Oracle® Analytics

What's New for Oracle Analytics Desktop

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Here's an overview of the new features and enhancements we've added recently to improve your Oracle Analytics Desktop experience. It's organized by the release a specific feature or capability became available.

Topics:

- Release 6.2
- Release 6.1
- Earlier Releases

Release 6.2

Feature	Description
Connect to Microsoft Azure Synapse	Visualize data from Microsoft Azure Synapse data sources. See Supported Data Sources.
Expression filters for entities in datasets with multiple tables	Use expression filters in datasets that contain multiple tables. See Apply a Filter to a Dataset Table.
Refresh profile results and recommendations	Refresh profile results and enrichment recommendations after you add or update custom knowledge. See Accept Enrichment Recommendations.
Annotations on canvases	In Visualize, add notes to canvases and tie notes to specific data points. See Add Notes to a Visualization.
Enhanced map visualizations with Mapbox libraries	Access smooth and powerful interactions with map visualizations through client-side libraries from Mapbox GL and WebGL.
Select multiple visualizations on a canvas	Multi-select visualizations on a canvas to easily change shared properties for groups of content. See Work with Multiple Visualizations on a Canvas.

Release 6.1

Feature	Description
Enable Oracle's Redwood experience	Use the preview dialog to enable Oracle's Redwood theme in Oracle Analytics before it becomes the default look and feel.
Conditional formatting	Use conditional formatting to highlight important data events in your visualizations so that you can take action. See Apply Conditional Formatting to a Visualization.
Null values in list filters	When a list filter with a large number of values is displayed, the list is refreshed when the user pages and when all possible values in the current page are selected. See Apply List Filters.
Automatic refresh of list filters	When a list filter with a large number of values is displayed, the list is refreshed when the user pages and when all possible values in the current page are selected. See Apply List Filters.
Control presentation mode interactivity for stories	When defining a story in Narrate, you can use the context menu to turn on and off the user interactivity options for the story in presentation mode. See Create a Story.
Sort data in visualizations by columns that aren't in the visualization	Sort data in a visualization by a column that's not included in the visualization. See Sort, Drill, Select Data, and Apply Statistics in Visualization Canvases.
Print visualizations on canvases with enhanced options	Print visualizations on canvases with logical default print sizes based on the printing target and enhanced options for various sources. See Print a Visualization, Canvas, or Story.
Auto-join option in datasets with multiple tables	Use the Auto Join Tables option to turn off or on automatic join creation in datasets. By default, joins are created automatically when you drag and drop tables onto the Join Diagram. In some cases it's useful to turn auto joins off and build joins manually. See Disable Auto Joins in Datasets.

Earlier Releases

- [Release 6.0](#)
- [Release 5.9](#)
- [Release 5.8](#)
- [Release 5.7](#)
- [Release 5.6](#)
- [Release 5.5](#)
- [Release 12.2.5.4](#)
- [Release 12.2.5.3](#)
- [Release 12.2.5.2](#)
- [Release 12.2.5.1](#)
- [Release 12.2.5.0](#)
- [Release 12.2.4.0](#)
- [Release 12.2.3.0](#)

Release 6.0

Feature	Description
Hierarchy navigation for Essbase and EPM data sources	Navigate Essbase or Enterprise Performance Management (EPM) hierarchies when connecting to subject areas or datasets. You can drill up and down the hierarchy tree in pivot and table visualizations. You can't use hierarchies in filters but you can use a hierarchy level in a filter. See Sort and Select Data in Visualization Canvases.
Customize auto-refresh in visualizations	Set the frequency at which the data automatically refreshes in visualizations on a canvas. See Visualize Canvas Layout and Properties.
On-canvas filter types	Select various on-canvas filter types such as Top Bottom N and Relative Time. See Create On-Canvas Filters and Apply Different Filter Types.
On-canvas date filters	Use the on-canvas date selector and the relative time filter for date filters. See Create On-Canvas Filters and Apply Different Filter Types.
On-canvas measure filters	Use the on-canvas measure selector and the top and bottom time filter for measures. See Create On-Canvas Filters and Apply Different Filter Types.
Tooltips on visualization titles	Enter your own tooltip text to display when you hover over a visualization title. See Visualize Properties.
Improved sort options	Use the Sort dialog to configure sorts and clearly see the sort order and any sort conflicts. See Sort and Select Data in Visualization Canvases.
Time series forecasting	Perform time series analysis forecasting directly from data flows. See Add a Time Series Forecast to a Data Flow.
Graph analytics	Enhance your geospatial visualizations using powerful spatial analytics functions. For example, you can compute the shortest path between two vertices or identify connected vertices in the graph. See Add Graph Analytics to a Data Flow.
Improved home page search	Enter advanced search commands in the search bar to tailor your search results for exact matches, multi-term matches, and field-level matches. See Advanced Search Commands for Finding Content.
Map layers in non-joined datasets	Create map layers in a visualization where the data between the layers isn't joined. See Apply Multiple Data Layers on a Single Map Visualization.
Average aggregation in Waterfall visualizations	When you add a Detail to a Waterfall visualization, the weighted average is calculated and displayed in the Bridge report.
Connect to Google BigQuery	Analyze data from Google BigQuery data sources. See Connect to Google BigQuery.
Datasets with multiple tables	Perform self-service data modeling with datasets by adding multiple tables to a dataset from one or more relational data source connections. See Create a Dataset from a Connection.

