

Workday Discovery Boards

Product Summary

July 23, 2026

This content is not part of the Workday Administrator Guide and is subject to further change.



Contents

Concept: The Discovery Board Workflow.....	4
Reference: Reporting Limits.....	7
Discovery Board Concepts.....	14
Concept: The Discovery Board Workflow.....	14
Concept: Vizzes.....	18
Concept: Visualization Types.....	18
Concept: Discovery Board Workspace.....	21
Concept: Summarization and Attribute Viz Fields.....	22
Concept: Interactive Viz Queries.....	24
Concept: Using Drop Zones in a Viz.....	24
Concept: Chart Viz Mark Types.....	25
Concept: Discovery Board Controls.....	25
Concept: Sharing Discovery Boards.....	26
Concept: Discovery Board Security.....	27
Workday-Delivered Discovery Boards.....	28
Copy Workday-Delivered Discovery Boards.....	28
Creating Discovery Boards.....	29
Steps: Create a Discovery Board.....	29
Steps: Create Visualizations.....	30
Set Up the Viz Data Source.....	31
Set Up Prompt Values for Discovery Boards.....	32
Set Up Curated Data Sources.....	33
Set Up Curated Field Lists for Discovery Boards.....	34
Set Up Discovery Boards as Home Page Worklets.....	36
Reference: Supported Fields in Discovery Boards.....	37
Modifying Visualizations.....	39
Steps: Modify Visualizations.....	39
Adjust Mark Size in a Viz.....	40
Group Data by Color in a Viz.....	40
Change Viz Colors.....	41
Highlight Data in a Viz.....	41
Change Field Options for Visualizations.....	42
Set Up Visualization Options.....	43
Change the Formatting of a Numeric or Currency Summarization in a Viz.....	47
Set Up KPI Viz Options.....	48
Set Up Waterfall Viz Options.....	49
Set Up Donut Chart Options.....	51
Concept: Color in Discovery Boards.....	51

Filtering and Sorting Data in Visualizations.....	52
Filter Data in a Viz.....	52
Sort Data in a Viz.....	54
Limit Viz to the Top N Values.....	55
Concept: Viz Filters.....	56
Sharing Visualization Insights.....	57
Export a Viz as a Custom Report.....	57
Download Visualizations.....	58

Concept: The Discovery Board Workflow

Discovery Boards is an analytical tool that enables line-of-business professionals to conduct self-service analysis with low-barrier to entry in a modern and interactive user interface.

A discovery board is your starting point for data analysis, similar to a project workspace. The discovery board is the canvas for discovering and sharing data insights. You typically create discovery boards from Workday Drive, and opening the board opens the workspace in Workday where you can create visualizations.

Each section explains each phase of the data analysis workflow in a discovery board from selecting data, visualizing it, and sharing with others. Although we describe these phases in a linear fashion, usually the editing process is iterative.

Phase 1: Create a discovery board as the workspace

The first phase is to create a discovery board that you can use as your workspace for analyzing data. There are multiple methods available for creating a discovery board:

- Create a new discovery board from Workday Drive.
- Copy an existing discovery board in Workday Drive.
- Make a copy of a Workday-delivered discovery board from the **Delivered Discovery Boards** report.

Who does this phase?	Data Analysts or Report Writers
Where can I read more details?	Steps: Create a Discovery Board Copy Workday-Delivered Discovery Boards The Next Level: Quick Sheet: Create Discovery Boards

Phase 2: Select and configure data in a viz

Discovery boards contain 1 or more vizzes where you analyze data in data sources. When you create a new discovery board, Workday creates a single empty viz by default. You can edit, copy, and delete existing vizzes, and create new ones.

Each viz analyzes data in a single data source. To analyze data in a viz, you:

- Select the data source.
- Select and configure prompt values for data sources that include built-in prompts.
- Select data source filters for data sources that include them.

You can analyze data in different types of data sources:

- Workday-delivered data sources. Workday makes some Workday-delivered data sources available for use in discovery boards.
- Prism data sources. If your tenant is enabled for Prism Analytics, you can use any Prism data source.
- Extend application data sources. If an Extend app is installed on your tenant, you can also use the app's data sources, including those from:
 - Business objects
 - Business processes (event business objects)

Who does this phase?	Data Analysts or Report Writers
Where can I read more details?	Concept: Vizzes

	Steps: Create Visualizations Set Up the Viz Data Source Set Up Prompt Values for Discovery Boards Concept: Viz Filters Filter Data in a Viz
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Phase 3: Configure and modify a viz

After you select a data source for a viz, you can select the fields to analyze, configure how the fields are used, and modify the overall appearance of the data in the viz.

Most of the time you spend on creating and editing discovery boards is for this phase.

When you configure and modify a viz, you:

- Select what type of viz to create, such as Chart, Donut Chart, Waterfall, or Pivot Table.
- Select which fields to include in the viz. The fields you use either measure quantitative values or group together multiple data records into a single data point (referred to as a mark). For more information, see [Concept: Summarization and Attribute Viz Fields](#).
- Modify the appearance of the selected viz type. Example: Depending on the viz type, you can:
 - Override display names in the viz.
 - Change the formatting of numeric and currency data.
 - Change the color palette applied to a viz.
 - Adjust the size of each mark based on a measurement (summarization field).
 - Group data by color.
 - Select a horizontal or vertical orientation for the marks on the viz.
 - Select the Grouping of the marks on the viz, such as Cluster, Overlay, Stack, or Stack to 100.
 - Select the type of marks for each y-axis, such as area, bar, or line.
 - Create a dual axis chart.
 - Create a combination chart by selecting different mark types for each y-axis in a dual axis chart.
 - Highlight data in a Table viz.
- Filter data in a viz at either the viz-level or sheet-level.
- Limit and sort the data in the viz to focus on what's important.

Who does this phase?	Data Analysts or Report Writers
Where can I read more details?	Concept: Discovery Board Workspace Concept: Visualization Types Concept: Using Drop Zones in a Viz Steps: Modify Visualizations Concept: Interactive Viz Queries Concept: Chart Viz Mark Types Concept: Summarization and Attribute Viz Fields Sort Data in a Viz Limit Viz to the Top N Values Reference: Supported Fields in Discovery Boards

Phase 4: Prepare the viz and board for viewers

You need to prepare the board and vizzes on it for users who will view it. Discovery board viewers can include other users and even yourself. Users who view a discovery board can't perform all the functions that a discovery board editor can, but editors can choose to make some lightweight capabilities available to viewers.

To prepare a discovery board for viewers, you can:

- Prepare each viz. You can:
 - Rename.
 - Add a description.
 - Resize.
- Arrange the vizzes. You can:
 - Create up to 10 vizzes on a sheet.
 - Arrange the vizzes on a sheet. Discovery boards use a grid layout.
 - Create multiple sheets to contain different vizzes.
 - Rename each sheet.
- Give viewers lightweight control over the data returned in a viz by creating controls. When you create controls for any of the vizzes in a board, Workday displays a Control panel that enables viewers to filter the data they see based on the available controls.

Who does this phase?	Data Analysts or Report Writers
Where can I read more details?	Concept: Discovery Board Workspace Concept: Discovery Board Controls Set Up Prompt Values for Discovery Boards Filter Data in a Viz

Phase 5: Share the insights and board with others

You can share the insights you find in a discovery board with others. You can:

- Share a specific discovery board with individual users or all users in a security group.
- Create a custom report using the data and configurations from some viz types.
- Download vizzes as CSV or PNG image files to your local computer.

Who does this phase?	Data Analysts or Report Writers
Where can I read more details?	Concept: Sharing Discovery Boards Export a Viz as a Custom Report Download Visualizations Concept: Discovery Board Security Reference: File Actions in Drive Based on File Type Reference: File Actions in Drive Based on Permissions

Optional Administrative Functions

Discovery Board Administrators have additional functionality available to them that's not available to discovery board editors and viewers. Depending on your access, you can:

- Curate the data sources that are displayed on the Data Source panel in discovery boards for editors. This list makes it easier for editors to see the data sources available to them. Editors can choose to display all data sources.
- Curate different lists of fields so that it's easier for discovery board editors to find the right fields to use when building vizzes. You can curate these types of field lists:
 - Data source fields
 - Drill By fields
 - Show Details fields
- You can add discovery boards as worklets on the Home page. This enables users to access their most commonly used discovery boards without needing to go to Drive.

Who does this phase?	Discovery Board Administrators
Where can I read more details?	Set Up Curated Data Sources Set Up Curated Field Lists for Discovery Boards Set Up Discovery Boards as Home Page Worklets

Related Information

Reference

[The Next Level: Discovery Boards Guidance](#)

Reference: Reporting Limits

- [Reference: Reporting Limits](#)
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Data Sources

Workday limits the number of returned instances based on the type of report data source (RDS) you use and whether filtering applies. Filtering includes:

- Drill down filters.
- RDS filters.
- RDS security.
- Report filters.

Prefiltering refers to the limit Workday imposes before applying any filters to the report. Postfiltering refers to the limit Workday imposes after applying filters or grouping.

Report Criteria	Returned Instances Limit
Indexed RDS	3 million

Report Criteria	Returned Instances Limit
Prefiltering	
Indexed RDS Postfiltering	3 million
Nonindexed RDS Prefiltering	3 million
Nonindexed RDS Postfiltering Pregrouping	1 million (for grouping only)
Nonindexed RDS Postfiltering Indexed report fields	3 million

If your report displays an error, consider using a different data source filter for indexed data sources or a different data source type. Example: When you use a nonindexed RDS, try using an indexed RDS instead.

For reports that use a Prism data source, Workday returns up to 1 million rows for these report types you run in the background:

- Advanced
- Matrix
- Simple
- Transposed

Prism data sources can return up to 512 MB of data. Indexed data sources (non-Prism) can return up to 2 GB of data.

Prism Data Sources

Workday limits from where you can query a Prism data source created from a Prism Analytics table that is enabled for analysis.

If the table contains more than 2,000,000,000 rows, then you can't use the Prism data source in a discovery board viz or a custom report as a worklet on a dashboard. You can use the Prism data source in a custom report that you run in the browser or in the background.

Financial Modeled Data Source

Workday limits the data it puts in the financial modeled data source when you set up the financial reporting data model.

Description	Limit
Time duration of journal line data	Up to 3 years, rolling (current year plus 2 years prior)
Maximum number of optional dimensions	15
Maximum number of values per dimension	100,000

Workday returns up to 1,000,000 cells that contain data in the query response.

Processing

Workday limits report processing to:

- 30 minutes for all reports before displaying an error. After 20 seconds, Workday enables you to schedule the report to run as a background process.
- 6 hours for background reports, scheduled reports, and web services. Workday terminates the scheduled background report if processing time takes longer.

You can enable all custom report types, except simple, to run in the background. When you create or edit a custom report, select the **Background Only** check box in the **Report Performance** section on the **Advanced** tab. You can also access the **All Background Only Custom Reports** report to view all custom reports in your tenant with the **Background Only** check box selected.

Discovery Board Visualizations

Workday limits viz query processing to 45 seconds and limits the returned viz data size to 50 MB. Workday displays an error in the viz if the viz query times out at 45 seconds or if the amount of data returned exceeds 50 MB. Example: A table viz fails to display if Workday returns 500 rows and each row of data contains 1 MB of data. This might happen if field values for a text field in a drop zone contain a lot of information, such as survey result data.

Viz Type	Results
Area Chart	Workday returns up to: • 100 values on the x-axis. • 250 color groupings per x-axis value, plus the Other group. • 40 million cells, whether or not the cell contains data. Empty cells don't display in a chart viz like they do in a pivot table viz. However, this limitation still applies.
Bar Chart	Workday returns up to: • 100 values on the x-axis. • 250 color groupings per x-axis value, plus the Other group. • 40 million cells, whether or not the cell contains data. Empty cells don't display in a chart viz like they do in a pivot table viz. However, this limitation still applies.
Chart	Workday returns up to: • 100 values on the x-axis. • 250 color groupings per x-axis value, plus the Other group. • 40 million cells, whether or not the cell contains data. Empty cells don't display in a chart viz like they do in a pivot table viz. However, this limitation still applies.
Donut Chart	Workday returns up to 250 color groupings, plus the Other group.
Heatmap	Workday returns up to: • 100 values on the x-axis, plus the Other group.

