



## WHAT'S NEW AND RELEASE NOTES

Release: 2023.4

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## NEW FEATURES AND IMPROVEMENTS

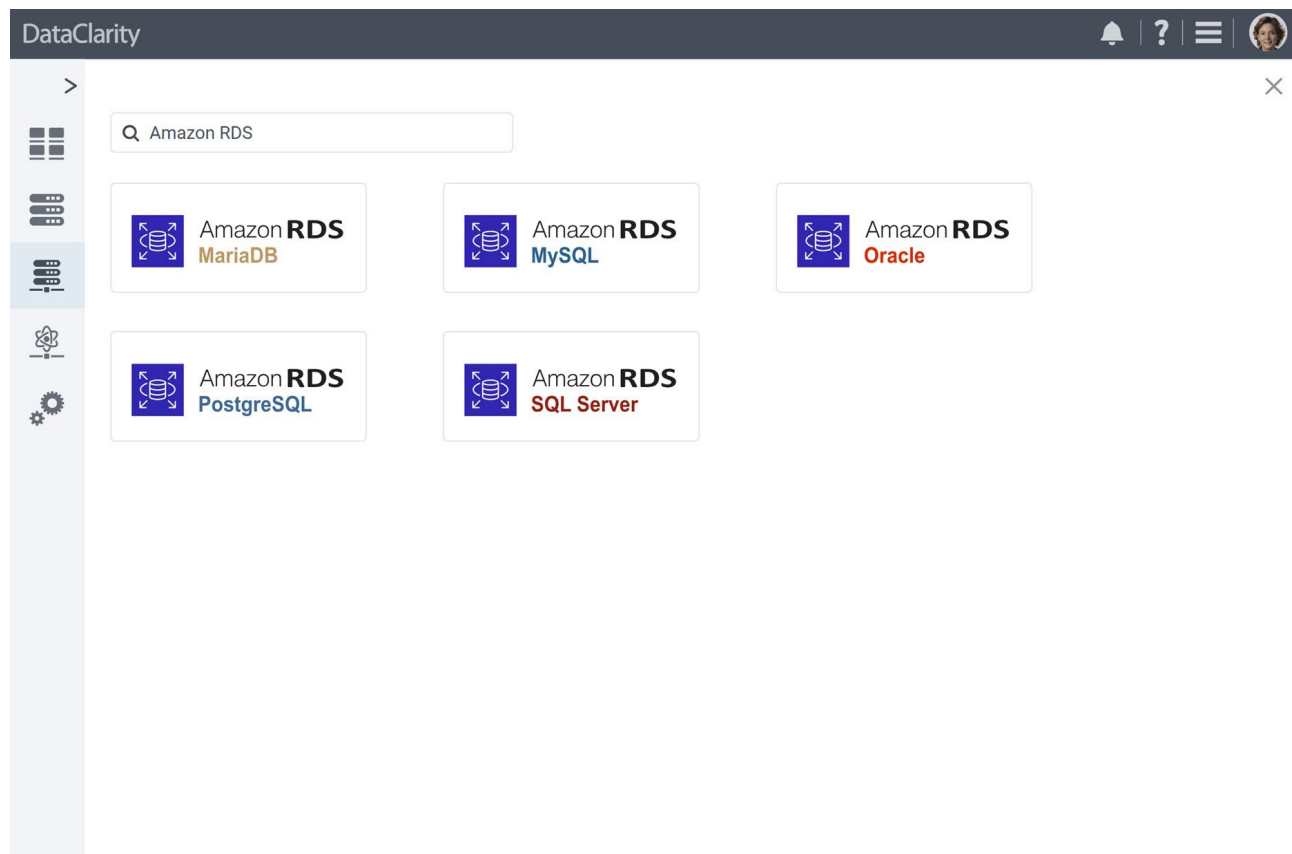
### DATA PREPARATION

#### *Support for Amazon RDS connections*

This release introduces new improvements to data preparation capabilities. You can now seamlessly connect and query Amazon Relational Database Service (RDS), including the following:

- Amazon RDS for MySQL
- Amazon RDS for MariaDB
- Amazon RDS for PostgreSQL
- Amazon RDS for Oracles
- Amazon RDS for SQL Server

This enhancement broadens your possibilities for accessing and utilizing data, giving you the flexibility to connect to Amazon RDS databases that best fit your needs. Whether you're working with MySQL, MariaDB, PostgreSQL, Oracle, or SQL Server, our platform now provides seamless integration with Amazon RDS databases, making data access and utilization more versatile than ever.



### Improved Connection Setup with JDBC URLs

We're excited to introduce an enhancement in data preparation that simplifies the process of defining database connections. You can now choose between specifying individual connection configuration fields or simply providing a JDBC URL.

When defining a database connection, you have the option to specify a JDBC URL directly. This feature is particularly useful when you need to copy and paste JDBC URLs from other applications, reducing the manual input required.

ADD DATA CONNECTION ?

