

# Riak & jQuery DataTables

## Will they blend?



Tutorial Combining Two  
Awesome Technologies  
2015

# Agenda

- jQuery DataTables
  - Getting Started
  - Overview of Features
- Riak
  - Overview and Demo
- Will they blend?
- Helpful Resources

# What is it?

- DataTables is a plug-in for jQuery JavaScript Library
- Highly flexible tool to add interactive controls to HTML tables
- Open Source – MIT license
- Available for free!

# Getting Started in 3 Steps

## Step 1: Add references to the library

```
<link rel="stylesheet" type="text/css" href="http://cdn.datatables.net/1.10.5/css/jquery.dataTables.css">
<script type="text/javascript" charset="utf8" src="http://code.jquery.com/jquery-1.11.1.min.js"></script>
<script type="text/javascript" charset="utf8" src="http://cdn.datatables.net/1.10.5/js/jquery.dataTables.min.js"></script>
```

## Step 2: Create a HTML table

```
<table id="myTable">
  <thead>
    <tr>
      <td>Group</td>
      <td>Subject</td>
      <td>Last Used</td>
    </tr>
  </thead>
  <tbody>
    <tr><td>Event </td><td>I: Thank You </td><td>0000-00-00 00:00:00</td></tr>
    <tr><td>Event </td><td>Q: Request for Help </td><td>0000-00-00 00:00:00</td></tr>
    <tr><td>Event </td><td>Q: Schedule Follow-up </td><td>0000-00-00 00:00:00</td></tr>
    <tr><td>Time </td><td>Q: Vacation Request </td><td>0000-00-00 00:00:00</td></tr>
    <tr><td>Time </td><td>I: Vacation Reminder </td><td>0000-00-00 00:00:00</td></tr>
    <tr><td>Time </td><td>I: Out Sick </td><td>0000-00-00 00:00:00</td></tr>
  </tbody>
</table>
```

# Getting Started in 3 Steps

## Step 3: Activate the library for your table

```
<script>
  $(document).ready(function () {
    $('#myTable').dataTable();
  });
</script>
```

Now, view the results...

Show 10 entries

Search:

Group	Subject	Last Used
Event	I: Thank You	0000-00-00 00:00:00
Event	Q: Request for Help	0000-00-00 00:00:00
Event	Q: Schedule Follow-up	0000-00-00 00:00:00
Time	Q: Vacation Request	0000-00-00 00:00:00
Time	I: Vacation Reminder	0000-00-00 00:00:00
Time	I: Out Sick	0000-00-00 00:00:00

Showing 1 to 6 of 6 entries

Previous1Next

# Overview of Features

Quickly leverage built-in support for...

- AJAX requests
- Adding a custom look 'n feel
- Pagination
- Row selection
- Customizing Table Cells
- Item counts, Sorting & Searching

# AJAX Requests

Dynamically load data into your HTML table.

```
<table id="myTable"><thead><tr>
  <td>Group</td>
  <td>Subject</td>
  <td>Last Used</td>
</tr></thead></table>
```

DataTable will make an AJAX call and populate the table rows using the returned JSON data.

```
[
  {"group":"Time","subject":"Q: Vacation Request","lastUsed":"0000-00-00 00:00:00"},
  {"group":"Time","subject":"I: Vacation Reminder","lastUsed":"0000-00-00 00:00:00"},
  {"group":"Time","subject":"I: Out Sick","lastUsed":"0000-00-00 00:00:00"},
  {"group":"Event","subject":"I: Thank You","lastUsed":"0000-00-00 00:00:00"},
  {"group":"Event","subject":"Q: Request for Help","lastUsed":"0000-00-00 00:00:00"},
  {"group":"Event","subject":"Q: Schedule Follow-up","lastUsed":"0000-00-00 00:00:00"}
]
```

# AJAX Requests (Continued)

Dynamically load data into your HTML table.

```
<script>
$(document).ready(function () {
    $('#myTable').dataTable({
        "ajax": {
            "url": "02_ajax.txt",
            "dataSrc": "",
        },
        "columns": [
            {
                "data": "group"
            },
            {
                "data": "subject"
            },
            {
                "data": "lastUsed"
            }
        ]
    });
});
</script>
```



# Adding a Customer Look 'n Feel

Using CSS, adjusting the appearance of your tables is within reach.

*/\* Alternate row colors \*/*

```
table.dataTable tr.even {  
    background-color: #eee;  
}
```

*/\* Highlight row under cursor \*/*

```
table.dataTable tbody tr:hover {  
    background-color: #dde;  
}
```

*/\* Blue & white table header \*/*

```
table.dataTable thead {  
    background-color: #07c;  
    color: #fff;  
    font-weight: bold;  
}
```

*/\* Update font and border \*/*

```
table.dataTable {  
    border: solid 1px #000;  
    font-family: sans-serif;  
    font-size: 10pt; }  
table.dataTable tbody tr td {  
    padding-left: 1.5em; }
```

# Customer Look 'n Feel (Continue)

Here is what the table looks like after our CSS updates.

