating the distribution of information to users through of email. All this thanks to its web platform that allows the Access to users from any remote location.

Who is this manual for?

This manual is designed to delve into the different sections that AQM allows you to use, as well as the design and creation of reports.

What is our documentation?

- User Manual Aranda Query Manager AQM (You are HERE).
- [Aranda Query Manager AQM Getting Started Guide]

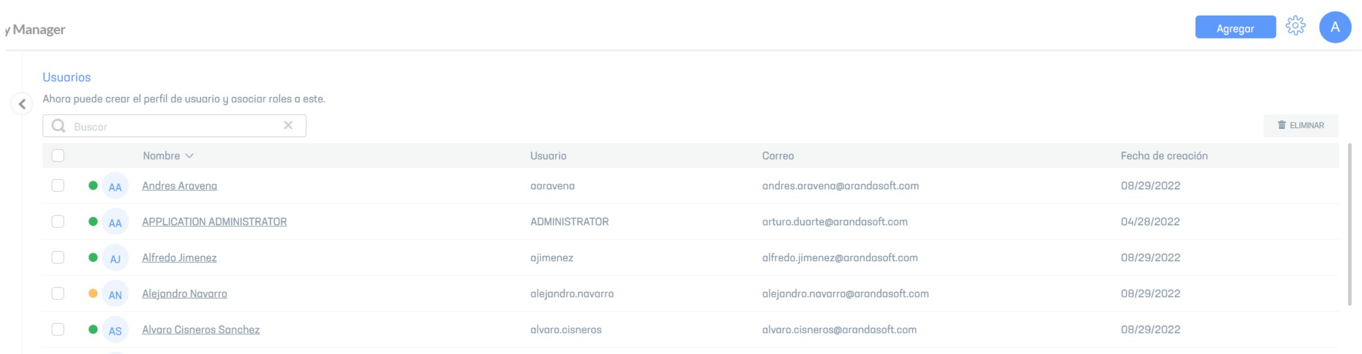
Configuration

Users

To configure users, you need to sign in with a user with an Administrator role.

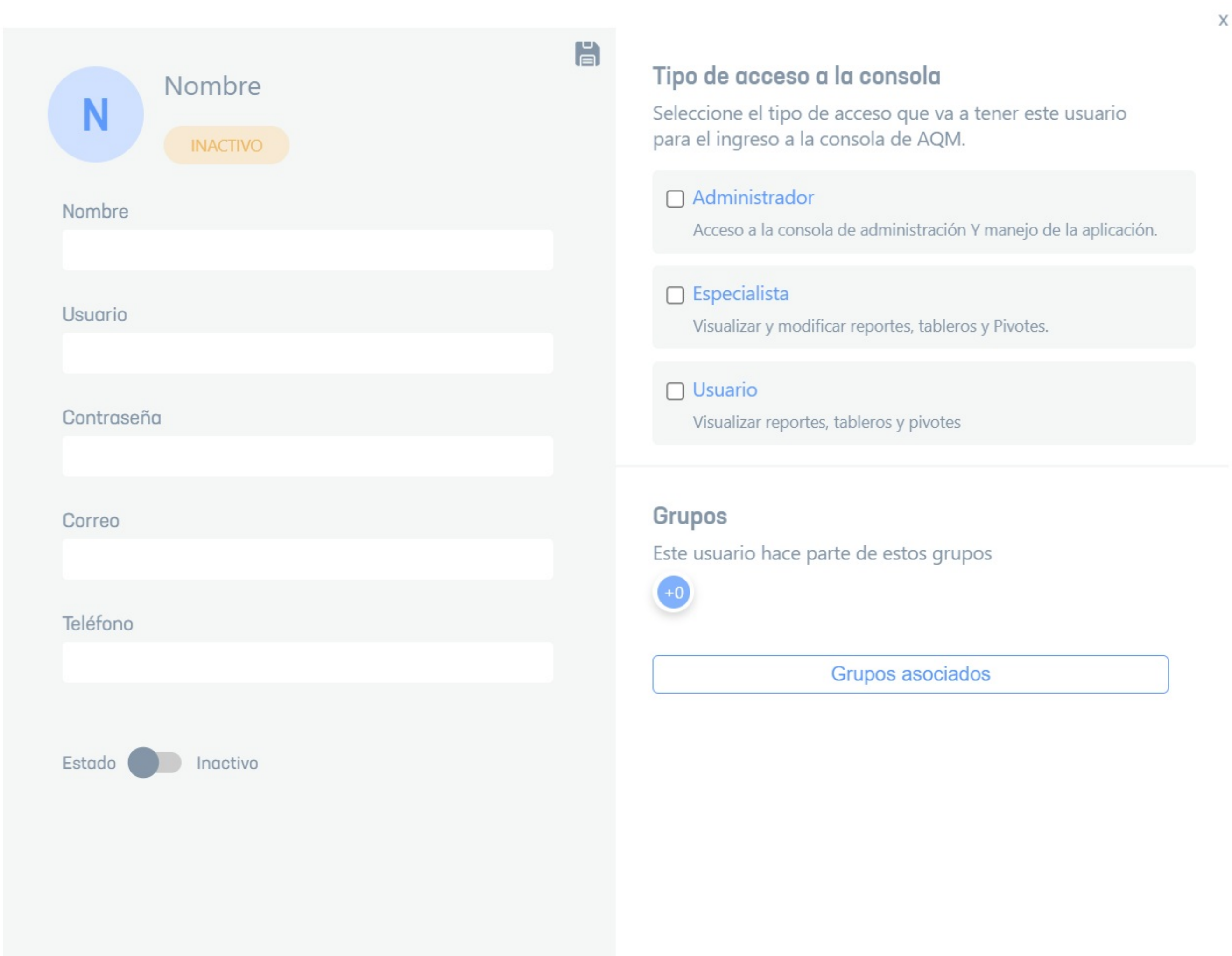
List of Users

1. Enter the AQM configuration console, in the General Settings from the main menu, select the Users. In the information view, the list of available users is displayed.



Creating Users

2. To create users, log in to the AQM configuration console, in the General Settings from the main menu, select the Users. In the heading menu select the Add; The form is enabled to enter the user's basic information and define the following access roles:



Role	Description
Administrator	User who manages and configures the entire console
Specialist	User who creates and edits documents in the console (dashboards, reports, and templates).
User	User who enters the console to view documents (dashboards and reports).

Editing Users

3. Once the new user is created, they will be listed in the AQM Configuration Console. When you select the name, the form with the detail is displayed. Click the pencil icon to turn on edit mode and modify the required information.

4. To confirm the changes, press the Save, to return to reading mode.

Deleting Users

5. To delete users, in the information view, select one or more records from the list of existing users that you want to delete and press the Eliminate.

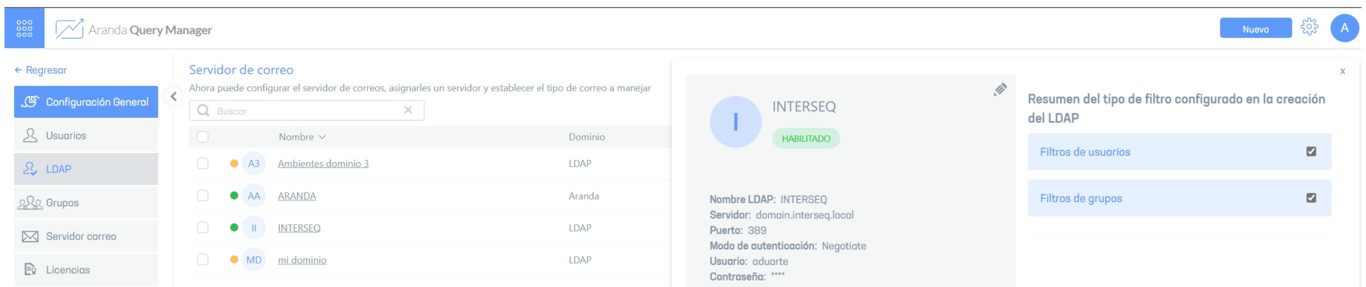
> ⚐ Note: You will not be able to delete users who have records related to historical data such as logs or information related to other Aranda products. In this case, you will see an error message at the bottom of the console.

> ⚐ Note:
>
> 1. In the detail view you can determine if the user is related in several groups by selecting the Associated Groups button. A window is enabled with the respective list of groups.
> 2. Note that you can only modify users of the Aranda provider. You won't be able to make edits for those that have been synced from third-party providers such as LDAP. For synced users, you can only assign them one role in the app.
> 3. The roles specified in this section are for AQM console operation only. To define access related to permissions on reports or dashboards, it is done from the folders section.

User Import

The user import module works transversally in all Aranda applications which have the ARANDA provider by default. This is a standalone user administration/authentication model, where you can create your own users and groups, and also import users from directory servers to make it easier to manage tools and assign permissions to users and groups.

1. To import users, go to the AQM Configuration Console, in the General Settings from the main menu, select the LDAP. In the information view, the list of authentication providers registered in the console is displayed. Select the New and in the detail view you can configure the associated information.

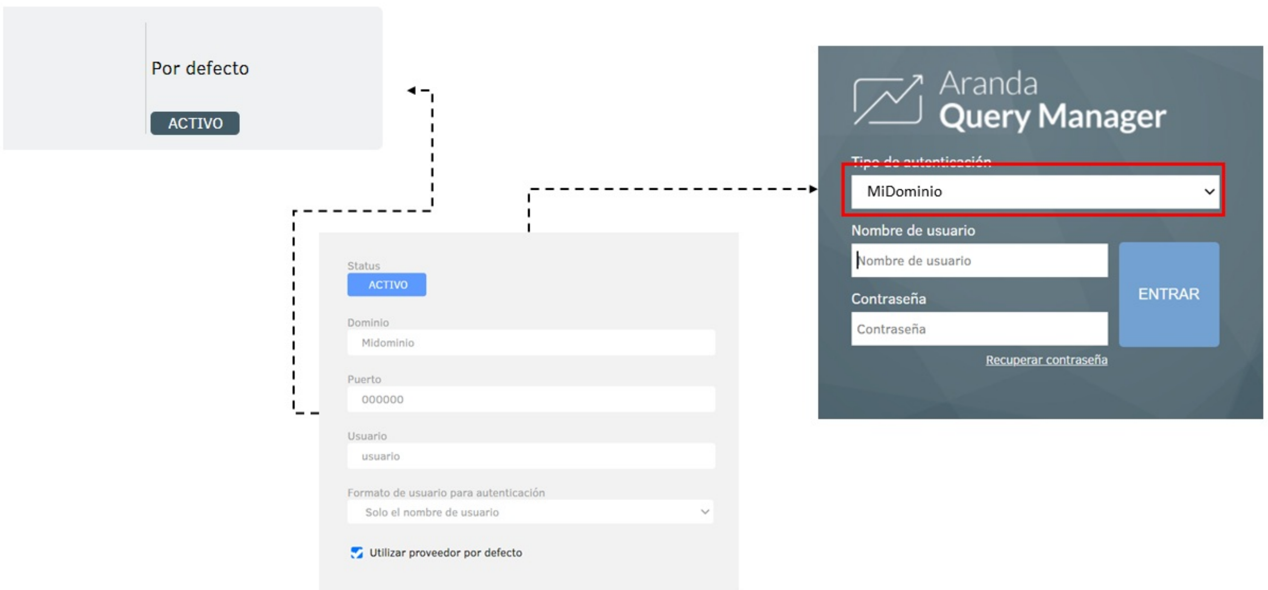


2. In the User Import Detail View in the AQM Configuration Console, select the Configuration, where you can enter the data to establish the connection to your directory server, the parameters of which will depend on your infrastructure.

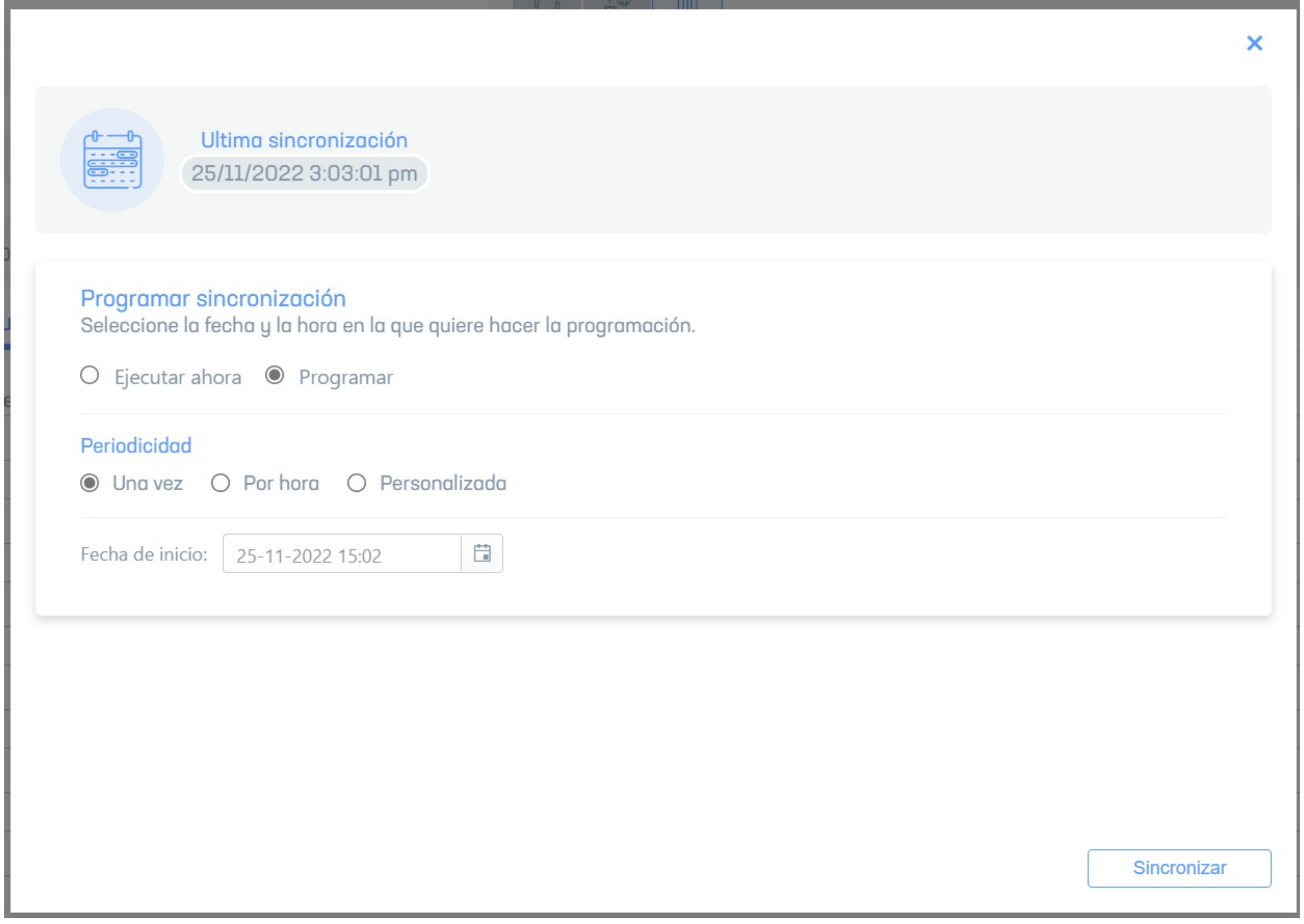
Parameter	Description
Domain	Controller Domain
Server	Directory Server
Port	TCP port where the service operates
Authentication Mode	Authentication Methods
User	User
Password	
Authentication User Format	Allows you to choose between 2 FQDN or UPN user formats
Default Name Context	Path where you want synchronization to start in the directory tree
Waiting Time	Maximum response wait time for the synchronization process in minutes
SSL	Indicates whether secure protocol applies
Use DS Name Distinction	
User filter	Filter for user search
Filter for Groups	Group filter

You can test the connection by selecting the Check connection. When finished, click Save.

You can only keep one provider chosen as the default, which will appear as the first option when authenticating to the application.



3. In the User Import Detail View in the AQM Configuration Console, click on the Synchronization, where you can set the synchronization frequency of users and groups. Use time synchronization to determine the time you want to run the process.



⚐ Note: If you have set up your provider, selecting the Upgrade Now You'll perform small or test syncs that don't consume large resources or long wait times. If you need to synchronize large numbers of users, it is recommended to make use of programming.

4. In the User Import Detail View in the AQM Configuration Console, select the User Filter, where you can map the fields in your active directory against the user information you want to include in Aranda products. Example:

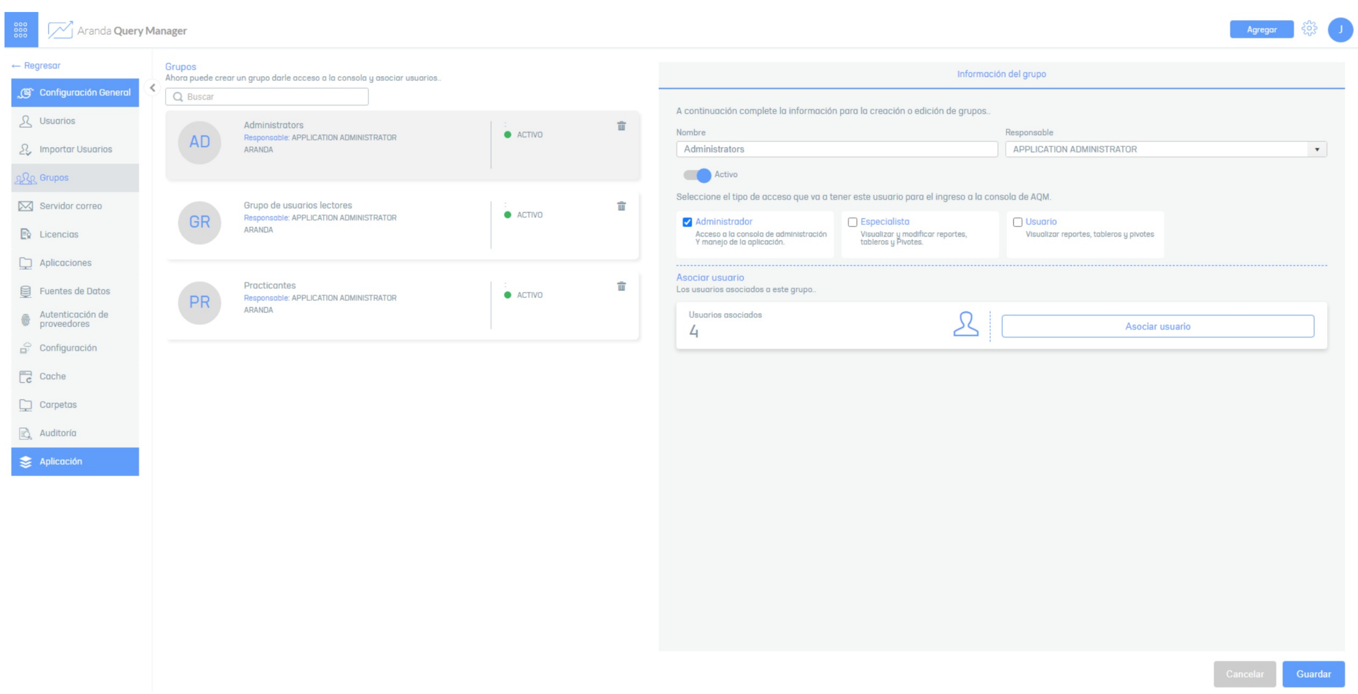
5. When you finish configuring the parameters, save the configuration and you will start getting the users as they are incorporated into the system. Users who are synced will not be editable since they come from an external authorization system. In case there is any type of error, these will be consolidated in the EventLog of your server for later analysis.

User Groups

Groups make it easy to manage users, roles, and permissions. You can configure document viewing permissions by relating them to groups of users, so you don't have to configure each user individually.

Associating Users to a Group

1. To associate users, go to the AQM configuration console, in the General Settings from the main menu, select the groups. In the information view, view the created group records. In the heading menu select the Add and in the Detail View, you can configure the basic information of the group, the access roles, and the users associated with the group.



2. In the User Groups Detail View in the AQM Configuration Console, on the Group Data, select the Associate Users, where you can consult and add the required users by username or email address. The added user will have the same roles that have been defined for the selected group.

3. To edit a user group, in the information view, select a record from the list of existing groups, and in the detail view you can modify the required information. 4. To delete a user group in the information view, select a record from the list of existing folders and select the icon to delete the associated information.

5. When you finish configuring the user groups, click Save in the Detail View of the AQM Configuration Console, to confirm the changes made.

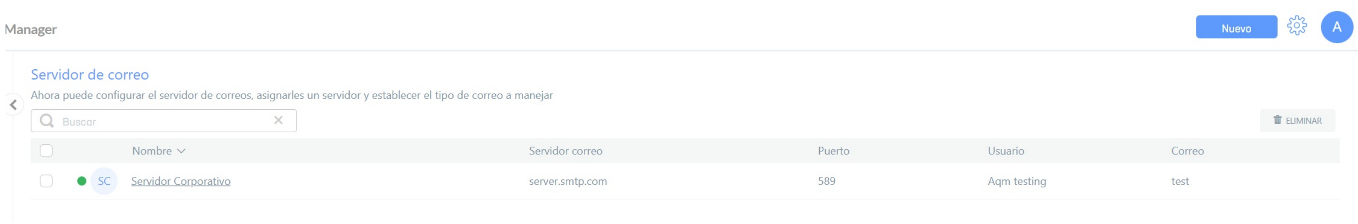
Mail

This section allows you to configure a mail provider for the AQM operation. Generation of reports by email, password reset, are examples of some functionalities that require an email provider to complete their operation.

Creating a Mail Server

1. To create a new mail configuration, log in to the AQM configuration console as an administrator, in the General Settings from the main menu, select the Mail Server.

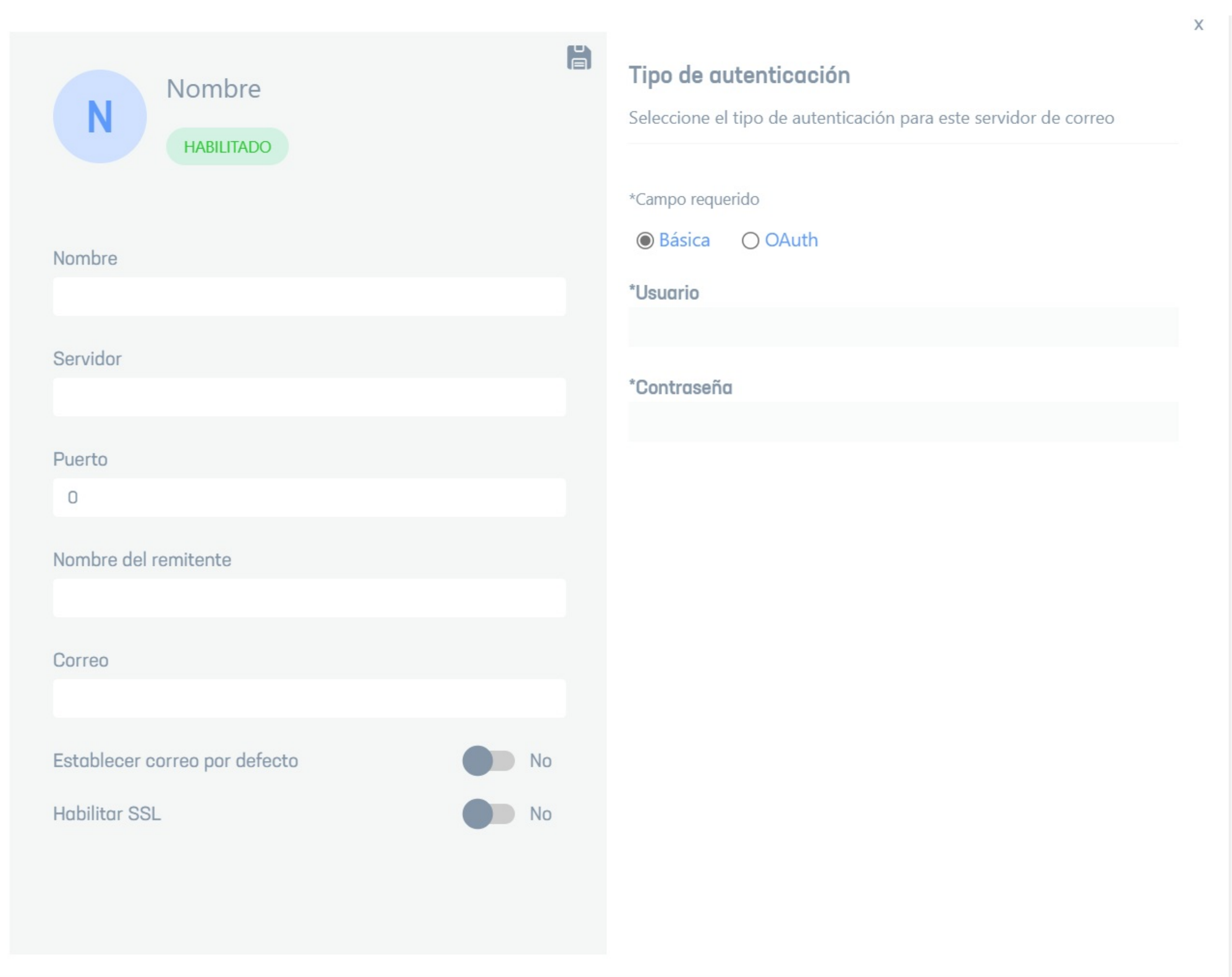
2. In the information view, the list of mail providers is displayed. In the heading menu select the New and in the detail view, the Authentication window is enabled where you can indicate the respective technical parameters or accounts



The authentication types available by provider type are:

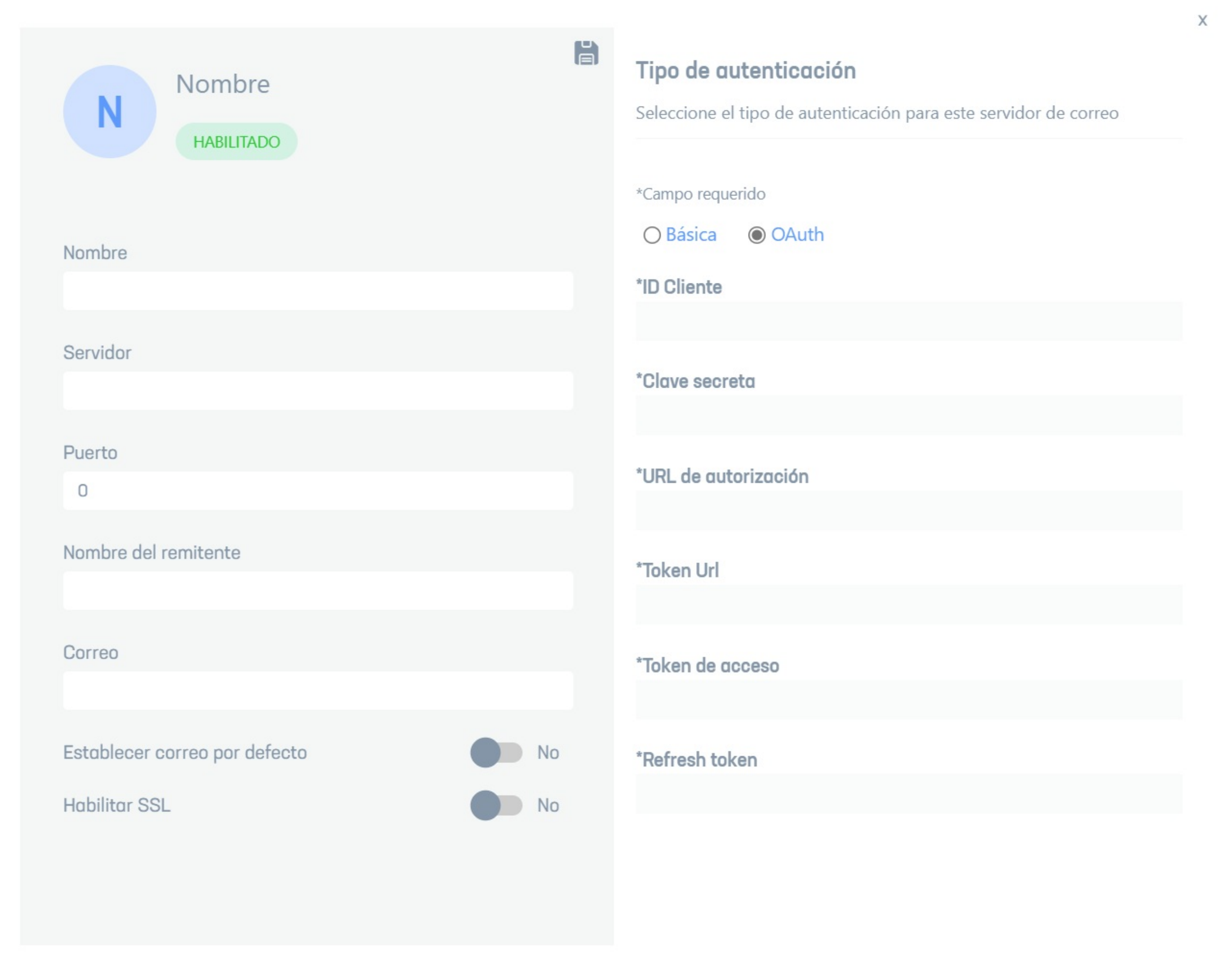
- Basic Authentication
- Oauth Authentication

Basic Authentication



Parameter	Description
Name	Display name for your server
Server	DNS name of the mail server
Port	TCP Service Operation Port
Sender name	Name of the sender of the emails
Mail	Sender’s email address
Set Default	Indicates whether you want that provider to be the only one authorized to send mail in aqm
Enable SSL	Indicates whether your connection uses secure protocol
User	Access User for Mail Server
Password	Access password

Oauth Authentication (Open Authorization)



Parameter	Description
Name	Display name for your server
Server	DNS name of the mail server
Port	TCP Service Operation Port
Sender name	Name of the sender of the emails
Mail	Sender’s email address
Set Default	Indicates whether you want that provider to be the only one authorized to send mail in aqm
Enable SSL	Indicates whether your connection uses secure protocol

Oauth authentication parameters

Your organization will need to set up the relevant information to [Oauth Mail Provider] this process will generate the parameters that are required in the Oauth mail configuration form in AQM.

Parameter	Description
Client ID	Customer ID given by your Oauth provider
Secret Key	Password
Authorization URL	URL address to be able to carry out the authorization
Url Token	URL for authorization token generation
Access Token	This will be generated during the credential generation process
Refresh Token	This will be generated during the credential generation process

After providing the parameters, save them by clicking on the respective icon for the system to adopt the changes.

⚐ Note:

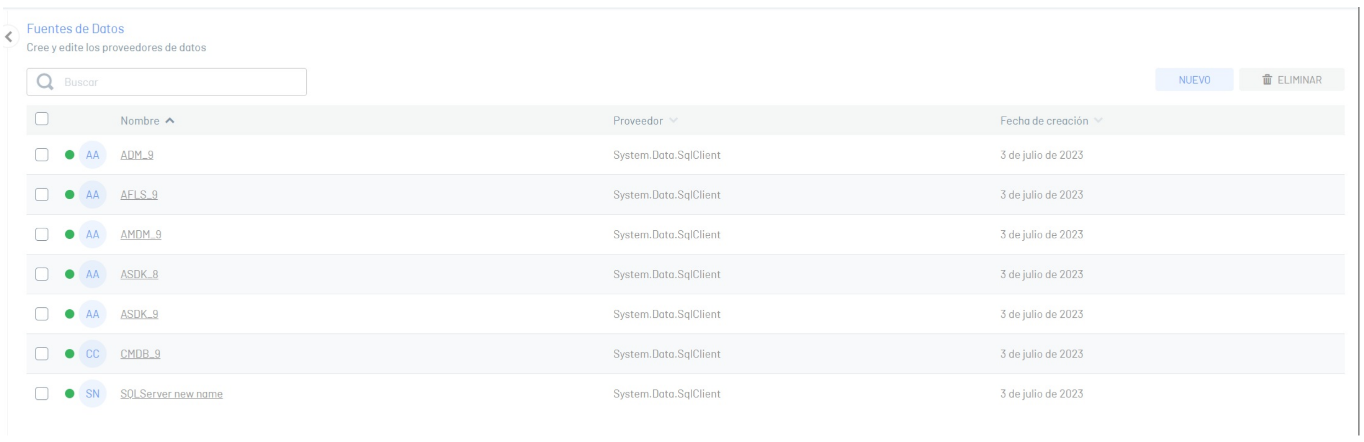
1. To edit a mail server provider, in the information view, select a record from the list of existing providers, and in the Authentication Type window, you can modify the required information.
2. When you finish configuring the mail server, click on the Save icon to confirm the changes made.

Data sources

Database Provider Configuration

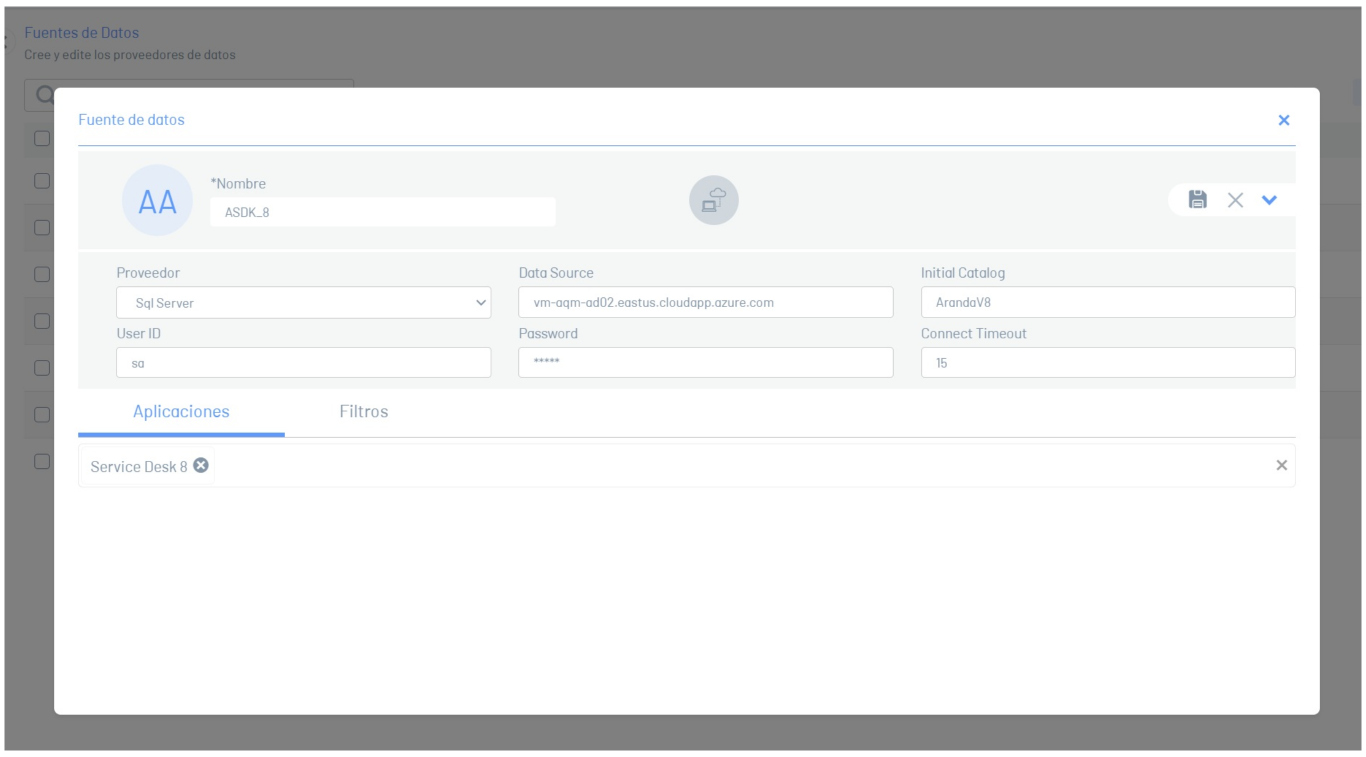
Database providers allow you to configure connections to get the information needed to build reports or dashboards. Each provider can Supply data to multiple applications, but only one application can be related to a single supplier.

1. To configure providers, log in to the AQM Configuration Console as an administrator, in the General Settings from the main menu, select the Data Sources. In the information view, the list of data providers is displayed. Select the New and in the detail view you can configure the supplier's information, enter the requested data and indicate which products it applies to. Test the connection when finished.



The requested parameters vary for each type of provider (Microsoft SQLServer or Oracle).

- Specify the maximum time in seconds for AQM to wait for a connection.
- If you use query editors, AQM can filter objects by tables, views, or procedures, so that it loads only the objects that it deems necessary. In the filter, you can separate the search criteria with semicolons.
- In the case of the Oracle provider, the data source corresponds to the DESCRIPTOR of the Oracle connection.



2. When you finish configuring the data providers, click Save in the Detail View of the AQM configuration console, to confirm the changes you have made.

⚐ Note: About Data Sources in the Report/Dashboard Editor desktop app

Support for report and dashboard editing apps for windows will not continue as of January 2023. The aforementioned applications are maintained in the product versions without reflecting the improvements of each update. The data sources allowed for the reporting system in the product will be MSSQL and ORACLE. Data sources from plain text and csv files will not be allowed even if they appear in the aforementioned Windows editors.

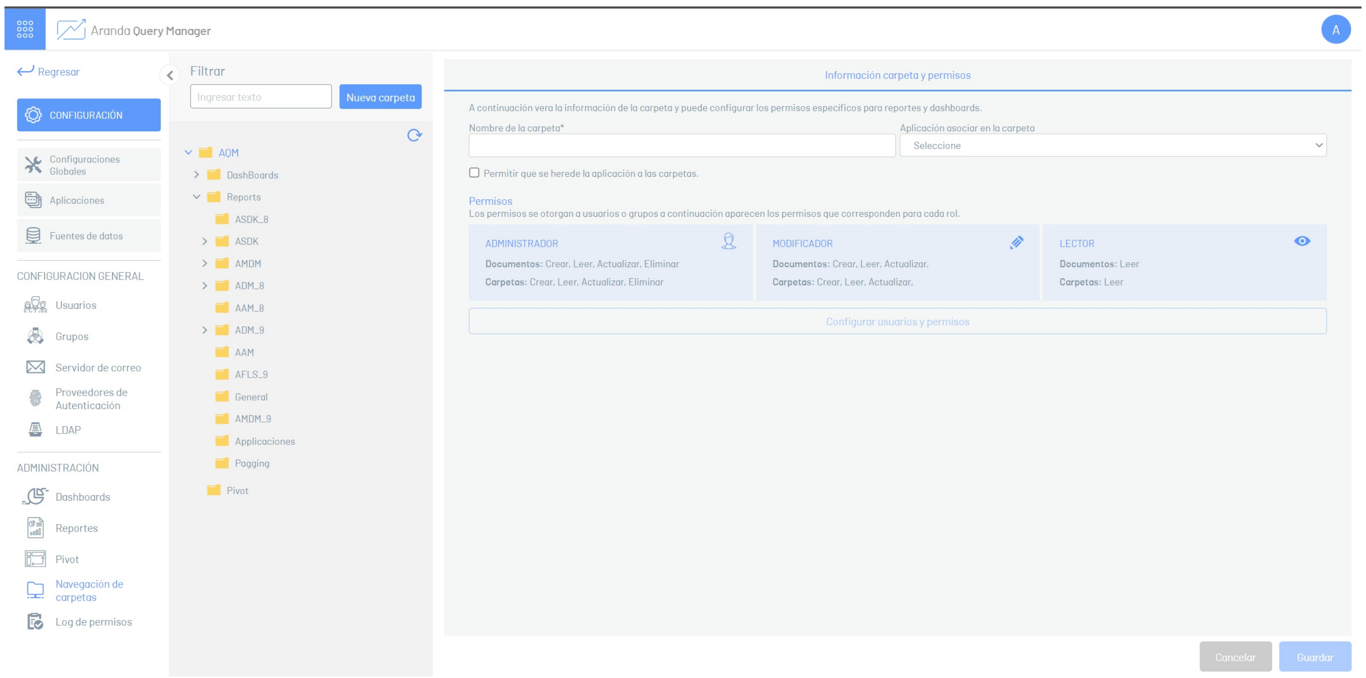
The invitation is to use the web version of reporting that integrates more functional elements.

Folders

Folders are containers used to store documents and to assign access levels to users. This option is available to users with an Administrator role.

Creating Folders

1. To create the folders, go to the AQM configuration console, in the General Settings from the main menu, select the Folder Navigation. In the information view, select the New and in the Detail View you can configure the folder and permission information.

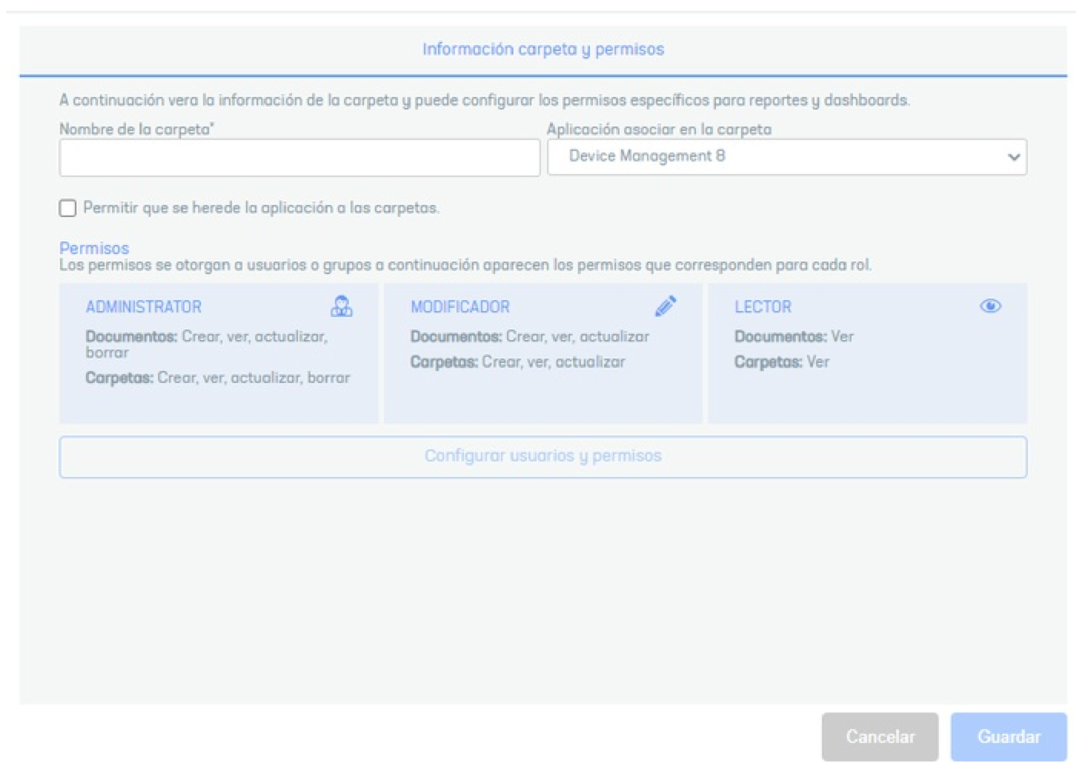


2 In the information view, you can query the generated folders. The information will be displayed in a hierarchical order and you will be able to access each folder at each level of the structure. 3. In the Folder Detail View in the AQM Configuration Console, select the Folder Information and Permissions, where you can fill in the basic folder information, assign an application, and access permissions for users and user groups.

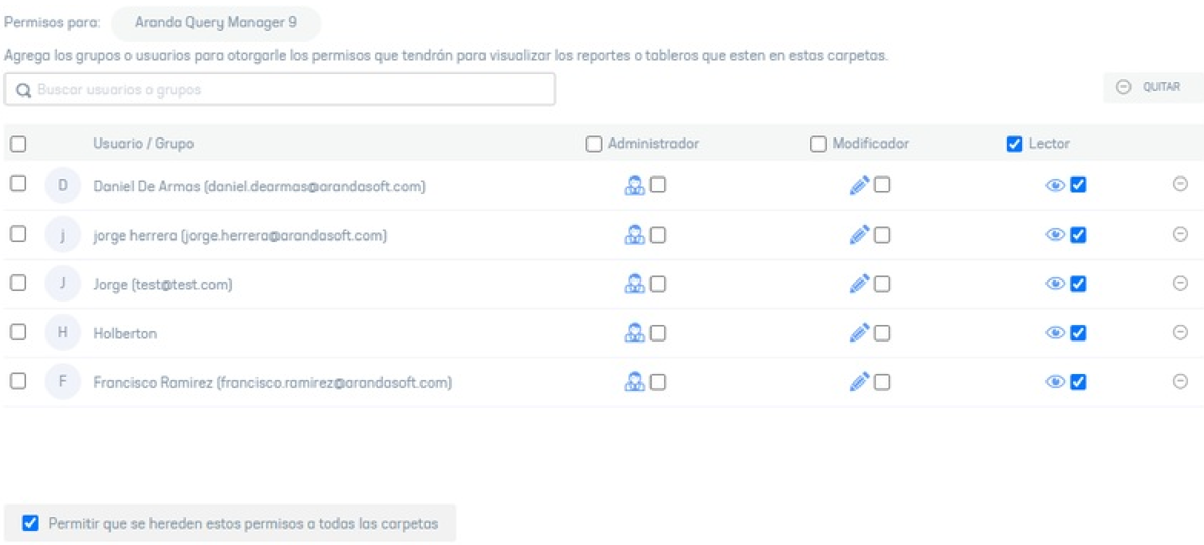
Notes	Description
1.	Assigning permissions for second-level folders requires first assigning the parent folder's permission.
2.	These folders cannot be modified, but you can freely create folders as you require in a multi-level structure. You can also use a text drawer to filter the nodes in the tree.
3.	Note that the application determines the connection of the reports/dashboards that are inside the folder.

Assigning Permissions

4. In the information view, select a record from the list of existing folders in the hierarchical structure.



5. In the Folder Detail View, in the Permissions section, select the Configure Users and Permissions; The window is enabled where you can define the roles by user/groups for each folder, taking into account the following items:



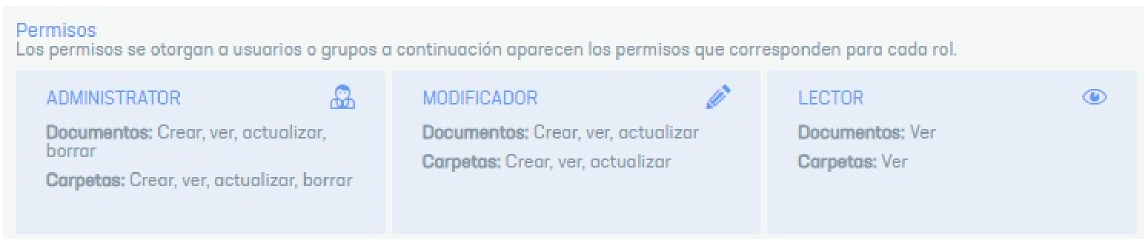
- Search for a user or group that you will have access to the selected folder.
- Select the user or group that will have access permissions to the folder
- Specify the role (administrator, modifier, reader) of folder access required
- Enable the Allow these permissions to be inherited to all folders, if it requires permission settings to be replicated to child folders.

Note	Description
1.	If you enable the permission inheritance option, you should be aware of the following considerations: - The option to Allow permissions to be inherited to child folders will remove permissions on child folders and apply the settings set from the folder that initiates the spread. - Provide reader access to users and groups so they can access and view folders and find documents.

6. Press the Escape key or close the permissions window.

Access Roles for Folders

Access roles allow you to configure the operations that each user or group can perform with each folder. There are 3 Access Roles for folders:



Role	Permissions
Administrator	This role allows you to create, view, update, delete documents and folders
Modifier	This role allows you to create, view, and update documents and folders
Reader	This role allows you to view documents and folders

⚐ Note: A user/group can have several roles, the highest role they have will be used.

6. To edit a Folder, in the information view, select a record from the list of existing folders and in the detail view you can modify the required information. 7. To delete a folder in the information view, select a record from the list of existing folders and select the icon to delete the associated information.

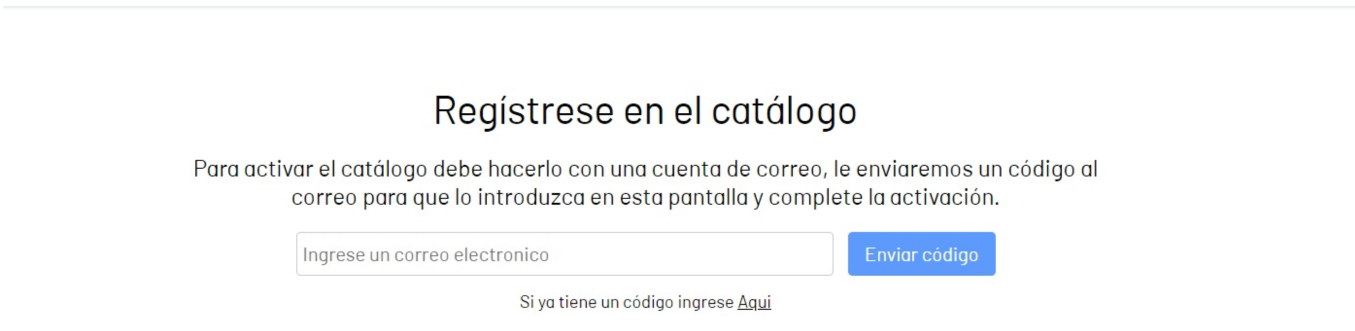
8.When you finish setting up the folder, click Save in the Detail View of the AQM Configuration Console, to confirm the changes made.

Catalogue

It is a library of documents pre-designed by Aranda that you can use in your AQM installation. To access it, click on the module Catalogue in the top bar. This option is visible only to administrators.

Registration

The first time you log in, you will need to follow the process to register for the shop.



- Enter your email and click Register.
- A few minutes later you will receive, in the email entered with an access code.

