



DataClarity

WHAT'S NEW AND RELEASE NOTES

Release: 2023.6

IN THIS RELEASE

NEW FEATURES AND IMPROVEMENTS.....	2
DATA PREPARATION.....	2
Enhanced Dataset Metadata Validation for Data Integrity	2
Top User Query Counts in Dataset Usage Stats Notifications	3
Unified Web Application for Data Preparation and Storyboards	4
DATA VISUALIZATION AND STORYBOARDS.....	6
Enhanced API Support for SQL Select Queries on Datasets	6
Support for Viewing Data in Custom JavaScript Charts	7
Enhanced Sharing Dialogs with User Profile Pictures.....	8
Support for Individual Widget Embed URLs	9
Expanded Geospatial Mapping Options	10
Unified Web Application for Storyboards and Data Preparation	12
Introducing Admin-Controlled GuideMe Welcome Screen	14
Performance Optimization and UX Enhancements	15

NEW FEATURES AND IMPROVEMENTS

DATA PREPARATION

Enhanced Dataset Metadata Validation for Data Integrity

In this release, we have introduced a new feature for dataset stewards, allowing them to validate the metadata of datasets to ensure data integrity and prevent potential storyboard visualization errors. With this enhancement, stewards can perform three types of validations:

- Table existence: check if tables used in the dataset still exist in the database.
- Column existence: verify the existence of columns used in the dataset within the database.
- Data type consistency: ensure that the data types of columns in the dataset match those in the database, preventing synchronization issues.

This feature is accessible within the “Dataset Cataloging and Lineage” section under the “Columns” tab, where stewards can click “Validate metadata”. After performing the validation, the grid displaying the list of columns is updated to show the validation results. If any validation issues are detected, users can easily identify the type of issue and take necessary actions to maintain data quality and the proper functioning of storyboards.

The screenshot shows the DataClarity interface with the 'CATALOGING & LINEAGE' section open to the 'Columns' tab. A 'Validate dataset' button is visible. Below it is a table with the following columns: Status, Table, Source table, Column, Source column, R..., Data type, Description, and Query co... The table contains 15 rows of validation results, including errors like 'Column not found', 'Data type changed', and 'Table not found', as well as 'Valid' entries.

Status	Table	Source table	Column	Source column	R...	Data type	Description	Query co...
?	Column not found	test_validation	profit	profit	#	NUMERIC		0
?	Data type changed	Custom SQL	Customer ID	Customer ID	abc	INT (found DECIMAL)		0
?	Table not found	test_validation_2	Product Line	Product Line	abc	STRING		0
?	Table not found	test_validation_2	Product Type	Product Type	abc	STRING		0
?	Table not found	test_validation_2	department	department	abc	STRING		0
✓	Valid	test_validation	Items per tran...	Items per tran...	#	INT		1
✓	Valid	test_validation	Manufacturin...	Manufacturin...	#	NUMERIC		0
✓	Valid	test_validation	No of custom...	No of custom...	#	INT		0
✓	Valid	test_validation	Planned Gros...	Planned Gros...	#	NUMERIC		0
✓	Valid	test_validation	Planned Profit	Planned Profit	#	NUMERIC		0
✓	Valid	test_validation	Sales Cost	Sales Cost	#	NUMERIC		0
✓	Valid	test_validation	Sales Date	Sales Date	📅	DATE		0
✓	Valid	test_validation	Sales per tran...	Sales per tran...	#	INT		0
✓	Valid	test_validation	Unit Price	Unit Price	#	INT		0
✓	Valid	test_validation	discount	discount	#	NUMERIC		0

Top User Query Counts in Dataset Usage Stats Notifications

We're continuing to enhance the information of the Datasets Cataloging and Lineage feature, making it easier for users to understand dataset usage and contributions. Previously, the feature displayed the top 5 users who utilized a specific dataset but did not provide detailed metrics regarding their activity. The new release includes the following:

- **Number of queries:** For each of the top users who have used a dataset, we now display the number of queries they have performed against that dataset. This additional metric provides valuable insights into the level of engagement and activity of each user.
- **Graphical bar chart:** To make it even easier to understand user contributions, we have introduced a graphical bar chart that visualizes the usage statistics of the top users. This chart allows users to quickly assess how much each top user has interacted with the dataset, improving the overall visibility of dataset usage patterns.
- **Profile pictures:** We have added profile pictures or avatars alongside the display names (first and last names) of the top users. This visual enhancement not only personalizes the dataset lineage and cataloging screen but also provides users with a quick and recognizable visual indicator of each top user.

