



Data Source

User Manual

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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.

Add New Data Source

Help ▾

Enter data source title

Data Source Type ▴

☒ MySQL table

☐ CSV file (*comma-separated values*)

☐ Excel file (*Microsoft Excel*)

☐ XML file

☐ Google Spreadsheet

☐ Wordpress Custom Posts

MySQL table ▴

☐ Use another database

Select Table

[Select Table]

▾

Preview

Save

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.

The screenshot shows the 'MySQL table' configuration window. At the top, there is a checkbox labeled 'Use another database'. Below it, the 'Select Table' dropdown menu is set to 'wp_options', with a 'Preview' button to its right. The 'Data Source Preview' section displays a table with the following data:

option_id	option_name	option_value	autoload
1	siteurl	http://wordpress.dev	yes
2	home	http://wordpress.dev	yes
3	blogname	Demo Website	yes
4	blogdescription		yes
5	users_can_register	0	yes

A 'Save' button is located at the bottom left of the preview section.

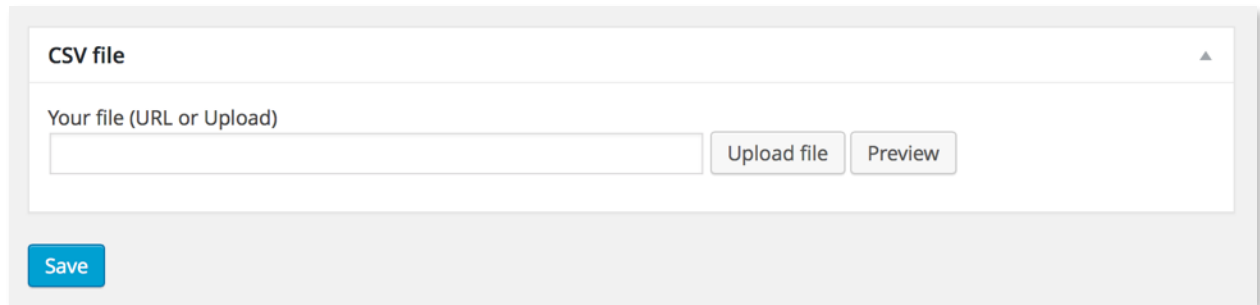
Sometimes, you may need to use your own MySQL query that will join, unite or filter tables. It is also possible with this plugin. Just choose “— Custom Query —” option from list of tables and put your query. Clicking preview will display first 5 results.

The screenshot shows the 'MySQL table' configuration window. The 'Use another database' checkbox is unchecked. The 'Select Table' dropdown menu is set to '-- Custom Query --', with a 'Preview' button to its right. Below the dropdown, a text area contains the following SQL query:

```
select id, post_title from wp_posts
```

CSV and XLS files

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



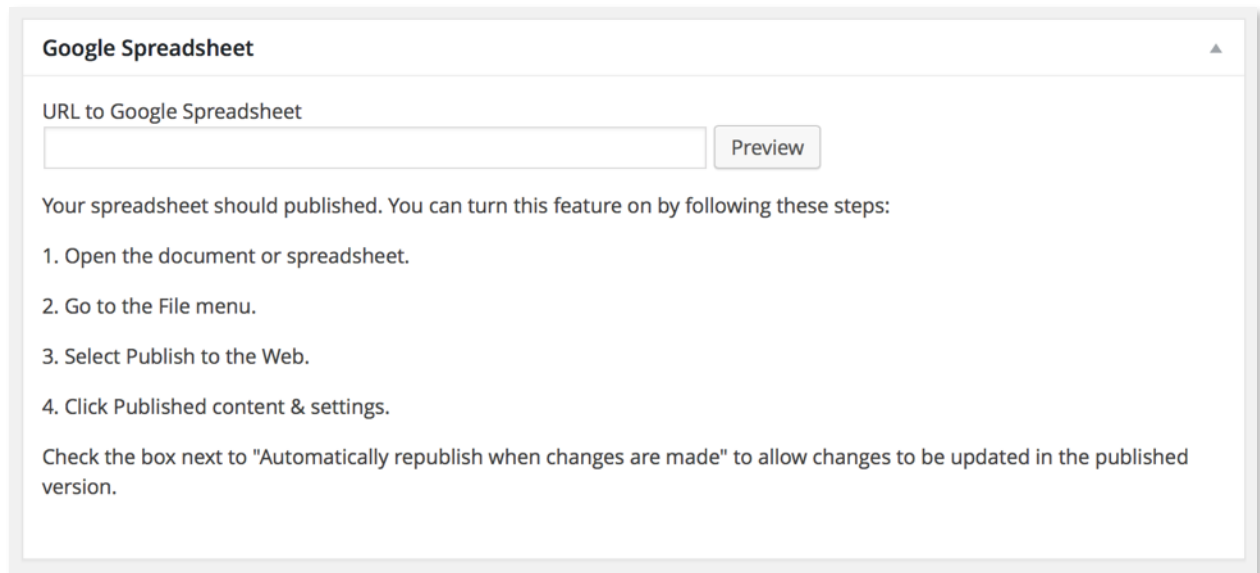
The screenshot shows a web interface for uploading a CSV file. At the top, there is a header "CSV file" with a small upward-pointing triangle to its right. Below the header is a form area with the label "Your file (URL or Upload)". Inside this area is a text input field. To the right of the input field are two buttons: "Upload file" and "Preview". Below the form area is a blue button labeled "Save".

