Highcharts 动态图

本章节我们将为大家介绍 Highcharts 的动态图。

我们在前面的章节已经了解了 Highcharts 配置语法。接下来让我们来看下 Highcharts 的其他配置。

每秒更新曲线图

chart.events

chart.event 属性中添加 load 方法（图表加载事件）。在 1000 毫秒内随机产生数据点并生成图表。

```
chart: {
    events: {
        load: function () {
            // 图表每秒更新一次
            var series = this.series[0];
            setInterval(function () {
                var x = (new Date()).getTime(), // 当期时间
                y = Math.random();
                series.addPoint([x, y], true, true);
            }, 1000);
        }
    }
}
```

实例

文件名：highcharts_dynamic_spline.htm

```
<html>
<head>
<meta charset="UTF-8" />
<title>Highcharts 教程 | 菜鸟教程(runoob.com)</title>
<script src="http://apps.bdimg.com/libs/jquery/2.1.4/jquery.min.js"></script>
<script src="http://code.highcharts.com/highcharts.js"></script></head>
<body>
<div id="container" style="width: 550px; height: 400px; margin: 0 auto"></div>
<script language="JavaScript">
$(document).ready(function() {
    var chart = {
        type: 'spline',
        animation: Highcharts.svg, // don't animate in IE < IE 10.
        marginRight: 10,
        events: {
            load: function () {
```

```
                // set up the updating of the chart each second
                var series = this.series[0];
                setInterval(function () {
                    var x = (new Date()).getTime(), // current time
                    y = Math.random();
                    series.addPoint([x, y], true, true);
                }, 1000);
            }
        }
    };
    var title = {
        text: 'Live random data'
    };
    var xAxis = {
        type: 'datetime',
        tickPixelInterval: 150
    };
    var yAxis = {
        title: {
            text: 'Value'
        },
        plotLines: [{
            value: 0,
            width: 1,
            color: '#808080'
