

# Internet & Requests

The other day, two routers got married...



The Wedding was OK

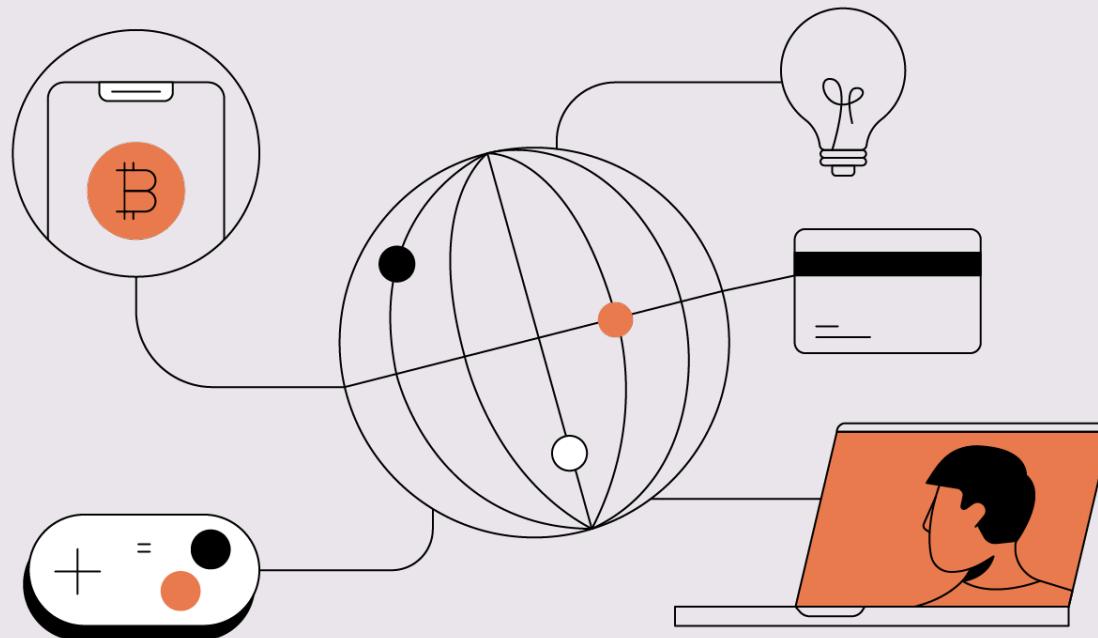
But the Reception was Great!

# Today

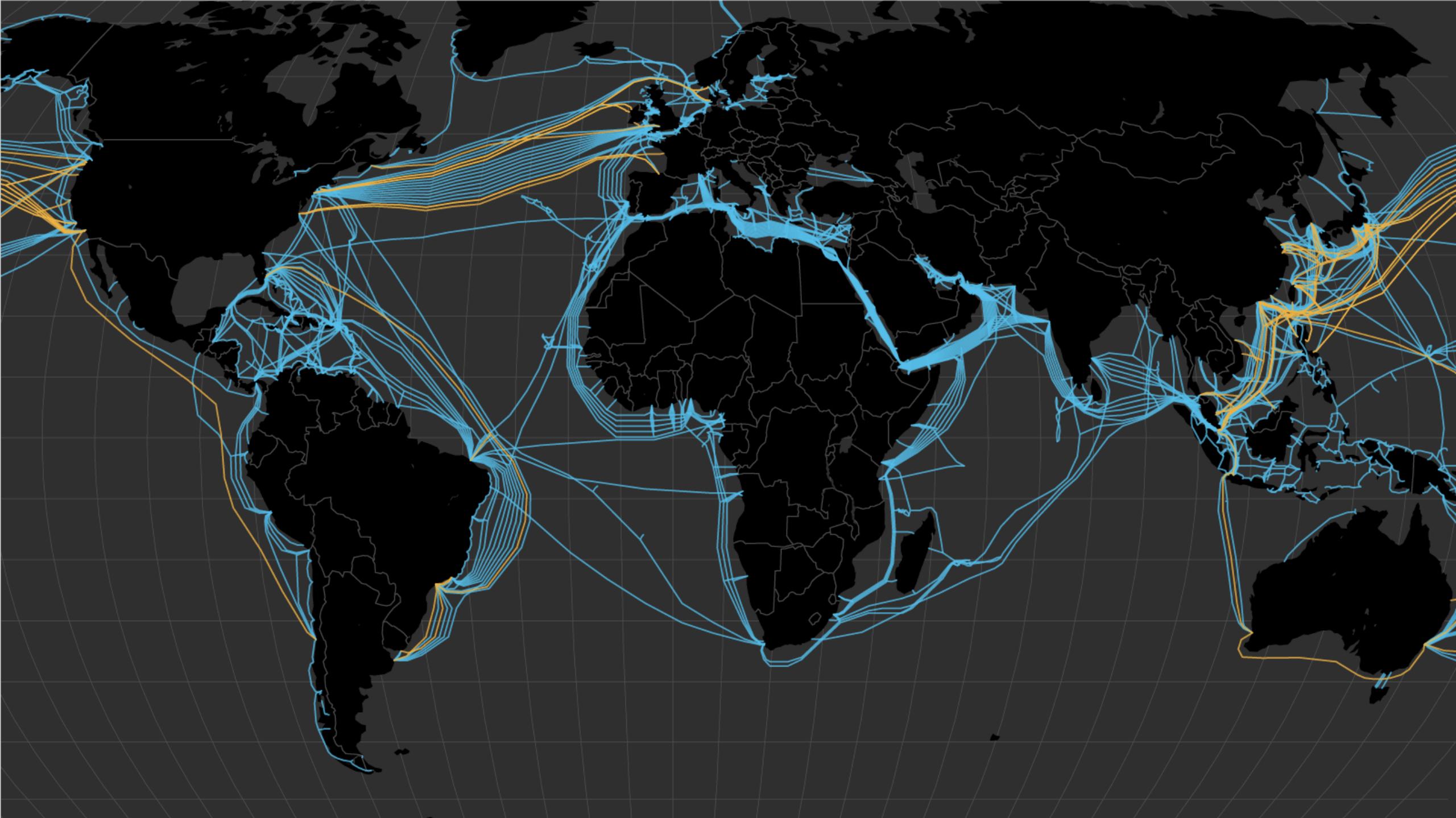
- What is the Internet
- Basic Components of Internet
- What is HTTP?
- Requests in Python
- Beautiful Soup

