codetiburon.com

Data Source

User Manual

Version 1.2.2

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Overview

DataSource is a WordPress plugin focused on providing visual presentations of your data within pages of your website. **DataSource** allows you to present data from CSV files, Excel files, Google Spreadsheets, MySQL database or WordPress custom post types as sortable tables, various charts, grids and even maps!

Requirements

Data Source requires minimum WordPress 3.8 and PHP 5.3.

Installation

Installation process is pretty simple and doesn't differ from standard installation process https://codex.wordpress.org/Managing_Plugins

1. Download **DataSource** Plugin to your desktop.
2. Extract the Plugin folder to your desktop.
3. With your FTP program, upload the Plugin folder to the wp-content/plugins folder in your WordPress directory online.
4. Go to Plugins screen and find **DataSource** in the list.
5. Click Activate Plugin to activate it.

Alternatively you can upload **DataSource** zip package via Plugin Manager in WordPress.

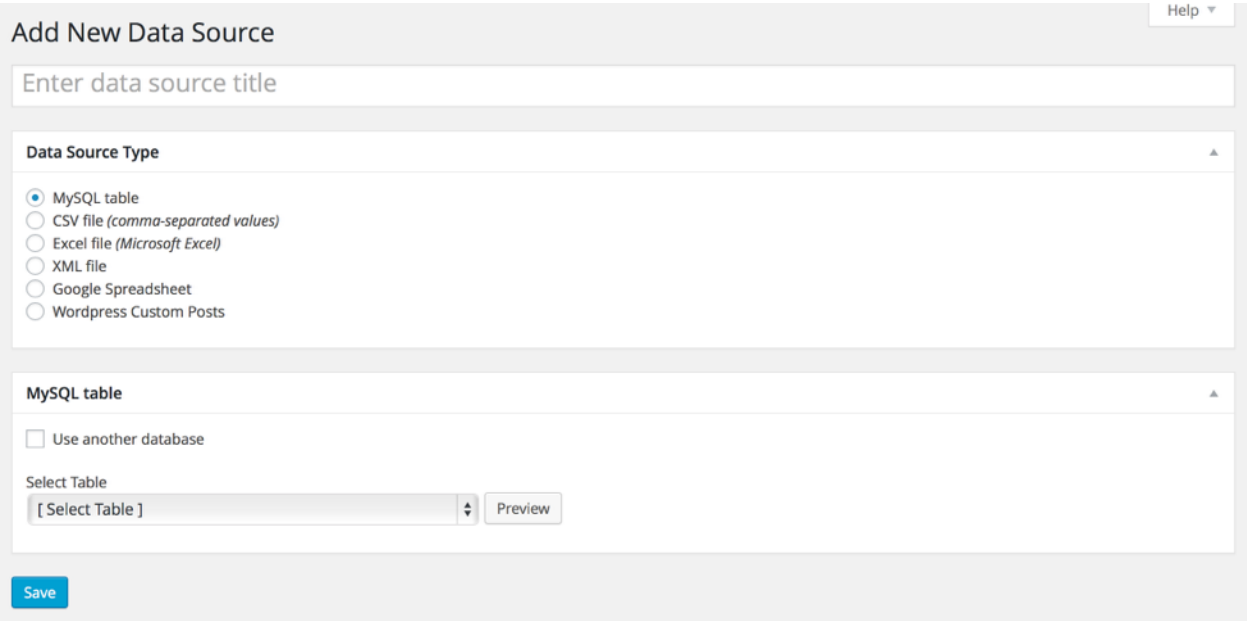
1. Download **DataSource** Plugin to your desktop.
2. Go to Plugins screen and click "Add New"
3. On the "Add Plugins" screen click "Upload Plugin"
4. Attach your zip file and click "Install Now".
5. Go to Plugins screen and find **DataSource** in the list.
6. Click Activate Plugin to activate it.

Data Sources

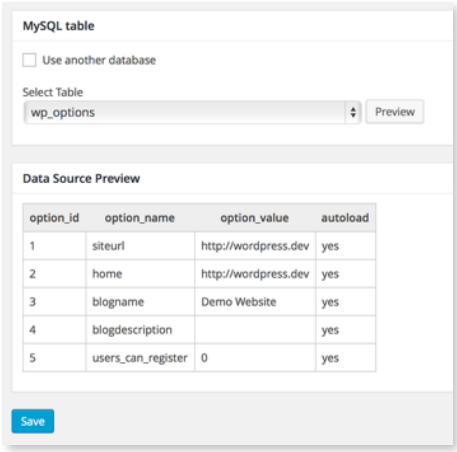
This section allows you to create, edit and delete data sources. Data source can be any of the following type:

- MySQL table
- Excel file
- CSV file
- XML file
- Google Spreadsheet
- WordPress custom post type.

In order to create data source click “Add New” in Data Sources menu.