- Enter the code and click Activate.
- A collection of pre-designed documents will be displayed
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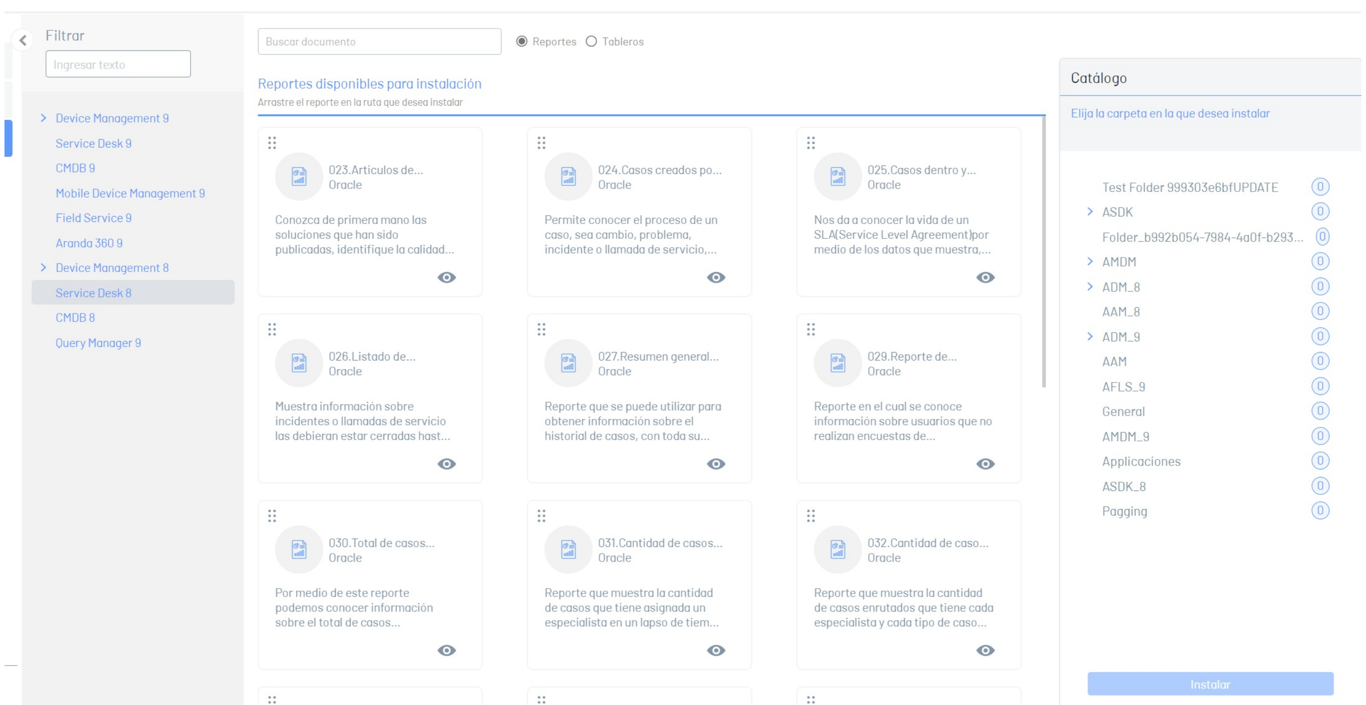


The connection to the catalogue is made through a service resident on the internet. The URL used for the store is part of the AQM parameters and can be used to be observed in Configuration > General. Ensure your infrastructure allow connectivity to the service (uses TCP/IP port 29000).

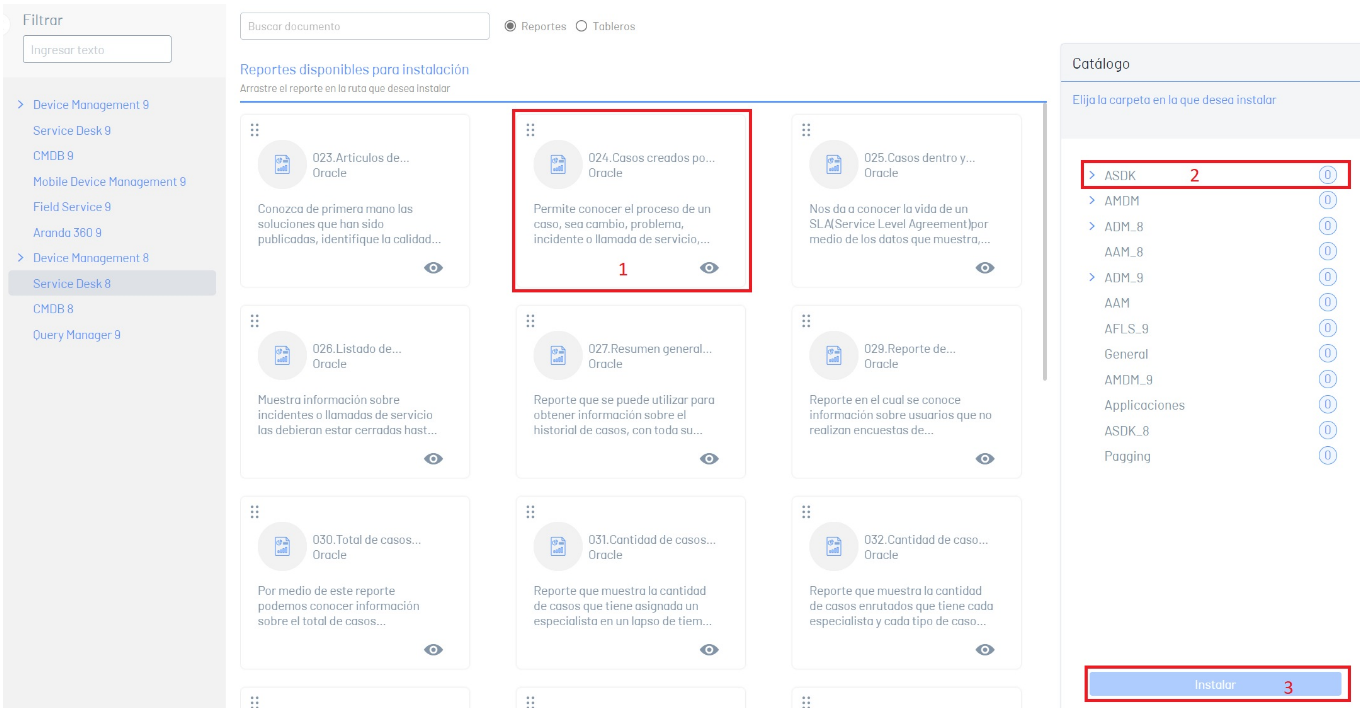
If there is a connectivity failure, an error log will remain in the EventLog of the server.

Download and install a document:

1. Choose one or multiple documents, you can use the filters available by type of document, application or name. For each document choose the concept where you want to locate it (for reporting only).

```
![Screenshot of a cell phone with lyrics Generated description
automatically](/aqm/en/assets/images/catalogo/006.png)
```

2. The selected documents will be displayed in the cart.
3. Click Install.

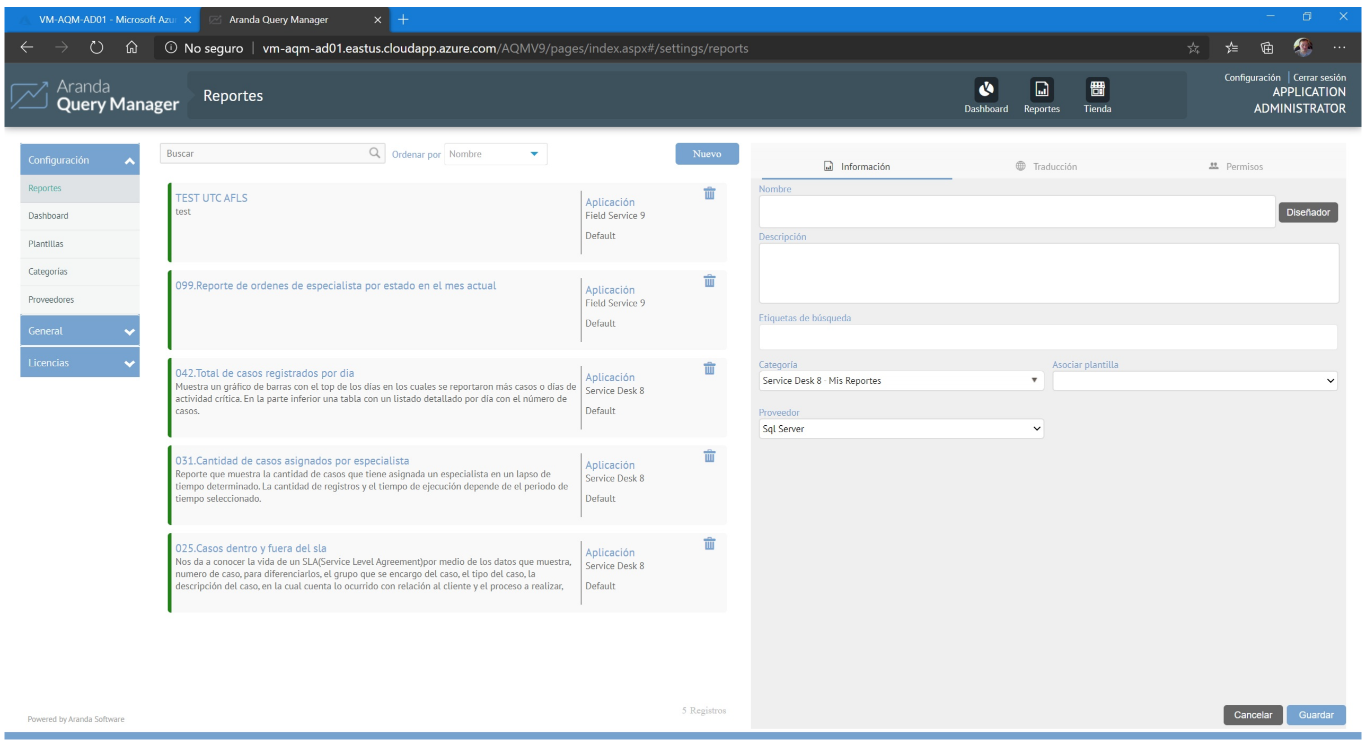


Documents will be placed in a short queue while they are installed from the store. After a few seconds the report will be ready to be Used.

Types of documents

Reports

Reports can be downloaded from the store or created directly using the report editor.



To create a new report from the AQM web console:

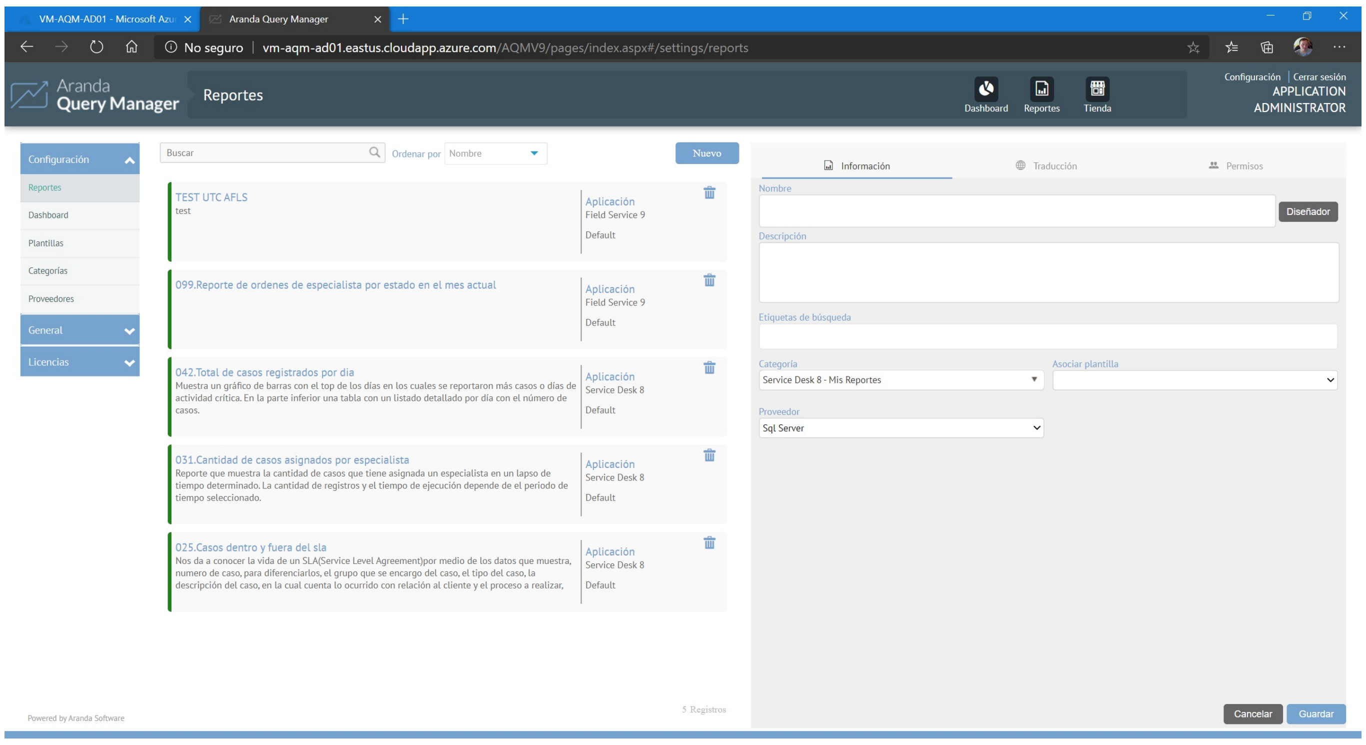
1. From the menu on the left, choose Configuration > Reports
2. Click New
3. Fill in the following fields in the Information:
4. Name
5. Description
6. Search Tag
7. Category (very important)
8. Associate template. (optional)
9. Vendor (SQL or Oracle)
10. Click Save

> ⚐ Note:The name of the report must not contain accents or special characters and cannot match the name of another existing report for the same concept. You can adjust viewing permissions in the Permissions.

As a general rule, reports are not published. If you want to publish them only Change the switch position to Published and save it again. Additionally, you have the option to upload a report from a document REPX or download it to edit it in other environments.

Modifying a report will affect existing schedules and to a greater extent if you make changes to the parameters. If so, the schedules will have to be redefined.

Boards



Dashboards can be downloaded from the store or created directly using the dashboard editor.

To create a dashboard:

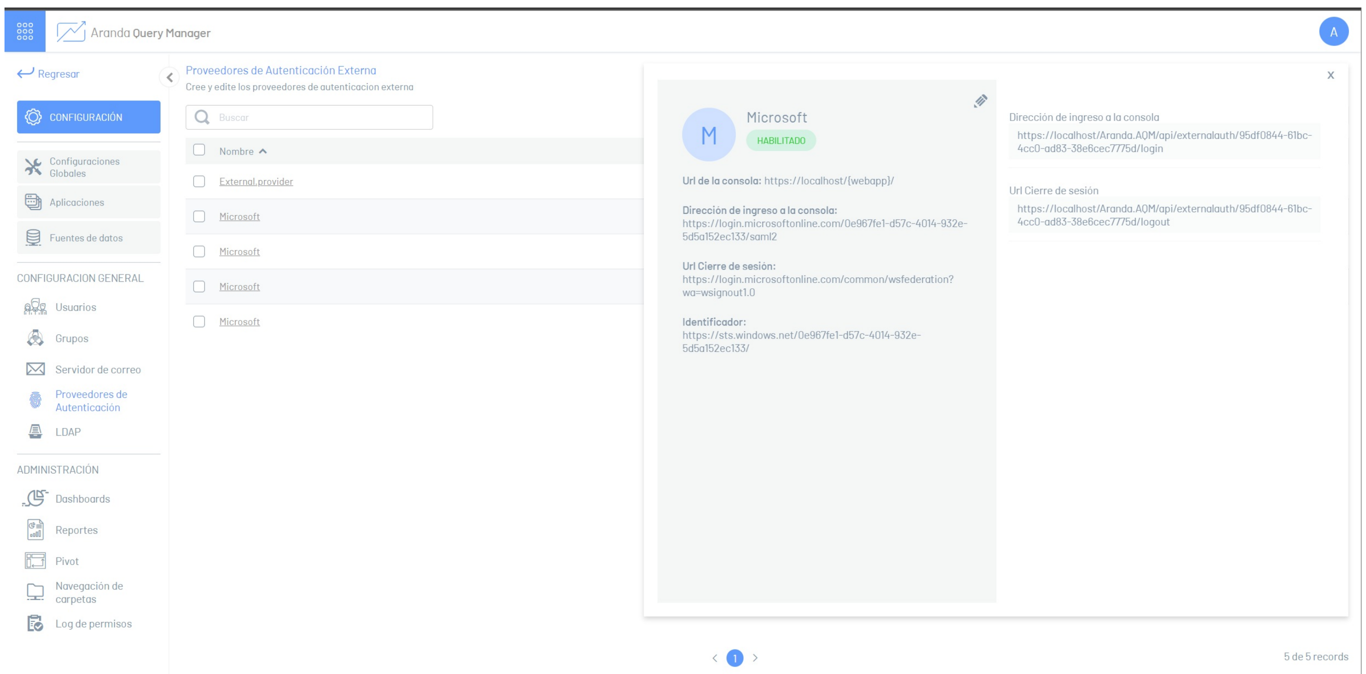
1. From the menu on the left, choose Configuration > Dashboard
2. Click the New
3. You can choose the data source for the dashboard from the menu if you want
4. Fill in the fields in the tab Information
5. Click Save

After creating the dashboard you will be able to assign the respective permissions in the tab Permissions. Then enter the corresponding editor and change the position of the Indicator A Published to make the dashboard available to all Users.

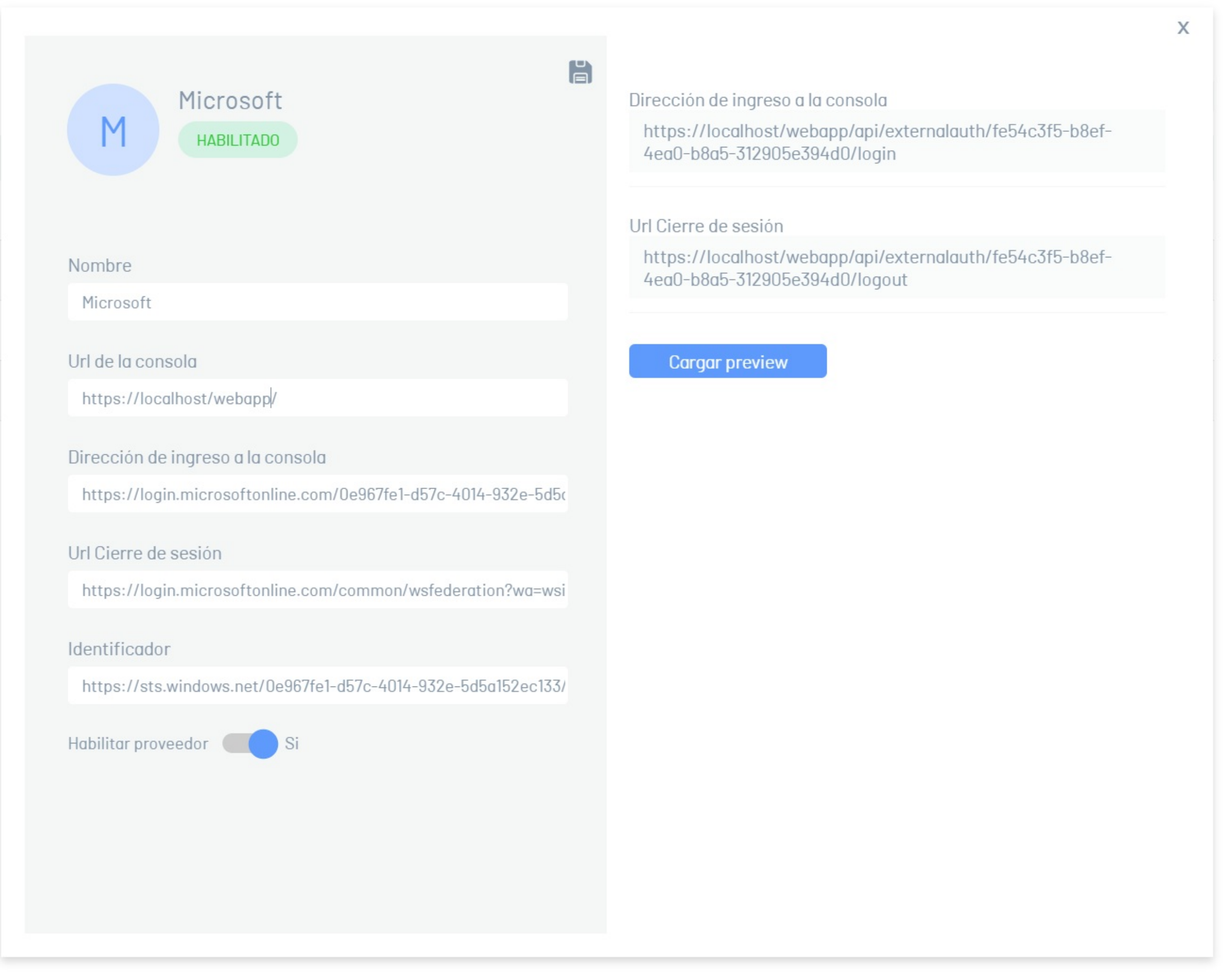
External Authentication

If you have an external authentication provider, such as SAML, Microsoft among others, you can make the corresponding configuration for AQM to use this authentication mechanism in the login. You can create various settings as well as enable them whenever you want.

1. To configure the authentication provider, log in to the AQM Configuration Console as an administrator, in the General Settings from the main menu, select the Supplier Authentication. In the information view, the list of authentication records is displayed. Select the New And in the detail view you will be able to configure the supplier information, enter the required data.



To do this, the following parameters must be specified:



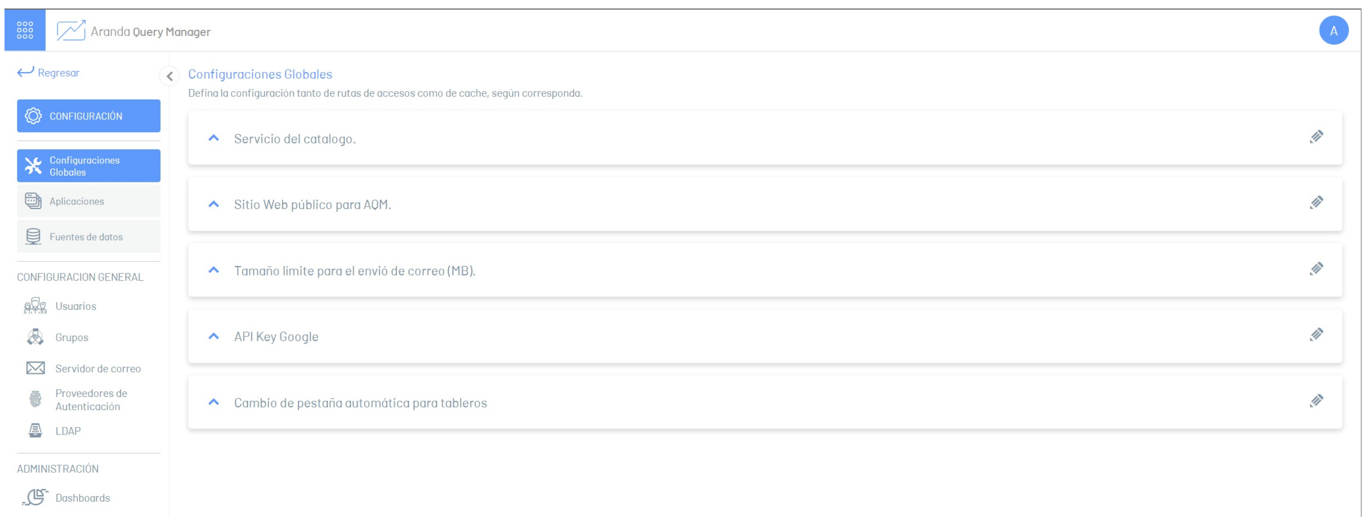
Field	Description
Name	Name that you want to assign to the authentication provider.
Console URL	Public address of your AQM facility
Icon	A small icon image to display on the login screen.
Console login address	URL address of your third-party provider for the login operation.
Logout Url	Public address of your third-party provider for the logout operation

2. When you finish configuring the authentication provider, click Save in the Detail View of the AQM Configuration Console, to confirm the changes made.

Configuration

Configure the paths where you can access the dashboard and dashboard and report catalog.

1. To configure routes, go to the AQM configuration console, in the General from the main menu, select the Configuration. In the detail view you can fill in the required data.



Catalogue

It allows you to indicate the address of the Aranda document repository QUERY MANAGER AQM, the service is exposed on TCP port 29000. Confirm that the port is available to enable direct download of reports and dashboards.

The default is http://store.arandasoft.com:29000/StoreService/

Public website for AQM

It allows you to indicate the public address of the AQM website, this configuration is essential for sharing documents, or for the export of reports since it is required to create the necessary hyperlinks that are attached to the emails.

Mail Sending Limit (MB)

Specify the maximum limit allowed for attachments in emails, if the document has a higher value, a download address will be included in the email. A value of zero indicates that a download hyperlink will always be created for all documents.

API Key Google

A value or key that AQM will use for map loading into dashboards that involve the Google Maps API.

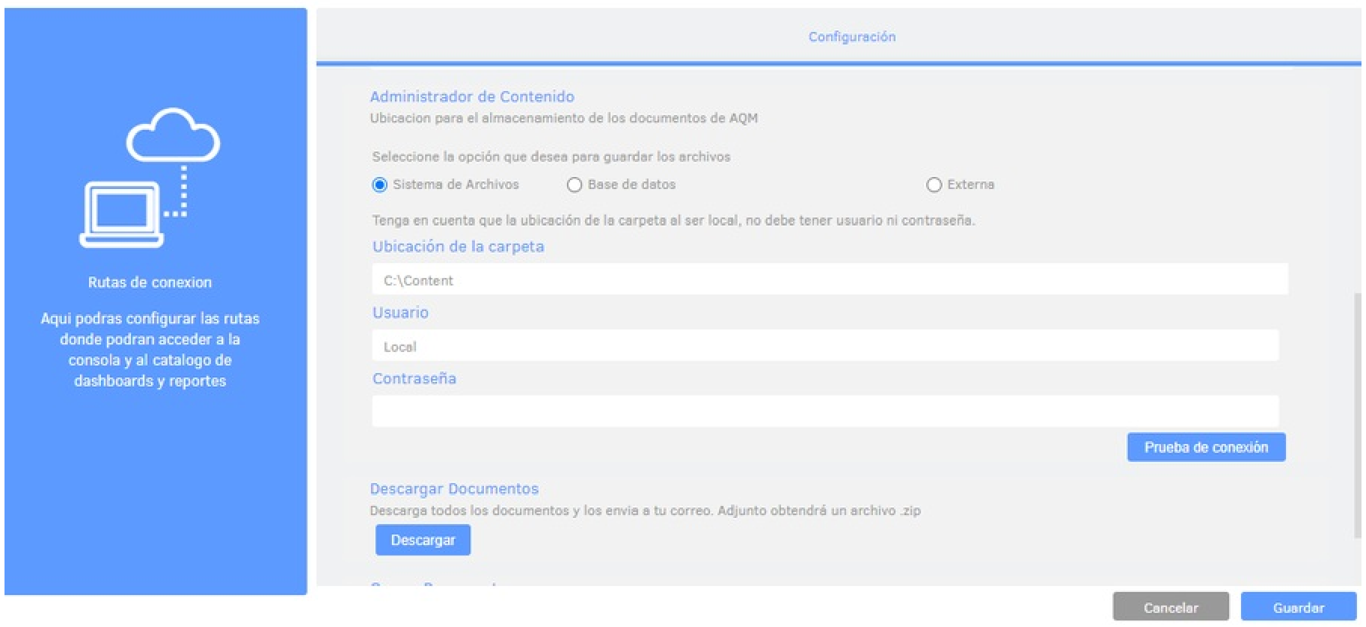
Automatic tab switching for dashboards

For boards that have tabs, allow the tab to change automatically.

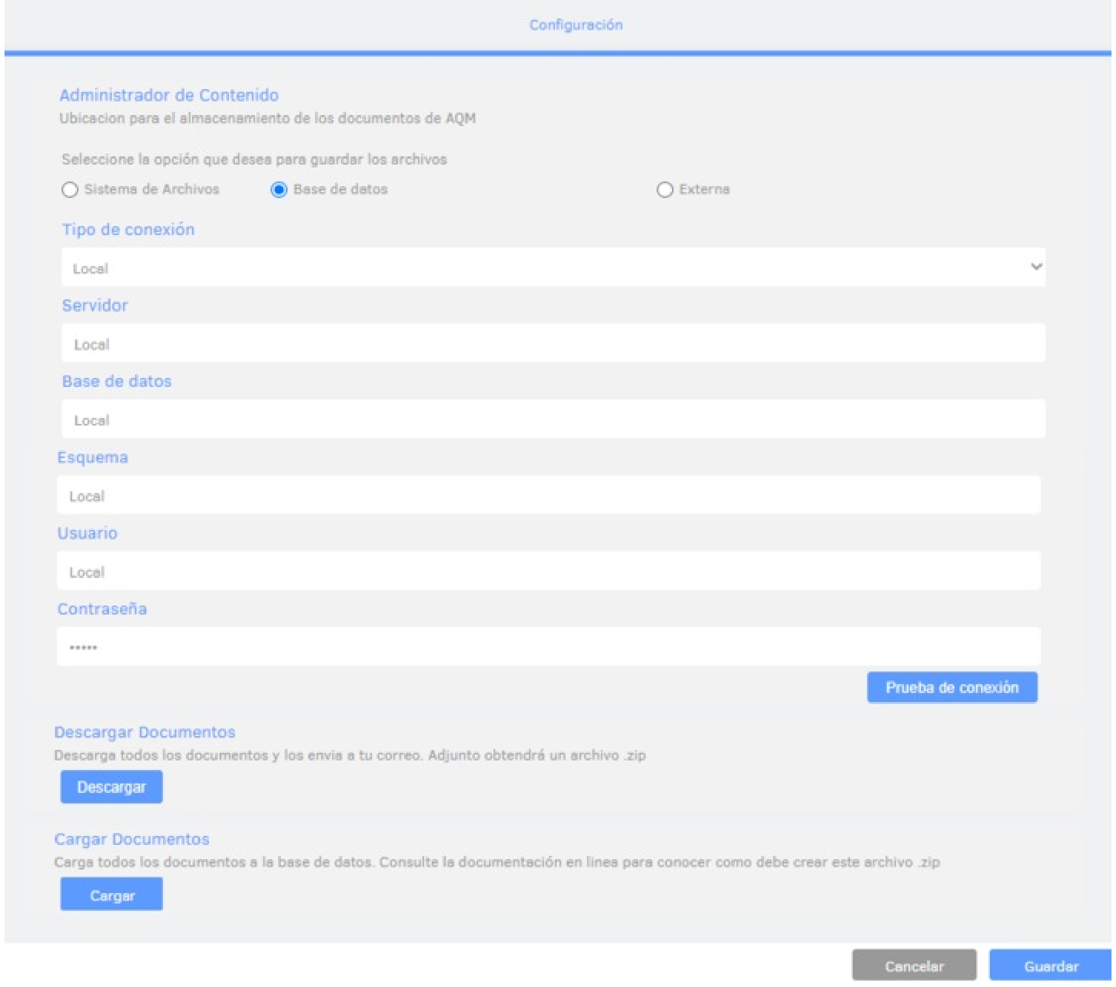
Content Manager

Configuration of the physical location of documents stored by AQM. This value is set by default, normally it should not be modified or adjusted in the tuning of the product, if it requires changing the parameter it is necessary to extract the documents and republish them again.

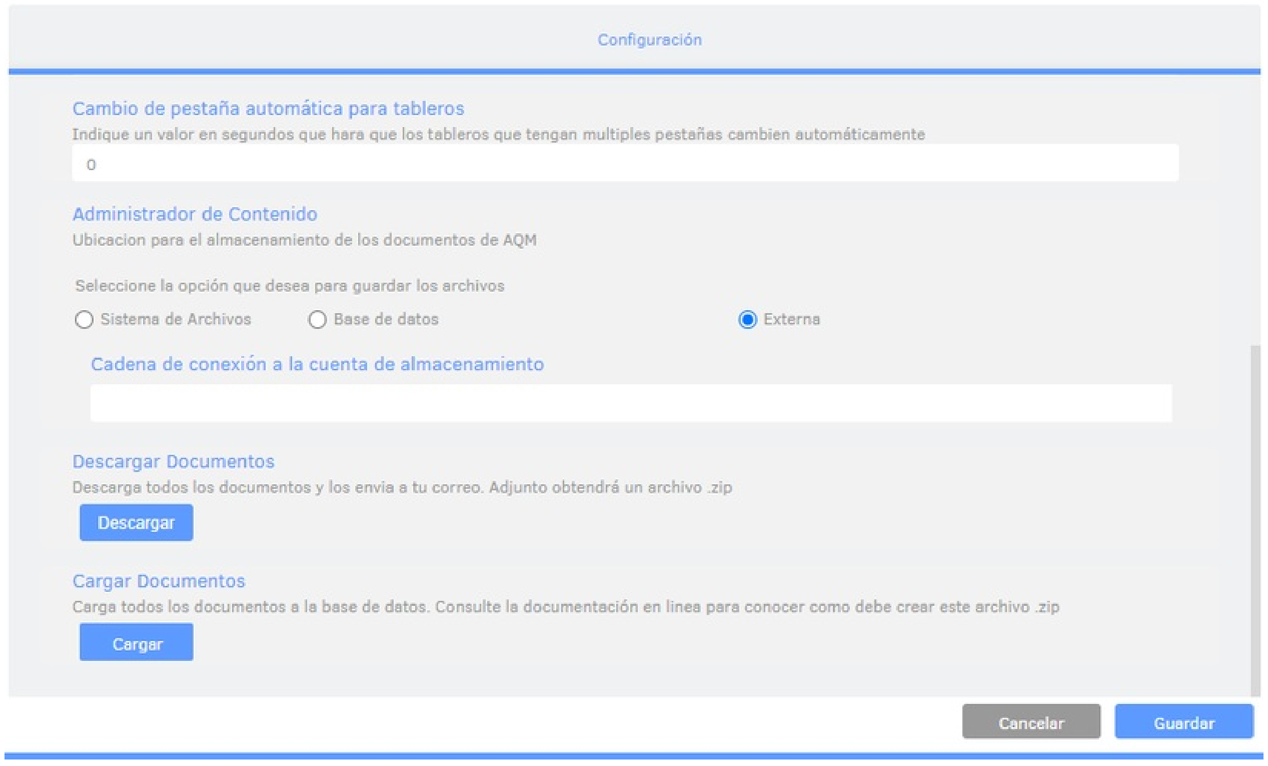
In the Content Management category, you can configure the storage of AQM documents by selecting one of the following options: File System



Database



External



Warning: An operation to change the physical location of documents should only be carried out under supervision and under conditions that really require it. 2. When you finish configuring, click Save in the Detail View of the AQM Configuration Console, to confirm the changes made.

Records

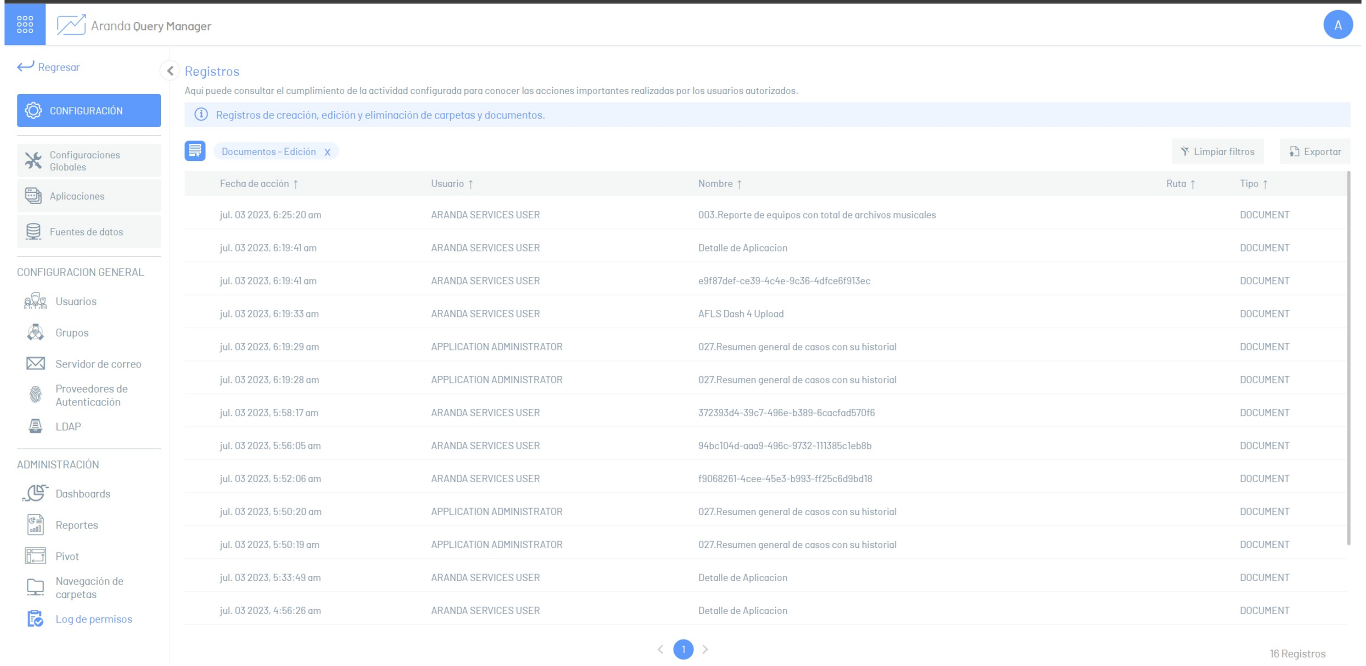
The auditing section allows you to view the modifications made to documents and folders so that you can visualize the interactions that users make on these elements.

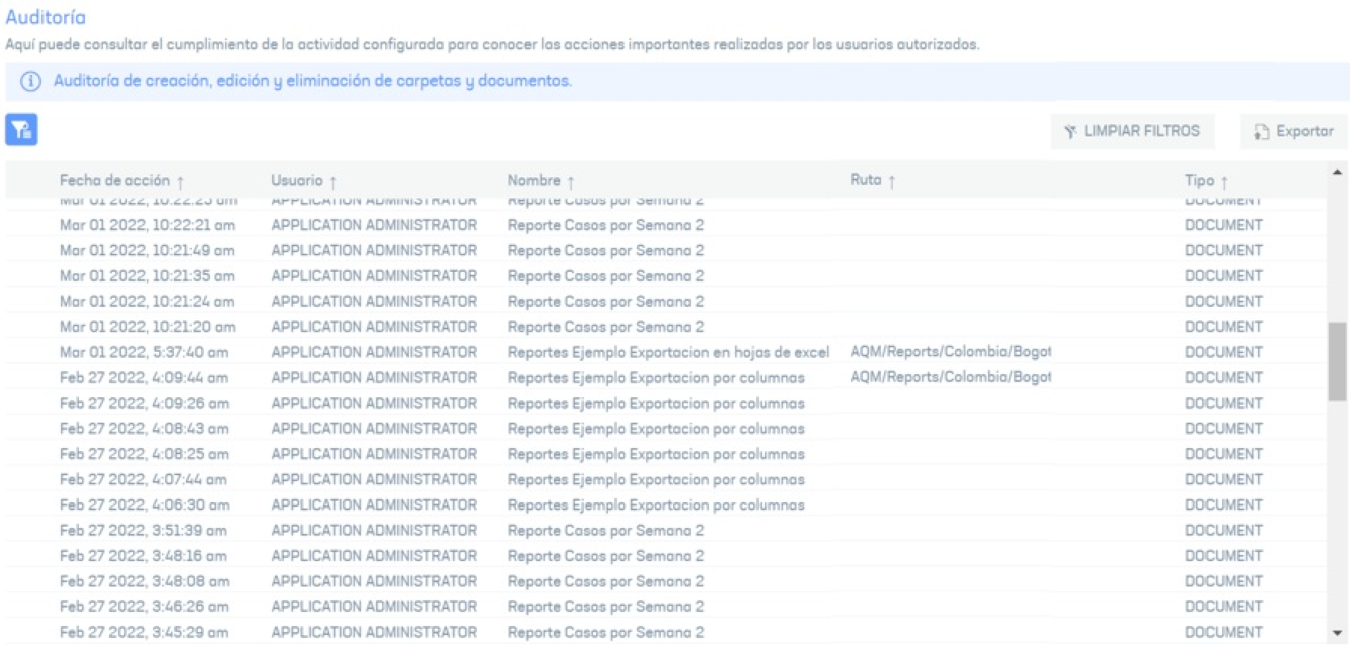
When a user creates, modifies, or deletes documents or folders, an audit event is logged in the system.

Through the Aranda QUERY MANAGER AQM You can run a query on events made by users or by specifying the type of action performed within a set date range. The results can be exported for further analysis in xls format.

Consulting Audit Logs

1. To view the audit logs, log in to the AQM configuration console, in the General Settings from the main menu, select the Records. In the information view, select the type of event that you want to display.

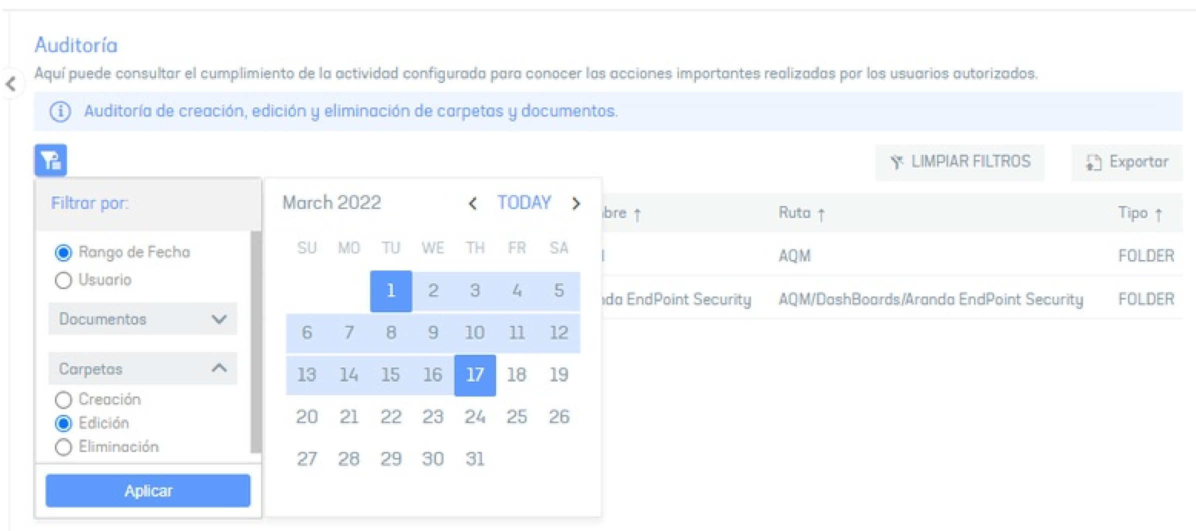




2. The filters available to display the audit information are as follows:

Filter	Description
Date range	Allows you to specify audit logs between the two chosen dates.
User	Allows you to choose auditable actions for the specified user

Filters for Documents and Folders	Description
Creation	Allows you to filter audit events related to the creation of documents and folders.
Edition	Allows you to filter audit events related to modifications to documents and folders
Filters for Documents and Folders	Filter events for document and folder deletions.



3.In the Information View in the AQM Configuration Console, you can export the generated audit logs in Excel format. Select the option Export.

Bulk Upload and Download

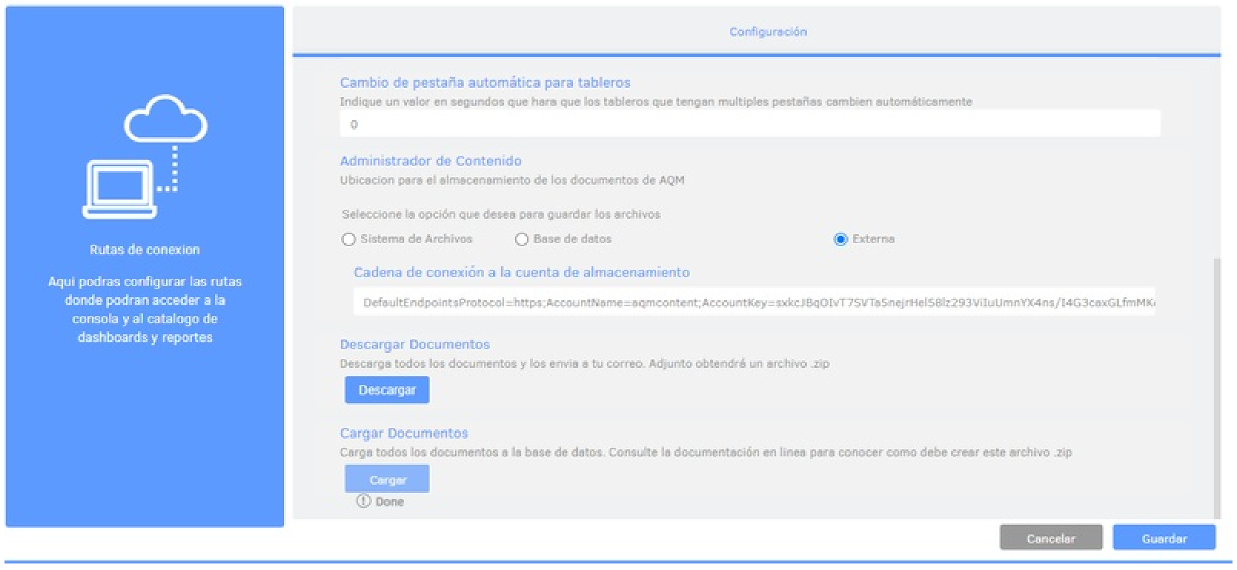
Bulk Download of Documents

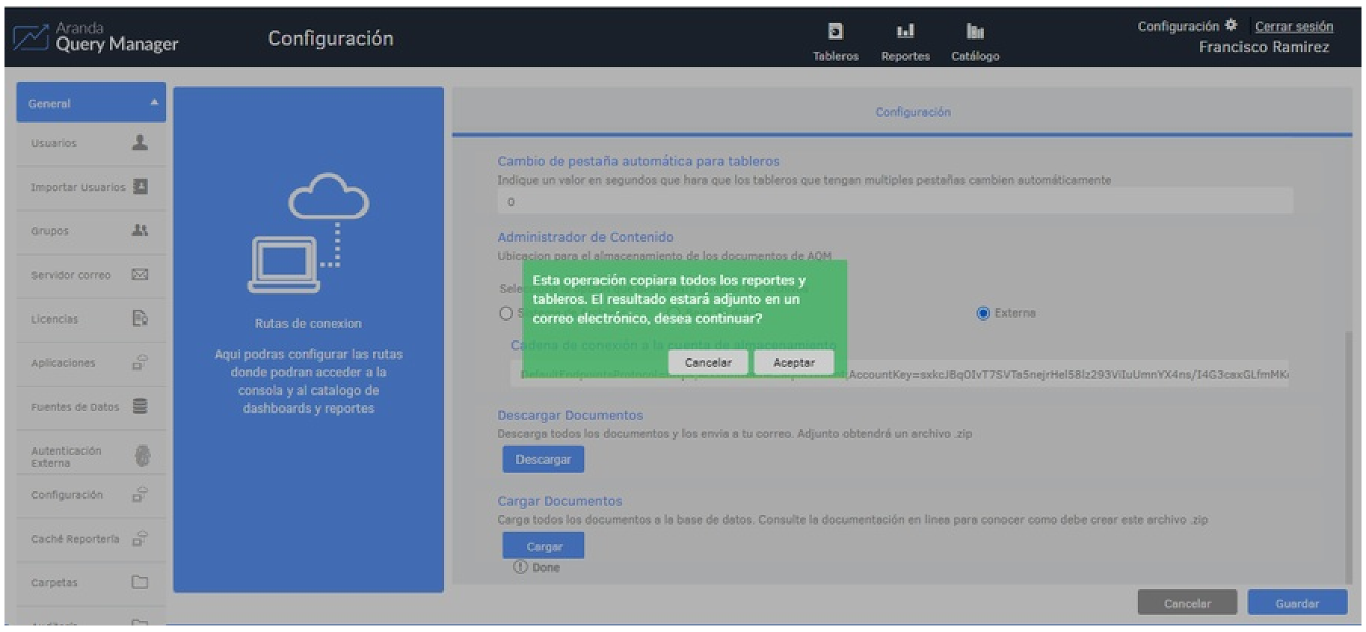
Downloading or exporting documents in bulk is a mechanism that allows you to send all the documents in your repository to a compressed archive by email. This feature is designed for a few specific cases:

- Help for database unification in customers who want to unify aqm into another Aranda database.
- Backup or backup of documents
- Initialize new AQM installations with a defined folder structure and multiple documents (dashboards, reports, etc.)

The bulk download process will copy the folder structure from the database to the file, preserving their names and the documents it contains.

1. To download documents, go to the AQM configuration console, in the General from the main menu, select the Settings option. In the information view, on the settings tab, select the Download, this option will allow you to copy the information with related data.





2. When the download process is complete, click Save to confirm the changes made.
Additional considerations

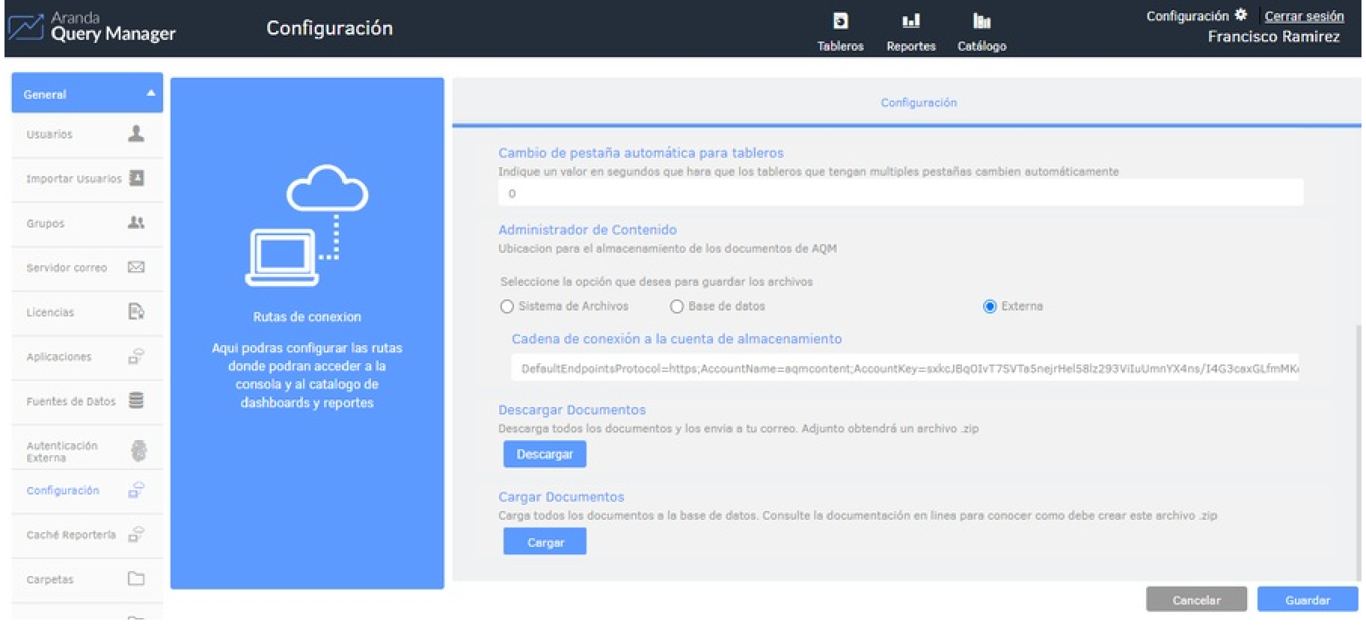
- Downloading or exporting documents does not include additional information regarding permissions on folders or documents.
- The export download sends the documents in an attached zip file. The destination address is used by the email of the user who performs the operation from the web console. This file lacks an extension to avoid being blocked by mail servers.

