Tuesday 12th January 2021 | 12:30 PM GMT

Live Stream:

Using Alteryx to Extract Foreign Exchange Rates in Real Time

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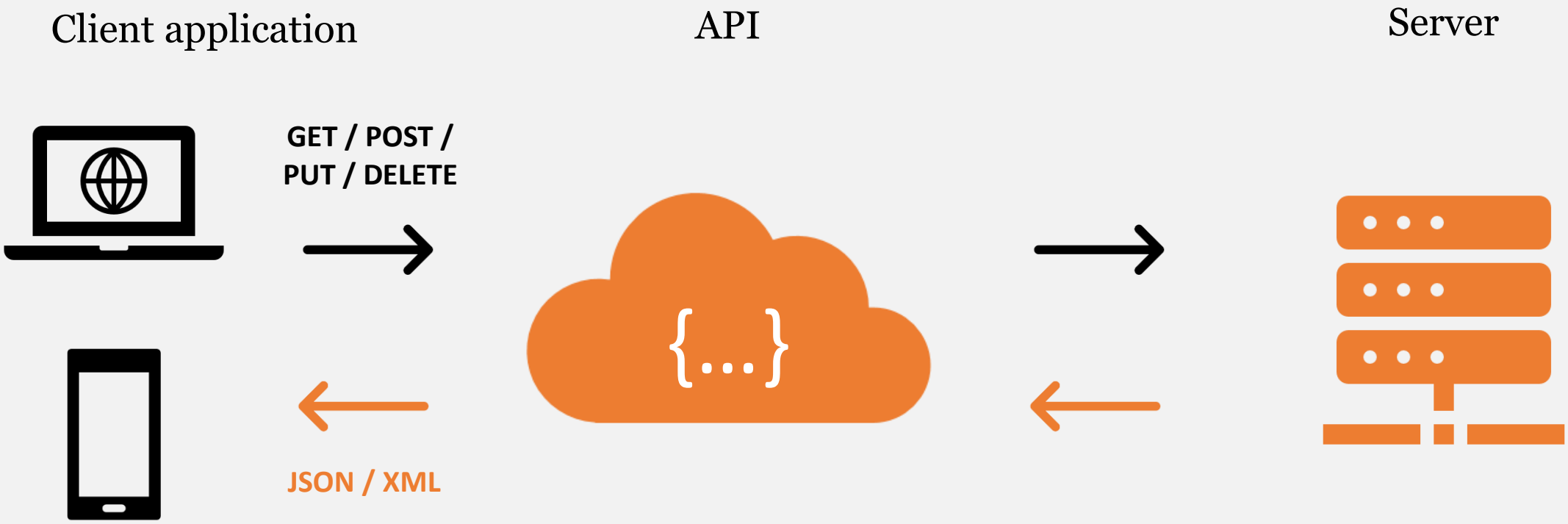
@Anyalitica

Find out more on Meetup!
http://til.bi/talkdata

The Information Lab

What is an API?



Data formats

XML – Extensible markup language

JSON – JavaScript Object Notation

The example of the response in JSON format on the right shows that the data is stored in **key and value pairs**.

```
GET https://api.exchangeratesapi.io/latest HTTP/1.1

{
  "base": "EUR",
  "date": "2018-04-08",
  "rates": {
    "CAD": 1.565,
    "CHF": 1.1798,
    "GBP": 0.87295,
    "SEK": 10.2983,
    "EUR": 1.092,
    "USD": 1.2234,
    ...
  }
}
```

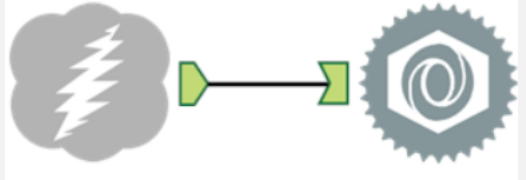
Reading the HTTP response

HTTP - Hypertext Transfer Protocol. Most common types of HTTP responses:

- **200 - Success. Everything is fine**
- 301 - The resource you are looking for has been moved
- 404 - Error. The URL does not exist
- 500 - There is a problem on the server side. It is probably down

How do we connect to APIs with Alteryx?

