

Leveraging the VizQL Data Service for Enhanced Automation



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Thank You



Agenda

- 01 What Is VizQL Data Service (VDS)?
- 02 VDS & Tableau Development Workflow
- 03 VDS Capabilities
- 04 VDS Use Cases
- 05 Demos
- 06 Useful Resources



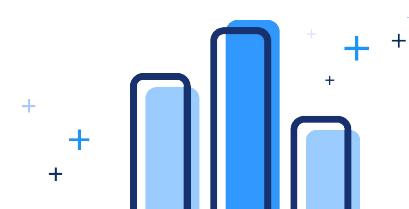
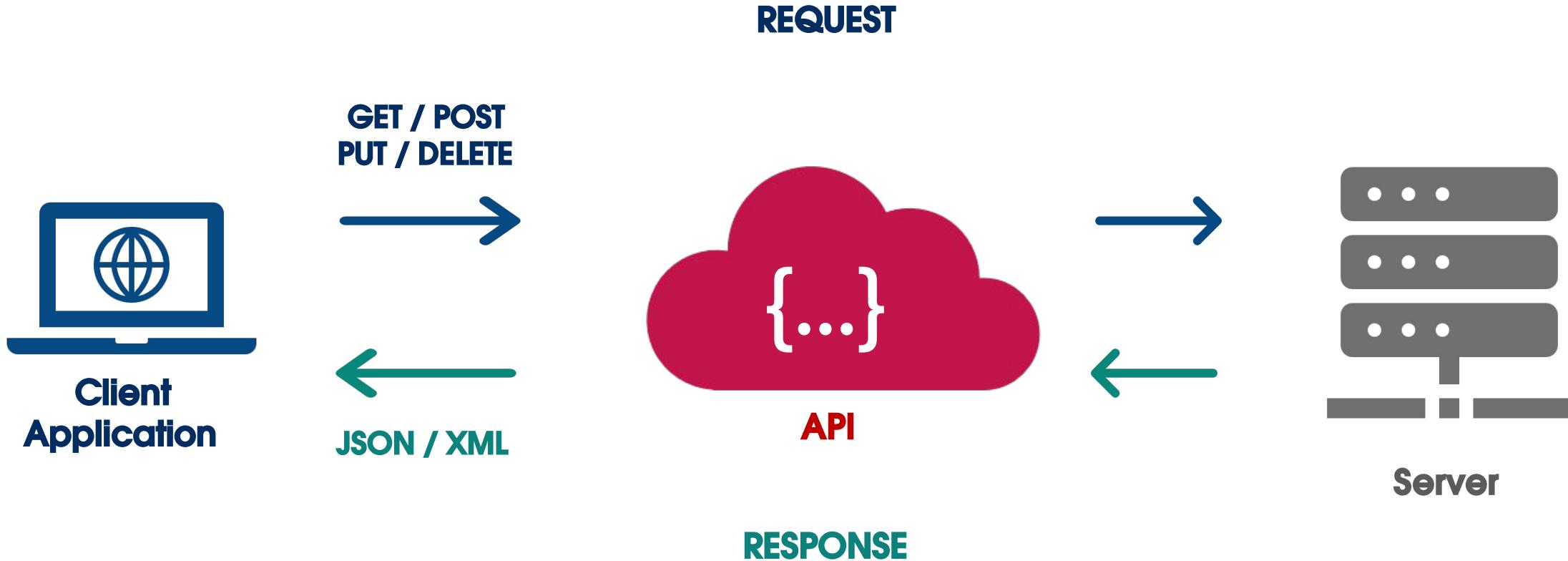
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Things I like:

