

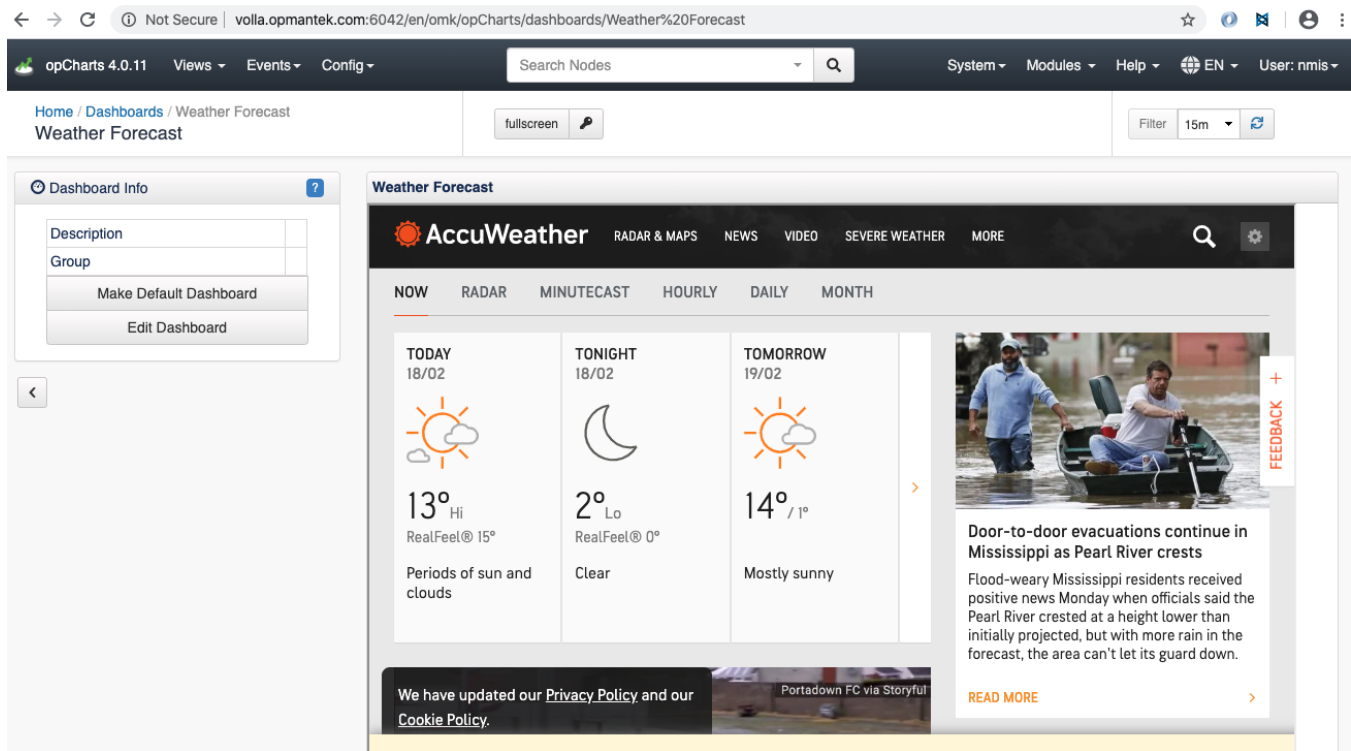
# Creating opCharts HTML Widgets

opCharts HTML widgets is a way to define templates which opCharts can render and present to the user.

- [Prerequisites](#)
- [How to](#)
- [Examples](#)
  - [Simple Component](#)
  - [Wikipedia Search](#)
  - [Using Javascript](#)
- [External Server restrictions](#)

## Prerequisites

- opCharts version >= 4.0.9
- You will need system administration privileges so you can create the required files in the `/usr/local/omk` directory.



## How to

1. Create a new template file and have its prefix `.html.ep` in `<omk_dir>/templates/public/`.
2. Define any arbitrary HTML inside the template as you see fit, mojolicious templates are also supported, see more on rendering mojolicious templates at <https://mojolicious.org/perldoc/Mojo/Template>
3. Create an opCharts component to tell the dashboard it can render this new file. For this, create a new json file in `/usr/local/omk/lib/json/opCharts/components.d/`: Example: `acme_component.json`

```
{
  "name": "What the component is called in the dashboards dropdown list",
  "ep_template_file": "The location of the template file",
  "options": {
    "titleText": "the component display name"
  },
  "type": "ep_template"
}
```

4. Restart the omkd daemon. Please note that omkd daemon should be restarted after any change.

## Examples

## Simple Component

1. Create `<omk_dir>/templates/public/acme_list.html.ep`
2. Add the html content:

```
<h1>
Hello, World!
</h1>
```

3. Create `<omk_dir>/lib/json/opCharts/components.d/acme_component.json`

### acme\_component.json

```
{
  "name": "Acme Component",
  "ep_template_file": "public/acme_list",
  "options": {
    "titleText": "My Title"
  },
  "type": "ep_template"
}
```

4. Restart omkd daemon:

```
sudo service omkd restart
```

## Wikipedia Search

In this example we will create a Dashboard with a Wikipedia Search.

