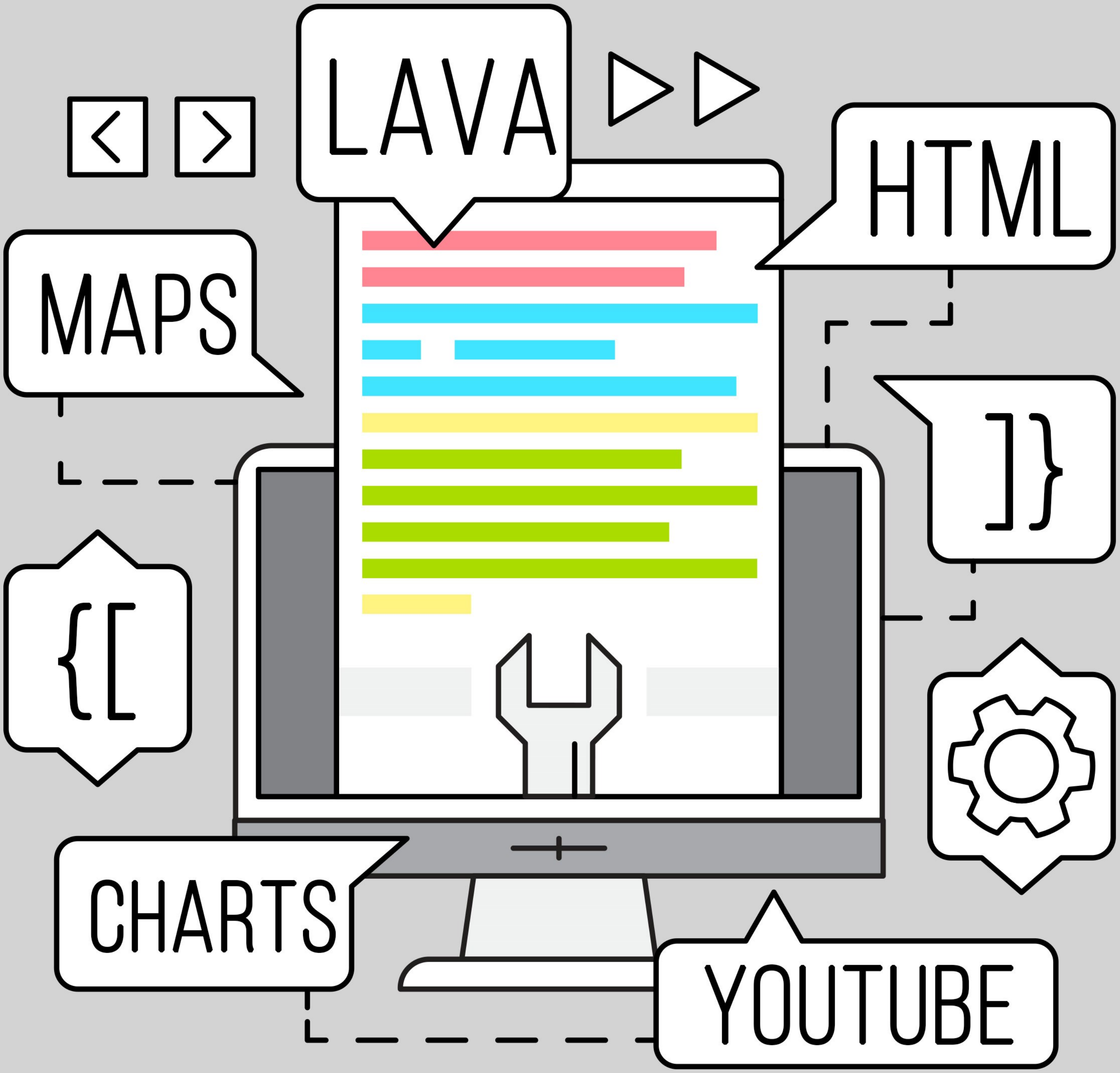
THE LONG & SHORT ON SHORTCODES



Getting Started

Shortcodes are a way to make Lava simpler and easier to read. They allow you to replace a simple Lava tag with a complex template written by a Lava specialist. This allows you to do some really powerful things without having to know how everything works.