MySQL table

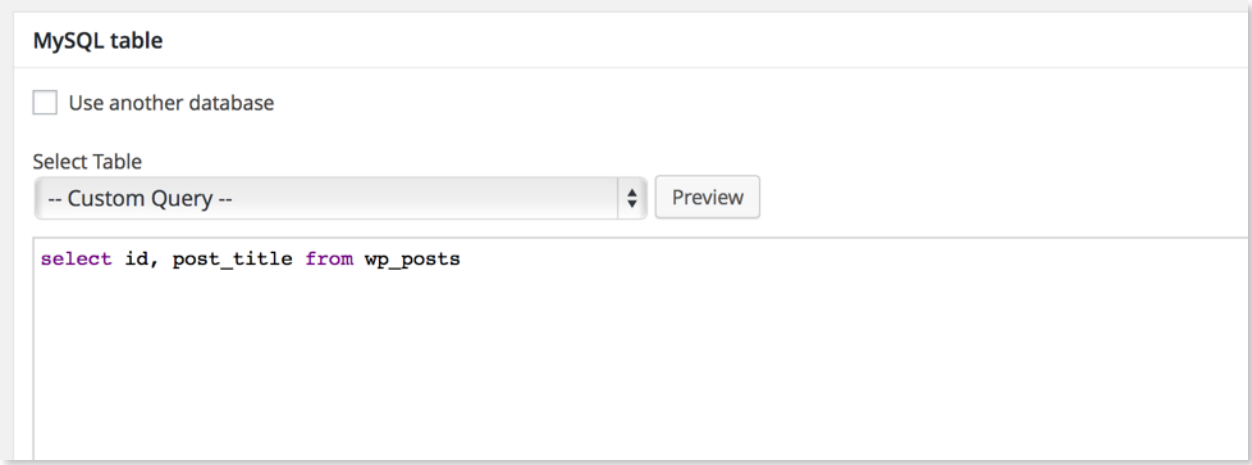


"MySQL table" type allows you to utilize any of existing WordPress MySQL tables or even tables from any other databases as data source.

In order to use existing WordPress table just choose any in a "Select Table" field. Preview with table data will appear (only first 5 records are shown).

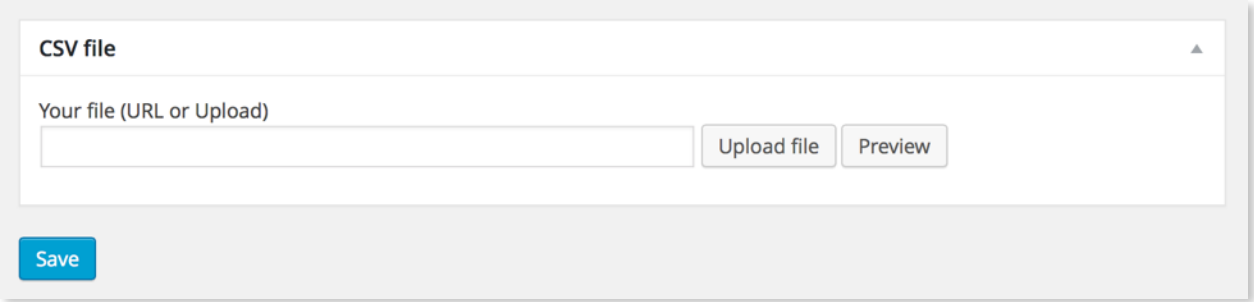
Clicking "Use another database checkbox" will display form that will ask you to put database name and database user credentials.Once done, the same dropdown with list of tables will appear.

Sometimes, you may need to use your own MySQL query that will join, unite or filter tables. It is also possible with this plugin. Just choose "— Custom Query —" option from list of tables and put your query. Clicking preview will display first 5 results.



CSV and XLS files

With CSV and XLS data sources you can upload file or set direct URL.

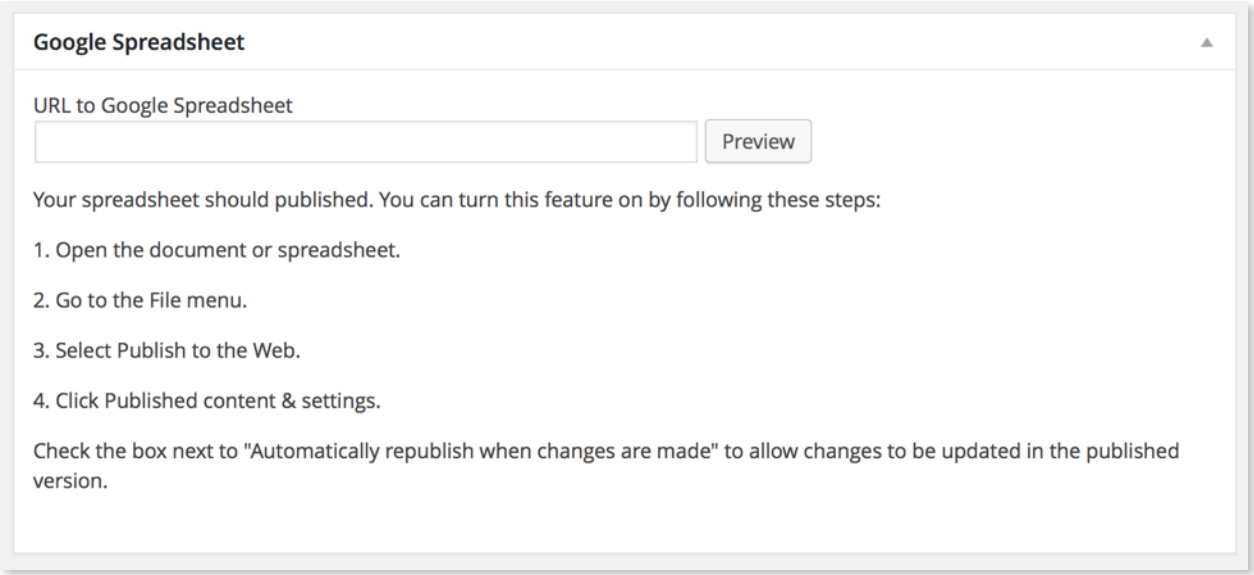


Google Spreadsheets

It can be useful to utilize data you already have in Google Spreadsheets. Some of most common use cases are:

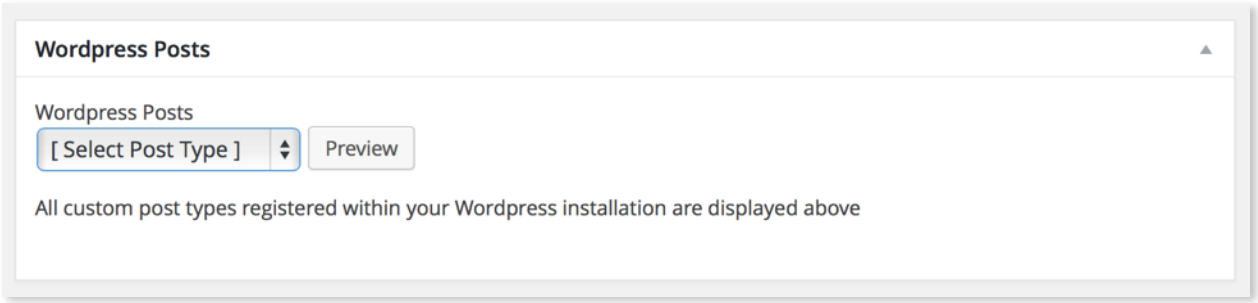
- Some spreadsheets you already have on Google Drive
- Spreadsheets you update on a regular basis in a collaboration with others
- Preparing your data for charts, maps, tables or grids.

Please note, your spreadsheet should be published with “Publish to the Web” option in Google Drive.



Wordpress Custom Posts

This option allows you to create data source from your WordPress posts, attachments, pages, or if you use your WordPress website with any plugins containing custom post types, this option is definitely for you. A great example can be WooCommerce plugin, you can use your products and order to build charts, sortable tables or even grids and maps.

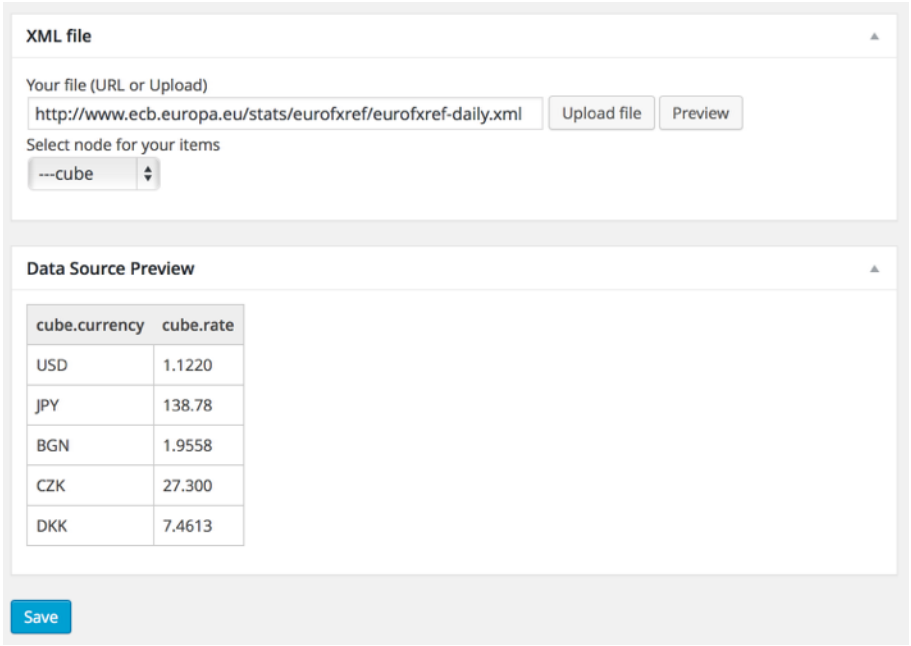


XML files

Starting with version 1.2.1 it is possible to use XML files as data sources. This option allows you to extract texts and attributes from XML nodes.
Here is an example of XML file containing currency exchange rates for Euro:
http://www.ecb.europa.eu/stats/eurofxref/eurofxref-daily.xml

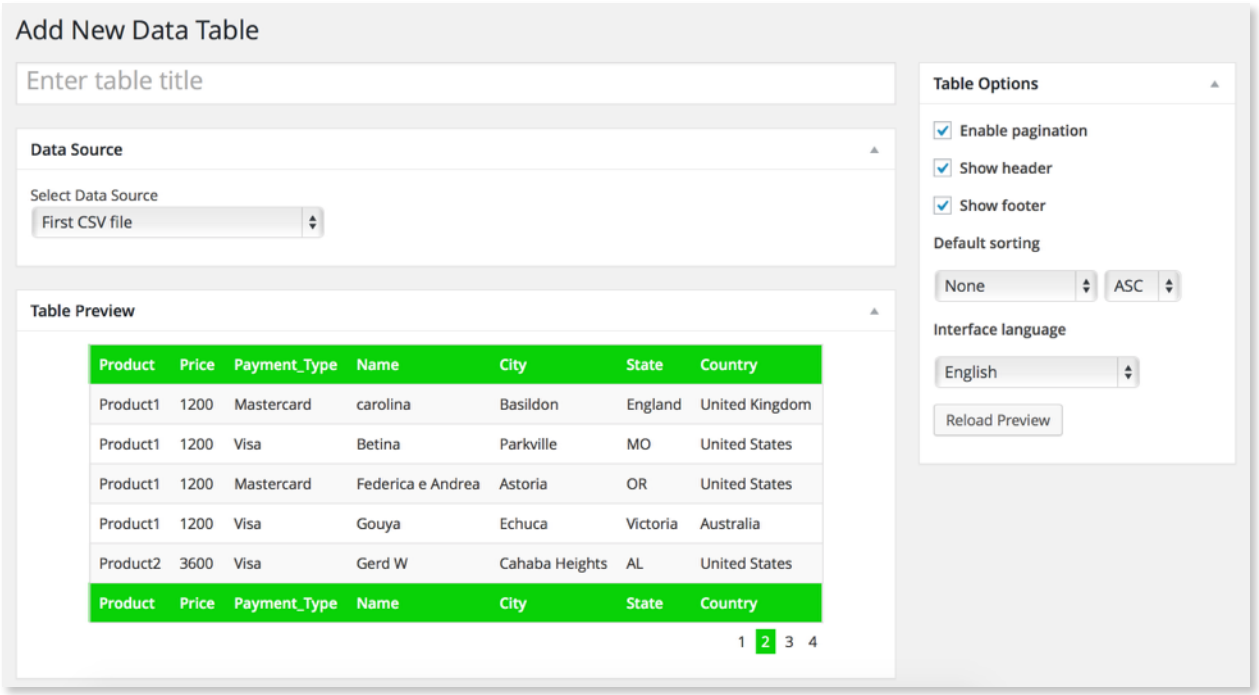
```
<gesmes:Envelope xmlns:gesmes="http://www.gesmes.org/xml/2002-08-01"
xmlns="http://www.ecb.int/vocabulary/2002-08-01/eurofxref">
<gesmes:subject>Reference rates</gesmes:subject>
<gesmes:Sender>
<gesmes:name>European Central Bank</gesmes:name>
</gesmes:Sender>
<Cube>
<Cube time="2015-06-12">
<Cube currency="USD" rate="1.1220"/>
<Cube currency="JPY" rate="138.78"/>
<Cube currency="BGN" rate="1.9558"/>
<Cube currency="CZK" rate="27.300"/>
<Cube currency="DKK" rate="7.4613"/>
…
</Cube>
</Cube>
</gesmes:Envelope>
```