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.



The screenshot shows a web interface for connecting a Google Spreadsheet. At the top, there is a header "Google Spreadsheet" with a small upward-pointing triangle to its right. Below the header is a form area with the label "URL to Google Spreadsheet". Inside this area is a text input field. To the right of the input field is a button labeled "Preview". Below the form area, there is a paragraph of text: "Your spreadsheet should published. You can turn this feature on by following these steps:". This is followed by a numbered list with four steps: 1. Open the document or spreadsheet. 2. Go to the File menu. 3. Select Publish to the Web. 4. Click Published content & settings. Below the list, there is another paragraph: "Check the box next to 'Automatically republish when changes are made' to allow changes to be updated in the published version."

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.

Wordpress Posts

Wordpress Posts

[Select Post Type]

Preview

All custom post types registered within your Wordpress installation are displayed above

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”.

XML file

Your file (URL or Upload)

Select node for your items

Data Source Preview

cube.currency	cube.rate
USD	1.1220
JPY	138.78
BGN	1.9558
CZK	27.300
DKK	7.4613

Save

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.

Add New Data Table

Enter table title

Data Source

Select Data Source

First CSV file

Table Preview

Product	Price	Payment_Type	Name	City	State	Country
Product1	1200	Mastercard	carolina	Basildon	England	United Kingdom
Product1	1200	Visa	Betina	Parkville	MO	United States
Product1	1200	Mastercard	Federica e Andrea	Astoria	OR	United States
Product1	1200	Visa	Gouya	Echuca	Victoria	Australia
Product2	3600	Visa	Gerd W	Cahaba Heights	AL	United States

1 2 3 4

Table Options

☒ Enable pagination
 ☒ Show header
 ☒ Show footer

Default sorting

None
ASC

Interface language

English

Reload Preview

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.

Table Design

Here you can select table design or configure your own styles for current table.

Existing Table Styles

ID	Name	Date	Price
12	admin	12/12/2014	\$120
13	user	05/05/2015	\$90
16	anonymous	01/03/2016	\$110

ID	Name	Date	Price
12	admin	12/12/2014	\$120
13	user	05/05/2015	\$90
16	anonymous	01/03/2016	\$110

ID	Name	Date	Price
12	admin	12/12/2014	\$120
13	user	05/05/2015	\$90
16	anonymous	01/03/2016	\$110

ID	Name	Date	Price
12	admin	12/12/2014	\$120
13	user	05/05/2015	\$90
16	anonymous	01/03/2016	\$110

Table Columns

Please specify columns to display on the table, set types and labels, reorder them.

Show	Name	Label	Type	Sortable
<input type="checkbox"/>	Transaction_date	Transaction_date	Text	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Product	Product	Text	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Price	Price	Text	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Payment_Type	Payment_Type	Text	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Name	Name	Text	<input type="checkbox"/>
<input checked="" type="checkbox"/>	City	City	Text	<input type="checkbox"/>
<input checked="" type="checkbox"/>	State	State	Text	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Country	Country	Text	<input type="checkbox"/>
<input type="checkbox"/>	Account_Created	Account_Created	Text	<input type="checkbox"/>
<input type="checkbox"/>	Last_Login	Last_Login	Text	<input type="checkbox"/>
<input type="checkbox"/>	Latitude	Latitude	Text	<input type="checkbox"/>
<input type="checkbox"/>	Longitude	Longitude	Text	<input type="checkbox"/>

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.