The screenshot displays the DataClarity interface for a dataset named 'Sample - World Sales'. The interface is divided into several sections:

- Navigation:** Includes 'CATALOGING & LINEAGE' and tabs for 'Overview', 'Columns', 'Calculations', 'Filters', 'Joins', and 'Lineage'.
- Dataset Details:**
 - Id:** 16930834422808254
 - Name:** Sample - World Sales
 - Description:** Enterprise sales datasets that contains sales and profitability metrics by location, product, customer, transaction date, and store type
 - Tags:** customers, enterprise, products analysis, Sale
 - Last updated:** Aug 26, 2023, 4:45 PM
- Endorsement:** Certified by DataClarity Demo (indicated by a green checkmark).
- Authors & Editors:** DataClarity Demo
- Top users:** A bar chart showing the number of queries performed by the top users:

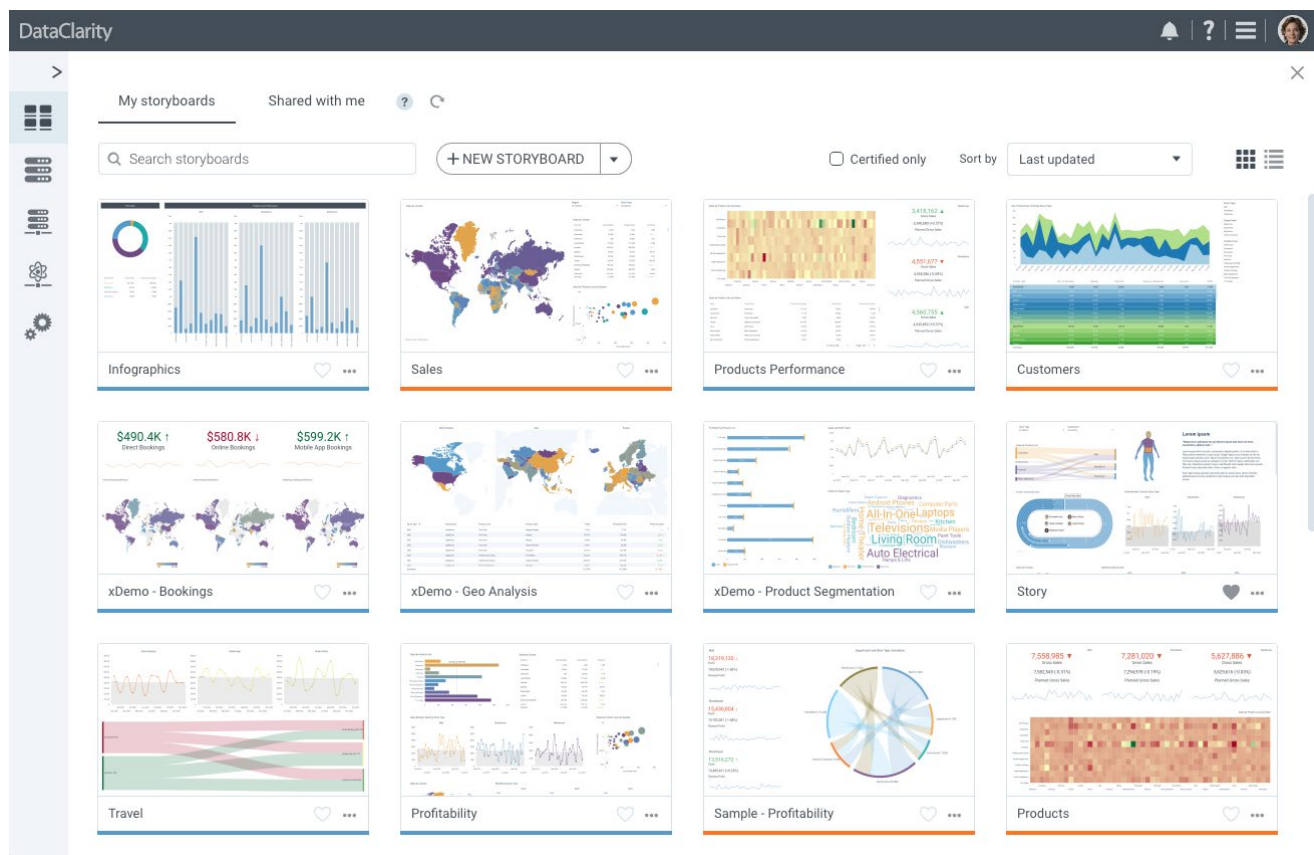
User	Query Count
DataClarity Demo	1,970
Bob Smith	420
Eliza N. Georgescu	44
Demo User	14
Brian Meyer	8
- Total query count:** 2,465