Document Upload

The upload or import process will copy the folder structure to the database, in case of finding documents with the same name in the same folder they will be overwritten.

> ⚐ Note:Importing won't delete any existing documents, but you should validate that no unwanted overwrites occur.

1. To upload documents, go to the AQM Configuration Console in the General from the main menu, select the Configuration. In the information view, on the settings tab, select the Upload button.



2. Select the file that requires Upload. A confirmation message is generated on overwritten documents. 3. When the upload process is complete, click Save to confirm the changes made.

4. A confirmation email will be sent when the upload or import operation is complete.

Dashboard viewer

The Viewer is a transversal component for Aranda's products and allows you to view the information of dashboards in each of the products.

The administrator or specialist in charge of implementing the component must take into account the following considerations:

1. Create Virtual App

A virtual application must be created in the OutServver.

2. Installation

The component installation process can be done in two ways:

- For installation in the cloud an artifact is delivered within the AQM-Release pipeline: Binary/Viewer.zip.
- For an installation OnPremise You need to run the app installer: Installer/Aranda.AQM.Viewer.[version].msi

⚐ Note:

1. The reporting module must be installed in the same domain as the application so that the authentication credentials match so that users and groups coexist. |
2. It is possible that the viewer will be published as an available nuget in the package list of the Aranda library.

3. Viewing dashboards from other Aranda applications

Once the viewer component is installed, you will be able to integrate the dashboard view to Aranda products and access the different reporting modules, with a simple route adjustment (url)

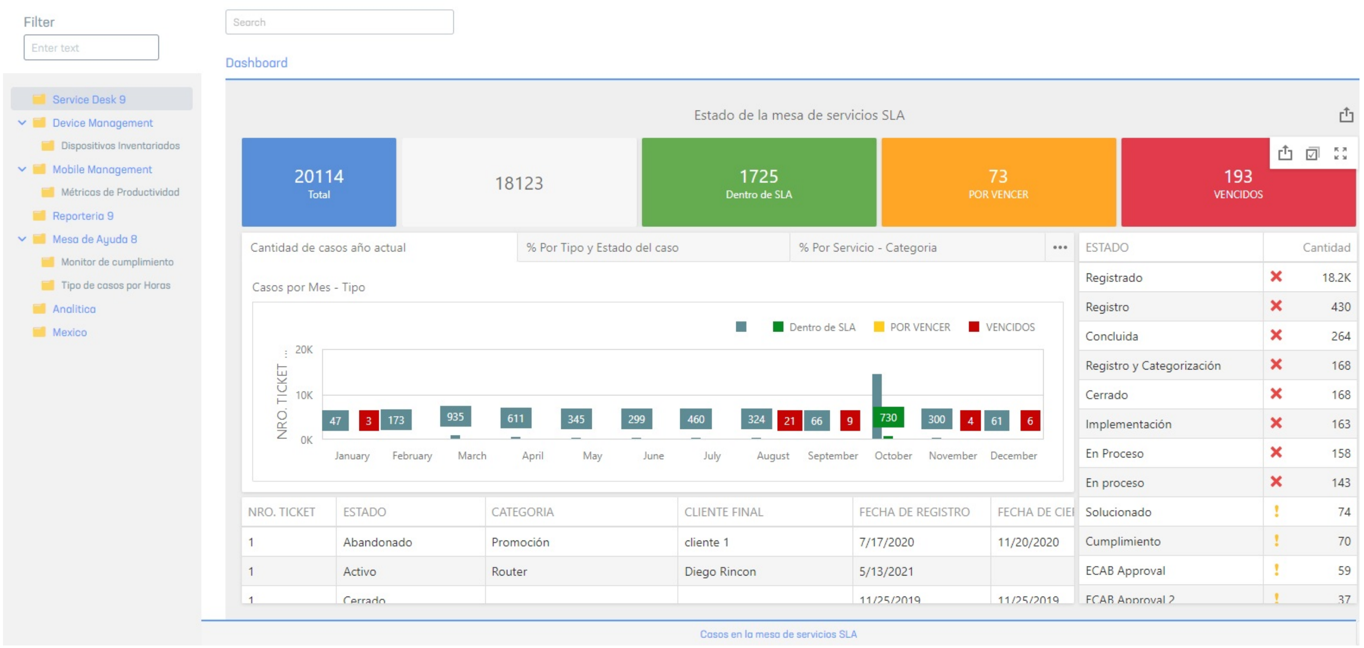
Below are the paths for the board view:

Access to the folder overview

By accessing this path, the component loads the view of all the folders and boards found. The information generated (folders, boards) will be organized in a hierarchical way and when choosing a folder, the boards contained will be displayed. Only folders with boards are displayed, i.e. no empty folders are displayed.

http://dominioaplicacion/viewer/index.html#/dashboards

The user will only be able to view the information to which he has access.



To upload only one dashboard use the following url

```
http://dominioaplicacion/viewer/index.html#/dashboard?id=<identificador de tablero>
```

To open the configuration console

This view allows you to configure permissions on folders, which must be used by the Administrator user. You can also upload or download dashboards in xml format.

```
http://dominioaplicacion/viewer/index.html#/configuration
```

Database Connection

The component will use the connection to your application's database.

> ⚐ Note: In later versions, the use of alternate databases as replicas will be allowed, so that the boards load without affecting performance.

Examples of use

In your application, place a snippet like the following:

```
<iframe src="https://dominioaplicacion.com/viewer/index.html#/dashboards"></iframe>
```

Considerations

- The component loads the blue white aqm theme that will be displayed within the iframe, improvements will be made to customize the themes according to the application.
- Your application must use common 9.7 libraries.

Multitenant operation

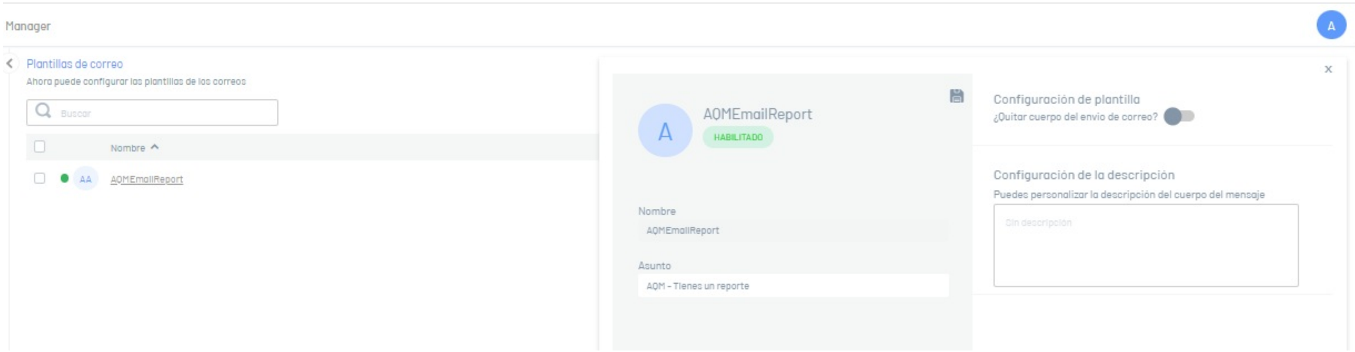
The viewer application supports multitenant operation, but be aware of the slight variations in the url that correspond to this type of configuration.

Email templates

This section configures the information contained in emails sent from Query Manager, when scheduling a report. Currently there is only one email template to edit.

Configuring email templates

1. To modify the mail template, enter the AQM configuration console as an administrator, in the General Settings section of the main menu, select the Mail Template option.
2. The configured mail template is displayed in the information view. Select the template name AQMEmailReport and in the detail view a window is enabled where you can enter the respective parameters.



Parameter	Description
Name	Name of the mail template. Unable to edit
Affair	Subject of the mail template. You can enter text and the File Name automatically
Hide Body	Indicates whether the template description is hidden. Overwrites the parameter Setting the description and hides it
Setting the description	Description of the mail template. You can indicate text, the File Name and the File description

When the setup is complete, click the Save icon to confirm the changes made.

Edition

Creating and Editing Dashboards

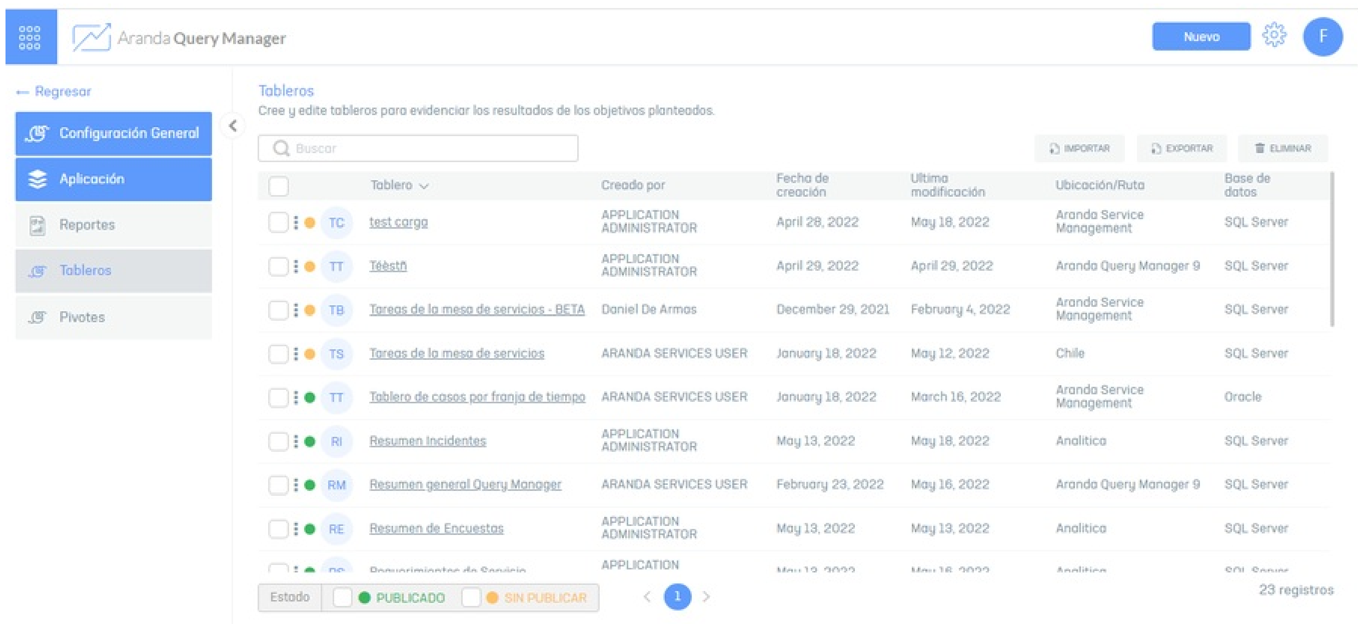
A dashboard in Aranda QUERY MANAGER is a tool that allows you to graphically customize the metrics required by the organization and facilitates the selection of relevant data and indicators, for analysis and intelligent business decision-making.

Creating Boards

1. To create the dashboards, go to the AQM configuration console, in the Application from the main menu, select the Boards.

A list of boards is displayed through a table that occupies the entire screen. You can sort the information by clicking on the header of each column. To see the detail of a board click on the name and a side menu will be displayed from the right to show the corresponding detail.

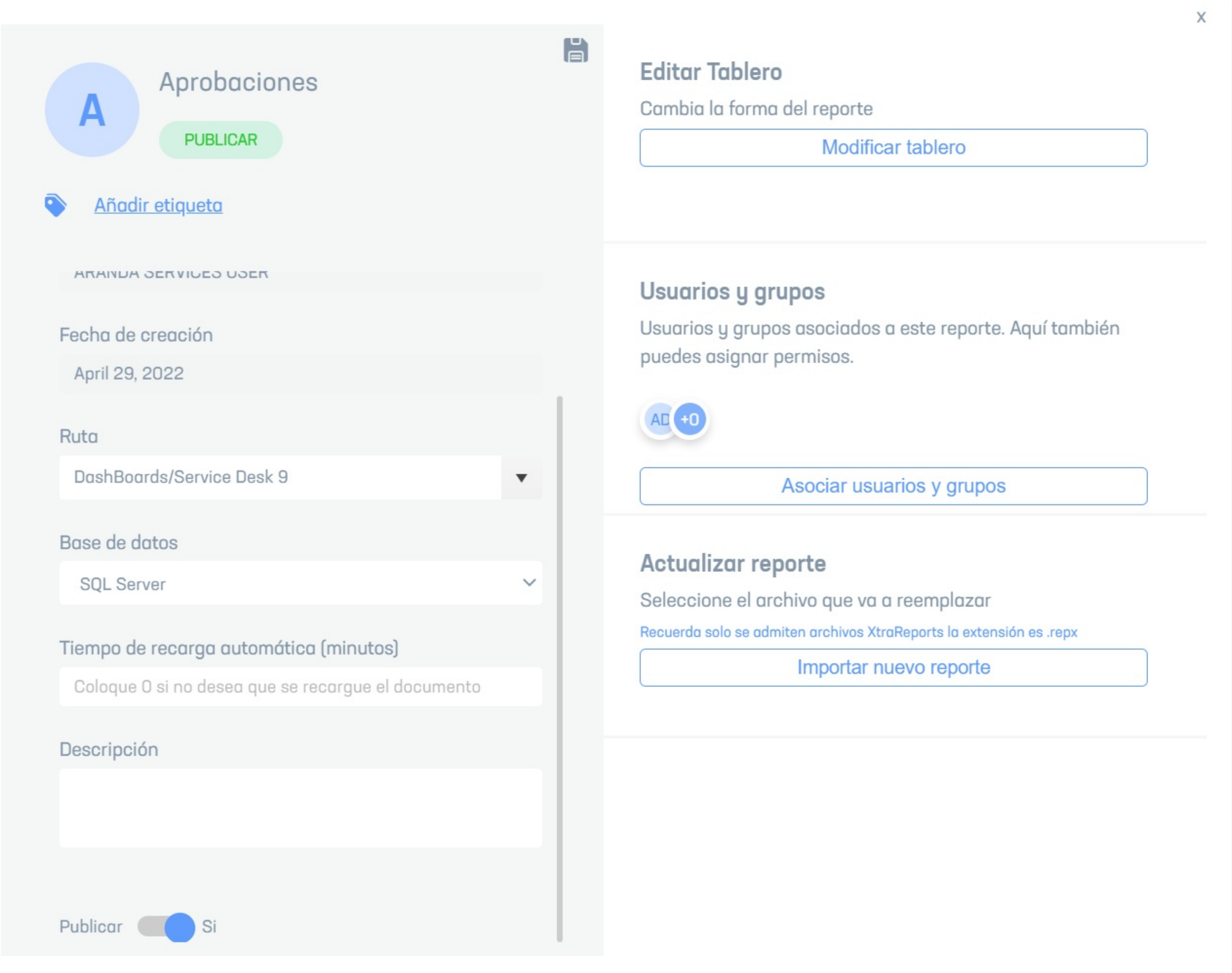
From the Header menu, select the New ; window is enabled Dashboard Detail where you will be able to fill in the basic dashboard information such as: Name, location path, database, enable location, and configure dashboard.



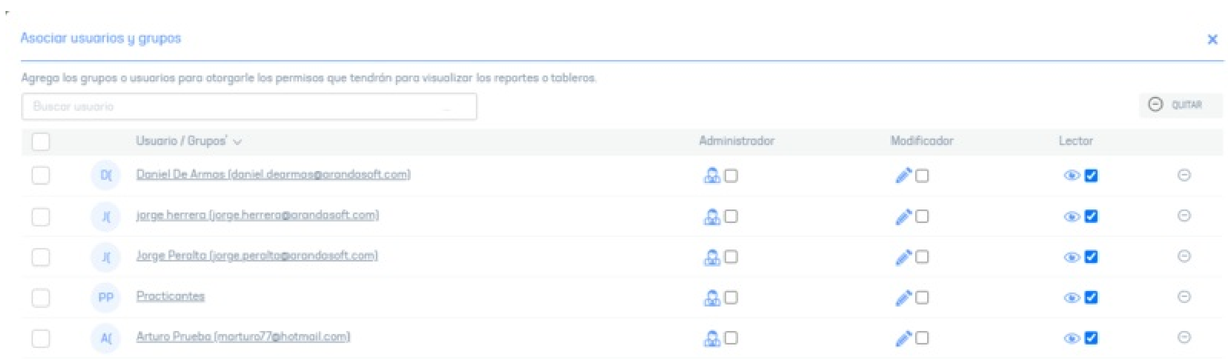
Associate Users and Groups

⚐ Note: Permission association will be enabled, after the dashboard is created.

2. To associate permissions with the dashboard, in the dashboard detail window in the AQM configuration console, select the Associate; window is enabled Associate users or groups where you can search and associate the users who will have access permissions to the boards. These permissions must be pre-configured.



3. In the search field, enter a user's name and add it to the list of records. For each user, you can enable or disable permissions to access reports. The available permissions are admin, reader, and editor.



Edit Boards

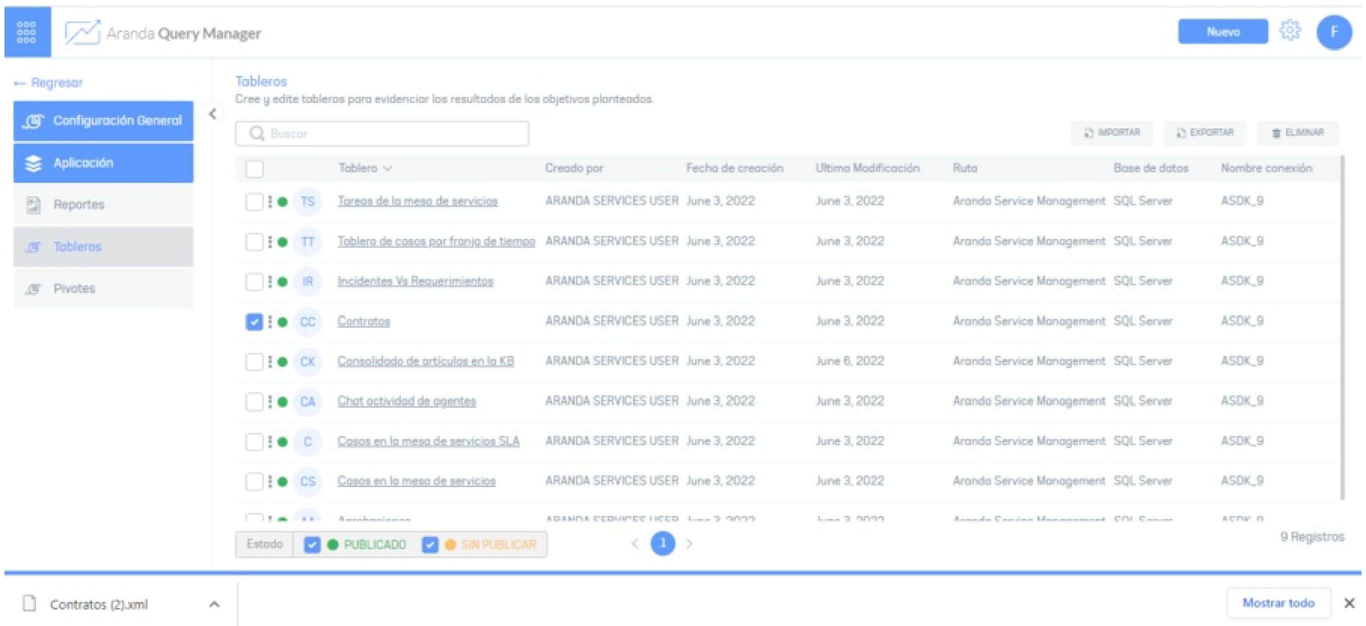
4. to edit a dashboard, in the information view of the AQM configuration console, select a record from the list of existing dashboards; window is enabled Dashboard Detail where you can modify the required information. When you select the Modify Dashboard you will be able to access the Dashboard Designer View Designer Boards .

⚐ Note: The Creation Date and Author fields of the board can be viewed when editing a board.

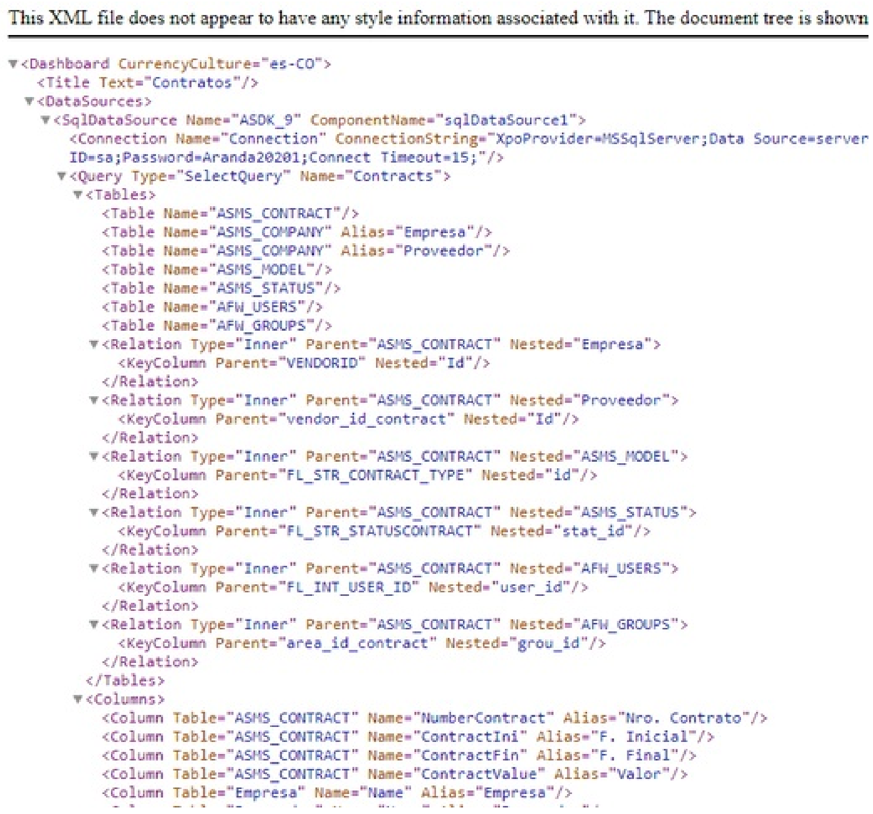
5. To delete one or more dashboards, in the information view, select a record from the list of existing dashboards and select the Eliminate to clear the associated information. 6. When you finish setting up a dashboard, click Save in the Detail View of the AQM Configuration Console, to confirm the changes made.

Bulk Board Loading

1. To export the dashboard information, go to the AQM configuration console, in the Application from the main menu, select the Boards and in the information view, select the Export This option will allow you to export the information with data for updating and/or creating dashboards.



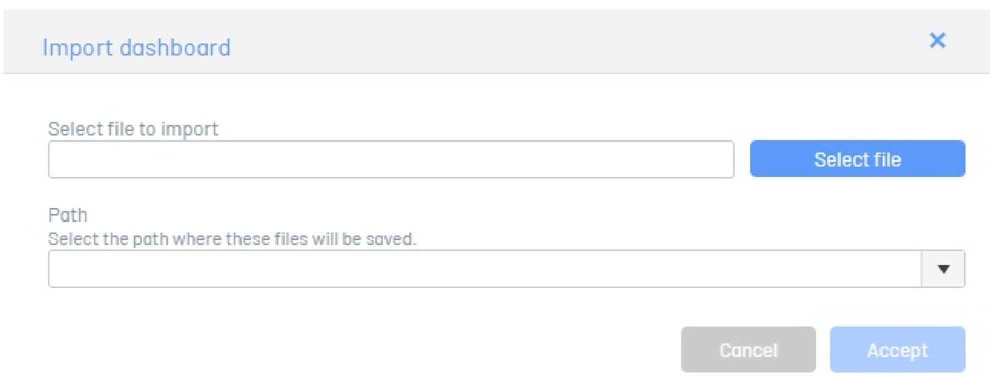
3. A file in XML format will be downloaded, which includes all the information associated with the selected board.


This XML file does not appear to have any style information associated with it. The document tree is shown


```
<Dashboard CurrencyCulture="es-CO">
  <Title Text="Contratos"/>
  <DataSources>
    <SqlDataSource Name="ASDK_9" ComponentName="sqlDataSource1">
      <Connection Name="Connection" ConnectionString="XpoProvider=MSSqlServer;Data Source=server
      ID=sa;Password=Aranda20201;Connect Timeout=15;"/>
      <Query Type="SelectQuery" Name="Contracts">
        <Tables>
          <Table Name="ASMS_CONTRACT"/>
          <Table Name="ASMS_COMPANY" Alias="Empresa"/>
          <Table Name="ASMS_COMPANY" Alias="Proveedor"/>
          <Table Name="ASMS_MODEL"/>
          <Table Name="ASMS_STATUS"/>
          <Table Name="AFW_USERS"/>
          <Table Name="AFW_GROUPS"/>
          <Relation Type="Inner" Parent="ASMS_CONTRACT" Nested="Empresa">
            <KeyColumn Parent="VENDORID" Nested="Id"/>
          </Relation>
          <Relation Type="Inner" Parent="ASMS_CONTRACT" Nested="Proveedor">
            <KeyColumn Parent="vendor_id_contract" Nested="Id"/>
          </Relation>
          <Relation Type="Inner" Parent="ASMS_CONTRACT" Nested="ASMS_MODEL">
            <KeyColumn Parent="FL_STR_CONTRACT_TYPE" Nested="id"/>
          </Relation>
          <Relation Type="Inner" Parent="ASMS_CONTRACT" Nested="ASMS_STATUS">
            <KeyColumn Parent="FL_STR_STATUSCONTRACT" Nested="stat_id"/>
          </Relation>
          <Relation Type="Inner" Parent="ASMS_CONTRACT" Nested="AFW_USERS">
            <KeyColumn Parent="FL_INT_USER_ID" Nested="user_id"/>
          </Relation>
          <Relation Type="Inner" Parent="ASMS_CONTRACT" Nested="AFW_GROUPS">
            <KeyColumn Parent="area_id_contract" Nested="grou_id"/>
          </Relation>
        </Tables>
        <Columns>
          <Column Table="ASMS_CONTRACT" Name="NumberContract" Alias="Nro. Contrato"/>
          <Column Table="ASMS_CONTRACT" Name="ContractIni" Alias="F. Inicial"/>
          <Column Table="ASMS_CONTRACT" Name="ContractFin" Alias="F. Final"/>
          <Column Table="ASMS_CONTRACT" Name="ContractValue" Alias="Valor"/>
          <Column Table="Empresa" Name="Name" Alias="Empresa"/>
```


Import Dashboard Format

1. Once the form has been completed, enter the AQM configuration console, in the section Administration from the main menu, select the Boards and in the information view, select the import .



2. In the Import Dashboard window, upload the file and select a path to save the dashboard; Click the Accept. 3. Once the import is complete, the confirmation of the import process will be displayed at the bottom of the screen

Report Creation and Editing

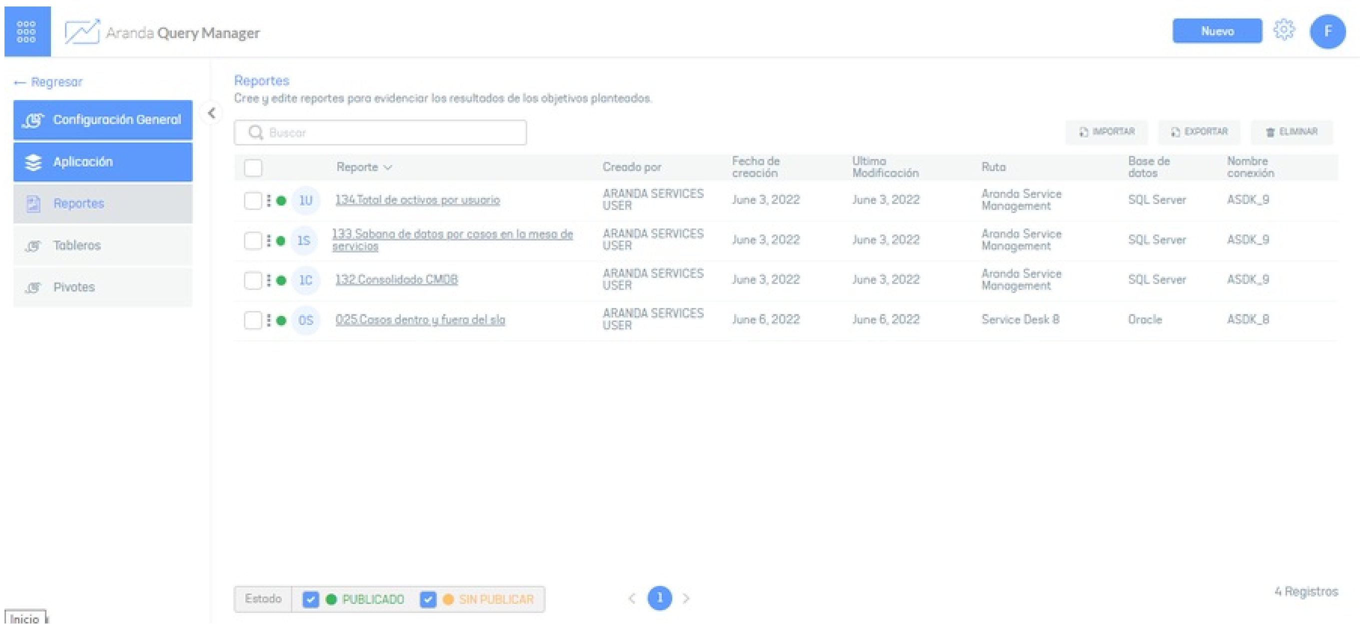
A report in Aranda QUERY MANAGER is a tool that allows you to generate and manage consolidated reports with outstanding information about your business processes in the Aranda Software tools.

Creating Reports

1. To create the reports, go to the AQM configuration console, in the Application from the main menu, select the Reports.

In the information view, you can view a list of reports through a data table. To sort the information in the table, click on the header of each column. To view the report detail, click on the name and display the related information.

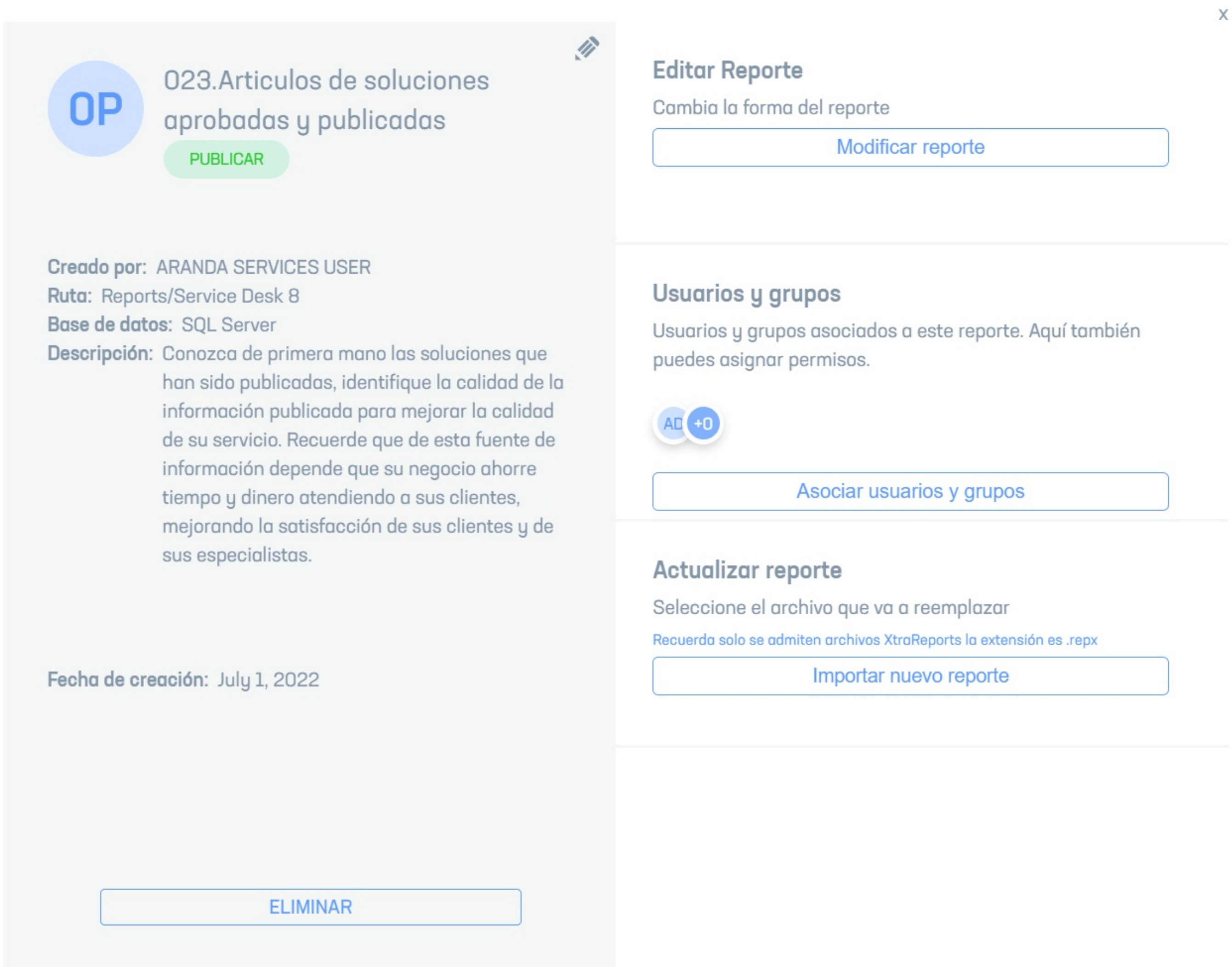
From the Header menu, select the New ; window is enabled Report Detail where you can fill in the basic information of the report such as: Name, location path, database, enable location, and configure report.



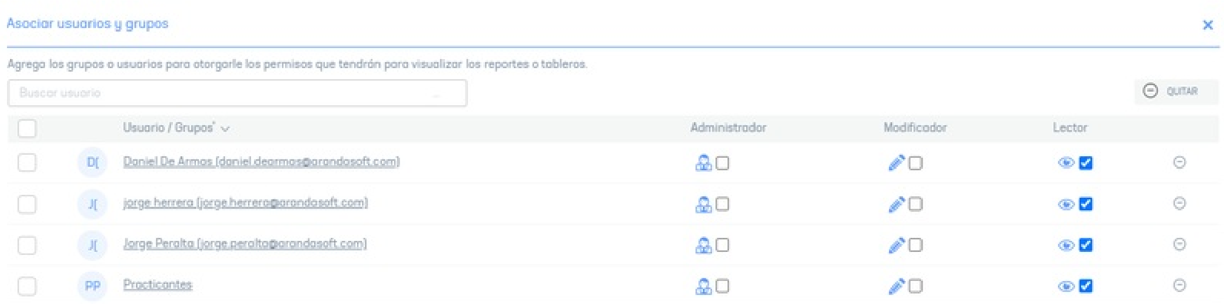
Associate Users and Groups

⚐ Note: Permission association will be enabled, after the report is created.

2. To associate permissions with the report, in the Report Detail window in the AQM Configuration Console, select the Associate User; window is enabled Associate users or groups where you can search and associate the users who will have the permissions to access the reports. These permissions must be pre-configured.



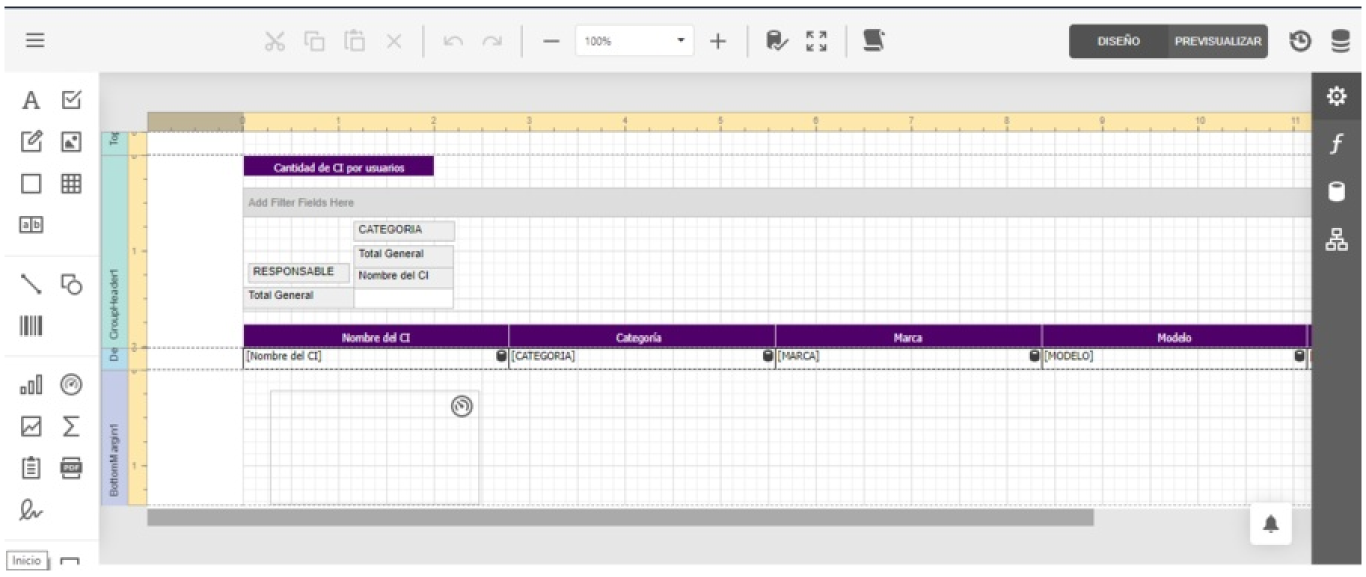
3. In the search field, enter a user's name and add it to the list of records. For each user, you can enable or disable permissions to access reports. The available permissions are admin, reader, and editor.



Edit Reports

4. to edit a report, in the information view of the AQM Configuration Console, select a record from the list of existing reports; window is enabled Report Detail where you can modify the required information. When you select the Modify Report you will be able to access the Report Designer. [View Designer Reports]

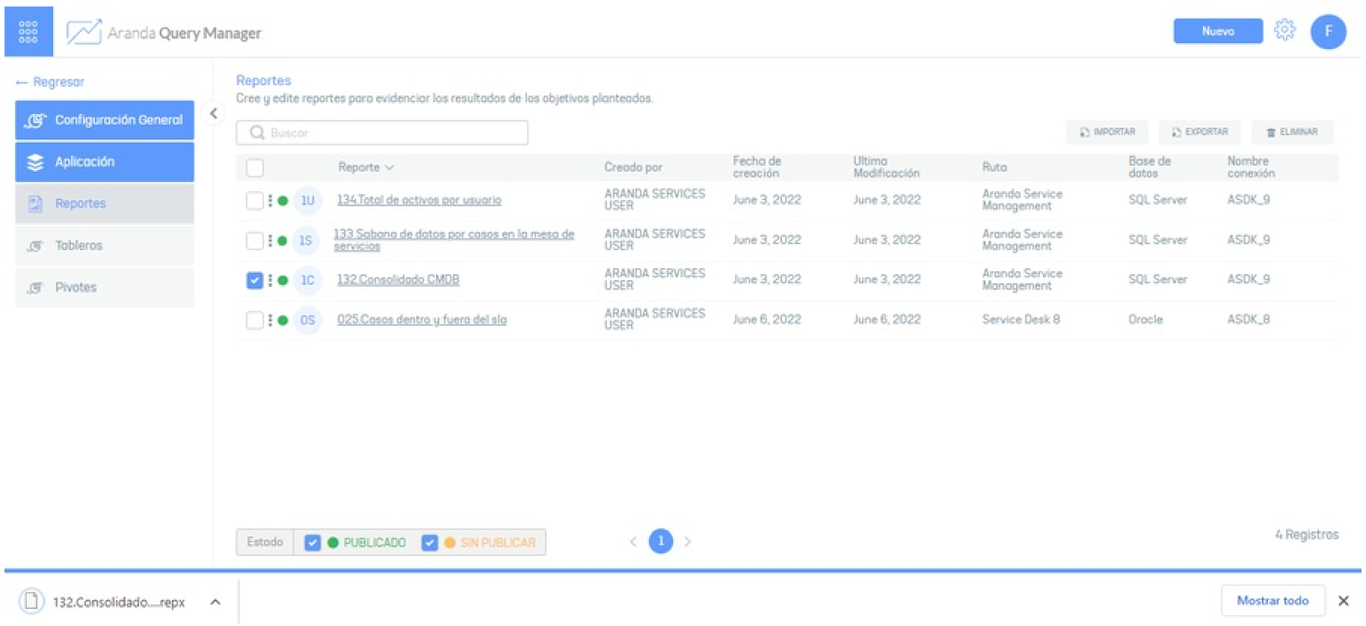
⚐ Note: The Report Creation Date and Author fields can be viewed when editing a report.



5. To delete one or more reports, in the information view, select a record from the list of existing reports, and select the Eliminate to clear the associated information. 6. When you finish setting up a report, click Save in the Detail View of the AQM Configuration Console, to confirm the changes made.

Bulk Report Upload

1. To export the reporting information, log in to the AQM Configuration Console, in the Application from the main menu, select the Reports and in the information view, select the Export This option will allow you to export the information with data for updating and/or creating reports.



3. A file in Repx format will be downloaded, which includes all the information associated with the selected board.


```xml
<?xml version="1.0" encoding="utf-8"?>
<XtraReportsLayoutSerializer SerializerVersion="20.1.7.0" Ref="1" ControlType="DevExpress.XtraReports.UI.XtraReport, DevExpress.XtraReports.v20.1, Version=20.1.7.0, Culture=neutral, PublicKeyToken=b88d1754d700e49a" Name="Sabana de datos por casos en la mesa de servicios" DisplayName="CMDB - BETA" Landscape="true" Margins="100, 100, 65, 100" PaperKind="Custom" PageWidth="3000" PageHeight="1654" ScriptReferencesString="&#xD;&#xA;Aranda.AQM.Scripting.dll" Version="20.1" DataMember="Consulta" DataSource="#Ref-0" Font="Tahoma, 8pt" Tag_type="System.String" Tag="{&quot;DataSetName&quot;:&quot;Consulta&quot;,&quot;OffSetField&quot;:&quot;offset&quot;,&quot;PageSizeField&quot;:&quot;pageSize&quot;}">
  <Extensions>
    <Item1 Ref="2" Key="DataSerializationExtension" Value="DevExpress.XtraReports.Web.ReportDesigner.DefaultDataSerializer" />
  </Extensions>
  <Bands>
    <Item1 Ref="3" ControlType="TopMarginBand" Name="TopMargin1" HeightF="64.83" TextAlignment="TopLeft" Padding="0,0,0,0,100" />
    <Item2 Ref="4" ControlType="GroupHeaderBand" Name="GroupHeader1" RepeatEveryPage="true" HeightF="73" TextAlignment="MiddleCenter" ForeColor="White" BackColor="255,80,0,105" BorderColor="255,227,227,227" Borders="All">
      <Controls>
        <Item1 Ref="5" ControlType="XRLabel" Name="label1" Multiline="true" Text="Consolidado de CI" SizeF="243.47,23" LocationFloat="0,12.25" Padding="2,2,0,0,100" />
        <Item2 Ref="6" ControlType="XRTable" Name="table2" SizeF="2800,23" LocationFloat="0,50">
          <Rows>
            <Item1 Ref="7" ControlType="XRTableRow" Name="tableRow2" Weight="1">
              <Cells>
                <Item1 Ref="8" ControlType="XRTableCell" Name="tableCell24" Weight="1" Multiline="true" Text="Nombre del CI" Padding="2,2,0,0,100" />
                <Item2 Ref="9" ControlType="XRTableCell" Name="tableCell25" Weight="1" Multiline="true" Text="Marca" Padding="2,2,0,0,100" />
                <Item3 Ref="10" ControlType="XRTableCell" Name="tableCell26" Weight="1" Multiline="true" Text="Modelo" Padding="2,2,0,0,100" />
                <Item4 Ref="11" ControlType="XRTableCell" Name="tableCell27" Weight="1" Multiline="true" Text="Serial" Padding="2,2,0,0,100" />
                <Item5 Ref="12" ControlType="XRTableCell" Name="tableCell28" Weight="1" Multiline="true" Text="Descripcion" Padding="2,2,0,0,100" />
                <Item6 Ref="13" ControlType="XRTableCell" Name="tableCell29" Weight="1" Multiline="true" Text="Categoria" Padding="2,2,0,0,100" />
                <Item7 Ref="14" ControlType="XRTableCell" Name="tableCell30" Weight="1" Multiline="true" Text="Estado" Padding="2,2,0,0,100" />
                <Item8 Ref="15" ControlType="XRTableCell" Name="tableCell31" Weight="1" Multiline="true" Text="Responsable" Padding="2,2,0,0,100" />
                <Item9 Ref="16" ControlType="XRTableCell" Name="tableCell32" Weight="1" Multiline="true" Text="F. registro o ingreso" Padding="2,2,0,0,100" />
                <Item10 Ref="17" ControlType="XRTableCell" Name="tableCell33" Weight="1" Multiline="true" Text="F.creación del CI" Padding="2,2,0,0,100" />
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                <Item14 Ref="21" ControlType="XRTableCell" Name="tableCell37" Weight="1" Multiline="true" Text="F. Salida de la compañia" Padding="2,2,0,0,100" />
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                <Item16 Ref="23" ControlType="XRTableCell" Name="tableCell39" Weight="1" Multiline="true" Text="F. Ultima Modificación" Padding="2,2,0,0,100" />
```
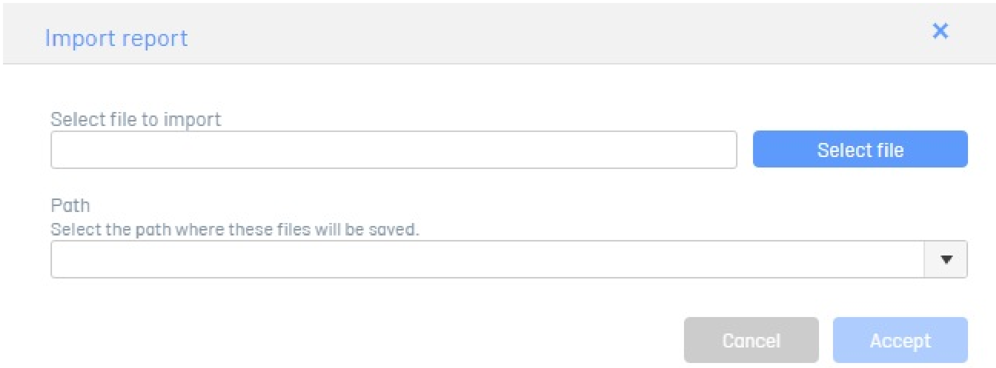


Import Report Format

1. Once the form has been completed, enter the AQM configuration console, in the section Administration from the main menu, select the Reports and in the information

view, select the import .

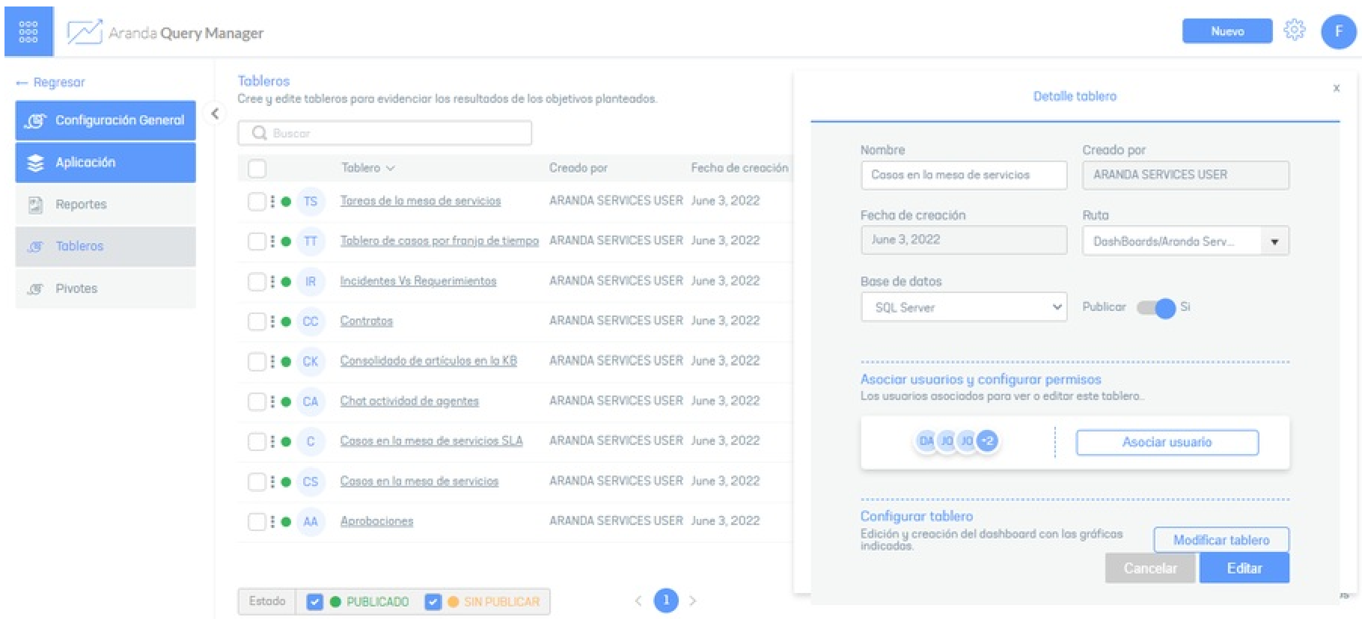


2. In the Import Report window, upload the file and select a path to save the report; Click the Accept. 3. Once the import is complete, the confirmation of the import process will be displayed at the bottom of the screen.

Board Designer

This editor allows you to customize and configure the information of your own indicators according to the business, making use of different controls and filters to organize and present the information graphically

1. To access the dashboard designer, go to the AQM configuration console, in the Application from the main menu, select a record from the list of existing boards, and in the detail view click the Modify Dashboard.