Connection details

Advanced

Metadata caching

URL, Username and Password

ORACLE

Oracle data source connection

URL

jdbc:oracle:thin:@10.15.16.234:1521:orcl12

Username

s.smith

Password

.....

Schema

Load list

Test your connection

After you fill in the data connection details, test your connection. If something goes wrong, an error message will be displayed.

Ask user for credentials

Off

Connection name

Oracle jdbc

SAVE

TEST CONNECTION

### Addition of Key/Value Type JDBC Parameters

In response to user feedback and to expand the flexibility of data connection configuration, we're excited to introduce an enhancement that allows users to specify additional data connection parameters using a convenient key/value pair approach.

Users now have access to a dedicated connection configuration tab, enabling the addition of key/value type JDBC parameters. This enhancement greatly enhances the versatility of data connection setup.

Before this update, users were limited to the required fields in the connection form. With the new key/value pair approach, you have the freedom to add any necessary JDBC parameters, ensuring a seamless and tailored connection setup for your specific requirements. This feature empowers users to fine-tune their data connection configurations with ease.

ADD DATA CONNECTION ?

Connection details

Advanced

Metadata caching

Key

Value

sslmode

require


DELETE

sslfactory

org.postgresql.ssl.No

DELETE

ADD

 PostgreSQL

PostgreSQL data source connection

Test your connection

After you fill in the data connection details, test your connection. If something goes wrong, an error message will be displayed.

SAVE

TEST CONNECTION

## SSL Connectivity Support for PostgreSQL, SQL Server, and MySQL Databases

This release introduces enhanced security options with the addition of SSL connectivity support for PostgreSQL, SQL Server, and MySQL databases. Whether your databases are on-premises or in the cloud, this feature provides an extra layer of protection for your data.

To enable SSL connectivity, we've introduced a convenient toggle in the connection configuration. When you activate this feature, our platform automatically adds the appropriate JDBC parameters to enable SSL to the Advanced Key Value configuration tab.

This means you have full control and visibility over SSL-related settings, allowing you to review and fine-tune them as needed. Whether you're connecting to PostgreSQL, SQL Server, or MySQL databases, this SSL support ensures your data transmissions are secure and protected, meeting the highest standards of data security.

SALES AND INVENTORY ?

Connection details

Advanced

Metadata caching

Username and Password

Server

10.15.16.183

Port

1433

Database

Sales data

Username

ssmith1ge7

Password

.....

Schema


dbo

Ask user for credentials

Off

Connection name

Sales and Inventory

 Microsoft SQL Server  
Microsoft SQL Server data source connection

**Test your connection**  
After you fill in the data connection details, test your connection. If something goes wrong, an error message will be displayed.

Use SSL ?

On

Load list

Choose this option if your database server has been setup to serve encrypted data through SSL

SAVE

TEST CONNECTION

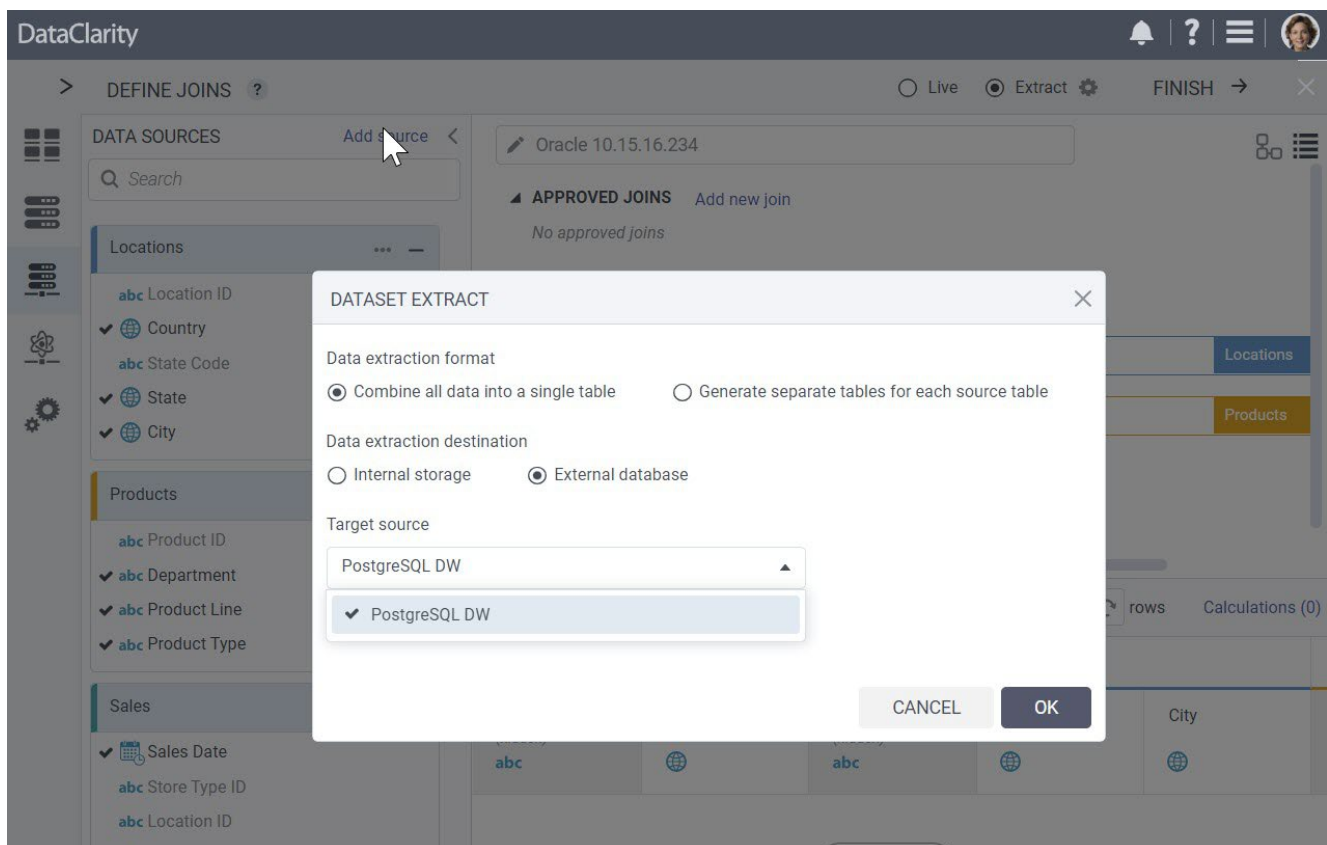
## Store Extracted Datasets in External PostgreSQL Databases