These enhancements make it more convenient for users to gain insights into dataset usage, understand user contributions, and navigate the Datasets Cataloging and Lineage feature. This improved clarity and visual representation contribute to a more user-friendly and informative experience when working with datasets.

Unified Web Application for Data Preparation and Storyboards

In this release, we have unified the Data Preparation and Storyboards applications into a single, cohesive web application, with a focus on improving performance and user experience. In the previous setup, Storyboards users had access to Data Preparation features through integration, which, while functional, presented opportunities for improvement.

With this enhancement, Storyboards users now have a single, faster, and more efficient web application that seamlessly combines both Storyboards and Data Preparation functionality. This integration not only improves the overall performance but also provides a more streamlined experience for users who work with both datasets and storyboards within the same application.



Key Highlights:

- **Enhanced user experience:** users, especially Storyboards users, will benefit from a more seamless and user-friendly experience when accessing both dataset and storyboard features within a single, unified application.
- **Performance optimization:** the integration of Storyboards and Data Preparation significantly improves overall performance, ensuring that users can work more efficiently and effectively.
- **Streamlined access:** users will no longer need to navigate between separate applications, simplifying their workflow and increasing productivity.
- **Simplified maintenance:** the consolidation of these services simplifies support, maintenance, and troubleshooting tasks, making it easier to manage the unified application.

This release represents a significant step forward, enhancing the performance and usability of the application, while also providing users with a more efficient and cohesive environment for working with datasets and storyboards.

DATA VISUALIZATION AND STORYBOARDS

Enhanced API Support for SQL Select Queries on Datasets

We have expanded the capabilities of the Storyboards and Datasets API, empowering developers to execute SQL select queries directly on datasets. Prior to this enhancement, developers, especially those working on embedded analytics and OEM use cases, could query dataset data using the API by providing input such as a list of columns, filters, and other parameters.

With this release, developers gain a powerful tool – they can now send SQL statements directly to query data using the datasets. Regardless of whether they are using Java, Python, or other programming languages, they can leverage the API to send SQL statements.

For example, developers can issue a query like: `SELECT product, SUM(sales), SUM(profit) FROM dataset_sales WHERE region='North America'`.

The screenshot displays a REST client interface for a request titled "Query dataset using SQL API". The request method is POST, and the URL is `{{(server)}}/sb/api/v1/visualizations/queryVisualize`. The request body is in raw JSON format, containing a `datasetId` placeholder and a SQL query. The query selects columns (Country, State, City) and aggregates (SUM(Profit), AVG(Quantity)) from a dataset named `dataset_sales`, filtering for `Profit > 10000` and grouping by Country, State, and City.

The response is a JSON object with a `data` array containing two records:

```
{
  "data": [
    [
      "United States",
      "Georgia",
      "Marietta",
      48331.2997546,
      24
    ],
    [
      "United States",
      "Oregon",
      "Salem",
      22088.142048,
      35
    ]
  ]
}
```

