TABLEAU CONFERENCES
Welcome
Chalk Talk: Tableau Server Automation API’s

Irwin Dolobowsky
Staff Product Manager
Tableau

Russell Hay
Manager, Development
Tableau
Enabling Integrations for Developers

 Integrations

 Embedded Analytics
 Extensions
 Data Connectivity
 Data Science
 Automation

 Tableau Platform
The Plan

Where we are today

Where we think we’re going

Where you want to see us go
## Where we are Today

<table>
<thead>
<tr>
<th>REST API</th>
<th>Tableau Server-Client for Python (TSC)</th>
<th>TabCmd</th>
<th>Document API</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content Management API’s</td>
<td>Python library for the Tableau Server REST API</td>
<td>Command line client for Tableau Server</td>
<td>Programmatically make updates to Workbook and Data Source files</td>
</tr>
<tr>
<td>• Manage Users &amp; Groups</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Manage Sites, Schedules, Tasks</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Where We Think We’re Going

- Future of REST API
- More Client Libraries
- Authentication / Authorization Improvements
- Open Source Vizportal
- GraphQL
- Webhooks
- Open Source TabCmd
- Document / Data Source APIs
To the board!
Where We Think We’re Going

- Future of REST API
- More Client Libraries
- Authentication / Authorization Improvements
- Open Source Vizportal
- GraphQL
- Webhooks
- Open Source TabCmd
- Document / Data Source APIs
#DataDev Resources

**TC18 Developer Track Content**
http://tabsoft.co/tcdevtrack

**Tableau Developer Program**
http://tableau.com/developer
Free environment for development
Early access to info and APIs

**Tableau on GitHub**
http://github.com/tableau
Please complete the session survey from the Session Details screen in your TC18 app.
Thank you!
# DataDev Resources

**TC18 Developer Track Content**
http://tabsoft.co/tcdevtrack

**Tableau Developer Program**
http://tableau.com/developer
Free environment for development
Early access to info and APIs

**Tableau on GitHub**
http://github.com/tableau
Slide Title

Main topic 1:
Subtopic copy goes here
Subtopic copy goes here

Main topic 2:
Subtopic copy goes here
Subtopic copy goes here

Main topic 3:
Subtopic copy goes here
Subtopic copy goes here
Slide Title (2 Column layout)

Main topic 1:
- Subtopic copy goes here
- Subtopic copy goes here

Main topic 2:
- Subtopic copy goes here
- Subtopic copy goes here

Main topic 3:
- Subtopic copy goes here
- Subtopic copy goes here

Main topic 1:
- Subtopic copy goes here
- Subtopic copy goes here

Main topic 2:
- Subtopic copy goes here
- Subtopic copy goes here

Main topic 3:
- Subtopic copy goes here
- Subtopic copy goes here
Slide Title

Main topic 1:
Subtopic copy goes here
Subtopic copy goes here

Main topic 2:
Subtopic copy goes here
Subtopic copy goes here

Main topic 3:
Subtopic copy goes here
Subtopic copy goes here
Slide Title (2 Column layout)

Main topic 1:
Subtopic copy goes here
Subtopic copy goes here

Main topic 2:
Subtopic copy goes here
Subtopic copy goes here

Main topic 3:
Subtopic copy goes here
Subtopic copy goes here

Main topic 1:
Subtopic copy goes here
Subtopic copy goes here

Main topic 2:
Subtopic copy goes here
Subtopic copy goes here

Main topic 3:
Subtopic copy goes here
Subtopic copy goes here
• Main topic 1:
  • Subtopic copy goes here
  • Subtopic copy goes here
• Main topic 2:
  • Subtopic copy goes here
  • Subtopic copy goes here
• Main topic 3:
  • Subtopic copy goes here
  • Subtopic copy goes here
Use white text in the negative space of full-bleed photos where necessary.

In areas of a photo where text isn’t legible, use a colored shape at full opacity or with a transparency of 5-15%.
Sample Code

```javascript
var pd = require('pretty-data').pd;

var xml_pp = pd.xml(data);

var xml_min = pd.xmlmin(data [,true]);

var json_pp = pd.json(data);

var json_min = pd.jsonmin(data);

var css_pp = pd.css(data);

var css_min = pd.cssmin(data [, true]);

var sql_pp = pd.sql(data);

var sql_min = pd.sqlmin(data);
```
Sample Code

```javascript
var pd = require('pretty-data').pd;

var xml_pp = pd.xml(data);

var xml_min = pd.xmlmin(data [,true]);

var json_pp = pd.json(data);

var json_min = pd.jsonmin(data);

var css_pp = pd.css(data);

var css_min = pd.cssmin(data [, true]);

var sql_pp = pd.sql(data);

var sql_min = pd.sqlmin(data);
```
Click to add quote

Name
Title, Org
Click to add quote

Name
Title, Org
Click to add quote

Name
Title, Org
Please complete the session survey from the Session Details screen in your TC18 app
Please complete the session survey from the Session Details screen in your TC18 app.
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Proin porttitor leo tortor, sed ullamcorper ipsum suscipit in.