Group Data

☒ None

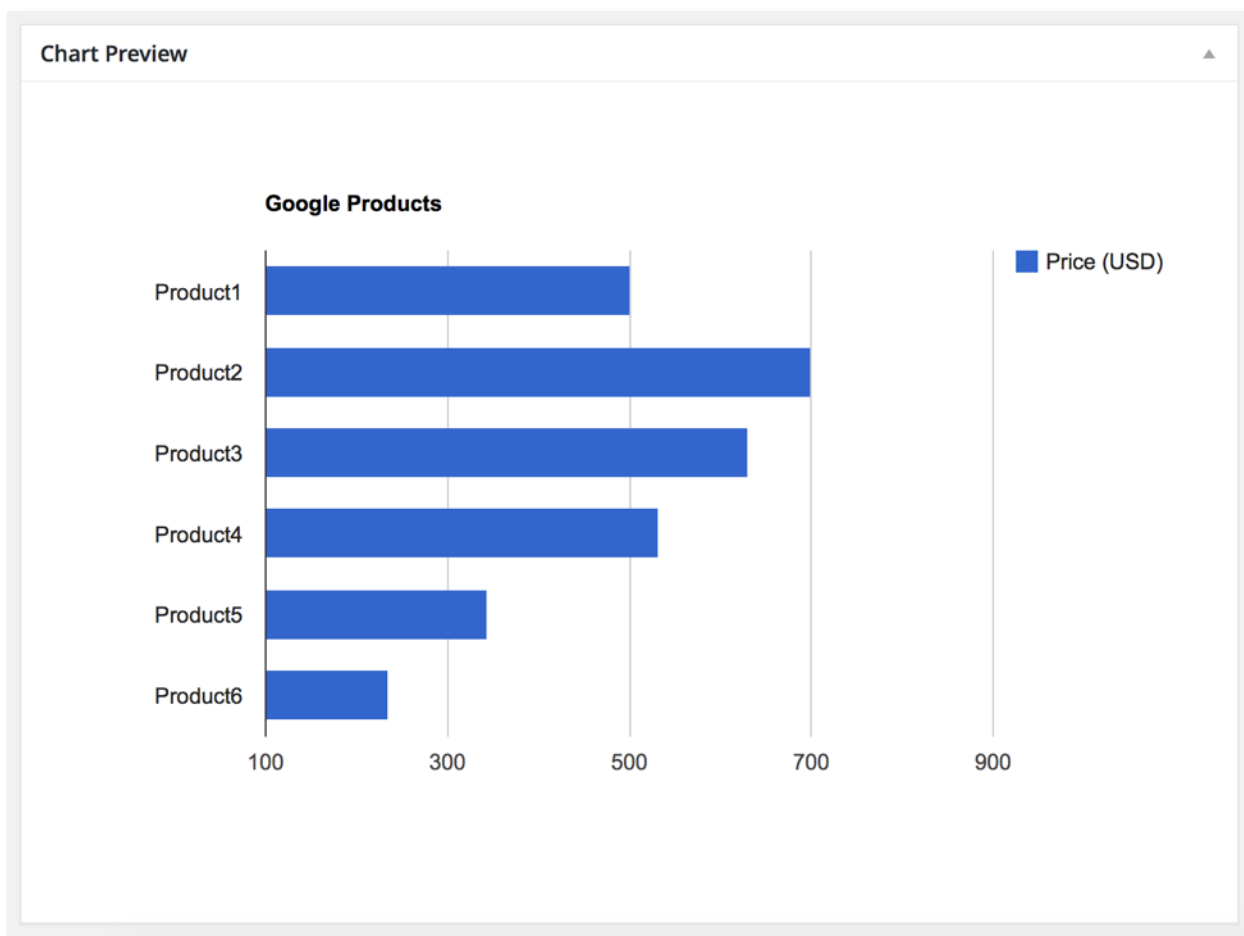
☐ By selected fields

☐ All (data summary)

Here you can see use cases for all options:

Grouping - None

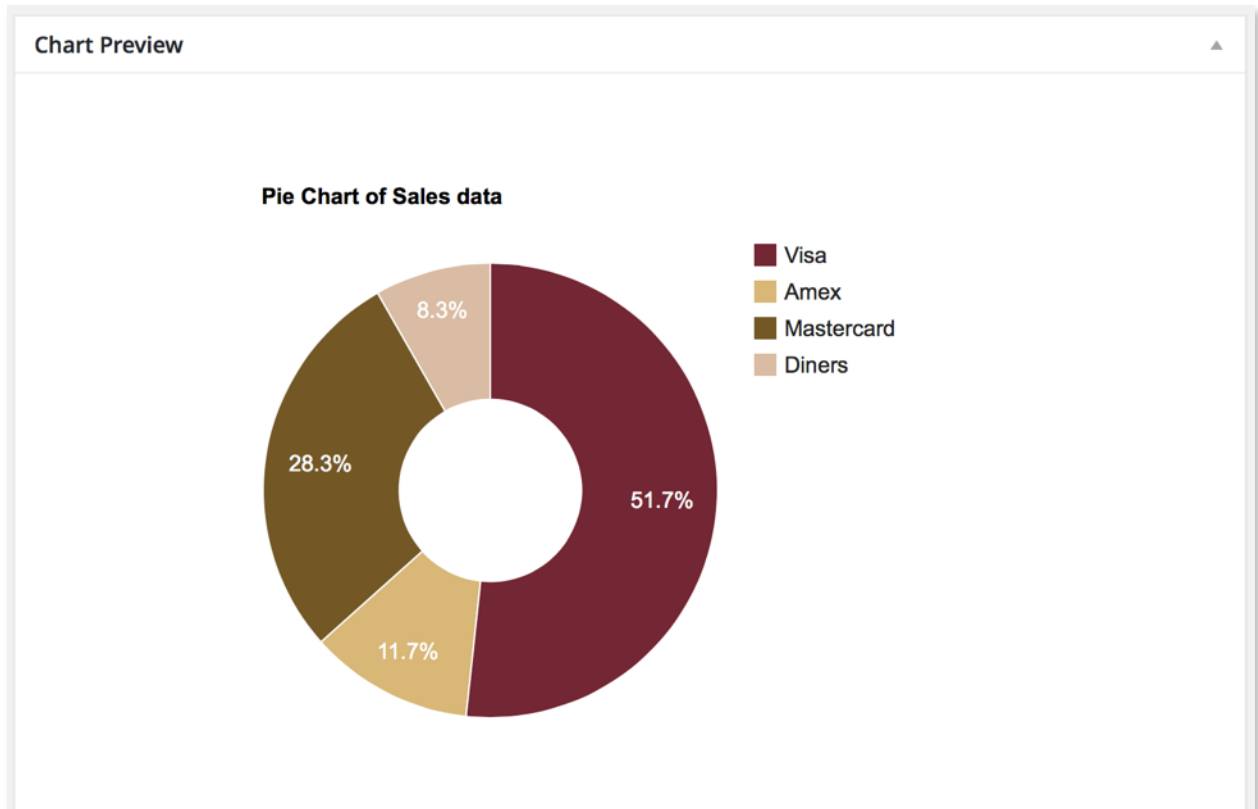
This option works perfect with low number of rows in your data source. It processes information from your data source as is. For example if you have a price list with 6 products and want to display their prices.



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.

Add New Data Map

Enter map title

Data Source

Select Data Source

First CSV file

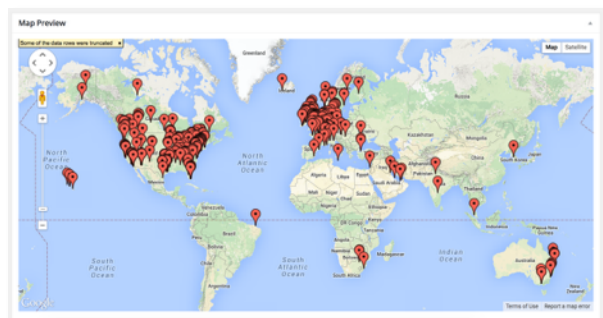
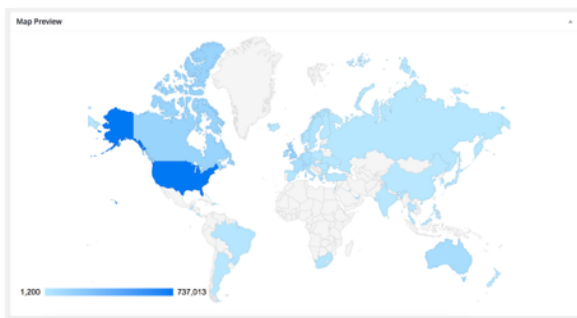
Map Type

☐ GeoChart
☐ Google Map

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:

WooCommerce Grid

Data Source

Select Data Source
WooCommerce Products

Grid Template

Add Media Visual Text

Heading 2

[%post_title% \(SKU: %meta__sku%\)](#)

Price: %meta__regular_price%\$- %meta__sale_price%\$!

Weight: %meta__weight%kg

%post_excerpt%

h2

Grid Options

Default sorting
meta__width
DESC
Columns in a row
1
Reload Preview

Placeholders

[%ID%](#)
[%post_title%](#)
[%post_date%](#)
[%post_content%](#)
[%post_excerpt%](#)
[%comment_status%](#)
[%post_name%](#)
[%post_password%](#)

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.

Grid Styles

Box paddings (px)

Top padding: 10
Bottom padding: 10
Left padding: 15
Right padding: 15

Box margins (px)

Top margin: 0
Bottom margin: 10
Horizontal margin: 0

Background colors
Add Color

Using short codes.

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

Data Tables Add New	
Bulk Actions ▾	Apply
<input type="checkbox"/> Title	Short Code
<input type="checkbox"/> WooCommerce products table	<code>[datatable id=181]</code>
<input type="checkbox"/> Sample Table custom CSS Edit Delete	<code>[datatable id=142]</code>
<input type="checkbox"/> Remote+Custom MySQL table	<code>[datatable id=141]</code>

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.