        }]
    };
    var tooltip = {
        formatter: function () {
        return '<b>' + this.series.name + '</b><br/>' +
            Highcharts.dateFormat('%Y-%m-%d %H:%M:%S', this.x) + '<br/>' +
            Highcharts.numberFormat(this.y, 2);
        }
    };
    var plotOptions = {
        area: {
            pointStart: 1940,
            marker: {
                enabled: false,
                symbol: 'circle',
                radius: 2,
                states: {
                    hover: {
                        enabled: true
                    }
                }
            }
        }
    };
```

```
        var legend = {
            enabled: false
        };
        var exporting = {
            enabled: false
        };
        var series= [{
            name: 'Random data',
            data: (function () {
                // generate an array of random data
                var data = [],time = (new Date()).getTime(),i;
                for (i = -19; i <= 0; i += 1) {
                    data.push({
                        x: time + i * 1000,
                        y: Math.random()
                    });
                }
                return data;
            }())
        }];

        var json = {};
        json.chart = chart;
        json.title = title;
        json.tooltip = tooltip;
        json.xAxis = xAxis;
        json.yAxis = yAxis;
        json.legend = legend;
        json.exporting = exporting;
        json.series = series;
        json.plotOptions = plotOptions;


        Highcharts.setOptions({
            global: {
                useUTC: false
            }
        });
        $('#container').highcharts(json);

    });
    </script>
    </body>
    </html>
```
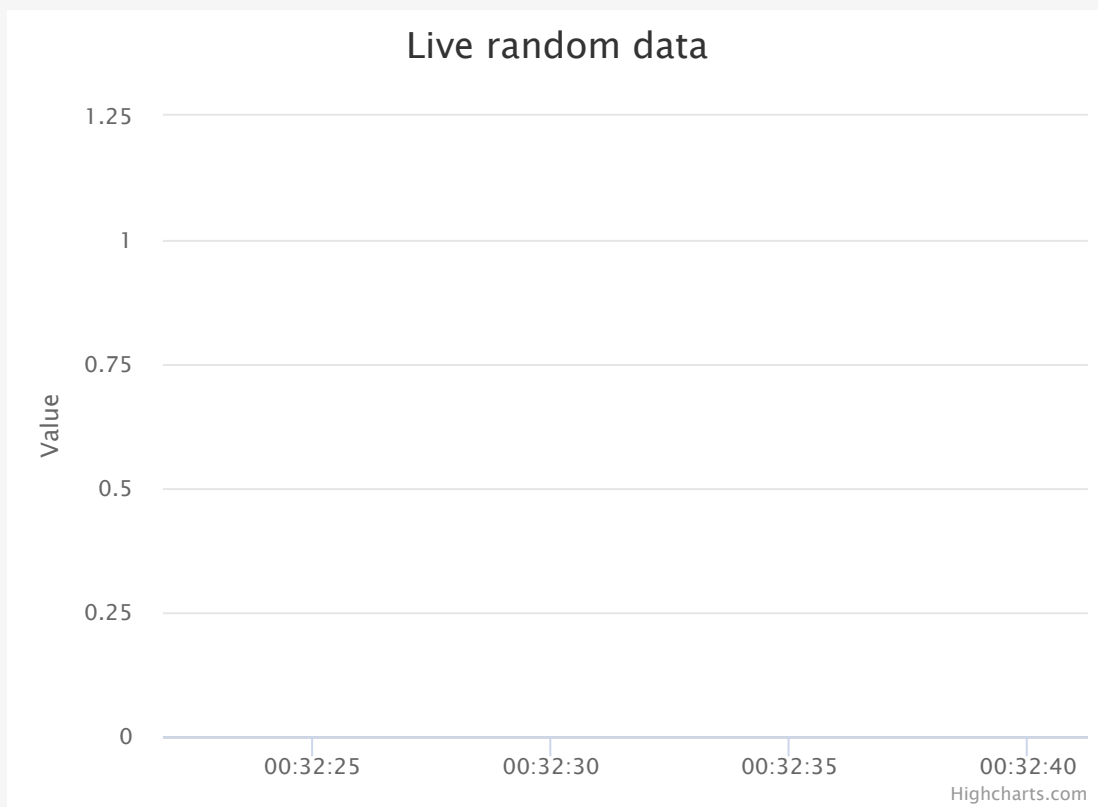
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以上实例输出结果为：