Starting this release, when creating datasets, you have the ability to store extracted data in an external PostgreSQL database, expanding your storage choices.

While accelerating query performance by configuring datasets to use extracted data, you now have the option to specify whether the extracted data will be stored in our internal columnar data storage or in an external PostgreSQL database.

To use this feature, first define a PostgreSQL data connection in Data Preparation. Once the connection is established, you can select it as the destination for your data extracts.

This enhancement empowers you with greater control over your data storage and management.

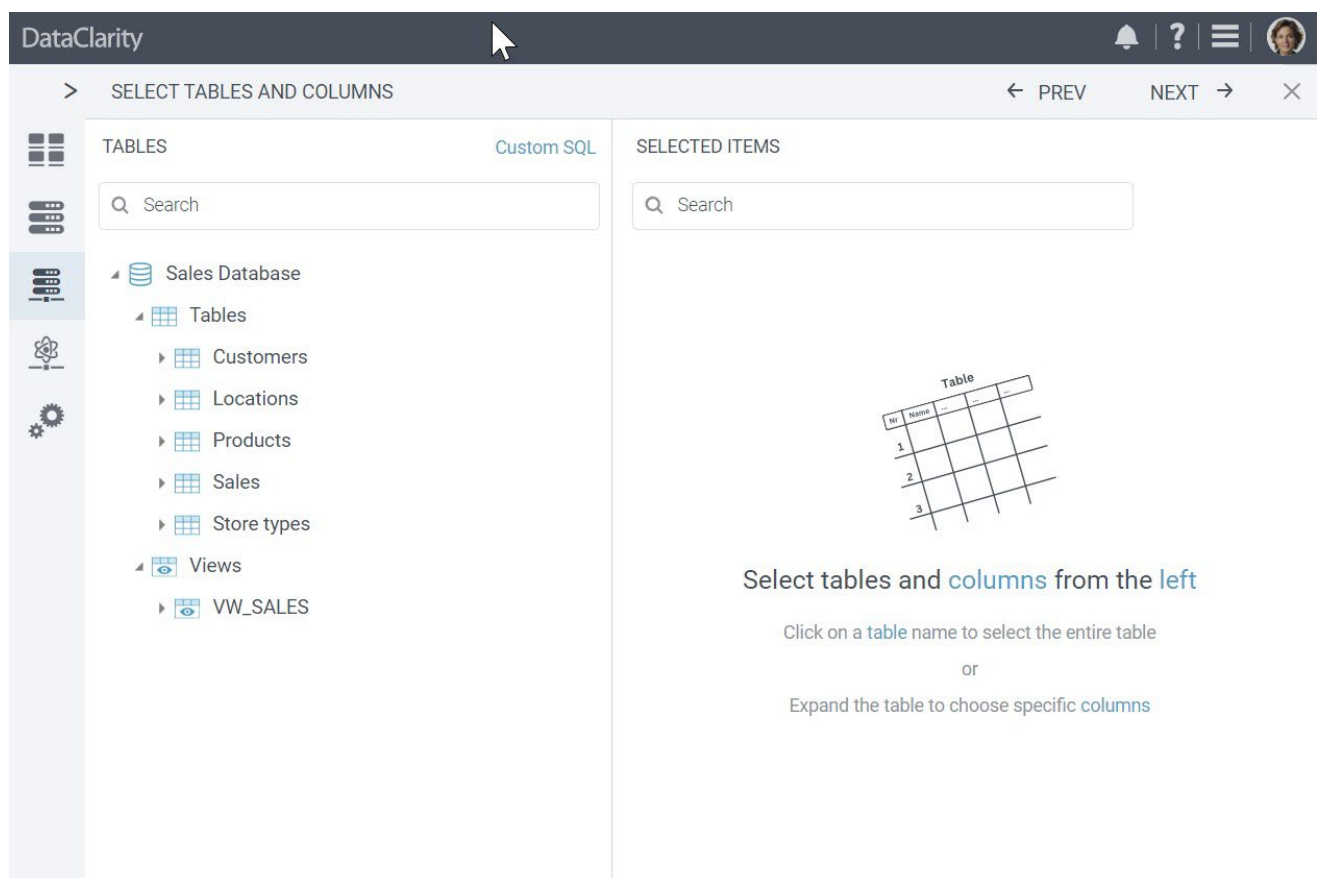


## Source Tables and Views Grouped by Object Type

This new release introduces an improvement that organizes source tables and views by object type. This enhancement ensures a more user-friendly and organized interface when selecting data sources.

Previously, when creating datasets and selecting tables and columns from data sources, both database tables and views were displayed together. Now we've reorganized the interface to display source tables and views grouped by their object types. You'll now see distinct categories labeled "Tables" and "Views," with tables and views listed under their respective categories.

This update simplifies the dataset creation process, making it easier for you to select the specific data sources you need.



### Table and Column Metadata Refresh Option for Seamless Dataset Creation

This release brings a valuable enhancement that empowers users to refresh tables and columns metadata while selecting tables for dataset creation. Now, users can easily refresh tables and columns metadata without requiring special privileges to manage the source connection or having to navigate to the connection configuration to clear metadata caching.

To refresh tables and columns metadata while in the process of selecting tables and columns for dataset creation, simply click the “Options Menu”, and then click “Refresh columns”. This action triggers the metadata refresh, ensuring you have access to the most up-to-date information.

The screenshot displays the DataClarity application interface for selecting tables and columns. The top navigation bar includes the DataClarity logo, a bell icon, a help icon, a menu icon, and a user profile icon. Below the navigation bar, the main area is divided into two panels: 'TABLES' and 'SELECTED ITEMS'.

The 'TABLES' panel on the left has a search bar and a list of tables. The 'Sales' table is selected and expanded, showing a context menu with 'View data' and 'Refresh columns' options. Below the menu, a list of columns is displayed, each preceded by a '123' icon:

- Location ID
- Product ID
- Customer ID
- Items per transaction
- Sales per transaction
- No of customers
- Quantity
- Discount
- Gross Sales
- Manufacturing Cost
- Sales Cost
- Profit

The 'SELECTED ITEMS' panel on the right has a search bar and a diagram of a table structure. The diagram shows a table with columns 'Nr', 'Name', and two unnamed columns. The rows are numbered 1, 2, and 3.

Below the diagram, the text reads: 'Select tables and columns from the left'. This is followed by instructions: 'Click on a table name to select the entire table' and 'or Expand the table to choose specific columns'.

## Enhanced Table and Column Selection with Data Type Information

We're excited to introduce an enhancement that significantly improves the dataset creation process. Now, when selecting tables and columns from a database source, you have enhanced visibility into the data types of each column, making it easier to identify and choose the right data sources.

In past releases, users were able to view the data types of table columns during the data preview step only. With this new release, you can now see the data type of each column in a table, identified by intuitive icons for numeric, string, date, or date time data types.

This improvement streamlines the dataset and table selection process, allowing you to quickly identify and choose columns based on their data types. Whether you're searching for date columns, numeric values, or specific data types, this feature makes it easier than ever to select the right data sources for your datasets.

DataClarity

> SELECT TABLES AND COLUMNS

← PREV NEXT → ×

**TABLES** Custom SQL

Q Search

Q Search

SELECTED ITEMS

Q Search

Table

Nr Name Value

1

2

3

Select tables and columns from the left

Click on a table name to select the entire table

or

Expand the table to choose specific columns

- Sales
  - Sales Date
  - 123 Store Type ID
  - 123 Location ID
  - 123 Product ID
  - 123 Customer ID
  - 123 Items per transaction
  - 123 Sales per transaction
  - 123 No of customers
  - 123 Quantity
  - 123 Discount
  - 123 Gross Sales
  - 123 Manufacturing Cost
  - 123 Sales Cost
  - 123 Profit

## Exclude and Keep-Only Actions for Enhanced Data Curation and Transformation

This new release introduces a feature that takes data curation and transformation during dataset creation to the next level. Now, you can quickly curate and transform your data by excluding or keeping only selected values, simplifying and expediting the data preparation process.