Show  entries Search:

Group	Subject	Last Used
Event	I: Thank You	0000-00-00 00:00:00
Event	Q: Request for Help	0000-00-00 00:00:00
Event	Q: Schedule Follow-up	0000-00-00 00:00:00
Time	Q: Vacation Request	0000-00-00 00:00:00
Time	I: Vacation Reminder	0000-00-00 00:00:00
Time	I: Out Sick	0000-00-00 00:00:00

Showing 1 to 6 of 6 entries Previous 1 Next

# Pagination

With a little configuration, you can adjust how many rows are visible on a page. For example to lock how many our displayed to 5 rows per page, you can use the following.

```
<script>
  $(document).ready(function () {
    $('#myTable').dataTable({
      pageLength: 5,
      lengthChange: false,
    });
  });
</script>
```

Search:

Group	Subject	Last Used
Time	I: Out Sick	0000-00-00 00:00:00

Showing 6 to 6 of 6 entries

Previous

1

2

Next

# Pagination (Continued)

You can even get fancy by keeping the height on the last result page the same as the previous pages.

```
<script>
$(document).ready(function () {
  $('#myTable').dataTable({
    pageLength: 4,
    lengthChange: false,
    fnDrawCallback: function (pref) {
      var columnCount = $(this).children('thead').children('tr').children('th').length,
          missing = pref._iDisplayLength - $(this).children('tbody').children('tr').length,
          i;
      for (i = 0; i < missing; i++) {
        $(this).append('<tr class="space"><td colspan="' + columnCount + '">&nbsp;</td></tr>');
      }
    }
  });
});
</script>
```

# Row Selection

By adding some additional JavaScript, you can enable row selection.

```
<script>
$(document).ready(function () {
    var table = $('#myTable').dataTable();
    $('#myTable tbody').on('click', 'tr', function () {
        $(this).toggleClass('selected');
        table.$('tr.selected').not(this).removeClass('selected');
    });
    $('#myTable').click(function () {
        table.row('.selected').remove().draw(false);
    });
});
</script>
```

# Row Selection (Continued)

Additional CSS can then be added to highlight the row further.

```
<style>
  table.dataTable tbody tr.selected {
    background-color: #aaa;
  }
</style>
```

Show  entries Search:

Group	Subject	Last Used
Event	I: Thank You	0000-00-00 00:00:00
Event	Q: Request for Help	0000-00-00 00:00:00
Event	Q: Schedule Follow-up	0000-00-00 00:00:00
Time	Q: Vacation Request	0000-00-00 00:00:00
Time	I: Vacation Reminder	0000-00-00 00:00:00
Time	I: Out Sick	0000-00-00 00:00:00

Showing 1 to 6 of 6 entries Previous 1 Next

# Customizing Table Cells

If you want to combine data from two columns or want to add in links for each cell in a column, you can specify how it should be rendered.

```
<script>
$(document).ready(function () {
    $('#myTable').dataTable({
        "columnDefs": [
            {
                "render": function (data, type, row) {
                    return '<a href="mailto:" + row[0] + ">' + data + '</a>';
                },
                "targets": 1
            },
            { "visible": false, "targets": [ 0 ] }
        ]
    });
});
</script>
```

# Customizing Table Cells (Continued)

The subject now contains a [mailto:](#) link with the value of data showing earlier in the group column.

Show  entries

Search:

Subject	Last Used
<a href="#">I: Thank You</a>	0000-00-00 00:00:00
<a href="#">Q: Request for Help</a>	0000-00-00 00:00:00
<a href="#">Q: Schedule Follow-up</a>	0000-00-00 00:00:00
<a href="#">Q: Vacation Request</a>	0000-00-00 00:00:00
<a href="#">I: Vacation Reminder</a>	0000-00-00 00:00:00
<a href="#">I: Out Sick</a>	0000-00-00 00:00:00

Showing 1 to 6 of 6 entries

Previous1Next



# Customizing Table Cells (Continued)

Additionally, you can specify widths of columns using different units such as em, px, pt, etc.

```
$(document).ready(function () {  
  $('#myTable').dataTable({  
    "columnDefs": [  
      {  
        "render": function (data, type, row) {  
          return '<a href="mailto:' + row[0] + '>' + data + '</a>';  
        },  
        "targets": 1  
      },  
      {  
        "visible": false,  
        "targets": [0]  
      },  
      {  
        "width": "25%",  
        "targets": 2  
      }  
    ]  
  });  
});  
</script>
```

# Item counts, Sorting & Searching

These are on by default, but can be turned off.

```
<script>
  $(document).ready(function () {
    $('#myTable').dataTable({
      bFilter: false,      // Turns off search box
      bPaginate: false,    // Turns off pagination
      bInfo: false,        // Turn off number of entries count
      bSort: false         // Turn off sorting
    });
  });
</script>
```

Group	Subject	Last Used
Event	I: Thank You	0000-00-00 00:00:00
Event	Q: Request for Help	0000-00-00 00:00:00
Event	Q: Schedule Follow-up	0000-00-00 00:00:00
Time	Q: Vacation Request	0000-00-00 00:00:00
Time	I: Vacation Reminder	0000-00-00 00:00:00
Time	I: Out Sick	0000-00-00 00:00:00

# Helpful Resources

- <https://www.datatables.net>
- <http://www.codepug.com/wiki/riak-and-datatable>  
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