While shortcodes are super powerful, they're also easy to develop. Everything you'll need to get up and running is right here in this short manual.

Types of Shortcodes

There are only two types of shortcodes: inline and block. Selecting the correct type is important as changing them in the future will break other people's Lava templates. Both short code types use the syntax: {[shortcode]}

Inline Shortcodes

The first type is an 'inline' shortcode. This is a simple shortcode that does not require an end tag. Just reference the shortcode and provide a list of parameters and you’re done!

Inline Example:

```
{[ youtube id:'8kpHK4YIwY4' showinfo:'false' controls:'false' ]}
```

Block Shortcodes

The second type of shortcode is the 'block' type. Like other Lava commands it has both a start and an end tag. The content you provide inside the tags will be passed to the shortcode for use in its template.

Block Example:

```
{[ parallax image:'http://cdn.wonderfulengineering.com/wp-content/uploads/2014/09/star-wars
-wallpaper-4.jpg' speed:'0.2' height:'400px' position:'top' contentpadding:'20px' ]}
<h1>Hello World</h1>
{[ endparallax ]}
```

Authoring Shortcodes

Writing shortcodes is simple. They're just Lava templates. Below are a few points to keep in mind as your write your own shortcodes.

Select the Proper Shortcode Type

As we already mentioned it's very important that you select the proper type of shortcode before you start using it. Changing it in the future means having to update all of your Lava templates that use it. The biggest factor in your decision of which type to use will be how much data your shortcode will pass and if any of the data has repeating sections. Let's consider a couple examples.

The parallax shortcode needs to access a large amount of HTML to place inside the parallax section. While this could be passed through a standard parameter `{[ parallax content:'...` this would be limiting in a number of ways. For example, the content could not have any line breaks and it would not be allowed to have any single quotes.

Consider next the googlemap place holder. It allows you to enter a variable number of map points. Again, you could use a single inline parameter, but this would be very difficult for the person who wanted to use your shortcode.

Finally, think about the youtube shortcode. In this example only a small amount of configuration is required, so an inline shortcode works great.

It comes down to how much data is being passed by the shortcode. For larger amounts of data, use the block shortcode type. For lesser amounts, use inline.

Configuring Parameters

You can configure parameters when setting up your shortcodes. While you technically don't need to configure parameters, any parameter that another person adds to the shortcode will be passed to your Lava template. Configuring the parameters when you write your shortcode provides two advantages.

1. Configuring the parameter guarantees that it will exist when it's passed to your Lava. This means you don't have to check for its existence. Instead, if you need to check if the parameter has a value, you can do a simple check to see if it's empty.
2. Configuring a parameter allows you to provide a default value. Again, this simplifies your Lava and reduces the number of lines of code you'll need to write.

The Lava you develop for your shortcode is passed in all of the parameters found on the shortcode tag as well as any parameters you defined as the author. Rock also provides an additional parameter 'uniqueid' which is a unique identifier for you to use for things like CSS id's and variables in your Javascript. It takes the form of 'id-4535a4a9-1b82-4d5b-9120-8c9c41eefcd6'. You don't need to use this identifier, it's just provided as a convenience to you.

Heads Up!
Your parameter keys need to be all lowercase for them to work properly; this is typical practice in Lava but is enforced here. Keys with uppercase characters will always return the default value that you provide in the shortcode definition and will not be able to be set from the HTML block where you are calling the shortcode from.