Feature	Description
Data quality insights	Explore your data, and use a visual overview of your content to assess and improve data quality. See Explore Your Data Using Quality Insights.
Frequent Item Set function supports association rules	Create more powerful Frequent Item Set analyses using enhanced algorithms. See Database Analytics Functions.
Oracle machine learning supports Feature Extraction	Apply a registered Oracle machine learning Feature Extraction model's view to a data flow. See Apply a Predictive or Oracle Machine Learning Model to a Dataset.

Release 5.9

Feature	Description
Data Action: Avoid passing duplicate filters	When you create a data action using multiple data points to filter another canvas, and you return to the original canvas and invoke the data action using different data points, the new expression filter replaces the previous filter on the target canvas. See Create Data Actions to Connect Visualization Canvases.
Data Action: Support single/multi selection	You can restrict the invocation of a data action to work only for a single value by setting **Supports Multiple Selection** to Off. You set this when the selection of multiple data points will result in an error (for example, with some third-party REST APIs). See Use Data Actions to Connect to Canvases, External URLs, Oracle Analytics Publisher Reports, and in Embedded Content.
Show database model full details in Oracle Analytics Cloud inspectors - Model Explainability	Oracle Analytics provides explainability about your registered Oracle machine learning models. Outputs describe how the Oracle machine learning model computes the predicted results for each record in the dataset and allow you to aggregate these results. See Inspect Registered Oracle Machine Learning Models.
Show database model full details in Oracle Analytics Cloud inspectors - Visualize Database Views	Visualize a registered Oracle machine learning model's views to better understand the model and iteratively improve the model's overall accuracy. See Visualize a Registered Oracle Machine Learning Model's View.
Ability to add new map backgrounds	You can add a map hosted on a web server as a map background using the Web Map Service (WMS) protocol and XYZ tile layers. See Add Map Backgrounds.
Apply no sort to data	In visualizations, data is always sorted by default. You can use the **Sort By None** option to "unsort" or return the data to its original order. See Sort Data in Visualizations.
Area chart visualization	In addition to the stacked area and 100% stacked area, you can visualize data in an area chart. See Change Visualization Types.
Improved chrome density in the data panel	The data panel across all visualization editors uses horizontal tabs instead of vertical tabs, and the density of the tree content is increased. See Build a Visualization by Adding Data from Data Panel.

Feature	Description
Improved progress bar behavior	The blue bars that were previously visible across the screen when data was refreshed have been removed. The data refresh experience is more subtle. Hover the mouse pointer over a visualization to see refresh details or to cancel. See Refresh Data in a Project.
Pass filters between the filter bar and visualizations	Filters for a canvas or project are defined on the top bar, and filters for a visualization are defined on the grammar. You can move a filter from one scope to another. See Change the Scope of Filters Between the Main Filter Bar and Visualizations.
Respect the canvas aspect ratio when exporting	You can select to maintain the canvas aspect ratio, ensuring that the outcome is closest to your intent. See Print a Visualization, Canvas, or Story.
Sort by multiple columns	You can select multiple sort columns for a visualization. You can create nested sorts based on a combination of the attributes and measures in the visualization. See Sort Data in Visualizations.
Trim spaces on text columns	You can easily trim or remove leading and trailing spaces on text columns using the transform options menu. See Transform Data Using Column Menu Options.
Support for database text tokenization in data flows	An advanced text-analytics technique is applied to user data to identify and list the words most frequently appearing within a text data-column. See Support for database text tokenization in data flows.
Support for Database Frequent Item Set (Market Basket) in data flows	Discover relationships in your data by identifying sets of items that often appear together. This data mining technique is known as association rule learning, affinity analysis, and market basket analysis. See Support for database text tokenization in data flows.