1. Create `<omk_dir>/templates/public/wikipedia.html.ep`
2. Add the html content:

```
<div class="row">
  <div class="container-fluid">
    <div class="navbar-header">
      <iframe id="wikipediaIframeExample"
        title="Wikipedia iframe Example"
        width="900"
        height="600"
        src="https://www.wikipedia.org/">
      </iframe>
    </div>
  </div>
</div>
```

3. Create `<omk_dir>/lib/json/opCharts/components.d/wikipedia_component.json`

### wikipedia\_component.json

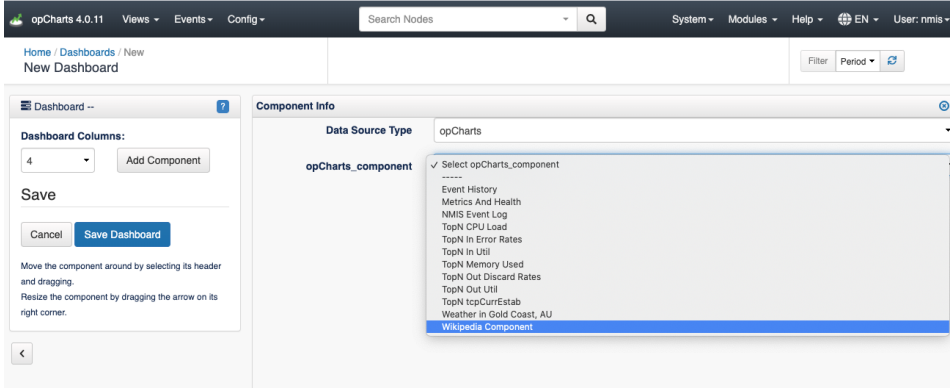
```
{
  "name": "Wikipedia Component",
  "ep_template_file": "public/wikipedia",
  "options": {
    "titleText": "Wikipedia search Embeded"
  },
  "type": "ep_template"
}
```

4. Restart omkd daemon:

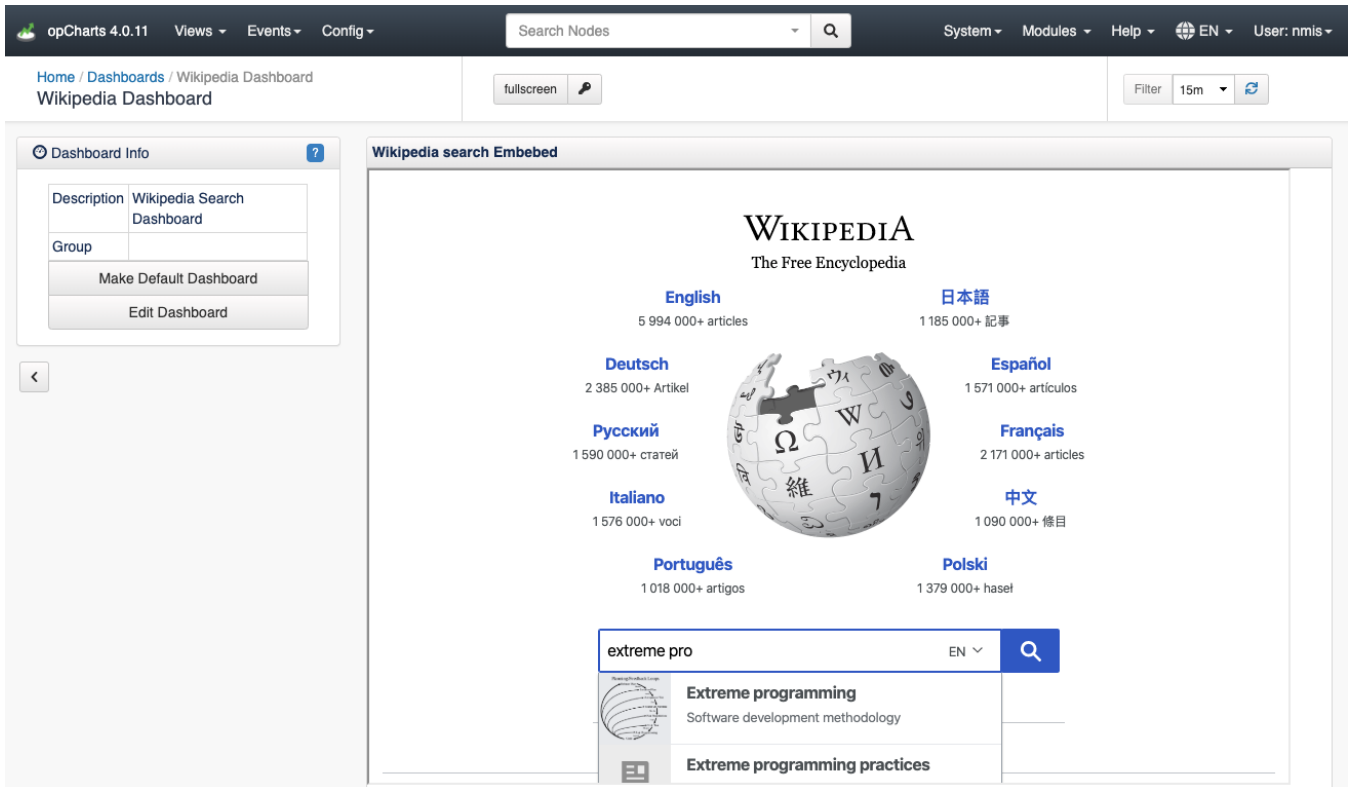
## console

```
sudo service omkd restart
```