Curabitur fermentum lacinia lectus non laoreet. Sed volutpat, dui eu rutrum volutpat, nulla mi accumsan dui, non venenatis mauris augue nec lectus.
Template

Apply the template to an existing PowerPoint presentation (that uses a different template)

1. Save this template to your Desktop.
2. Open an existing PowerPoint you wish to update.
3. Click Design, then scroll down and select "Browse for Themes."
4. Browse to the TC17 template file (.potx) you saved to your Desktop and click Open.
5. The template should update the design and font.
Type and background combinations must meet a minimum *4.5:1 contrast ratio or greater* for accessibility and large format screen legibility. Examples above demonstrate correct color use for on-screen applications.
Typography

Fonts
• This template has been formatted with Arial (bold) and Arial which are standard fonts set in the Slide Master to avoid compatibility issues.

Slide Titles and Headers
• Slide Title and Header text should be set in Arial (bold) have each word capitalized
• Main topics and Headers should be set at 32pt when possible, use colored text for visual differentiation/focus.

Body Copy
• Body copy should be set to Arial 24pt when possible.
• Try to limit each slide to a maximum of 3 font sizes.

Type Tips
• Create visual differentiation/focus by using scale and color versus using bullets.
To view the grid and guidelines, check the Guides box in the Show section under the view tab.

To further aid in alignment of objects, click the expand icon in the bottom-right corner of the Show section and check ‘Display smart guides when shapes are aligned.’
These icons are provided so you can use them to for diagrams showing architecture, workflow, etc. Icon colors can be modified by right-clicking item and selecting theme color.
# Tables

<table>
<thead>
<tr>
<th>Header 1</th>
<th>Header 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>To modify table, <strong>first click anywhere</strong> in table, so the <strong>Table Tools</strong> menu is highlighted at top</td>
<td><strong>Layout</strong> &gt; Shrink or expand column widths by adjusting the <strong>Cell Size</strong>, or set them to same size with <strong>Distribute</strong></td>
</tr>
<tr>
<td><strong>To modify the table layout</strong>, click <strong>Table Tools &gt; Layout</strong></td>
<td><strong>Layout</strong> &gt; Use <strong>Alignment</strong> settings to adjust <strong>text alignment</strong> and <strong>cell margins</strong></td>
</tr>
<tr>
<td><strong>To modify the table style</strong>, click <strong>Table Tools &gt; Design</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Layout</strong> &gt; <strong>To add rows</strong>, click into cell and choose, <strong>Insert Above</strong> or <strong>Insert Below</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Layout</strong> &gt; <strong>To add columns</strong>, click into cell and choose <strong>Insert Left</strong> or <strong>Insert Right</strong></td>
<td><strong>Tip</strong>: To quickly add a row, place cursor in this <strong>last cell</strong> and hit <strong>Tab key</strong></td>
</tr>
</tbody>
</table>
## Sample Table (Option A)

<table>
<thead>
<tr>
<th>Header 1</th>
<th>Header 2</th>
<th>Header 3</th>
<th>Header 4</th>
<th>Header 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td>Content</td>
<td>Content</td>
<td>Content</td>
<td>Content</td>
</tr>
<tr>
<td>Content</td>
<td>Content</td>
<td>Content</td>
<td>Content</td>
<td>Content</td>
</tr>
<tr>
<td>Content</td>
<td>Content</td>
<td>Content</td>
<td>Content</td>
<td>Content</td>
</tr>
<tr>
<td>Content</td>
<td>Content</td>
<td>Content</td>
<td>Content</td>
<td>Content</td>
</tr>
<tr>
<td>Content</td>
<td>Content</td>
<td>Content</td>
<td>Content</td>
<td>Content</td>
</tr>
<tr>
<td>Content</td>
<td>Content</td>
<td>Content</td>
<td>Content</td>
<td>Content</td>
</tr>
<tr>
<td>Content</td>
<td>Content</td>
<td>Content</td>
<td>Content</td>
<td>Content</td>
</tr>
</tbody>
</table>
## Sample Table (Option B)

<table>
<thead>
<tr>
<th>Header 1</th>
<th>Header 2</th>
<th>Header 3</th>
<th>Header 4</th>
<th>Header 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td>Content</td>
<td>Content</td>
<td>Content</td>
<td>Content</td>
</tr>
<tr>
<td>Content</td>
<td>Content</td>
<td>Content</td>
<td>Content</td>
<td>Content</td>
</tr>
<tr>
<td>Content</td>
<td>Content</td>
<td>Content</td>
<td>Content</td>
<td>Content</td>
</tr>
<tr>
<td>Content</td>
<td>Content</td>
<td>Content</td>
<td>Content</td>
<td>Content</td>
</tr>
<tr>
<td>Content</td>
<td>Content</td>
<td>Content</td>
<td>Content</td>
<td>Content</td>
</tr>
<tr>
<td>Content</td>
<td>Content</td>
<td>Content</td>
<td>Content</td>
<td>Content</td>
</tr>
</tbody>
</table>
Thank you!

Contact or CTA info goes here
Thank you!

Contact or CTA info goes here
TABLEAU
CONFERENCE