In order to get it as data source on your website, you can put URL or upload file and select node for your items / rows. Rows are displayed as a nested tree with dashes, so with an example above it should be third level “Cube” item “- - - cube”.



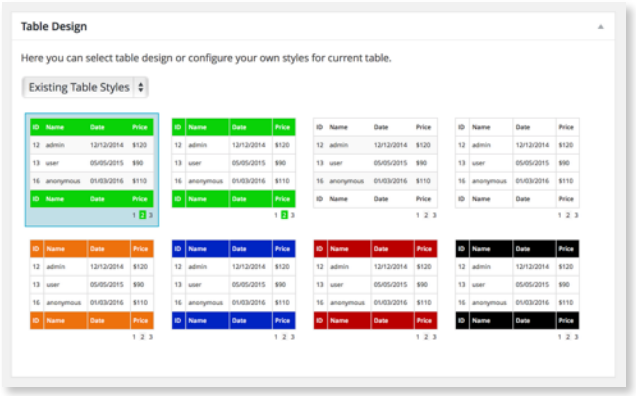
Data Tables

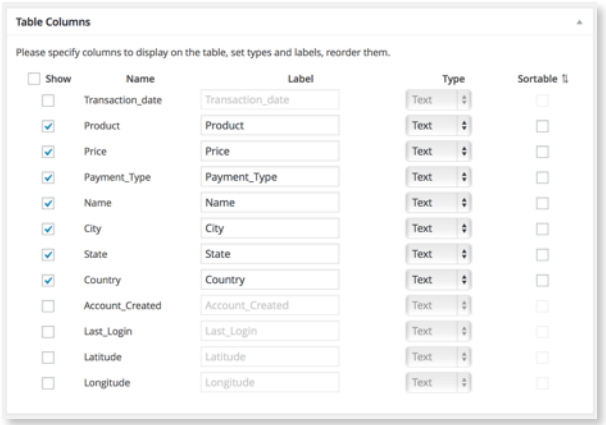
With Data Tables you can create nice sortable and filterable tables for your data sources.
Navigate to “Data Sources” => “Data Tables” menu and click “Add New” button.



Data Table form contains following fields:

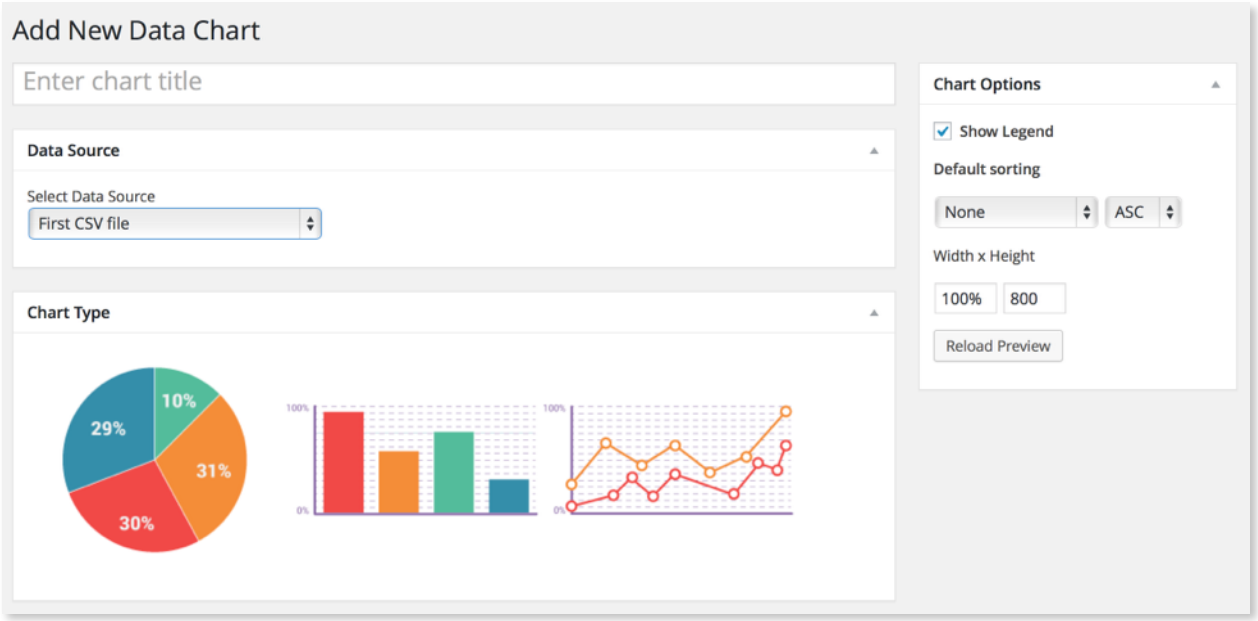
- Data Source - any data source you already created. Select one to start configuring your table.
- Table preview displays first 5 rows from your data source and selected table styles.
- Next you will see “Table Columns” box with list of all columns available in selected data source. Feel free to disable and reorder them, change labels, set types and make them sortable.
- Next item is “Table Design” where you can choose any predefined table styles, configure your own or even write CSS code yourself and set table class.
- On the right side you will find “Table Options” block that allows you to enable pagination, table header and footer, set default sort option and select table interface language.