# What is the Internet?

# A bunch of connected computers

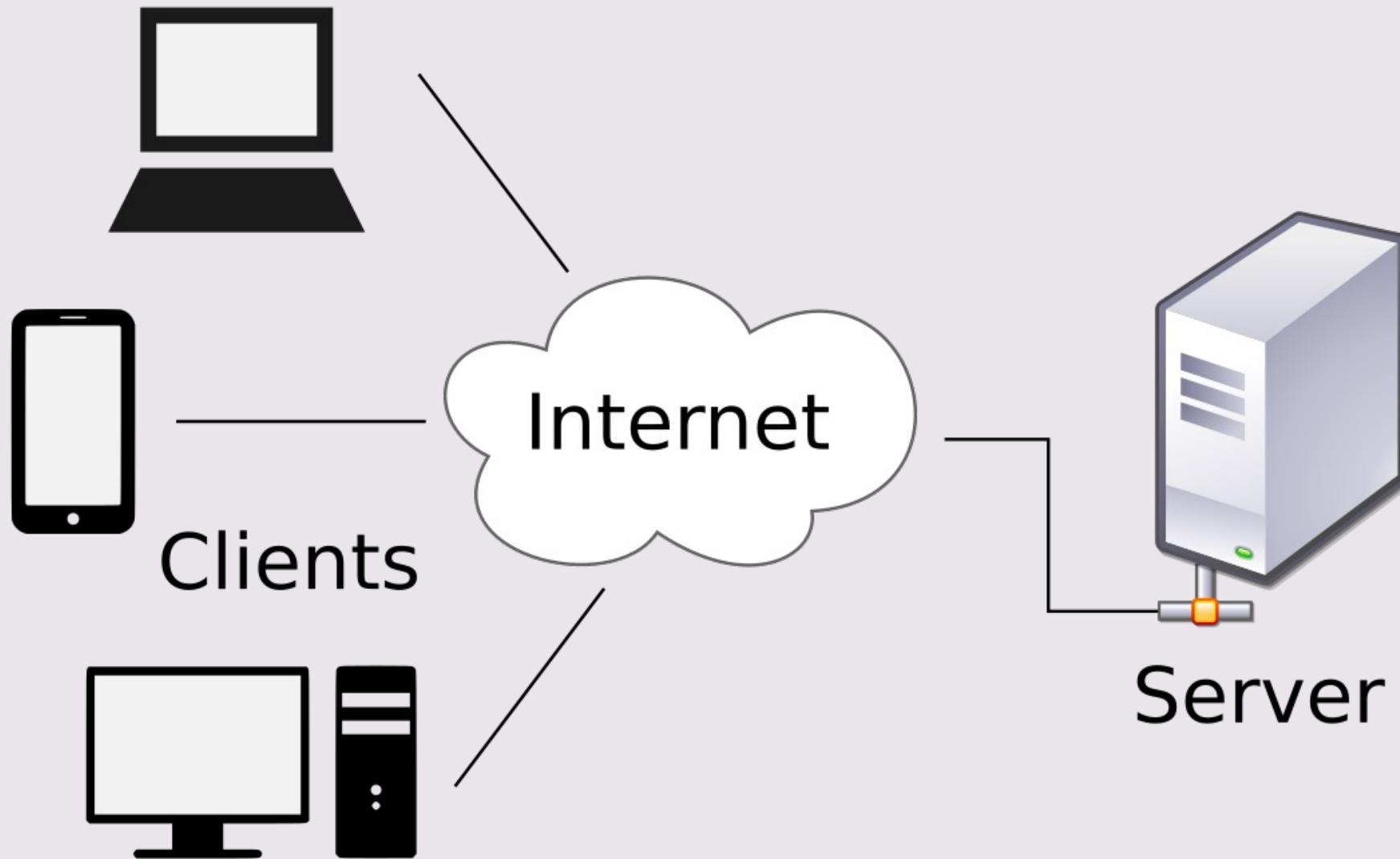