Live random data

[Highcharts 饼图](#)

通过点击添加数据

chart.events

在 chart.event 属性中添加 click 方法（整个图表的绘图区上所发生的点击事件）。该方法在图表绘图区上发生点击时会添加新的数据点。

```
chart: {
    events: {
        click: function (e) {
            // 获取点击坐标和数据项
            var x = e.xAxis[0].value,
            y = e.yAxis[0].value,
            series = this.series[0];
            // 添加点击的坐标
            series.addPoint([x, y]);
        }
    }
}
```

实例

文件名：highcharts_dynamic_click.htm

```
<html>
<head>
<title>Highcharts 教程 | 菜鸟教程(runoob.com)</title>
    <script src="http://apps.bdimg.com/libs/jquery/2.1.4/jquery.min.js"></script>
    <script src="/try/demo_source/highcharts.js"></script>
</head>
<body>
<div id="container" style="width: 550px; height: 400px; margin: 0 auto"></div>
<script language="JavaScript">
$(document).ready(function() {
    var chart = {
        type: 'scatter',
        margin: [70, 50, 60, 80],
        events: {
            click: function (e) {
                // find the clicked values and the series
                var x = e.xAxis[0].value,
                y = e.yAxis[0].value,
                series = this.series[0];
                // Add it
                series.addPoint([x, y]);
            }
        }
    };
    var title = {
        text: 'User supplied data'
    };
    var subtitle = {
        text: 'Click the plot area to add a point. Click a point to remove it.'
    };
    var xAxis = {
        gridLineWidth: 1,
        minPadding: 0.2,
        maxPadding: 0.2,
        maxZoom: 60
    };
    var yAxis = {
        title: {
            text: 'Value'
        },
        minPadding: 0.2,
        maxPadding: 0.2,
        maxZoom: 60,
        plotLines: [{
            value: 0,
            width: 1,
            color: '#808080'
        }]
```

```
        };
        var legend = {
            enabled: false
        };
        var exporting = {
            enabled: false
        };
        var plotOptions = {
            series: {
                lineWidth: 1,
                point: {
                    events: {
                        'click': function () {
                            if (this.series.data.length > 1) {
                                this.remove();
                            }
                        }
                    }
                }
            }
        };

        var series= [{
            data: [[20, 20], [80, 80]]
        }];

        var json = {};
        json.chart = chart;
        json.title = title;
        json.subtitle = subtitle;
        json.xAxis = xAxis;
        json.yAxis = yAxis;
        json.legend = legend;
        json.exporting = exporting;
        json.series = series;
        json.plotOptions = plotOptions;
        $('#container').highcharts(json);

    });
</script>
</body>
</html>
```
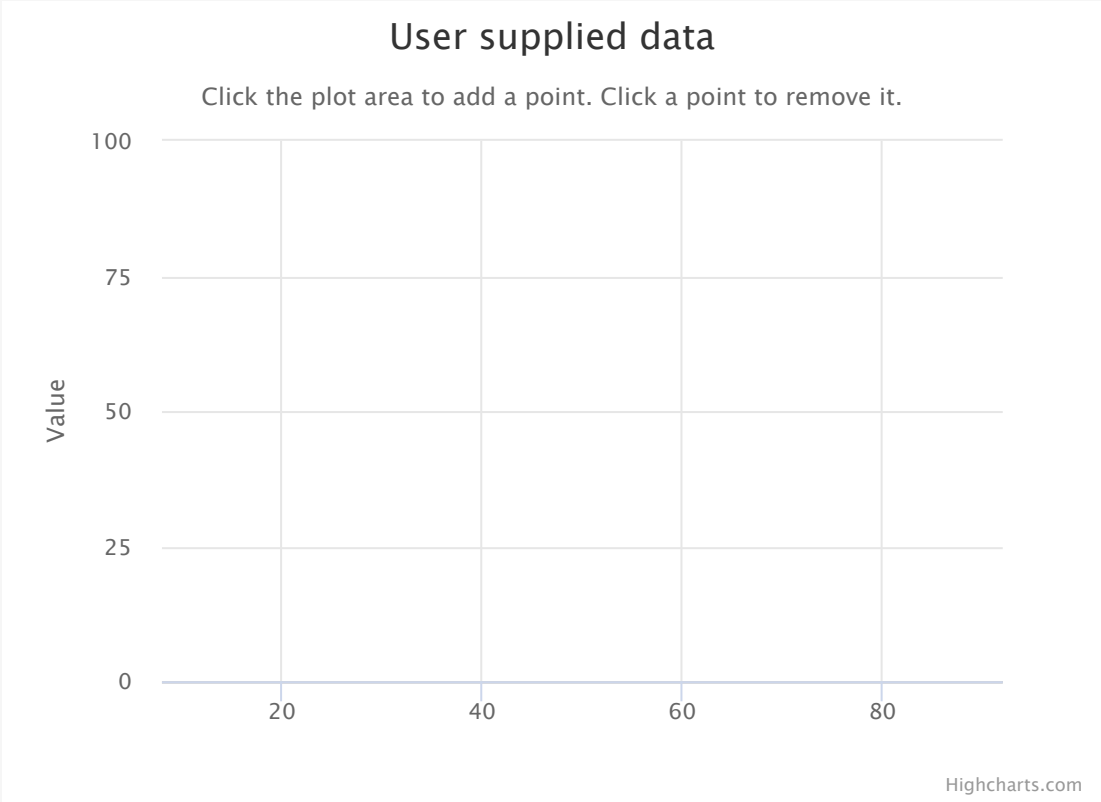
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以上实例输出结果为：

User supplied data

Click the plot area to add a point. Click a point to remove it.

100

75

Value

50

25

0

20   40   60   80

Highcharts.com

← Highcharts 气泡图   Highcharts 组合图 →

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