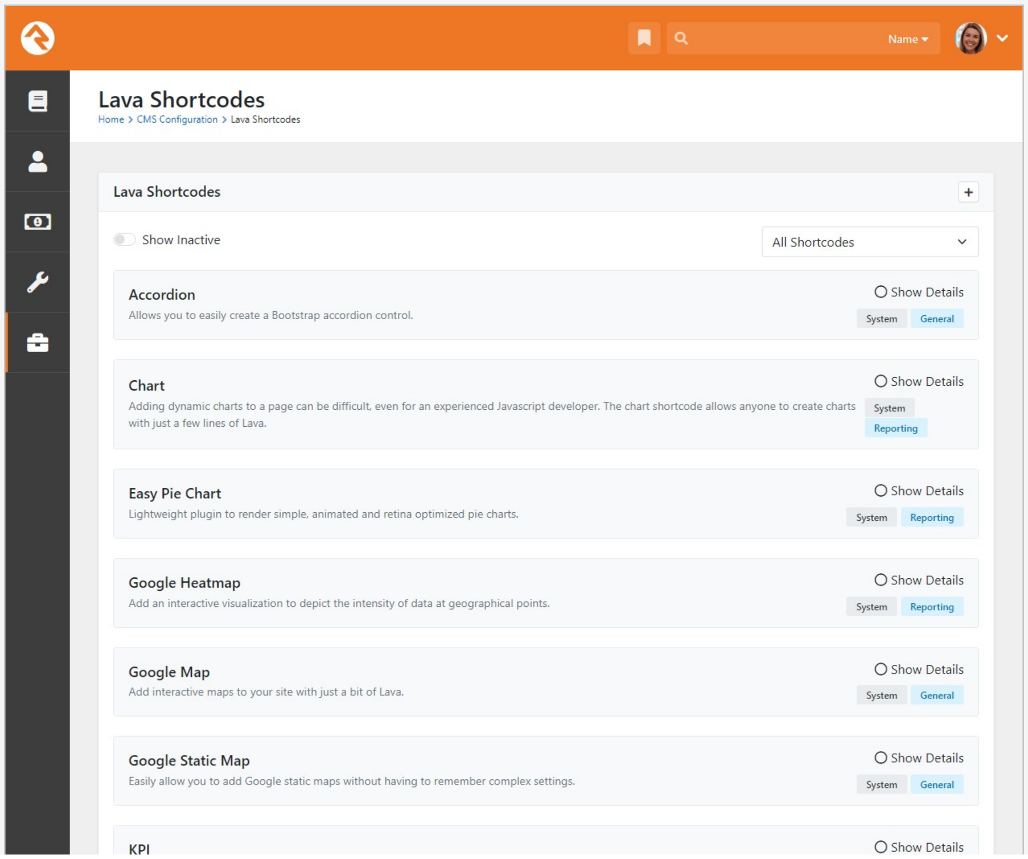
Enabled Lava Commands

You can enable certain Lava commands to be able to run within your shortcode. These commands do not need to be configured in the source block to run. For instance, if your shortcode is being used on a web page and requires the RockEntity command, the HTML Block does not need to have the command enabled if you've configured access on your shortcode.

Adding Lava Shortcodes in Rock

Lava Shortcodes can be found at `Admin Tools > CMS Configuration > Lava Shortcodes`.

Lava Shortcodes



Accordion
Allows you to easily create a Bootstrap accordion control.
Show Details · System · General

Chart
Adding dynamic charts to a page can be difficult, even for an experienced Javascript developer. The chart shortcode allows anyone to create charts with just a few lines of Lava.
Show Details · System · Reporting