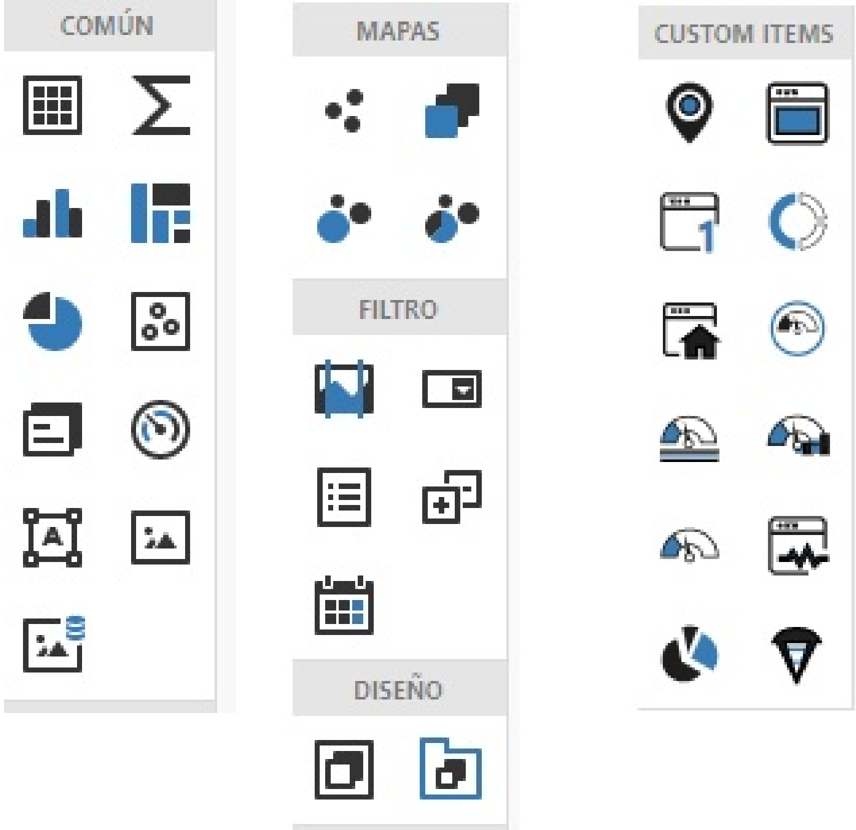


2. The dashboard designer is enabled where you can customize the information generated. In the main menu of the designer you can see different dashboard controls to organize the information on the board and in the dashboard view you can use the different controls. Each dashboard is made up of graphical regions called item dashboards, to which you can include the various controls.

3. To design a board, select the control of your choice from the main menu and move it to the designer's board view.

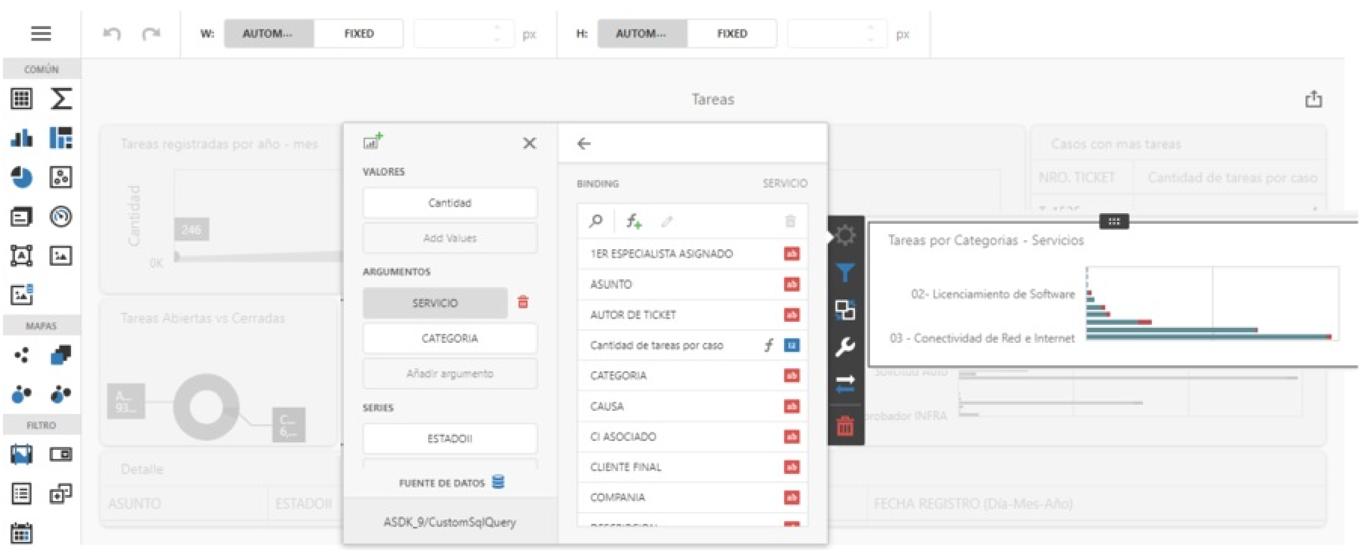
Controls

The dashboard controls are grouped into categories that allow you to design and customize the dashboard with different characteristics

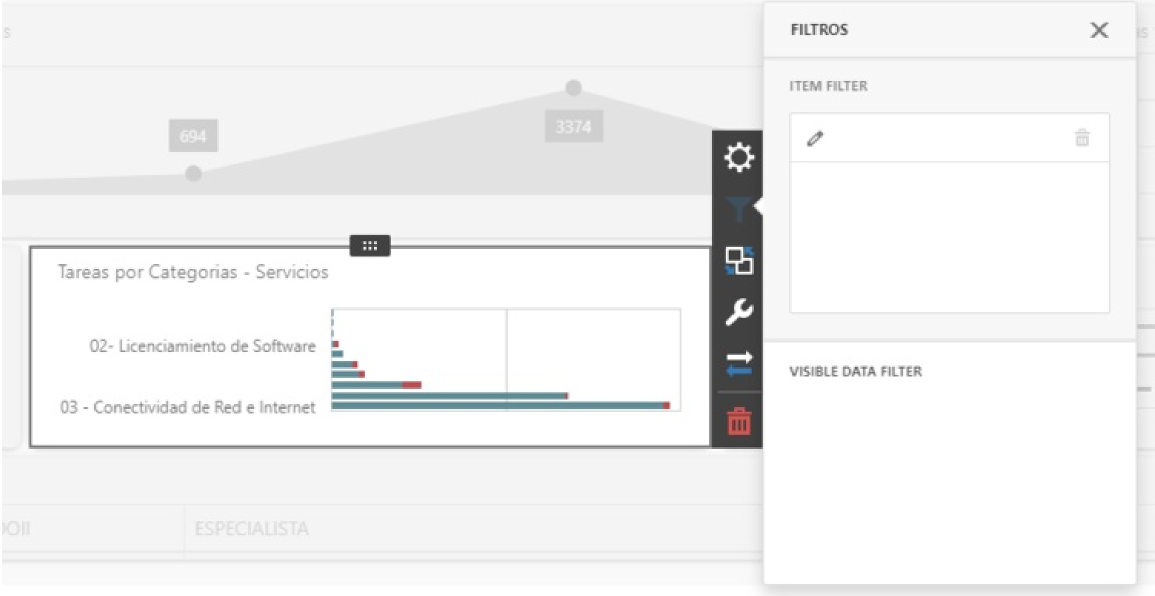


Control Type	Description
Common	This category groups the information display controls as: Tab-Cube-Graph, TreeMap, Pies, Scatter Charts, Tabs, Gauge, Text Box, and Bound Image.
Maps	This category groups the controls that present the information using georeferencing elements such as maps: Geo Point Map, Choropeth Map, Bubble Map, Cake Map.
Filter	This category groups controls to filter information, such as: Range filter, combo box, list box, tree view, and data filter.
Design	This category is made up of the group and tab container controls
Customized	This category groups custom controls such as: Online map, webpage, kpi number, donut, kpi icon, circular gauge, linear gauge, bar gauge, just gauge, kpi icon bar, extreme chart, funnel chart

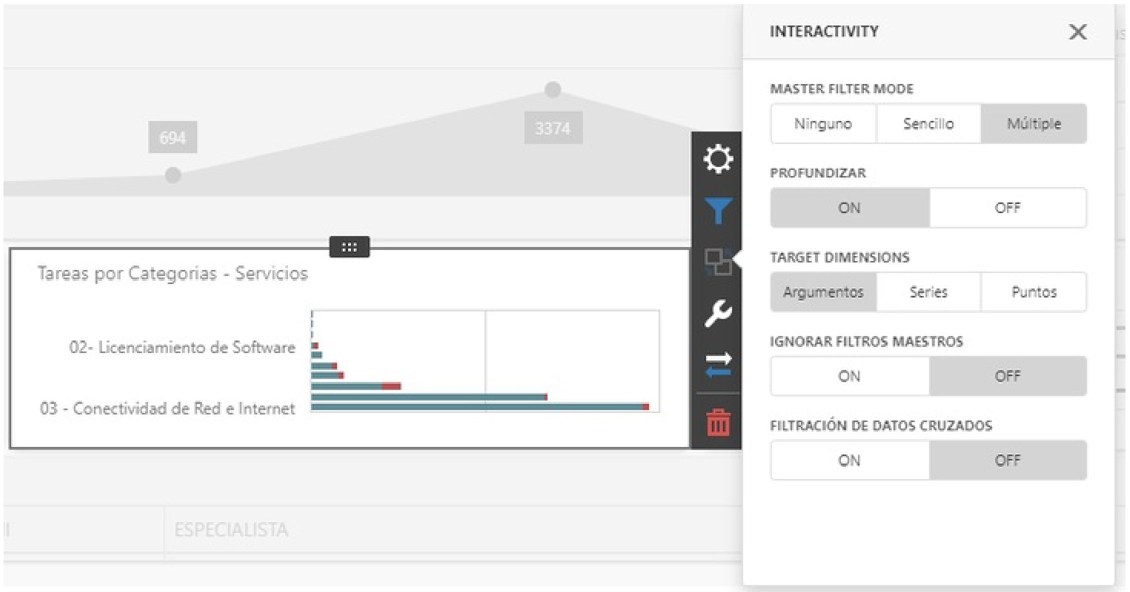
4. When you select a dashboard or dashboard item, the information configured for the defined control is displayed and a toolbar is enabled to customize the dashboard settings. The standard toolbar of the controls is composed of the following items: Links: This option allows you to relate relevant information or values from each control. Example you can modify values of the indicator, define an argument with the existing variables, configure series, define dimensions and measures of the dashboard, display the data source.



Filters: This option presents the filters for each control.

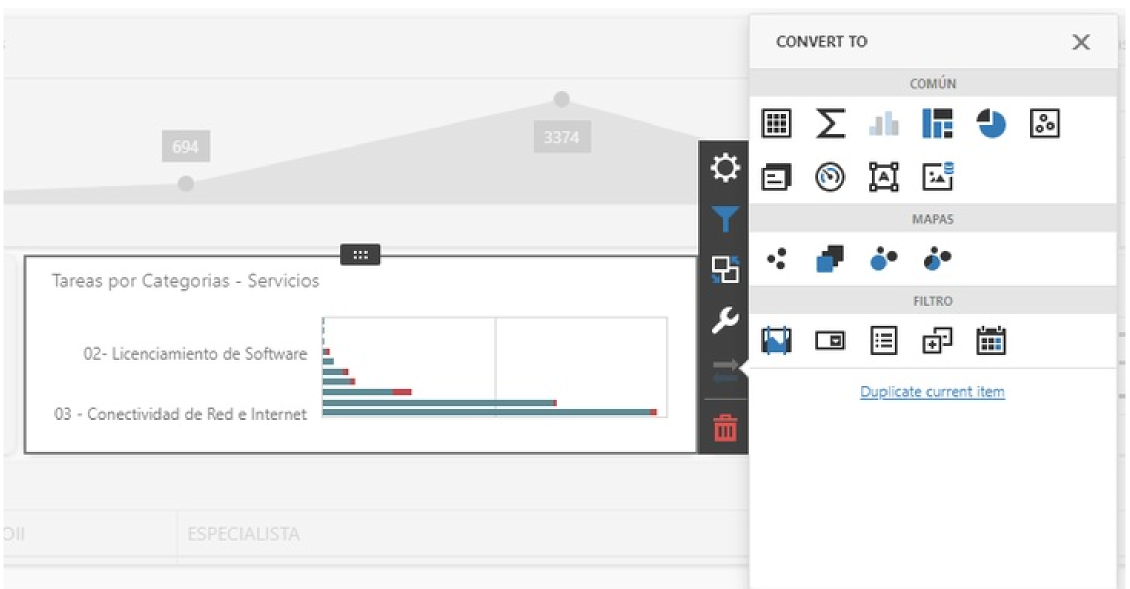


Interactivity: This option presents interactive options for each control with items such as master mode, target dimensions, ignore master filters, or cross-data filtering.



Options: This item allows you to define the styles and presentation of the board by including elements such as presentation of titles, layout and labels of the chart, diagram of colr.

Convert to: This option allows you to convert the assigned control to the selected dashboard, using the available controls.



Remove: This option allows you to delete the selected board. 5. In the information view of the Dashboard Designer, you will have the option to export each board to PDF, Image, or Excel format, using the corresponding icon.

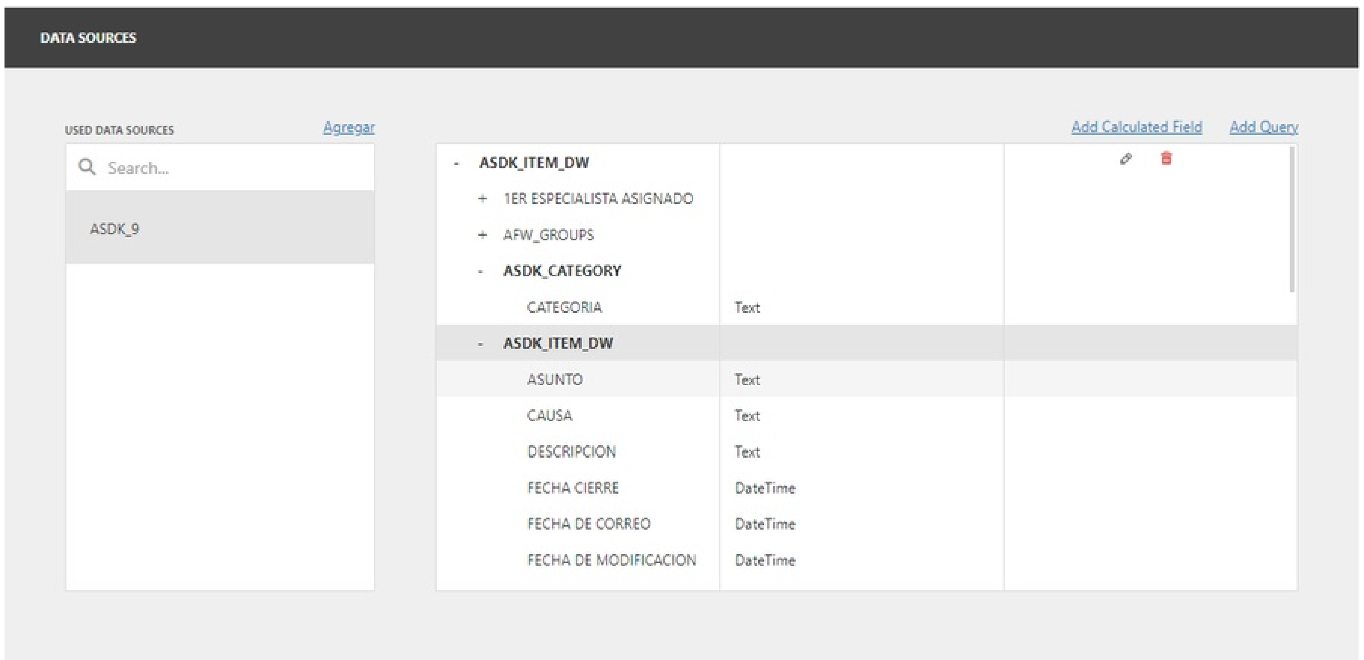
6. In the dashboard designer header, you can customize the layout size of the dashboards automatically or by correcting the pixel size of the layout.

Dashboard Menu

7. In the main designer menu you can access the dashboard menu, where you can access the following options:

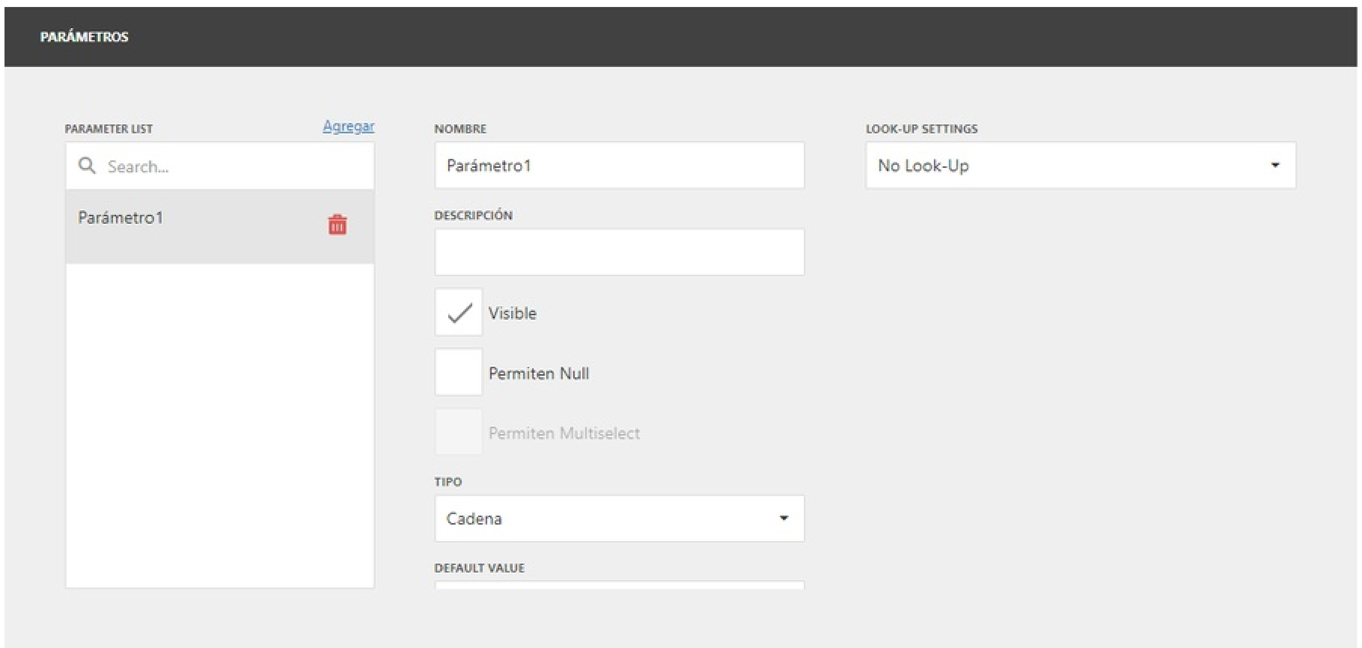
Open: This option presents a list of the dashboards generated in AQM. Selecting a created record enables the display of the dashboards.

Save: This option allows you to save the presentation of boards. Data Sources: This option presents the context information view of the database. [View Data Source]

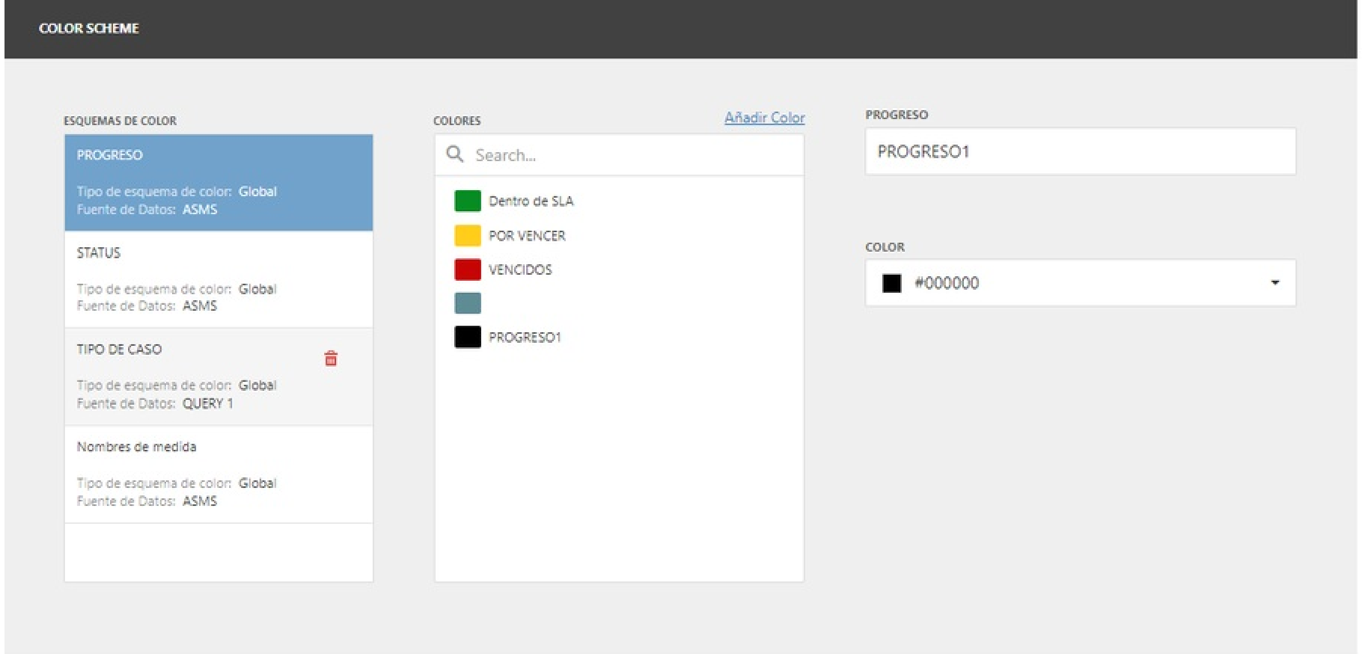


Title: Here you can define the characteristics of the selected board title. Coin: This option sets the culture and currency in which the boards are presented in the designer.

Parameters: The context parameters of the database are defined.



Color Scheme: Set the colors to be set in the dashboard visuals such as progress, status, case types, and measure name.

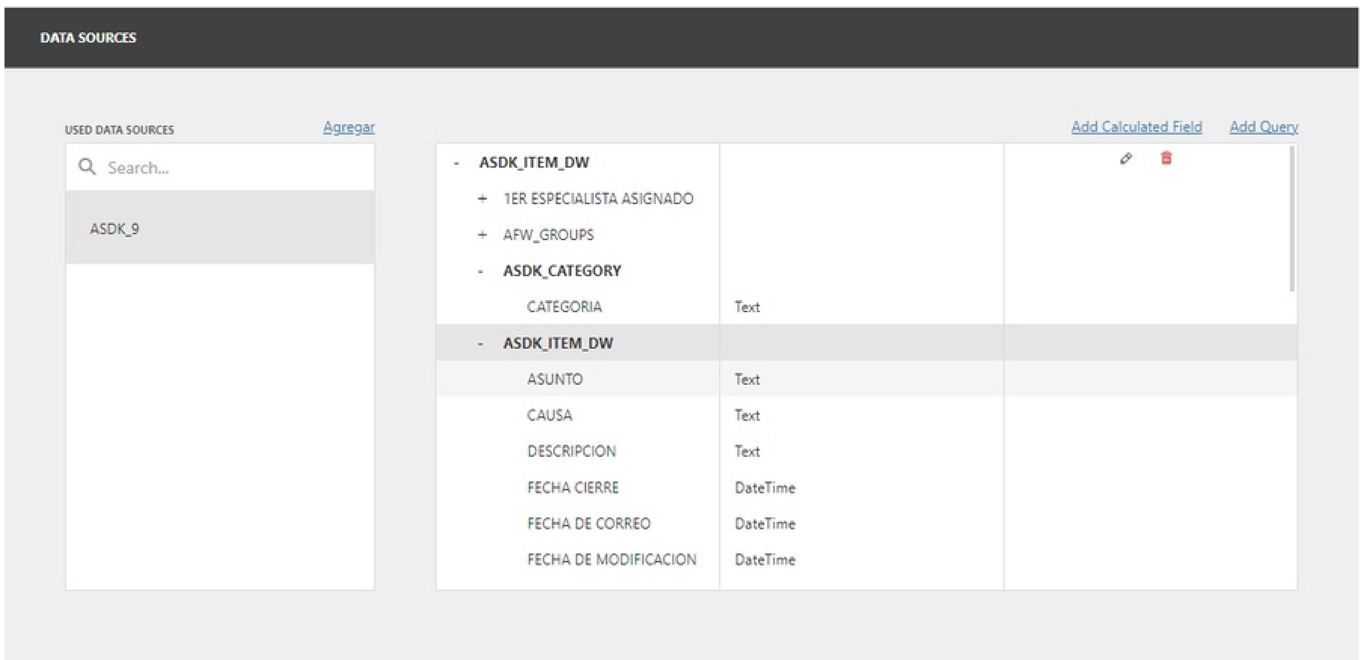


Data Source

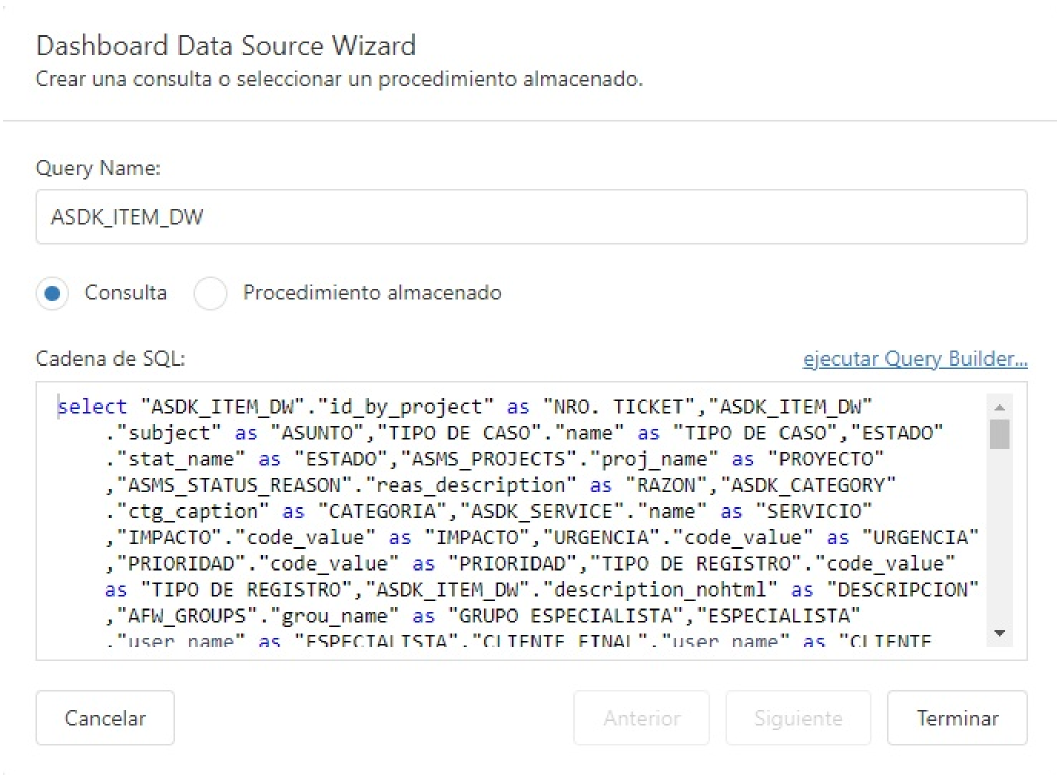
By accessing the Data Sources, you will be able to consult or add the information according to the origin of the data.

1. In the main menu of the dashboard designer, enter the dashboard menu and the Data Sources.

2. Select a record from the data source and select the edit icon, the window is enabled Data Source Wizard Dashboard, to view the query and modify the required information.



3. To create a new data query or stored procedure, from the Data Source window, select the Add Query; window is enabled Data Source Wizard Dashboard and complete the required information.



Run Query Builder 4. Select the option Run Query Builder, to access the query builder, to graphically model the queries included in the dashboard and report editor.

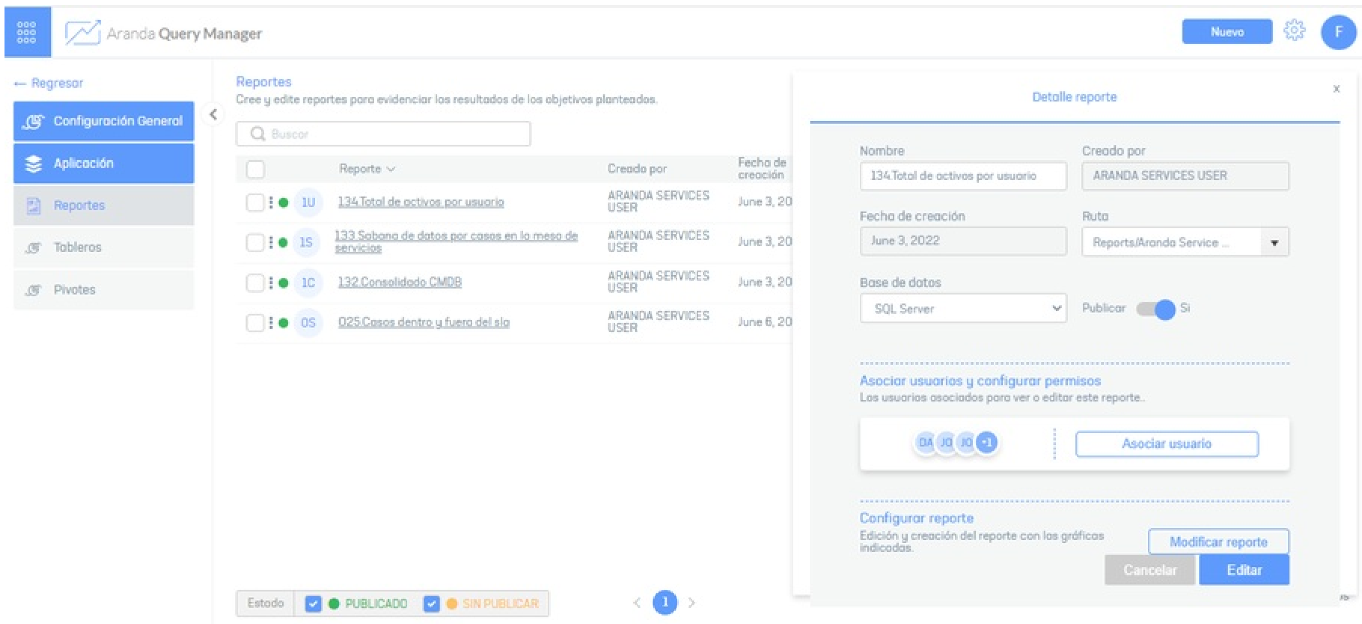
[View Query Builder ↪](#)

⚐ Note: If you want to create a query with different data sources then take a look at [Federated consultations](#).

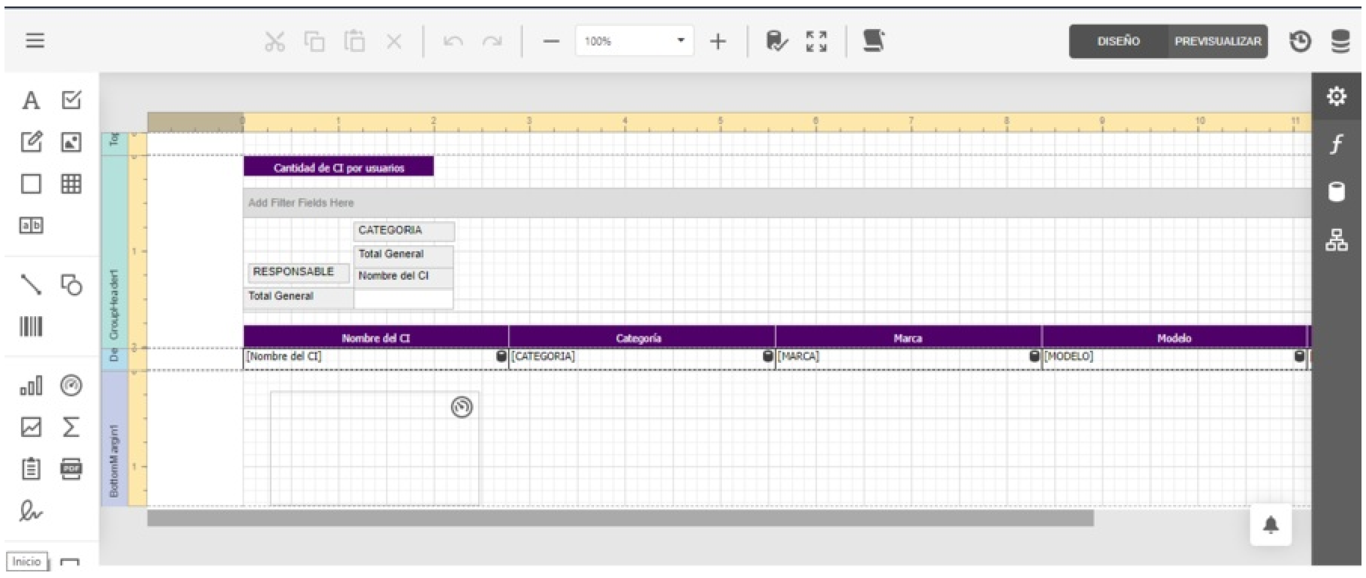
Report Designer

This editor allows you to customize and configure the information in the consolidated reports of the business processes, making use of different controls and filters to organize and present the information graphically

1. To access the Report Designer, log in to the AQM Configuration Console, in the Application From the main menu, select a record from the list of existing reports, and in the Detail view, click the Modify Report.



2. The report designer is enabled where you can customize the information generated. In the main menu of the designer you can see different controls to organize the information in the report and in the report view you can use the different controls.



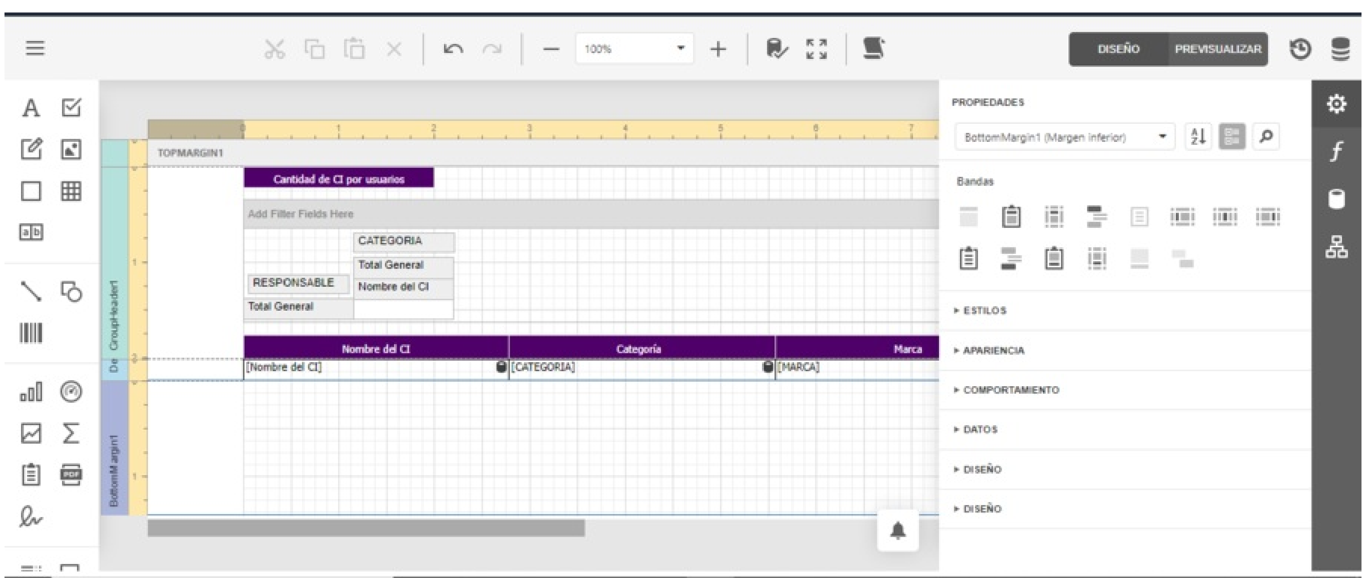
3. To design a report, select the control of your preference from the main menu and scroll it to the Designer Reports view.

Controls

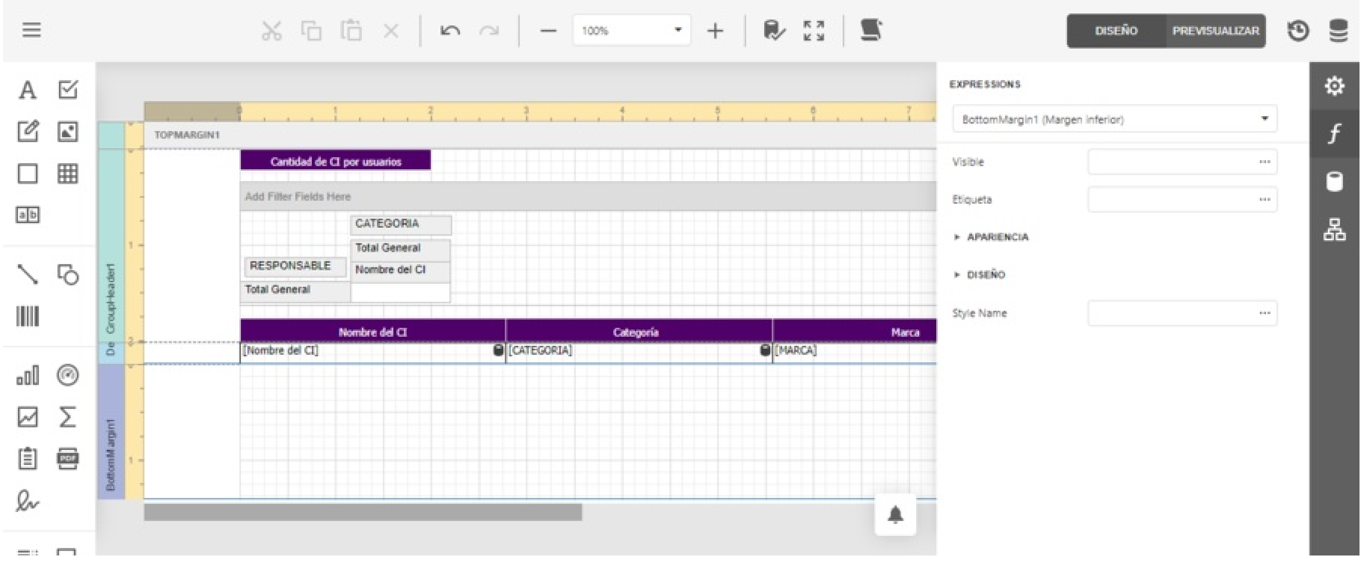
The controls in the report designer are grouped into categories that allow you to design and customize the report with different characteristics.

Control Type	Description
Common	This category groups the information display controls such as: Label, checkbox, rich text, image box, panel, table, and character comb.
Forms	This category groups the controls that present the information such as:Line, Shape, and Barcode.
Graphic	This category groups the controls for presenting information, such as: Graphic, gauge, sparkline, cross tab, sub report, pdf content, pdf signature
Organize	This category is made up of controls to organize information such as: table of contents, page info, page break, cross-band, and cross-band box.

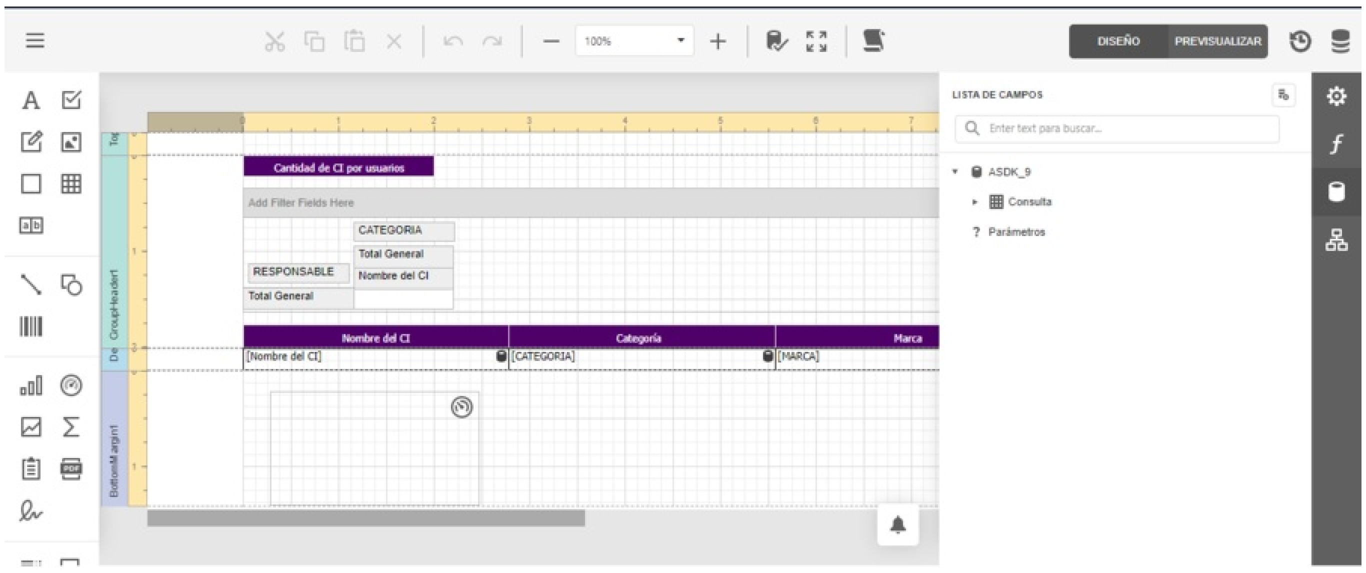
4. When you select a report control in the Designer Insights view, the information configured for the defined control is displayed, and a toolbar is enabled to customize the report information. The standard toolbar for controls is composed of the following items: Properties: This option allows you to customize properties of report controls such as layout, dimensions, styles, editing options, font, padding, scripts, summary, size, text.



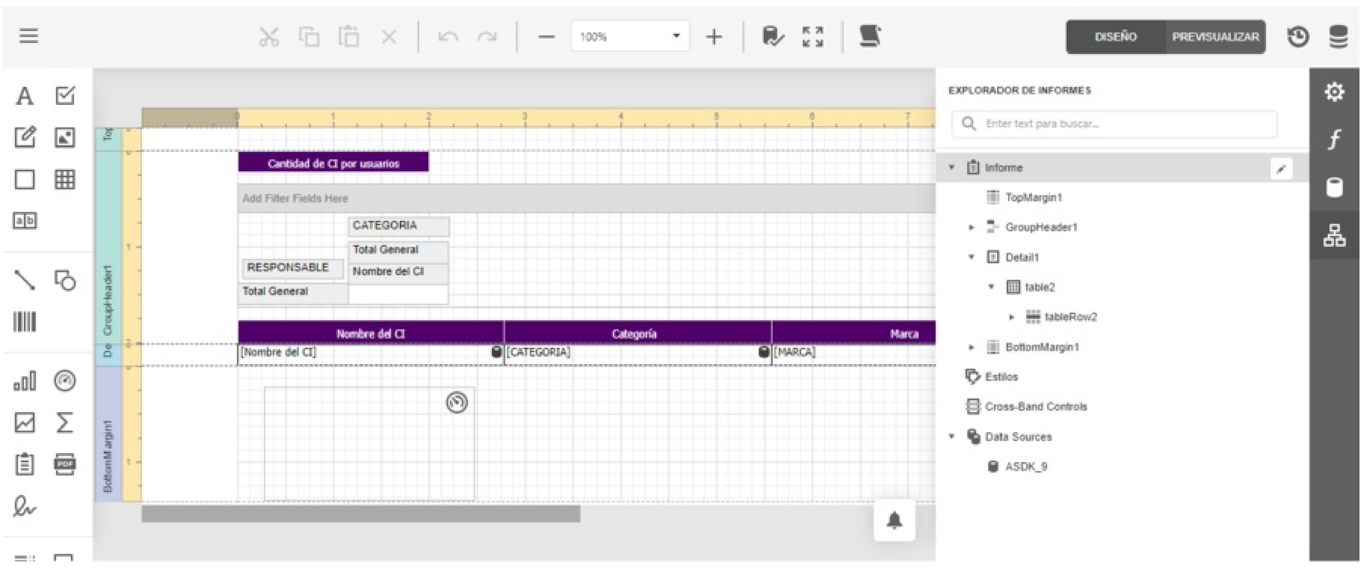
Expressions: This option allows you to configure the design and style elements of the report through an expression editor.



List of Fields: This option allows you to define a query, add the information according to the source of the data, and include parameters in the report.

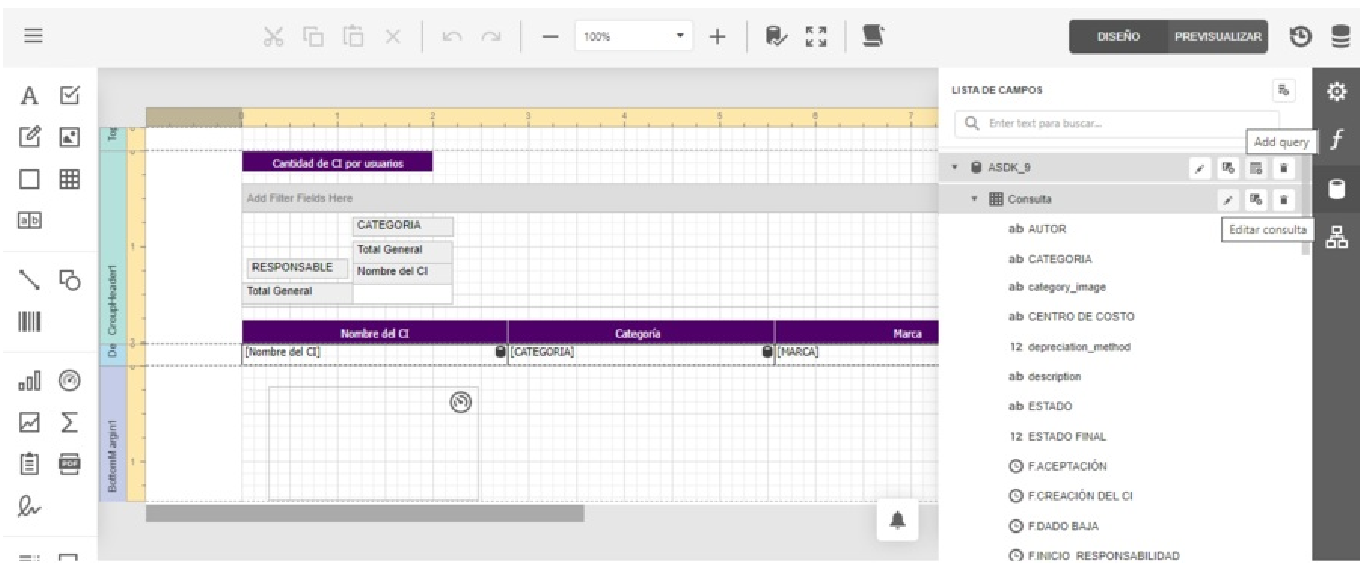


Report Explorer: This item allows you to know the structure and configuration of the report.

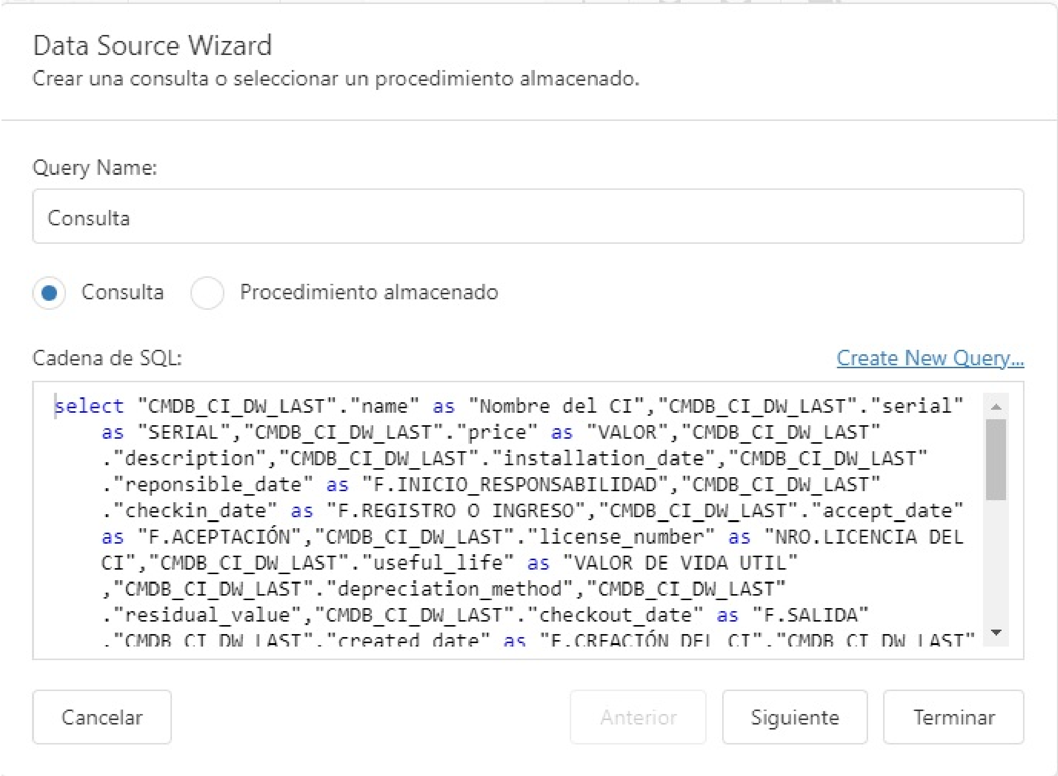


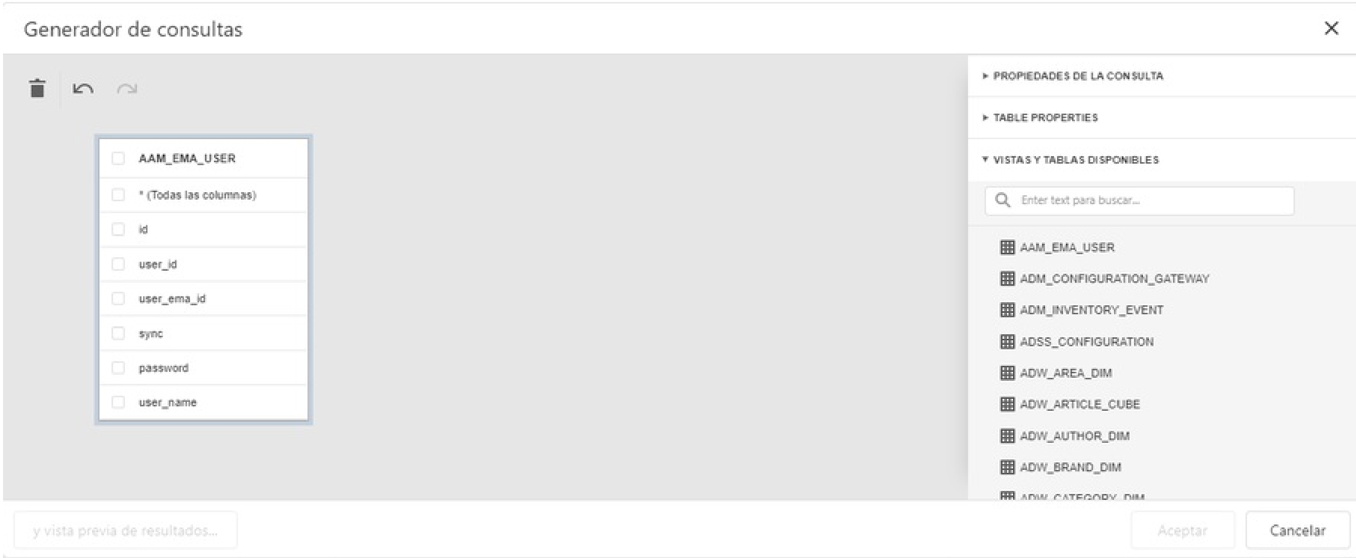
List of Fields

When you select the data source or a query from the Field List category, you will have access icons available to add a query (Add Query) or edit a query. The Data Source Wizard window is enabled to create a new data query or stored procedure.