Right-click on a table preview grid view to:

- Exclude Selected Value - choose to exclude the selected cell value from the dataset.
- Keep Only Selected Value - opt to keep only the selected cell value, filtering out other data.

These additional quick actions provide a powerful toolset for refining your data with precision. Whether you need to exclude specific values or retain only the ones you select, this feature enhances your ability to prepare data efficiently and effectively.

The screenshot displays the DataClarity application interface. At the top, the 'REFINE DATA' tab is active, showing a file named 'Sample - US Sales 2.xlsx'. Below the file name, there are tabs for 'Sales', 'Store Types', 'Locations', and 'Products'. The 'Products' tab is selected, displaying a table with columns: Product ID, Department, Product Line, and Product Type. The table contains 17 rows of data. A right-click context menu is open over the 'Electronics' department in row 9, showing three options: 'Copy to clipboard', 'Exclude Electronics', and 'Keep only Electronics'. The 'Exclude Electronics' option is highlighted. The interface also includes a sidebar with various icons and a top bar with a 'NEXT' button and a user profile icon.

Product ID	Department	Product Line	Product Type
abc	abc	abc	abc
1	Electronics	TV & Video	Televisions
3	Electronics	TV & Video	Media Players
6	Electronics	TV & Video	Home Theater
7	Electronics	Computers	All-In-One
8	Electronics	Computers	Computer Parts
9	Electronics	Computers	Networking
10	Electronics	Computers	Printers
11	Electronics	Computers	Laptops
12	Electronics	Computers	Software
15	Electronics	Cell Phones	Phones
16	Electronics	Cell Phones	Android Phones
17	Electronics	Cell Phones	Apple iPhone

### Default Aggregated View for Data Exploration

Now, when you select a dataset for exploration, the data aggregation toggle is turned on by default. When you add dataset columns to explore the data, the results are displayed in an aggregated view, simplifying your initial data analysis.

Additionally, when "Group Data" is activated, measures are automatically set to be aggregated using the default aggregation configuration established when the dataset was created. For example, if "Profit" was defined with a default aggregation of "Sum" during dataset creation, in exploration with "Group Data" enabled, "Profit" will automatically use the "Sum" aggregation. You can still customize the aggregation for measures by clicking on them.

This enhancement streamlines the data exploration process, providing you with a simplified starting point for your analysis while still allowing for flexibility when you need to switch to detailed data or customize aggregations.

The screenshot displays the DataClarity 'EXPLORE DATA' interface. The top navigation bar includes the DataClarity logo, a bell icon, a help icon, a menu icon, and a user profile icon. The main header shows '> EXPLORE DATA' and 'Enterprise dataset' with a close icon.

The interface is divided into several sections:

- Left Sidebar:** Contains icons for Data, Profile, and a settings gear.
- Search Bar:** A text input field with a magnifying glass icon.
- Dimensions:** A list of folders including Forecast, Locations, Products, Regions, Sales, and Store types.
- Measures:** A list of folders including Forecast (with a sub-item 'Forecasted Gross Sales' marked with a green hash) and Sales.
- Data Section:**
  - Columns:** A list of selected columns: 'Product Type' and 'Profit (Sum)'.
  - Group data:** A toggle switch labeled 'On'.
  - Data view options:** A section containing a 'Max number of rows' dropdown set to '5000'.
- VIEW DATA:** A button at the bottom right of the configuration panel.
- Right Panel:** A large empty area with the text 'To explore data, select columns or modify selections'.

At the bottom of the interface, there is a pagination bar showing '0 to 0 of 0' and navigation arrows, along with 'Page 0 of 0'.