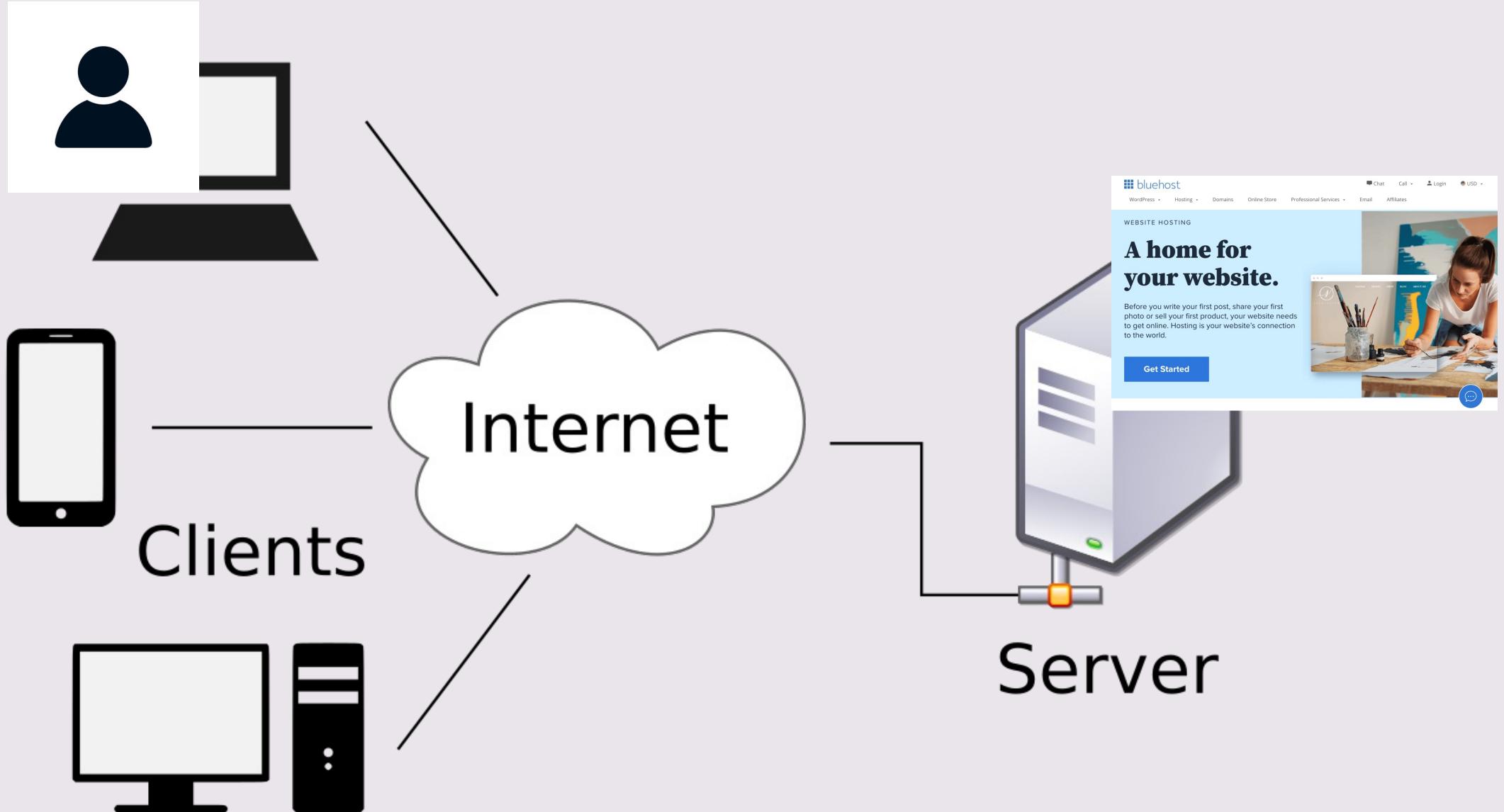
How are they connected?





