Data is Key

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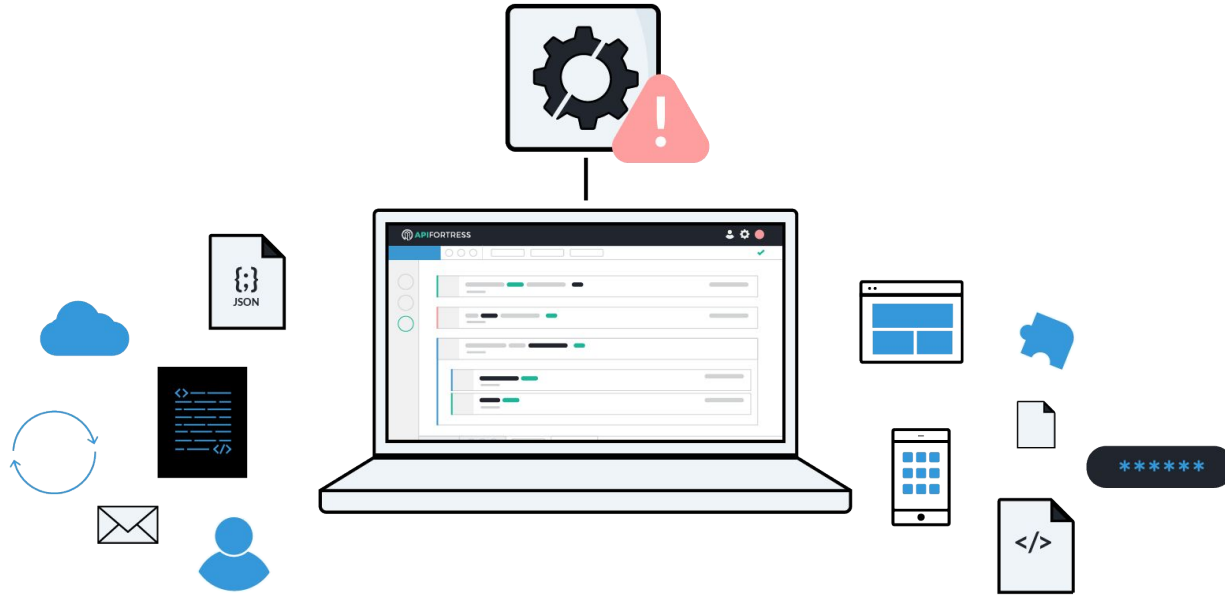
Data is Key

- Go beyond a stagnant set of test data
- Use dynamic data from sources like databases and APIs
- Differentiate the data sources and environments you test against
- Don't forget that APIs at larger organizations involve many different teams, with different understandings of the APIs' goals
- Don't fear testing against live data: it is often the only way to truly reveal issues
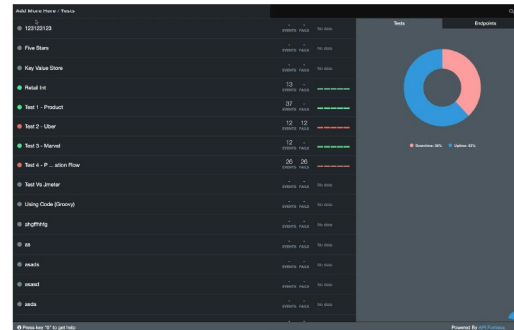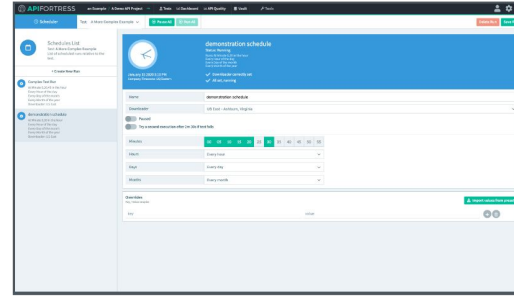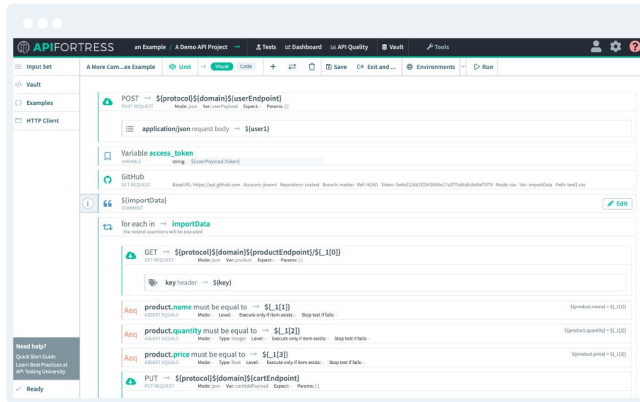
Next Step: Integration Testing
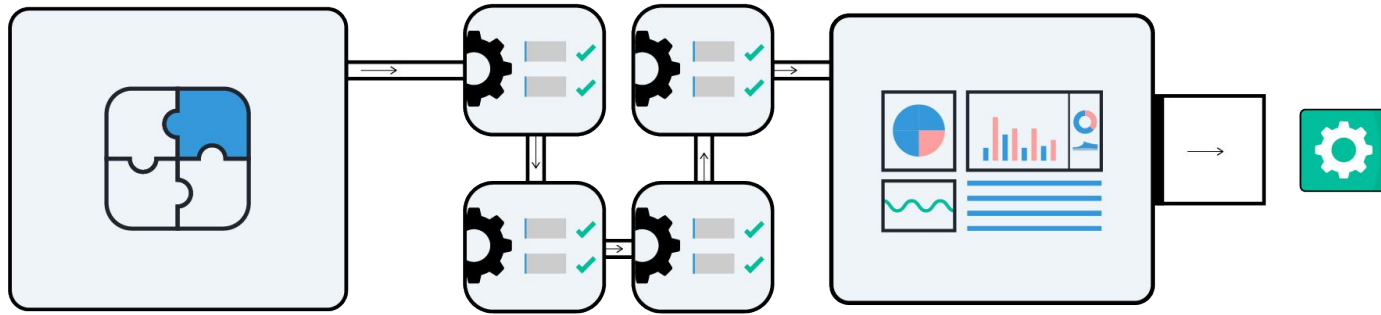
Next Step: Integration Testing