Viz Type	Results
	100 values on the y-axis, plus the Other group.
Line Chart	Workday returns up to: 100 values on the x-axis. 250 color groupings per x-axis value, plus the Other group. 40 million cells, whether or not the cell contains data. Empty cells don't display in a chart viz like they do in a pivot table viz. However, this limitation still applies.
Pivot Table	Workday returns up to: 50,000 data rows. 12,000 row groupings (rows displayed in the pivot table). 250 column attribute groupings. 40 million cells, whether or not the cell contains data.
Scatterplot	Workday returns up to 250 color groupings, plus the Other group.
Table	Workday returns up to 50,000 data rows.

When you filter on a field that contains more than 5,000 values, Workday returns up to 5,000 distinct values in the **Filter panel**.

Scheduled Report Output

Access the **Schedule a Report** task to set up a schedule to run custom reports and deliver them to **My Reports**. You can also schedule reports to run as a single unit by grouping and bursting up to:

- 200 report groups that use an Excel template.
- 2,500 report groups that don't use an Excel template, such as a report that's in PDF or a nontemplate XLS format.

The limitation refers to the number of reports generated by the report group.

You can select 1 of these output types for the report:

- Excel*.
- Report (PDF)*.
- Text (CSV)*.
- View in Browser* for composite and matrix reports only.

Workday might deliver a file type other than your selected **Output Type** depending on the file size, Workday Markup Language (WML) size, or number of rows returned.

If an Excel or PDF report exceeds a WML size of 1GB, Workday generates a CSV file. Workday displays this warning message when this occurs: *'Workday generated a CSV file because the report exceeded the limits for the selected format. For large reports, Workday recommends selecting the CSV output option.'* You can select CSV as the preferred output format for future runs of the report.

Number of Rows	Supported Formats	Results
Fewer than 10,000	<i>Excel, Report (PDF), and Text (CSV)</i>	Workday generates the report in the selected Output Type format.
Between 10,000 and 500,000	<i>Excel and Text (CSV)</i>	If you select <i>Excel</i> as the Output Type format, Workday generates the report in <i>Excel</i> . If you select <i>Report (PDF)</i> or <i>Text (CSV)</i> , Workday generates the report in <i>Text (CSV)</i> format.
Between 500,000 and 1 million	<i>Text (CSV)</i>	Workday generates the report in <i>Text (CSV)</i> format.
More than 1 million	<i>Text (CSV)</i>	Workday generates the report in <i>Text (CSV)</i> format provided the total <i>Text (CSV)</i> file size remains under 15 GB.

You can use the **Process Monitor** report to determine if Workday switched to another supported format, or if Workday didn't generate the report.

Reports Run in the Browser

Report Type	Results
All	- The file size limit for report results is 50 MB and 15 GB for scheduled reports. Workday limits report results to 50 MB for composite reports and matrix reports with a scheduled report output of View in Browser. - The XML string limit is 2 GB. - Workday limits tabular data processing to 5 seconds.
Advanced	Workday returns up to: 1,000 instances. 10,000 rows for nonsupported pagination. 50,000 rows for reports with drill to details or supported pagination. Workday processes the Group by Field only for reports with column or row grouping if there are 1 million or fewer post-filter instances. The limit doesn't affect indexed fields.
Composite	The file size limit for composite results with a scheduled report output of View in Browser is 50 MB. Workday returns up to: 100,000 cells. 1,000 columns. 16,000 rows. For reports with drill-down, Workday returns up to:

Report Type	Results
	• 50,000 rows for supported pagination. • 10,000 rows for nonsupported pagination.
Matrix	The file size limit for matrix results with a scheduled report output of View in Browser is 50 MB. Workday returns up to: • 250 columns. • 12,000 rows. In the report definition, you can add up to 15 summarization rows. For reports with drill-down, Workday returns up to: • 50,000 rows for supported pagination. • 10,000 rows for nonsupported pagination. • 80,000 drill-down cells. For reports using Prism data sources, Workday returns up to: • 1 million instances for count distinct aggregations. Workday can process up to 1 million rows for reports with aggregations and up to 40 million rows for: • Background reports. • Scheduled reports. • Web services. Workday processes the Group by Field only for reports with column or row grouping if there are 1 million or fewer post-filter instances. The limit doesn't affect indexed fields.
nBox	Workday enables up to 100 images for each nBox cell. For reports with drill-down, Workday returns up to: • 50,000 rows for supported pagination. • 10,000 rows for nonsupported pagination.
Search	Workday returns up to 2,000 instances. The limit doesn't affect mass actions within search reports. There is a limit of 300,000 instances for a single facet for search reports.
Simple	Workday returns up to: • 1,000 instances. • 50,000 rows.
Transposed	Workday returns up to: • 1,000 instances.

Report Type	Results
	50,000 rows.
Trending	For reports with drill-down, Workday returns up to: 50,000 rows for supported pagination. 10,000 rows for nonsupported pagination. 80,000 drill-down cells. Workday can process up to: 1 million rows for reports with aggregated rows. 40 million rows for background reports, scheduled reports, and web services. Workday processes the Group by Field only for reports with column or row grouping if there are 1 million or fewer post-filter instances. The limit doesn't affect indexed fields.

Displaying Report Designer in the Browser

Workday limits the number of:

- Cells for multi-instance columns and fields to 1 million for composite, matrix, and trending reports.
- Top-level rows to 50,000 for all reports.

Your composite report can have an unlimited number of columns and rows. Adding more columns or rows might affect the response time of the report designer. These browser limits restrict what you see in the report designer:

Browser	Rows Displayed	Columns Displayed
Internet Explorer 11	50	20
All other browsers	200	50

Exporting to Excel

Workday adheres to these Microsoft Excel 2007 or newer limitations when exporting a composite report with outlining:

Type	Limit
Columns	16,384
Rows	1,048,576

Report Performance Logs

You can use report performance logs to troubleshoot performance issues in your reports.

Mobile Devices

You can enable dashboards and reports for mobile so that it's easier to view reporting data on Android, iPad, and iPhone devices. Managers and executives can also view metrics and key performance indicators on mobile applications.

Workday designs mobile apps for self-service, so not all reporting features are available. To access all features, sign in on a browser or desktop.

Your tenant configuration determines how dashboards and reports display. For custom reports and worklets on iPads, Workday doesn't support:

- Hiding table borders and column headings.
- Manually refreshing data. The data refreshes every time you access the report or worklet.
- Maximizing reports.
- Using 3D chart options.

For mobile devices, Workday doesn't support:

- Creating composite reports.
- Creating custom dashboards.
- Saving custom prompt values for worklets.
- Using dual-axis and combination charts.
- Viewing all or conditional formatting styles for composite reports.

Workday doesn't support these reports on mobile:

- Calendars.
- XpressO reports with 2 tabs.
- XpressO reports that use data pulled from the related business object.

Dashboard availability depends on your security configuration, but we support many Workday-delivered dashboards on mobile. To determine if Workday enables a dashboard for mobile devices:

1. Access the **Maintain Dashboards** report.
2. From the related actions menu of a dashboard, click **Dashboard > Edit**.
3. Access the **Settings** tab.
4. View the enabled **Device Type** in the **Task Information** section.

Related Information

Reference

[The Next Level: Breaking Through with Mobile](#)

Discovery Board Concepts

Concept: The Discovery Board Workflow

Discovery Boards is an analytical tool that enables line-of-business professionals to conduct self-service analysis with low-barrier to entry in a modern and interactive user interface.

A discovery board is your starting point for data analysis, similar to a project workspace. The discovery board is the canvas for discovering and sharing data insights. You typically create discovery boards from Workday Drive, and opening the board opens the workspace in Workday where you can create visualizations.

Each section explains each phase of the data analysis workflow in a discovery board from selecting data, visualizing it, and sharing with others. Although we describe these phases in a linear fashion, usually the editing process is iterative.

Phase 1: Create a discovery board as the workspace

The first phase is to create a discovery board that you can use as your workspace for analyzing data. There are multiple methods available for creating a discovery board:

- Create a new discovery board from Workday Drive.
- Copy an existing discovery board in Workday Drive.

- Make a copy of a Workday-delivered discovery board from the **Delivered Discovery Boards** report.

Who does this phase?	Data Analysts or Report Writers
Where can I read more details?	Steps: Create a Discovery Board Copy Workday-Delivered Discovery Boards The Next Level: Quick Sheet: Create Discovery Boards

Phase 2: Select and configure data in a viz

Discovery boards contain 1 or more vizzes where you analyze data in data sources. When you create a new discovery board, Workday creates a single empty viz by default. You can edit, copy, and delete existing vizzes, and create new ones.

Each viz analyzes data in a single data source. To analyze data in a viz, you:

- Select the data source.
- Select and configure prompt values for data sources that include built-in prompts.
- Select data source filters for data sources that include them.

You can analyze data in different types of data sources:

- Workday-delivered data sources. Workday makes some Workday-delivered data sources available for use in discovery boards.
- Prism data sources. If your tenant is enabled for Prism Analytics, you can use any Prism data source.
- Extend application data sources. If an Extend app is installed on your tenant, you can also use the app's data sources, including those from:
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 - Business processes (event business objects)

Who does this phase?	Data Analysts or Report Writers
Where can I read more details?	Concept: Vizzes Steps: Create Visualizations Set Up the Viz Data Source Set Up Prompt Values for Discovery Boards Concept: Viz Filters Filter Data in a Viz

Phase 3: Configure and modify a viz

After you select a data source for a viz, you can select the fields to analyze, configure how the fields are used, and modify the overall appearance of the data in the viz.

Most of the time you spend on creating and editing discovery boards is for this phase.

When you configure and modify a viz, you:

- Select what type of viz to create, such as Chart, Donut Chart, Waterfall, or Pivot Table.
- Select which fields to include in the viz. The fields you use either measure quantitative values or group together multiple data records into a single data point (referred to as a mark). For more information, see [Concept: Summarization and Attribute Viz Fields](#).

- Modify the appearance of the selected viz type. Example: Depending on the viz type, you can:
 - Override display names in the viz.
 - Change the formatting of numeric and currency data.
 - Change the color palette applied to a viz.
 - Adjust the size of each mark based on a measurement (summarization field).
 - Group data by color.
 - Select a horizontal or vertical orientation for the marks on the viz.
 - Select the Grouping of the marks on the viz, such as Cluster, Overlay, Stack, or Stack to 100.
 - Select the type of marks for each y-axis, such as area, bar, or line.
 - Create a dual axis chart.
 - Create a combination chart by selecting different mark types for each y-axis in a dual axis chart.
 - Highlight data in a Table viz.
- Filter data in a viz at either the viz-level or sheet-level.
- Limit and sort the data in the viz to focus on what's important.

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To prepare a discovery board for viewers, you can:

- Prepare each viz. You can:
 - Rename.
 - Add a description.
 - Resize.
- Arrange the vizzes. You can:
 - Create up to 10 vizzes on a sheet.
 - Arrange the vizzes on a sheet. Discovery boards use a grid layout.
 - Create multiple sheets to contain different vizzes.
 - Rename each sheet.

- Give viewers lightweight control over the data returned in a viz by creating controls. When you create controls for any of the vizzes in a board, Workday displays a Control panel that enables viewers to filter the data they see based on the available controls.

Who does this phase?	Data Analysts or Report Writers
Where can I read more details?	Concept: Discovery Board Workspace Concept: Discovery Board Controls Set Up Prompt Values for Discovery Boards Filter Data in a Viz

Phase 5: Share the insights and board with others

You can share the insights you find in a discovery board with others. You can:

- Share a specific discovery board with individual users or all users in a security group.
- Create a custom report using the data and configurations from some viz types.
- Download vizzes as CSV or PNG image files to your local computer.