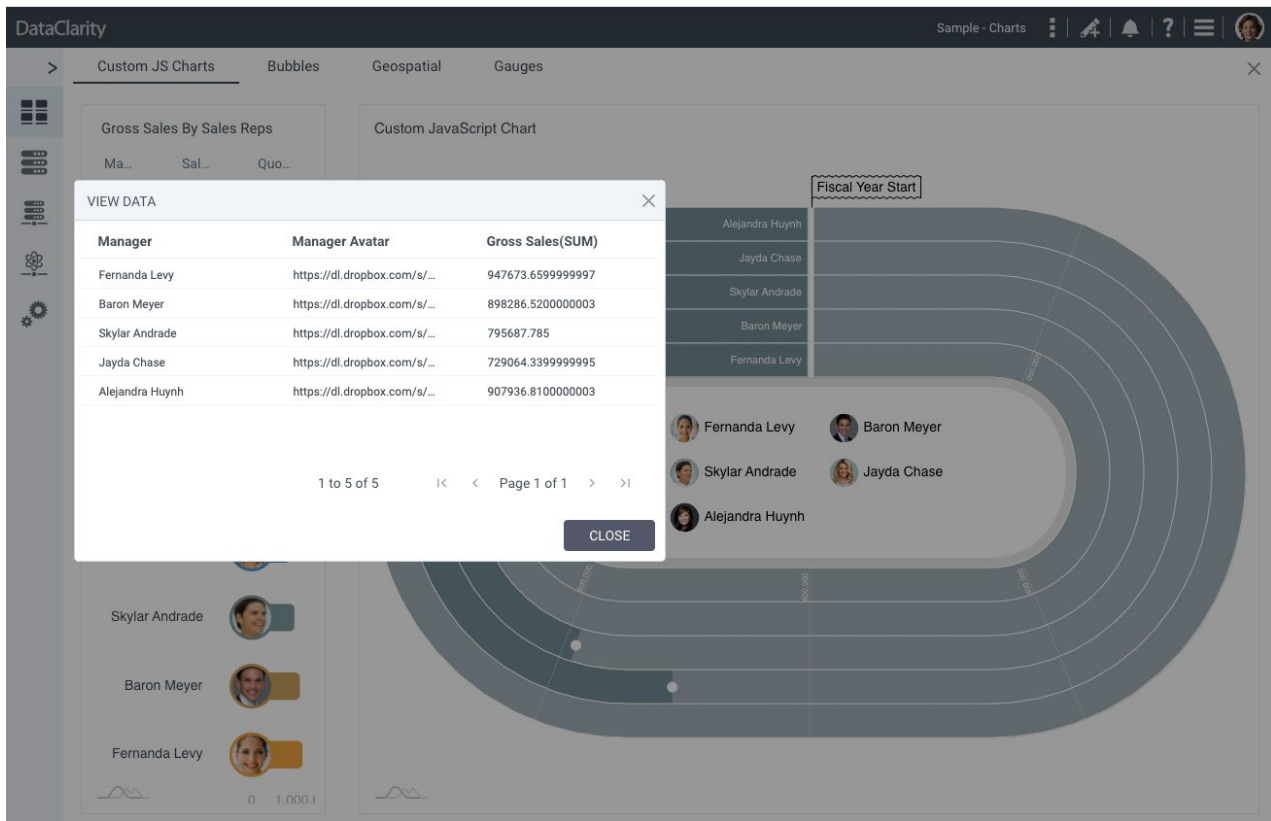
Response details: Status: 200 OK, Time: 153 ms, Size: 2.77 KB.

This feature introduces a standard SQL interface for querying data within datasets, offering greater flexibility and compatibility with various programming languages. Developers can harness the full potential of their preferred language to extract and manipulate data from datasets, streamlining their workflow and enabling more advanced data analysis and reporting capabilities.

Support for Viewing Data in Custom JavaScript Charts

We're excited to introduce an enhancement that empowers you to explore and gain insights from custom JavaScript charts like never before. Now, for both standard and custom visualizations, you can easily view the data that feeds the custom chart, enhancing your data exploration capabilities.

In the chart "More Options" menu, you'll find the "View Data" option. This feature was previously available for standard charts and has now been extended to custom visualizations created using JavaScript. Clicking "View Data" allows you to access and explore the underlying data that powers the chart.

