

DKAN Quick Start Guide

Creating Visualizations

Information in this document contains excerpts from the comprehensive DKAN manual available at <https://docs.getdkan.com/en/latest>

Introduction	1
Step One - Choose a Resource	1
Step Two - Define Variables	2
Step Three - Choose Chart Type	3
Step Four - Preview and Adjust	4
Query Editor	5
Filter Editor	6
Chart Configuration	7
X Axis	7
Y Axis	7
General	8
Save the chart	9
Embedding the chart	9

Introduction

The DKAN data portal software allows for visualizations (i.e. charts) to be created from dataset resources, where that resource is machine-readable. Machine-readable resources are typically resources that have been uploaded in CSV format and have been loaded into the *Datastore*. For more details on loading CSV files into the datastore, see the *Adding a dataset* quick start guide.

Step One - Choose a Resource

- Enter a title for the chart.
- Enter a description if needed.
- Then start typing the title of a resource that you would like to use as the data source. A list will appear, select the resource from the list.
- OR, if the data you want to use is not on your site, click the Upload Data tab to upload a CSV data file.
- Click the Next button.

Add Chart

1 Load data
2 Define variables
3 Choose chart type
4 Preview and adjust

Title *

Description

Internal Data
Upload Data

To create a chart using data from a resource that already exists on the site, start typing the title of the resource here. Select the resource from the list that appears.

Existing resource

○

Type the title of the resource to use for the data.

Or, if the data is in a file that is not on your site, click the Upload Data tab to upload a file.

Load Data

Source Type *(Experimental : Backends other than DKAN are still a work in progress.)*

CSV
⌵

Click next →
Next

Step Two - Define Variables

- **Series:** Add all the columns you would like to plot along the y-axis, the **value** axis. A collection of related values is what makes up a 'series'.
- **Y-Field Data Type:** The data type will be auto-detected but if you see issues you can manually select the data type here.
- **X-Field:** Choose a single column for the x-axis, the **category** axis.

- **X-Field Data Type:** The data type will be auto-detected but if you see issues you can manually select the data type here.

Define Variables

Source

/node/e0e42cb1-e515-431f-b762-86ac46909784/download

Series ⓘ

Percent Eligible to Retire ✕ Percent Retirements ✕

Y-Field Data Type ⓘ

Number String Date Auto

X-Field ⓘ

Fiscal Year

X-Field Data Type ⓘ

Number String Date Auto

Back Next

Step Three - Choose Chart Type

Select the chart type that will best represent your data. **NOTE:** X and Y Axis Fields are not supported by the *Pie Chart* type.

Choose Chart

Source

/node/4d6d64b8-5c1d-49b6-a222-652fd4a7cb35/download

X Field

date

Series fields

price



Step Four - Preview and Adjust

You can adjust colors, margins, include a goal, labels, tick values, and more. Click the question mark icons if you need help understanding the configuration options.

Preview and Adjust

Chart Preview: Note that by default the preview only displays up to 100 records. Click on the Dataset tab below to review the data in use. Adjust the start and end fields of the pager to set the number of records you wish to use.

Source
/node/e0e42cb1-e515-431f-b762-86ac46909784/download

X Field
Fiscal Year

Series fields
Percent Eligible to Retire, Percent Retirements

Graph Type
multiBarChart

Click the question mark icons if you need help understanding the configuration options.

By default the chart will use the first 100 records of your data source. To use all records, click the Dataset tab to reveal the data pager, edit the max range value from 100 to the total number of records present.

Preview and Adjust

Chart Preview: Note that by default the preview only displays up to 100 records. Click on the Dataset tab below to review the data in use. Adjust the start and end fields of the pager to set the number of records you wish to use.