Who does this phase?	Data Analysts or Report Writers
Where can I read more details?	Concept: Sharing Discovery Boards Export a Viz as a Custom Report Download Visualizations Concept: Discovery Board Security Reference: File Actions in Drive Based on File Type Reference: File Actions in Drive Based on Permissions

Optional Administrative Functions

Discovery Board Administrators have additional functionality available to them that's not available to discovery board editors and viewers. Depending on your access, you can:

- Curate the data sources that are displayed on the Data Source panel in discovery boards for editors. This list makes it easier for editors to see the data sources available to them. Editors can choose to display all data sources.
- Curate different lists of fields so that it's easier for discovery board editors to find the right fields to use when building vizzes. You can curate these types of field lists:
 - Data source fields
 - Drill By fields
 - Show Details fields
- You can add discovery boards as worklets on the Home page. This enables users to access their most commonly used discovery boards without needing to go to Drive.

Who does this phase?	Discovery Board Administrators
Where can I read more details?	Set Up Curated Data Sources Set Up Curated Field Lists for Discovery Boards Set Up Discovery Boards as Home Page Worklets

Related Information

Reference

[The Next Level: Discovery Boards Guidance](#)

Concept: Vizzes

A viz (visualization) is a graphical or textual representation of certain fields selected from a data source. Vizzes might be charts, tables, or more. Use vizzes to explore and analyze your data interactively.

Discovery boards have 1 or more sheets, and each sheet can display up to 10 vizzes. The individual vizzes on a sheet can be:

- Related, meaning they use the same underlying data source and data source filter.
- Unrelated, meaning they use different data source and data source filter.

To create a viz on your discovery board, select a data source. To display data in a viz, drag and drop fields into the various drop zones. Vizzes display inside panels (or boxes) in the workspace area of a discovery board sheet.

The drill panel gives you more control over your vizzes by enabling you to:

- Add vizzes to a sheet, and each sheet can display up to 10 vizzes.
- Display the details of a data point to the transaction level.
- Export vizzes to the Report Writer.
- Use different dimensions to drill into viz measure data.

Concept: Visualization Types

Visualizations enable you to display data from a data source either graphically or textually. The viz type determines the drop zones in the Builder panel and how the data is visually displayed in the viz.

Workday provides several viz types that enable you to decide how to explore and display the data. Some viz types are compatible with custom reports, enabling you to create a report from the viz using the data and configurations in the viz. Other viz types are optimized for use in discovery boards and can't be exported to custom reports.

Viz Type	Description
Chart (Matrix report-compatible)	A Chart is a viz type that displays data graphically, representing each point of data as a mark on the chart. Chart vizzes support several mark types, enabling you to create different types of charts, such as bars, lines, points, and more. A chart display summarized (aggregated) data grouped and filtered by the selected attribute fields. You can think of a chart in a discovery board as a recipe with these components: • Attribute and summarization fields • Axis placement (X-Axis and Y-Axis) • Appearance encodings (such as Color and Size) • Mark type (such as Point, Line, and Bar) When you create a report from this viz type, Workday creates a Matrix report.
Donut Chart	A Donut Chart is a viz type that displays a circle divided into segments with a hole in the center that displays the total value of all segments. Each segment represents a percentage of the total.

Viz Type	Description
(Matrix report-compatible)	Donut chart vizzes show relative sizes at a glance. The human eye can't easily distinguish between segments that have similar sizes, especially if there are many very small segments (marks). Workday recommends using a donut chart viz under these circumstances: • You only have 1 summarization field to display in the viz. • All values to display in the viz are positive (no zero or negative values). • The attribute values to display represent part of a whole. • The number of attribute values to display is low, such as less than 10. You can sort and filter an attribute field to reduce the values displayed. Donut chart vizzes can't display negative or zero values in the Angle drop zone. When a summarization field contains those values, Workday displays a warning icon in the upper right corner of the viz. Click the warning icon to learn how many values do and don't display in the viz. When you create a report from this viz type, Workday creates a Matrix report.
Pivot Table (Matrix report-compatible)	A Pivot Table is a viz type that displays attribute and summarized data in a tabular format. Pivot tables have complex headers that are ideal for comparing multiple fields against one another. Pivot tables are similar to tables, but with the added feature of adding grouping to rows and columns. Due to their detailed headers, pivot tables are useful for comparing data that contains subcategories, so you can access several levels of detail in 1 place. You can choose to hide or show row totals and column totals to control how much data is displayed You might want to create a pivot table if you want to see the raw data comprising the points on a chart viz, instead of a graphical representation of it. When you create a report from this viz type, Workday creates a Matrix report.
Table (Advanced report-compatible)	A Table is a viz type that displays the data in a tabular, spreadsheet format. A table is a viz with attribute fields only in the Columns drop zone. Its format is closest to what you might see in a CSV file. Tables are optimal for when you'd like a granular, simple display of data that has several attribute fields in it. When you create a report from this viz type, Workday creates an Advanced report.
Area Chart	An Area Chart is a viz type that displays metrics connected by line segments as a continuum, filling in the space between the lines with color. Similar to Line Charts, Area Charts typically display trends over time. Area Charts provide more options for grouping the categories than Chart vizzes. You can't create a report from this viz type.
Bar Chart	A Bar Chart is a viz type that displays metrics for categories of data as either vertical or horizontal bars. Bar Charts provide more options for grouping and orienting the categories than Chart vizzes. You can't create a report from this viz type.

Viz Type	Description
Heatmap	A Heatmap is a viz type that compares 2 attributes by a common metric (a summarization field). Heatmaps enable you to use color to see variations in the data. You can't create a report from this viz type.
KPI Chart	A KPI Chart is a viz type that displays a measure and its progress toward a specified target. Use a KPI viz on aggregated numeric or currency data. When you create or edit a KPI, you can display: • The base measure. • An optional comparison measure. • The variance (difference) between the base measure and the comparison measure. • A visual cue that indicates the progress toward the target. You can't create a report from this viz type.
Line Chart	A Line Chart is a viz type that displays metrics connected by line segments as a continuum, typically as a trend over time. You can't create a report from this viz type.
Scatterplot	A Scatterplot is a viz type that compares 2 metrics (summarization fields), grouped by a set of common attributes (color and size). Scatterplots show how a metric correlates to another metric. Example: You can use a Scatterplot to show the relationship between population size and income. You can't create a report from this viz type.
Waterfall	A Waterfall is a viz type that displays the incremental transitions of quantitative values that increase or decrease. Use a Waterfall viz to visualize and understand the progression of a specific value and how it's influenced by positive and negative factors. Example: Use a Waterfall to display how headcount is influenced by hiring and terminations. You can use either Numeric or Currency metrics in a Waterfall viz. By default, Waterfalls display the Total (the end value), which summarizes all values and calculates how all the increments affect the starting value. Optionally, you can hide the Total. You can create a Waterfall viz using either of these methods: • One field each in the Measures and Dimensions drop zones. Workday displays how the values of a dimension field incrementally increase or decrease the value of a measure field. Example: You can perform expense analysis by the categories defined in a single dimension field. • Multiple fields in the Measures drop zone. Workday displays each field in order on the x-axis, using the top field as the starting value. You can't create a report from this viz type.

Related Information

Reference

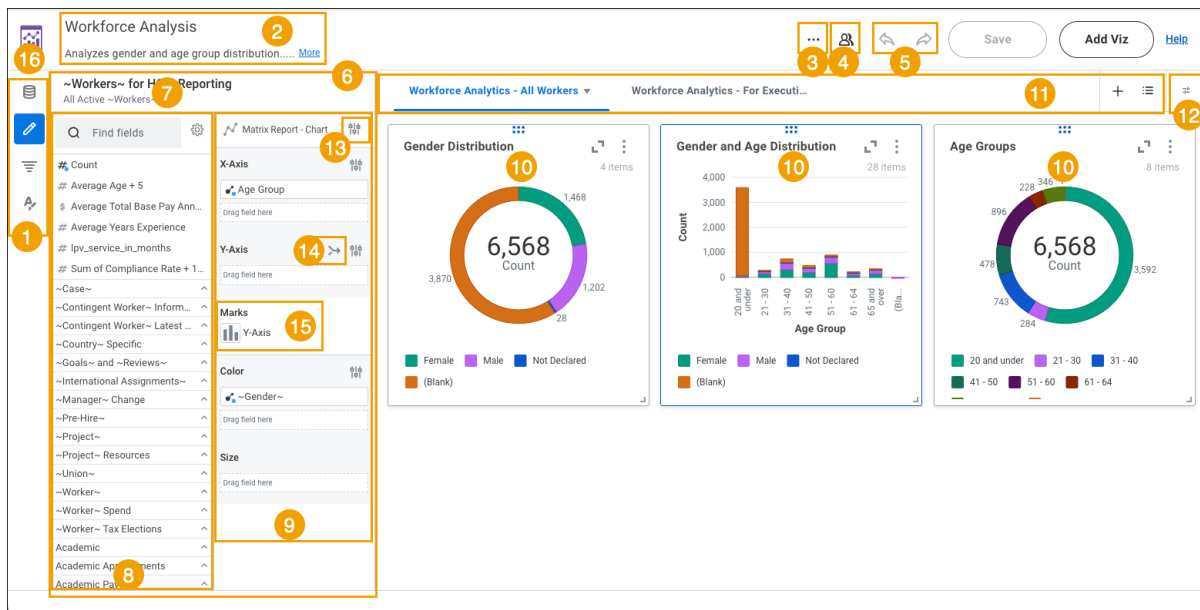
[The Next Level: Discovery Board Visualization Examples](#)

Concept: Discovery Board Workspace

When you open a discovery board, Workday opens the workspace in View mode. View mode enables you to view the discovery board, but not make any changes. If you have Can View or Can Comment permission on the discovery board, you view the discovery board in view mode.

If you're the owner or if you have Can Edit permission on the discovery board, you can click **Edit** to switch to Edit mode. Edit mode enables you to make changes to the discovery board and save it.

You see these workspace components in edit mode:



1. Panels for editing a viz. The left side panel is where you navigate between the data source panel, builder panel, filter panel, configuration panel, and formatting panel to edit and configure a viz. Click an icon to hide or open a particular panel. You might want to hide a panel to see more of the workspace.
2. Board title and description. Click in either field to enter or edit text.
3. Menu options for the board.
4. Share button. Click to share a board with an individual user or a security group.
5. Undo and redo buttons.
6. Builder panel. The builder panel contains the options for configuring the selected viz in the workspace. You select the type of viz to create, such as Chart or Pivot Table, drag fields into the drop zones, and configure any drop zone or field options. You can narrow the list of fields by filtering the field list.
7. Data source used in the selected viz. You can change the data source in the viz by clicking the data source panel.
8. Field list. Expand a category to see the fields in that category. All summarization fields for a particular Numeric or Currency field are grouped under the field. Hover over the Numeric or Currency field and click the double chevron icon to expand it to see the related summarization fields.
9. Drop zones and drop zone options. The available drop zones and options vary by viz type.
10. Visualization.
11. Sheet controls.
12. Control panel. The control panel displays the controls linked to the prompts and filters that viewers and editors can use to provide input values.
13. Viz type options.
14. Select a dual or merged Y-axis (Area Chart, Bar Chart, Chart, and Line Chart vizzes only).

15. Select mark type (Chart viz only).

16. Back to Drive button.

The left side panel includes these icons:

- Data source panel. View or change the data source for the selected viz.
- Builder panel. Build the viz by selecting the fields and configuring options for the selected viz.
- Filter panel. Filter the data in the selected viz or all vizzes on the sheet.
- Configuration panel. Configure how vizzes display data, such as managing the sort order of fields or overriding populated values for **Drill By** and **Show Details**.
- Formatting panel. View or change formatting options for the selected viz or all vizzes on the board, such as changing the assigned color.

Concept: Summarization and Attribute Viz Fields

All fields used in vizzes serve one of these field roles: either attribute or summarization. Attribute and summarization fields control how Workday analyzes and groups data in a viz.