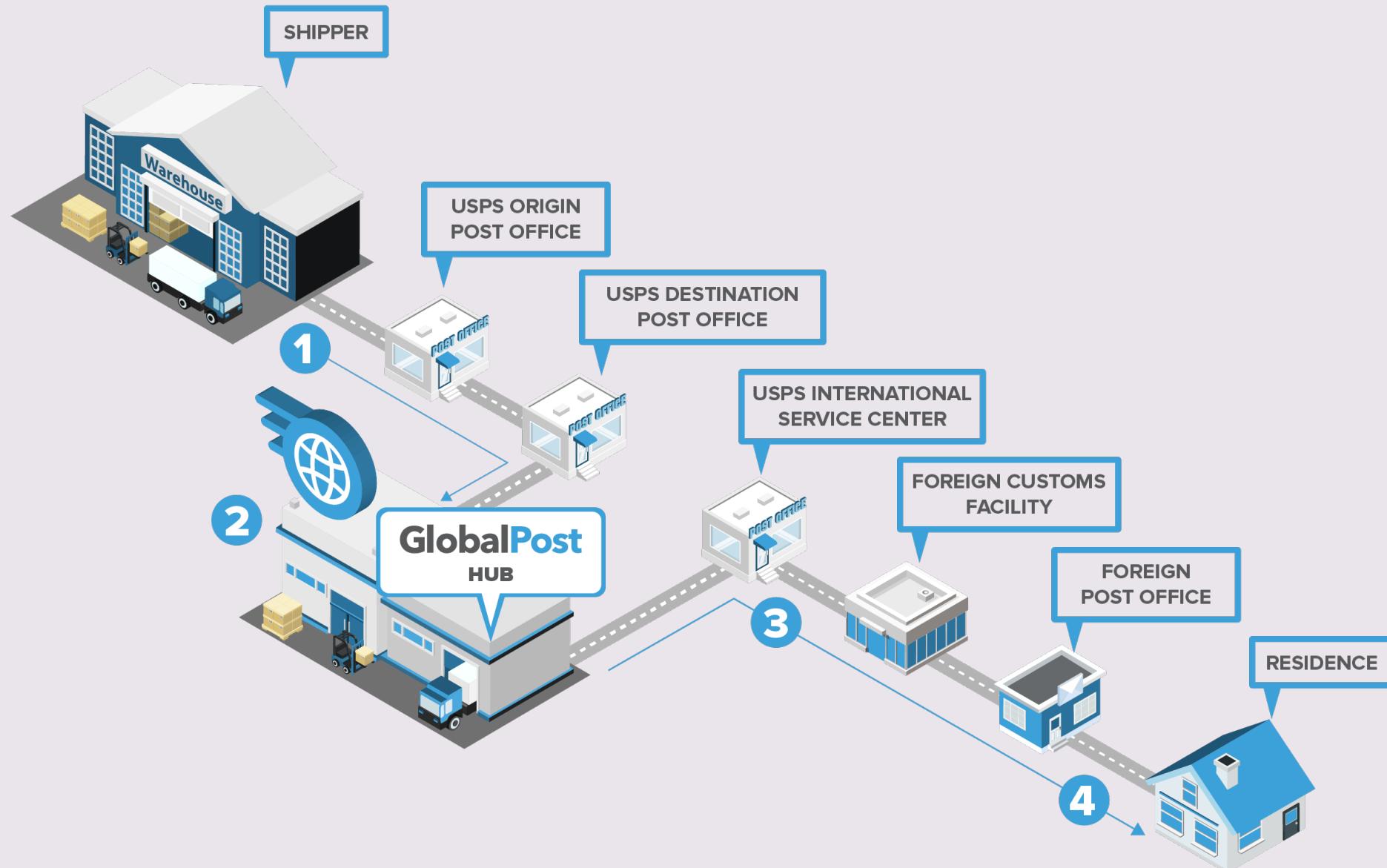
How do we interact with the  
internet and ‘browse the web’