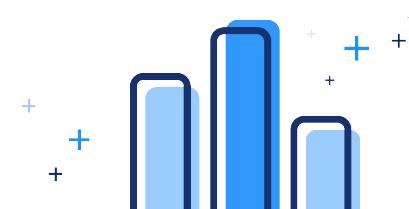
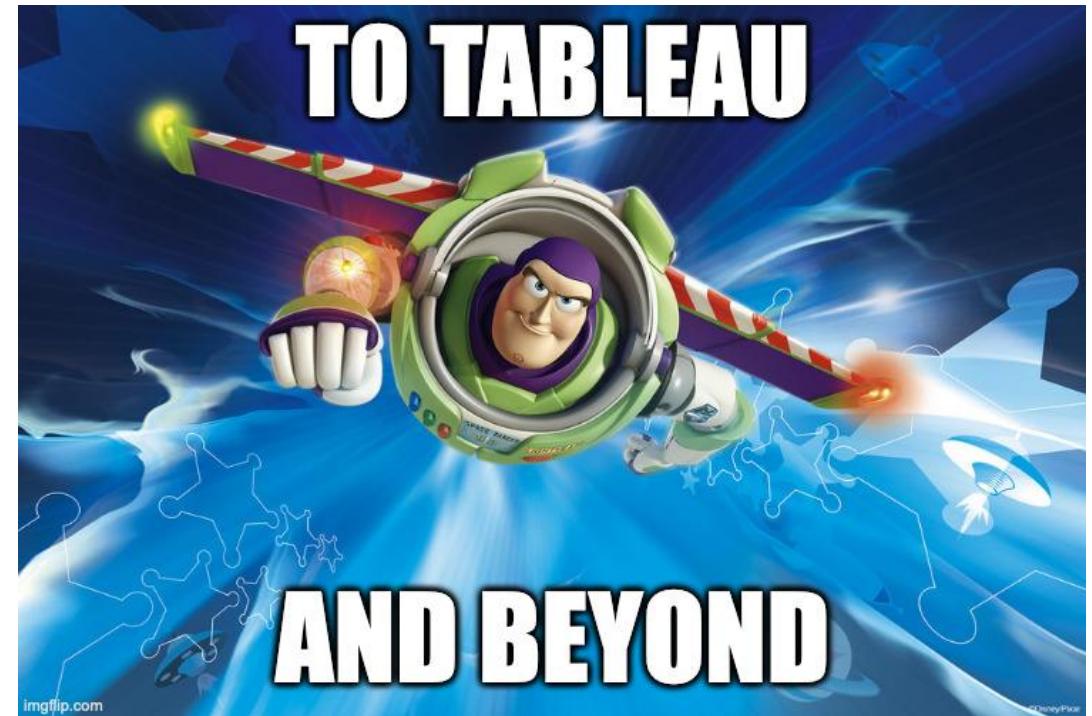
- Exploring new APIs
- Automating processes
- Coffee

Quick Intro to APIs



VizQL Data Service (VDS): New Developer Tool

- VDS is a new Tableau API for programmatic data access
- Allows querying **published** Tableau data sources and sending data to external applications
- A flexible solution for extending data usage beyond Tableau dashboards



Enter Headless BI

Approach to data analytics that decouples the backend (data processing, querying, and management) from the frontend (visualization and presentation)

- Separation of Data Layer & Visualization
- API-Driven Integration
- Customizable & Scalable
- Improved Flexibility