Field Role	Attribute	Summarization
Alternate Name	Dimension	Measure
Description	Attribute fields typically contain qualitative data, such as names, dates, or geographical data Attribute fields describe a property of an entity. The data answers who, what, when, and where questions and can be any field type on a data source. Use attribute fields to categorize and group your data. Attribute fields affect the level of detail in the view.	Summarization fields typically contain things you can measure, such as numeric and quantitative values. Summarization fields are numeric values that represent aggregated data from multiple data records. Example: Summarization fields can represent total dollar amounts, average salary, or count distinct of workers. Summarization fields enable you to analyze the attributes as categories.
Field Types Supported	Fields of all field types can be an attribute field. When you use a Currency or Numeric field as an attribute field, the values displayed in the viz are individual, finite, discrete values.	Fields with these field types can be a summarization field: • Numeric • Currency • Text • Instance Workday automatically creates summarization fields for each supported field type in the discovery board builder panel. To access the summarizations for a field, click the field in the builder panel to see the list of summarizations. Workday displays all the aggregate functions that the field supports, such as AVG, MAX, or COUNT_DISTINCT.

		The supported aggregate functions depend on the field type and the type of data source.
Examples	• Gender • Full Name • Is Hourly • Hire Date • Journal	• SUM(Sales) • COUNT_DISTINCT(Full Name) • AVG(Total Base Pay Annualized in GBP) • MEDIAN(Total Base Pay Annualized in GBP)

You can place attribute and summarization fields only in some drop zones in a viz depending on the viz type. Some viz types, such as Chart and Pivot Table, must contain at least 1 summarization field. If you don't use a summarization field in a drop zone, Workday uses the Count summarization in the viz, which is a count of all data records.

You can use some numeric data as either an attribute or summarization field, such as length. However, some numeric data isn't continuous and you should use them only as an attribute, such as USA zip codes.

Supported Aggregate Functions for Summarization Fields

Field Type	Supported Aggregate Functions
Numeric, Currency	All data source types support: • AVG • MAX • MIN • SUM Workday-delivered data sources also support: • MEDIAN • PERCENTILE • 5 • 10 • 25 • 50 (the same value as median) • 75 • 90 • 95 • 97 • 98 • 99
Instance, Text	All data source types support: • COUNT_DISTINCT

Related Information

Reference

[2024R2 Feature Note: Median and Percentile Summarizations in Discovery Boards](#)

Concept: Interactive Viz Queries

When you build a visualization in a discovery board, you're actually creating queries against a data source. The act of dragging a field to a drop zone creates a query that is sent to the data source, fetches the requested data, and then visually renders the results as a chart or table.

By default, the viz automatically updates the data when you make a change. However, you can temporarily turn off live, automatic updates of the data for all vizzes in the board. You might want to disable automatic updates to improve performance if the board contains many vizzes with a lot of data. To turn off the live updates, select **Automatically Update** from the discovery board menu. When you change a viz, such as changing a field in a drop zone, Workday displays an empty viz until you click **Update now** in a viz.

When some people think of queries, they think of SQL (the structured query language used to access data stored in a relational database). Viz queries aren't written in SQL, they're constructed by your actions in the discovery board. However, it might help to understand how data is requested and returned if we make a comparison with SQL.

If a viz query were expressed in SQL, it would look something like this statement (the clauses are listed in the order that they're processed):

```
SELECT <attributes in builder>, <summarizations in builder>
  FROM <data source>
 WHERE <attributes in filters>
 GROUP BY <attributes in builder>
 ORDER BY <attribute sort options>
 LIMIT <attribute limit options>
```

Note that the query is constructed based on the field role (summarization or attribute), and where the fields are placed in the drop zones.

Concept: Using Drop Zones in a Viz

To analyze data in a visualization, you place (drag and drop) fields from the list of fields into the drop zones (such as X-Axis) in the builder panel. The fields and their locations determine the placement and visual appearance of the data in your viz.

Workday automatically selects the best visual representation for the combination of summarization and attribute fields you add to the drop zones.

When you select a field from the panel and start to drag it over, the appearances of the drop zones change to help guide your placement of the field in the builder panel. Drop zones permit either summarization and attribute fields. A grayed out drop zone means that the drop zone doesn't apply to the selected field. A highlighted drop zone means that the drop zone is available for the selected field.

As you work with drop zones, consider:

- Some drop zones permit multiple fields and some limit the number of fields. As you drag and drop fields, the drop zones provide instructional text and highlighted drop zone areas to help you build your viz.
- The position of attribute fields in drop zones, such as X-Axis and Columns, determines the grouping order in the viz.
- You can remove a field from a drop zone by clicking the **X** next to the field name.
- You can drag a new field directly on top of an existing field to replace it.

Concept: Chart Viz Mark Types

In a Chart visualization, Workday displays the data as a collection of marks. A mark is the visual representation of a metric value calculated for a group of input rows.

The mark type controls the shape of data in a Chart viz, and how data points are visually represented. When you create a Chart viz in a discovery board, you can select the mark type from the **Marks** drop-down menu.

How Workday renders a particular chart depends on the mark type along with the placements of summarization and attribute fields in the drop zones.

Mark Type	Description
Bar	Workday displays each mark as a rectangular bar with its length proportional to the value it represents.
Point	Workday displays each mark as a dot, with its position determined by the values on the 2 axes (Cartesian coordinates).
Line	Workday displays each mark as an end point of a straight line, with a straight line connected between marks. You might use a line chart to visualize a trend in summarization data over time with the line drawn chronologically.
Area	Like a line chart, Workday displays each mark as an end point of a straight line, but fills the space between the marks and the horizontal axis with a color. Similar to a line chart, an area chart typically displays summarization data over time, and is typically used to compare 2 or more quantities. However, unlike lines, area charts are typically used to represent cumulative totals rather than individual totals. You might use an area chart to illustrate how the member of an attribute contributes to an overall trend.
Auto	Workday selects the best mark type based on the fields in the drop zones.

Concept: Discovery Board Controls

When you create or edit a discovery board, you can give discovery board viewers some control over the data returned in the board by creating controls. A control is a configurable input that provides viewers some lightweight data analysis capabilities over the discovery board that they view.

Each control is associated with and linked to a controllable, either a prompt or a filter. When editors or viewers select a value in a control, Workday applies that value as the input to the associated controllable.

When you view a discovery board with controls listed in the control panel, you can select a viz to see which controls impact that viz. Workday displays a small, blue circle icon to the left of each control name that impact the selected viz.

To create a control, select the **Create Control and Link** option from either a prompt menu or filter menu.

When you select **Create Control and Link** for a controllable, Workday:

- Creates a control and links it to the controllable.
- Displays a control panel on the right side of the discovery board workspace. Workday displays the control panel in both edit mode and view mode.

- Places the control at the bottom of the control panel. Workday creates 2 controls when you configure a filter that uses the is between operator.

You can create a control for:

- Any prompt.
- Filters that use an operator that accepts a filter value, such as the operator is greater than or is in list. You can't create a control for filters that don't accept values, such as filters with the operator is empty or is not blank.

When you create a control, you can:

Control Action	Notes
Change the name of the control.	Select Rename from its menu in the control panel. Workday uses the prompt or filter name as the control name automatically. Because some prompts and fields have the same name, you can create multiple controls with the same name. Note that when you create a control from a filter that uses the in between operator, Workday creates 2 controls and uses both the field name and control operator to define the control name.
Change the order in the control panel.	Drag and drop a control in the control panel to change its order. By default, Workday displays the controls in the control panel in the order you create them. The order of the controls doesn't affect the data because Workday applies an AND condition between all controls. However, you might want to change the order to group together similar controls.
Remove the control.	Select Remove from its menu in the control panel. When you remove a control, Workday: - Removes the control from the control panel. - Retains the associated controllable in the data source panel or filter panel, but removes the link. - Moves any input value currently defined in the control input to the controllable input. Additionally, Workday automatically removes a control when you perform an action on its associated controllable that renders the control obsolete. Example: The controllable is a filter and you update the filter, or disable the filter.

Related Information

Tasks

[Set Up Prompt Values for Discovery Boards](#)

[Filter Data in a Viz](#)

Reference

[2023R1 What's New Post: Discovery Board Controls](#)

Concept: Sharing Discovery Boards

You can share a discovery board with an individual user or a security group. You share a discovery board by:

- Clicking the **Share** button from the board.

- Using Workday Drive.

Consider these requirements:

- To share a discovery board, you must be the owner or have Can Edit permission if the owner enables editors to share.
- To share a discovery board with a security group:
 - Your tenant must be set up for group sharing on Drive using the **Configure Group Sharing in Drive** task.
 - Discovery boards must be shareable with the security group.
- You can give users and groups Can View or Can Edit permission.
- To give Can View permission, the user or group you share with must have permission on at least 1 data source used in the discovery board.
- To give Can Edit permission, the user or group must have access to the *Discovery Boards: Create domain*.

Note: Discovery Boards use Workday Drive to share an individual discovery board. If Drive hasn't been translated into the language that a user selected as their display language, your security administrator must access the **Edit Workday Account** task for the user and select the **Allow Mixed-Language Transactions** option. This makes the Drive user interface visible to the user in English. For details on setting up Drive, see [Steps: Set Up Drive](#).

Concept: Discovery Board Security

Workday enforces security when someone views or edits a discovery board. To view a discovery board, you must have permission on at least 1 data source used in it.

Each viz in a discovery board uses a single data source. To see a viz when editing or viewing a discovery board, you must have permission on that data source. Workday enforces contextual security, which determines what data displays for each user.

How Workday displays the discovery board depends on your data source access and board permission:

Discovery Board Permission	Details
Can Edit	When you edit a discovery board, Workday: • Displays a placeholder for every viz, but only displays the data if you have permission on the data source. • Displays every sheet even if you don't have permission on any data source used in the sheet.
Can View	When you view a discovery board, Workday: • Hides a viz if you don't have permission on the data source. • Reorganizes the vizzes on a sheet if you don't have permission on 1 or more vizzes. • Hides a sheet if you don't have permission on at least 1 data source used in the sheet.

Example: A discovery board includes 2 vizzes total, one using the Workers for HCM Reporting data source and the other using the Journal Lines for Financial Reporting data source. The discovery board owner shared the discovery board with user Jennifer, giving her Can Edit permission and with users Ricardo and Shannon, giving them Can View permission. Jennifer has access to Journal Lines for Financial Reporting, but not to Workers for HCM Reporting. Ricardo has access to Workers for HCM Reporting, but not to Journal Lines for Financial Reporting. Shannon doesn't have permission on either data source.

With this tenant configuration, you should expect to observe these behaviors:

- Jennifer is able to view and edit the discovery board.
- When Jennifer views the discovery board in either view or edit mode, she sees 1 viz with data and a placeholder for the other viz with an error message. Workday displays an error message instead of the data in the viz that uses the Journal Lines for Financial Reporting data source because she doesn't have permission on that data source.
- Ricardo is able to view the discovery board.
- When Ricardo views the discovery board in view mode, he sees only the 1 viz that uses the Journal Lines for Financial Reporting data source. He doesn't see any indication that the board might contain other vizzes that he doesn't have permission on.
- Shannon cannot view the discovery board because she doesn't have permission on any data source used in it.
- Jennifer and Ricardo only see data records and field values that they have access to. The viz doesn't display records and field values they don't have access.
- Jennifer and Ricardo only see fields that they have access to. Example: If a viz uses a data source they have access to, but it includes a field they don't have access to, then they can't view the data in the viz. Instead, they see a different error message.

Workday-Delivered Discovery Boards

Copy Workday-Delivered Discovery Boards

Prerequisites

- Set up your tenant for Drive.
- Security: *Discovery Boards: Manage Delivered Discovery Boards* domain in the System functional area.

Context

You can use Workday-delivered discovery boards as a starting point when configuring discovery boards. You can make copies of Workday-delivered discovery boards and share them using Drive.

You can customize copied discovery boards by:

- Adding visualizations to the discovery board.
- Editing the copied discovery boards in Drive.
- Removing visualizations.

Changes Workday makes to Workday-delivered discovery boards don't apply to copies.