A screenshot of the Bluehost website. The header includes the Bluehost logo, navigation links for WordPress, Hosting, Domains, Online Store, Professional Services, Email, and Affiliates, and user icons for Chat, Call, Login, and USD. Below the header, a main banner features the text "WEBSITE HOSTING" and "A home for your website." followed by a subtext about sharing photos or products online. A "Get Started" button is visible at the bottom left of the banner. To the right, there's an image of a person working at a desk with art supplies.



How do we know where to send  
information?

# IP Addresses

192.1.2.32

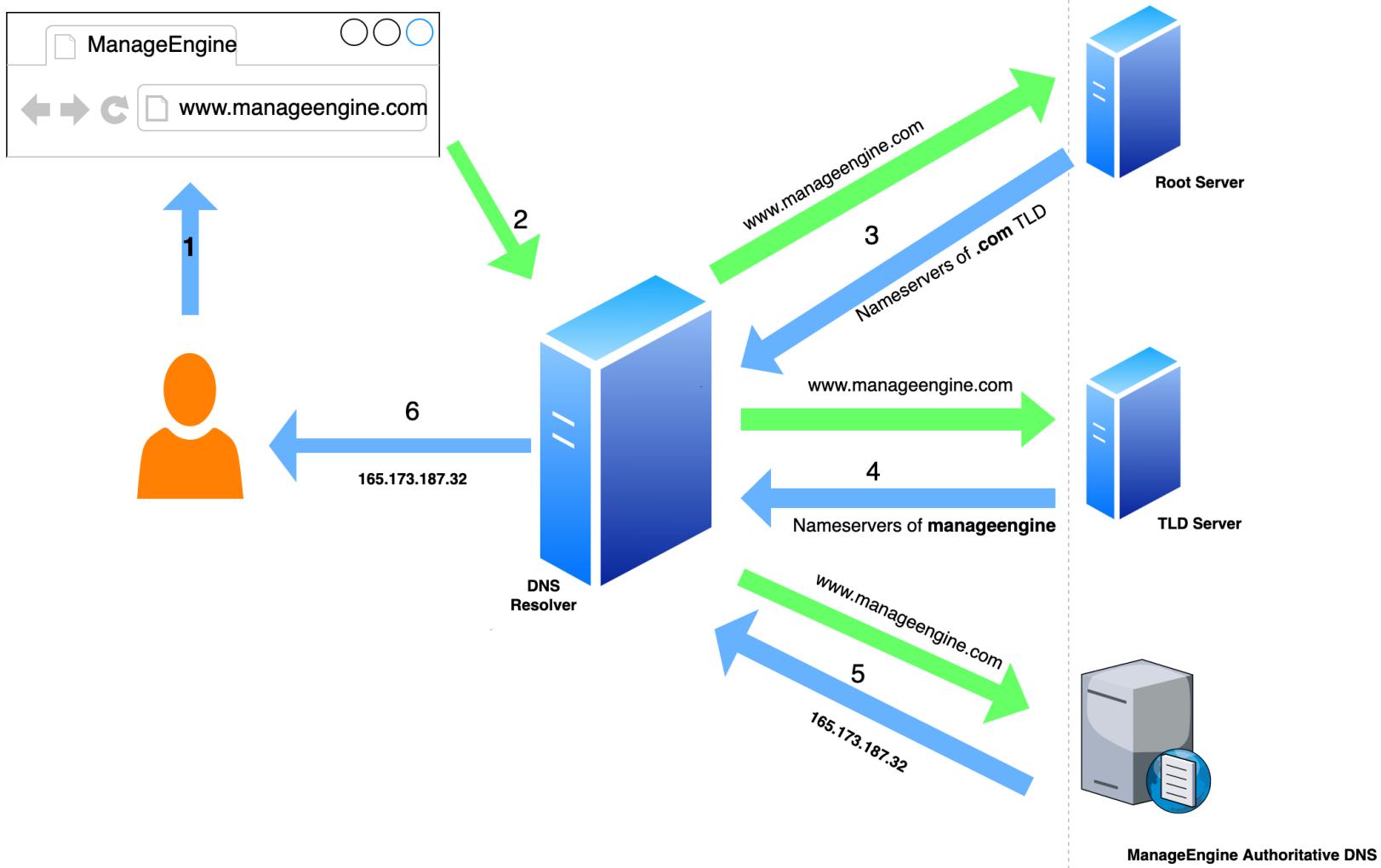
1.232.13.2

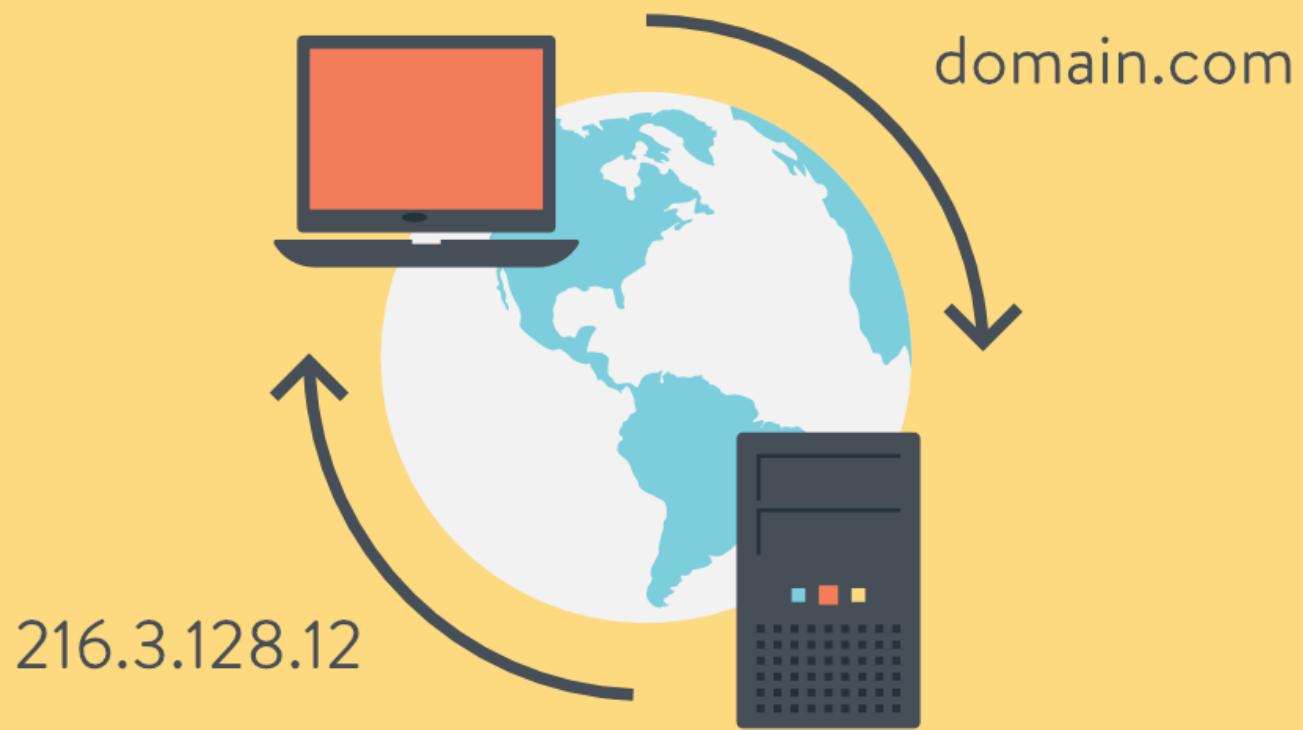
youtube.com: 142.250.80.14

twitter.com: 104.244.42.1

wikipedia.org: 198.35.26.96