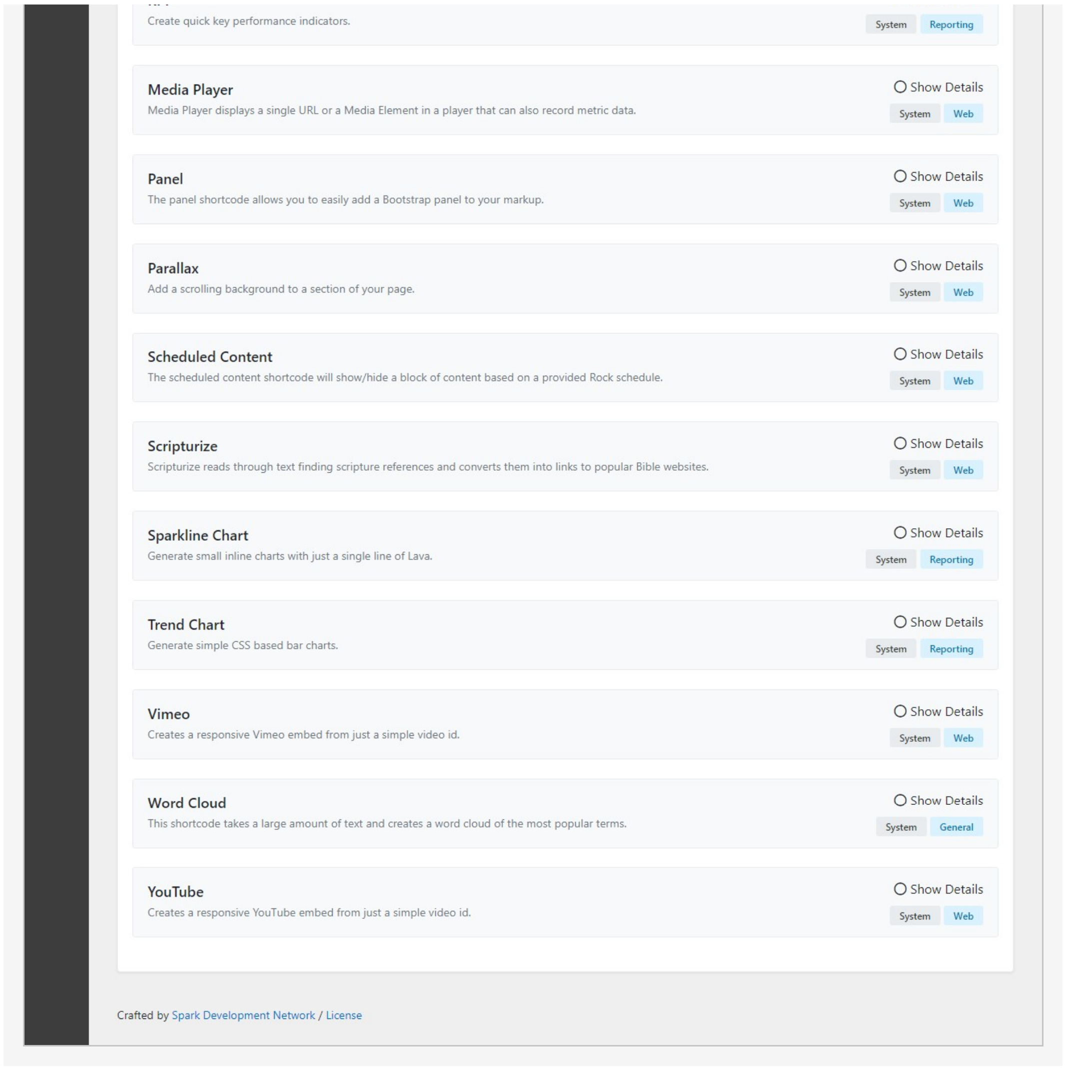
Easy Pie Chart
Lightweight plugin to render simple, animated and retina optimized pie charts.
Show Details · System · Reporting

Google Heatmap
Add an interactive visualization to depict the intensity of data at geographical points.
Show Details · System · Reporting

Google Map
Add interactive maps to your site with just a bit of Lava.
Show Details · System · General

Google Static Map
Easily allow you to add Google static maps without having to remember complex settings.
Show Details · System · General

KPI
Show Details



Create quick key performance indicators. System Reporting

Media Player
Media Player displays a single URL or a Media Element in a player that can also record metric data.
Show Details System Web

Panel
The panel shortcode allows you to easily add a Bootstrap panel to your markup.
Show Details System Web

Parallax
Add a scrolling background to a section of your page.
Show Details System Web

Scheduled Content
The scheduled content shortcode will show/hide a block of content based on a provided Rock schedule.
Show Details System Web

Scripturize
Scripturize reads through text finding scripture references and converts them into links to popular Bible websites.
Show Details System Web