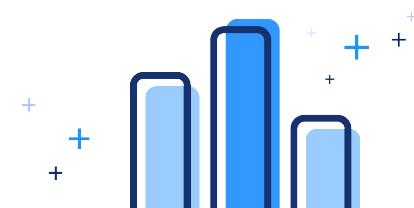


Tableau Data Flow: Before VDS

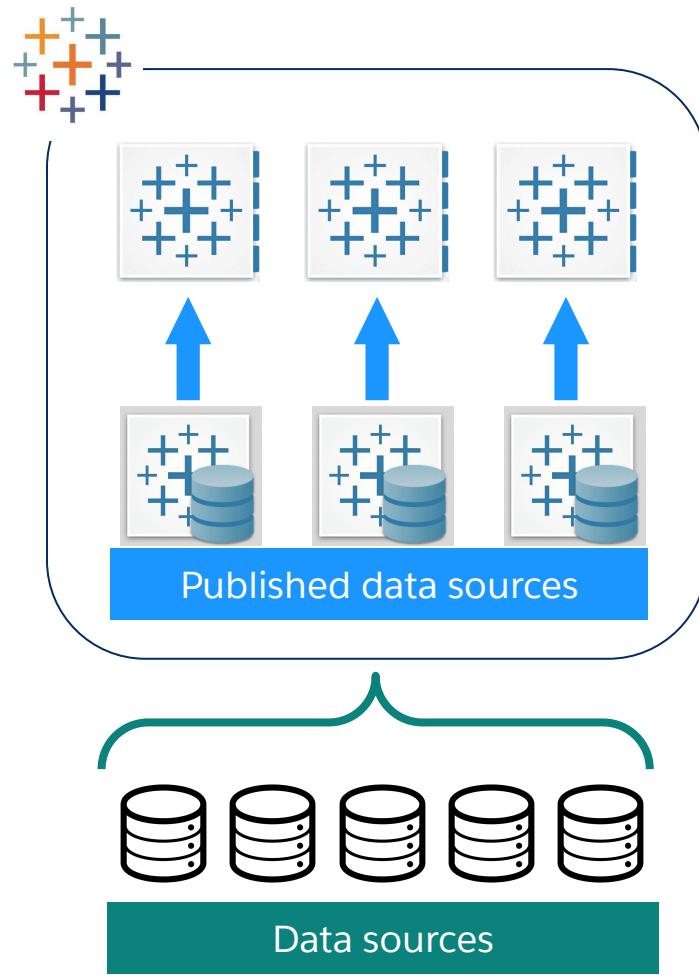
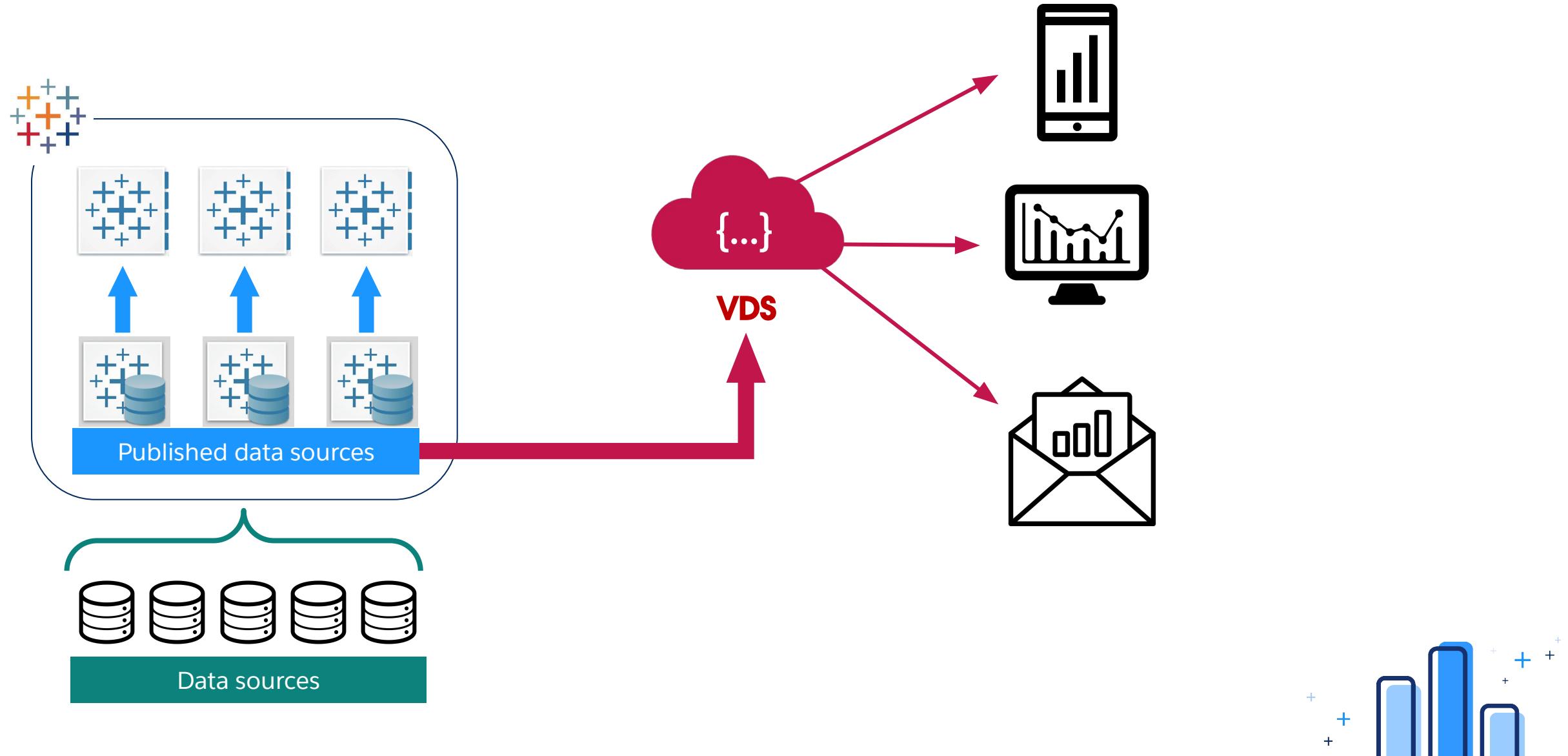