From the data Source Wizard you can select the options Run Query Builder or Create New Query, to access the query builder and graphically model the queries included in the dashboard and report editor. View Query Builder



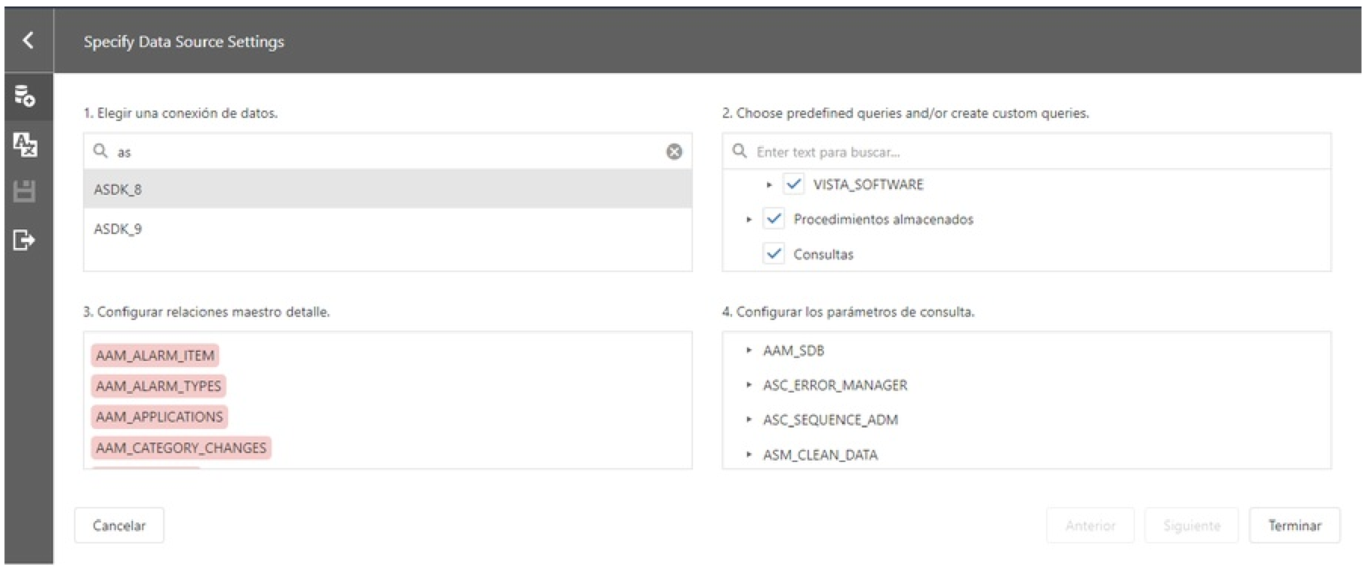


5. In the report designer header, you can find a toolbar to customize the layout size and automatically preview reports, set timeout, or set pagination options.

Report Menu

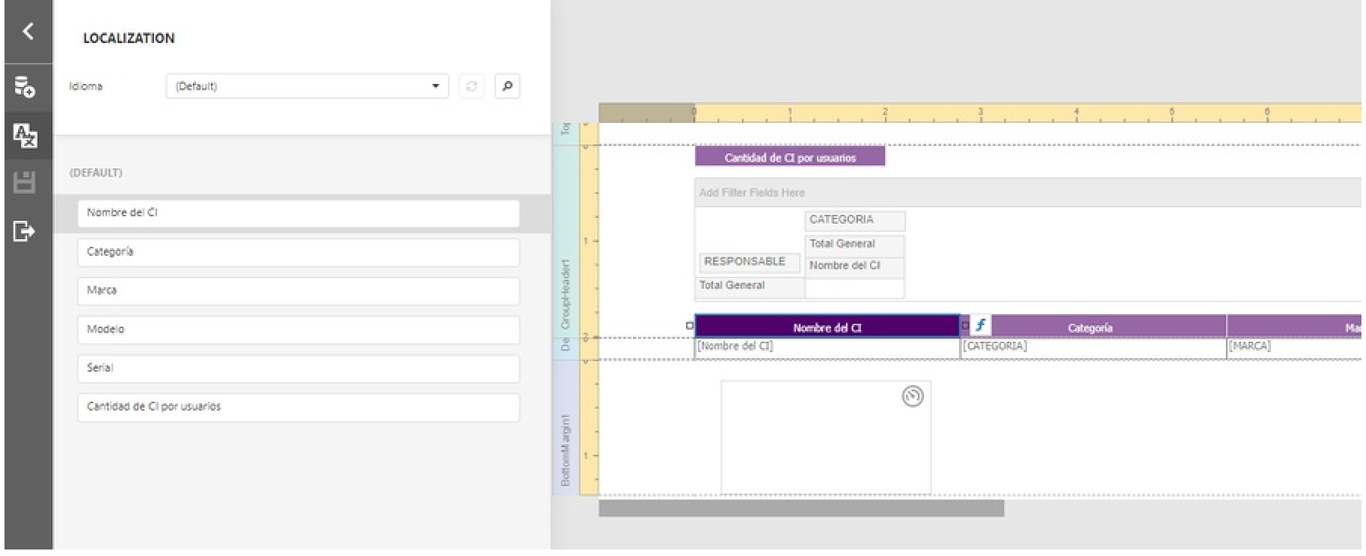
6. In the main menu of the report designer, you can access the menu, where you can access the following options:

Add Data Sources: This option allows you to query or aggregate the information according to the source of the data. When selecting a record from the data source, choose a predefined query, define the master detail relationships, and define the query parameters.



⚐ Note: If you want to create a query with different data sources then take a look at [Federated consultations](#).

Localization This option allows you to customize the language of the report presentation.



Save: This option allows you to save the reporting presentation.

Reporting TimeOut

Allows you to configure the timeout for the execution of queries in the Data Sources of the reports.

The type of data source you are working with must be taken into account.

Data Source Type	Description
Production	It is the original data source intended for creating, updating and reading information.
Replica	Copy of original data source used for reading large amounts of information.

Timeout in Production Data Sources

For production data sources, the timeout value is 30 seconds for all reports.

To set the timeout to a value other than 30 seconds, contact your system administrator

⚐ Note:

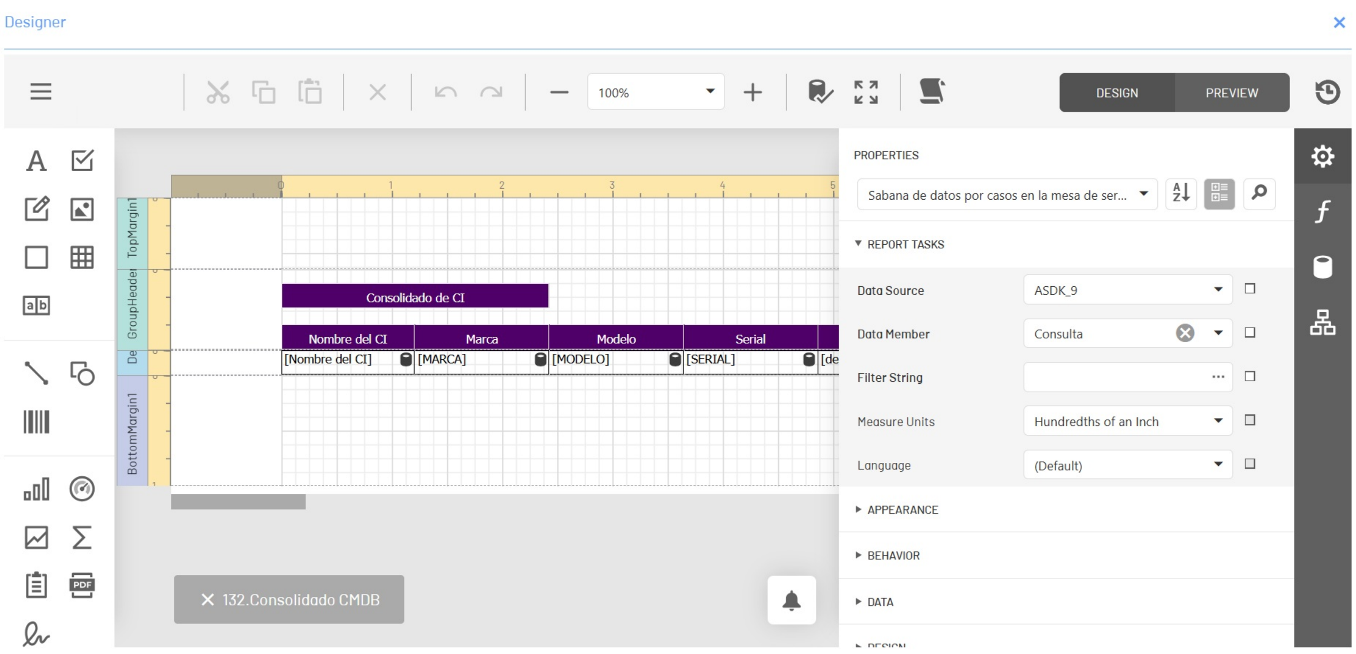
- The defined timeout applies to all data sources in the reports.
- 30 seconds is considered to be an efficient value so as not to overwhelm resource utilization in production data sources.

Timeout in Replica Data Sources

In replication-type data sources, the timeout is applied individually for each report and can be greater than 30 seconds, with no time limit.

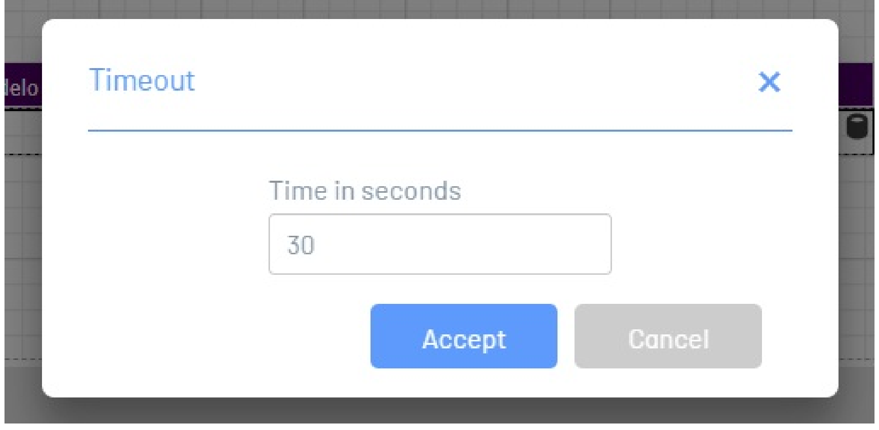
To perform this configuration, consider the following steps:

1. Enter the report designer.



2. On the main toolbar, click the Timeout icon

to configure the timeout. 3. The window is enabled Waiting time where you can enter the value in seconds for the report query.



4. Click Accept to save your changes. You don't need to save the report layout.

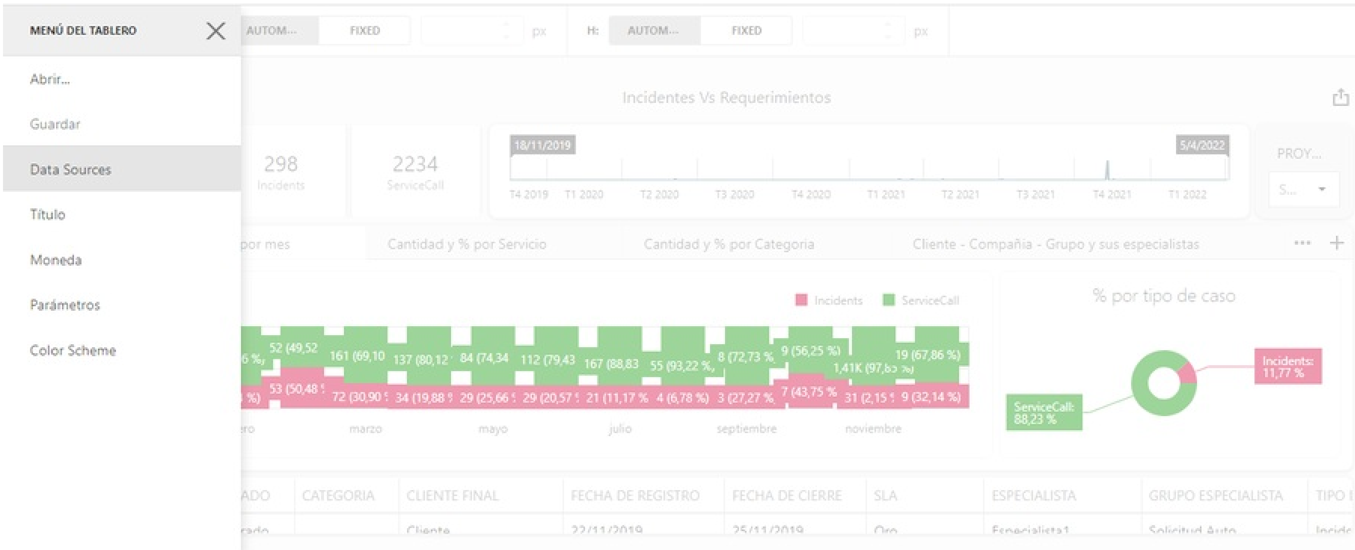
⚐ Note:

- When you save the Timeout, the changes are not reflected in the designer, because they are saved within the report.

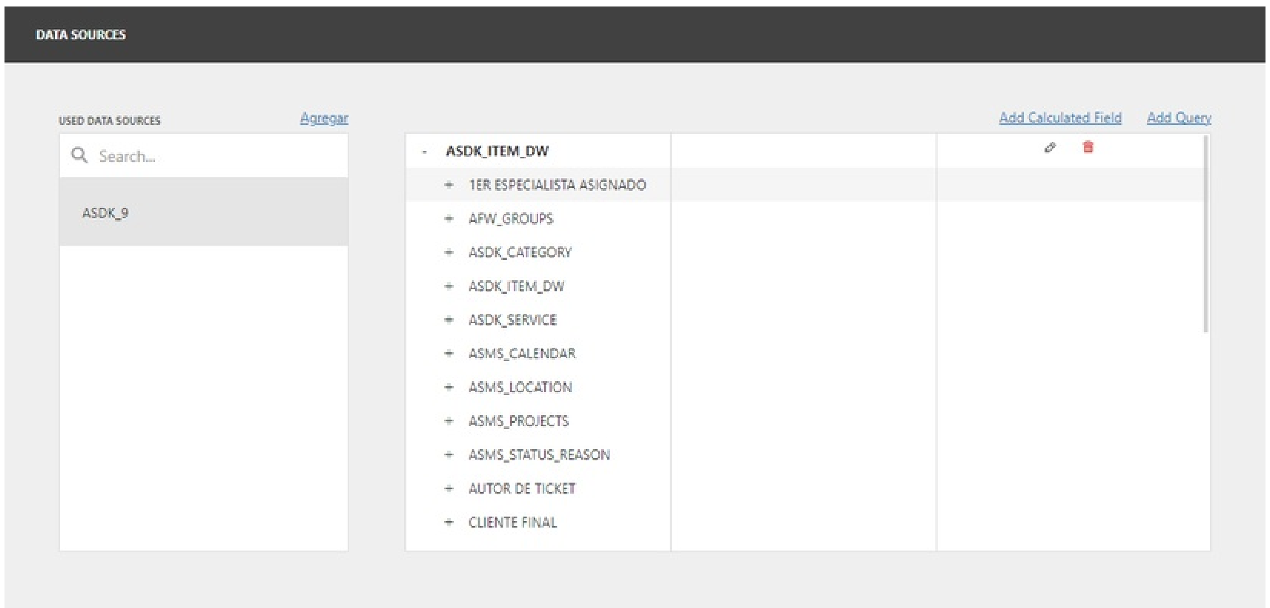
Generador de consultas Query Builder

Query Builder is a tool that allows you to graphically model queries included in report and dashboard editors. However, if you make modifications to queries manually, they can no longer be evaluated by Query Builder and cannot be displayed in the graphical editor.

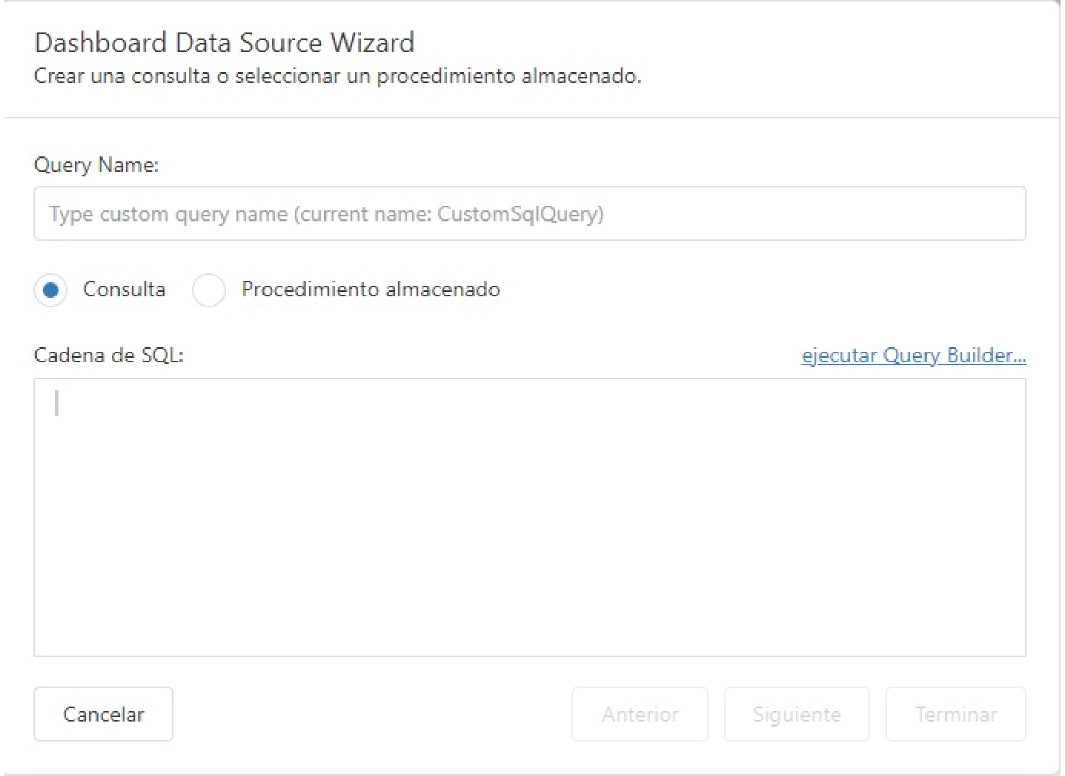
1. In the main menu of the dashboard designer, enter the dashboard menu and the Data Sources.



2. Select a record from the data source and select the edit icon, the window is enabled Data Source Wizard Dashboard, to view the query and modify the required information.

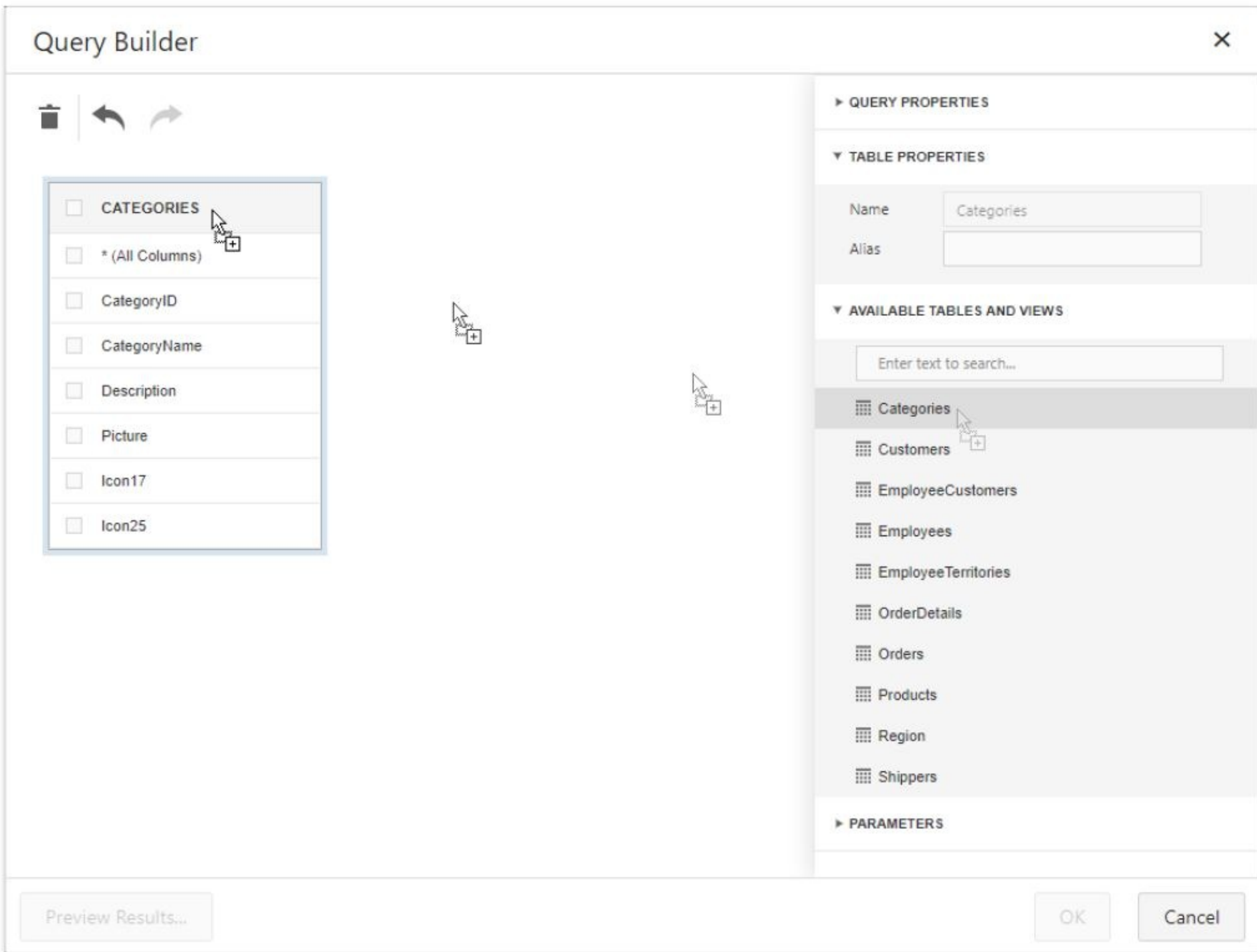


3. Select the option Run Query Builder, Window is enabled Query Builder where you can graphically model the queries.



Views and tables

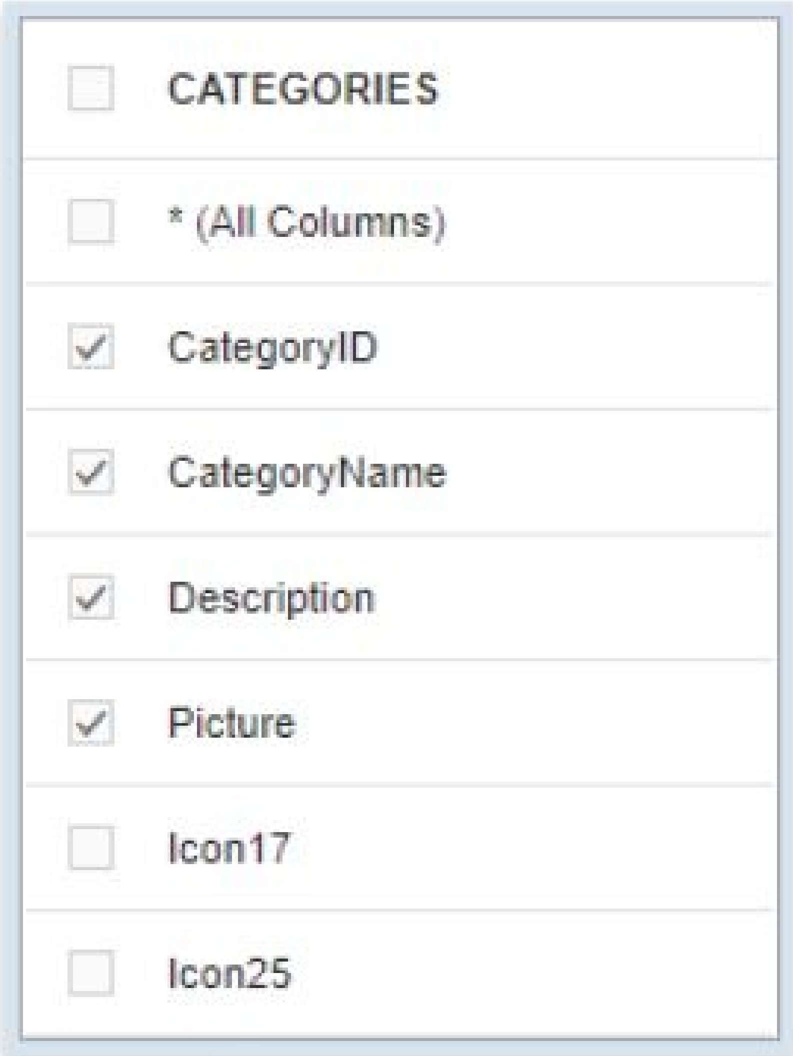
4. In the category Available Views and Tables in the query Builder you will be able to display a list of tables; select and move a table to the Query Builder design area to include it in a query result set.



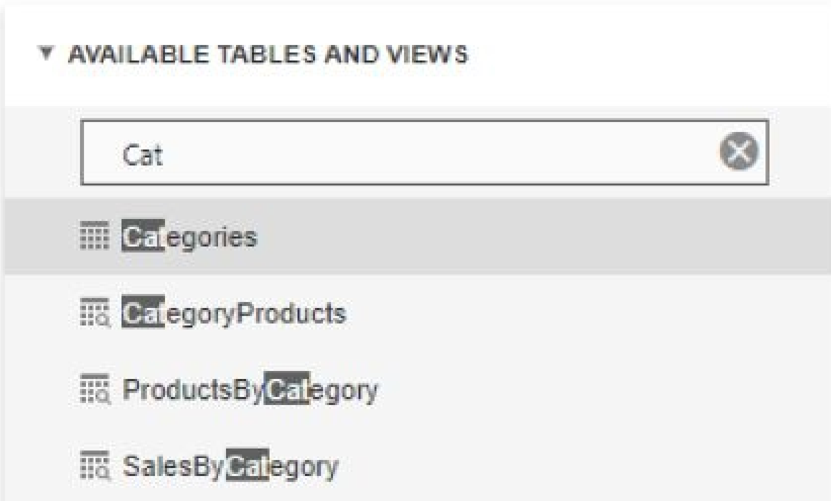
Query Builder provides a toolbar with the following commands:

Icono	Descripción
	Elimina la tabla o vista seleccionada de la consulta.
	Invierte la acción más reciente.
	Realiza la acción previamente deshecha.

Enable check boxes for the columns in the table that you want to include in the query result set.

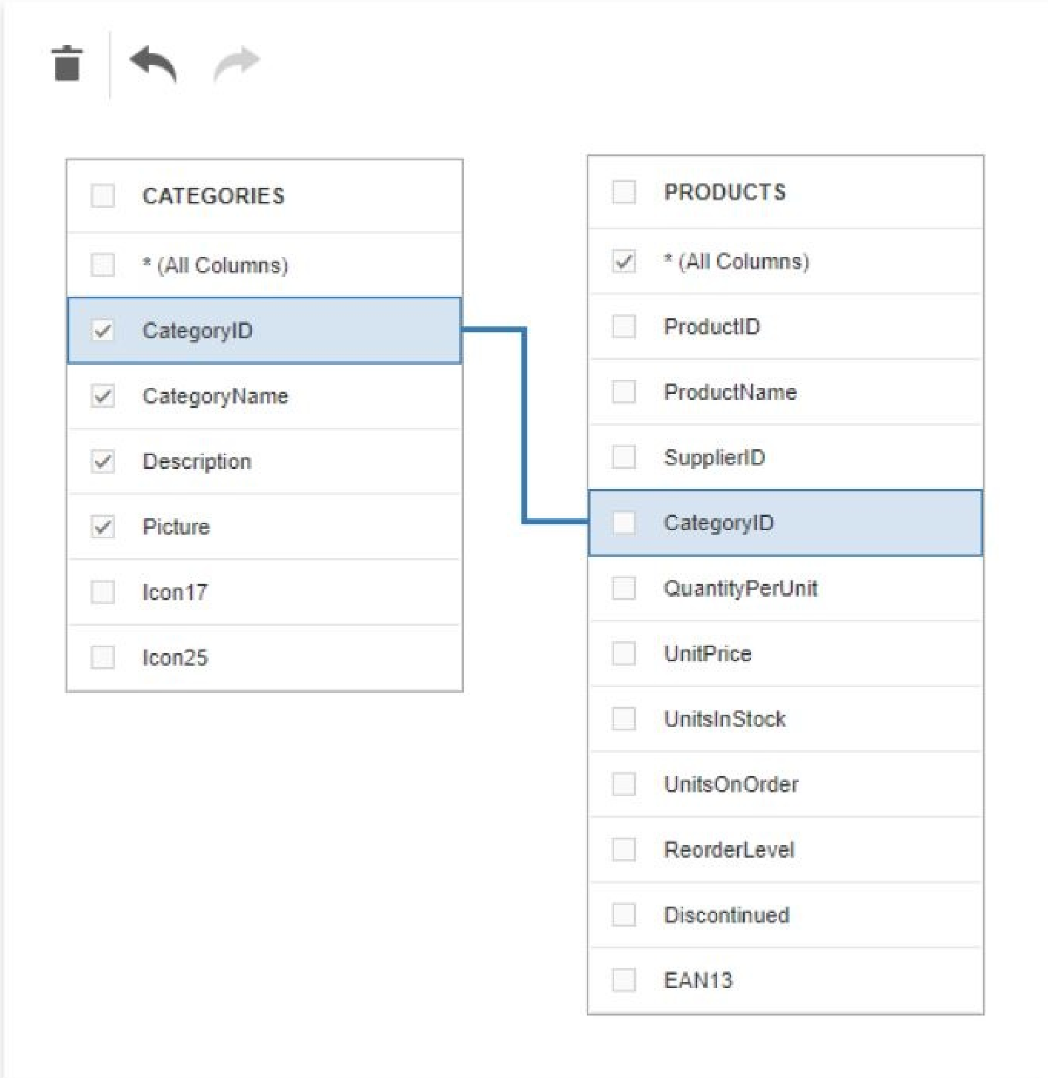


Use the dedicated search box to find a specific table or view.

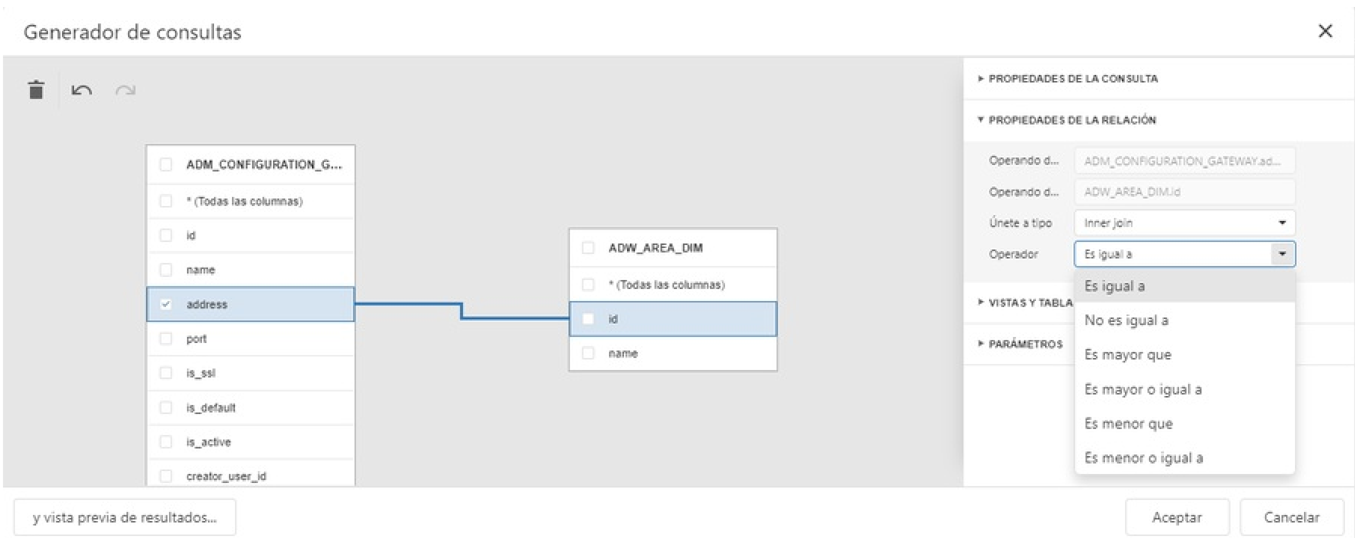


Using Join

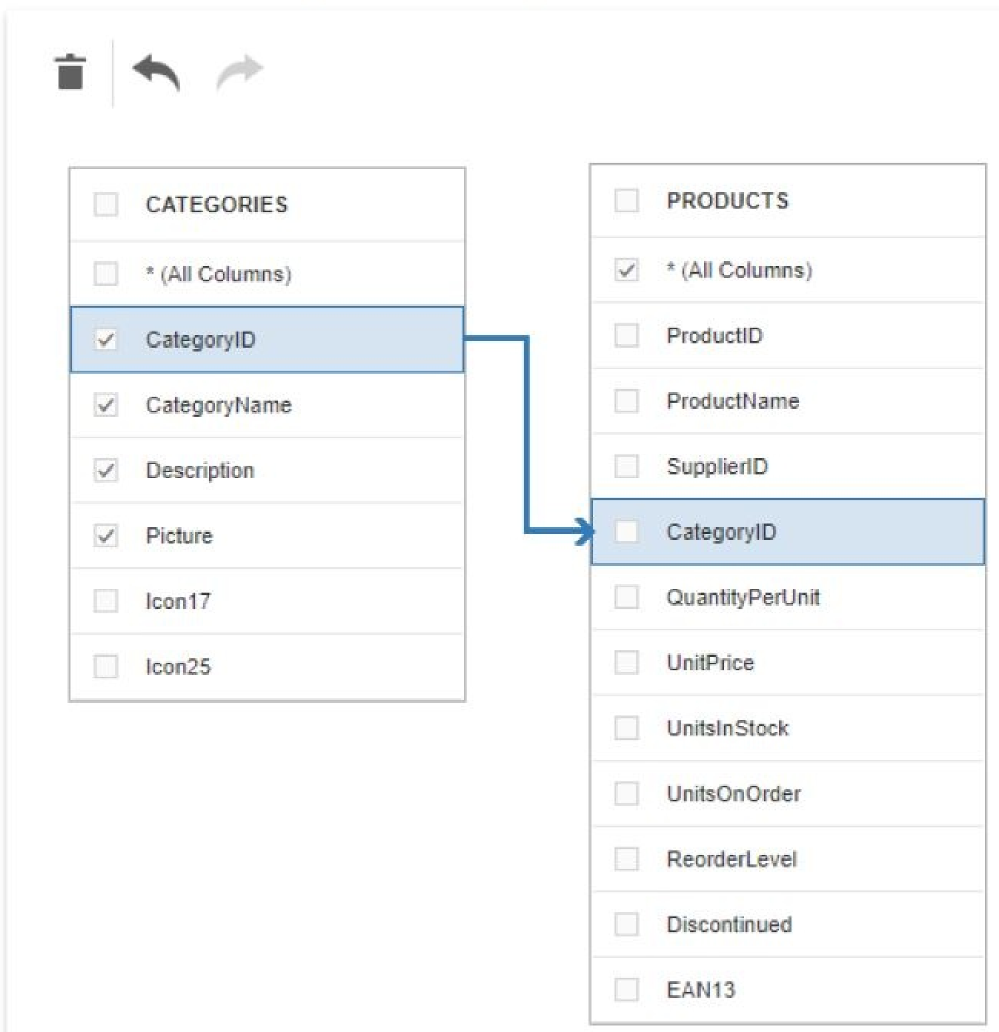
When you use Query Builder it allows you to join tables and/or views. Use drag and drop to connect the corresponding columns (key fields). Connected columns must have data types of identical types.



When you define a relationship between tables, you can display the category Relationship Properties. The properties in this section define the type of join (Left or Left Outer joins) and the logical operator applied.



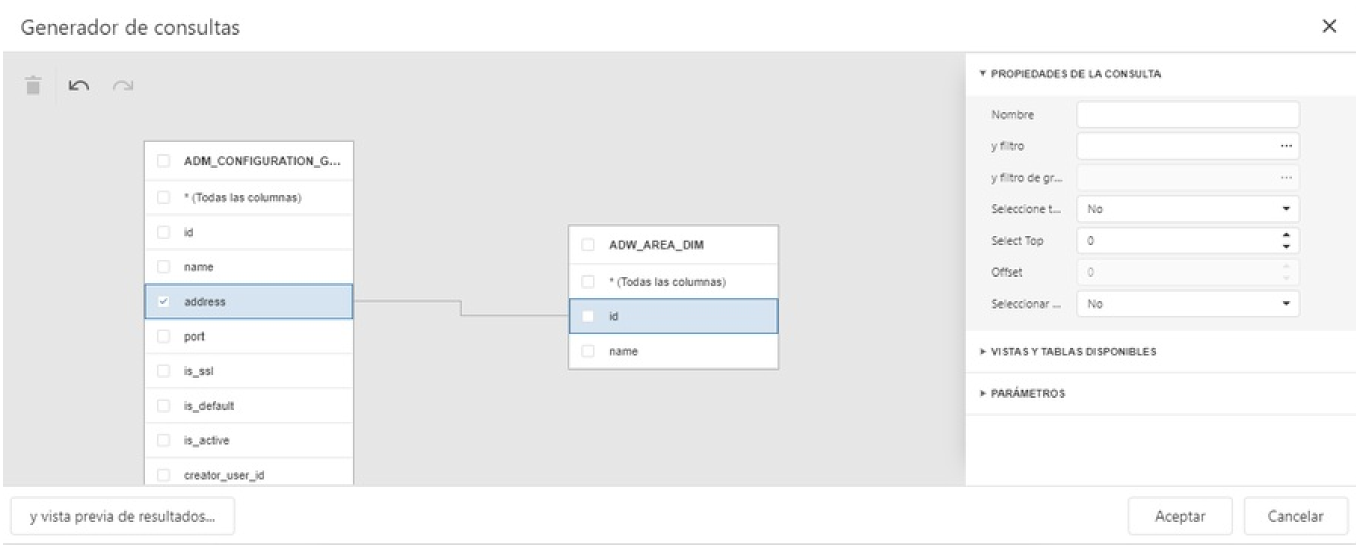
A combination outer left returns all values of an inner join (inner join) along with all the values in the "source" table that do not match the "destination" table and includes rows with null (empty) values in the key field. If you select the combination outer left, the relationship line shows an arrow pointing to the "right" table of the join clause.



The executed query returns a "flat" table that joins different tables within a single query. The specified join options define which data records make up the result set.

Filter data

In the category Query Properties of the Query builder, you will be able to customize the different query options such as:



Consultation options	Description
Name	Enter the name of the custom query (alias).
Filter	Runs filter editor where you can specify filter conditions for the resulting data. Filtering criteria can contain parameters of the query.
Group filter	Runs the Filter Editor where you can specify filter conditions for grouped and aggregated data. This option is enabled only for grouped data.
Select All (*)	Specifies whether to include all columns in selected tables or views in the query result set, regardless of their individual settings. The default is No.
Select Superior	Specifies the number of first records to include in the query result set. The default value is 0 and indicates that the query result set contains all records that meet all other filter conditions.
Compensate	Specifies the number of records to be skipped before the reporting engine retrieves the data. This option is available only for sorted data.
Select different	Specifies whether to include only different values in the result set. The default value is No.

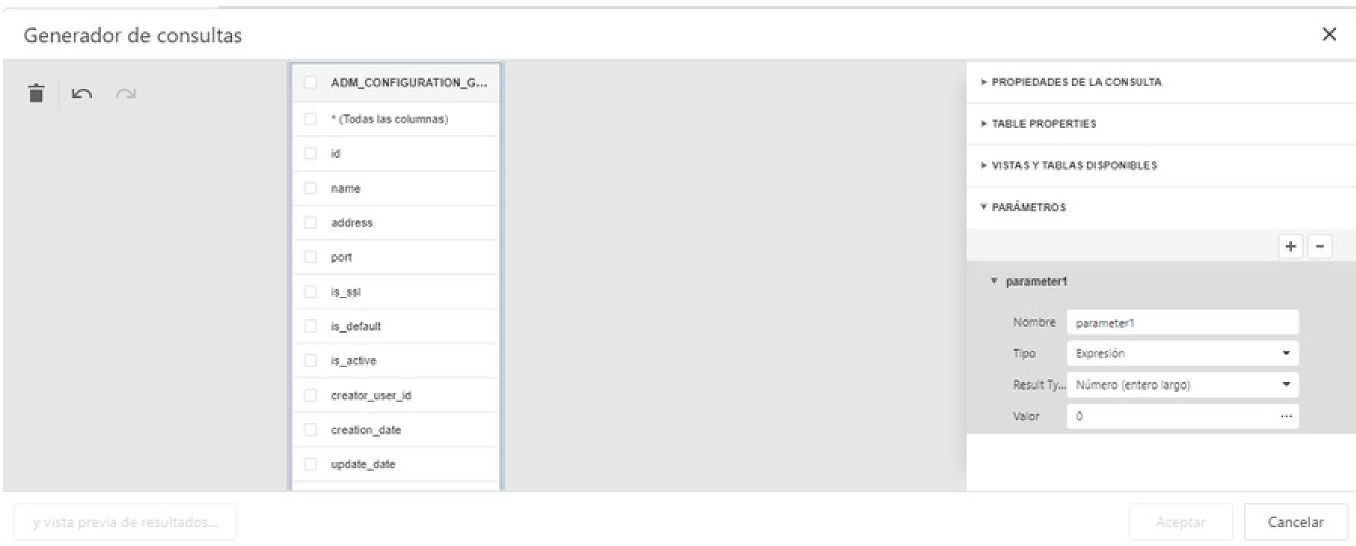
Field Configuration

Selecting a table or view and accessing a column of data will take you to the Column Properties in Query Builder, to customize the data column options:

Consultation options	Description
Name	Indicates the name of the column that Query Builder gets from the database.
Alias	Specifies the name of the custom column (alias). Include a column in a query to enable this option.
Guy	Indicates the data type of the column. Query Builder provides information about the maximum string length for string columns.
Exit	Specifies whether the column is included in the query result set.
Type of Arrangement (classification)	Specifies whether to preserve the order of the original data records within the column or to sort them (in ascending or descending order).
Ranking order	Apply classification to the records in the data column to enable this option. Defines the sorting priority for multiple columns (the lower this number, the higher the priority). For example, set the sort order to 1 for column A and set it to 2 for column B. The Query Builder first sorts the query by column A and then by column B. The sort order for all columns is automatically updated when you change this setting for a column. It allows you to avoid priority conflicts.
Group by	Specifies whether the query result set will be grouped by this column. NOTE: You must apply grouping and/or aggregation to each selected column.
Aggregate	Specifies whether to add the column's data records. You can use the following added functions: Count, Max, Min, Avg, Sum, CountDistinct, AvgDistinct, SumDistinct. Query Builder discards individual data records from the query result set and retains only the result of the added function when you apply any of these functions. NOTE: Use aggregation/grouping for all or none of the selected columns. Query Builder applies grouping to all selected columns automatically if you apply aggregation to a column. Query Builder resets grouping to other columns when you remove all aggregation functions.

Use query parameters

In the category Parameters in the Query builder, you can add, remove, and edit query parameters



Consultation options	Description
Name	Name of the query parameter.
Guy	Specifies the data type of the parameter value. Set this property to Expression to dynamically generate parameter values.
Result Type	Specifies the data type of the output value of the expression. This property is enabled if the query parameter type is Expression.
Value	Determines the actual value of the query parameter. You can specify a static current value based on the data type of the selected value. Alternatively, construct an expression to generate real parameter values dynamically. Click the ellipsis button for this property to invoke the Expression Editor and create an expression. This ellipsis button is enabled if you set the query parameter type to Expression.

5. After you model the query in the Query Builder, select the Preview Results to test the query on the limited subset of current data at any time. The Open Data Preview screen displays the first 100 data records in the query result set.

Data Preview (First 100 Rows Displayed)

CategoryID	Description	CategoryName
1	Soft drinks, coffees, teas, beers, and ales	Beverages
2	Sweet and savory sauces, relishes, spreads, and seasonings	Condiments
3	Desserts, candies, and sweet breads	Confections
4	Cheeses	Dairy Products
5	Breads, crackers, pasta, and cereal	Grains/Cereals
6	Prepared meats	Meat/Poultry
7	Dried fruit and bean curd	Produce
8	Seaweed and fish	Seafood

OK

Time zones

If you want to display report dates in your country's local time, the following procedure is recommended. The dates stored in the Aranda database are in UTC (Coordinated Universal Time) format. From version 9.23 of the unified database, utilities are offered to be able to perform the respective time transformation.

There is a table where time zones are listed called ADW_TIME_ZONE.

```
select * from ADW_TIME_ZONE
```

161 %

Results | Messages

	name	display
1	UTC	(UTC) Coordinated Universal Time
2	GMT Standard Time	(UTC+00:00) Dublin, Edinburgh, Lisbon, London
3	Greenwich Standard Time	(UTC+00:00) Monrovia, Reykjavik
4	Sao Tome Standard Time	(UTC+00:00) Sao Tome
5	W. Europe Standard Time	(UTC+01:00) Amsterdam, Berlin, Bern, Rome, Stock...
6	Central Europe Standard Time	(UTC+01:00) Belgrade, Bratislava, Budapest, Ljublja...
7	Romance Standard Time	(UTC+01:00) Brussels, Copenhagen, Madrid, Paris
8	Morocco Standard Time	(UTC+01:00) Casablanca
9	Central European Standard Time	(UTC+01:00) Sarajevo, Skopje, Warsaw, Zagreb
10	W. Central Africa Standard Time	(UTC+01:00) West Central Africa
11	Jordan Standard Time	(UTC+02:00) Amman
12	GTB Standard Time	(UTC+02:00) Athens, Bucharest
13	Middle East Standard Time	(UTC+02:00) Beirut
14	Egypt Standard Time	(UTC+02:00) Cairo
15	E. Europe Standard Time	(UTC+02:00) Chisinau
16	Syria Standard Time	(UTC+02:00) Damascus
17	West Bank Standard Time	(UTC+02:00) Gaza, Hebron
18	South Africa Standard Time	(UTC+02:00) Harare, Pretoria
19	FLE Standard Time	(UTC+02:00) Helsinki, Kyiv, Riga, Sofia, Tallinn, Vilnius
20	Israel Standard Time	(UTC+02:00) Jerusalem
21	South Sudan Standard Time	(UTC+02:00) Juba
22	Kaliningrad Standard Time	(UTC+02:00) Kaliningrad
23	Sudan Standard Time	(UTC+02:00) Khartoum
24	Libya Standard Time	(UTC+02:00) Tripoli
25	Namibia Standard Time	(UTC+02:00) Windhoek
26	Arabic Standard Time	(UTC+03:00) Baghdad

This table contains two columns ADW_TIME_ZONE

Name	Time Zone Name
display	Zone-Sensitive Time Shift

Adjust a report to use local time zones.

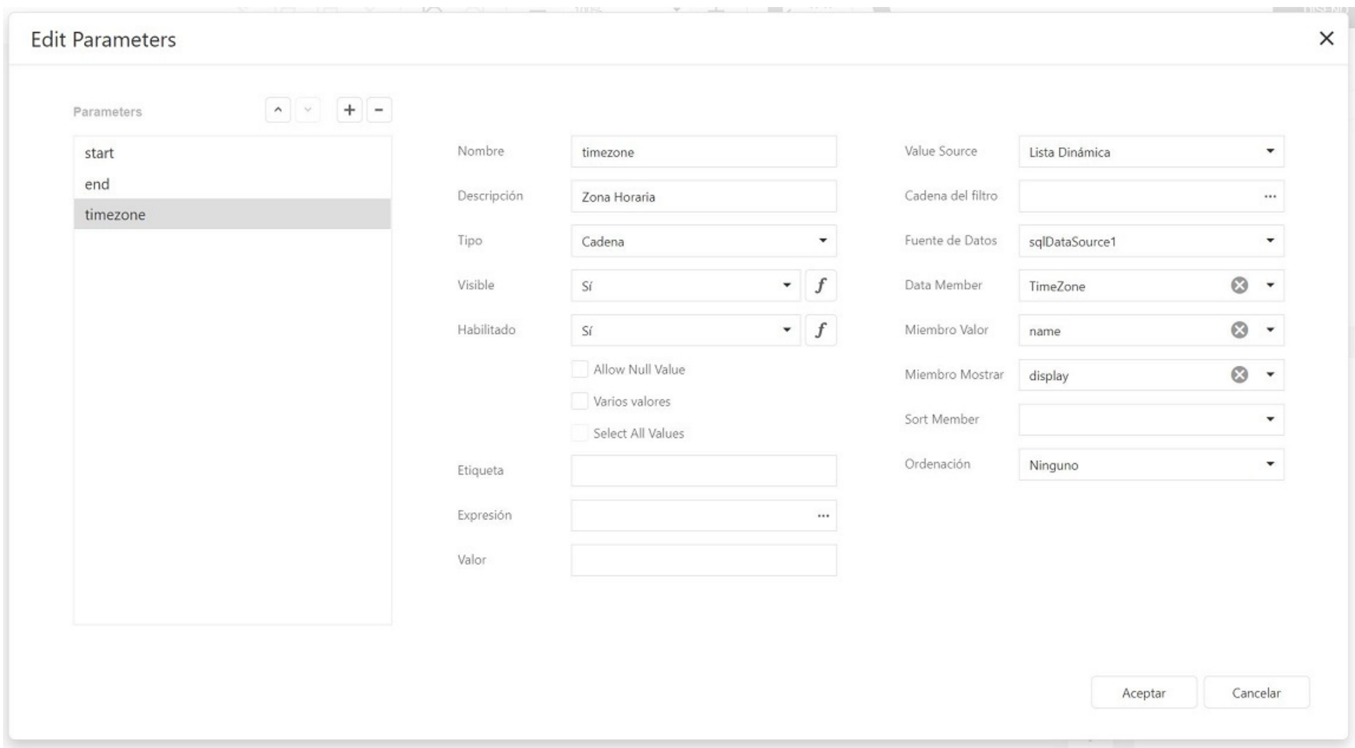
The idea is to pass the time zone as a parameter to the query. A parameter must be set in the designer which will be displayed in the report as a combo. When you select a time zone, the parameter value is sent to the database for adjustment.