5. Go to our Server Views/Dashboards: <http://ourserver/en/omk/opCharts/dashboards> and Add a New Dashboard.
6. Select Data Source Type> opCharts. We will out new component, **Wikipedia Component**.



7. We will see our new Dashboard:



## Using Javascript

In this example we will create a Dashboard with a Drag and Drop Javascript functionality as an example of how Javascript can be used.

1. Create `<omk_dir>/templates/public/jsexample.html.ep`
2. Add the html content:

## jsexample.html.ep

```
## JS
%= javascript begin
var templateHtml;
$(document).ready(function(){

    $("#sortable li").addClass("drop").bind('mousedown',function(){
        templateHtml = $("#sortable").html();
    });
    $("#sortable").sortable();
    $("#droppable").droppable({
        activeClass: 'active',
        hoverClass: 'hovered',
        accept: ".drop",
        drop: function(event, ui){
            $("#sortable").sortable('destroy').html(templateHtml);
            $("#sortable").sortable();
            $("#sortable li").addClass("drop").bind('mousedown',function(){
                templateHtml = $("#sortable").html();
            });
            alert(ui.draggable.text());
        }
    });
});
% end
## CSS Style
<style type="text/css">
    #sortable li{
        clear:both;
        float:left;
        margin: 10px;
    }

    #droppable {
        clear:both;
        height:100px;
        width:100px;
        background-color:#DEC9F0;
        margin: 40px;
        padding: 20px;
    }
    #droppable.active {
        background-color:#CFC;
    }
    #droppable.hovered {
        background-color:#CCF;
    }
</style>

<ul id="sortable">
<li id="one"><span class="label label-success">Success</span></li>
<li id="two"><span class="label label-danger">Danger</span></li>
<li id="three"><span class="label label-warning">Warning</span></li>
<li id="four"><span class="label label-primary">Secondary</span></li>
<li id="five"><span class="label label-info">Info</span></li>
<li id="six"><span class="label label-light">Light</span></li>
</ul>

<div id="droppable">
<center>Drop me Here</center>
</div>
```

### 3. Create <omk\_dir>/lib/json/opCharts/components.d/jsexample\_component.json

#### jsexample\_component.json

```
{
  "name": "Javascript Example Component",
  "ep_template_file": "public/jsexample",
  "options": {
    "titleText": "Javascript Example"
  },
  "type": "ep_template"
}
```

- Restart omkd daemon:

#### console

```
sudo service omkd restart
```

- Go to our Server Views/Dashboards: <http://ourserver/en/omk/opCharts/dashboards> and Add a New Dashboard.
- Select Data Source Type> opCharts. We will select our new component, **Javascript Example**.
- We will see our new Dashboard:

opCharts 4.0.11 Views Events Config Search Nodes

Home / Dashboards / Javascript Dashboard Javascript Dashboard fullscreen

Dashboard Info

Description	
Group	

Make Default Dashboard

Edit Dashboard

Playing with Javascript

Success

Danger

Warning

Secondary

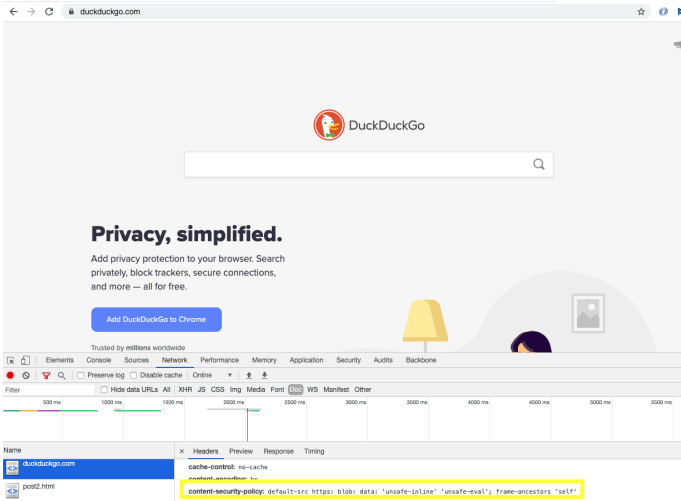
Info

Drop me Here

## External Server restrictions

It is not possible to embed some webpages in an iFrame due to the [CSP](#). The Content Security Policy is a http header from the original server that prevents to load a webpage from an external domain - Or even the same.

It is possible to identify whether the page has this header visiting the external webpage and looking for the existence of the content-security-policy header:



Trying to embed this webpage as an iframe, the result will be something like the following:

