



splunk>

# 10 Tips, Tricks and Hacks for Better Dashboards in Splunk

Applications that look better are perceived to be better.

Jason Conger, Splunk

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# whoami



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6+ years at Splunk

Created or consulted on 25+ Splunkbase applications



Staff Solutions Architect  
Global Strategic Alliances

# Am I In The Right Place?

**Target Audience: Splunk Application Developer**

## You should be *familiar* with:

- ▶ Simple XML
- ▶ JavaScript
- ▶ jQuery
- ▶ CSS

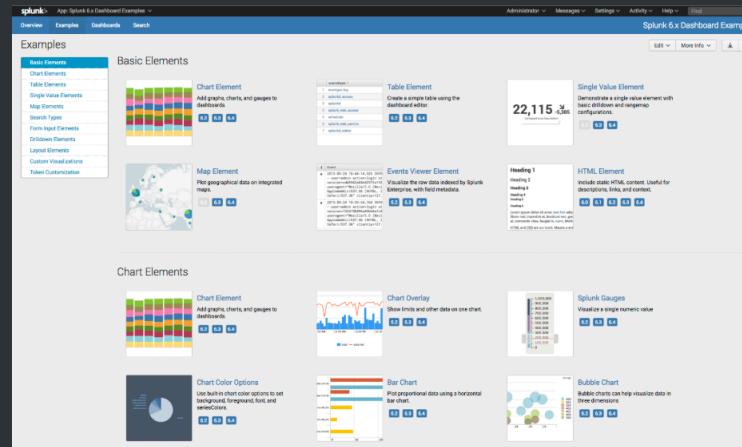
## You will learn:

- ▶ Splunk Developer Settings
- ▶ Tokens and Event Handlers
- ▶ Splunk's Bootstrap Implementation
- ▶ Splunk Web Framework
- ▶ Splunk Form Input Manipulation
- ▶ Bonus Fun Stuff



# Splunk Dashboard Examples App

Start Here



The screenshot shows the Splunk Dashboard Examples App interface. On the left, there's a dark sidebar with a blue icon of three overlapping screens, the title "Splunk Dashboard Examples", a 5-star rating icon, "52 ratings", and a "Splunk Built" badge. The main area displays a grid of dashboard examples. Each example includes a thumbnail, a title, and a brief description. The examples are categorized under "Basic Elements", "Chart Elements", and "Map Elements". Some examples are interactive, showing live data or allowing users to change settings. A navigation bar at the bottom indicates this is the first page of a multi-page application.

<https://splunkbase.splunk.com/app/1603/>

# Developer Settings

## Avoiding Headaches

# 1. Splunk Instance Developer Settings

## Caching, minification, limits

\$SPLUNK\_HOME/etc/system/local/  
web.conf

```
[settings]
minify_js = False
minify_css = False
js_no_cache = True
cacheEntriesLimit = 0
cacheBytesLimit = 0
enableWebDebug = True
```

# Topics

1. Debug/refresh – updates settings without restarting Splunk. Update just what you need <http://localhost:8000/en-US/debug/refresh?entity=data/ui/views&entity=data/ui/nav>

2. Disable Caching in your browser debug capabilities



3. JavaScript – cause a breakpoint with the “debugger” command

# Dashboard Tricks without coding

Just a step beyond Simple XML, but no coding yet

# 2. Dynamic Content with Tokens

**Hide things that are irrelevant**

## Empty maps are no fun...



# 3. Bootstrap Modal

## Bootstrap is already in Splunk



**Splunk® Enterprise**

**Release Notes**

[Download manual as PDF](#)

Documentation / Splunk® Enterprise / Release Notes / Bootstrap

[Download topic as PDF](#)

## Bootstrap

Version 2.3.1

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<http://docs.splunk.com/Documentation/Splunk/7.1.2/ReleaseNotes/Bootstrap>