Data Charts

With **Data Source** plugin you are able to create charts with your data. Navigate “Data Sources” => “Data Charts” menu and click “Add New” button.

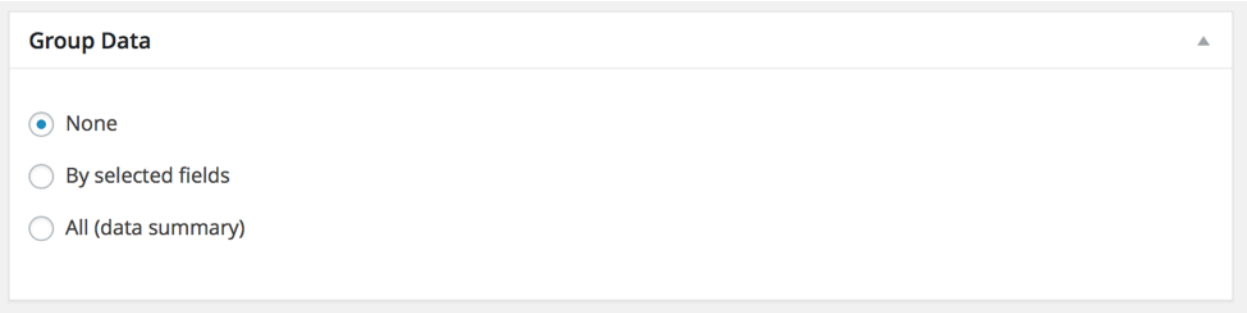


Data Chart form consists of following blocks:

- Data Source - any data source you already created. Select one to start configuring your chart.
- Chart Type - click on base chart type you prefer to create.
- Group Data - select how you would like to group your data:
  - None - means no grouping at all
  - By selected fields - select this option if you want to display summary by specific fields like Product, Country, User, etc.
  - All (data summary) - means grouping all your data in a single row. This option is useful when you just want to display totals across all rows from your data source.
- Chart columns - allows you to select labels and values for your charts. Depending on select chart type labels can be static texts or values from data source. If any kind of grouping data was selected aggregation functions will appear:
  - Count - count the number for rows
  - Sum - calculate the sum of selected values
  - Average - calculates average number for selected values for each group
  - Minimum and Maximum - min and max values for each group.
- Chart styles - each chart has a set of styles, like:
  - Plain, 3D chart, Donut chart for Pie charts
  - Stacked and Horizontal for Bar/Column charts
  - And palette for all charts.
- Each chart has also a set of basic options:
  - Default sorting
  - Show legend
  - Size (width and height)

Grouping Columns

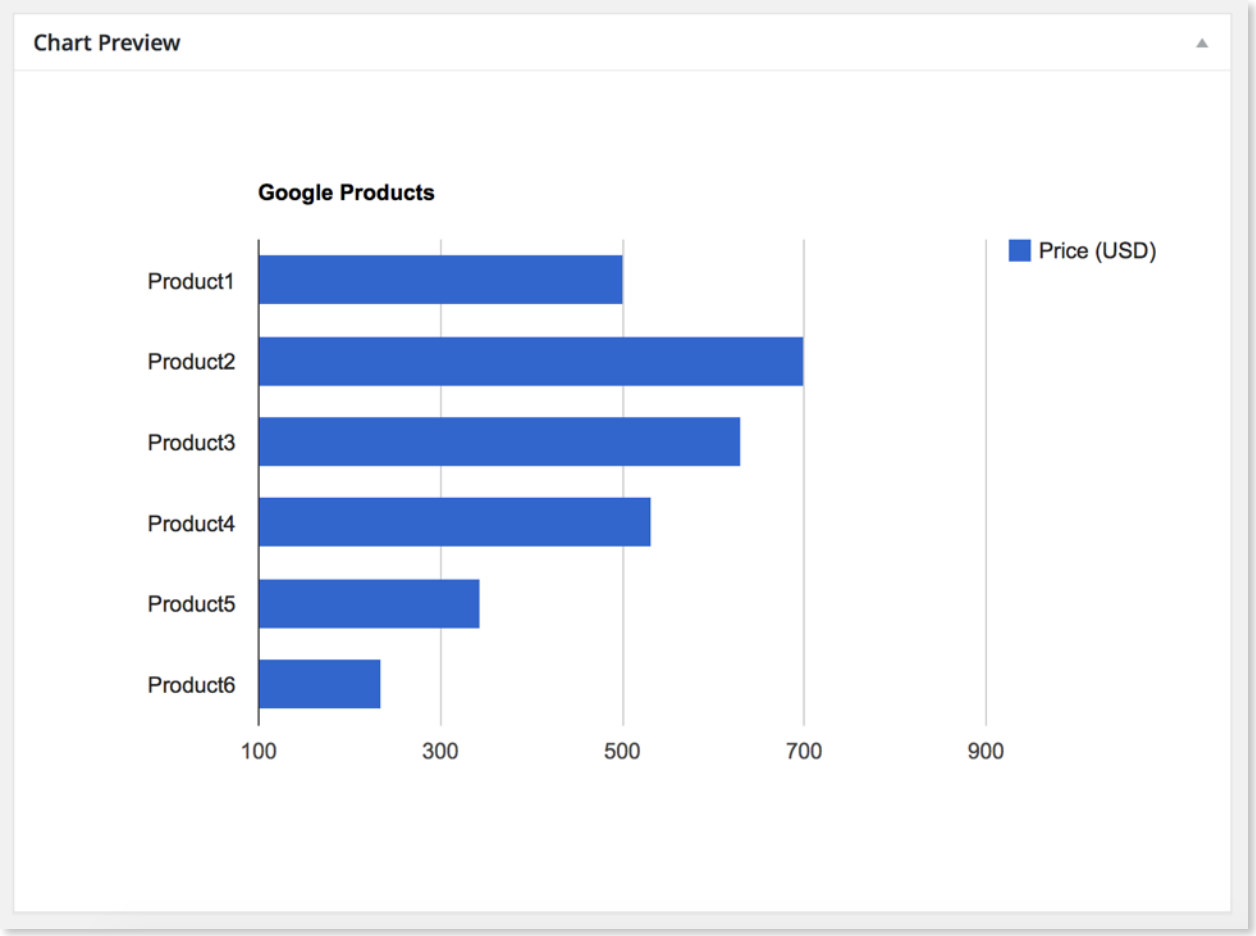
Grouping columns is a powerful tool of data charts. However, it can be tricky for new users.