Release 5.8

Feature	Description
Consistent legend properties across visualizations	The following visualizations have properties (such as location and fonts) added to their legend: Sankey, Network, Tree Diagram, and Chord. See Adjust Visualization Properties.
Image backgrounds for heat maps	Visualize data with heat map layers on your custom image maps. See Apply Map Backgrounds and Map Layers to Enhance Visualizations.
Single header on all pages	The user interface in Oracle Analytics has been enhanced with a single header that helps to maximize your workspace. With the content density provided, you can realize the benefits of your viewing capability with a modernized user interface and improved navigation.
Enrichments for live datasets	You can leverage enrichments for live datasets along with cached or file-based datasets. See About Data Preparation.

Release 5.7

Feature	Description
Spark charts within performance tiles	You can liven up your visualizations with spark charts added to tiles. See Examine Trends with Spark Charts.
Responsive canvas layouts	You can use controls for setting vertical and horizontal scrolling of canvas reports and automatic responsive design across screen resolutions. See Adjust the Visualization Canvas Layout.
On-canvas filters	You can add on-canvas filters that allow users to choose, change, and apply filters to attribute columns within some or all of the visualizations on the canvas. See Add an On-Canvas Filter.
Oracle machine learning models and Oracle Analytics Desktop	In Oracle Analytics Desktop, you can register and use Oracle machine learning models to model, score, and output large datasets on the database. You can register and use Oracle machine learning models from Oracle Database and Oracle Autonomous Data Warehouse connections. See How Can I Use Oracle Machine Learning Models In Oracle Analytics?.
Top/Bottom filters for attributes	Add a Top/Bottom filter for an attribute and then pick the measure. Previously you could only add the Top/Bottom filter for a measure and then pick the attribute. See Apply Top Bottom N Filters.
Bridge reports	You can use the Waterfall visualization to build a bridge report. A bridge report groups data by contributions of each member to the overall variation between values of categories. For example, show the respective contribution of various products to the total sales variation year by year. See Create a Project and Add Datasets.
Database Advanced Analytics functions in data flows	You can consume advanced analytics functions from Oracle Autonomous Data Warehouse and Oracle Database. These include Dynamic Clustering and Dynamic Anomalies, Unpivoting of columns and rows, and Smart sampling. See Add Analytic Functions to a Data Flow.

Release 5.6

Feature	Description
Connect to Microsoft Azure SQL Database	Visualize data from Microsoft Azure SQL Database. See Supported Data Sources.
Create digitized custom map layers	Easily create custom interactive visualizations from any image. Upload images and create map layers that support defining areas on the images with no-code polygon definitions bound to data interactively. See Use an Image as a Map Background and Draw Map Layer Shapes on the Image.
Create data actions to Publisher reports	Create data actions to easily navigate to a Publisher report. See Create Data Actions to Connect to Publisher Reports.
Enhanced color in Waterfall visualizations	Assign custom colors for increase and decrease values in a waterfall visualization.
Copy calculation expressions to the Clipboard	Access a simple menu option to copy an entire expression to the Clipboard without opening the formula editor.
Create calculations more quickly	Quickly copy and duplicate custom calculations to create derivatives of calculations, to make backup copies, and to test syntax scenarios quickly.

Feature	Description
Improved usability of the Canvas	As you create a project, you have many different tabs of analyses. Explore the improved content density of canvas names for better visibility and quick duplication of a canvas for iterative report creation and testing. As you duplicate or copy canvas tabs, new canvasses are added next to the original and not at the end of the list for ease of accessibility.
Enhanced map rendering and ability to disable gestures	The performance of map rendering is enhanced including data truncation warnings when using large datasets. You can lock the display of a map and disable interactive gestures for a better experience.
Flexible and persistent cell sizing in tables and pivot tables	Enhance the clarity of tables and pivot tables. You can control the size of columns and rows for specific data points that need more attention or more room for visibility.