<https://getbootstrap.com/docs/4.1/components/modal/>

## 4. Static Resources

### Images, CSS, JavaScript

## File System

\$SPLUNK\_HOME/etc/apps/<your app>/appserver/static/<your resource>

## URL

http://splunk\_url:splunk\_port/static/app/<your app>/<your resource>

# 5. Splunk Style Guide Splunkey Elements

[http://splunk\\_url:splunk\\_port/en-US/static/docs/style/style-guide.html](http://splunk_url:splunk_port/en-US/static/docs/style/style-guide.html)

The screenshot shows the Splunk UI Style Guide page. At the top, there's a navigation bar with 'splunk >' and tabs for 'Enterprise' and 'Light'. The main content area has a sidebar on the left with links to various UI components: Typography, Colors, Tables, Buttons, Links, Forms, Navigation, Dropdowns, Modals, Accordions, Icons, Tooltips, Alerts, and Time Picker. The main content area displays examples of typography, specifically H1, H2, and H3 headings, each with a brief description and a link to a report or visualization.

**UI Style Guide**  
preview of basic elements, classes, & UI components used in splunk

**Typography**  
Headings & Paragraphs

**H1 Page Title**  
Reports are based on single searches and can include visualizations, statistics and/or events. Click the name to view the report. Open the report in Pivot or Search to refine the parameters of further explore the data.

**H2 Heading Title**  
Reports are based on single searches and can include visualizations, statistics and/or events. Click the name to view the report. Open the report in Pivot or Search to refine the parameters of further explore the data.

**H3 Heading Title**  
Reports are based on single searches and can include visualizations, statistics and/or events. Click the name to view the report. Open the report in Pivot or Search to refine the parameters of further explore the data.