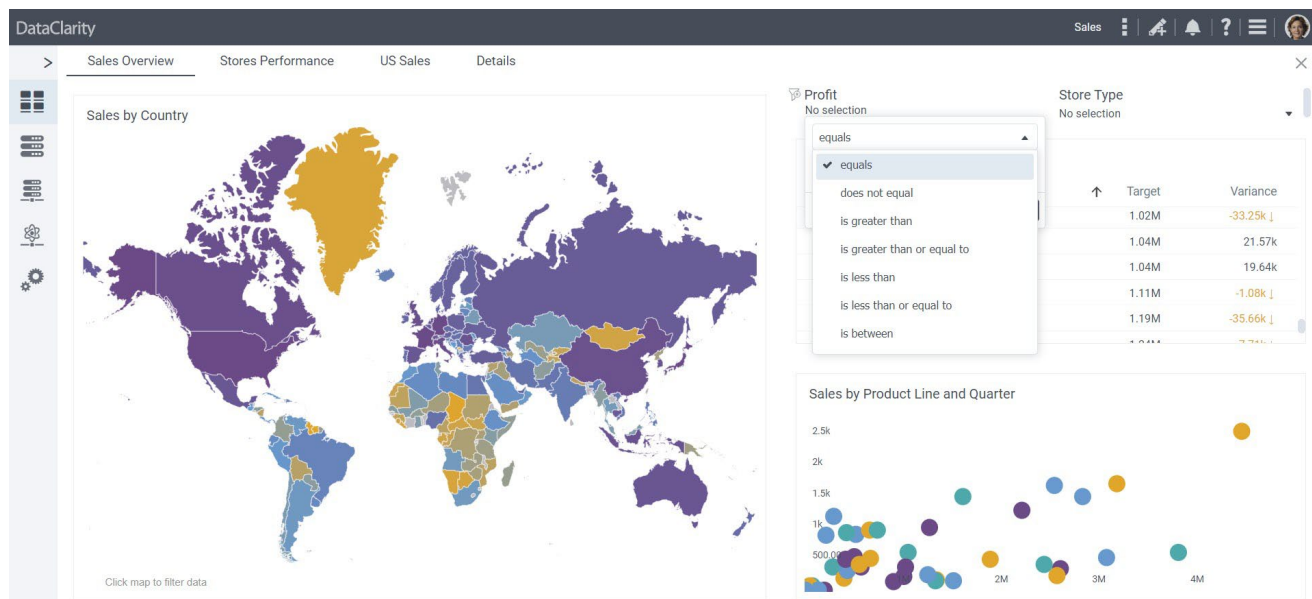
## STORYBOARDS

### *User-Friendly Numeric Column Filter Interface to End-Users*

In our ongoing commitment to enhancing user experiences, we're thrilled to introduce a significant improvement that simplifies the process of specifying numeric column filter criteria within storyboards. Previously available exclusively to authors when specifying data filters for charts, this enhancement now provides end-users with the same user-friendly numeric column filter interface.

Users can now select filter operations from a dropdown menu, including options like "less than", "less than or equal to", "greater than", "greater than or equal to", "between", "in list", "not in list", "is null", and "is blank".

Depending on the selected operation, the UI dynamically adapts to display the relevant fields required to specify the filter criteria. For example, if "greater than" is selected, the UI provides an input field for users to specify the value for the greater expression.



## Trigger Event Options for Charts Custom Actions

In this new release we've expanded the trigger event options for "Charts Custom Actions". Previously, while we offered various trigger events for pre-defined actions such as "Left Click", "Right Click", "Title Click", and "Mouse Over", custom actions were limited to chart title and chart content click.

With this enhancement, we've extended the trigger event options for Custom Actions to include:

- Left Click - trigger custom actions with a left click event.
- Right Click - perform custom actions with a right click event.
- Hover - enhance interactivity with custom actions triggered by hovering over elements.
- Double Click - execute custom actions with a double click event.

These new trigger event options empower you to create more interactive and dynamic storyboards, by controlling the behavior of your charts and widgets with more accuracy.

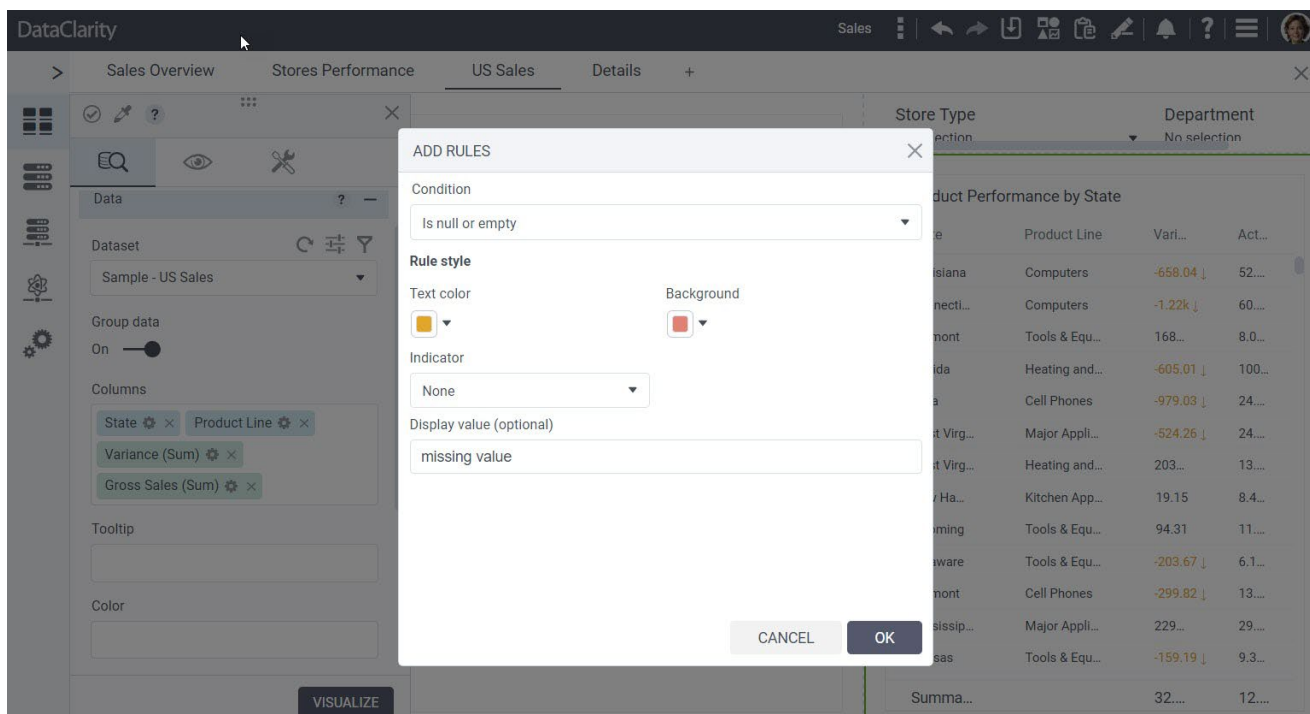
The screenshot displays the DataClarity dashboard with the 'ACTIONS' panel open. The panel is titled 'ACTIONS ?' and contains a table for configuring actions. The table has columns for 'Name', 'Event', and 'Action'. A row is visible with 'Highlight charts' as the name, 'Left click' as the event, and 'Highlight' as the action. Below the table, there are dropdown menus for 'Action' (set to 'Highlight'), 'Event' (set to 'Left click'), and 'Target widgets' (with 'Performance' and 'Monthly Sales' listed). A '+ NEW' button is located at the top right of the panel. The background shows a 'Warehouse' line chart and a 'Performance' bar chart.