Click the Dataset tab to see the data used to create the chart

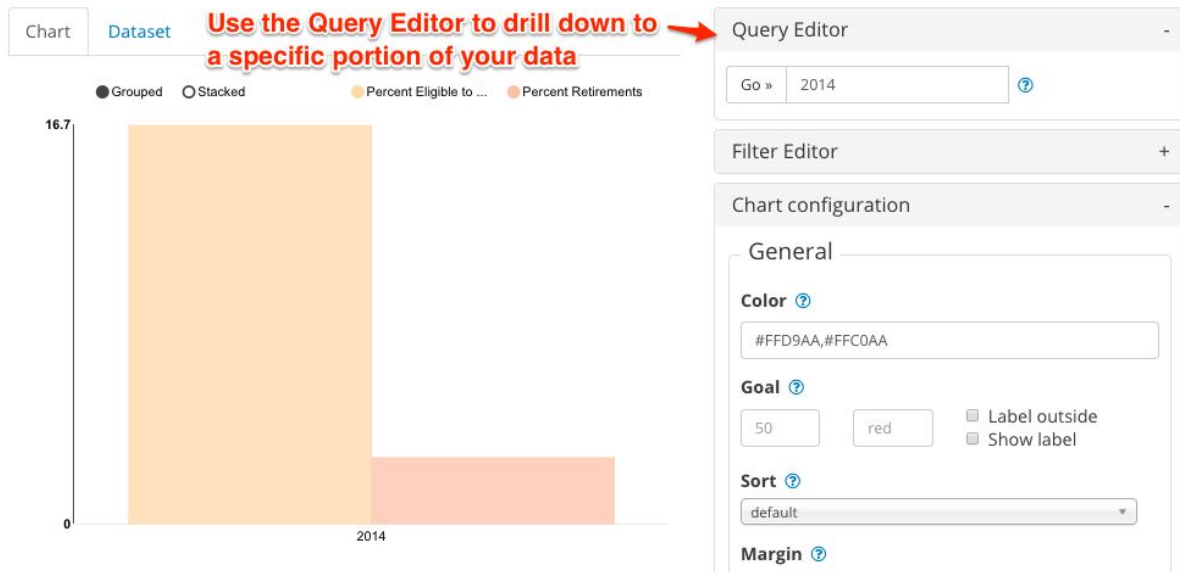
The pager shows how many records are being used to create the chart (default is 100)

The total number of records in the source

OBJE...	ROAD...	ROAD...	LNCD	DESCR	BEGI...	END_...	Shap.
2049	75000...	R	1	DESIG...	0.076	0.364	463.
2050	88070...	R	1	DESIG...	0.073	5.21	826.
2051	89010...	R	1	DESIG...	11.266	14.64	543.

Query Editor

Click the '+' on the query editor to see the query input field. Enter text to query the data. Returned rows will contain data matching your text (including partial text matches). Click on the Dataset tab to better see how the data is modified by your query.



Filter Editor

Click the '+' on the filter editor to add one or more filters to limit the data used for the chart. Multiple filters will be applied with the AND operator (all criteria must be met for the data to be included in the chart).

1. Create a filter

- Select the field you would like to filter by.
- Select filter type: Select Value to filter by strings (labels), select Range to filter by numerical values, and select Geo distance to filter by geographical data.
- Click **Add**
- Value filters check for exact matches (no partial text matches; use the Query Editor instead if you need to search for partial text matches)

1. Configure the filter

- Fill in the fields to complete the filter.

- Click **Update** to reload the chart.

To remove a filter, click the trash can icon next to the filter name.