Here you can see use cases for all options:

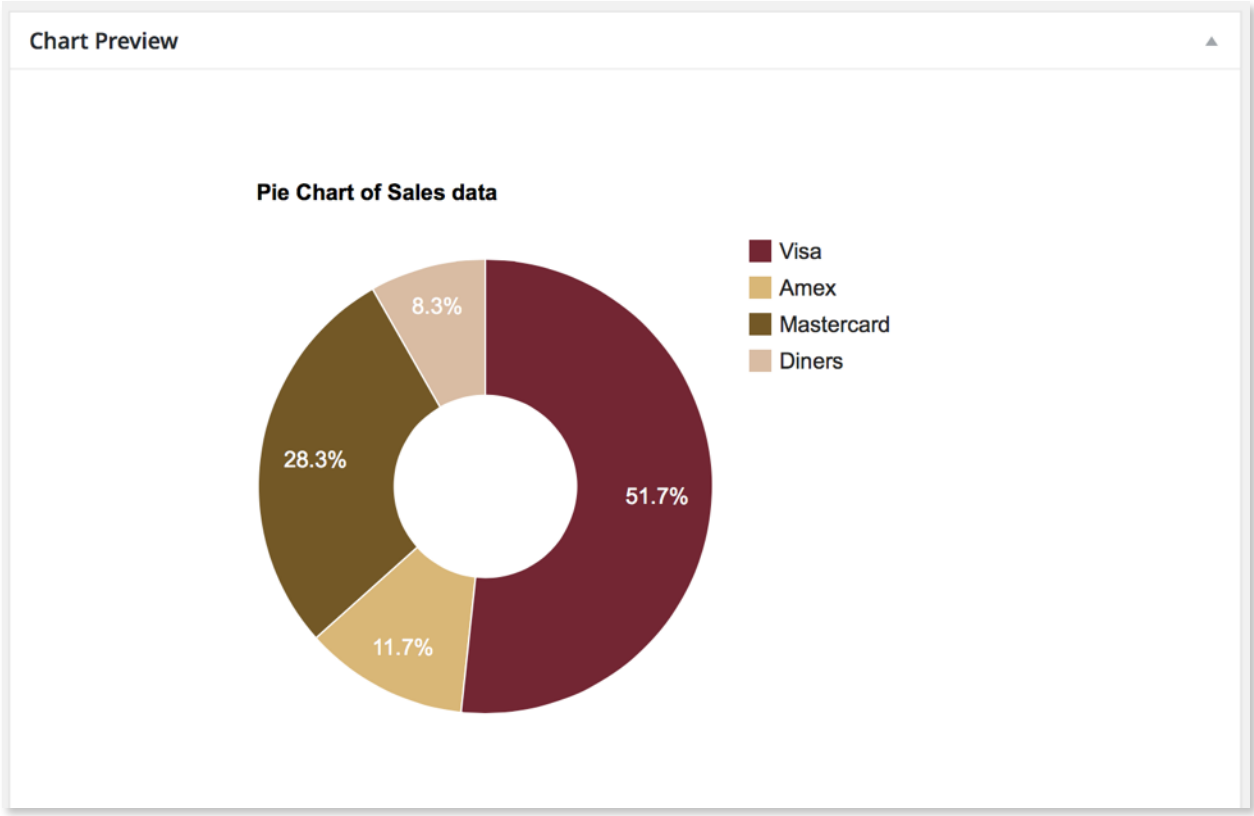
Grouping - None

This option works perfect with low number of rows in your data source. It processes information from your data source as is. For example if you have a price list with 6 products and want to display their prices.



Grouping - by selected fields
This option will require you to select one or more fields for grouping data. As an example, you have thousands of transactions containing credit card type:

- Select “By selected fields”
- Select “Payment_type” field in list of fields that will be displayed on the right
- Select “Payment_type” for Label, “Price” as value and “Sum” function in a “Chart Columns” box below.
- Set any other styling options you prefer and click “Preview” button.

