Building Client Applications That Consume OData V4 Services

KEVIN DOCKX
ARCHITECT

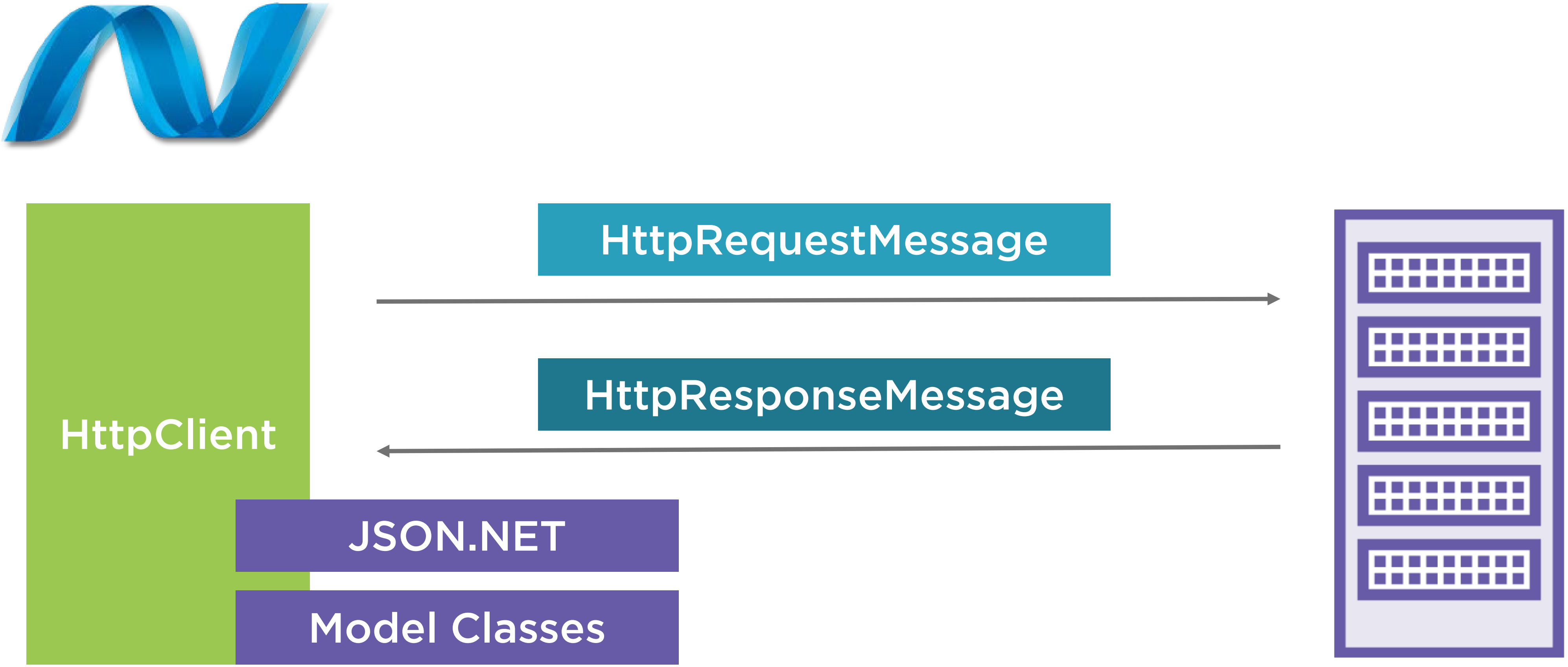
@KevinDockx https://www.kevindockx.com

Coming Up

Consuming OData Services

.NET and JavaScript

Additional Libraries



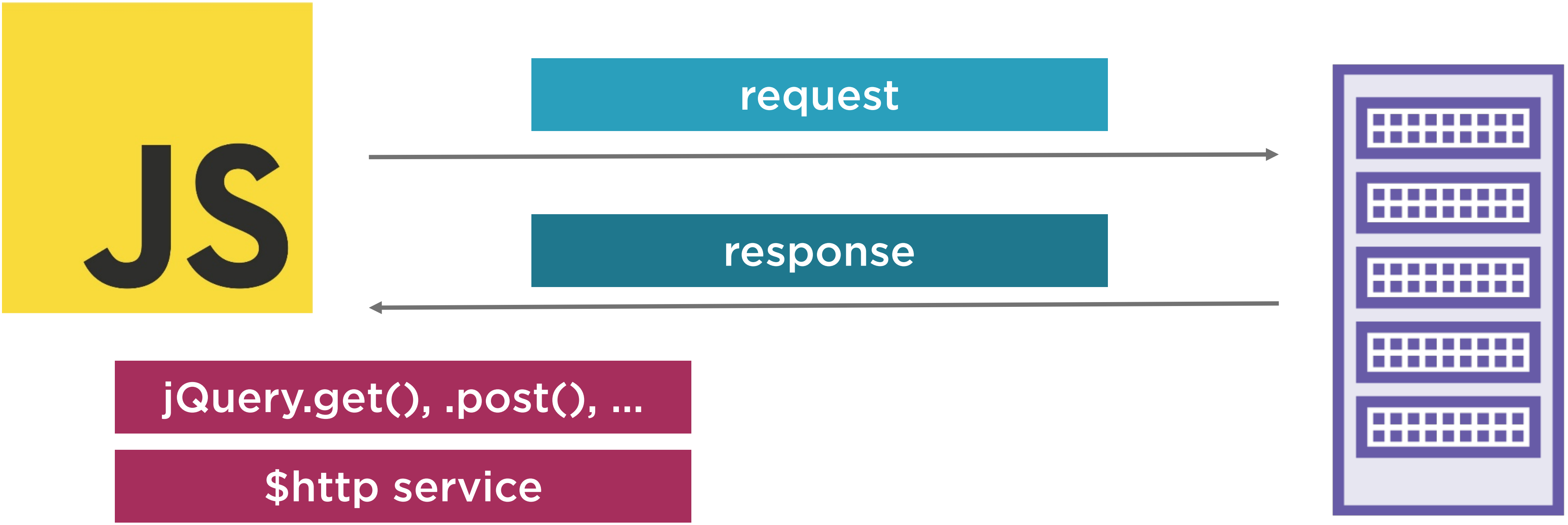
HttpClient

HttpRequestMessage

HttpResponseMessage

JSON.NET

Model Classes



request

response

jQuery.get(), .post(), ...

$http service

Libraries and Tools

.NET

OData Connected Service
http://bit.ly/1PYu3yf

OData Client for .NET
http://bit.ly/1qbOgM4

JavaScript

Apache Olingo OData Client for JavaScript
http://bit.ly/1Sjk2NL

Demo

Consuming an OData Service From .NET

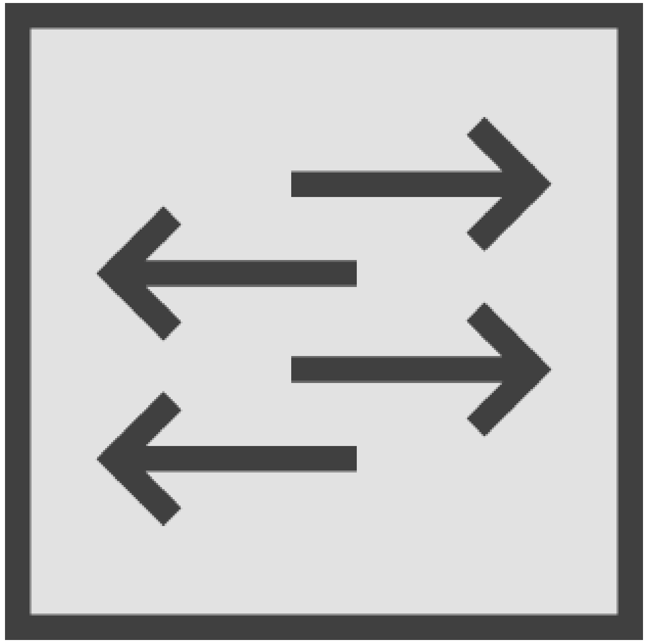
- OData Connected Service
- Microsoft’s OData Client
- Read, Create, Update and Delete

Demo

Consuming an OData Service From JavaScript (Part 1)

- Apache’s Olingo OData Client (odatajs)
- Read, Create, Update and Delete

Cross-Origin Resource Sharing



AJAX requests to another domain are prevented

CORS allows a server to relax the same-origin policy

Cross-Origin Resource Sharing

Origin: http://example.com

http://example.net

Different domain

http://example.net:9000/foo.html

Different port

https://example.com/foo.html

Different scheme

http://www.example.com/foo.html

Different subdomain

Demo

Consuming an OData Service From JavaScript (Part 2)

- CORS
- Apache’s Olingo OData Client (odatajs)
- Read, Create, Update and Delete

Additional Libraries

Simple OData Client
http://bit.ly/1PYoYWS

Apache Olingo Project
http://bit.ly/1Whv3Fg

o.js
http://bit.ly/1RIsPNe

Even more libraries
http://www.odata.org/libraries/

Summary

OData: the Open Data Protocol

- Best practices for building and consuming RESTful API's

Entity Data Model

GET, POST, PUT/PATCH, DELETE

We're implementing a standard

Summary

[EnableQuery]

- Parse, validate, apply
- Deferred execution

Containment Navigation

Custom Functions and Actions

Singleton

Summary

Derived Types

- Qualified name

Open Types

- Persist undeclared properties

Batch Requests

- Multipart MIME v1 message

Consuming the API

- Helper libraries
- OData metadata and standard

You're ready to be AWESOME!

@KevinDockx