# Dashboard Tricks with code

Taking things a step farther with JavaScript

# Make table text that is too long a tooltip

## 6. Add Rendering to Table Rows

### Table rendering with Bootstrap Tooltips



Table with tool tips			
index	source	content	source
_internal	mongod	<p>laoreet risus fringilla ac. Maecenas tempor lectus elit, eu laoreet massa vehicula a. Maecenas vel pharetra eros. Fusce vul-</p> <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Integer elit diam, efficitur a sem at, varius euismod risus. Nullam et lectus laoreet, ac sodales enim auctor. Nulla facilisi. Donec dictum varius augue ut finibus. Ut sed dapibus sapien, vita sapien semper sollicitudin sed ut ligula. Ut quam risus, cursus non elit id, luctus consectetur lorem. Donec non risus risus vulputate urna. Mauris at semper nisi, et semper velit. Aenean quis diam leo. Proin augue lacus, tincidunt id consectetur id</p> <p>lectus laoreet, ac sodales enim auctor. Nulla facilisi. Donec dictum varius augue ut finibus. Ut sed dapibus sapien, vita sapien semper sollicitudin sed ut ligula. Ut quam risus, cursus non elit id, luctus consectetur lorem. Donec non risus risus vulputate urna. Mauris at semper nisi, et semper velit. Aenean quis diam leo. Proin augue lacus, tincidunt id consectetur id, facilisis a orci. Nunc condimentum elementum lectus at consectetur. Curabitur sit amet mi nunc. Sed sollicitudin consectetur bibendum. Nullam ullamcorper mi ut tincidunt aliquet. Phasellus rutrum magna ante, non laoreet risus fringilla ac. Maecenas tempor lectus elit, eu</p>	/Applications/Splunk/var
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_internal	metric_collector-2	<p>cursus non elit id, luctus consectetur lorem. Donec non risus risus. Etiam a massa tellus. Donec sit amet vulputate urna. Mauris at semper nisi, et semper velit. Aenean quis diam leo. Proin augue lacus, tincidunt id consectetur id, facilisis a orci. Nunc condimentum elementum lectus at consectetur. Curabitur sit amet mi nunc. Sed sollicitudin consectetur bibendum. Nullam ullamcorper mi ut tincidunt aliquet. Phasellus rutrum magna ante, non laoreet risus fringilla ac. Maecenas tempor lectus elit, eu</p>	/Applications/Splunk/var
_internal	splunkd	<p>laoreet massa vehicula a. Maecenas vel pharetra eros. Fusce vulputate pharetra sagittis.</p> <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Integer elit diam, efficitur a sem at, varius euismod risus. Nullam vita</p>	/Applications/Splunk/var
_internal	mongod	<p>consequat orci. Mauris vulputate diam et lectus laoreet, ac sodales enim auctor. Nulla facilisi. Donec dictum varius augue ut finibus.</p> <p>Ut sed dapibus sapien, vita tempor mi. Vestibulum mollis metus sit amet sapien semper sollicitudin sed ut ligula. Ut quam risus,</p>	/Applications/Splunk/var
_internal	scheduler	<p>cursus non elit id, luctus consectetur lorem. Donec non risus risus. Etiam a massa tellus. Donec sit amet vulputate urna. Mauris at semper nisi, et semper velit. Aenean quis diam leo. Proin augue lacus, tincidunt id consectetur id, facilisis a orci. Nunc condimentum elementum lectus at consectetur. Curabitur sit amet mi nunc. Sed sollicitudin consectetur bibendum. Nullam ullamcorper mi ut tincidunt aliquet. Phasellus rutrum magna ante, non laoreet risus fringilla ac. Maecenas tempor lectus elit, eu</p>	/Applications/Splunk/var
_internal	splunk:tabuilder:log	<p>laoreet massa vehicula a. Maecenas vel pharetra eros. Fusce vulputate pharetra sagittis.</p> <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Integer elit diam, efficitur a sem at, varius euismod risus. Nullam vita</p>	/Applications/Splunk/var
_internal	splunk:tabuilder:log	<p>consequat orci. Mauris vulputate diam et lectus laoreet, ac sodales enim auctor. Nulla facilisi. Donec dictum varius augue ut finibus.</p> <p>Ut sed dapibus sapien, vita tempor mi. Vestibulum mollis metus sit amet sapien semper sollicitudin sed ut ligula. Ut quam risus,</p>	/Applications/Splunk/var
_internal	splunk:tabuilder:log	<p>cursus non elit id, luctus consectetur lorem. Donec non risus risus. Etiam a massa tellus. Donec sit amet vulputate urna. Mauris at semper nisi, et semper velit. Aenean quis diam leo. Proin augue lacus, tincidunt id consectetur id, facilisis a orci. Nunc condimentum elementum lectus at consectetur. Curabitur sit amet mi nunc. Sed sollicitudin consectetur bibendum. Nullam ullamcorper mi ut tincidunt aliquet. Phasellus rutrum magna ante, non laoreet risus fringilla ac. Maecenas tempor lectus elit, eu</p>	/Applications/Splunk/var

# Splunk Web Framework

## 7. Splunk Web Framework Pivot a Table

IP Address:

Submit
Hide Filters

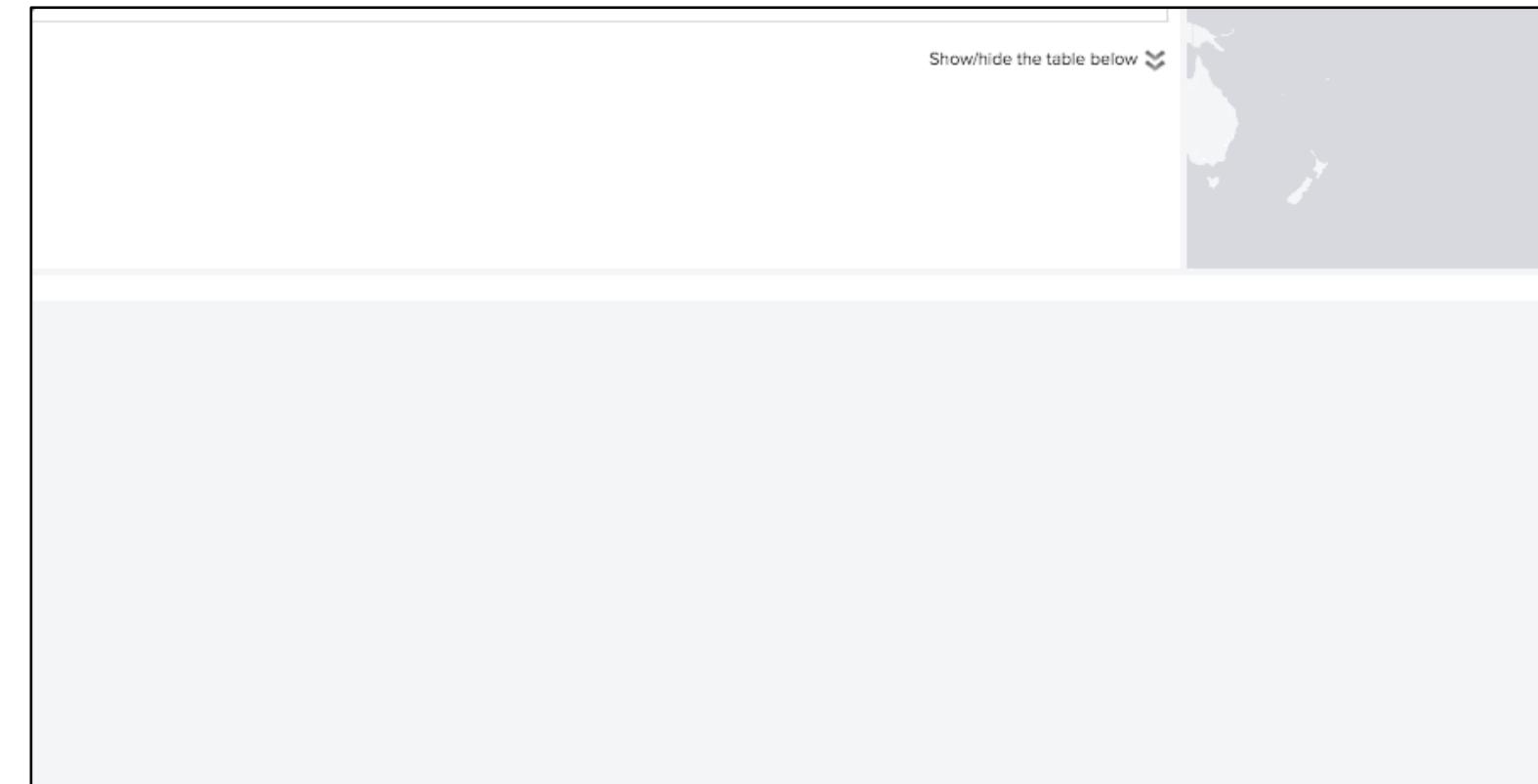
**IP Address Details** ⓘ

City:	San Francisco
Country:	United States
Region:	California
ipaddr:	204.107.141.22
lat:	37.79570
lon:	-122.42090