Tableau Data Flow: With VDS

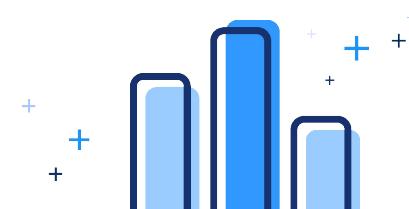


VDS: Key Features

- View metadata about your data source to explore available fields
- Get existing columns with specified aggregation
- Filter your data using four filter types: QUANTITATIVE, SET, DATE or TOP
- Create new columns using familiar Tableau calculated field syntax

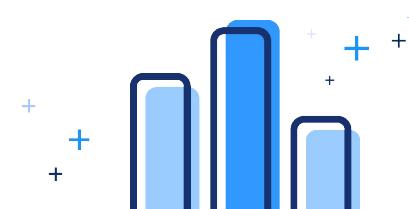


```
{  
  "columns": [  
    {  
      "columnName": "Segment"  
    },  
    {  
      "columnName": "Sales",  
      "function": "SUM"  
    }  
  ]  
}
```



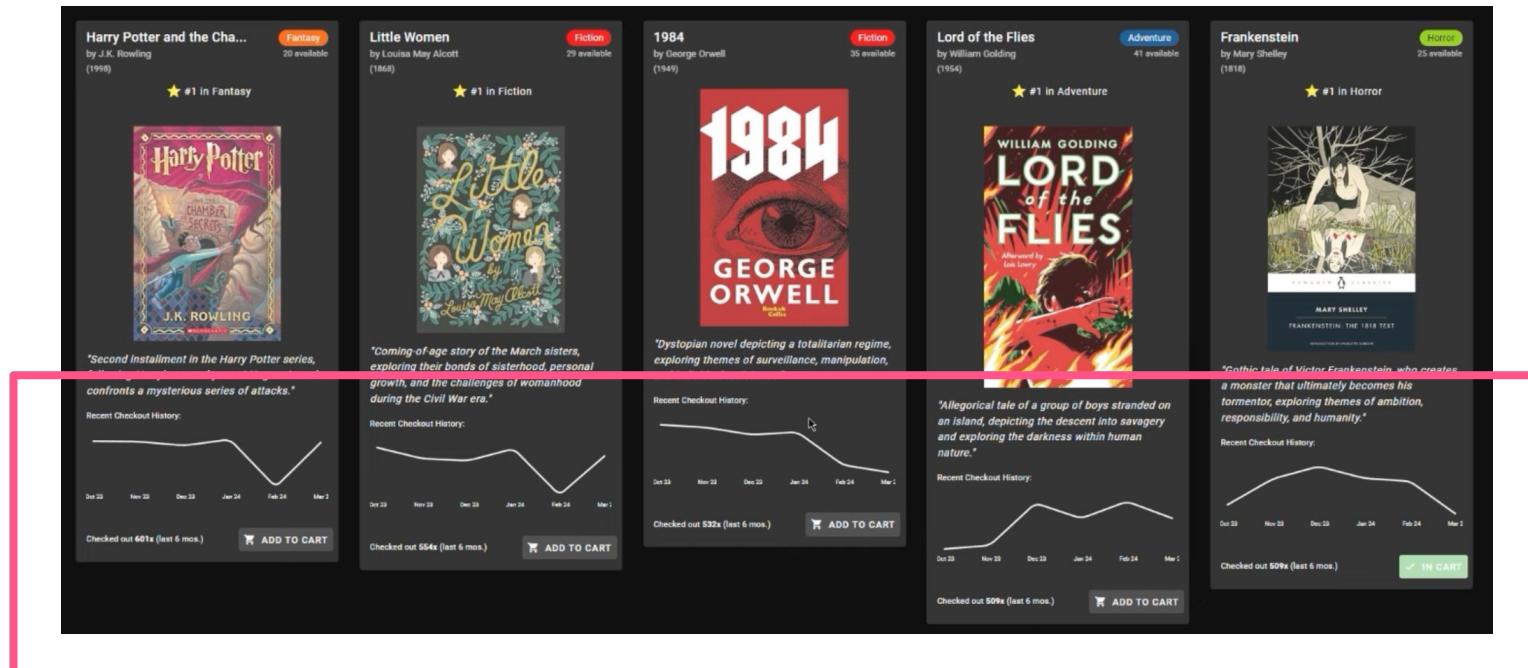
VDS: Security & Governance

- Maintains existing data governance framework
- Requires API access configuration for the corresponding data source
- Enables controlled data access for various user needs via personal access tokens (PAT) or connected apps