Release 5.5

Feature	Description
Butterfly visualization	You can select the Butterfly visualization to present two sets of data series side by side and organized by a specific metric.
Spacer visualization	You can add spacers to the canvas to provide filler space between visualizations.
Assign a map layer to a column	You can use the **Location Details** option to assign a map layer to a column. See Assign a Map Layer to a Data Column.
Auto focus in map layers	When you've added filters to your map visualization, you can use the **Auto Focus on Data** option to automatically focus on a particular map area. See Auto Focus on Data for a Map Visualization.
Enhance grand totals in pivot tables and tables	For pivot tables and tables, use the Property tab to control the formats and positions of grand totals and subtotals.
Canvas and project background configuration	You can add background colors and images to canvases and projects.
Hierarchical coloring	You can select the **Hierarchical Coloring** option to ensure consistent coloring for each metric's attribute values.
Reference line in Explain	In Explain's Key Drivers results for attribute columns, a constant reference line is displayed in 100% stacked charts. See Analyze Data with Explain.
Oracle NetSuite Connection Type	Visualize data from Oracle NetSuite data sources.
Oracle Database Advanced Connection Options	Connect to an Oracle Database configured on multiple clusters using a Single Client Access Name (SCAN) ID. In the Create Connection dialog, you select **Advanced** to configure the Single Client Access Name (SCAN) ID. See About Specifying Connections to Databases.

Release 12.2.5.4

Feature	Description
Oracle Analytics Desktop	Oracle Data Visualization Desktop is renamed to Oracle Analytics Desktop.
Delimiter Support	When creating a dataset from a CSV or TXT file, you can specify a thousand separator and a decimal separator. When you output data from a visualization, the outputted file uses the data delimiter for your computer's locale. See Add a Spreadsheet from Your Computer and Share a Visualization or Story as a File.
Trellis Row (Y2 Axis) improvements	The default position of a visualization's trellis row is the left side of the visualization. The formatting of the Values Axis is preserved when you change the position of the trellis row to the right side of the visualization.
Copy and Paste Between Projects	You can copy and paste a visualization or canvas from one project into another. See Copy and Paste a Visualization or Canvas.
Review Location Matches for a Map Visualization	You can review mismatch issues between data and match results in map layers, such as when there are ambiguous or partial matches between words. See Review Location Matches for a Map Visualization.
Create Custom Data Action Plug-ins	You can create custom data action plug-ins to use in Analytics Cloud. See Create Custom Data Action Plug-ins.
Font Customizations	You can customize all title and label text in a visualization. Options include font (for example, Arial), type size, and emphasis (for example, bold, underline, or color). See Adjust Visualization Properties.
Server-side SSL support	You can enable server-side SSL for these additional connection types: • Apache Hive • DB2 • Hortonworks Hive • IBM Biginsights Hive • MapR Hive • Pivotal HD Hive • Spark • SQL Server
Enhanced home page and search bar	Use the enhanced home page and search bar to quickly locate your analytics content. See Search for Content.

Release 12.2.5.3

New Features

Feature	Description
Tooltips improvement	Use the **Tooltips** field to adjust a visualization's tooltips content, or to turn a visualization's tooltips off. See Modify a Visualization's Tooltips.

Feature	Description
Select alias table	You can select an alias table when creating or updating Essbase datasets. See Create Datasets from Essbase Cubes.
Configure currency symbols	You can dynamically populate a currency symbol in visualizations based on the configured currency. See Set Currency Symbols for Visualizations.

Release 12.2.5.2

New Features

Feature	Description
Add notes	Add, edit, and adjust notes on a canvas. See Add Notes.
Enhanced column operations	Quickly reorganize items in the Projects, Data, and Machine Learning pages by sorting the items based on their attributes. See Sort the Items in a Page.
Data flow improvements	Employ improvements to data flows including: • Transform Data in a Data Flow • Schedule a Data Flow • Create and Customize an Essbase Cube in a Data Flow • Copy, Paste, and Skip Rules • Designation Change Rules for Generation Columns
Map improvements	Employ improvements to maps in visualizations including: • Create Cluster Layers on a Map Visualization • Represent Point Data With Custom Icons on a Map • Select Points or Area on a Map • Represent Line Data Using Size and Color on a Map
Connection improvements	• Create connections to the Snowflake Data Warehouse. See Create Connections to Snowflake Data Warehouse.
Specify filters for relative time periods	Display data for a specified time period based on the current date and time using the relative time filter on a Date or Date/Time column. See Apply Relative Time Filters.
Upload larger data files	Upload files with a maximum size of 250 MB. The number of data columns allowed in a single file is 250 columns. See About Adding Spreadsheets or Other Files.
Connect to on-premises databases	Visualize data in on-premises databases using the **Use Remote Data Connector** option. See Supported Data Sources (to find out supported remote database types, look for databases with a Y in the 'Remote Connection to Datasets' column).