With the help of the Download and JSON Parse tools



Step 1. Read the API's documentation

Step 2. Get a request URL

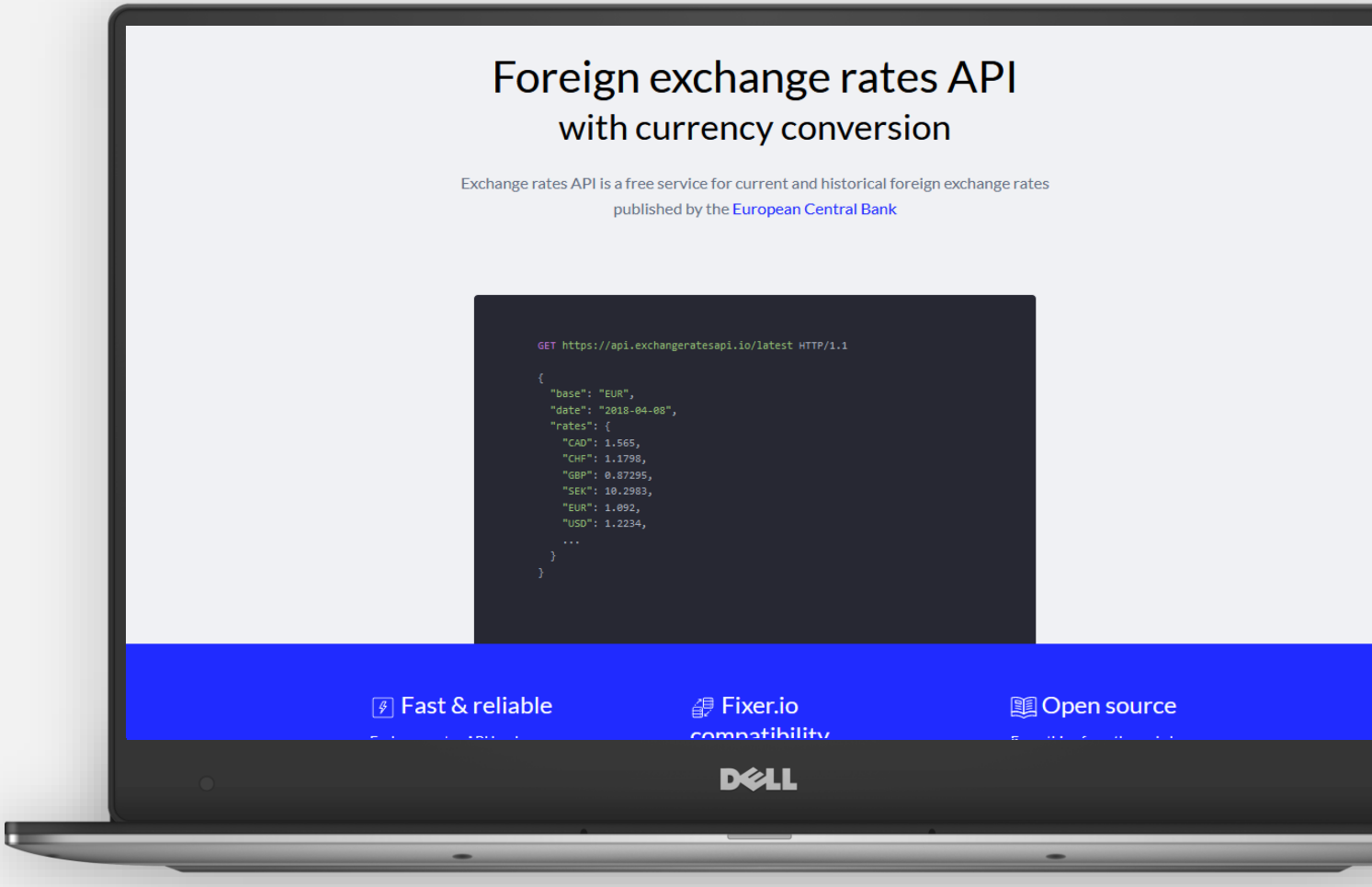
Step 3. Send the request to the API and download the data with the **Download tool**

Step 4. Break the key and value pairs into columns and rows with the **JSON Parse tool**

Step 5. Clean the response data, and form a table to output it or use further in the workflow

Connecting to the Foreign Exchange Rates API in Alteryx

exchangeratesapi.io



Further resources

- The workflow from this webinar is available from The Information Lab's Alteryx gallery
- Free public APIs
  - https://github.com/public-apis/public-apis
  - https://public-apis.io/
- Alteryx challenges involving APIs
  - Challenge #7
  - Challenge #69
- The Data School blog & The Information Lab YouTube channel

Thank you for joining!

We now have some time for questions

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