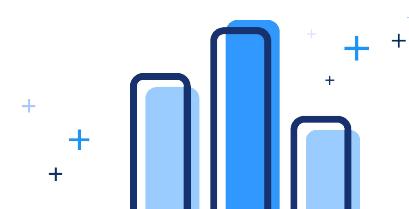


VDS Use Cases: Beyond Vizualizations

- Embed custom visualisations in any application using governed data sources
- Automate data distribution
- Power AI and machine learning applications



Screenshot from a YouTube video about VizQL Data Service by Kyle Massey



VDS Demo: Get Started with Postman

Use code snippets in Tableau's Postman collection

REQUEST

```

1  {
2    "connection": {
3      "tableauServerName": "{{tableau-server-name}}",
4      "siteId": "{{site-id}}",
5      "datasource": "{{datasource}}"
6    },
7    "options": {
8      "debug": {{options-debug}},
9      "returnFormat": "OBJECTS"
10     },
11   "query": {
12     "columns": [
13       {
14         "columnName": "Category"
15       },
16       {
17         "columnName": "Sub-Category"
18       },
19       {
20         "columnName": "Profit",
21         "function": "AVG"
22       }
23     ]
24   }
25 }
```



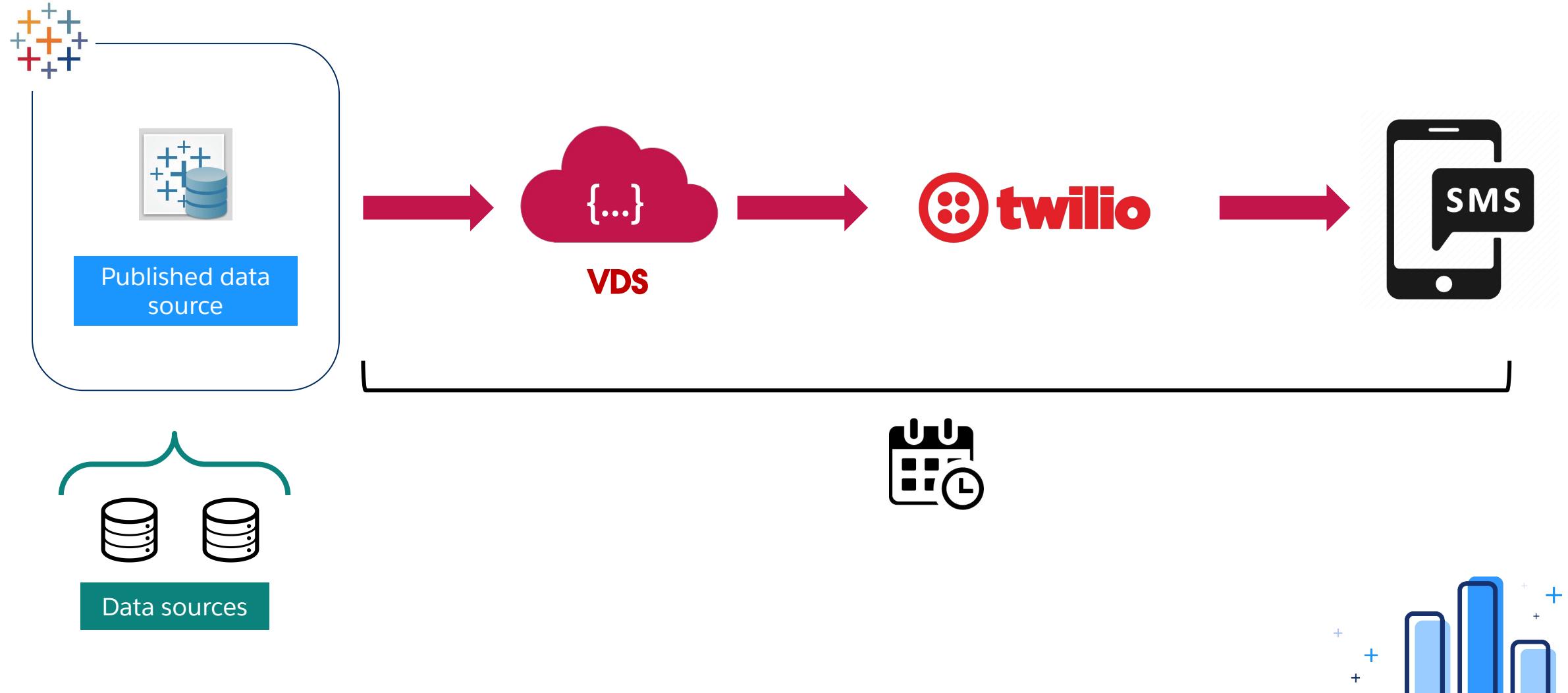
RESPONSE

Body	Cookies	Headers (19)	Test Results
Pretty Raw Preview Visualize JSON			
<pre> 1 { 2 "data": [3 { 4 "Category": "Office Supplies", 5 "Sub-Category": "Binders", 6 "AVG(Profit)": 20.30109838501296 7 }, 8 { 9 "Category": "Office Supplies", 10 "Sub-Category": "Storage", 11 "AVG(Profit)": 24.86578446261679 12 }, 13 { 14 "Category": "Technology", 15 "Sub-Category": "Accessories", 16 "AVG(Profit)": 54.11178800000001 17 }, 18 { 19 "Category": "Furniture", 20 "Sub-Category": "Furnishings", 21 "AVG(Profit)": 13.767832507433102 22 }, 23 { 24 "Category": "Furniture", 25 "Sub-Category": "Tables", 26 "AVG(Profit)": -54.45768742331289 27 } 28 } 29 }</pre>			