- Whenever possible, reproduce entire user flows on the API level
- Reproduce normal user behaviors in a single test
- Test using good and bad data, to validate all types of responses

Functional Tests as Monitors

Functional Tests as Monitors

- Your existing functional tests should be scheduled as API monitors
- Run multi-step integration tests as monitors
- There is a big difference between Uptime and *Functional* Uptime
- Test third-party APIs as well as internal and partner APIs
- Monitor production as well as internal staging environments
- Monitors can help catch things like memory leaks

What is Performance Testing?
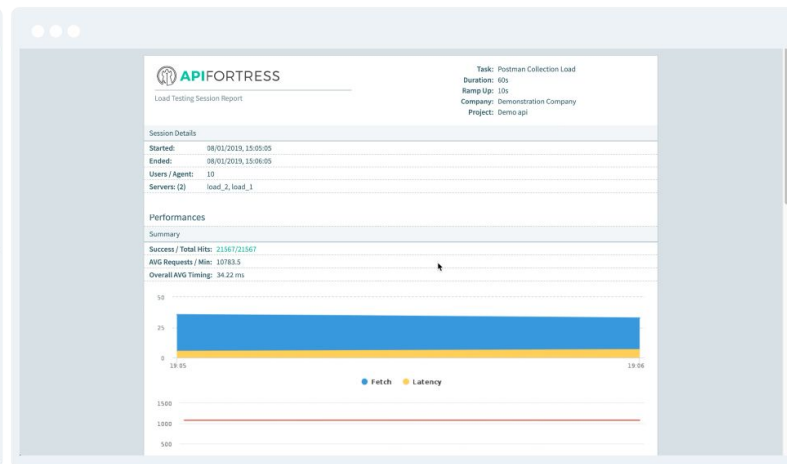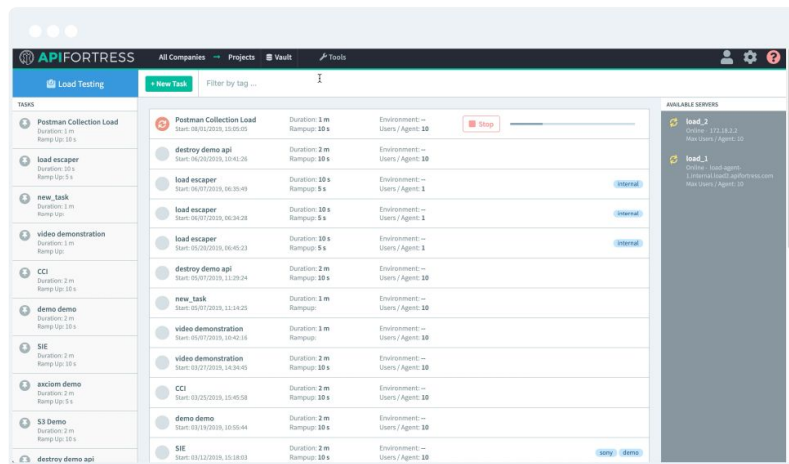
What is Performance Testing?

- Performance can mean different things to different people
- For APIs, it should mean load testing (stress testing), as well as monitoring the latency and fetch from your APIs being monitored
- A payload should have a max size, and respond in a certain amount of time, otherwise it could crash mobile apps
- Stress test using full functional and integration tests
  - This properly validates API health from a real world user's perspective

PSD2 / Open Banking - What Does It All Mean?
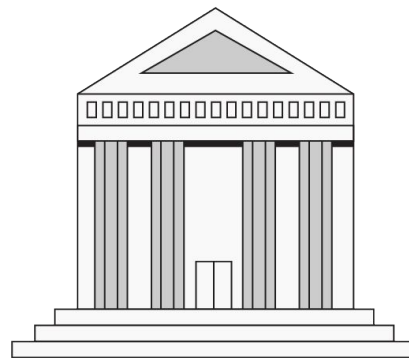
PSD2 / Open Banking - What Does It All Mean?

- Keep in mind that "open banking" is not unified. Hopefully, someday the protocols will all be interchangeable, but Open Banking and PSD2 are not in line with the UAE's vision for it (for example).
- Even banks doing PSD2 aren't perfect and have their own slight variations. This means that you need a solution to test with variability. One test does not fit all, but it can help.
- More than ever, it is important that banks validate that these APIs do not expose sensitive data in live environments