Release 12.2.5.1

Creating Connections

Feature	Description
Autonomous Data Warehouse connection enhancements	You can more easily create a connection to Oracle Autonomous Data Warehouse because key connection details are prepopulated from the selected client credentials zip file. See Create Connections to Oracle Autonomous Data Warehouse.
Autonomous Transaction Processing connections	You can create connections to Oracle Autonomous Transaction Processing. See Create Connections to Oracle Autonomous Transaction Processing.

Release 12.2.5.0

Creating and Working With Projects

Feature	Description
Preparing data	You can use data transformation and enrichment recommendations to prepare your data before visualizing it. See Preparing Your Dataset in a Project.
Visualization types	You can create Grid Heatmap, Picto, 100% Stacked Bar, Horizontal 100%, 100% Area, and Correlation Matrix visualizations.
Map layers and backgrounds	• You can select a map background to use in a project. See Using Different Map Backgrounds in a Project. • You can display multiple data series (different sets of dimensions and metrics) on a single map visualization in a project. See Applying Multiple Data Layers on a Single Map Visualization. • You can use a heatmap as a data layer type on a map visualization to identify the density or high concentration of point values or metric values associated with the points. See Creating Heatmap Layers on a Map Visualization. • You can make map backgrounds available to users. See Making Map Backgrounds Available to Users.
Inspect object properties	You can use inspectors to view and edit the properties of standalone objects in the Home, Data, Projects, and other top-level pages. See Viewing and Editing Object Properties.

Managing Data

Feature	Description
Data flow enhancements	• You can branch a data flow and create multiple outputs or connections. See Branching Out a Data Flow into Multiple Connections. • You can add parameter prompts to reuse a data flow across multiple sources or to use different criteria to process and select data. See Applying Parameters to a Data Flow. • You can modify or select the database name, the attribute or measure, and the aggregation rules for each column of the output dataset before running or executing a data flow. See Saving Output Data from a Data Flow.
Saving changes automatically	You can use the Auto Save option to automatically save your updates to a project without repeatedly clicking **Save**. See Saving Your Changes Automatically.
Opening objects using keyboard shortcuts	You can use keyboard shortcuts to open artifacts in a new tab or window. See Keyboard Shortcuts for Oracle Analytics.
Replacing a dataset in a project	You can replace a dataset by re-mapping columns used in a project to columns from a different dataset. See Replacing a Dataset in a Project.
Duplicating a dataset	You can duplicate an uploaded dataset listed in the Datasets page to help you further curate (organize and integrate from various sources) data in projects. See Duplicating Datasets.

Release 12.2.4

Machine Learning

Feature	Description
Use machine learning to make predictions and intelligent suggestions	You can use machine learning (ML) algorithms to show patterns and uncover insights in your datasets, and then add them to your visualizations. • Use the Machine Learning catalog to manage your ML scripts and models. • Use data flows to train ML models using custom or built-in scripts. • Use data flows to score and predict datasets using ML models. • Self-service ML for diagnostics analytics of attributes (explain). • Create a custom scenario for attributes by applying ML models to a dataset. See Working with Machine Learning.

Managing Data

Feature	Description
Connect to more databases	You can connect to several new data sources: • Oracle Autonomous Data Warehouse • Oracle Big Data Cloud Service • Oracle Talent Management Cloud See Connecting to Database Data Sources.
Data flow enhancements	• Merge the rows from two datasets. See Merging Rows in a Data Flow. • Create bins from a measure. See Creating a Binning Column. • Use binning attributes to group your data. See Creating a Group. • Use cumulative aggregate functions to group your data. See Adding Cumulative Values to a Data Flow. • Calculate additional rows with forecasted values by applying a Time Series Forecast calculation. See Adding a Time Series Forecast to a Data Flow. • Detect sentiment for a given text column by applying a sentiment analysis to your data flow. See Adding a Sentiment Analysis to a Data Flow. • Use filters to restrict your data. See Adding Filters to a Data Flow. • Transform your data using custom scripts. See Applying Custom Scripts to a Data Flow. • Build datasets from a predefined sequence. See Creating a Sequence. • Load data into an Essbase cube. See Creating an Essbase Cube.