Steps

1. Access the **Delivered Discovery Boards** report.
2. Select the discovery board you want to copy.
3. Click **Make a Copy**.

Result

Workday displays a link to the discovery board copy in Drive.

Next Steps

You can:

- Customize the discovery board by adding visualizations.

- Share the discovery board with users.

Related Information

Reference

[2021R2 What's New Post: Buyer Manager Insights with Discovery Boards](#)

[2021R2 What's New Post: Delivered Discovery Boards](#)

Creating Discovery Boards

Steps: Create a Discovery Board

Prerequisites

These domains in the System functional area:

- *Discovery Boards: Create*
- *Drive*

Context

Discovery boards enable you to perform drag and drop analysis by iteratively asking questions around data in a data source. Use a discovery board to create 1 or more visualizations, which are graphical representation of certain data fields selected from a data source.

Steps

1. Access the Drive Home page.
2. Select **New > Discovery Board**.
You can also duplicate an existing discovery board by right-clicking it and selecting **Make a Copy**.
3. Enter a name.

Result

Workday creates a discovery board and adds it to your list of documents on the **My Files** view in Drive. The discovery board contains 1 empty visualization to begin your analysis.

Next Steps

You can:

- Enter an explanatory description below the board title to help viewers understand the board's purpose and scope.
- Open the discovery board and edit the empty visualization, and add more visualizations as desired.
- Add your discovery board as a worklet on the Home page.
- Share the board with other users and assign their access to the board.
- Permanently delete discovery boards by accessing the **Drive Permanent File Delete** task.

Related Information

Tasks

[Set Up Discovery Boards as Home Page Worklets](#)

Reference

[The Next Level: Discovery Boards Guidance](#)

[The Next Level: Quick Sheet: Create Discovery Boards](#)

Steps: Create Visualizations

Prerequisites

Security: These domains in the System functional area:

- *Drive*
- *Discovery Boards: Create*

Context

You can explore and analyze data in a data source interactively by using a visualization (viz) in a discovery board.

Steps

1. Access **Drive**.
You can also access your discovery board as a worklet from the Home page.
2. Select the discovery board you want to edit.
3. (Optional) To enable live updates, select **Automatically Update** from the related actions menu of the discovery board. When you disable the automatic update, you can manually update the viz by clicking **Update Now**.
4. [Set Up the Viz Data Source](#) .
5. On the **Builder panel**, select a viz type.
See [Concept: Visualization Types](#) .
6. Drag and drop fields into the drop zones to analyze the data.
7. (Optional) To display only the fields administrators configured in curated field lists, enable **Show only curated fields** from the related actions menu of the discovery board. When you disable the curated field list, Workday displays all available fields to discovery board users.
Discovery board administrators can configure curated field lists for the primary business object of the data source.

Next Steps

You can:

- Add a description to the viz by selecting **Add Description** from the related actions menu of the viz.
- Change how Workday displays your vizzes by dragging the viz to a new location on the sheet to reposition it.
- Modify your viz to change how Workday displays data.
- Duplicate the viz by selecting **Duplicate** from the related actions menu.

Related Information

Concepts

[Concept: Discovery Board Workspace](#)

[Concept: Using Drop Zones in a Viz](#)

[Concept: Interactive Viz Queries](#)

Tasks

[Steps: Modify Visualizations](#)

[Set Up Curated Field Lists](#)

[Set Up Discovery Boards as Home Page Worklets](#)

Reference

[The Next Level: Discovery Boards Guidance](#)

Set Up the Viz Data Source

Prerequisites

These domains in the System functional area:

- *Drive*
- *Discovery Boards: Create*

Context

Every visualization (viz) in a discovery board analyzes data in a data source.

When you create a discovery board, you select the data source to analyze in the first viz. When you add a new viz or duplicate an existing viz, Workday automatically selects the same data source as the previously selected viz. You can change the data source used in a viz by using the Data Source panel.

When you select a data source and save the discovery board, Workday automatically creates a Recommended Data Sources section in the Data Source panel. This list displays a maximum of 10 recommended data sources in alphabetical order based on the most recently used and most frequently used data sources. Users can disable show recommended data sources from the discovery board related actions.

If your tenant has Prism Analytics enabled, Workday lists both Prism data sources and the supported Workday-delivered data sources you have access to.

For Workday-delivered data sources, you have more options to configure for the data source, such as data source filters and prompts built into data sources or fields.

Steps

1. Select a viz in a discovery board.
2. Click the data source panel icon on the left side of the discovery board workspace.
3. Select a data source from the list when creating a new discovery board.
Workday displays data sources that you have permission on. If your Discovery Boards administrator curated the list of data sources, then Workday lists the data sources you have permission on from that curated list. To view all data sources that you have permission on, disable **Show only curated data sources** from the discovery board related actions.
4. (Optional) Save the discovery board to view your selected data source in the Recommended Data Sources list.
5. (Optional) Click the left arrow next to the data source name to select a different data source.
6. (Workday-delivered data sources) Select all required and any optional data source filters and prompts.

Result

Workday applies the selected data source and displays the builder panel so you can analyze the data in the data source.

Set Up Prompt Values for Discovery Boards

Prerequisites

These domains in the System functional area:

- *Drive*
- *Discovery Boards: Create*

Context

The data sources used in a discovery board might include prompts that are built-in to the data source or fields. Built-in prompts can:

- Filter down the data in your data source. Example: Worker Type prompt built-in to the Trended Workers data source.
- Be a parameter that influences data results. Example: Currency and Account Translation Rule Set prompts built-in to the Translated Debit Amount field.

You can select the values for the built-in prompts when you edit a discovery board. Built-in prompts are either required or optional.

You can select values for most built-in prompts. Workday supports prompts that use any field type supported in discovery boards except for:

- Currency
- DateTime
- Numeric
- Text

When you configure a prompt in a discovery board, by default:

- You select a static value for the prompt.
- The prompt value applies to all vizzes on a sheet that use the same combination of the selected data source and data source filter.
- The prompt is visible in edit mode only.

Steps

1. Select a viz that uses the combination of data source and data source filter you want to configure.
2. Select the data source panel icon on the left side of the discovery board workspace.
3. In the **Sheet Prompts** section, select 1 or more values for a built-in prompt.
4. (Optional) Select the prompt menu and select an option to change the properties of the prompt:

Option	Description
Determine Value Dynamically	Use this option to change the prompt from static to dynamic, meaning that Workday determines the prompt value based on some context, such as the current date or current user. When you update a prompt to be dynamic, select a field that determines the prompt value dynamically. These fields are on the Global business object. These Global fields aren't available: • Fields with built-in prompts.

Option	Description
	- Calculated fields with these functions: - Date Constant - Lookup Field with Prompts - Numeric Constant - Prompt for Value - Text Constant Example: In a date prompt's input, you select the field First Day of This Month. When you view the discovery board, Workday: - Determines the first day of the current month. - Uses that value for the prompt. - Displays data in the viz based on that prompt value. In view mode, dynamically determined viewer-exposed prompts display the resulting values, not the field on the Global business object.
Override at Viz	Use this option to override the value of the prompt for the selected viz. When you override a sheet-level prompt at the viz-level, Workday moves the prompt from the Sheet Prompts section to the Viz Overrides section on the data source panel. You can remove a viz override by selecting Clear Override from the prompt menu in the Viz Overrides section.
Create Control and Link	Use this option to create a control and link it to the prompt, giving viewers control over the data returned. When you select a value in a control, Workday applies that value as the input to the linked prompt. Any changes you make to the values of a control in view mode only apply to view mode in your current session. Example: You are in view mode and select different values for the control, and then switch to edit mode. Workday reverts the control values to the saved version of the discovery board. See Concept: Discovery Board Controls .

Related Information

Reference

[2022R1 What's New Post: Discovery Boards Prompts](#)

[2021R2 What's New Post: Viewer Access for Discovery Boards](#)

Set Up Curated Data Sources

Prerequisites

Security: *Discovery Boards: Manage Curated Data Source List* subdomain in the System functional area.

Context

You can curate the data sources to display on the **Data Source** panel in discovery boards. This list makes it easier for discovery board users to view the data sources available to them. By default, when you create

a data source list, Workday only displays the data sources in that list. Users can also display all data sources.

Steps

1. Access the **Maintain Data Source List for Discovery Boards** report.
2. Click **Add Data Sources**.
Select the data sources to display on your discovery board. The **Data Sources to Add** grid only displays the data sources supported in discovery boards.
3. Click **Enable in Discovery Boards**.
Once you enable a data source list, you can disable it by clicking **Disable in Discovery Boards**.
4. (Optional) To modify the list, click **Add Data Sources** or **Remove Data Sources**. The **Data Sources to Remove** grid displays the data sources currently on the curated data sources list.

Result

When you create a discovery board, Workday displays the list of curated data sources in the **Data Source** panel.

Set Up Curated Field Lists for Discovery Boards

Prerequisites

Security: These domains in the System functional area:

- *Discovery Boards: Manage Curated Data Source Field List*
- *Discovery Boards: Manage Drilling Field Lists*

Context

You can configure curated field lists so that it's easier for discovery board editors to find the right fields to use when building visualizations. For all visualizations except tables, you can perform better ad hoc analysis and reporting by configuring fields to drill into and view details for.

Steps

1. Access the **Maintain Field Lists for Reporting** report.
2. From the **Product Area** prompt, select **Discovery Boards**.
3. Select a **Business Object** to base the curated field list on.
All data sources with the primary business object you select share the same curated field list.
4. As you complete the **Data Source Fields** tab, consider:

Option	Description
Enable in Discovery Boards	(Available after you add fields to the curated field list.) Click to enable the curated list that you configured in discovery boards. Once clicked, you can click Disable in Discovery Boards to disable the curated field list. From the related actions menu of the discovery board, you can click Show only curated fields: • Off to display all available fields.

Option	Description
	On to display only the fields configured in the curated field list.
Add Fields	Click to access the Add Fields to Data Source Field List for Discovery Boards task. The Fields to Add grid displays all fields available to populate the curated field list.
Remove Fields	(Available after you add fields to the curated field list.) Click to access the Remove Fields from Data Source Field List for Discovery Boards task. The Fields to Remove grid displays the fields currently on the curated field list.
Selected Fields	The grid displays all fields added to the curated field list that users view when creating visualizations. The Where Used column displays a usage count for each curated field. The count includes Workday internal development usages.

- On the **Drill By Fields** tab, click **Edit Drill By Field List** to access the **Edit Drill By Field List for Discovery Boards** task. You can manage the fields you use to drill into visualization measure data. If you don't configure fields on the **Drill By Fields** tab, **Drill By** won't display on visualizations.
- As you complete the tab, consider:

Option	Description
Enable in Discovery Boards	Click to enable the drill by field list that you configured in discovery boards. Once clicked, you can click Disable in Discovery Boards to display all available drill by fields for the business object you selected.
Selected Grouping Fields	The grid displays all fields added to the drill by field list that users view when creating visualizations. You can select the Default Sort for each field that determines the display order for the drill by fields. Example: When you select a drill by field in a visualization, Workday displays a new table. The new table displays the Default Sort you selected for the drill by data.

Discovery boards don't support drilling on:

- Blank or *Other* values.
 - Fields that you can't filter on.
 - Lookup prior value calculated fields.
- On the **Show Details Fields** tab, click **Edit Show Details Field List** to access the **Edit Show Details Field List for Discovery Boards** task. You can manage the fields Workday displays when you view the details of a data point to the transaction level. If you don't configure fields on the **Show Details Fields** tab, **Show Details** won't display on visualizations.

8. As you complete the tab, consider:

Option	Description
Enable in Discovery Boards	Click to enable the show details field list that you configured in discovery boards. Once clicked, you can click Disable in Discovery Boards to disable the show details field list.
Selected Fields	The grid displays all fields added to the show details field list that users view when creating visualizations. You can select the Default Sort for each field that determines the display order for fields when you view details. Example: When you click Show Details on a visualization data point, Workday displays a new table. The new table displays the Default Sort option you selected for the show details data. To change the order of the Show Details fields displayed in a visualization, remove the fields, then add them in the desired order.