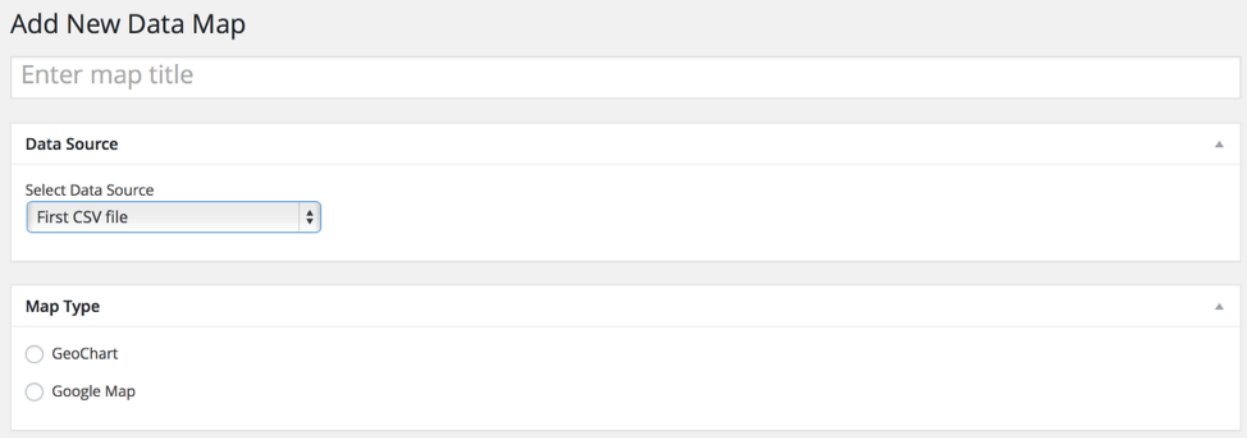


Grouping - All (data summary)
In some cases you may want to get totals of data available in data source. For example you may want to compare income and outcome from XLS file exported from QuickBooks, Sales Force or any other application operating with financial data. In this case just do the following:

- Select “All (data summary) in “Group Data” box
- Add columns you wish to compare with labels and functions in “Columns” box
- Set any other options and click “Preview”

Data Maps

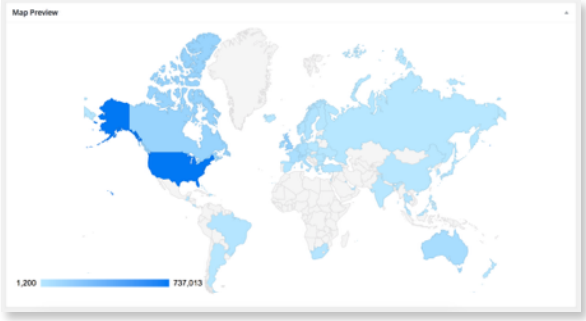
With **Data Source** plugin you can create interactive vector or google maps using your data. Navigate “Data Sources” => “Data Maps” menu and click “Add New” button.



GeoCharts are vector maps. They don’t display terrain, roads and other objects available in Google Maps. However it makes them useful when you need to highlight countries or cities on map.

Data Map form consists of following options:

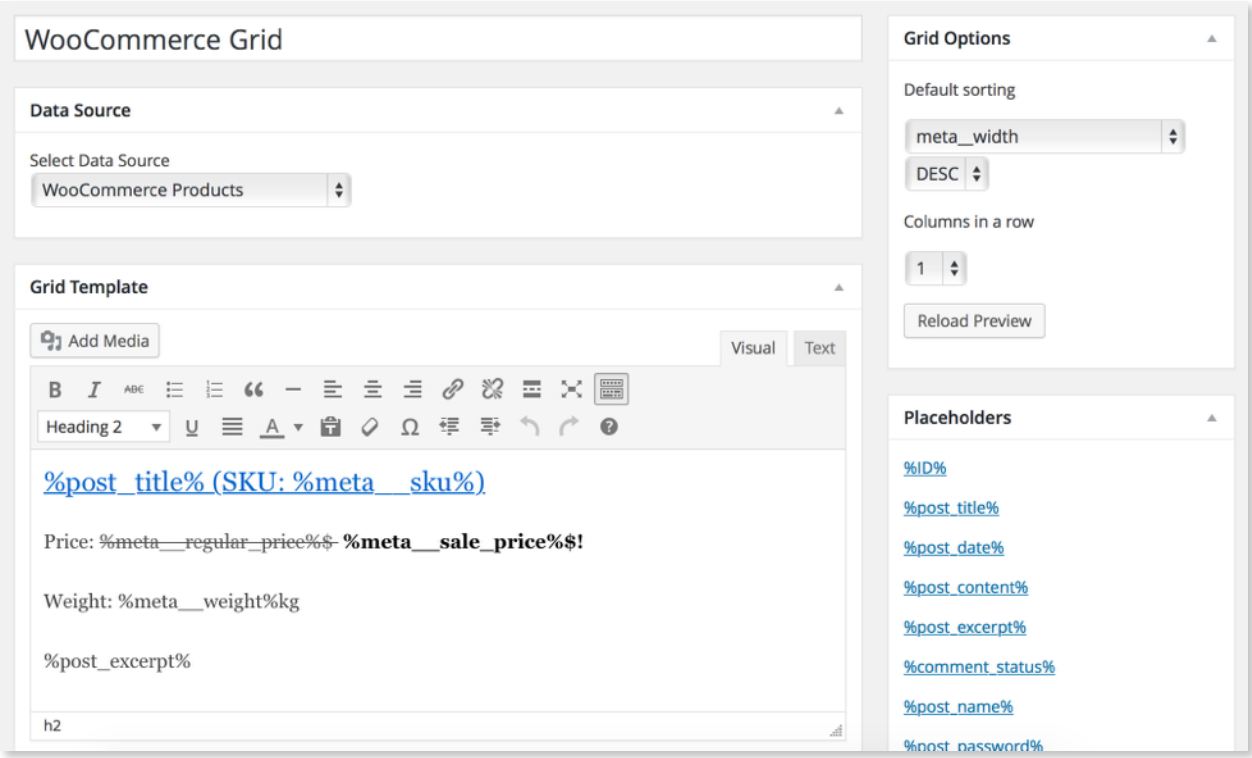
- Data Source - any data source you already created. Select one to start configuring your map.
- Map Type - click on map type you prefer to use.
- Group Data - select how you would like to group your data:
  - None - means no grouping at all
  - By selected fields - select this option if you want to display summary by specific fields like Product, Country, User, etc.
- Map Configuration - allows you to select location columns as latitude and longitude or country, state, city and/or address names. A lot of other map-specific options are available in this block. I.e with GeoChart map you can select country or continent/sub-continent to display as well as select to highlight regions or markers. If any kind of grouping data was selected aggregation functions will appear:
  - Count - count the number for rows
  - Sum - calculate the sum of selected values
  - Average - calculates average number for selected values for each group
  - Minimum and Maximum - min and max values for each group.