Creating and Working With Projects

Feature	Description
Improved narration and storytelling features	When you use the improved narrate feature it makes presenting your data stories even easier. See Building Stories.
Include links to related content in your project	Enhance visualizations by offering links to related content under a handy **Data Actions** menu. See Working with Data Actions.
Numeric values in file-based data sources uploaded as measures	When you upload a file based data source, columns containing numeric values are imported as measures with the Number data type.
More display formatting options for numbers and dates	You can select from a wide range of number and date formats to choose the best display format for data in your visualizations. See Adjusting the Display Format of Date or Time Columns.
New properties area in the Data Panel	For quick and easy access, the properties of objects you select are displayed in the Data Panel. See Adjusting Visualization Properties.
Improved sharing	Use the ⤳ to share a visualization, canvas, or story with others, as a file, by email, a printed page, and on cloud. You can also share a project or folder only in DVA format, as a file, by email, and on cloud. See Importing and Sharing.

Feature	Description
More options to copy, paste, and duplicate	It's often quicker to copy visualizations than starting from scratch. You can paste within the same canvas and between canvases in the same project. Use the duplicate option to make copies of an object within the same canvas or to duplicate the entire canvas. See Adjusting the Canvas Layout.
Add unrelated datasets to the same project	Your projects can contain visualizations from multiple, unrelated datasets; that is, the datasets don't have to be joined.
Date and time intelligence	You can seamlessly transition through different levels of time hierarchies or granularities with ease.
Data warning indicator	Warning signs indicate possible issues with your data. If you don't want to see any warnings in your projects you can hide them. Warnings never display in printed or shared output. See Visualization Data Warning Notification.
Background maps	Use background maps to enhance your geographical visualizations. See Enhancing Visualizations with Map Backgrounds.
Coloring maps using attribute column values	You can use color features to interpret the measure columns and attribute values in projects that include map visualizations. See Interpreting Data Measure and Attribute Values by Color in Map Visualizations.

Other Enhancements

Feature	Description
Brand new home page	Improved design that's simple to navigate and easy to use. Personalize your home page to suit the way you want to work.

Release 12.2.3.0

Creating and Managing Datasets

Feature	Description
Connect to new data sources	New connection types are available with limited support, and are marked as **Beta** in the product: OData, Oracle Docs, JDBC, and ODBC.
Data Source editor	Previously you used the Data Source dialog to create or edit data sources. The Data Source dialog is replaced by the Data Source editor, which provides the same functionality but is more dynamic and easier to use. See Using the Data Source Editor.
CSV and text file delimiters	When uploading CSV and text files for datasets, you can override the auto-detected delimiter. Your choices are: Comma, Semicolon, Space, Tab, and Custom. If you select Custom, you then specify the delimiter used in your CSV file.

Feature	Description
Subject areas as data sources	You can build data sources from Oracle Fusion Applications with Oracle Transactional Business Intelligence or Oracle BI EE subject areas. See Composing Data Sources from Subject Areas.
Data flow improvements	You can save a data flow as a database connection, which stores the data flow data to a database table. See Saving Data Flow Output Data to a Database. You can merge two or more columns in a data flow to display as one column. See Merging Columns in a Data Flow. The Data Flow editor layout is now easier to use. See Using Data Flows to Curate Data Sources.

Creating and Working With Projects

Feature	Description
Visualization types	You can create box plot, horizontal box plot, and waterfall visualizations.
Apply top or bottom N filters	You can use the top or bottom N filter to filter a measure to display a subset of its largest or smallest values. See Applying Top or Bottom N Filters.
Date and time column improvements	You can convert a text column into a true date, time, or timestamp column. See Converting Text Columns to Date or Time Columns. You can adjust the display format of a date or time column to show a different level of granularity. See Adjusting the Display Format of Date or Time Columns.
Canvas duplication and multi-canvas reordering	You can duplicate an existing canvas on a visualization and use the duplicate canvas as a starting point for a similar canvas. You can also manually reorder the sequence of multiple canvases in a visualization. See Adjusting the Canvas Layout.
Support for event data at second or millisecond grain	Line visualizations can show a continuous datetime reading on the x-axis. You can analyze data at the second or millisecond grain. Previous versions supported analyzing data at the day grain, only.
Custom map layers support	You can load and manage custom map layers in a project using geometric JSON files. See Adding Custom Map Layers.

Other Enhancements

Feature	Description
Custom Visualization Plug-in Upload	If you want to display data in a custom visualization that was created by another user or an Administrator, then you can upload and deploy the custom visualization's plug-in to your installation. See Managing Custom Plug-ins.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

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