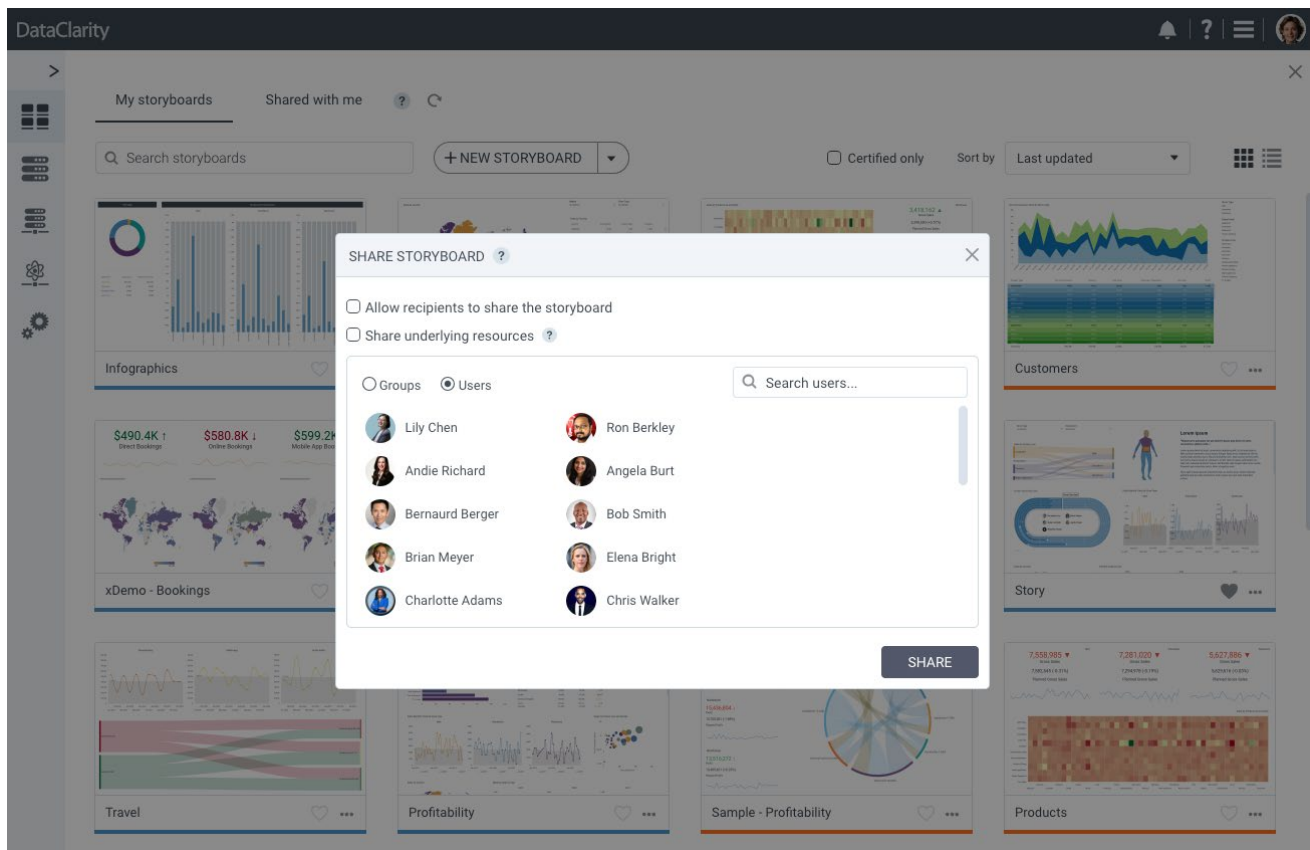


This enhancement provides a unified and consistent experience, giving you the ability to dive into the data behind both standard and custom charts. Whether you're working with predefined charts or crafting custom visualizations, the "View Data" option ensures you have the insights you need at your fingertips.

Enhanced Sharing Dialogs with User Profile Pictures

This enhancement improves the sharing experience by adding a personal touch. Now, when you open the share content dialog, you can see the profile pictures/avatars of other users alongside their first and last names.

User names are accompanied by profile pictures (avatars), if configured by the users. This improvement makes it easier to identify recipients and select the right audience for sharing. You can quickly recognize users not only by their names but also by their profile pictures, enhancing the overall sharing experience.



Whether you're sharing with colleagues, collaborators, or team members, the inclusion of profile pictures enhances the clarity and ease of sharing, streamlining your workflow.

Support for Individual Widget Embed URLs

Now, in addition to embedding entire storyboards or specific storyboard pages, you can create embed URLs for individual widgets or charts. This means you can select and embed only the content that matters most to your users, providing a more tailored and seamless experience within your web applications.

This enhancement opens up new possibilities for integrating analytics into your applications, giving you the flexibility to showcase specific insights and data visualizations exactly where you need.