Data Grids

Data Grids module is focus on building template based grids of your data. Navigate “Data Sources” => “Data Grids” menu and click “Add New” button.

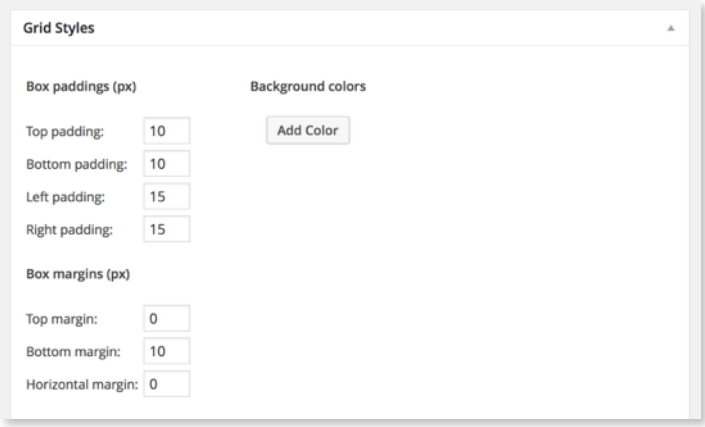
Below you can see sample data grid created with Data Source of WooCommerce products:



Data Grid form consists of following blocks:

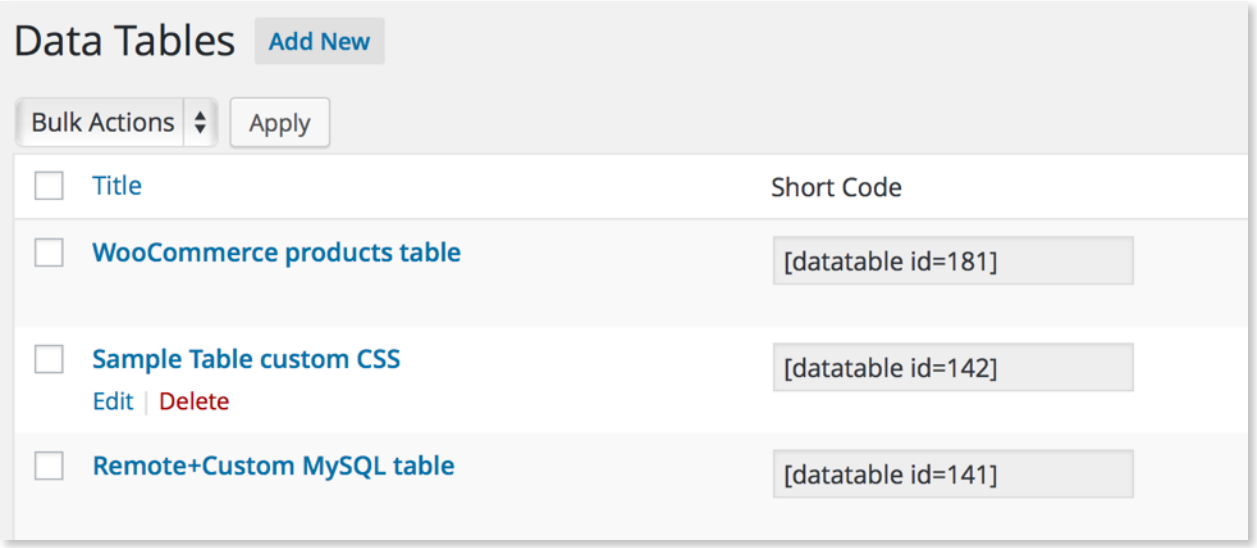
- Data Source - any data source you already created. Select one to start configuring your grid.
- Template - native WordPress WYSIWYG editor
- Placeholders block with list of existing data source columns on the right. You can click on any to insert into Grid Template editor.
- Grid Options on the right allow you to set sorting and number of columns in your grid.

With Grid Styles on the bottom you can configure the look of each cell by setting borders, background colors, padding and margins.



Using short codes.

On each index page of Charts, Maps, Grids and Tables you can see Short Code columns



These are WordPress short codes that can be used in your pages and posts. Just copy short code of record you want to display and paste it in page or post editor.

See https://codex.wordpress.org/Shortcode and https://en.support.wordpress.com/shortcodes/ for more details.