

AUTO-BATCHING MS GRAPH REQUESTS IN SPFX





INTRO

- Marcin Wojciechowski
- [Marcin Wojciechowski | LinkedIn](#)
- [Marcin Wojciechowski \(@mgwojciech\) / Twitter](#)
- <https://github.com/mgwojciech/>

WHY IMPLEMENT AUTO-BATCHING?

- + Graph has a great API to batch requests which can greatly improve performance and help You avoid throttling
- + As batching is part of data access layer of an application it would be great to abstract it away
- + When working in a team You want other developers (and higher application layers) not to be aware of implementation details of batching, yet You want them to benefit from it.
- + Real world example: To render user card You need three calls to get the user profile, profile pic and user presence. Rendering 5 user cards in quick succession will trigger throttling. Batching those makes a lot of sense



HOW TO DO IT?

- + Define an interface (IHttpClient) that will declare the contract of any call to Graph API
- + Create an adapter from HttpClient provided by SPfx to our interface
- + Implement IHttpClient which will defer actual call and put it on queue. Then every few milliseconds get requests from the queue and build a batch out of it. Once batch request is completed resolve deferred promises with associated batch response



DEMO TIME



WHY DO IT LIKE THIS?

- + Why custom IHttpClient? – have something more like fetch API to improve reusability (this will work in ReactNative and any other Web based framework). Additionally – I'm not the biggest fan of HttpClientConfiguration.v1 nor msGraphClient api
- + Why composition? – so we don't be bound by the base class. Maybe we want to introduce caching layer in between or (outside of SP) authentication layer