VDS Demo: Morning Brew Alerts

Sending scheduled text messages using data from published Tableau data sources



Useful Resources

- [VDS Documentation](#)
- [Introduction to VDS at Tableau Conference'24](#)
- [Blog about VizQL Data Service from Kyle Massey](#)
- [VDS: First impressions and discussion about Headless BI](#)
from Tableau Tim
- Join Tableau Developer Programme:
www.tableau.com/developer



Hands-on VDS training tomorrow at 3pm

Unlock Tableau Data with VizQL Data Service API



Discover how to harness Tableau's VizQL Data Service API for seamless data access, automation, and app integration. Learn to query Tableau data sources and power advanced workflows programmatically.

Important: By selecting "Schedule" you are reserving a seat. Please show up 10 mins prior to the session or we will release your seat. If a session is full, you still can join the walk-up line onsite.

Required equipment: Bring your own laptop with Tableau Cloud installed.

You can get your Tableau Cloud free sandbox site by joining the DataDev program: tableau.com/developer

Nick Brisoux, Senior Director, Product Management, Salesforce

Product: Tableau Cloud, Developer Platform

Topic: Integrations

Session Type: Hands-On Training

[Add To Schedule](#)

TUESDAY, NOV 12 | 3:00 PM - 4:30 PM GMT | DODDINGTON 1

Headless BI in Tableau session tomorrow at 3:40pm

Life with Headless BI in Tableau



Discover how Headless BI, Embedded Analytics, and VizQL Data Service can transform your data strategy today, with a glimpse into the future of Tableau, including Tableau Semantics.

Important: This session is first come first seated.