Sparkline Chart
Generate small inline charts with just a single line of Lava.
Show Details System Reporting

Trend Chart
Generate simple CSS based bar charts.
Show Details System Reporting

Vimeo
Creates a responsive Vimeo embed from just a simple video id.
Show Details System Web

Word Cloud
This shortcode takes a large amount of text and creates a word cloud of the most popular terms.
Show Details System General

YouTube
Creates a responsive YouTube embed from just a simple video id.
Show Details System Web

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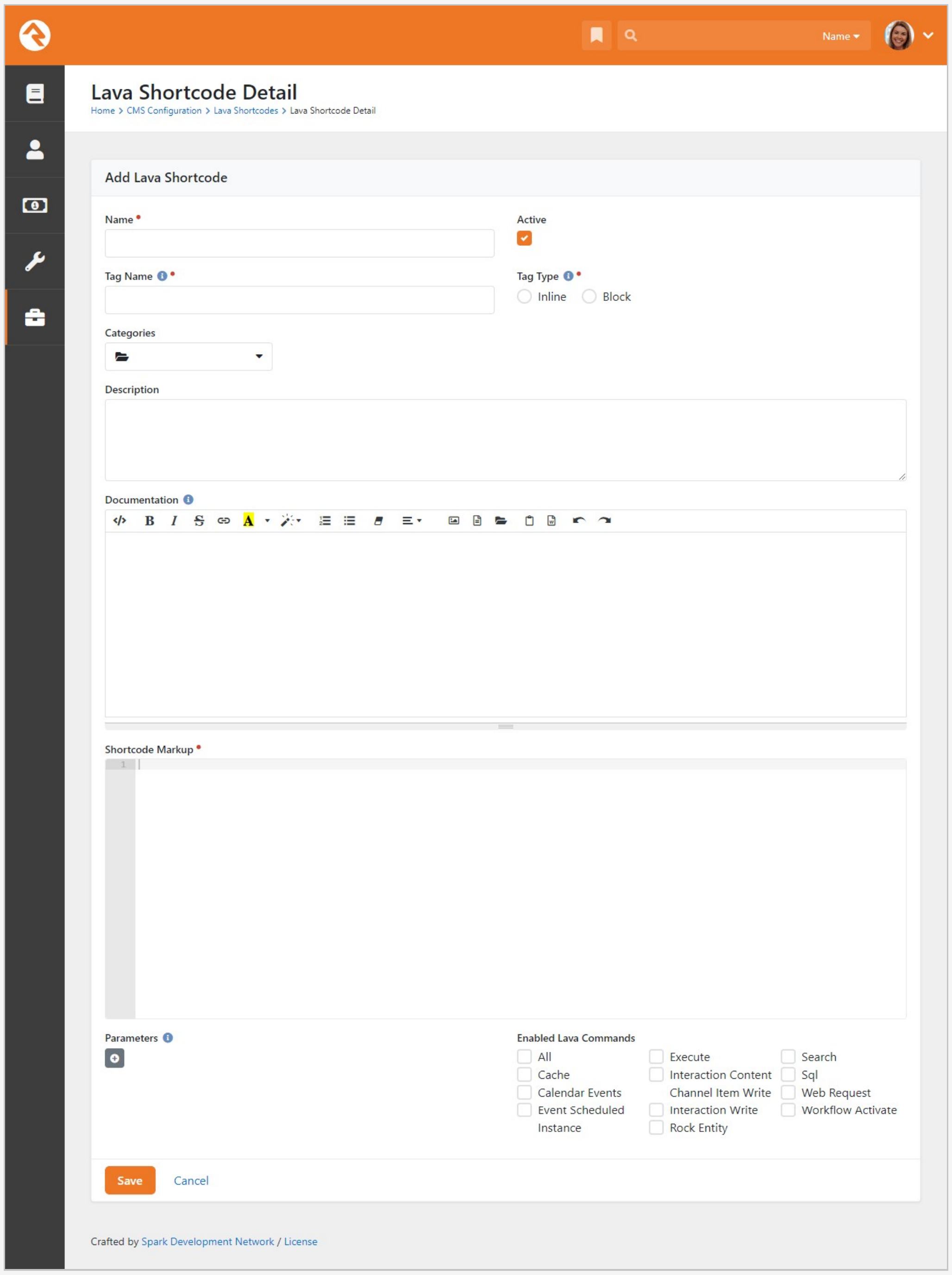
Pictured above, as of Rock v14, you can assign categories to your shortcodes. This lets you group shortcodes according to their function, and allows you to filter the list of shortcodes by category. A single shortcode can be assigned to multiple categories. The categories for a shortcode can be added from the Lava Shortcode Detail page, pictured below.