Result

Workday displays:

- Curated fields when you build discovery board visualizations if the data source has a primary business object with a curated field list configured.
- Options on the visualization to drill into and view details for your data.

Next Steps

You can drill into or view details for visualizations and display the resulting data in a pivot table or table. You can then click:

- **Add to Sheet** to add a visualization to a sheet. Each sheet can display up to 10 visualizations. Workday disables **Add to Sheet** if the visualization you drill into or view details for includes a lookup date rollup calculated field.
- **Export as a Report** to export a visualization to the Report Writer. Workday disables **Export as a Report** if:
 - The visualization you drill into or view details for includes a lookup date rollup calculated field.
 - You don't have access to the *Custom Report Creation* domain in the System functional area.

Related Information

Reference

[The Next Level: Enable Discovery Boards in Your Tenant](#)

Set Up Discovery Boards as Home Page Worklets

Prerequisites

Enable People Experience to customize the Home page.

Security: These domains in the System functional area:

- *Discovery Boards: Set Up Discovery Board as a Worklet*

- *Set Up: Tenant Setup - Worklets*

Context

You can add discovery boards as worklets on the Home page. This enables users to access their most commonly used discovery boards without needing to go to Drive.

Steps

1. Access the **Maintain Dashboards** report.
2. Click **Edit** in the **Home** dashboard row.
3. In the **Content** tab, add a worklet row in the **Worklets** grid.
4. As you complete the grid, consider:

Option	Description
Worklet	Select the Discovery Boards folder and then select the discovery board that you want to set as a worklet.
Required for Groups	Select the security groups that you want to have access to the discovery board worklet.
Required	Select the check box to set the discovery board worklet as Required .

5. (Optional) For users in security groups that don't require the discovery board worklet:
 - a) Access the **Configure My Worklet Landing Pages** task.
 - b) Select the **Home** landing page.
 - c) In the **Optional Worklets** section, select the discovery board to display.

Result

The discovery board worklet displays on the Home page.

Related Information

Reference

[2022R2 What's New Post: Discovery Boards Worklets on the Home Page](#)

Reference: Supported Fields in Discovery Boards

When you create or edit a discovery board, Workday lists the supported fields in the field list.

For Prism data sources, Workday supports:

- Every field in the Prism data source.
- Tenant-wide summarization calculations.
- The global calculated field functions supported in Prism data sources.

For Workday-delivered data sources, Workday supports:

- Workday-delivered fields.
- Tenant-wide summarization calculations.

- Tenant-wide calculated fields that use these functions:

- Aggregate Related Instances
- Arithmetic Calculation
- Build Date
- Concatenate Text
- Convert Currency
- Convert Text to Number
- Count Related Instances
- Date Constant
- Date Difference
- Evaluate Expression
- Evaluate Expression Band
- Extract Multi-Instance
- Extract Single Instance
- Format Date
- Format Number
- Format Text
- Increment or Decrement Date
- Lookup Date Rollup
- Lookup Field with Prompts
- Lookup Hierarchy
- Lookup Hierarchy Rollup
- Lookup Organization
- Lookup Organizational Roles
- Lookup Range Band
- Lookup Related Value
- Lookup Translated Value
- Lookup Value As Of Date
- Numeric Constant
- Substring Text
- Sum Related Instances
- Text Constant
- Text Length
- True/False Condition

Workday doesn't support:

- Fields on the Global business object.
- Fields that use these field types:
 - DateTime
 - DateTimeZone
 - Rich Text
 - Time

If you use a Self-referencing Instance field in a viz, it displays as a Single Instance field.

Note: Use optimized fields whenever possible to improve performance. When creating or editing a viz, Workday displays a blue dot and tip text messages on fields optimized for performance. Data source fields might be optimized for different purposes. You can achieve better performance when you use fields optimized for grouping, aggregation, or filtering. Workday optimizes all fields in Prism data sources, and some fields in indexed Workday-delivered data sources.

Related Information

Concepts

[Concept: Prism Data Sources](#)

Modifying Visualizations

Steps: Modify Visualizations

Prerequisites

Security: These domains in the System functional area:

- *Drive*
- *Discovery Boards: Create*

Context

You can change discovery board visualizations (vizzes) to control the way Workday displays viz data.

Steps

1. Access the viz in a discovery board.
2. (Optional for Area Chart, Bar Chart, Chart, and Line Chart viz types) To compare metrics with different scales, select **Dual** on the Y-Axis drop zone to enable the Y-Axis (Left) and Y-Axis (Right) drop zones.
Drag and drop summarization fields in both Y-Axis drop zones to display values on opposite axes of the chart.
3. (Optional for Bar Chart or Waterfall viz types) Select a horizontal or vertical **Orientation** for the marks on the viz.
4. (Optional for Area Chart and Bar Chart viz types) Select the **Grouping** of the marks on the viz, such as Cluster, Overlay, Stack, or Stack to 100.
To group by date, create a Lookup Date Rollup calculated field. You can create a hierarchy of Lookup Date Rollup calculated fields for more granular grouping. Example: Create a field for Year, and then a field for Month. See [Lookup Date Rollup](#).
5. (Optional for the Chart viz type) Select the type of **Marks** for each y-axis, such as area, bar, or line.
When you create a dual axis chart, you can make a combination chart by selecting different mark types for each y-axis.
6. (Optional) [Adjust Mark Size in a Viz](#) .
7. (Optional) [Change Viz Colors](#) .
8. (Optional) [Highlight Data in a Viz](#) .
9. (Optional) [Group Data by Color in a Viz](#) .
10. (Optional) [Change Field Options for Visualizations](#) .
11. (Optional) [Set Up Visualization Options](#) .
12. (Optional) [Change the Formatting of a Numeric or Currency Summarization in a Viz](#) .
13. (Optional for the KPI viz type.) [Set Up KPI Viz Options](#) .
14. (Optional for the Waterfall viz type.) [Set Up Waterfall Viz Options](#) .
15. (Optional for the Donut Chart viz type.) [Set Up Donut Chart Options](#) .
16. (Optional) [Filter Data in a Viz](#) .

- 17.(Optional) [Sort Data in a Viz](#) .
- 18.(Optional) [Limit Viz to the Top N Values](#) .

Related Information

Concepts

[Concept: Discovery Board Workspace](#)

[Concept: Using Drop Zones in a Viz](#)

Tasks

[Steps: Create Visualizations](#)

Adjust Mark Size in a Viz

Prerequisites

Security: *Discovery Boards: Create* domain in the System functional area.

Context

You can adjust the size of Point mark types in Chart and Scatterplot visualizations. To adjust the size based on the field value per mark, add a summarization field to the Size drop zone.

Steps

1. Select a Scatterplot viz or a Chart viz with **Point** as the mark type.
2. Drag a summarization field from the field panel to the **Size** drop zone.

Group Data by Color in a Viz

Prerequisites

Security: *Discovery Boards: Create* domain in the System functional area.

Context

For some viz types, you can add a field to the Color drop zone to encode the marks so the groups are visually differentiated.

Most viz types, such as Chart and Donut Chart, accept an attribute field in Color, which creates additional groupings in the viz. Heatmap vizs accept a summarization field in Color.

Steps

1. (Area Chart, Bar Chart, Chart, and Line Chart viz) Select a viz with at least 1 attribute field in the **X-Axis** drop zone.
2. (Donut Chart viz) Select a Donut Chart viz with a summarization field in the **Angle** drop zone.
3. (Heatmap viz) Select a Heatmap viz.
4. Place a field in the **Color** drop zone.
Suppose you have a Chart viz, and you place the worker field in **X-Axis**, Count in **Y-Axis**, and the gender field in **Color**. The viz groups the workers by gender and uses a different color for each gender.

Related Information

Concepts

[Concept: Color in Discovery Boards](#)

Tasks[Change Viz Colors](#)

Change Viz Colors

Prerequisites

Security: These domains in the System functional area:

- *Drive*
- *Discovery Boards: Create*

Context

You can select color palettes to use for your discovery boards and assign color options at the viz level.

Steps

1. Open a discovery board and click the **Formatting** panel.
2. Select a color palette to use for the board and any board-level color overrides.
3. To override board-level palettes and overrides, select a viz and set any field value overrides for the viz.
When you override a palette color, Workday assigns the next color in the palette to the next field value, and so on, if multiple overrides exist.
4. Clear any overrides that you no longer need.

Related Information

Concepts

[Concept: Color in Discovery Boards](#)

Tasks

[Group Data by Color in a Viz](#)

Highlight Data in a Viz

Prerequisites

Security: These domains in the System functional area:

- *Drive*
- *Discovery Boards: Create*

Context

To emphasize specific aspects of the data in a table viz, you can apply:

- Formatting to highlight all values in the table or in a column. Example: You set the font to bold type for all values in the first column of the table.
- Conditional formatting to highlight values that meet set conditions. Example: You set the background color to light green for all table values greater than or equal to 500.

You can apply conditional formatting to fields of these types:

- Boolean.
- Date.
- Number (including amounts).

- Text.

Steps

1. Open a discovery board and click the **Formatting** panel.
2. Select the entire table or the column you want to highlight.
3. In the formatting panel, select either:
 - *Value* to highlight the entire selection.
 - A filter operator to highlight values based on set conditions, when you select a column with a field type that supports conditional formatting. Example: *Is greater than or equal to*.
 - A field type and a filter operator to highlight values based on set conditions, when you select the table. Example: *Date* and *Is between*.
4. Select formatting options to highlight the selection:
 - Bold
 - Italic
 - Underline
 - Text Color
 - Background Color
5. (Optional) From the related actions menu, add or remove conditional formatting or formatting conditions.

Result

Workday applies the selected formatting to the table and highlights the relevant data. When you define multiple conditional formatting conditions for a selection, or a mix of formatting and conditional formatting, Workday evaluates each value in the selection and applies:

- The conditional formatting from the first set condition that the value matches.
- The formatting that you define for all values in the selection, when the value doesn't match any set condition.

Related Information

Tasks

Steps: [Modify Visualizations](#)

Change Field Options for Visualizations

Prerequisites

Security: *Discovery Boards: Create* domain in the System functional area.

Context

You can change field names and how Workday displays summarization data for fields in your viz. You can also change the display name of drop zones and reset to the default name.

For Waterfall viz types, click **Viz Options** to configure the display name.

For KPI viz types, you can change the display names in the **Configuration** panel.

Steps

1. (Optional) On the **Builder panel**, access the drop zone menu, select **Field Options** and update the **Field Display Name**. Select **Reset to default name** to revert to the original display name.

You can enter a unique display name for these viz types:

Viz Type	Drop Zones
Area Chart	X-Axis, Y-Axis
Bar Chart	X-Axis, Y-Axis
Bubble Chart	X-Axis, Y-Axis
Chart	X-Axis, Y-Axis
Donut Chart	Angle, Color
Heatmap	X-Axis, Y-Axis, Color
Line Chart	X-Axis, Y-Axis
Scatterplot	X-Axis, Y-Axis

2. (Available for all viz types except KPI and Waterfall.) Select a field in a drop zone and select **Field Options**.
3. (Available for Pivot Table vizzes.) From **Field Options**, in the **Display As** drill down menu, you can display the summarization field as a percentage of a total.
Overall Total is unavailable when the pivot table includes rows only.
4. (Optional) In the **Field Display Name** field, enter a unique display name.

Related Information

Tasks

[Set Up Waterfall Viz Options](#)

[Set Up KPI Viz Options](#)

Set Up Visualization Options

Prerequisites

Security: These domains in the System functional area:

- *Drive*
- *Discovery Boards: Create*

Context

You can configure vizzes to customize the display, such as managing the sort order of fields and overriding populated values for **Drill By** and **Show Details**.

Steps

1. Access the **Configurations** panel on your visualization.
2. (Optional for Pivot Table viz types) As you complete the **Columns** section, consider:

Option	Description
Reset to default	Select to reset all configuration on the selected viz.