Alex Eskinasy, Principal Solutions Engineer - Embedded Analytics, Salesforce

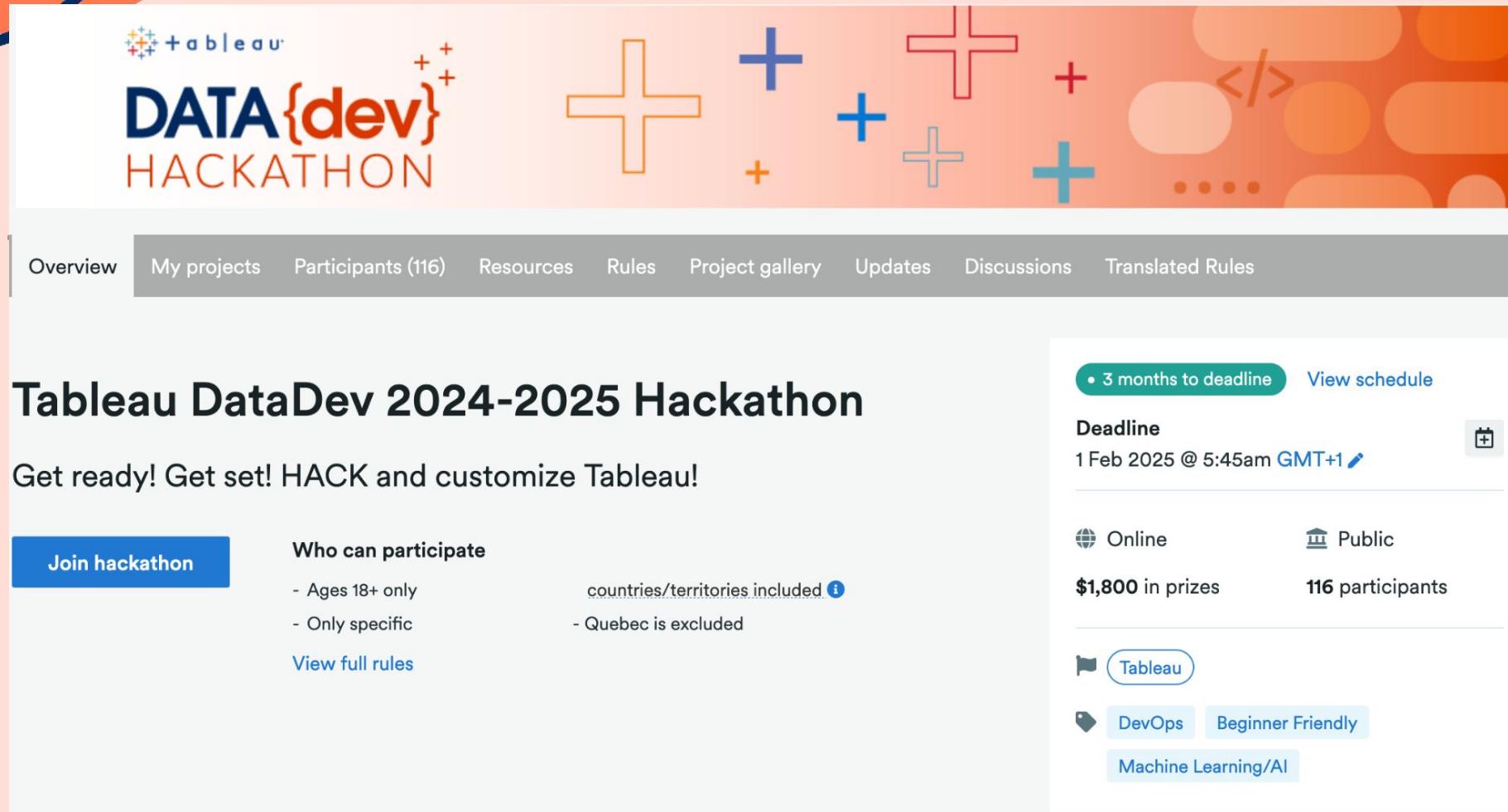
Tim Payne, Principal Specialist Solution Engineer, Salesforce

Product: Embedded Analytics

Session Type: Breakout

[Add To Schedule](#)

TUESDAY, NOV 12 | 3:40 PM - 4:10 PM GMT | HARDWICK HUB



The screenshot shows the Tableau DataDev Hackathon landing page. At the top left is the Tableau logo and the text "DATA{dev} HACKATHON". Below the logo is a navigation bar with links: Overview, My projects, Participants (116), Resources, Rules, Project gallery, Updates, Discussions, and Translated Rules. The main section features a large title "Tableau DataDev 2024-2025 Hackathon" and a subtitle "Get ready! Get set! HACK and customize Tableau!". To the right is a summary box with the following details:

- 3 months to deadline [View schedule](#)
- Deadline**: 1 Feb 2025 @ 5:45am GMT+1
- Online** **Public**
- \$1,800 in prizes** **116 participants**
- Tableau**
- DevOps** **Beginner Friendly**
- Machine Learning/AI**



Data{dev(quest)}

Blog About Us Submit Challenge

Tableau DataDevQuest

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Innovate, Automate, and Elevate Your Data Solutions

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Thank you

