API Monitoring

with Postman, Serverless, & Lambda

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- Founder / CEO of Chain.io
- Old school full stack IT guy 22 years
- 7 years in the cloud
- Serverless ~6 months

Postman 101

Why Postman in Production?

- Build tests with a familiar tool
- Spend time building code, not tests
- Open Source JS (no magic, no 3rd parties)

Postman

- Chrome add on for making API calls
- Save calls and expected results
- Manage multiple environments

Newman

- JS library to execute Postman files
- NPM Package
- Returns test results
- https://github.com/postmanlabs/newman

Postman JSON

{"variables":[],"info":{"name":"Chain.io API
Tests","_postman_id":"efa696b5-61e7-0e3e-387e-f0ccc5928118","description":"","schema":"https://schema.getpostman.com/json/collection/v2.0.0/collection.json"},"item":[{"name":"Write",
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1;"]}}],"request":{"url":"https://{{url}}/write","method":"POST","header":[{"key":"x-api-key","value":"{{api-key}}","description":""},{"key":"Content-Type","value":"application/json"
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JSON.parse(responseBody);","tests[\"Query By UUID - Properties\"] = jsonData.results[0].node.properties.customer_order_number === \"SampleOrder1\";","tests[\"Query by UUID - Batch\"]
= jsonData.metadata.batch.nodes_read ===
1;"]}}],"request":{"url":"https://{{url}}/query","method":"POST","header":[{"key":"x-api-key","value":"{{api-key}}","description":""},{"key":"Content-Type","value":"application/json"
,"description":""}],"body":{"mode":"raw","raw":"{\n\t\"type\": \"purchase_order\",\n\t\"where\": { \"uuid\": \"{{sample-uuid}}\" }\n}"},"description":""},"response":[]}]}

Our toolbox

Postman >

Newman >

Lambda >

Serverless >

Cloudwatch >

SNS, SES, Twillio, PagerDuty, etc

Postman

- Build your API calls
- Write your tests
- Set your environment variables
- Save your file

Newman + Lambda

- Set dependencies
- Incorporate Newman
- Verify results
- Send failure message

https://github.com/bglick/serverless_phl/blob/master/serverless/runner.js

Serverless + Cloudwatch

- Configure lambda
- Set environment variables
- Add Cloudwatch schedule

https://github.com/bglick/serverless_phl/blob/master/serverless/serverless.yml

Thanks

https://github.com/bglick/serverless_phl

https://chain.io

http://brian-glick.com

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