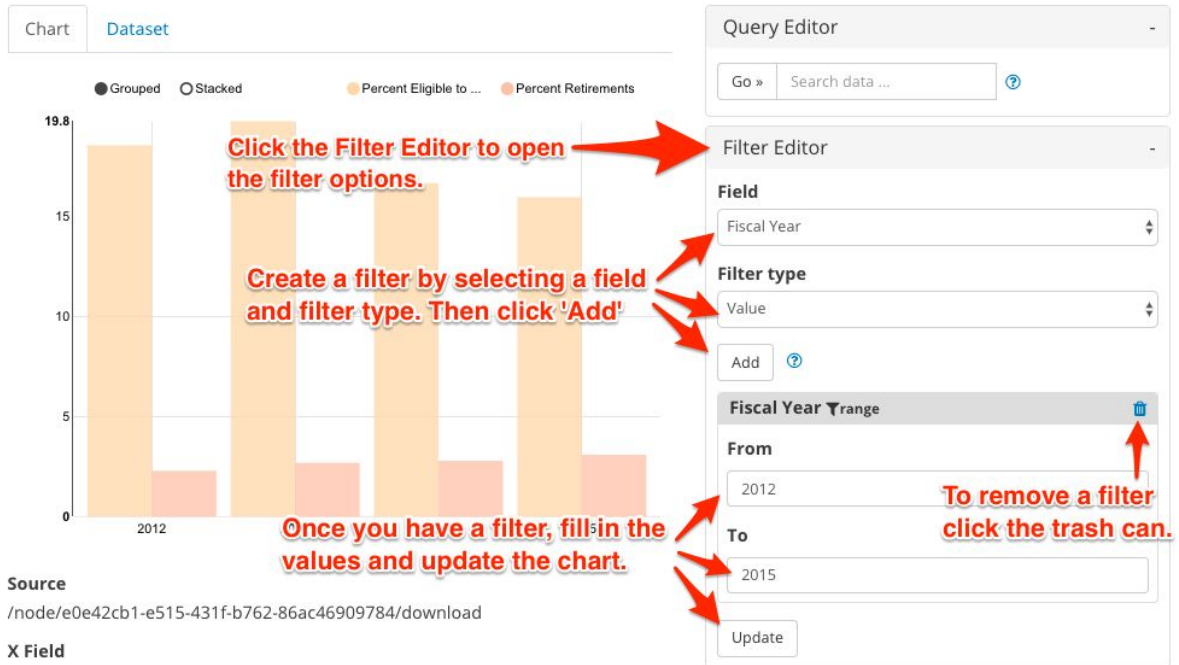


Chart Configuration

X Axis

- **Format** Select an appropriate format for the X Axis labels.
- **Axis Label** will provide a custom label for the x axis.
- **Note:** Axis labels do not display for Pie Charts.
- **Label rotation** will change angle of label values.
- **Tick Values** Enter a numerical range to set the start and end values to display.
- **Step:** Use the Step field to define the value between each tick within the range. **NOTE:** If the range set for tick values is smaller than the range of complete data represented, the chart will be abbreviated.

Y Axis

- **Axis Label** Provides a custom label for the y axis.
- **Note:** Axis labels do not display for Pie Charts.

- Adjust the *distance* field if your axis label overlaps the y-axis data labels. You can move the label left with positive values, and right with negative values. You may need to adjust the left margin of the chart as well.
- **Tick Values** Enter a numerical range to set the start and end values to display.
- **Step:** Use the Step field to define the value between each tick within the range. **NOTE:** If the range set for tick values is smaller than the range of complete data represented, the chart will be abbreviated.

General

Color: Set the color the chart is drawn in. Use either a [HEX color code](#) or a [valid css color name](#) Separate multiple colors with commas.

Goal: Overlay a goal or target line on the chart.

Margin: Enter value of margin in the order: *top, right, bottom, left*

Show Title: Display the title you entered on step 1.

Show Controls: Whether to show extra controls or not. Extra controls include things like making multiBar charts stacked or side by side.

Show Legend: Display a legend for the chart.

Show Tooltips: Shows data and label on hover.

Group By X Field:

If there are two or more rows that have the same value in the column assigned to the x-axis field, those rows will be combined and display

as a single data point. This is only relevant for combining numerical data.

Fewer X-axis Labels:

Reduces the number of labels displayed along the x-axis.