The screenshot shows the DataClarity dashboard with an 'EMBED WIDGET' dialog box open over the 'Sales by Country' widget. The dialog contains the following information:

- Include tenant parameters:** Off
- Link you can share directly:** `https://10.15.16.205/storyboards/widget/?storyboardId=169308` [Copy]
- HTML code you can include on your website:** `<iframe width="100%" height="100%" src="https://10.15.16.205/...` [Copy]

The background dashboard shows a 'Sales Overview' page with a navigation menu (Sales Overview, Stores Performance, US Sales, Details), a sidebar with widget icons, and a main content area with a world map, a table of sales data, and a scatter plot.

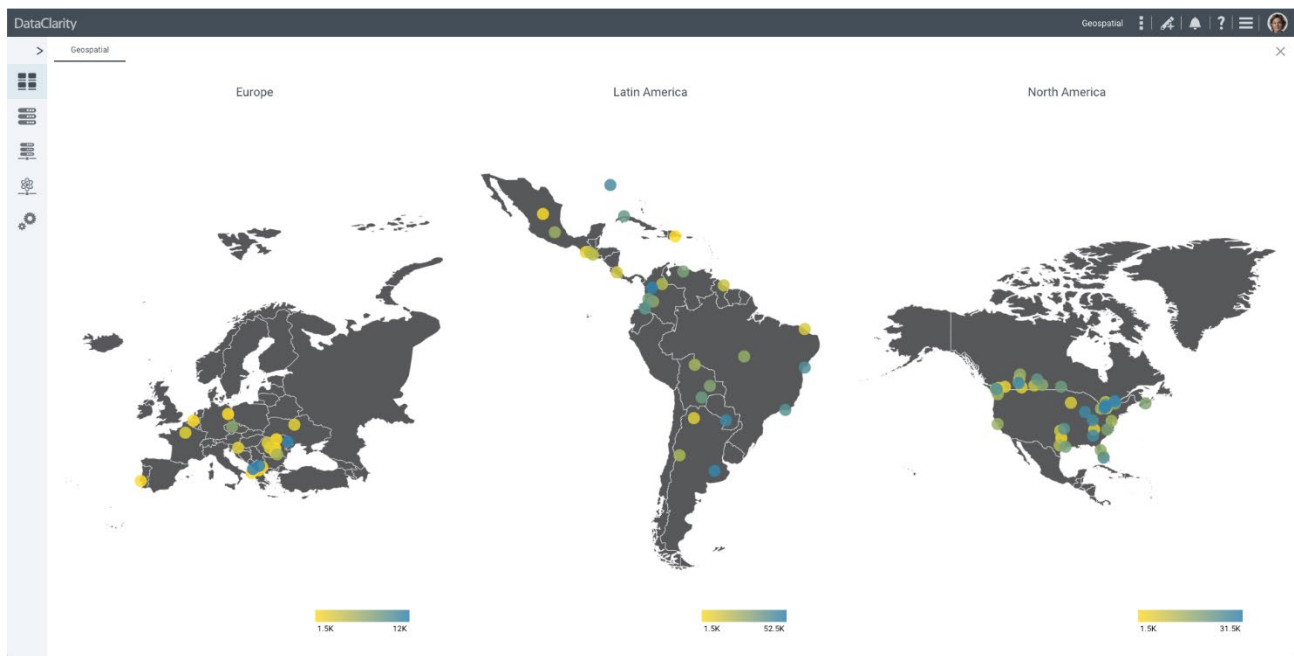
Country	Act...	Target	Varia...
...	60....	59.64k	654.88
...	89....	87.41k	2.48k
...	86....	83.85k	2.56k
...	70....	67.9k	2.19k
...	72....	70.02k	2.25k
...	113...	108.47k	5.52k
...	1.1...	1.19M	-35.66k ↓

Expanded Geospatial Mapping Options

In this release, we have expanded the list of available geospatial maps in the Storyboards application, providing authors with more granular control over the representation of their data. Previously, the application supported a limited set of maps, including the United States map, World map, and individual maps for specific countries.