# Domain Name Servers



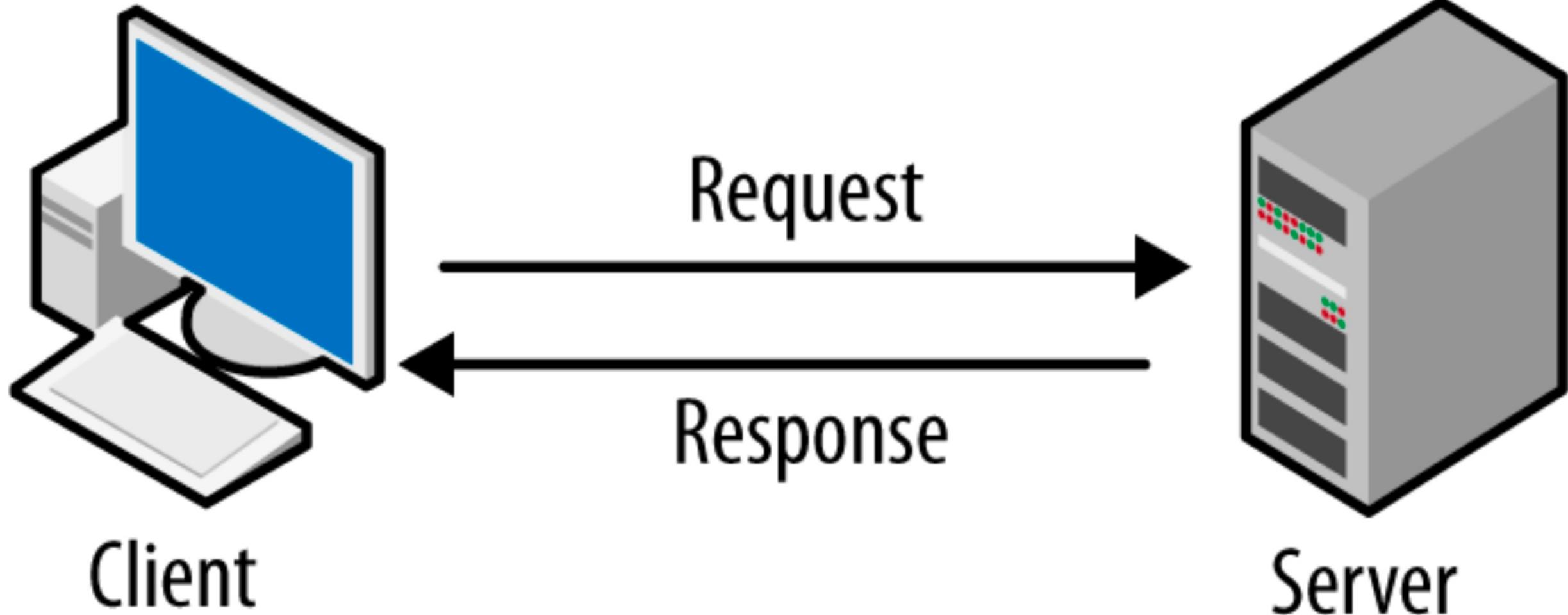


Example?

How can we access  
websites hosted elsewhere  
in ms?

# Our Communication Language: HTTP

# Hyper Text Transfer Protocol



**Get**  
**Put/Patch**  
**Post**  
**Delete**

# HTTP STATUS CODES

2xx Success

200

Success / OK

3xx Redirection

301

Permanent Redirect

302

Temporary Redirect

304

Not Modified

4xx Client Error

401

Unauthorized Error

403

Forbidden

403

Forbidden

404

Not Found

405

Method Not Allowed

5xx Server Error

501

Not Implemented

502

Bad Gateway

503

Service Unavailable

504

Gateway Timeout

# HTTP Headers



# What's an API?

## API Reference

The Stripe API is organized around [REST](#). Our API has predictable resource-oriented URLs, accepts [form-encoded](#) request bodies, returns [JSON-encoded](#) responses, and uses standard HTTP response codes, authentication, and verbs.

You can use the Stripe API in test mode, which doesn't affect your live data or interact with the banking networks. The API key you use to [authenticate](#) the request determines whether the request is live mode or test mode.

The Stripe API doesn't support bulk updates. You can work on only one object per request.

The Stripe API differs for every account as we release new [versions](#) and tailor functionality. [Log in](#) to see docs customized to your version of the API, with your test key and data.

### Just getting started?

Check out our [development quickstart](#) guide.

### Not a developer?

Use Stripe's [no-code options](#) or apps from [our partners](#) to get started with Stripe and to do more with your Stripe account—no code required.