Option	Description
Sort Order	Change the sort order to: • <i>Alphabetical - Ascending or Alphabetical - Descending</i> • <i>Value Total - Ascending or Value Total - Descending</i>
Number of column groupings	Set the number of column groupings. There is a maximum limit of 250.
Total	Select the Hide Column Totals check box to hide the total column value, which displays the cumulative effect of all increments in the last bar using a separate color.

3. (Optional for Pivot Table viz types) As you complete the **Rows** column, consider:

Option	Description
Reset to default	Select to reset all configuration on the selected viz.
Sort Order	Change the sort order to: • <i>Logical - Ascending or Logical - Descending</i> for fields with logical sorting enabled. • <i>Alphabetical - Ascending or Alphabetical - Descending</i> • <i>Value Total - Ascending or Value Total - Descending</i>
Number of row groupings	Set the number of row groupings. There is a maximum limit of 12000.
Total	Select the Hide Row Totals check box to hide the total row value, which displays the cumulative effect of all increments in the last bar using a separate color.

4. (Optional for Area Chart, Bar Chart, Chart, and Line Chart viz types) As you complete the **X-Axis** section, consider:

Option	Description
Reset to default	Select to reset all configuration on the selected viz.
Sort Order	Change the sort order to: • <i>Alphabetical - Ascending or Alphabetical - Descending</i> • <i>Value Total - Ascending or Value Total - Descending</i> • <i>Field - Alphabetical Ascending or Field - Alphabetical Descending</i>
Number of axis groupings (Max 100)	Set a limit for the number of axis groupings. If you set a limit, select the Summarize remaining values check box to display an <i>Other</i> grouping on the x-axis to view the

Option	Description
	remaining results. Clear the check box to exclude the remaining results.
Display Name	Change the axis display name or select Reset to default name to revert to the original display name.

5. (Optional for Area Chart, Bar Chart, Chart, and Line Chart viz types) As you complete the **Y-Axis** section, you can change the **Axis display name** or select **Reset to default name** to revert to the original display name.

6. (Optional) As you complete the **Color** section, consider:

Option	Description
Reset to default	Select to reset all configuration on the selected viz.
Sort Order	Change the sort order to: • <i>Alphabetical - Ascending or Alphabetical - Descending</i> • <i>Value Total - Ascending or Value Total - Descending</i> • <i>Field - Alphabetical Ascending or Field - Alphabetical Descending</i>
Number of groupings (Max 250)	Set the limit for the number of groupings. If you set a limit, select the Summarize remaining values check box to display an <i>Other</i> grouping on the x-axis to view the remaining results. Clear the check box to exclude the remaining results.
Display Name	(Optional for Donut Charts) Change the display name or select Reset to default name to revert to the original display name.

7. (Optional for Area Chart, Bar Chart, Line Chart, Matrix Chart, Heatmap, and Scatterplot viz types) As you complete the **Options** section, consider:

Option	Description
Data Labels	Select Display data labels to show data values as text on the viz. For Area, Bar, and Line viz types: • Select All to display data labels for all measures on the viz. • Select Custom and then select the specific measure(s) to display data labels for. (For Matrix charts, if Point is selected, only the All option is available). If there is not enough space on the viz to display data labels without overlapping, some labels may be hidden. You can try to: • Select only specific measures to display labels for.

Option	Description
	- Configure decimal points to shorten the data label. - Expand the viz for more display room. - For stacked bar charts, zoom into the chart until the label displays.
(Optional Area Chart, Bar Chart, and Line Chart) Reference Lines	Select Add Line to add a reference line to compare data against specific values. Select the Line Type and your specifications for the reference line: Constant value Measure Workday Delivered Fields Select the Label Display for your reference line: Name and Value Name Value You can add multiple reference lines. Remove or disable reference lines from the related actions menu. Note: If there is 1 measure in the drop zone and this is used as a reference line, the default <i>Count</i> measures the viz. To use the same measure as a Y-axis value and a reference line, the user must add the measure to the Y-axis drop zone twice and identify 1 of these measures as the reference line.

8. (Optional for KPI viz types) Complete the **Comparison Measure** and **Indicator** tabs, see [Set Up KPI Viz Options](#) .

9. (Optional) As you complete the **Show Details** section, consider:

Option	Description
Enable Show Details for this viz	Turn the toggle: - On to enable the viz to display Show Details when you select aggregated marks and cells. - Off to disable the viz from displaying Show Details.
Override default fields and settings	Turn the toggle: - On to enable custom field configurations for Show Details. - Off to revert fields to the default values set up by your admin.
Field	(Available when you toggle on Override default fields and settings .) Add, remove, or reorder fields for the viz.

Option	Description
Sort Order	(Available when you toggle on Override default fields and settings .) Manage the sort order of Show Details fields by selecting <i>Alphabetical - Ascending</i> or <i>Alphabetical - Descending</i> .

10. (Optional) As you complete the **Drill By** section, consider:

Option	Description
Enable Drill By for this viz	Turn the toggle: - On to enable the viz to display Drill By when you select aggregated marks and cells. - Off to disable the viz from displaying Drill By.
Override default fields and settings	Turn the toggle: - On to enable custom field configurations for Drill By. - Off to revert fields to the default values set up by your admin.
Field	(Available when you toggle on Override default fields and settings .) Add, remove, or reorder fields for the viz.
Sort Order	(Available when you toggle on Override default fields and settings .) Manage the sort order of Drill By fields by selecting: <i>Alphabetical - Ascending</i> or <i>Alphabetical - Descending</i>. <i>Value Total - Ascending</i> or <i>Value Total - Descending</i>. <i>Logical - Ascending</i> or <i>Logical - Descending</i> for fields with logical sorting enabled.

Related Information

Tasks

[Set Up KPI Viz Options](#)

[Set Up Waterfall Viz Options](#)

[Set Up Donut Chart Options](#)

Reference

[2023R2 What's New Post: Discovery Board Visualization Defaults](#)

Change the Formatting of a Numeric or Currency Summarization in a Viz

Prerequisites

Security: *Discovery Boards: Create* domain in the System functional area.

Context

You can specify the number format for Numeric or Currency summarization fields displayed in a viz. When you edit a KPI or Waterfall viz, the number formatting you specify applies to every summarization field.

Steps

1. Select a viz that includes a summarization field.
2. Hover over a summarization field in a drop zone and select **Formatting**.
3. Select the desired formatting option:

Option	Description
Custom	Select a format from the list of supported values or enter a custom format. Workday displays an error message for unsupported formats.
Automatic	Workday automatically determines the best display based on the data in the viz.
Numeric	• Select how to display the Negative Values. • Select the number of Decimal Places to round the data to. • Select the Display Unit from Thousands (K), Millions (M), Billions (B), or Trillions (T). • Select or clear the Include thousands separators check box.
Currency	• Select how to display the Negative Values. • Select the number of Decimal Places to round the data to. • Select the Display Unit from Thousands (K), Millions (M), Billions (B), or Trillions (T). • Select or clear the Include thousands separators check box. • Select or clear the Include currency symbols check box.
Percentage	• Select how to display the Negative Values. • Select the number of Decimal Places to round the data to.

4. Select **Reset to Default** to revert to the original values and formatting.
The sample value displays an indication of how the formatting looks in the viz.

Set Up KPI Viz Options

Prerequisites

Security: *Discovery Boards: Create* domain in the System functional area.

Context

When you create or edit a KPI viz, you can configure some KPI-specific options, such as:

- The variance (difference) between a base measure and a comparison measure. To display the variance, you must include a field in the **Comparison Measure** drop zone.
- The variance (difference) between the metrics from a base time period and a comparison time period. To display the variance, you must include a field in the **Date** drop zone.
- A visual cue that indicates the progress toward the intended result. The visual cues use an icon and/or prominent background color to indicate progress. You can add rules that define when the current value is expected, a warning, or critical. For time comparisons, you can add rules that indicate whether a KPI is on a positive or negative trend.

Steps

1. Select a KPI viz.
2. On the **Configurations** panel, define how to calculate the variance in the **Comparison Measure** or **Period Comparison Date** tab.
3. (Optional) Select how to display the variance. For percentages, select the number of **Decimal Places** to display.
4. (Optional) Define the base and comparison periods for time period comparison using dynamic or static dates.
5. (Optional) Enable or disable **Show Date Ranges on Visualization** from the related actions menu to view or hide the date ranges for the base period and/or comparison period on the viz.
6. (Optional) Select the **Indicators** tab, and add 1 or more rules that define progress toward the intended result.
 - a) Select which value to evaluate against in each rule, either the **Base measure value** or **Percentage of target**. For date values, select **Base Measure Value**, **Variance as a Value**, or **Variance as a Percentage**.
 - b) In the first rule, define the rule conditions by selecting the comparison operator, comparison value, and the visual indicator to display.
 - c) (Optional) Click **Add Rule** to add another rule.
 - d) To change the order of rules, click the handle on the right side of a rule and drag into the desired position.

Workday evaluates the rules in order starting at the top. The viz displays the indicator for the first matching rule.

Related Information

Reference

[2021R2 What's New Post: KPI Viz Type for Discovery Boards](#)

Set Up Waterfall Viz Options

Prerequisites

Security: *Discovery Boards: Create* domain in the System functional area.

Context

When you create or edit a Waterfall viz, you can configure how to display the data and labels in the viz.

You can create a Waterfall viz using either of these methods:

- One field each in the **Measures** and **Dimensions** drop zones. Workday displays how the values of a dimension field incrementally increase or decrease the value of a measure field. Example: You can

display headcount (measure field) by fiscal period (dimension field). You can change the sort order of the dimension field values.

- Multiple fields in the **Measures** drop zone. Workday displays each field in order on the x-axis, using the top field as the starting value. You can change the order of the measure values in the viz by changing the order of the fields in the Measures drop zone.

The method you use to create a Waterfall viz determines the viz options you can configure.

Steps

1. Select a Waterfall viz.
2. On the **Builder** panel, click **Viz Options**.
3. As you complete this step, consider:

Option	Description
Show data labels	Display the data value as text above each incremental increase or decrease.
Hide Start Value	By default, Workday uses the first value on the x-axis as the start value and applies the Start color displayed in the viz legend to the first value. When you enable this option, Workday: • Hides the Start label from the viz legend. • Changes the color of the first value on the x-axis to use either the Increase or Decrease assigned color according to the field value.
Hide total	Hide the total value, which displays the cumulative effect of all increments in the last bar using a separate color.
Sort Order	(Dimension drop zone only) Select how to sort the values from the field in the Dimensions drop zone. You can sort the data alphabetically, logically, or numerically in ascending or descending order.
Limit	(Dimension drop zone only) You can apply a limit on the number of field values displayed on the axis with the dimension field. For more information on limiting data, see Limit Viz to the Top N Values .
Axis display names	Override the default names that display on the x-axis and y-axis of the viz.
Measure display names	Override the default display names for each field in the Measures drop zone. When the viz has multiple fields in the Measures drop zone, Workday uses these display names for the first measure and each incremental measure.
Label display name	Override the default display name for the total value (if included).

Related Information

Reference

[2022R2 What's New Post: Waterfall Viz Type for Discovery Boards](#)

Set Up Donut Chart Options

Prerequisites

Security: *Discovery Boards: Create* domain in the System functional area.

Context

When you create or edit a Donut Chart viz, you can configure how to display the data and labels in the viz.

Steps

1. Select a Donut Chart.
2. On the **Builder** panel, click **Angle Options**.
3. As you complete this step, consider:

Option	Description
Angle Display Name	The label to display in the center of the donut chart.
Show Value Data Labels	Display the data label next to each segment as a numeric value.
Show Percentage Data Labels	Display the data label next to each segment as a percentage value.
Hide Total	Hide the total value that is displayed in the center of the donut chart.
Space Out Segments	Increase the spacing between each segment of the donut chart. The viz tile must be big enough to display the spacing between segments.
Show Leader Lines	Display lines from each segment to its data label.

Concept: Color in Discovery Boards

You can use color in discovery boards to apply more meaning to your vizzes. We provide a variety of color palettes to help differentiate data across vizzes. Use the Formatting panel to make color selections for:

- Board level: Select a palette and specify any field value overrides.
- Viz level: Select a viz and specify any field value overrides.