Save the chart

Remember to click **Finish** to save your configuration changes.

Embedding the chart

Once configured and saved, a chart can be embedded into other webpages, such as within the data portal in the description field of a dataset and also into external websites.

When viewing a visualization page, click on the `</>` *Embed* button and copy the *Embed code* text. Paste this code into the webpage where you want to display the chart. Note that some website content management systems will require this code to be pasted while editing in *Source* mode.

Nauru Sea Levels

View Edit Delete

Description: Nauru sea levels by year
Existing resource:
Sea levels by year

`</>` Embed

Width

Height

Embed code

```
<iframe width="960" height="600" src="http://d:8090/visualization/ve_chart/5d476af5-d0ae-465b-a738-ccb388a1ef6/iframe" frameborder="0">
```



Year	Minimum	Maximum	Mean
1	2.6	2.8	2.7
2	2.7	2.9	2.8
3	2.5	2.7	2.6
4	2.6	2.8	2.7
5	2.5	2.7	2.6
6	2.6	2.8	2.7
7	2.5	2.7	2.6
8	2.6	2.8	2.7
9	2.5	2.7	2.6
10	2.6	2.8	2.7
11	2.5	2.7	2.6
12	2.6	2.8	2.7
13	2.5	2.7	2.6
14	2.6	2.8	2.7
15	2.5	2.7	2.6
16	2.6	2.8	2.7
17	2.5	2.7	2.6
18	2.6	2.8	2.7
19	2.5	2.7	2.6
20	2.6	2.8	2.7
21	2.5	2.7	2.6
22	2.6	2.8	2.7
23	2.5	2.7	2.6
24	2.6	2.8	2.7
25	2.5	2.7	2.6
26	2.6	2.8	2.7
27	2.5	2.7	2.6
28	2.6	2.8	2.7
29	2.5	2.7	2.6
30	2.6	2.8	2.7

Copy and paste the embed code to embed the chart into other webpages.


The embedded chart will be generated dynamically, which means that if the dataset resource is updated and imported into the datastore then the chart will automatically update to reflect the new data. Depending on configured caching rules there may be a delay before the chart re-generates with new data.



Department of Commerce, Industry and Environment

The Nauru Department of Commerce, Industry and Environment has oversight and responsibility over issues concerning the environment, climate change, and commerce.

Data Extent



Leaflet | Map data © OpenStreetMap

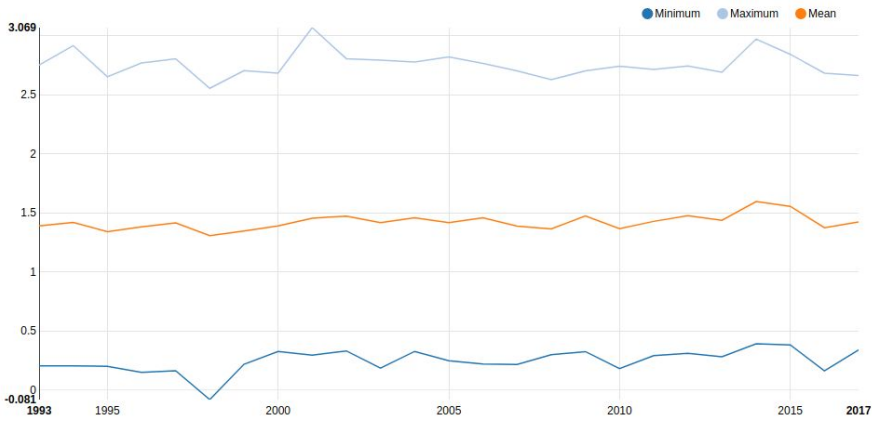
License

Other (Public Domain)

Nauru Sea Levels

Coastal and Marine

Sea level data by month and year 1993 to 2017



Data and Resources

Sea levels by month 

[Preview](#) [Download](#)

Example of a chart embedded into the description of the related dataset.