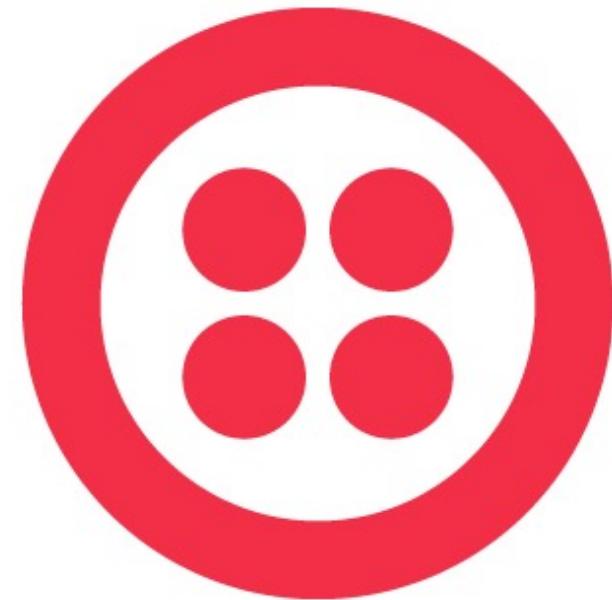
BASE URL <https://api.stripe.com>

#### CLIENT LIBRARIES



By default, the Stripe API Docs demonstrate using curl to interact with the API over HTTP. Select one of our official [client libraries](#) to see examples in code.





twilio

Market Summary > Twilio Inc

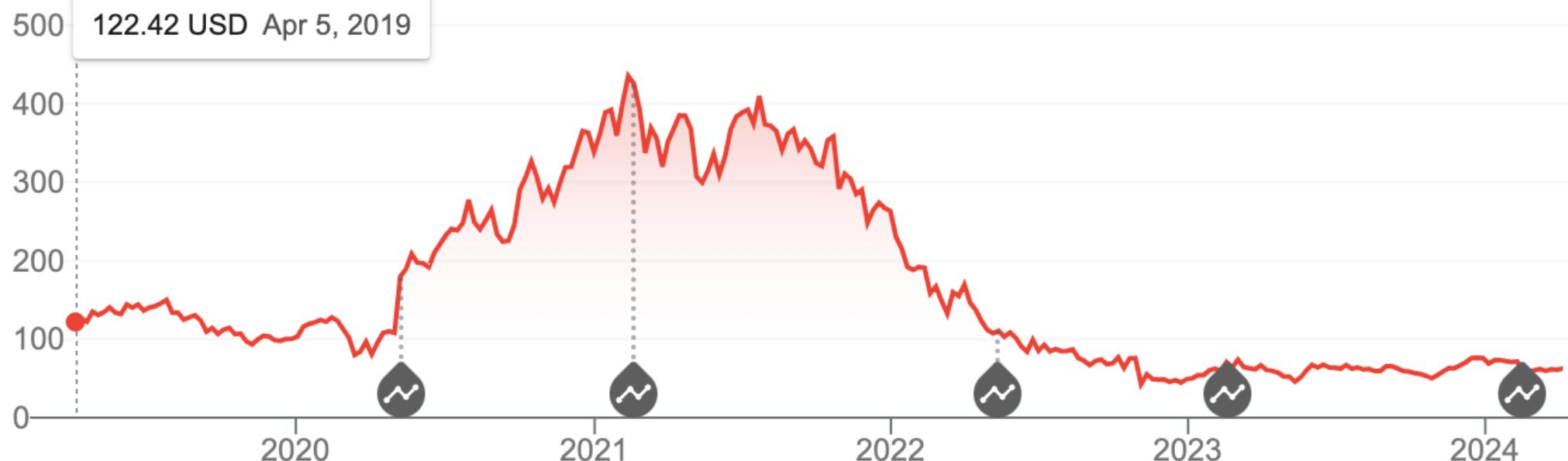
**62.45** USD

-59.97 (-48.99%)  past 5 years

Closed: Apr 1, 7:57 PM EDT • Disclaimer

After hours 62.40 -0.050 (0.080%)

1D | 5D | 1M |  |  |  |  ****



# What is JSON?

JSON

```
{  
    "name": "John Doe",  
    "age": 32,  
    "address": {  
        "street": "123 Main St",  
        "city": "Anytown",  
        "state": "CA"  
    },  
    "tags": ["Finance", "Admin"]  
}
```



Python

```
{  
    "name": "John Doe",  
    "age": 32,  
    "address": {  
        "street": "123 Main St",  

```



```
{ } sample.json > [ ] data
1  {
2      "data": [
3          {
4              "type": "articles",
5              "id": "1",
6              "attributes": {
7                  "title": "Working with JSON Data in python",
8                  "description": "This article explains the various ways to work with JSON data in python.",
9                  "created": "2020-12-28T14:56:29.000Z",
10                 "updated": "2020-12-28T14:56:28.000Z"
11             },
12             "author": {
13                 "id": "1",
14                 "name": "Aveek Das"
15             }
16         }
17     ]
18 }
```