# Toggle Visibility of any Simple XML Element

## 8. Interactive Collapse & Expand

With just a little JavaScript



# Controlling Text Box Input Types

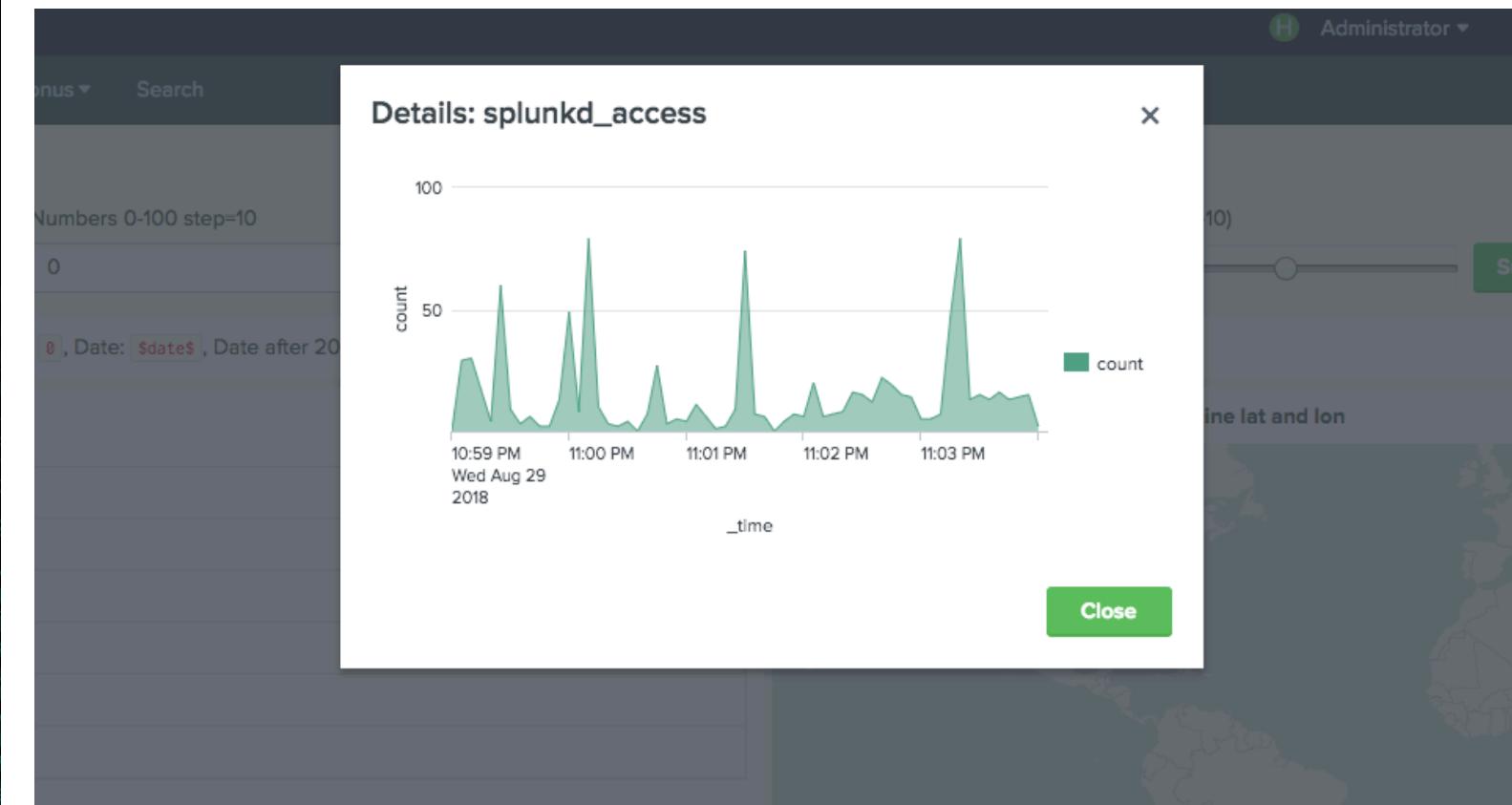
## 9. Form Input Types HTML5 Input Types

**9. Form Input Types**

IP Address:	Numbers only	Numbers 0-100 step=10	Date		
204.107.141.22	1	20	08/03/2018		
Date after 2017-01-01	Range (0-10)				
01/06/2017	<input type="range"/>	<b>Submit</b>	<b>Hide Filters</b>		
<b>Token Values</b>					
IP Address <b>▼</b>	Numbers only <b>▼</b>	Numbers 0 to 100 step 10 <b>▼</b>	Date <b>▼</b>		
204.107.141.22	1	20	2018-08-03		
<b>IP Address Details</b> ⓘ <table border="1"> <tr> <td>City:</td> <td>San Francisco</td> </tr> </table>  <p>The map shows up if geostats can determine lat and lon</p>				City:	San Francisco
City:	San Francisco				

# 10. Putting it all Together

**Event Handler + Token  
+ Table Cell Render +  
Modal + Splunk Web  
Framework**



# 11. Bonus Time



# Q: where can I get a copy of this app?

A: GitHub



<https://github.com/JasonConger/SplunkConf18>

# Additional UI Sessions at .conf18

- ▶ FN1209 - Visualize This, Mother Trucker
- ▶ DEV1545 - Go From Dashboards to Applications With Ease: SplunkJS and Splunk Python for Non-Developers
- ▶ Exciting, To-Be-Announced Developer Sessions

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