Click *Show Details* for any of the shortcodes to view its summary, code and parameters. To add a new shortcode, press the + button. This will take you to the Lava Shortcode Detail screen.

Lava Shortcode Detail



This screen is where you designate which type of shortcode you're creating, which parameters to use, the actual Lava markup code, and any Lava commands you want enabled. Remember, it's always a good idea to supply a description for the benefit of other users. Click `Save` when you're done. Super easy!

The Power of Shortcode Blocks

Shortcode blocks are very powerful as they allow you to provide advanced configuration options. Rock does a lot of the heavy lifting for you to help parse the configuration.

Block Content

The content (everything between the start and end tags) that the user adds to your shortcode is accessible to your template using the `{{ blockContent }}` variable. For instance, the parallax shortcode would use this variable to place the content inside the parallax section of a page.

Lava will be run across the markup of the `{{ blockContent }}`. You can disable this behavior by adding a parameter to your shortcode with the key of `disablelavamerge` and a value of 'true'.

Block Configuration

The block configuration can also be placed in the block contents using the syntax: `[[ itemname parameter:'value' parmeter2:'value' ]] content [[ enditemname]]` When Rock is parsing your shortcode, these options will be parsed and removed from the `{{ blockContent }}`. They will then be provided to your template as variables. How these variables are created is super powerful and will help reduce the amount of Lava that is created. Let's dig deeper to see how this works by looking at some examples.

As you've probably seen, the syntax of the googlemap shortcode is:

```
{[ googlemap height:'400px' scrollwheel:'false' draggable:'false' ]}
    [[ marker location:'33.640705,-112.280198' title:'Spark Global Headquarters']]
        <strong>Spark Global Headquarters</strong><p>
        It's not as grand as it sounds.<br>
        <img src='https://rockrms.blob.core.windows.net/misc/spark-logo.png' width="179" he
ight="47" />
    [[ endmarker ]]
    [[ marker location:'33.52764, -112.262571']][[ endmarker ]]
{[ endgooglemap ]}
```

After parsing, your template would have access to the 'height, scrollwheel, draggable' variables just like any shortcode. It would also be provided an array of 'markers' using the variable name 'markers'. (Yes, we know... clever...) Each 'marker' in the 'markers' array would have a variable for 'location, title, ...' It would also have a variable called 'content' which would contain the text within the start and end configuration tags (in this case, the HTML for the Google Maps Info Window).

Single vs Repeating Configuration Items

You know which configuration items can have multiple values (such as the markers on the maps) and which should only have one (such as the map style item), but Rock does not. To deal with this, Rock will provide an array of items AND a single value for each type of configuration item it finds. For example, in the case of markers there will be a 'markers' array variable and a 'marker' variable. The 'marker' variable will have the first item in the array. Your Lava template can use either based on whether it should be a single configuration or multi-value item.

Passing In Objects

> **Version Note**
>
> Passing in objects requires Rock v10 or above.

Up until this point we've seen how we can pass primitive types (strings, numbers, booleans, etc) into our shortcodes. What happens though when we want to pass in a Lava variable? For instance, what if we had a collection of groups, loaded from an entity command, and we want our shortcode to format them. No problem, simply drop the quotes and Lava will pass the contents of the variable into the key you provide. Let's see an example.

```
{% group where:'GroupTypeId == 25'%}
    {[ grouplistformat groups:groupItems ]}
{% endgroup %}
```