### Conditional Formatting with Value Overrides for Null and Blank Values in Table Columns

A new feature introduced in this release allows you to override values using conditional formatting, with a focus on null or blank values in table columns.

Conditional formatting is commonly used when dealing with null or blank values, allowing authors to display custom messages or alternate values for improved data presentation.

With this enhancement, you can now configure conditional formatting rules to override values, ensuring that your table columns effectively communicate custom messages or alternative data when needed.



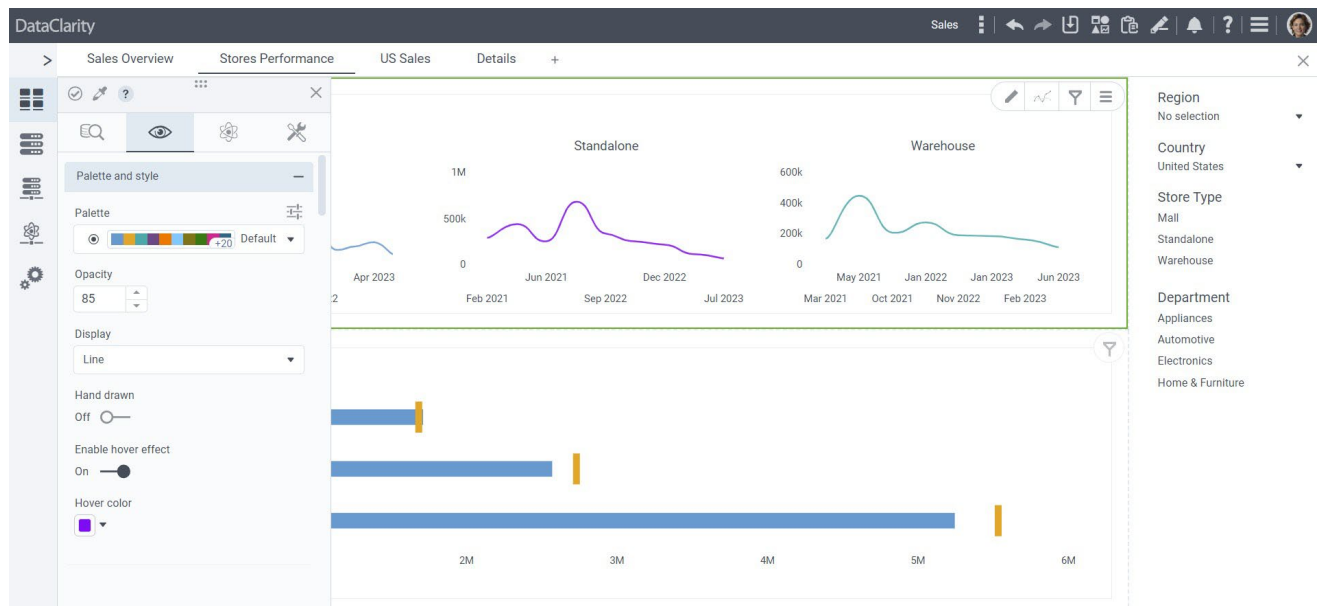
### Chart Line Hover Color Customization

Starting with this release, you can enable and customize hover colors for line elements in various types of charts, expanding the visual possibilities for your data representations. Previously, hover color customization was available for various chart elements, such as bars, columns, maps, bullets, and more, but it did not apply to line-type charts.