- Create a parameter in the report that uses the following query:

The "name" field indicates the time zone and "display" shows the corresponding time offset

```
SELECT name, display FROM ADW_TIME_ZONE
```

- Parameter Settings From the report explorer located in the right sidebar of the editor, you can access the list of parameters and define a new one.

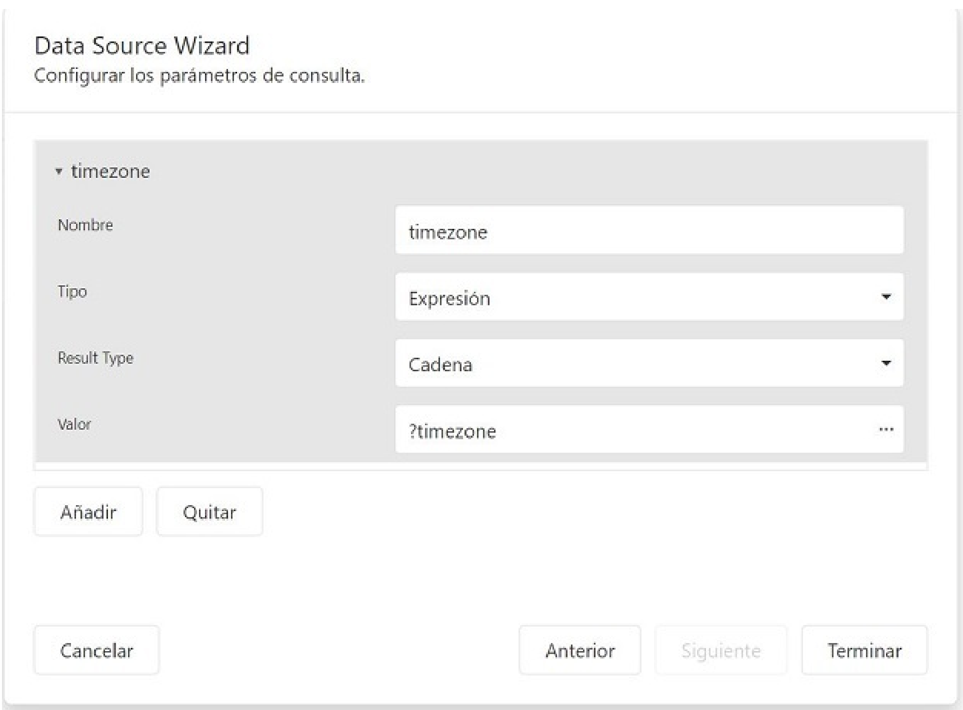


- Parameterize the query To have the database engine automatically execute the correct time zone settings, observe the following TSQL sample statement. Use the AT TIME ZONE transformation where there are dates that you want to adjust. For more information on AT TIME ZONE

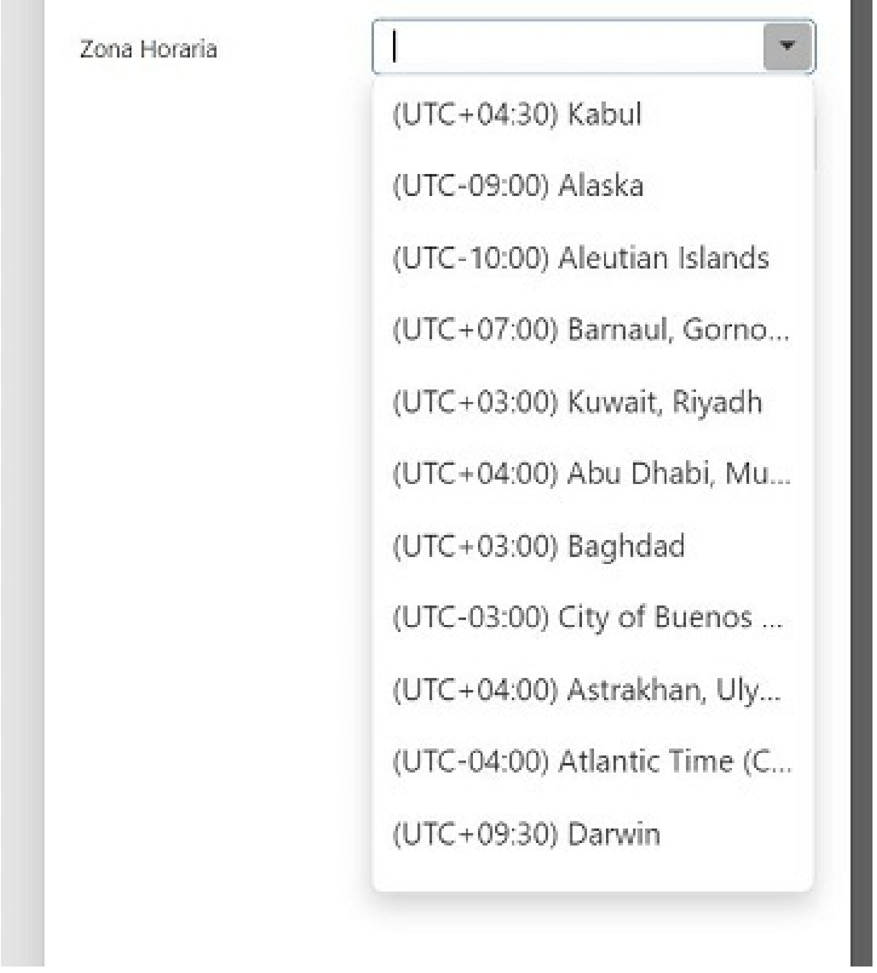
```
SELECT ...
    docu_creation_date
    AT TIME ZONE 'UTC'
    AT TIME ZONE @timezone as HoraLocal,
* FROM AFW_DOCUMENT
```

In this example @timezone is the name of the time zone that is passed as a parameter, more specifically the value of the "name" field of the query that lists the time zones.

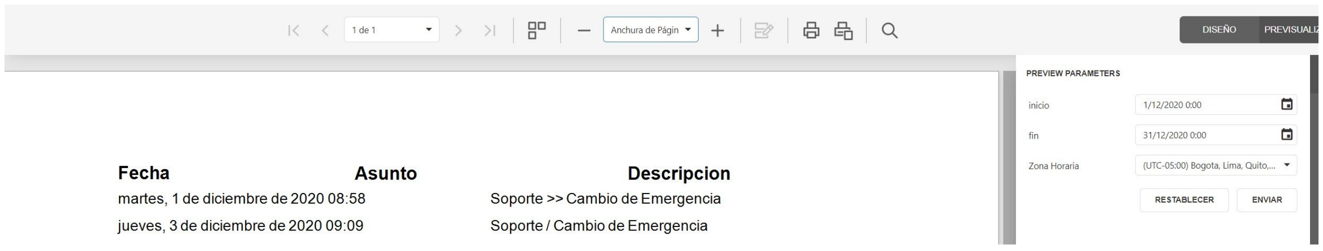
- Pass the time zone parameter to the query

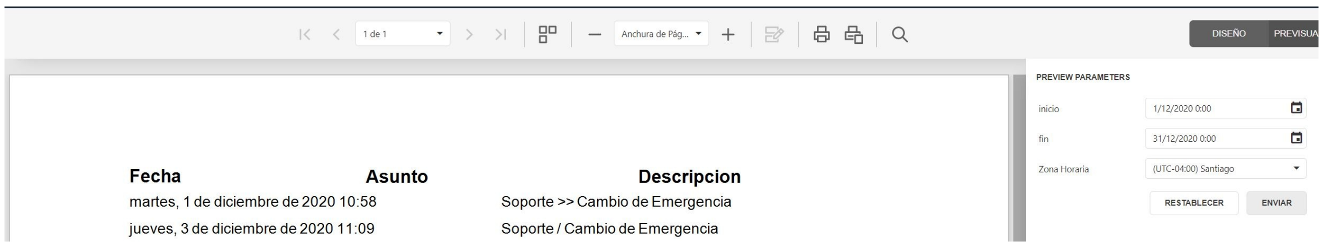


- When you run the report, you can choose the offset that corresponds to your region. The database will automatically transform the date to the required time.



- The dates will be adjusted as indicated, in this example transformed times are shown for Bogotá and Santiago de Chile.





Export to excel in separate sheets

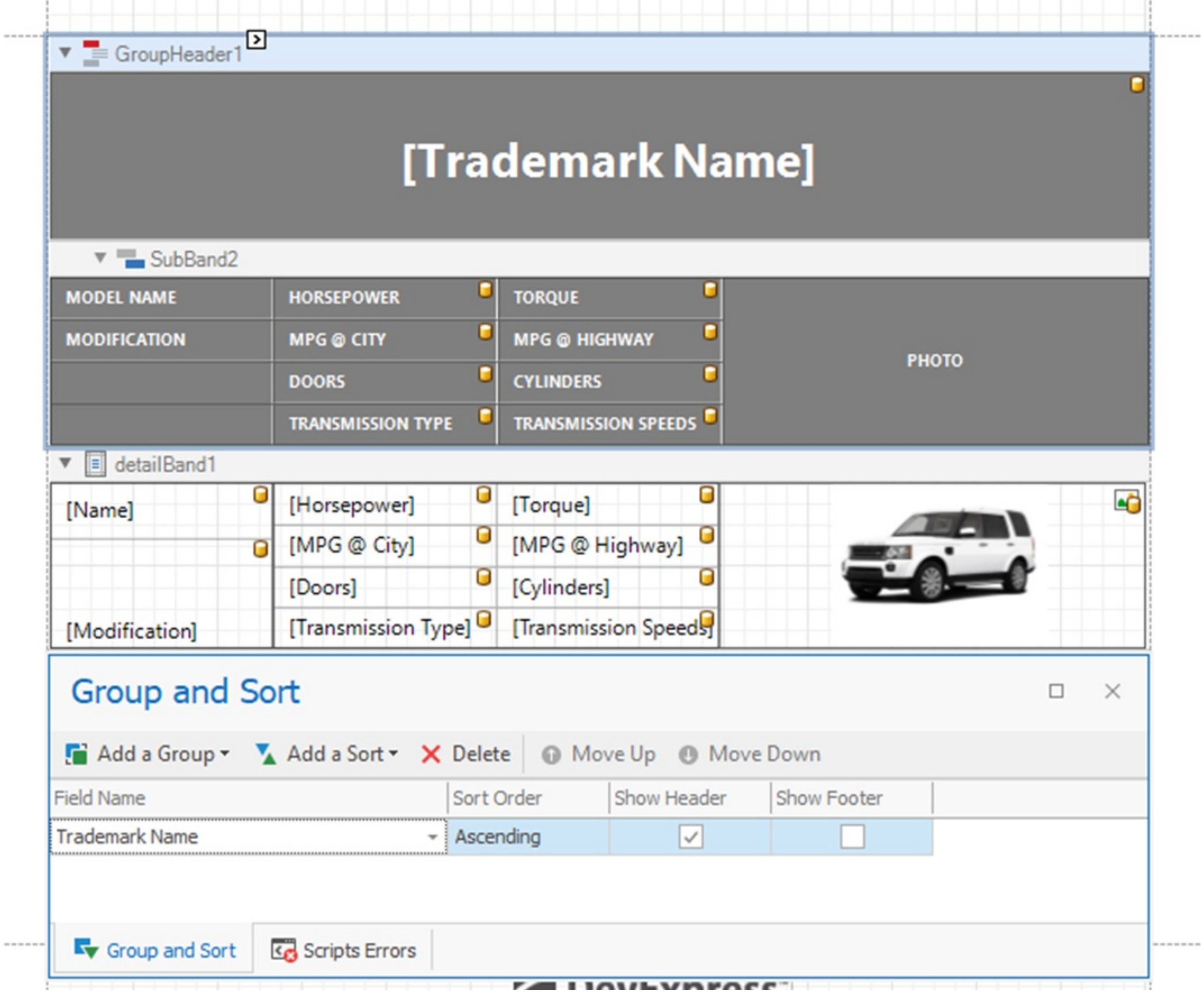
To specify how a document is exported to Excel, AQM provides the XlsxExportOptions.ExportMode property. Here are the three possible values of that property:

Name	Description
SingleFile	The document is exported to a single file. In this mode, headers and footers are added to the resulting XLSX file only once, at the beginning and end of the document.
DiferentFiles	The document is exported to multiple files, one report page per file.
SingleFilePageByPage	The document is exported to a single file, but an individual sheet is created for each page.

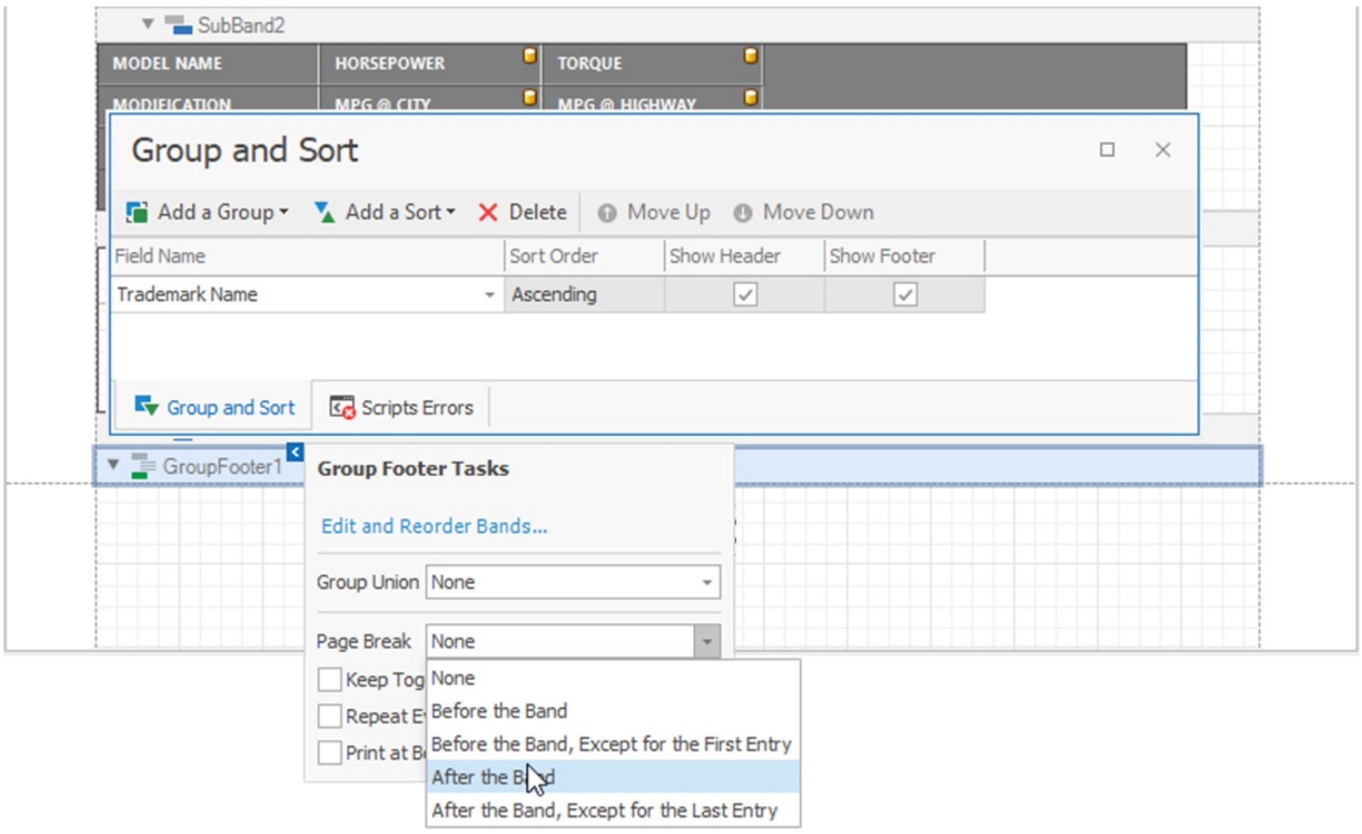
During the Excel export process, the reports are divided into parts according to the definitions in the report. For example, it is possible to split the report into different files or individual sheets for each of the groups in the report.

The RollPaper property

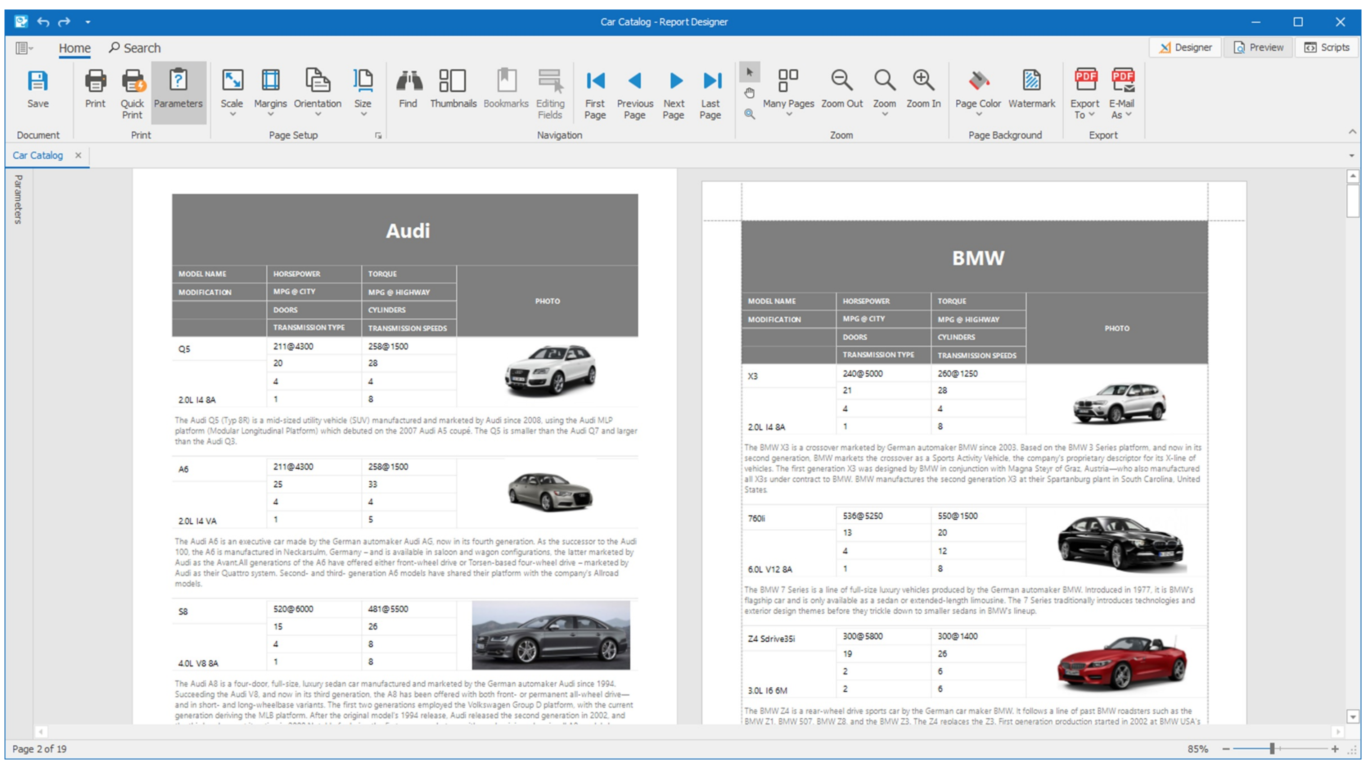
The following is a report with several groups:



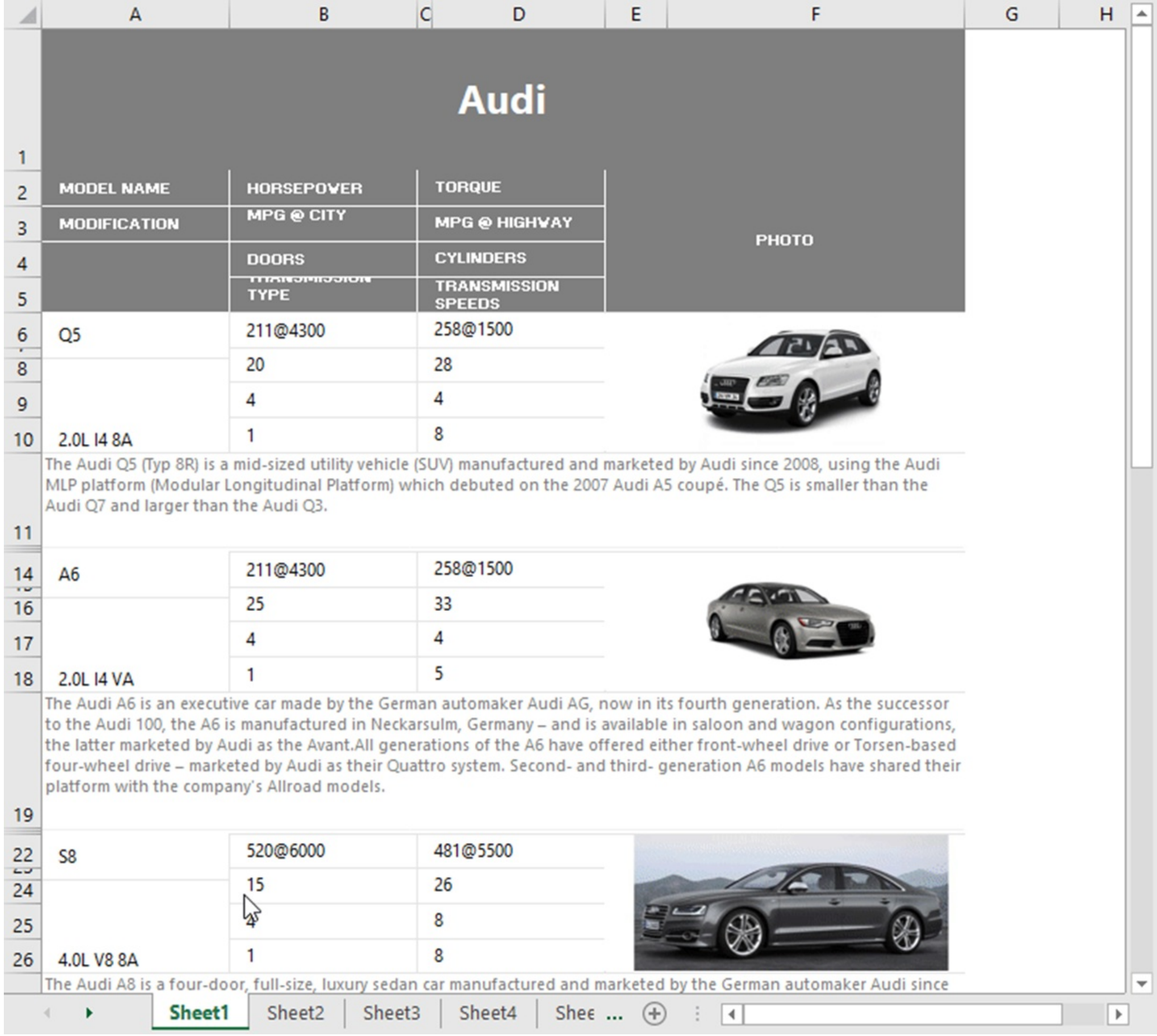
The following image shows the same report with an inserted group footer band. The height of the band is zero and its PageBreak property is set to AfterBand:



Selecting the Page Break enables the XtraReport.RollPaper property. On the Preview You see a document with several pages of different lengths. Each page represents a group.



When this report is exported to Excel using the SingleFilePageByPage export mode, each report suite occupies its own sheet in the resulting file:



Reporting Federation

The Federated consultations They allow you to unify queries from different data sources, into a single query, generating a federated report.

The concept of Reporting Federation it occurs when a federated query is added within a dashboard or report, then it is called a Federated Report (Dashboard or report).

▶ Federación de informes: ❯

Operations that you can add, when creating a federated query: |Operation|Sentences to use|Bear in mind:| |JOIN|-Inner join
-Left outer join
-Right outer join
-Full outer join|The person responsible for generating the query must have knowledge of the fields to be used in the JOIN operation| |UNION|NA|This operation only joins the fields, whose names match all the data sources|

To set up a federated report, follow the steps below depending on the type of report you want to design.

Requirements for creating report federation

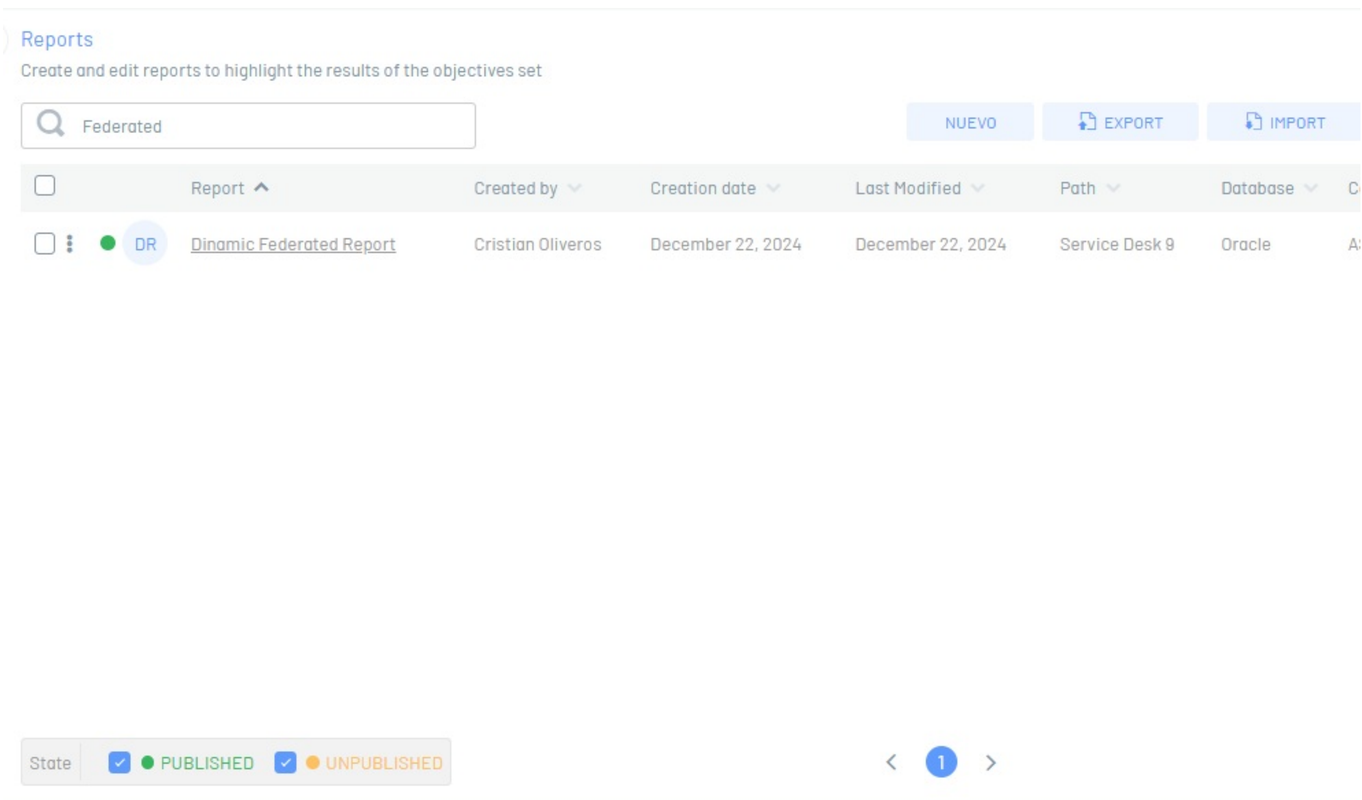
- More than one data source is required in AQM. For more information, see the Configuring Data Sources
- The controller must know the fields to bind if he uses the JOIN statement.

Federated Report Creation

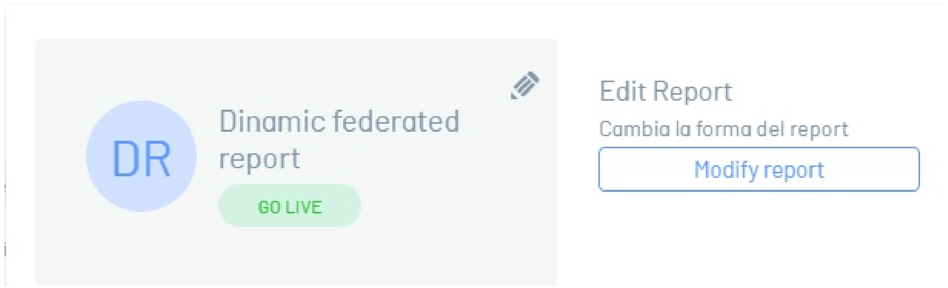
⚐ Note

1. The images that illustrate the creation of the federated dashboard query lists devices from a CMDB data source, synchronized with an AAM data source.

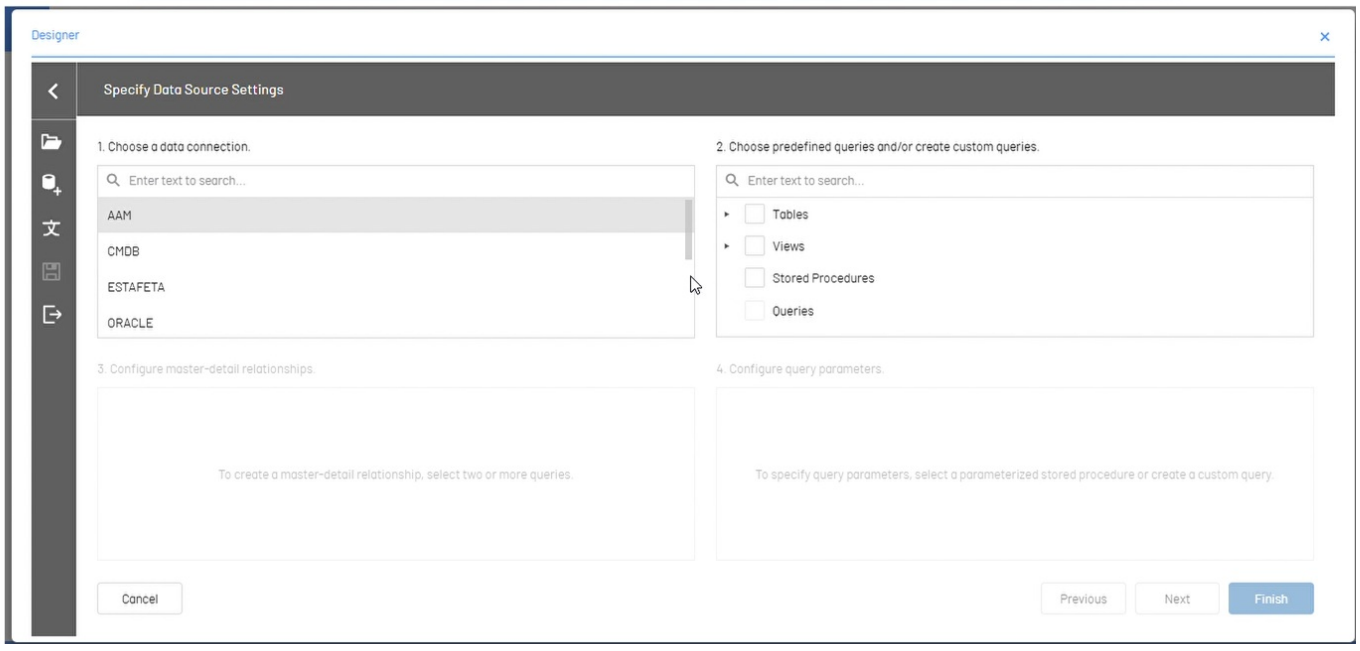
1. Create a blank report, keeping in mind Creating and editing AQM Reports

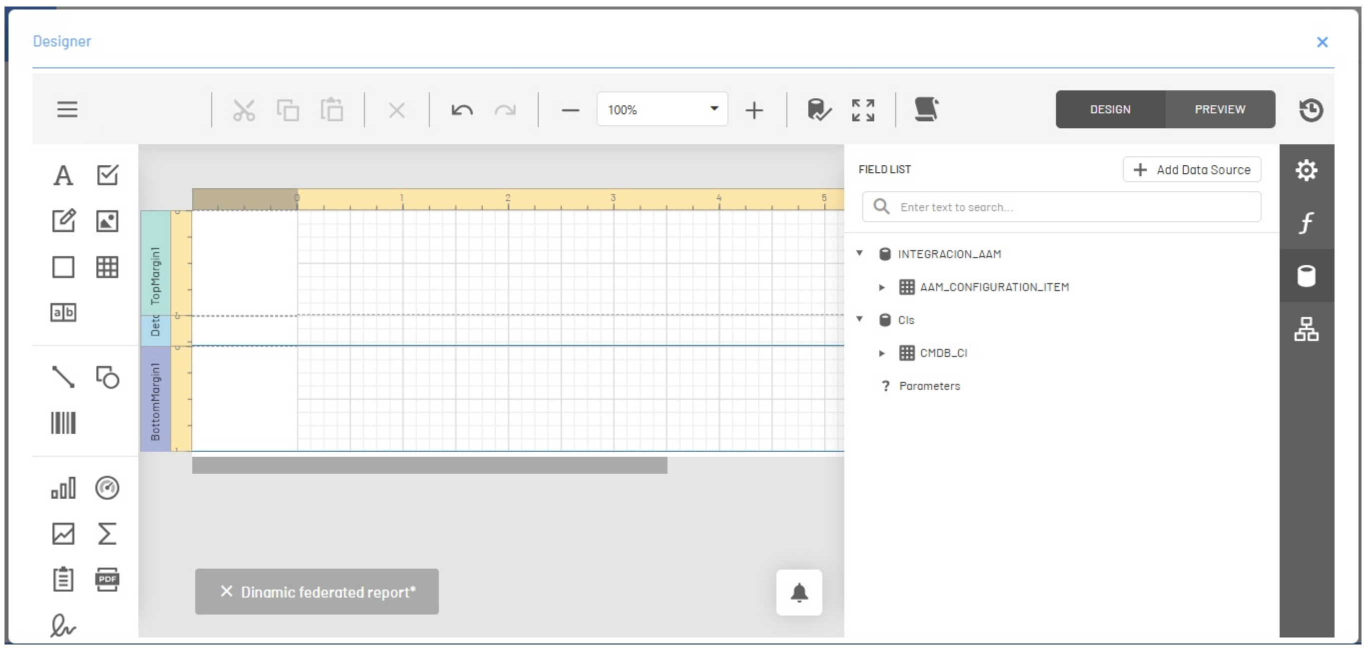


2. In the report information view, select the report record created. In the Detail view click the Modify Report.

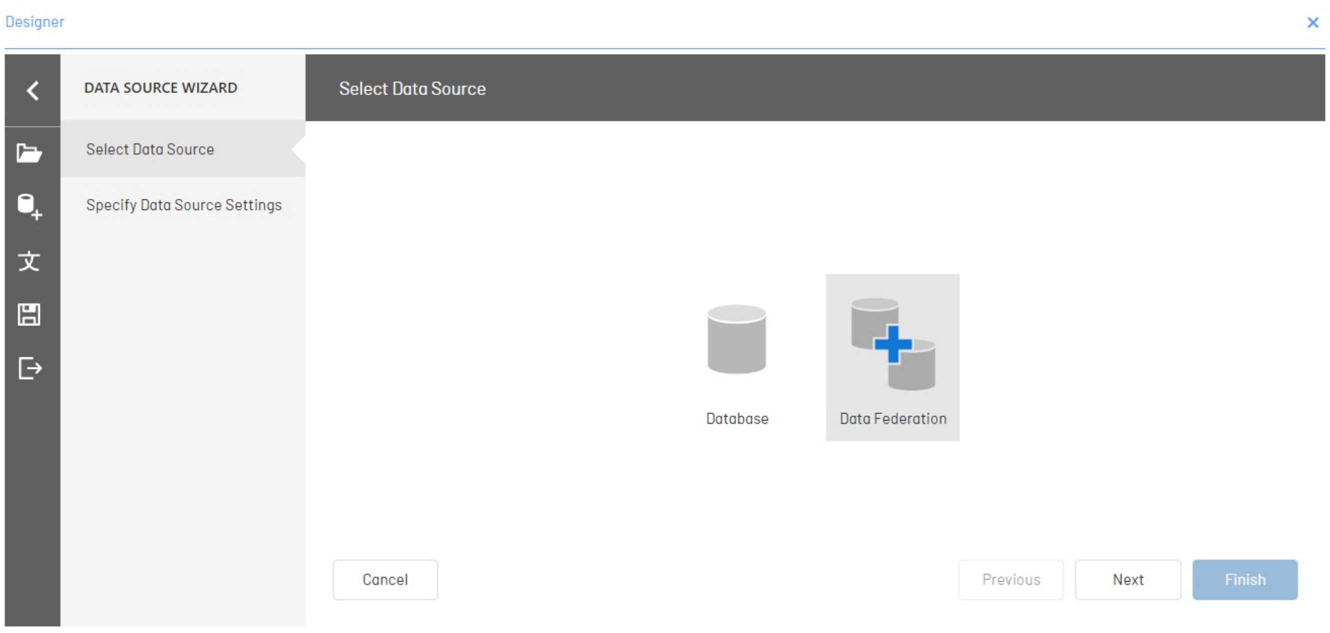


3. On the toolbar, select the Fields, where you can identify the list of previously created data sources. Select the Add Data Source, and add the required data sources.

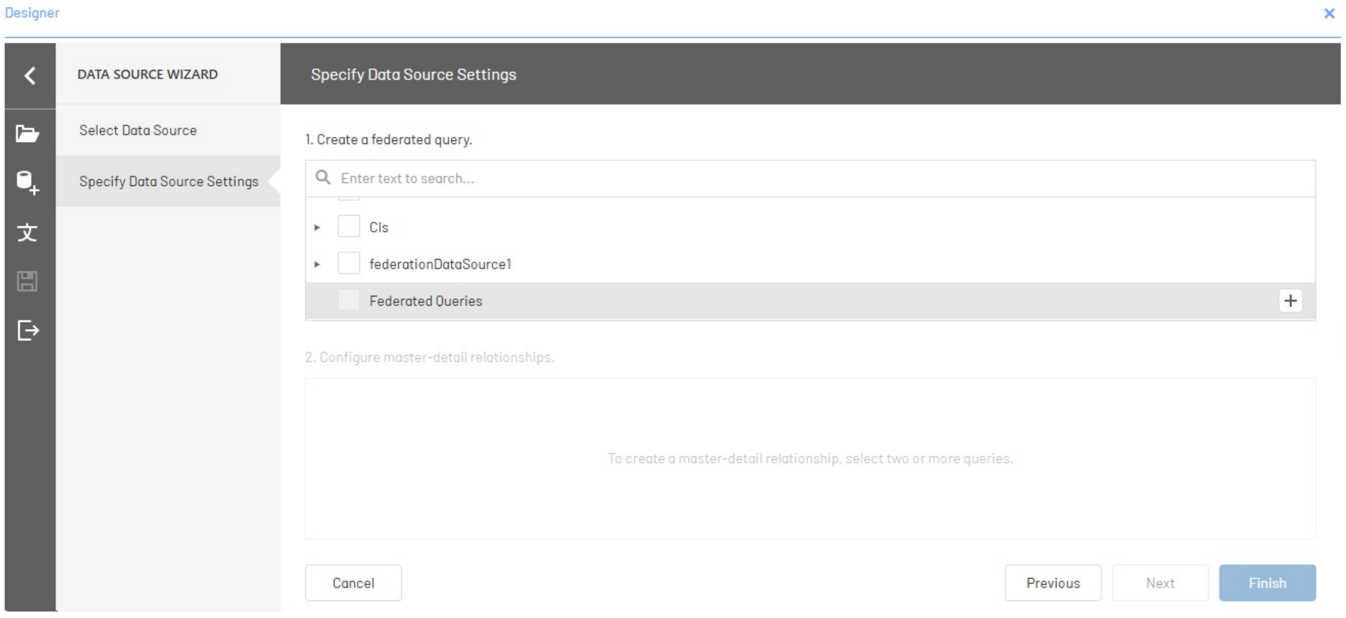


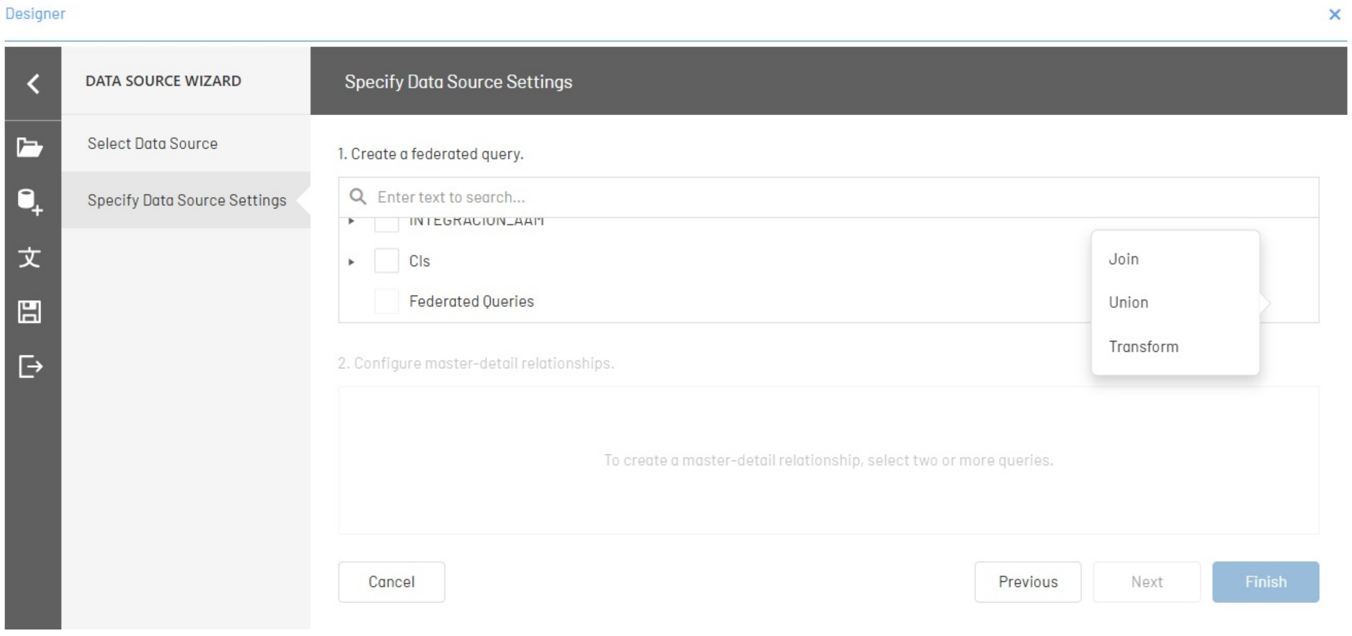


4. In the window Select Data Source Select the option Data federation and the Following.



5. In the window Specify Data source Setting, in step 1 Create a federated query, select the Federated Queries and the Add Query.



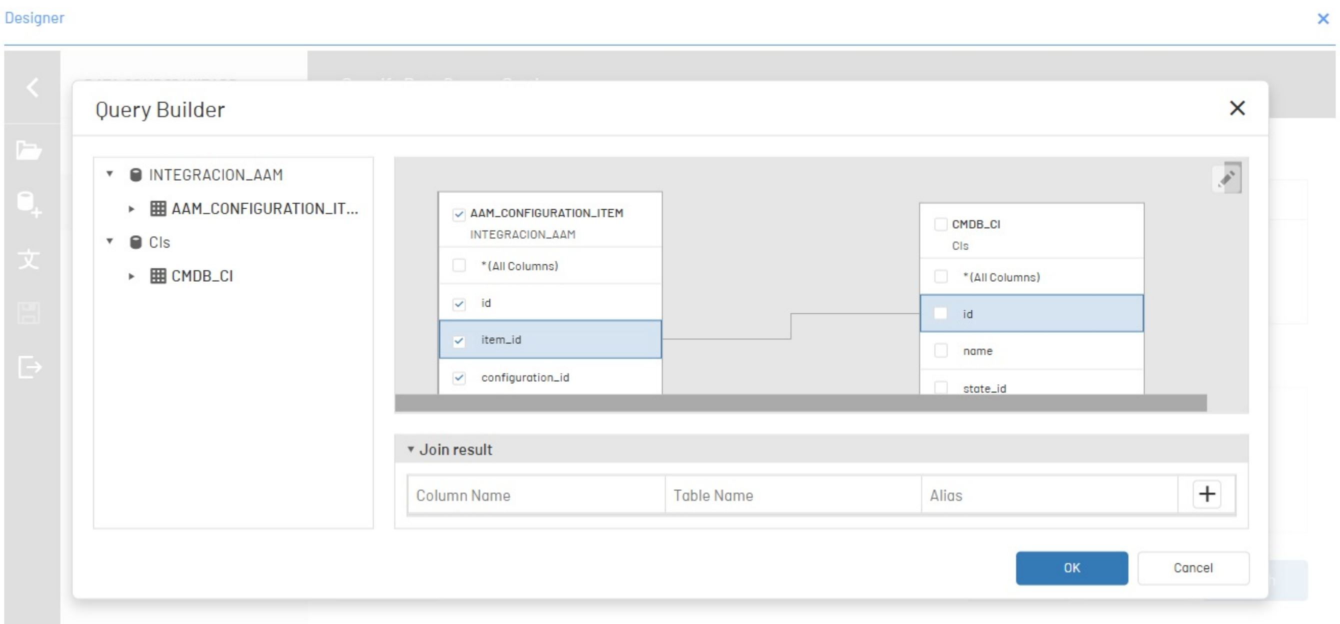


6. Define the required operation (Join, Union, Transform). The Transform option is not used in Query because at the moment it does not manage data sources based on collections of properties such as JSON, Object, Entity Framework, or XPO. For this example we're going to use the JOIN.

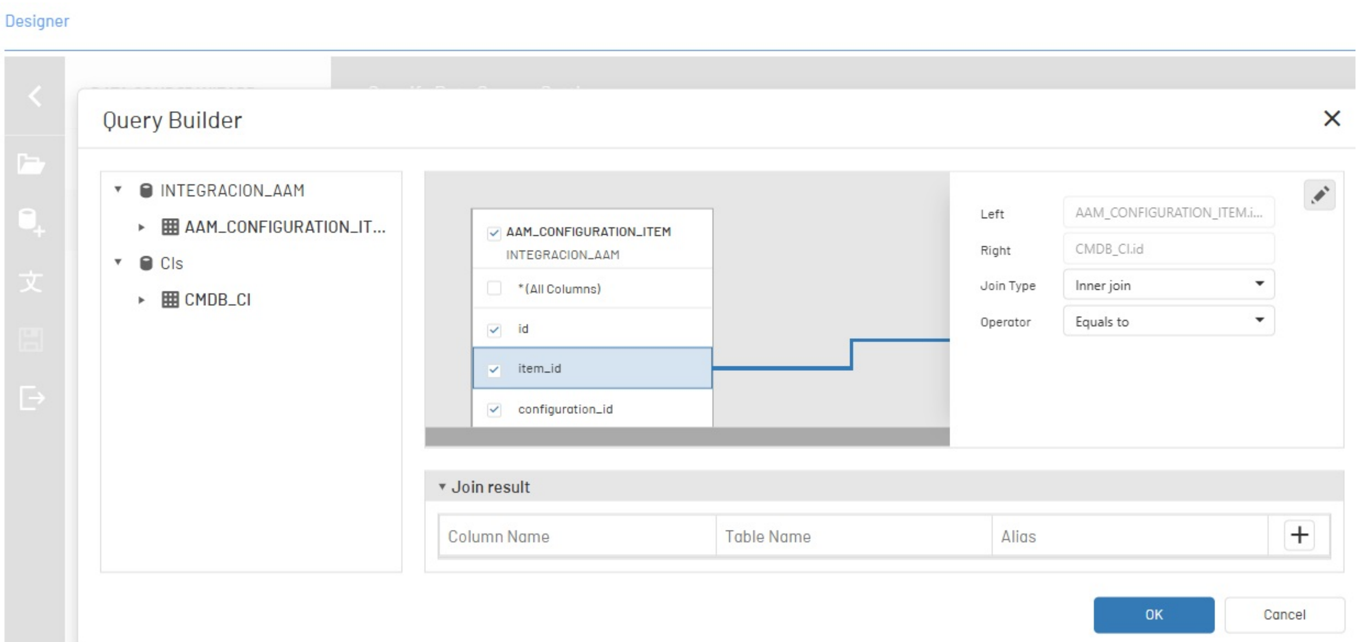
⚐ Note:

1. The Transform operation is not used in AQM. Data sources based on property collections such as JSON, Object, Entity, Framework, or XPO are not currently supported.
2. The images listed as an example use the JOIN.

7. In the window Query buildericon, from the existing data sources, drag the queries you want to link to the workspace. Link the fields in the tables to create the relationship and select the fields you want to display in the report.