With this release, we have introduced an extensive selection of new maps, including maps for different regions and continents. The new map options include:

- Africa
- Asia
- Caribbean
- Central America
- Europe
- Latin America
- Middle East
- North America
- Oceania
- South America
- World Regions



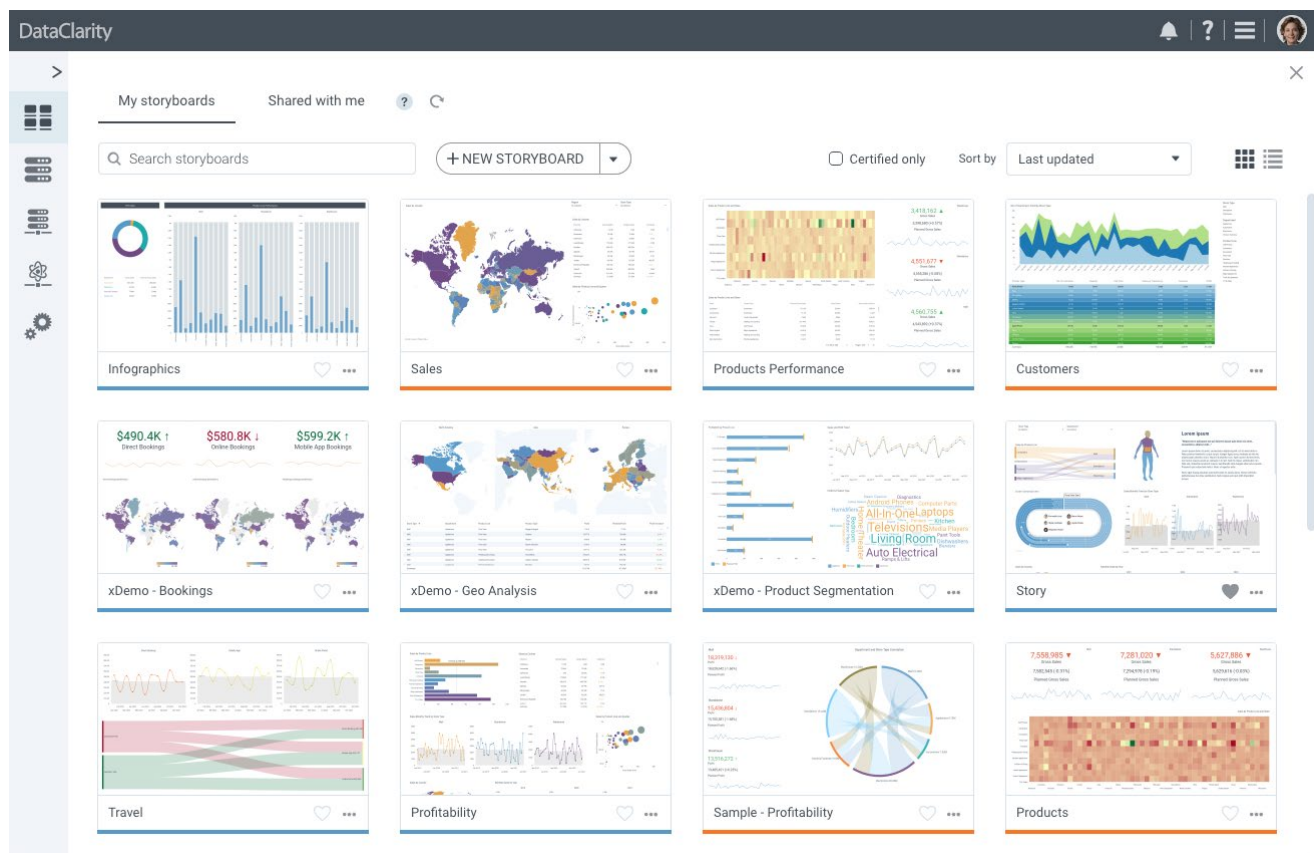
Authors can now refine their geospatial charts by selecting the specific map that corresponds to the geographical area they want to visualize. For example, if an author wants to display a geospatial chart for European countries, they can now choose the "Europe" map, and a map with only European countries will be displayed. This enhancement allows for more accurate and detailed data representation, making it easier for users to create meaningful geospatial visualizations tailored to their specific needs.

This expanded set of geospatial mapping options empowers authors to create more precise and relevant visualizations, enhancing the overall usability and effectiveness of the Storyboards application.