With this enhancement, authors can now enable and customize hover colors for line elements in the following chart categories:

- “Line & Marker” charts
- “Column and Line” charts
- “Bar and Line” charts
- “Pareto” charts

This feature empowers you to enhance the visual interactivity of your charts, making it easier to highlight and explore data points within line-type charts. This brings greater control over the appearance of your charts, ensuring your data is presented exactly the way you want it to be.



## Enhanced Trellis Title Styling for Crisper Chart Visualizations

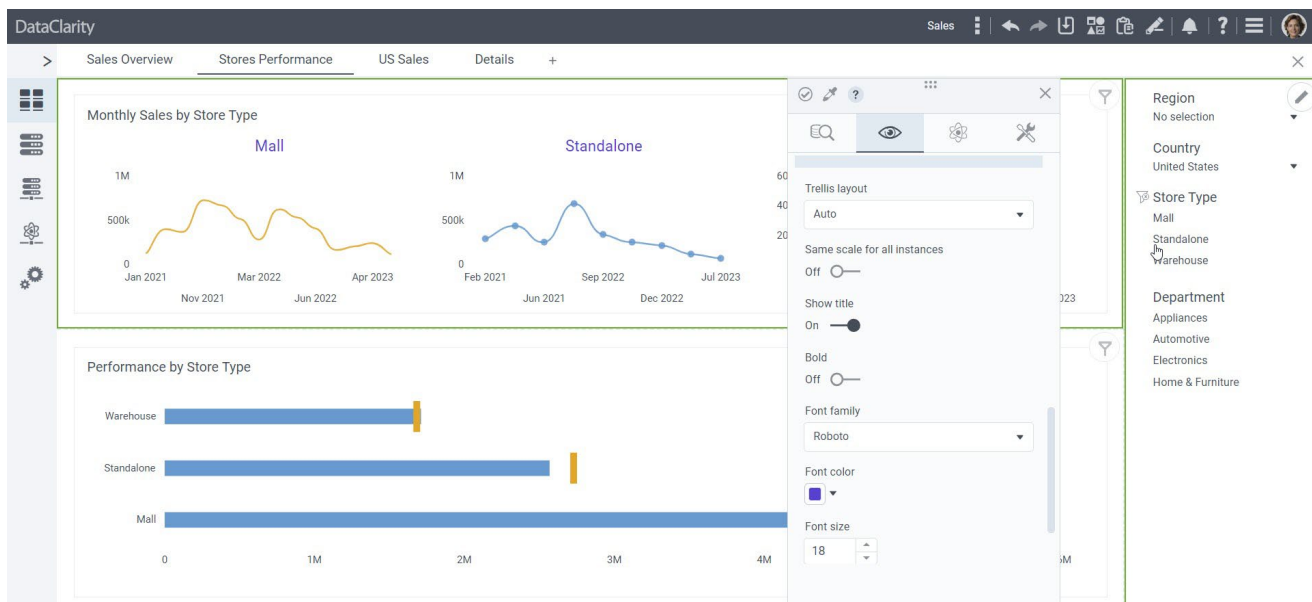
Users are empowered to configure the appearance of “Trellis Titles” when utilizing a “Trellis” column in charts. This enhancement ensures more visually appealing chart visualizations.

When configuring charts with the “Trellis” option, you'll now have the ability to style and customize “Trellis Titles” for each chart generated based on the “Trellis” column.

The enhanced “Trellis Title” styling options include:

- Show/Hide - you can choose to show or hide the Trellis Title based on your visualization preferences.
- Font Type - select the font type that best suits your chart's aesthetic.
- Font Size - adjust the font size to ensure clear visibility.
- Font Bold - emphasize Trellis Titles by applying bold formatting.
- Font Color - choose the font color that complements your chart design.

This enhancement provides you with the flexibility to fine-tune the appearance of “Trellis Titles”, enhancing the clarity and customization of your chart visualizations.



## USER INTERFACE / USER EXPERIENCE

### *UX Improvements for Enhanced User Experience*

We've rolled out a series of UX enhancements aimed to make data preparation and storyboards even more user-friendly and efficient.

Here are just a few of the improvements:

- Streamlined Interface – we've revamped the interface to provide a smoother user journey.
- Consistent Naming – we've adopted uniform naming convention for seamless understanding.
- Intuitive UI – experience a more self-explanatory user interface for effortless navigation.
- Enhanced Error Handling – clearer error messages help you address issues more effectively.
- Tooltip Refinement – tooltips have been refined to provide improved guidance.
- User Action Consistency – common actions are more intuitive and predictable.
- Success Feedback – celebrate accomplishments with improved success messages.

These UX improvements empower you to work effortlessly with your data, delivering a more user-friendly and efficient experience in data preparation and storyboards.

### *UI Performance Optimization for Faster Rendering*

We're thrilled to announce UI performance enhancements that ensure faster rendering and eliminate any visible lags for end-users. This optimization focuses on loading chart table widgets classes before requesting data, resulting in improved table UI rendering and minimized CSS files.