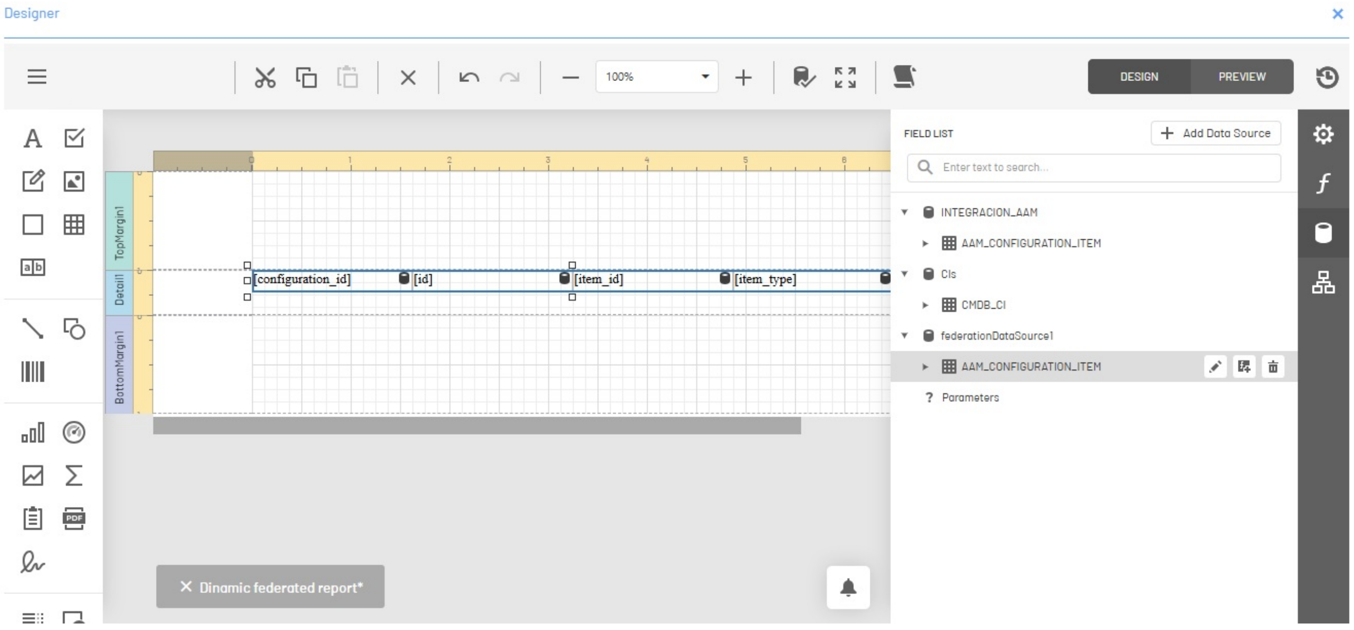


8. Select the relationship line if you need to configure the JOIN operation type.

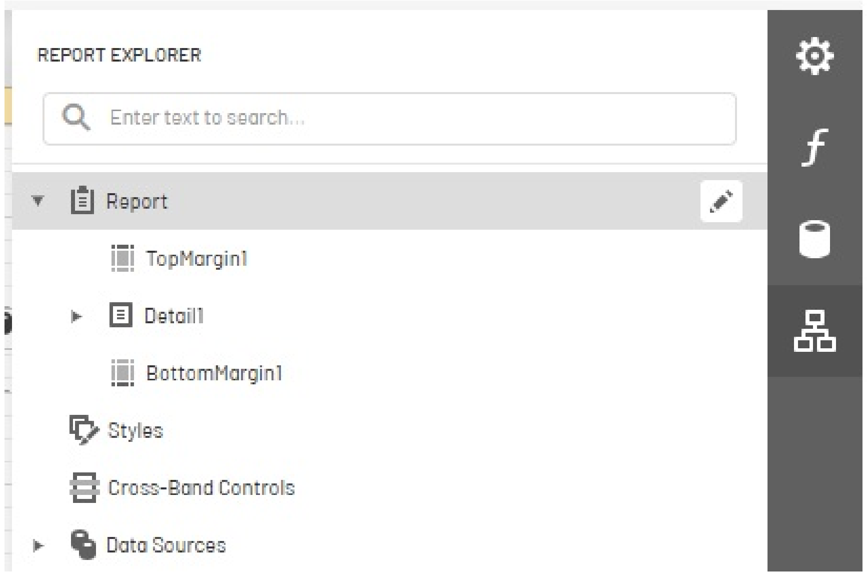


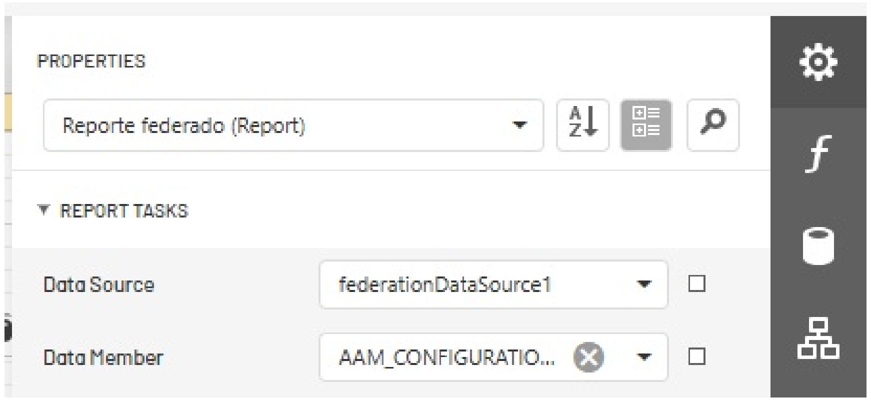
9. Click Accept to finish configuring the federated query. When exiting, click Finish to return to the report designer

10. In the list of data sources, you can display the new federated query. Drag the fields into the report.

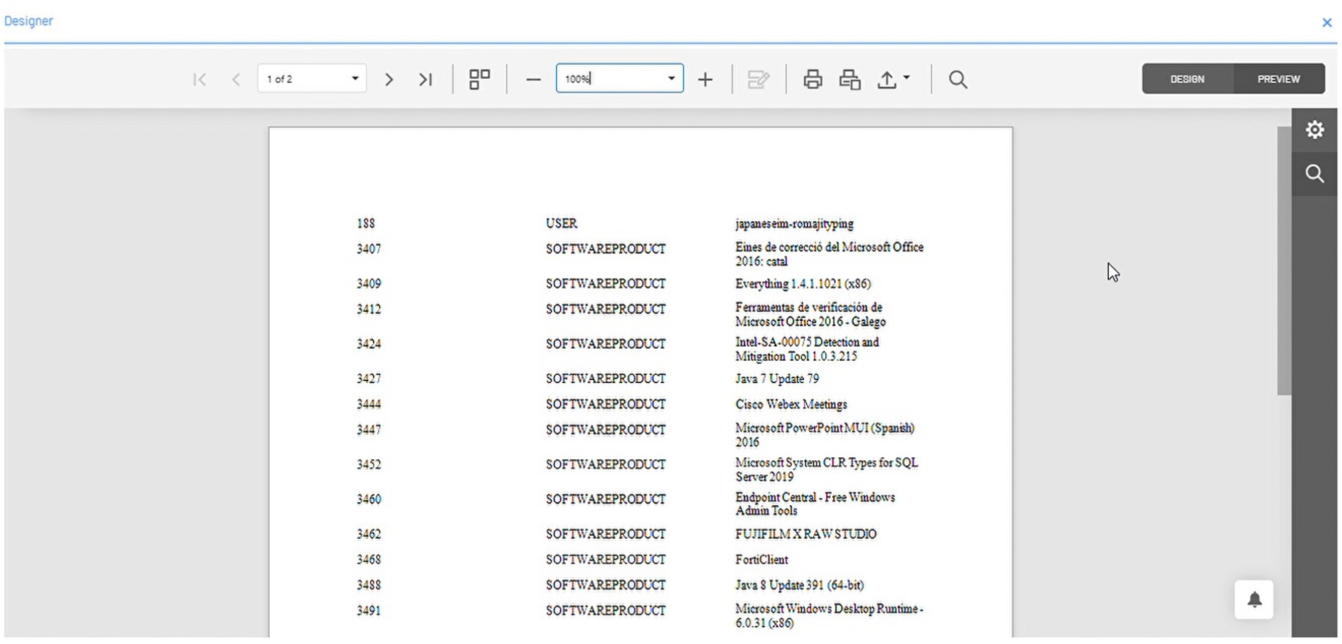


11.. Finally, select the first layer of the report and verify the data member settings.





Select the Preview, to view the data in the report.



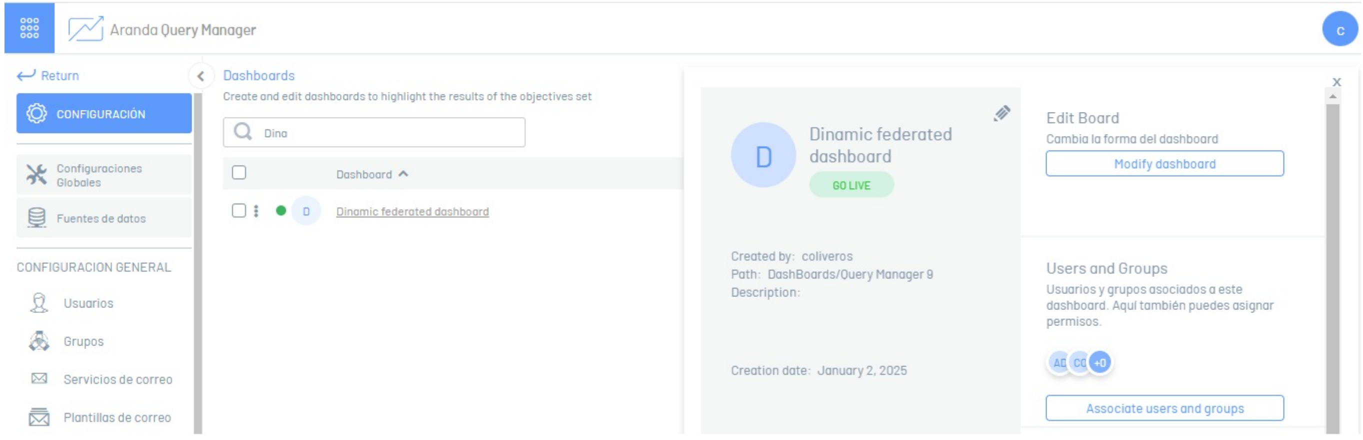
Federated Board Creation

⚐ Note

1. The images that illustrate the creation of the federated dashboard query lists devices from a CMDB data source, synchronized with an AAM data source.

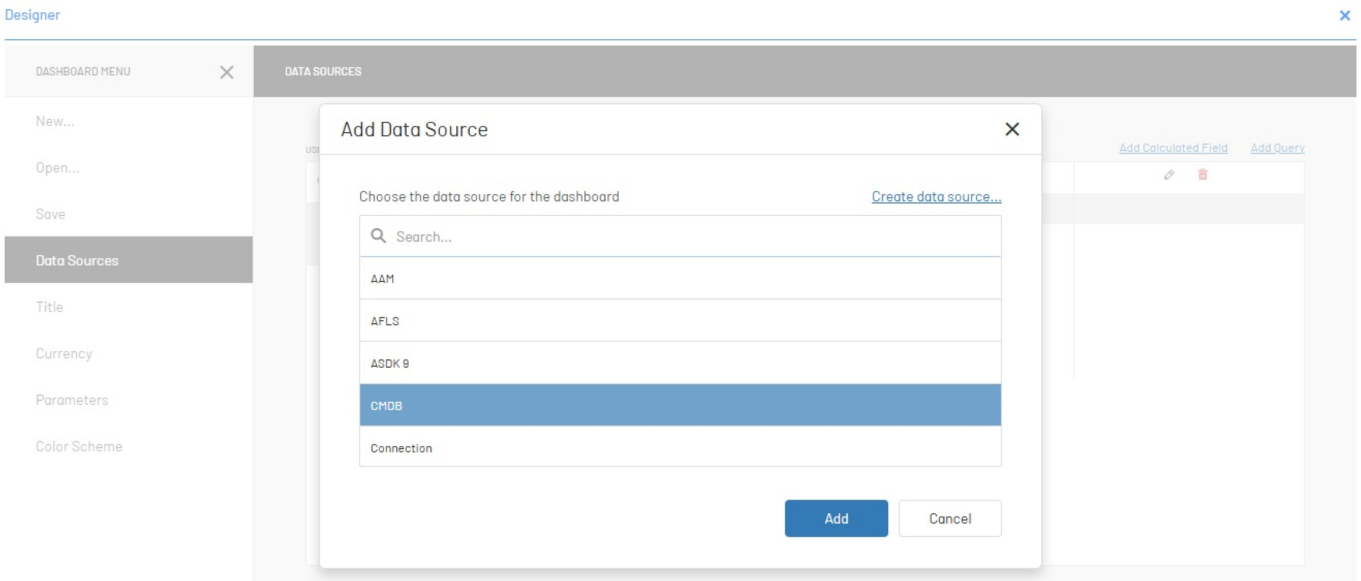
1. Create a blank board, keeping in mind the creation and editing of AQM boards. How to Create a Board

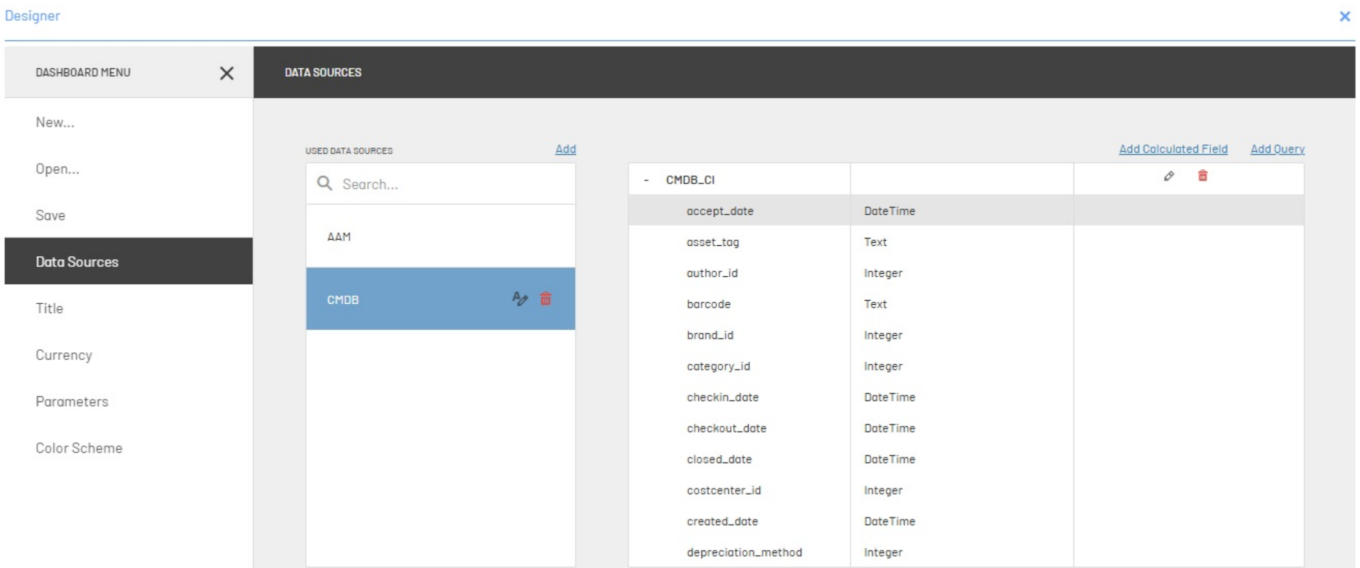
2. In the dashboard information view, select the record for the created dashboard. In the Detail view click the Modify Dashboard.



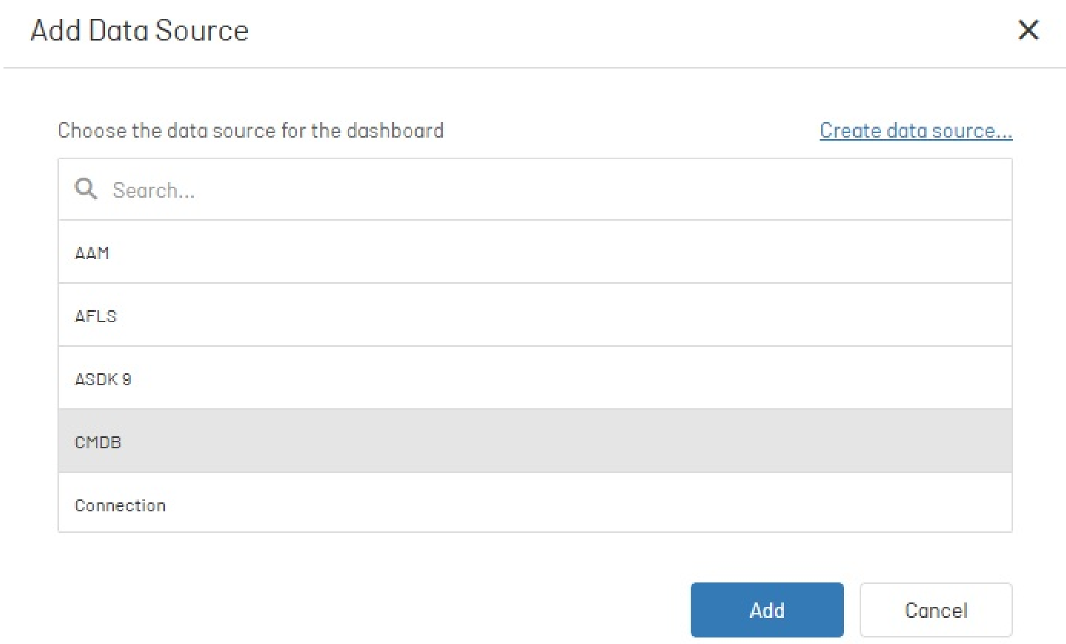
.

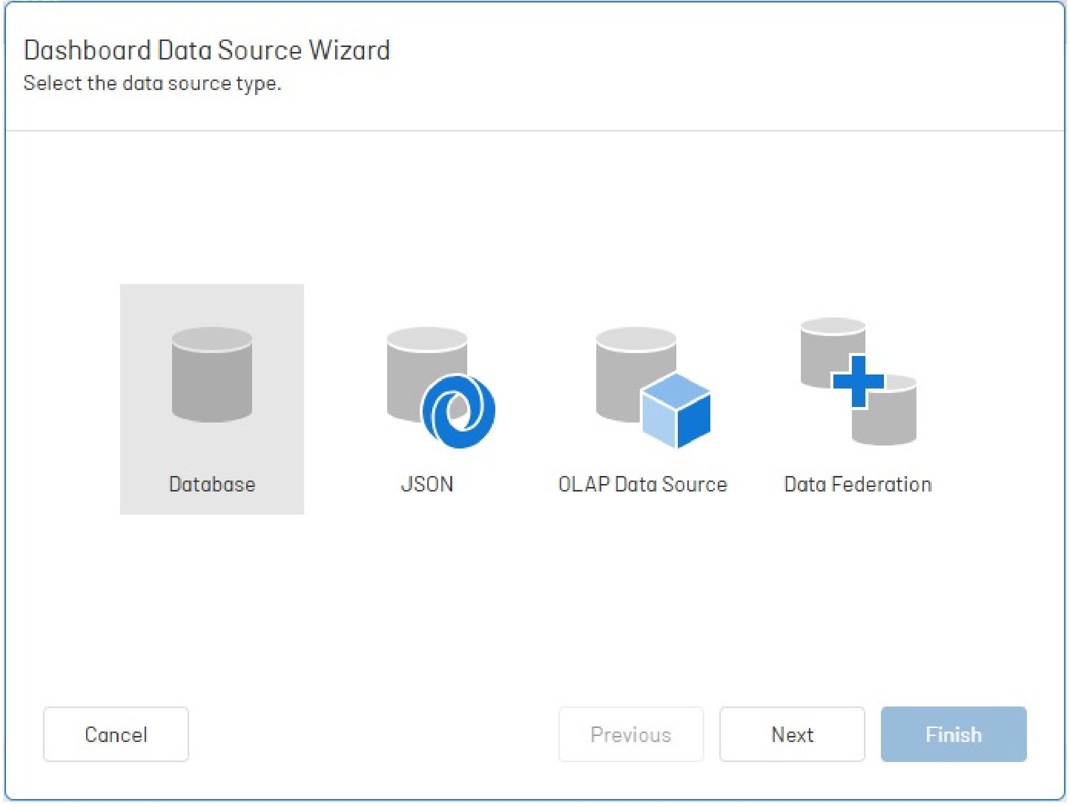
3. From the Dashboard menu select the Data Sources, and click Add to include the data sources to be used. In the data source list you will be able to identify the list of previously created data sources.



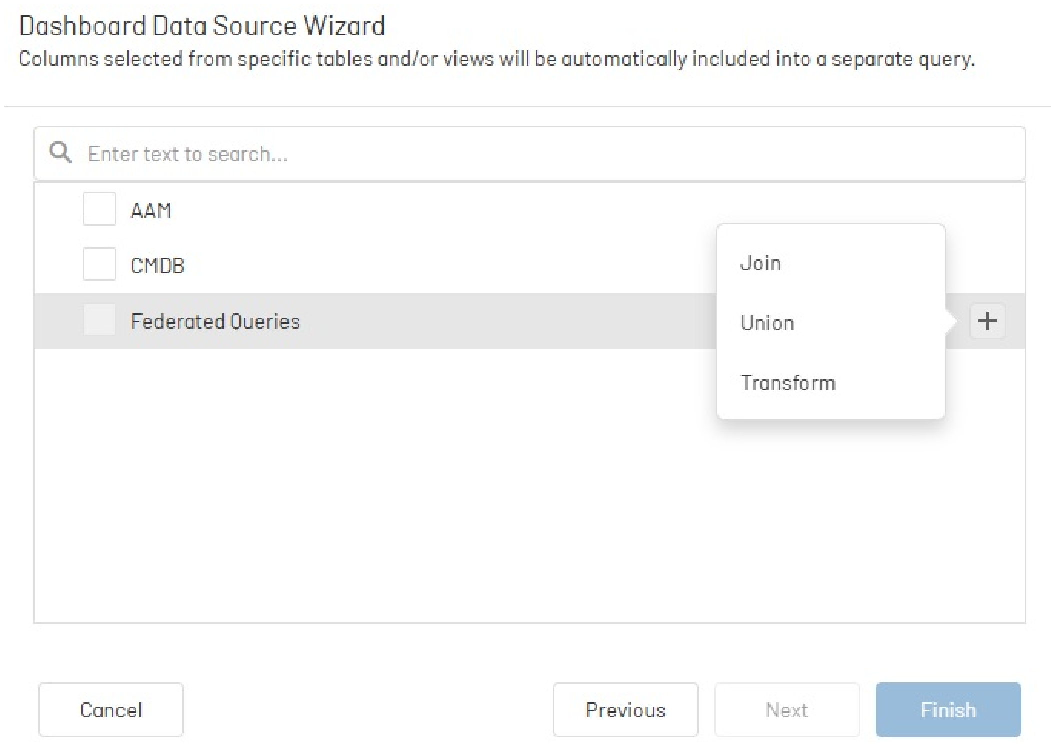


4. In the Data Sources from the Designer Options menu, click the Add, in the window that is enabled select Option Create Data Sources and in the next window select the Data federation and following.





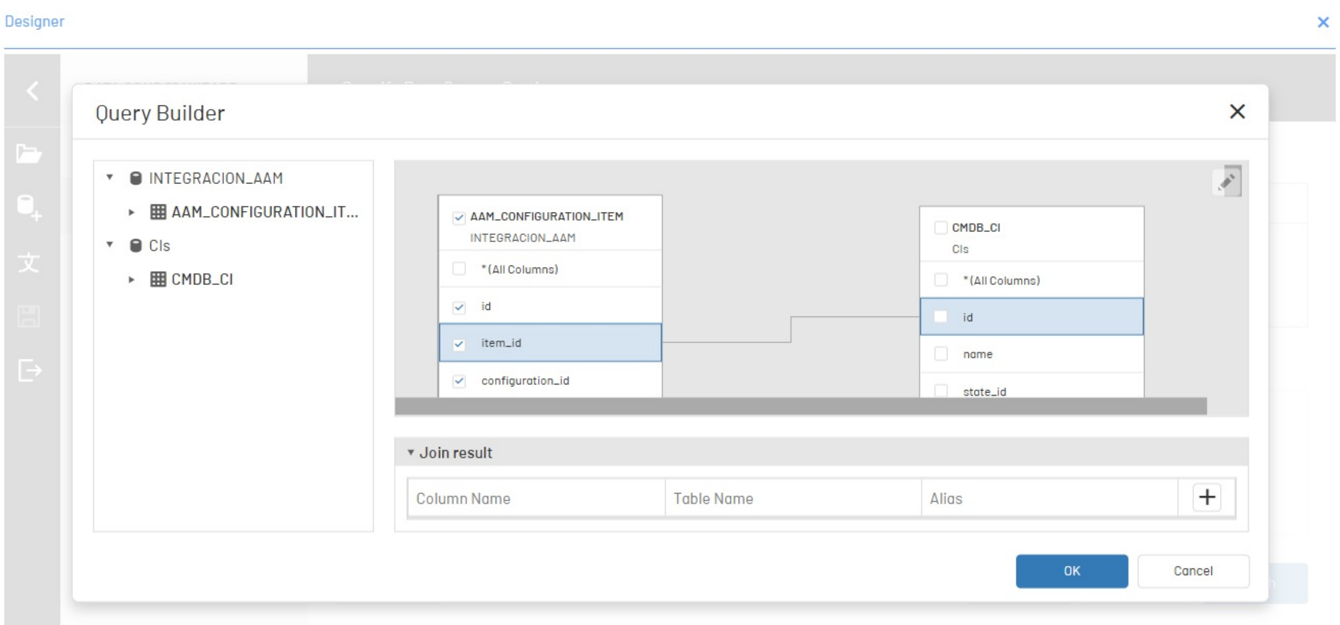
5. In the window that pops up, select the Federated consultations. In the window Dashboard Data source Wizard, select the Federated Queries and the Add Query button. 6. Define the required operation (Join, Union, Transform).



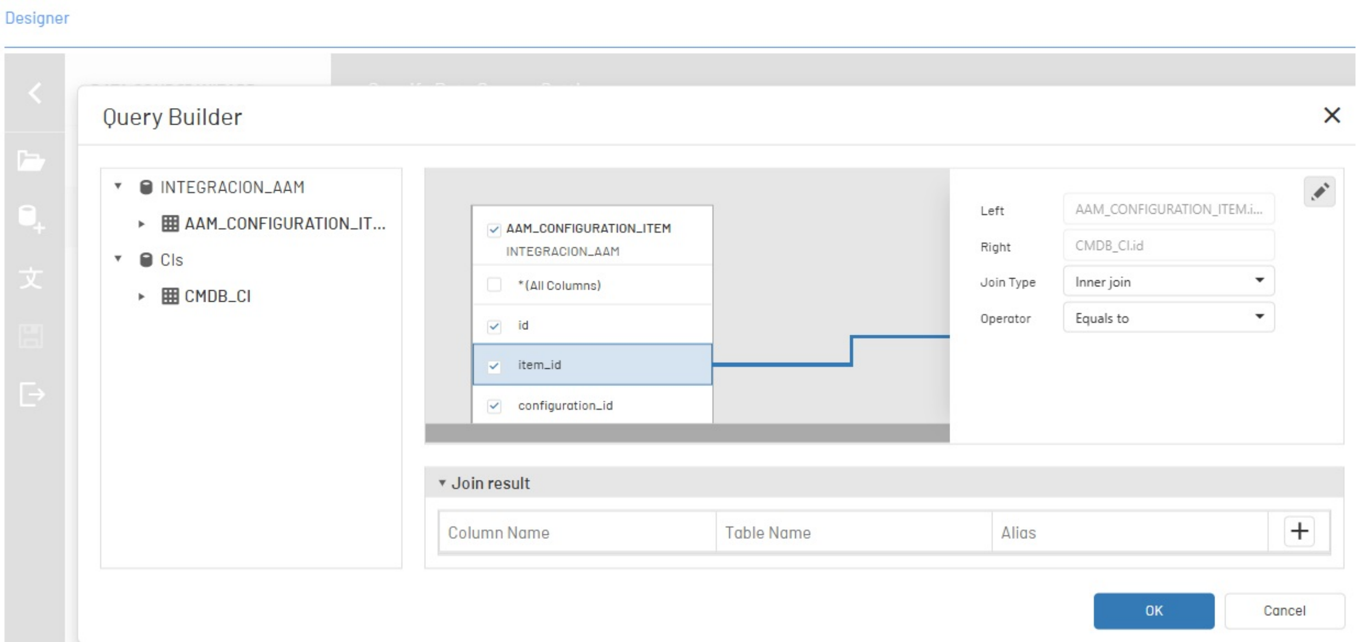
⚐ Note:

1. The Transform operation is not used in AQM. Data sources based on property collections such as JSON, Object, Entity, Framework, or XPO are not currently supported.
2. The images listed as an example use the JOIN.

7. In the window Query Builder From the existing data sources, drag the queries you want to link to the workspace. Link the fields in the tables to create the relationship, and select the fields you want to display on the dashboard.

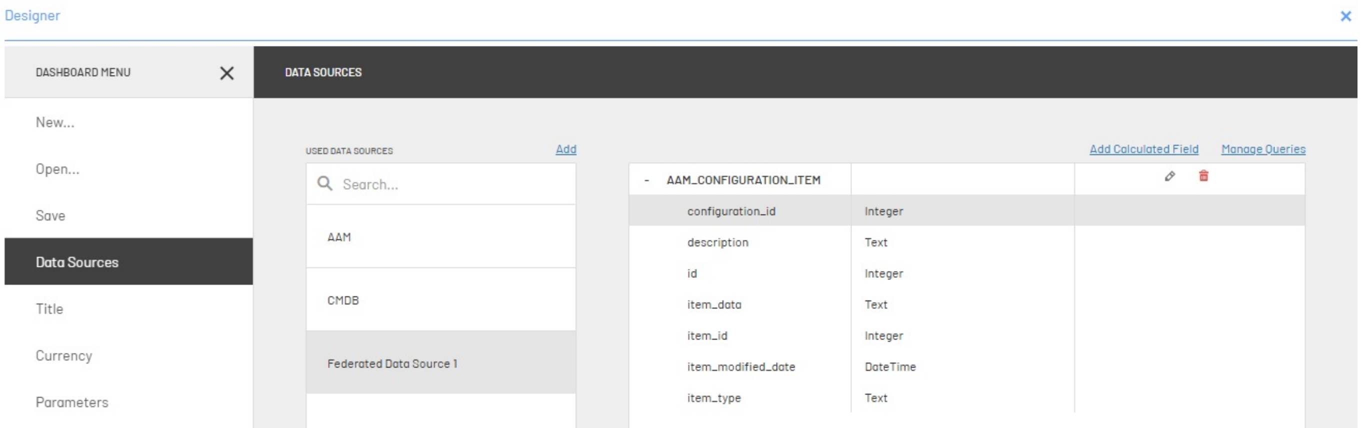


8. Select the relationship line if you need to configure the JOIN operation type.



9. Click Accept to finish configuring the federated query. When exiting, click Finish to return to the dashboard designer.

10.. In the list of data sources, you can display the new federated query.



After this configuration, you will be able to access this query in the dashboard designer tools.

⚐ Note

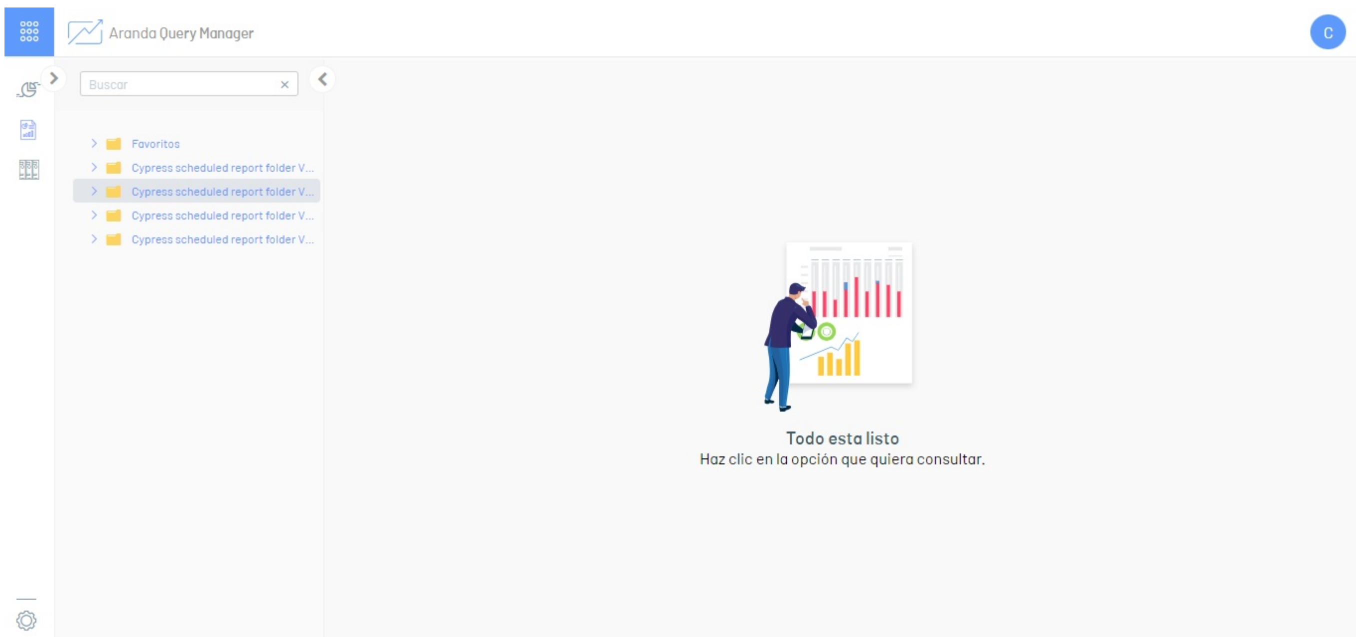
1. Federated queries cannot have parameters, they must continue to be created on top of the base queries.

Visualization

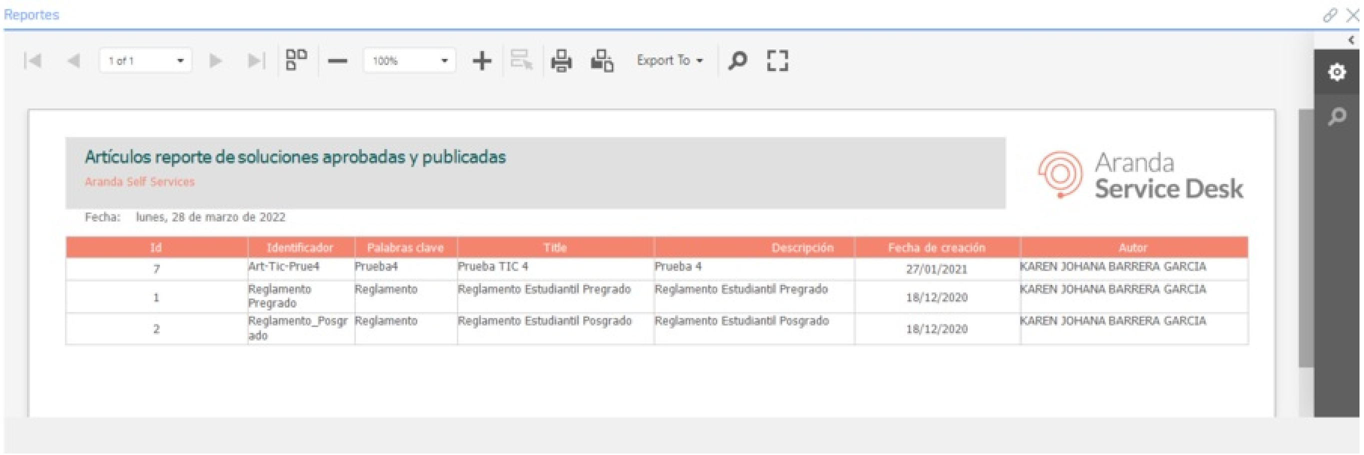
Reports

Generate and View a Report

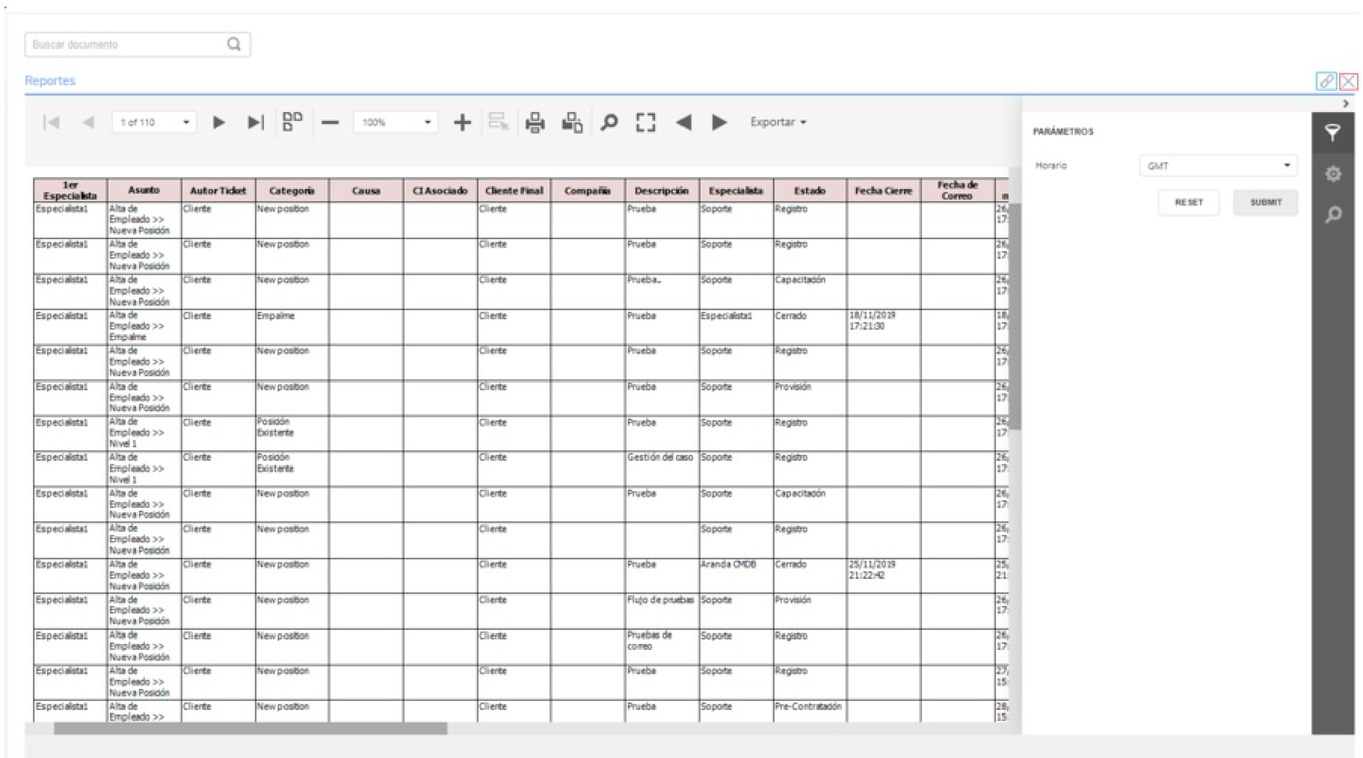
1. To view or upload a report, log in to the AQM main console, select the Reports from the main menu. In the information view, view the report logs that have read permissions.



2. Select a report from the list and in the detail view the window is enabled Reports where you can consult or export the associated information.



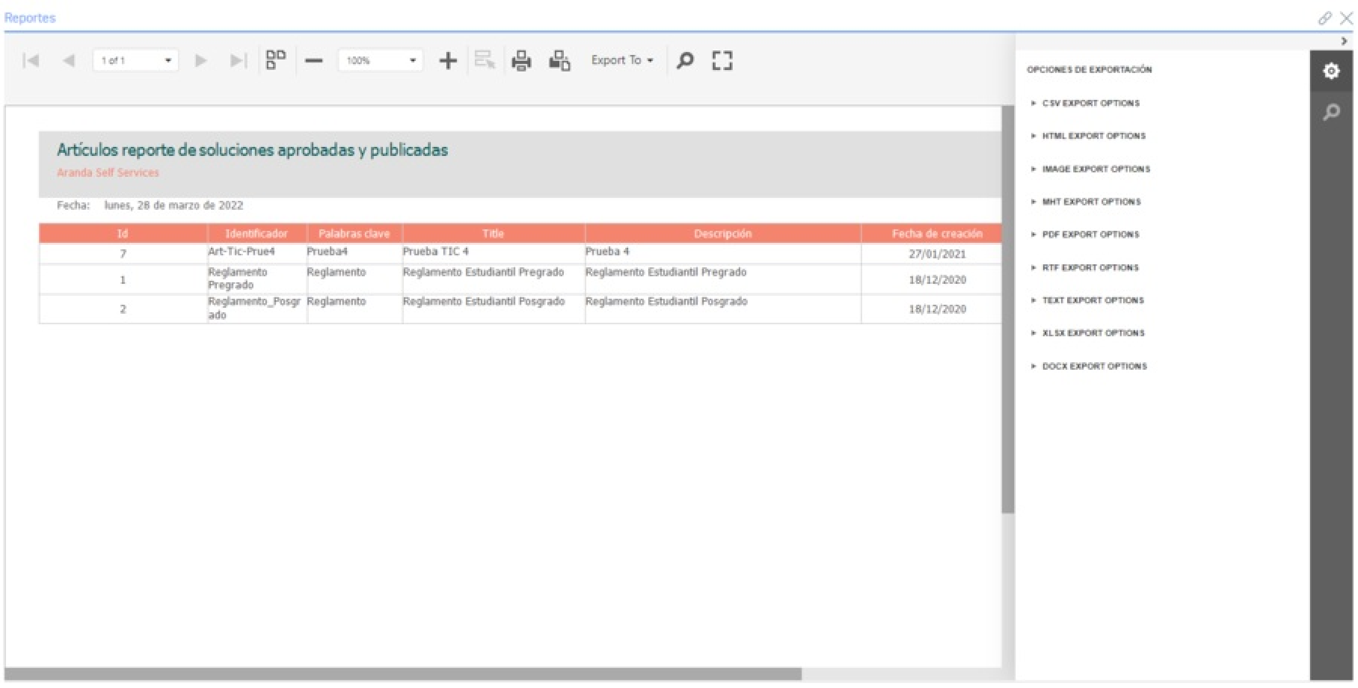
3. Depending on the configuration, some reports require parameters to be generated. In the window Reports The Parameters section is enabled. Define the parameter and select the Send/Submit, so that the report load is generated.



4. At the top right of the Report window, you can display 2 icons to perform the following actions:

- Close document: This action closes the report window.
- Copy link: This action copies the report link to view it in another browser window.

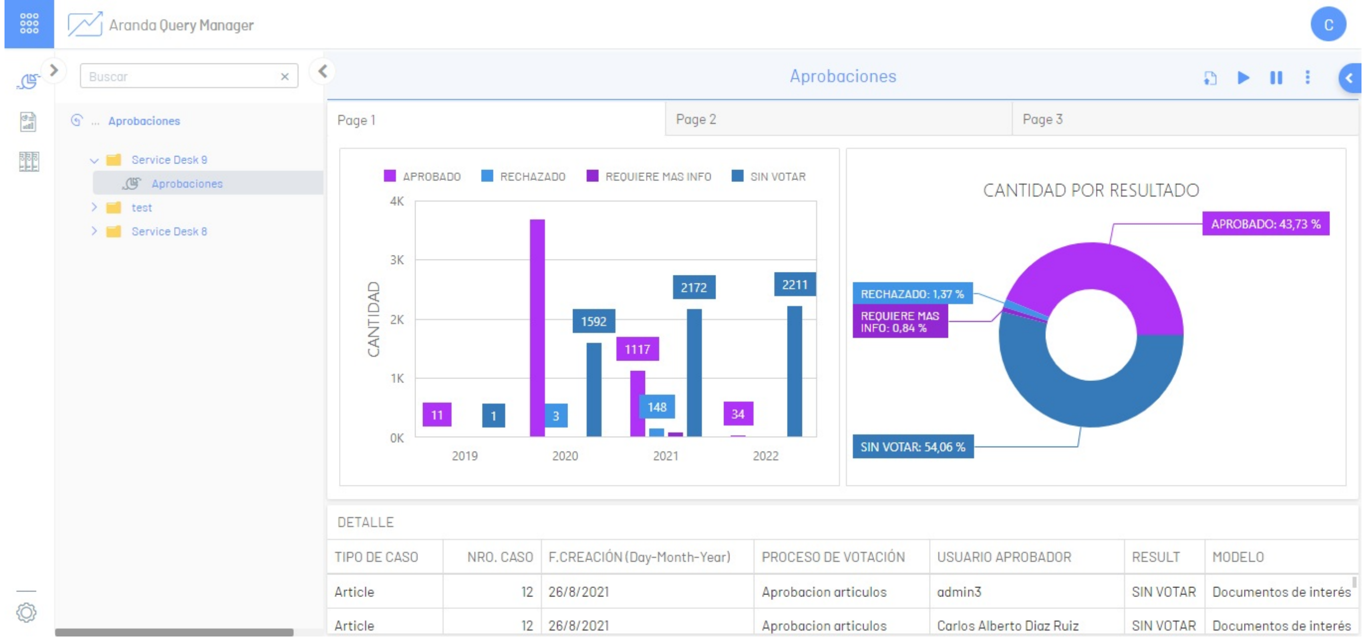
5. Once the report is generated in the Reports window, you can export the information in PDF, Excel or as an image.



Boards

Generate and Visualize a Dashboard

1. To view or load a dashboard, log in to the AQM main console, select the Boards from the main menu. In the information view, view the boards that have read permissions



2. Select a dashboard from the list and in the detail view you will be able to view the summary of reports and dashboards. 3. In case there are boards that are not visible in the detail view, a drop-down menu is enabled in the upper right part of the console with the ellipsis icon (three dots), to access this information.

⚐ Note: Some boards may request parameters.

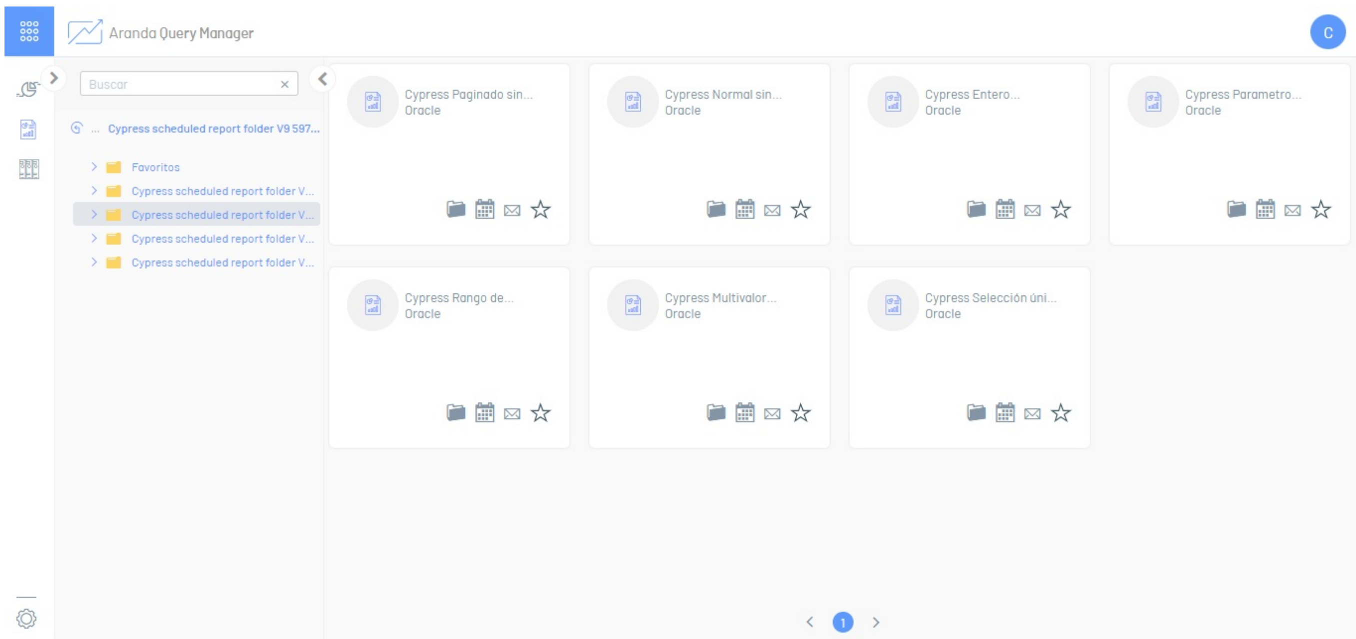
4. In the upper right part of the Dashboard window, you will see a blue arrow icon with which you can display the following actions:

- Copy link: Copy the dashboard link to view it in another browser window. .
- Close dashboard: Closes the board that is being viewed.

Mailing the Report

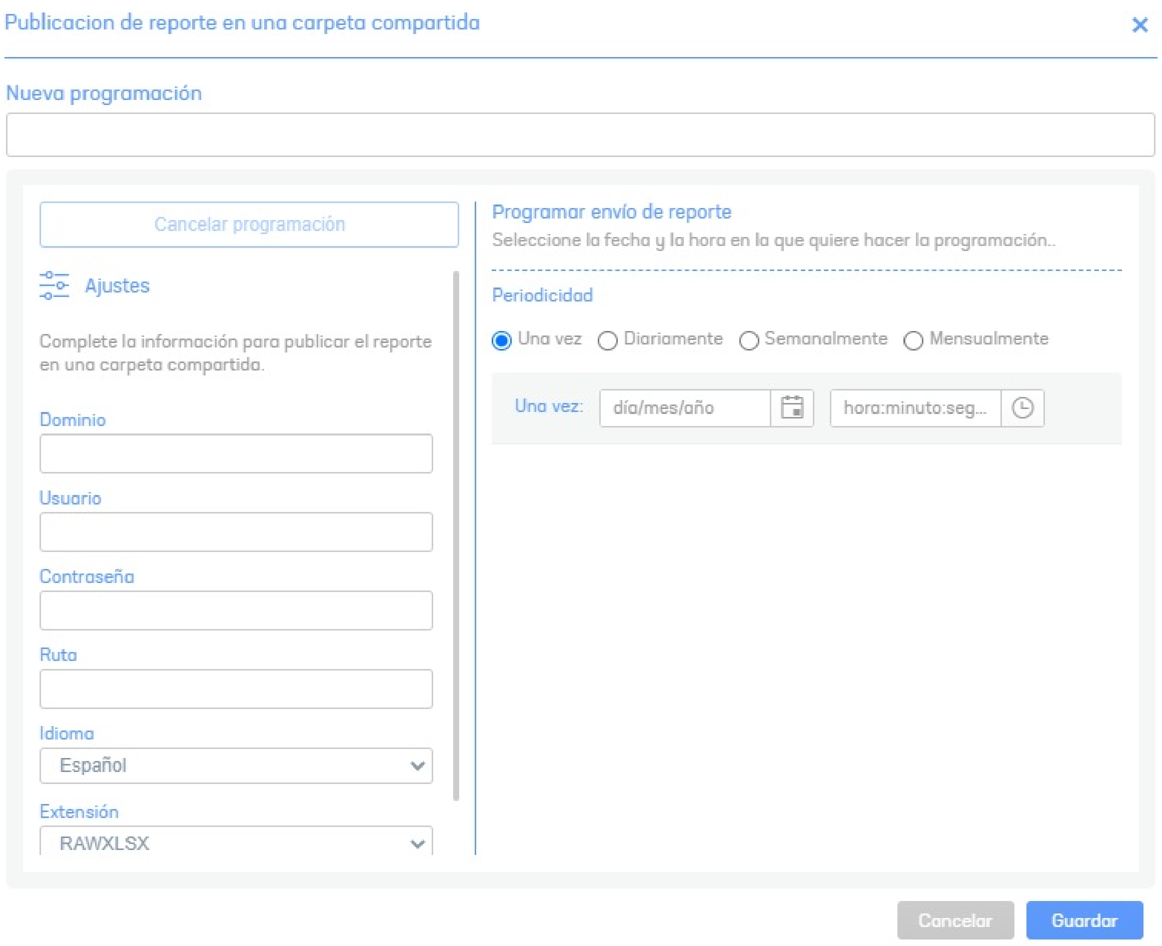
Actions by Report

1. To execute the actions per report, enter the AQM configuration console, in the General Settings section of the main menu, select a reports folder and in the Information View you will be able to view the report logs that have read permissions.
2. In the description of the cards of each report, you will have associated actions such as the publication, scheduling and scheduled sending of reports.