Unified Web Application for Storyboards and Data Preparation

In this release, we have unified the Data Preparation and Storyboards applications into a single, cohesive web application, with a focus on improving performance and user experience. In the previous setup, Storyboards users had access to Data Preparation features through integration, which, while functional, presented opportunities for improvement.

With this enhancement, Storyboards users now have a single, faster, and more efficient web application that seamlessly combines both Storyboards and Data Preparation functionality. This integration not only improves the overall performance but also provides a more streamlined experience for users who work with both datasets and storyboards within the same application.



Key Highlights:

- Enhanced user experience: users, especially Storyboards users, will benefit from a more seamless and user-friendly experience when accessing both dataset and storyboard features within a single, unified application.
- Performance optimization: the integration of Storyboards and Data Preparation significantly improves overall performance, ensuring that users can work more efficiently and effectively.
- Streamlined access: users will no longer need to navigate between separate applications, simplifying their workflow and increasing productivity.
- Simplified maintenance: the consolidation of these services simplifies support, maintenance, and troubleshooting tasks, making it easier to manage the unified application.

This release represents a significant step forward, enhancing the performance and usability of the application, while also providing users with a more efficient and cohesive environment for working with datasets and storyboards.

Introducing Admin-Controlled GuideMe Welcome Screen

In this release, we have added a new feature that allows administrators to control whether the GuideMe welcome screen is displayed to users when they access the Storyboards application for the first time.

Administrators can now use the User Access Manager to set an attribute for each user called "showGuideMe." This attribute can have two values: "true" or "false."

- If the "showGuideMe" attribute is set to "true" for a user, the GuideMe welcome screen will be displayed to that user when they access the application for the first time.
- If the "showGuideMe" attribute is set to "false" for a user, the GuideMe welcome screen will be disabled, and the user will not see it.

If the "showGuideMe" attribute is not set for a user, the GuideMe welcome screen will be displayed by default.

The screenshot shows the 'AccessManager' interface. On the left is a dark sidebar with navigation options: Configure (Settings, Clients, Authentication Providers, Local Authentication Settings, Identity Providers), Manage (Licenses, Roles, Groups, Users), and Monitor (Sessions, Events). Below that are Import/Export options (Import, Export). The main content area shows the user 'Andie.richard' with tabs for Details, Attributes (selected), Credentials, Role Mappings, Groups, and Sessions. The 'Attributes' tab displays a table with columns 'Key', 'Value', and 'Actions'. One row shows 'showGuideMe' with a value of 'false' and a 'Delete' action. Below the table are input fields for adding a new attribute and 'SAVE' and 'CANCEL' buttons.

This new feature provides administrators with greater flexibility in managing the user experience for the Storyboards application, allowing them to tailor the onboarding process to their users' needs and preferences.

Performance Optimization and UX Enhancements

We're excited to introduce a series of improvements aimed at enhancing the overall user experience, addressing possible struggle points, and improving the efficiency of Storyboards and Data Preparation. These improvements include:

- **Performance optimization:** we have significantly optimized both the front-end and back-end of the Storyboards and Data Preparation, resulting in faster loading times and reduced resource consumption. This performance enhancement ensures a smoother user experience.
- **Naming consistency:** we have maintained naming consistency across all layers of data preparation, reducing confusion and ensuring that terminology remains uniform throughout the application.
- **UI & UX enhancements:** improvements to the user interface have made it more self-explanatory, transparent, and user-friendly. These improvements aim to eliminate uncertainty points for users, making the application easier to navigate and use effectively.
- **Error handling:** our error handling mechanisms have been improved to provide clearer and more informative error messages, helping users troubleshoot and resolve issues more effectively.
- **Tooltips enhancement:** tooltips were improved to provide users with additional context and guidance, making it easier for them to understand various features and functions.
- **User actions streamlining:** we have worked to improve user actions' consistency and minimize repetitiveness, reducing the steps required to perform common tasks and improving the overall workflow.
- **Success messages:** we have improved success messages to provide users with clearer feedback when actions are completed successfully, ensuring that users have confidence in their actions' outcomes.

These comprehensive enhancements aim to make the Storyboards and Data Preparation more efficient, user-friendly, and transparent. Users will experience improved performance, better guidance, and a more streamlined workflow, resulting in a more satisfying and productive user experience.