

## Using protobuf for Investec OpenAPI









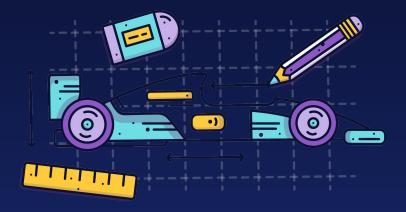
#### Michael Wallace Louwrens

#### **Client generator**

- Generating multiple clients from an API definition
- Allows for simple updates
- Proto3, grpc-gateway, swagger-codegen







#### **How it works**





#### How it works

- Proto3 allows for defining http calls via options
- So grpc-gateway creates a proxy for http -> grpc servers
- Part of grpc-gateway is a swagger generation component
- This allows for swagger definitions to be generated from the proto!
- So we can easily create new clients using swagger-codegen





## Why?

- Familiarity with proto and grpc-gateway
- Swagger-ui is great for demoing an API
- It's easy to update the proto for any changes
- Seeing the /za/pb/v1 path made me suspect this is possibly being used internally anyway!







#### **Get Involved!**





#### Challenges encountered

- Hours were spent trying to get the identity call mapped in
- Just... don't
  - All methods tried (and failed) made the definition awful to work with
  - This made me want to just try OpenAPI 3.1 yaml (still want to!)
- cURL doesn't play nice with the standard cURL header (adding a browser header fixes that)



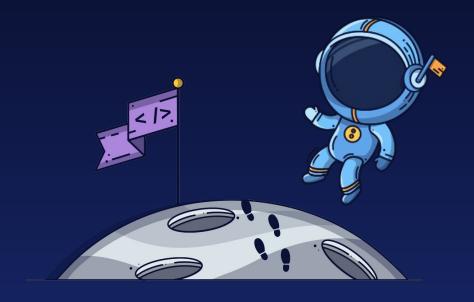


#### **Get in touch**

- Find me on Slack! @Michael Louwrens
- Repos are not yet pushed want to explore alternatives first!







# **Next Steps**





### **Next steps**

- Try out OpenAPI 3.0/3.1 as an alternative (will ask for feedback!)
- Setup a makefile + examples for requested clients (please list!)
- Publish packages to relevant repositories e.g. npm, pip
- Investigate swagger-codegen flags







#### **Questions**