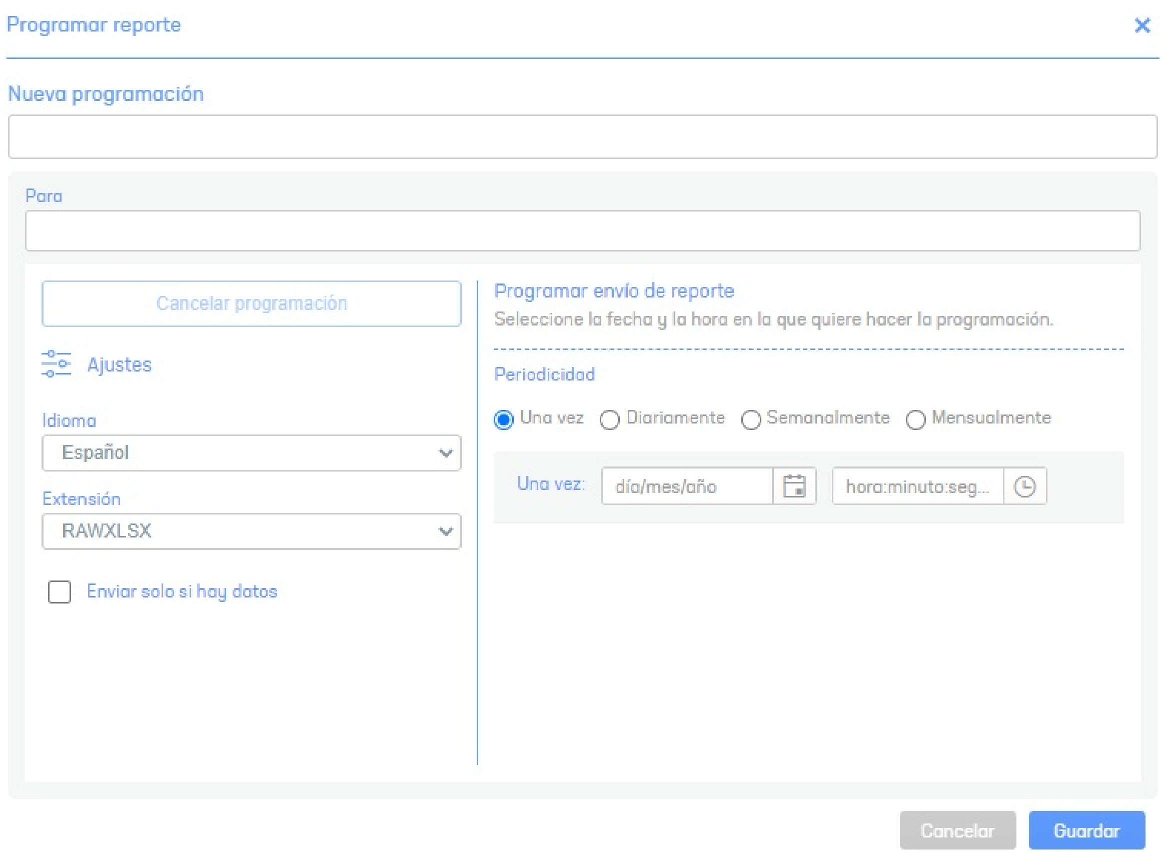
Publish Report

In the window Publishing Report to a Shared Folder, you will be able to consult the reports to be published and publish according to an established schedule.



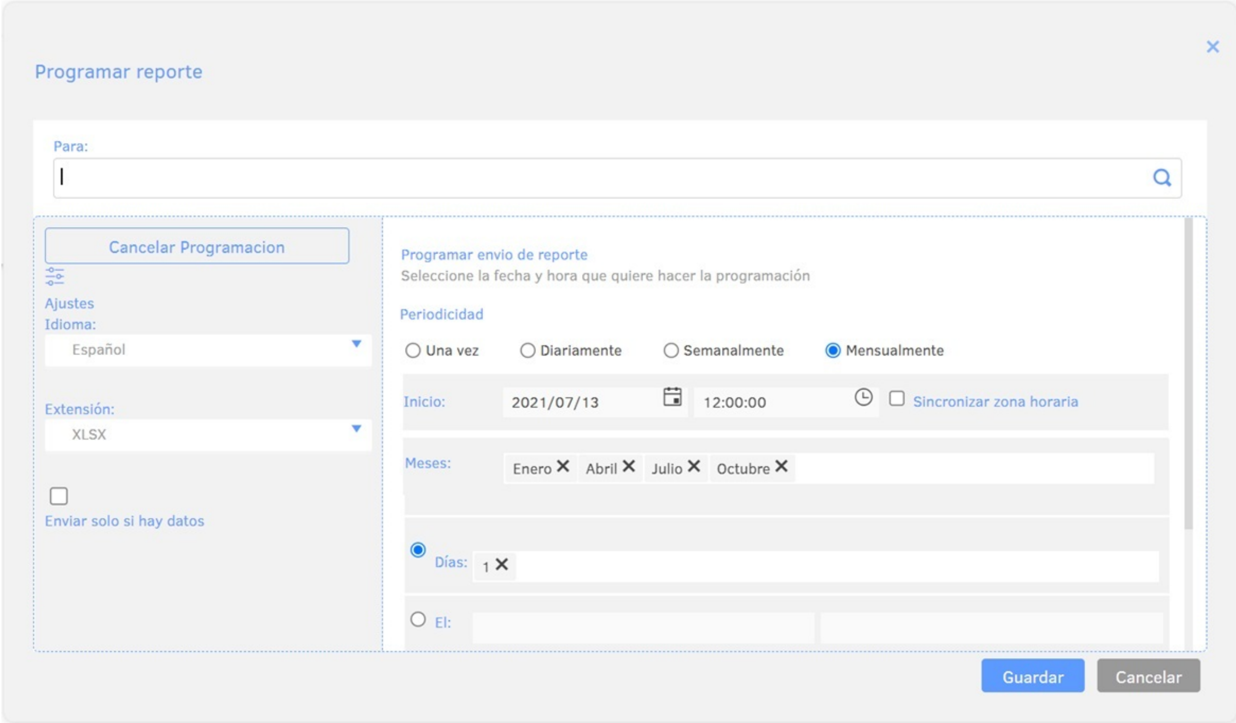
Schedule Report

In the window Schedule Report, you will be able to consult reports for the scheduling and sending of them on a regular basis. This form requests the data to schedule the sending of reports in the future. You can set up multiple schedules for sending the report, choose an existing one or press New programming to set up one.



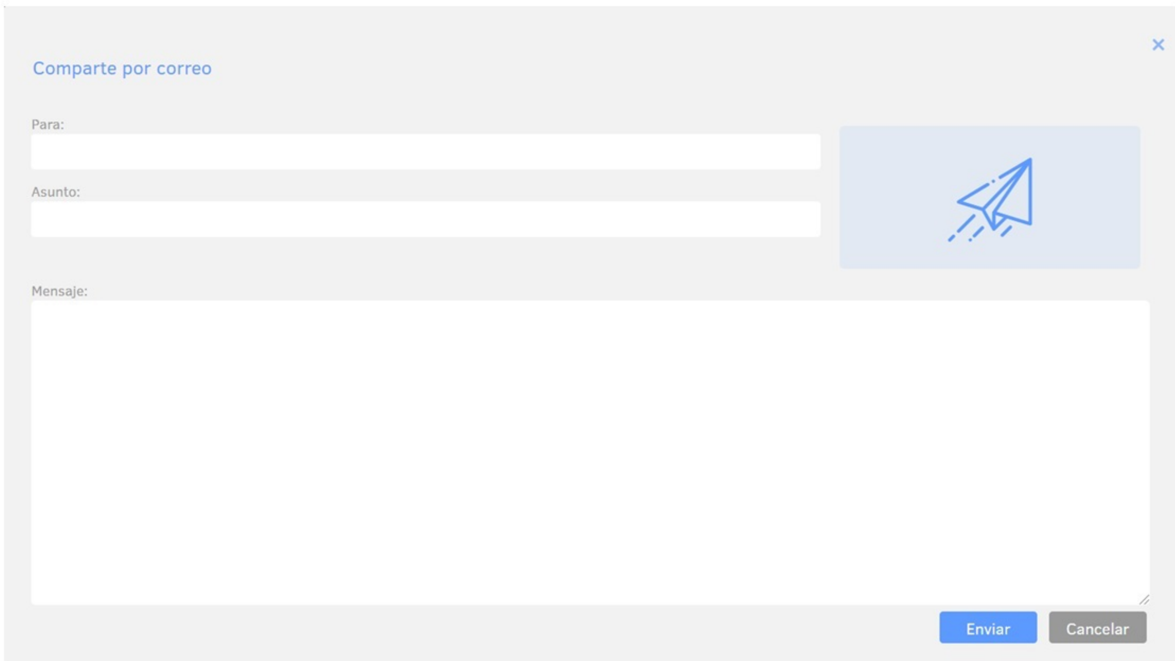
Enter the requested information:

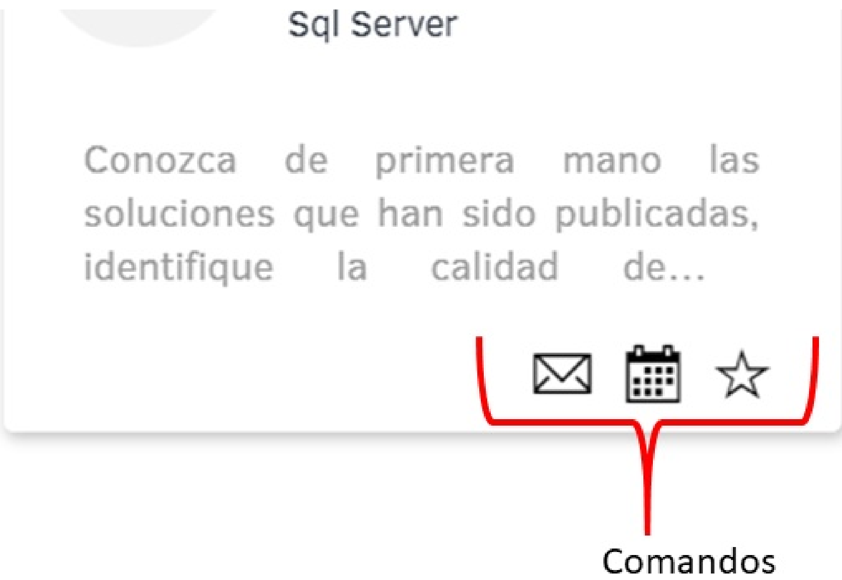
Field	Description
Email	In this field you can add one or more email addresses, an autocomplete mechanism will be activated. To validate it press enter (which will make the email appear inside the box),
Extension	Specify the export format of the report
Language	Select the export language
Periodicity	Define the date and time at which the report will be scheduled and the frequency at which the schedule is made (once, daily, weekly, monthly). if the export frequency of the report, is once, the schedule will be automatically deleted after the document is mailed. In case the report contains parameters, they will appear for you to specify their respective values.



Share by email

In the share by email window, you can send the report by email by defining the recipient, subject and message of the email. Immediately, this sending is used for the recipient to use the report through a link. The recipient must have a previously configured and licensed user.





Favorite

Export

Considerations when exporting to formats such as Excel or CSV

To avoid unexpected behavior when exporting to formats such as Excel or CSV, the following important aspects need to be taken into account During report design:

Not all document formats are created equal

You can use many different elements to make the design. The data They can be presented in a clear tabular format, but usually carry formatted headings or titles and possibly graphic elements, tables, or Underreporting. A document with enough controls can be represented perfectly for a document-centric export format as a PDF. Some formats do a good job with document presentation, but they may have problems when exporting documents that need to be edited such as DOCX and RTF.

There is a group of formats with limited display that are used for the work interactive with integrated data. This is the case of XLS(X) and CSV. We will talk about these in this chapter.

Consider exporting the data separately

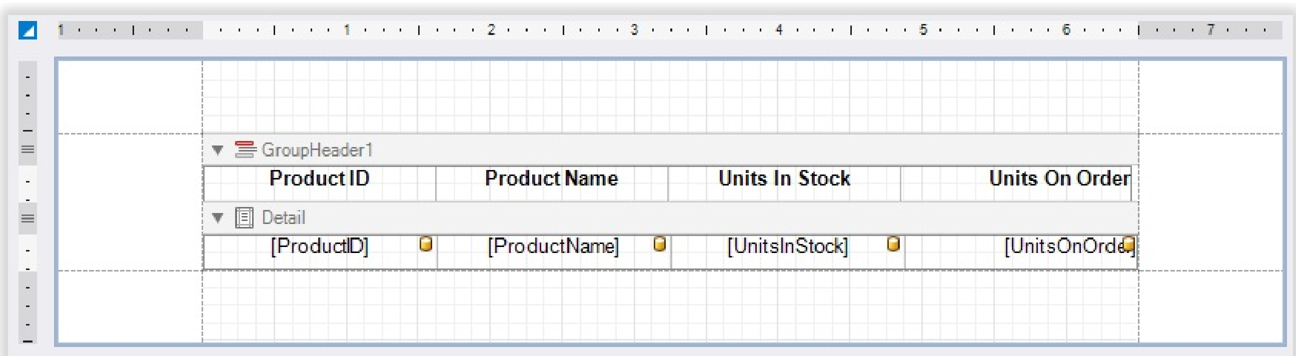
Consider implementing data export features in your applications by separate. The WYSIWYG reporting system aims to create the data exports for users who want to run their data analysis in a spreadsheet. It is essential that the structure of data export is as clean as possible, the visual elements of any type often offer no added value for this purpose.

Export data cleanly

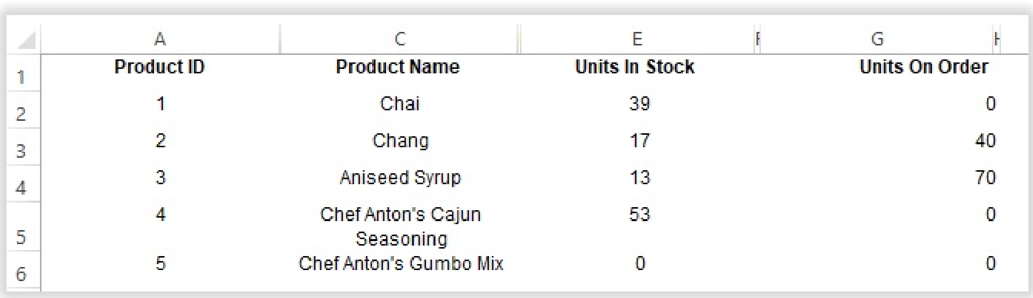
Several export formats do not support intersecting elements. The Engine Export generates a tabular structure where rows and columns are used to place output items as required by report design Visual. Especially for Excel and CSV formats, this technique of Implementation can result in more columns or rows or even cells Combined, which makes it difficult to work with documents for Data analysis. It shows several scenarios of the problem, finding possible solutions or strategies for designing your reports to keep them compatible with data-centric exports.

Misaligned columns

The following image shows a report layout with a table. Maybe hard to see, but the columns in the header don't line up perfectly with those of the rest of the table.

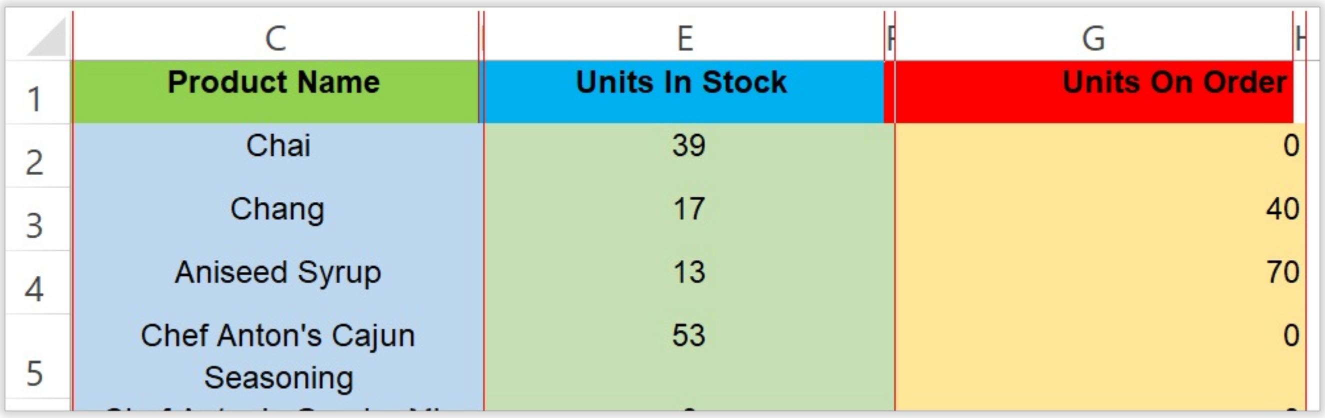


Here's the result of exporting to XLSX:



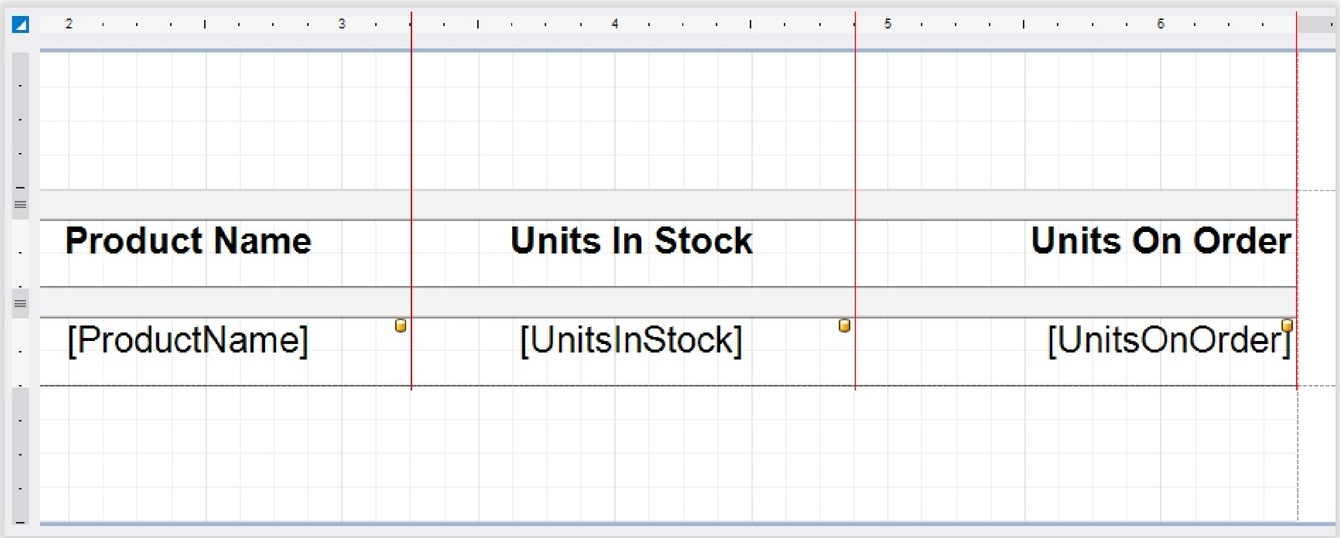
	A	C	E	G
1	Product ID	Product Name	Units In Stock	Units On Order
2	1	Chai	39	0
3	2	Chang	17	40
4	3	Aniseed Syrup	13	70
5	4	Chef Anton's Cajun Seasoning	53	0
6	5	Chef Anton's Gumbo Mix	0	0

You can see that only columns A, C, E, and G are fully visible, while that columns B, D, F, and H are almost unvisible. This happens because the columns in the report are misaligned, therefore the columns in the table header do not align correctly with those in the detail. The problem becomes more visible when enlarging the Excel file and Add some colors:



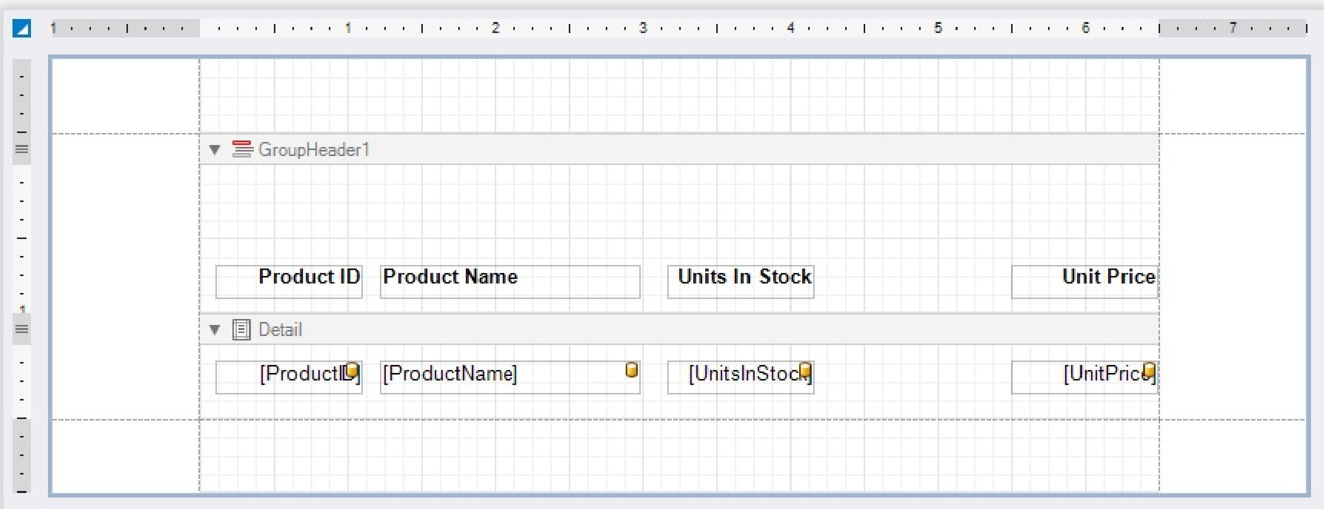
You can fix this problem by accurately aligning the header and the Table of the detail band of each cell, using vertical indicators in the editor.

This image shows the alignment guides in red.

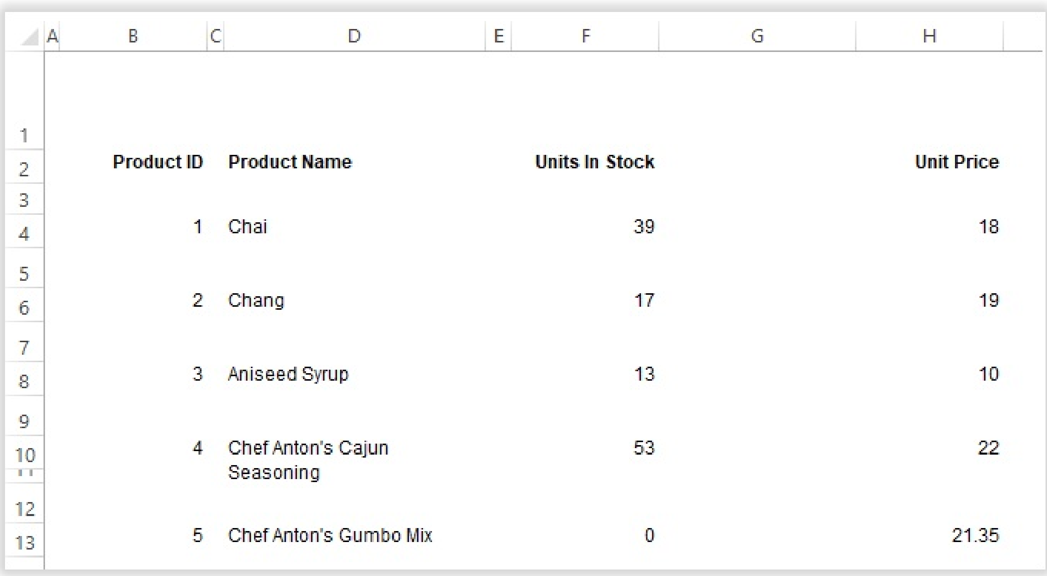


Blank spaces

This report shows some graphical elements that are separated by space between them:



When exporting to XLSX, this is the result:

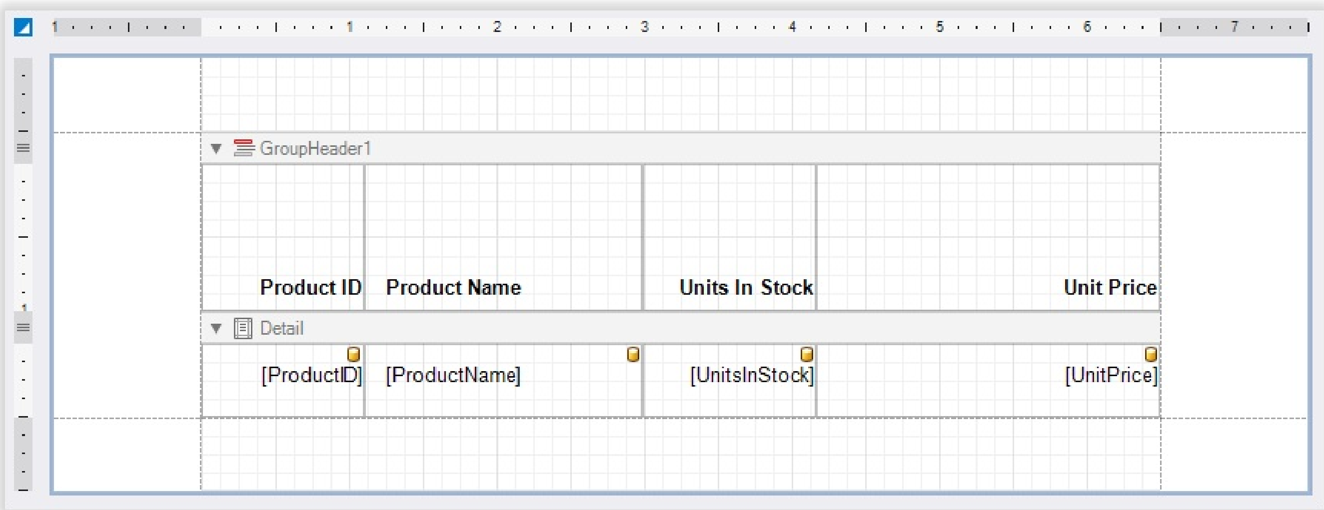


Additional rows and columns are generated because of the spaces in the the initial report. To determine the origin of such spaces it can be useful to determine the origin of such spaces Set item background colors in the report designer before export.

In some cases, it is recommended to disable the CanGrow option for the tables to prevent the cells from growing in size when exporting and an overflow in the number of rows in the XLS(X) document occurs.

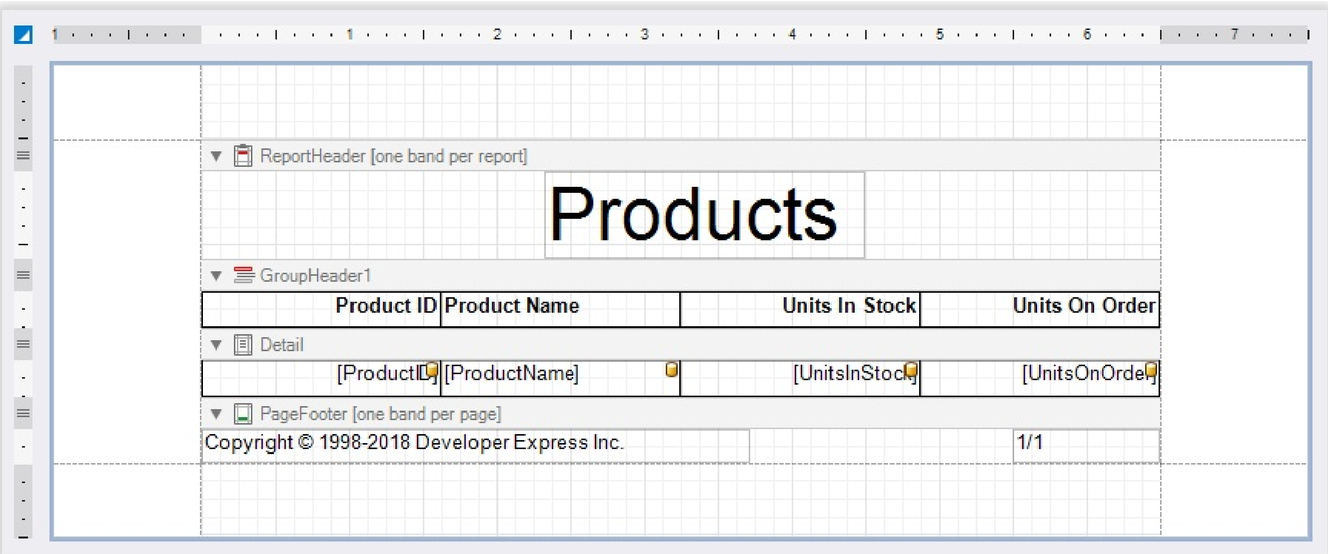
The colors are displayed in Excel, making the cell boundaries visible:

As a solution, it is recommended to adjust the positions of each element so that they do not No empty space remains. You can use the TextAlignment and Padding to align them.

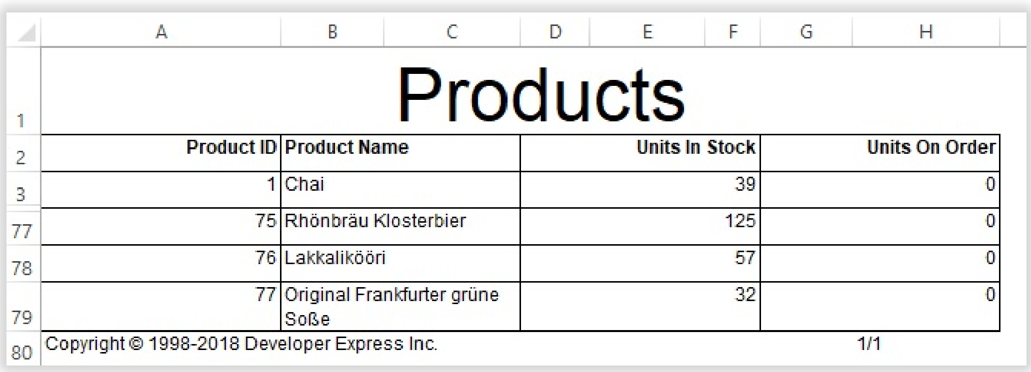


Header and footer

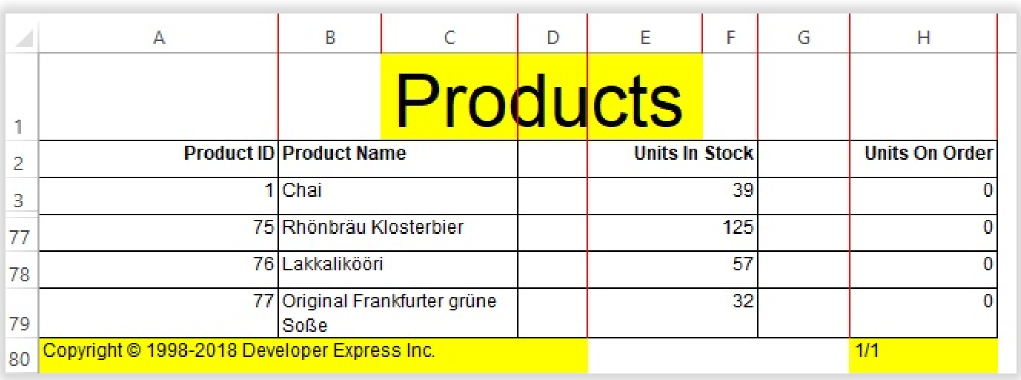
In reports, header and footer bands can also cause problems in the rows or columns of the export file, if your controls they do not align with those of other bands. The following is a report design that Displays this problem:



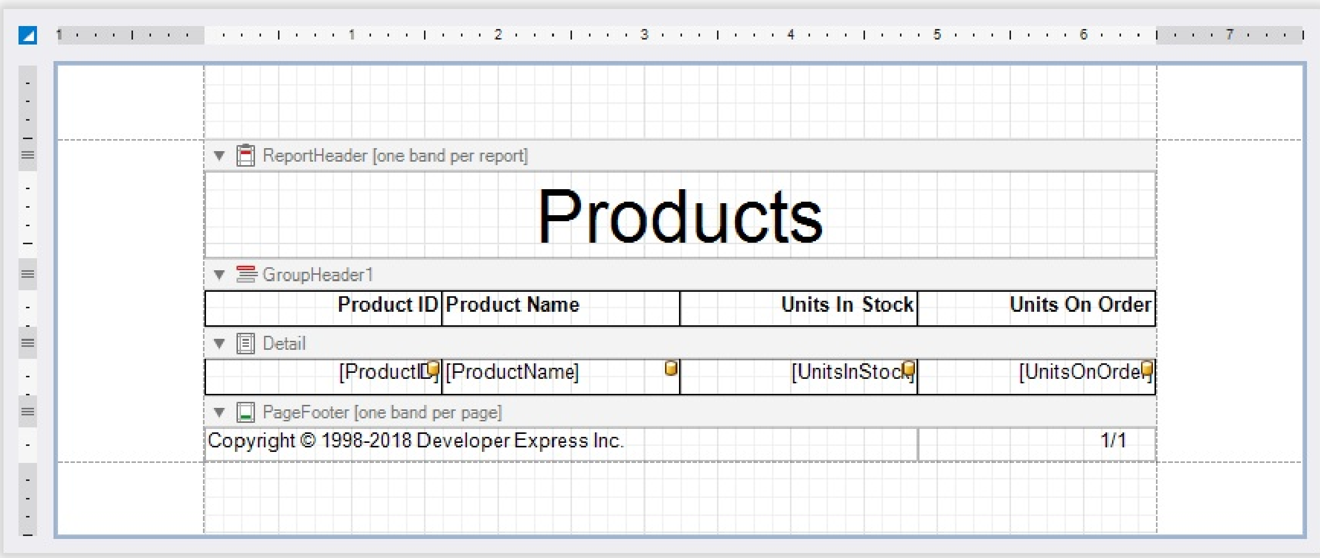
The resulting XLSX file looks like this:



Using background colors helps to understand exactly what causes the problem. This image shows red lines to illustrate the controls that influenced the creation of columns.



The recommendation is to align controls in headers and footers with those in the data bands of the report. In some cases it is advisable to remove the header or footer elements in case a better tabulation of the data and no additional columns appear.



Calculated and custom-formatted values

Exports to Excel and CSV will not work in the following cases:

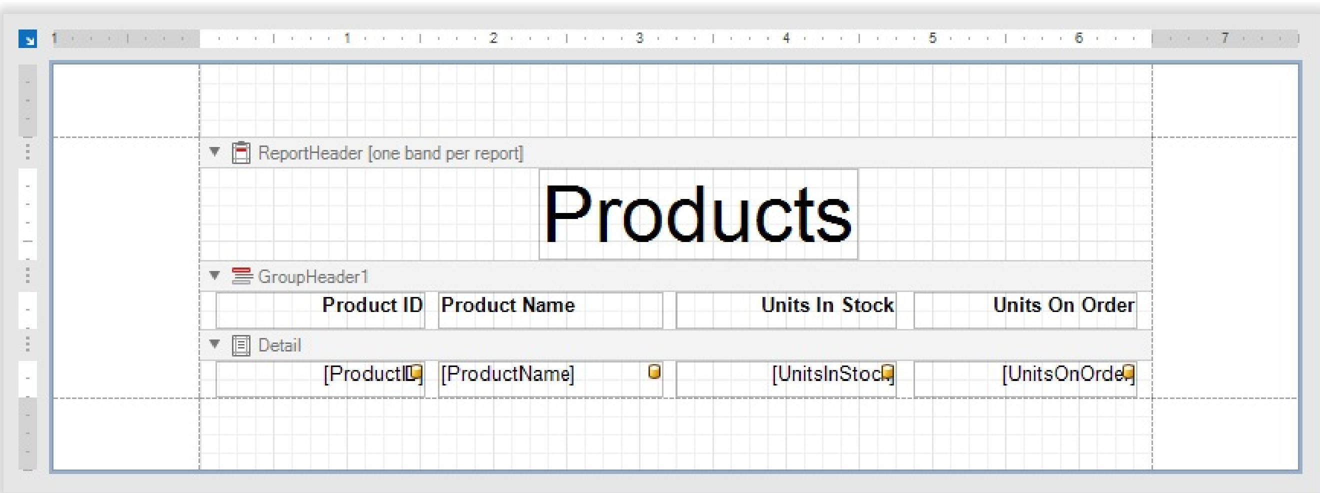
- When the value of a cell comes from a calculated value.
- When a value in a cell is applied a formatting value derived from a personalized format.
- When the event is used BeforePrint to assign custom values to The property Text of labels or table cells.

This is because Excel and CSV are the only formats currently supported that distinguish between string values and other types of data (such as numbers, decimals etc.) Therefore, it is not possible to perform calculations involving this type of fields.

When exporting these types of fields is required, it is recommended to use the EvaluateBinding instead of BeforePrint. In this case, assign your field calculated to the variable e.Value and change the value of the XlsxExportOptions.TextExportMode to Text. The final data will always be a value text string, therefore, in the resulting Excel file you will not be able to perform calculations or operations, such as additions, etc.

CSV specifics

For CSV exports, there are two additional options that can help Avoid empty cells in the resulting file. These options are SkipEmptyColumns and SkipEmptyRows which are enabled in a default. The following is an example report layout to demonstrate The effect of these options:



When exported to CSV and uploaded to Excel with the default settings, Here's the result:

	A	B	C	D	E
1			Products		
2	Product ID	Product Name		Units In Stock	Units On Order
3	1	Chai		39	0
4	2	Chang		17	40
5	3	Aniseed Syrup		13	70
6	4	Chef Anton's Cajun Seasoning		53	0
7	5	Chef Anton's Gumbo Mix		0	0
8	6	Grandma's Boysenberry Spread		120	0
9	7	Uncle Bob's Organic Dried Pears		15	0
10	8	Northwoods Cranberry Sauce		6	0

And here's what you get if you disable both properties:

	A	B	C	D	E	F	G	H	I	J	K
1					Products						
2		Product ID		Product Name			Units In Stock			Units On Order	
3		1		Chai			39			0	
4		2		Chang			17			40	
5		3		Aniseed Syrup			13			70	
6		4		Chef Anton's Cajun Seasoning			53			0	
7											
8		5		Chef Anton's Gumbo Mix			0			0	
9		6		Grandma's Boysenberry Spreac			120			0	
10											
11		7		Uncle Bob's Organic Dried Pear			15			0	
12											
13		8		Northwoods Cranberry Sauce			6			0	

Another option that can be useful for CSV exports is the static FollowReportLayout, which is enabled by default.

A report exported with those default settings will look like this:

	A	B	C	D	E	F	G	H	I	J	K
1		Watch a video tutorial on creating invoices on the DevExpress YouTube channel									
2		Read a step-by-step guide on creating invoices in our online documentation									
3		INVOICE				10643					
4		Alfreds Futterkiste				Order ID: 10643					
5		Maria Anders				Order Date: 8/25/1997					
6		Obere Str. 57									
7		Berlin									
8		Germany									
9		Pos.	Quantity	Product N	Unit Price			Discount	Net Price		
10		1	15	Rössle Sau	$45.60			$3.75	$683.75		
11		2	21	Chartreus	$18.00			$5.25	$377.75		
12		3	2	Spegesild	$12.00			$0.50	$23.75		
13		Item count: 3					Grand Total:			########	
14							Discount Total:			$9.50	
15							Amount Paid:			########	
16		Alfreds Futterkiste				Order ID: 10692					
17		Maria Anders				Order Date: 10/3/1997					
18		Obere Str. 57									
19		Berlin									
20		Germany									
21		Pos.	Quantity	Product N	Unit Price			Discount	Net Price		
22		1	20	Vegie-spr	$43.90			$0.00	$878.00		
23		Item count: 1					Grand Total:			$878.00	
24							Discount Total:			$0.00	
25							Amount Paid:			$878.00	

Disabling that property will not observe certain design details in the resulting file. This means that the space can be eliminated An Export Void.

	A	B	C	D	E	F	G	H
1	Watch a video tutorial on creating invoices on the DevExpress YouTube channel							
2	Read a step-by-step guide on creating invoices in our online documentation							
3	INVOICE				10643			
4	Alfreds Futterkiste				Order ID: 10643			
5	Maria Anders				Order Date: 8/25/1997			
6	Obere Str. 57							
7	Berlin							
8	Germany							
9	Pos.	Quantity	Product N	Unit Price	Discount	Net Price		
10	1	15	Rössle Sau	$45.60	$3.75	$683.75		
11	2	21	Chartreus	$18.00	$5.25	$377.75		
12	3	2	Spegesild	$12.00	$0.50	$23.75		
13	Item count: 3				Grand Tot	########		
14					Discount T	$9.50		
15					Amount P	########		
16	Alfreds Futterkiste				Order ID: 10692			
17	Maria Anders				Order Date: 10/3/1997			
18	Obere Str. 57							
19	Berlin							
20	Germany							

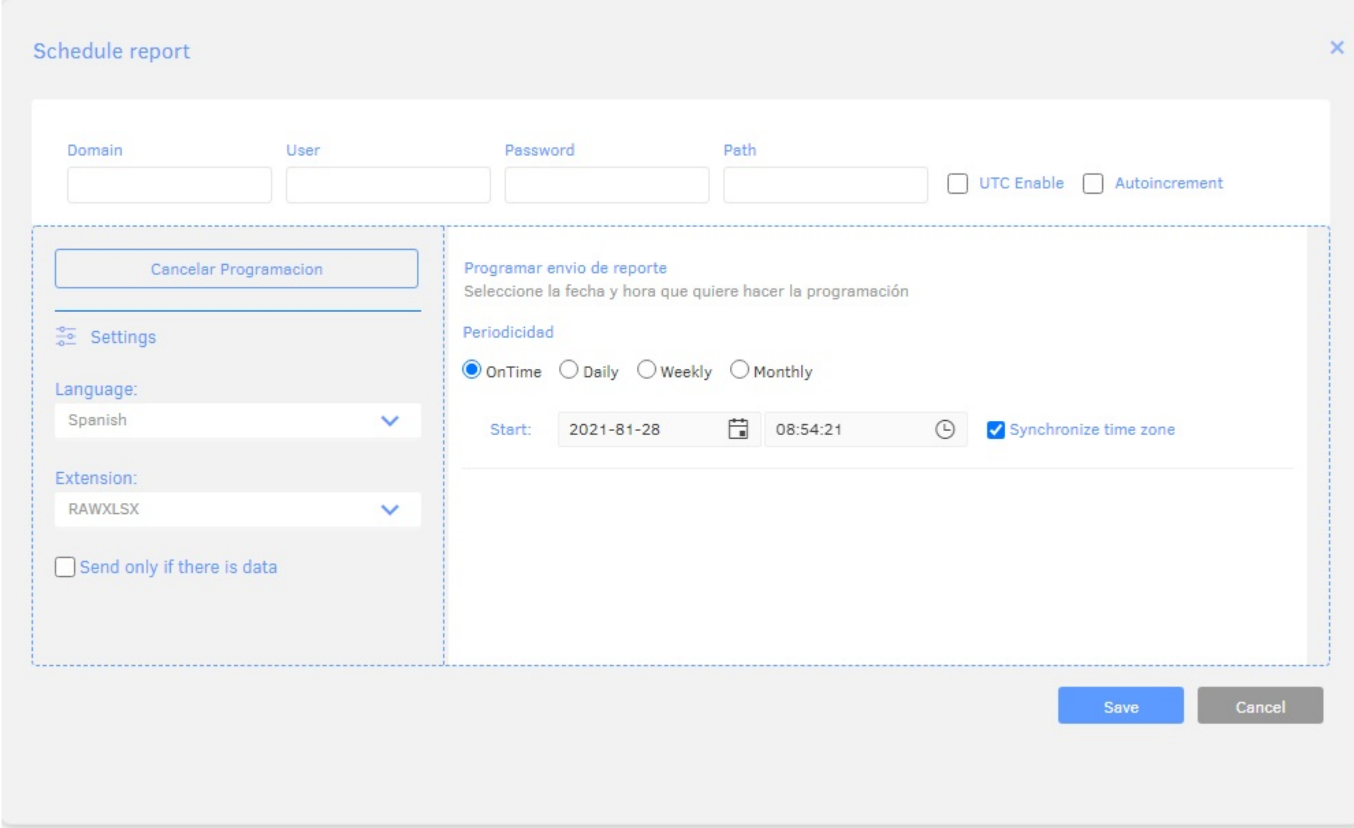
These additional options for CSV format exports are important since this format requires clean structures of data export so that they can be used in Automated data transfer.

Publishing to shared folder

To access the shared folder publishing window, identify the report card icons and click the folder icon

-Next, a window is presented with the properties for configuring the destination folder and schedule.

- The export process of a report is authenticated with the specified username and password parameters.
- If the autoincrement parameter is enabled, a file will be created sequentially; a new one each time the report schedule is executed.
  The name of the file in the folder is as follows: fecha_nombrereporte. Where date is the date of the server. If UTC dates are enabled, the Universal Date will be used for file renaming. The format of the date will be yyyy-MM-dd-HH-mm
- If the autoincrement option is disabled, the generated file will always be overwritten in the destination folder and the use UTC dates parameter does not apply.



Considerations

- Shared folder publishing is intended for use only in local environments.
- The location or path of the folder where the documents are published must be located on the same machine. It does not apply to routes through local networks and VPNs.

Migration Reports / OnPremise Architectures

Migration Reports / OnPremise Architectures

Report migration requires a utility that allows you to iterate on all definitions of dashboards and reports in an OnPremise environment, changing the definition of the reports to be compatible with AQM enhancements. When you use this functionality for the report migration process, you will perform the following tasks:

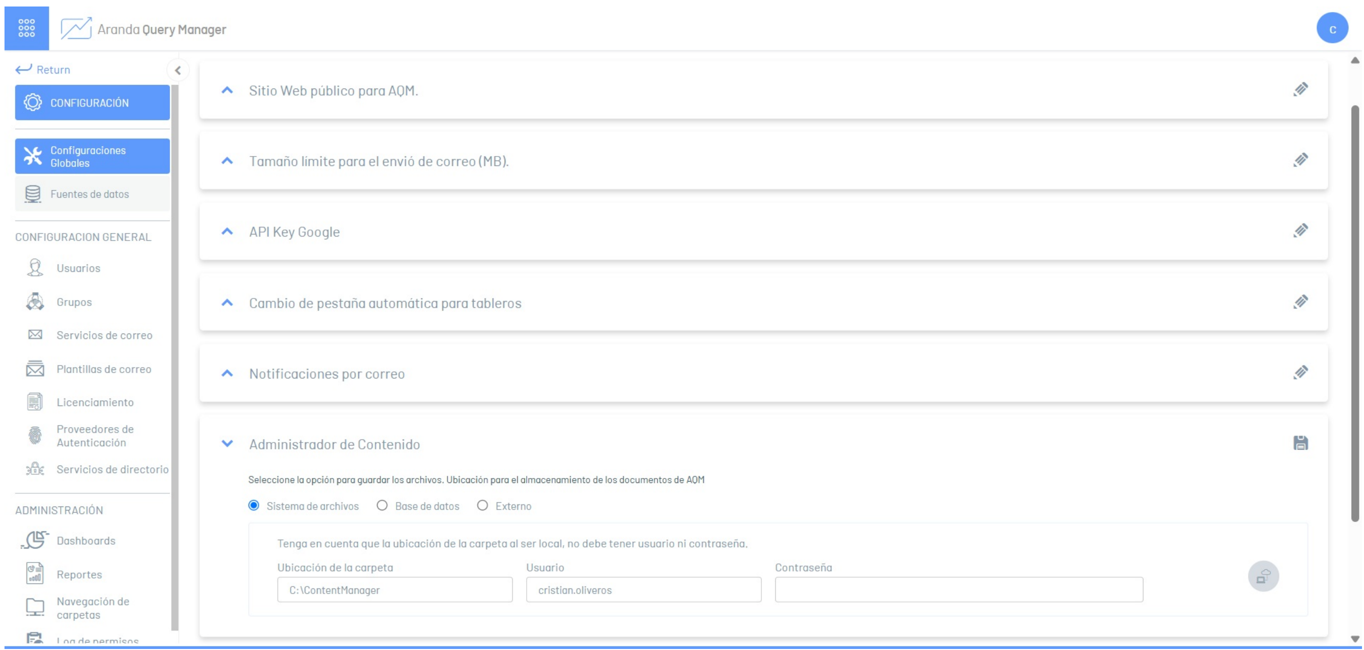
- Create reports with multiple data sources.
- Improve the security of reporting information.

Considerations When Saving a Report Backup

⚐ Note: Before migrating reports, consider:

1. Upload all reports (dashboards and reports) to the AQM console.
2. Create a backup of the reports depending on your Content Manager in AQM.

Validate in the general settings section of AQM, what type of content manager you are using to back up information. For more information about the AQM configurations section, see the Configuration



Content Manager Type	Backup Consideration
Database	If you use a database to store reports, back up the database.
File System	If you have an OnPremise environment and use a local folder to store reports, make a copy of this folder.
External	If you use a storage account in Azure, clone the contain blob where you store the reports.

Using the Report Migration Tool in On-Premise Environments

⚐ Note:

1. The definition of the report (File with .rep or .xml extension is required.

2. The database connection can be on the local network or use SQL Server to connect to your databases.
3. Connection string to the OnPremise product database.
4. Download the utility [MigrationTool.zip]().
5. Unzip the utility files MigrationTool.zip in a folder.
6. Run the following powershell command inside the folder where the files were unzipped by replacing the required spaces:

```
.\Aranda.AQM.Migrate.Tool.exe "{productDB}"
```

- productDB: It is the connection string to the product database in OnPremise.

Console Messages

As you run the migration process, you can visualize how the tool iterates across all reports, performing different actions.

If the report is in the database, but the definition is not found in the Content Manager, the message displays as follows:

```
Tableros: Casos en la mesa de servicios
        STORAGE_FILE_NOT_FOUND
        [Error] es probable que el archivo del documento Casos en la mesa de servicios no se encuentre en el almacenamiento
```

If the report is associated with a data source, it will update the name and remove definitions that contain this report in its design.

```
Reporte: Ejemplo Filtro Parámetros
        Conexiones encontradas: 1
        -- Cambiando SDK9 por SDK9
```

If the report exists but is not associated with a data source, the definitions that this report contains in its design are removed.

```
Reporte: Párametro Entero
        Conexiones encontradas: 1
        No hay una aplicación asociada a la fuente de datos
```