

# Printing PNG Charts

## Overview

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Google Charts can be printed directly from your browser, or from JavaScript via the `print()` function. If you want to provide access to a PNG image of a chart, you can use the `getImageURI()` method. This currently works for core charts and [geocharts](https://developers.google.com/chart/interactive/docs/gallery/geochart.html) (<https://developers.google.com/chart/interactive/docs/gallery/geochart.html>).

If your chart (of type *ChartType*, such as *ColumnChart* or *PieChart*) is called *my\_chart* and the div displaying it is *my\_div*, here's how you access the chart as a PNG:

```
var my_div = document.getElementById('chart_div');
var my_chart = new google.visualization.ChartType(chart_div);

google.visualization.events.addListener(my_chart, 'ready', function () {
    my_div.innerHTML = '';
});

my_chart.draw(data);
```

**Note:** You should wait for the **ready** event, as shown in the examples on this page, to ensure that the chart has finished rendering.

**Note:** This will only work in browsers that support the HTML5 **<canvas>** element, and so won't work on Internet Explorer 9 or earlier.

Here's a complete example:

```
<html>
<head>
  <script type="text/javascript" src="https://www.gstatic.com/charts/loader.js">
  </script>
  <script type="text/javascript">
    google.charts.load("current", {packages:['corechart']});
    google.charts.setOnLoadCallback(drawChart);
    function drawChart() {

      var data = google.visualization.arrayToDataTable([
        ['Element', 'Density', { role: 'style' }],
        ['Copper', 8.94, '#b87333', ],
```

```

    ['Silver', 10.49, 'silver'],
    ['Gold', 19.30, 'gold'],
    ['Platinum', 21.45, 'color: #e5e4e2' ]
  ]);

  var options = {
    title: "Density of Precious Metals, in g/cm^3",
    bar: {groupWidth: '95%'},
    legend: 'none',
  };

  var chart_div = document.getElementById('chart_div');
  var chart = new google.visualization.ColumnChart(chart_div);

  // Wait for the chart to finish drawing before calling the getImageURI()
  google.visualization.events.addListener(chart, 'ready', function () {
    chart_div.innerHTML = '';
    console.log(chart_div.innerHTML);
  });

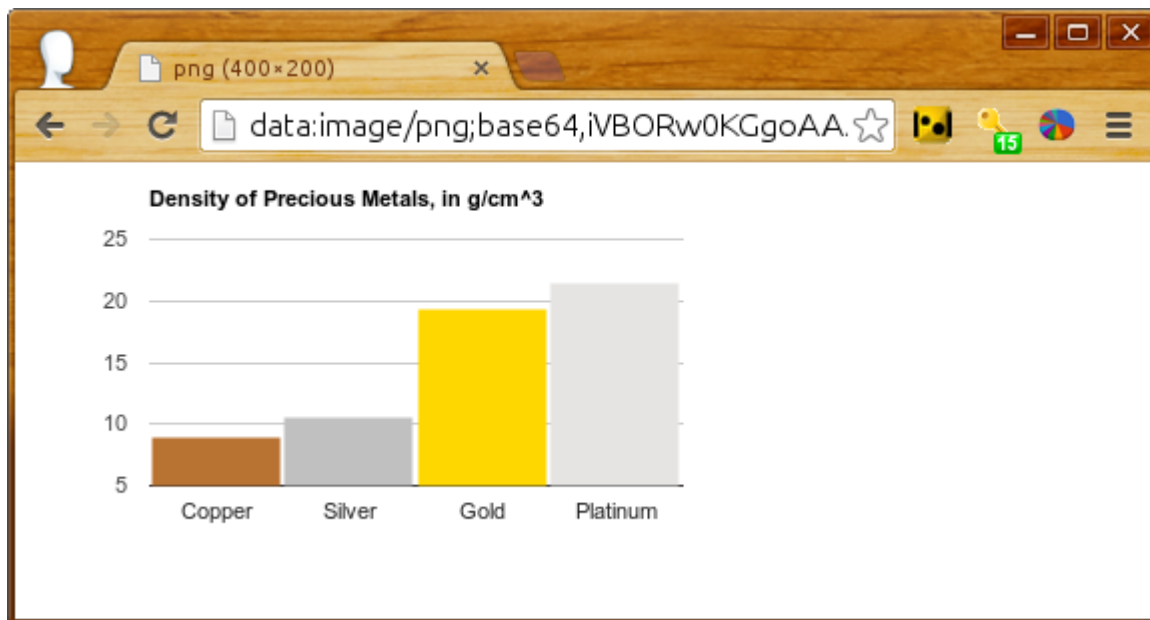
  chart.draw(data, options);
}
</script>
<div id='chart_div'></div>