Palettes and Overrides

You pick a color palette for a board and then assign colors that are meaningful. Example: You could assign colors to represent specific products or functional areas; a company could use the branding colors of the top 5 competitors on its vizzes to quickly identify each product while analyzing the data.

You can change the overall color aesthetic on discovery boards without having to change each viz manually. You can select from a variety of color palettes, including ones that are color-blind friendly or high contrast to differentiate colors more easily.

You can override field value colors for most viz types:

Viz Type	Overrides Available
Bar Chart	Yes
Line Chart	Yes
Area Chart	Yes
Scatterplot	Yes
Heatmap	No
KPI	NA
Waterfall	Yes
Chart	Yes
Donut Chart	Yes

Color Assignment Rules and Considerations

- Colors from the selected palette are assigned dynamically, so the color assignment might change based on the data in the viz. If you want to apply a specific color to a data value, assign the color manually as an override to persist the color. Color assignments made by the system are based on the legend items returned in the viz query, which takes instance-level and cell-level security into consideration.
- Color assignments for measures apply to all data sources used on the board. Color assignments for dimensions are specific to the data source and can be different.
- Color assignments depend on whether there's a field in the Color drop zone on the Builder panel. Until there's a dimension in the Color drop zone, color assignments are driven by measures.
- Color assignments are persisted when switching between chart types that support color assignments.
- For Waterfall charts, there's a 4-color palette that represents the start, increase, decrease, and total data values. You can swap the increase and decrease colors from the palette to make those selections more meaningful. Example: For a decrease that is actually a positive trend, assign a color that visually represents the trend (green instead of red).

Related Information

Tasks

[Group Data by Color in a Viz](#)

[Change Viz Colors](#)

Reference

[2022R2 What's New Post: Color in Discovery Boards](#)

Filtering and Sorting Data in Visualizations

Filter Data in a Viz

Prerequisites

These domains in the System functional area:

- *Drive*
- *Discovery Boards: Create*

Context

You can constrain data in a viz by filtering on an attribute field. Viz filters enable you to filter data in a single viz, while sheet filters enable you to filter data on all vizzes in the sheet that use the same data source. You can reorder filters or move the filter to a different filter group.

As you filter data in a viz, consider:

- Some filter operators will be slower than others.
- Workday applies the filter in the order that they're listed in the filter panel. Consider placing filter conditions that constrain the largest amount of data toward the top of the filter panel for better performance.

Steps

1. Access your discovery board from **Drive**.

You can also access your discovery board as a worklet from the Home page. See [Set Up Discovery Boards as Home Page Worklets](#).

2. Select a viz that uses the combination of data source and data source filter you want to filter.
3. Select the filter panel on the left side of the discovery board workspace.
4. Add a filter to the **Sheet Filters** or **Viz Filters** section.
5. As you complete the task, consider:

Option	Description
Field	Select the field that you want to filter. Workday doesn't support lookup date rollup calculated fields on sheet or viz filters.
Filter Operator	Workday displays the operators available for the selected field.
Filter Values	Available options depend on the selected field and filter operator.
AND/OR Filter Conditions	Use a combination of AND/OR filter conditions on viz or sheet level. You can change the AND filter to OR and vice versa.
Nested Group	Add a nested filter group at each filter level. Nesting levels are indicated through the brackets around the group and numbered headings. You can apply up to 4 levels of nesting.

6. (Optional) Select the filter menu and select an option to change the properties of the filter:

Option	Description
Determine Value Dynamically	Use this option to change the filter from static to dynamic, meaning that Workday determines the filter value based on some context, such as the current date or current user. When you update a filter to be dynamic, select a field that determines the filter value dynamically. These fields are on the Global business object. These Global fields aren't available: • Fields with built-in prompts.

Option	Description
	- Calculated fields with these functions: - Date Constant - Lookup Field with Prompts - Numeric Constant - Prompt for Value - Text Constant Example: In a date filter's input, you select the field First Day of This Month. When you view the discovery board, Workday: - Determines the first day of the current month. - Uses that value for the filter. - Displays data in the viz based on that filter value.
Move to Sheet and Move to Viz	Use this option to change which vizzes the filter applies to. A viz filter applies to the selected viz, and a sheet filter applies to all vizzes on the sheet that use the same data source and data source filter.
Create Control and Link	Use this option to create a control and link it to the filter, giving viewers control over the data returned. When you select a value in a control, Workday applies that value as the input to the linked filter. Any changes you make to the values of a control in view mode only apply to view mode in your current session. Example: You are in view mode and select different values for the control, and then switch to edit mode. Workday reverts the control values to the saved version of the discovery board. See Concept: Discovery Board Controls .
Remove	Deletes the filter from the discovery board.
Disable	Use this option to turn off the filter temporarily without removing it.

Related Information

Concepts

[Concept: Viz Filters](#)

[Concept: Discovery Board Controls](#)

Tasks

[Limit Viz to the Top N Values](#)

[Set Up Discovery Boards as Home Page Worklets](#)

Reference

[2023R1 What's New Post: Discovery Board Controls](#)

[2023R1 What's New Post: Discovery Board Filters](#)

Sort Data in a Viz

Prerequisites

Security: *Discovery Boards: Create* domain in the System functional area.

Context

You can sort attribute data in a visualization to arrange the data in a meaningful order for analysis, such as:

- Alphabetically
- Chronologically
- Logically
- Numerically

Additionally, in the view mode for a table, you can sort the table data on a single column header by ascending or descending and reset to the default sort depending on the sort options available for the column data.

You can sort the data in a Waterfall viz when there's a field in the **Dimensions** drop zone. For details, see [Set Up Waterfall Viz Options](#).

Steps

1. Select a viz with at least 1 attribute field in a drop zone.
2. (Area Chart, Bar Chart, Chart, Heatmap, and Line Chart viz) Click the drop zone options for the **X-Axis** or **Color** drop zone.
3. (Donut Chart and Scatterplot viz) Click the drop zone options for the **Color** drop zone.
4. (Pivot Table viz) Click the drop zone options for the **Columns** or **Rows** drop zone.
5. (Table viz) Hover over an attribute field in the **Columns** drop zone and select **Table Options**.
6. Select the **Sort Order**.

When you add fields to a viz, Workday automatically sorts the data by **Logical Sort**. For example, Workday will sort the months of the year in a chronological order starting with January rather than in an alphabetical order. If **Logical Sort** isn't applicable to the viz, Workday automatically sorts the data alphabetically (chronologically and numerically for date and numeric fields) in ascending order.

For Donut Charts, the first mark in a sorted list starts at the Y-axis, which is the top half of a vertical line going through the circle. The next mark in the sorted list displays next to the first in a clock-wise rotation.

Limit Viz to the Top N Values

Prerequisites

Security: *Discovery Boards: Create* domain in the System functional area.

Context

Another way to filter data in a visualization is to apply a limit on the number of attribute values displayed. You can limit attribute values in these viz types:

- Area Chart
- Bar Chart
- Chart
- Donut Chart
- Heatmap
- Line Chart
- Scatterplot
- Pivot Table

Workday limits the data if the number of unique values exceeds the configured limit. Workday automatically defines different limit values depending on the viz type and drop zone. Example: Workday automatically

limits the **Color** drop zone in Donut Chart vizzes to 20 values. You can change the limit values of different drop zones, up to a different maximum for each.

Limiting data in a viz works with how you sort the data. You can change how you sort the data when you edit the limit settings.

For most viz types, you can sum all other values into a single value labeled Other. You can't sum all other values in a Pivot Table viz.

You can limit the values in a Waterfall viz when there's a field in the **Dimensions** drop zone. For details, see [Set Up Waterfall Viz Options](#).

Steps

1. Select a viz with at least 1 attribute field in a drop zone.
2. Click the drop zone options for the **X-Axis**, **Columns**, **Rows**, or **Color** drop zone that contains an attribute field.
When you change the orientation of a Bar Chart viz to horizontal, you can click the **Y-Axis** drop zone options.
3. Select the number of values to **Limit**.
4. (Optional for Area Chart, Bar Chart, Chart, Donut Chart, Heatmap, Line Chart, and Scatterplot)
Select **Sum Remaining Values**.

Related Information

Reference

[Reference: Reporting Limits](#)

Concept: Viz Filters

You can filter on an attribute field to constrain the data Workday displays in discovery board sheets and visualizations. Filtering on a field enables you to include records in the viz based on the values of the selected field.

Create and edit filters on the **Filter panel**. You can create these types of filters:

- Viz filters, which apply only to the selected viz.
- Sheet filters, which apply to all vizzes on the sheet that use the same data source and data source filter.

You can create multiple sheet and viz filters on a field with a combination of AND and OR filters. You can reorder filters and move a filter to a different filter group.

As you create filters, consider that Workday doesn't support lookup date rollup calculated fields on sheet or viz filters.

Related Information

Tasks

[Filter Data in a Viz](#)

Sharing Visualization Insights

Export a Viz as a Custom Report

Prerequisites

Security: These domains in the System functional area:

- *Custom Report Creation*
- *Discovery Boards: Create*

Context

You can create a custom report using the data and configurations from these viz types:

- Chart
- Donut Chart
- Pivot Table
- Table

When you create a report from a viz, consider:

- Each time you create a report from a viz, Workday creates a new report definition.
- Fields not supported in discovery boards might display in custom reports. Example: Discovery boards don't support time field types, but Report Writer does. If you use a datetime field, Workday displays only the date in a viz, but displays the date and time in the custom report.
- The chart and sort options you select for the viz might not display the same way in the custom report.
- The drill by and show details fields you set up might differ in the custom report.
- The type of report that Workday creates depends on the viz type.
 - A Chart and Donut Chart viz becomes a Matrix report with the chart and table displayed.
 - A Pivot Table viz becomes a Matrix report with only the table displayed.
 - A Table viz becomes an Advanced report.
- For Chart and Donut Chart vizzes, color overrides aren't exported.
- Workday assigns you as the owner of the report.
- Workday sets the report definition sharing options to **Don't share report definition**.
- You can edit the report definition after Workday creates the report.

Steps

1. Select a viz.
2. Select **Create Report** from the viz menu in the upper right corner.
3. Enter the name of the report definition.

Result

Workday creates the report definition and runs the report. You can view the report immediately in a new tab.

Download Visualizations

Prerequisites

Security: *Discovery Boards*: Create domain in the System functional area.

Context

You can download visualizations as CSV or PNG image files to your computer.

Steps

1. Select a viz.
2. (Available for all viz types except Matrix Report - Pivot Tables and Advanced Report - Tables.) Select **Download as PNG** from the related actions menu of the viz.
3. (Available for Matrix Report - Pivot Tables and Advanced Report - Tables only.) Select **Download as CSV** from the related actions menu of the viz.

You can also select **Download as CSV** from the related actions menu of **Drill By** and **Show Details** results.

Downloading large volumes of data might impact the performance of your browser. You can't download multiple CSV files simultaneously.

If you want to download the data as csv but don't see the **Download as CSV** viz menu option, check with your administrator to ensure that the security group you belong to isn't configured to exclude these functionalities under the **Excludes Functionality** prompt:

- *Export to PDF or Excel*
- *Export to PDF or Excel (Except Payslips and W2s)*

See [../authentication-and-security/authentication/authentication-policies/ala1377540590379.dita](#) for more information on how administrators can restrict access to export functionalities for security groups.

4. (Optional) Access the **Text Import Wizard** in Microsoft Excel to display localized text from the CSV file.

You can access the **Text Import Wizard** by:

- Clicking **Data > From Text/CSV** from the menu bar of Excel.
- Accessing Excel, then selecting the downloaded file.

Result

Workday generates a CSV or PNG file and saves it to the directory configured in your browser. The filename is the same as the viz name, and the viz title and description (if populated) export along with the viz.

When you open the CSV file, consider the application you select might impose limitations different from Workday. Example: Microsoft Excel limits the number of characters in each cell to 32,767.