```

When this program runs, `chart_div.innerHTML` will be set to this PNG encoding of the chart and displayed in the JavaScript console:

```
data:image/png;base64,iVBORw0KGgoAAAANSUhEUgAAZAAAADICAYAAADGFbfiA...
```

When that URI is placed directly into a browser address bar, modern browsers will render the image:



You can include a link to the printable version with the following line of JavaScript:

```
document.getElementById('png').innerHTML = '<a href="' + chart.getImageURI(
```

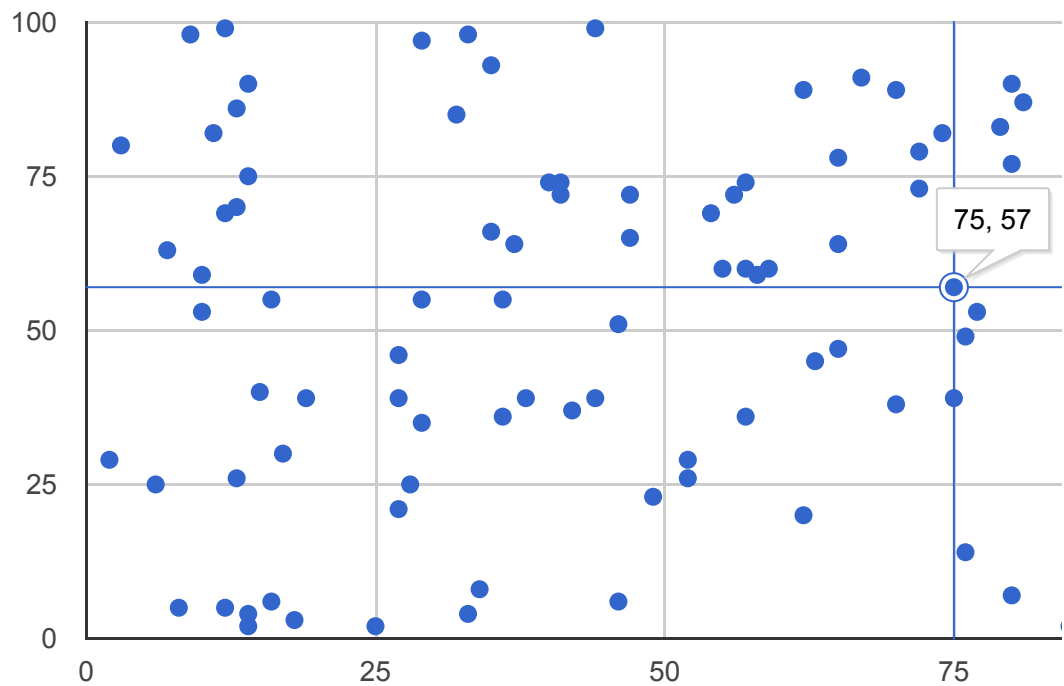
followed by this line in your HTML:

```
<div id='png'></div>
```

## Snapshotting Selections

As a chart creator, you can do most anything to your charts programmatically that users can do in their browsers. So if you want to create a static image of the chart with a [tooltip](https://developers.google.com/chart/interactive/docs/customizing_tooltip_content) ([https://developers.google.com/chart/interactive/docs/customizing\\_tooltip\\_content](https://developers.google.com/chart/interactive/docs/customizing_tooltip_content)) showing or with [crosshairs](https://developers.google.com/chart/interactive/docs/crosshairs) (<https://developers.google.com/chart/interactive/docs/crosshairs>) at a particular point, you can do that by calling `setSelection()` prior to `getImageURI()`, as shown below.

Here's a scatter chart with 100 random points, one of them with tooltip and crosshairs pre-selected:



Reload and you'll see a different point selected. The code, with key lines in bold:

```
<script type="text/javascript">
  google.charts.load("current", {packages:['corechart']});
  google.charts.setOnLoadCallback(drawChart);
  function drawChart() {
    var data = new google.visualization.DataTable();
    data.addColumn('number');
    data.addColumn('number');
    for (var i = 0; i < 100; i++)
      data.addRow([Math.floor(Math.random() * 100),
                   Math.floor(Math.random() * 100)]);

    var options = {
      legend: 'none',
      crosshair: { trigger: 'both' },    // Display crosshairs.
      tooltip: { trigger: 'selection' } // Display tooltips on selection.
    };

    var chart = new google.visualization.ScatterChart(document.getElementById

    google.visualization.events.addListener(chart, 'ready', function () {
```

```
chart.setSelection([{row:99, column:1}]); // Select one of the points.  
png = '<a href="' + chart.getImageURI() + '">Printable version</a>';  
console.log(png);  
});  
  
chart.draw(data, options);  
}
```

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