


Performance Testing for your APIs

The background of the slide features a series of overlapping, wavy bands in various shades of orange and red, creating a modern, abstract design that flows from the bottom left towards the top right.

Hello!



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What's in for today?

- Overview of Performance Testing for APIs
- API Performance Testing types
- Why Performance Testing for APIs?
- Tools available
- Demo with Postman and k6



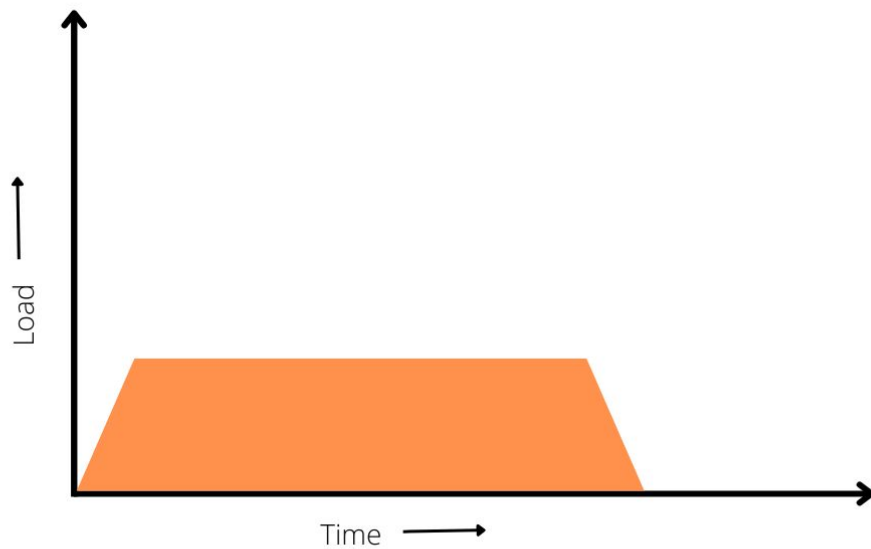
What is Performance Testing?

- Evaluating the performance of your application/APIs
- Stability, Scalability, Speed and Reliability

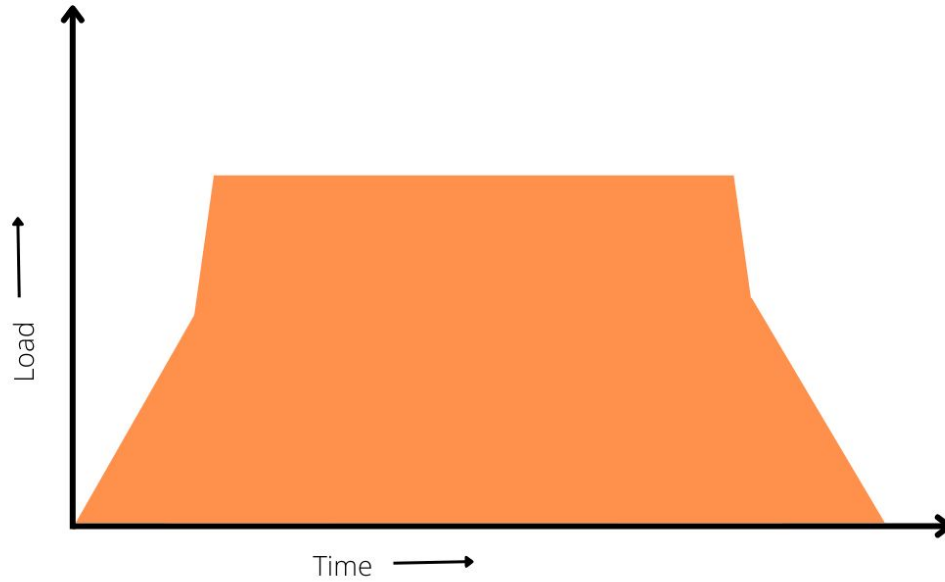
API Performance Testing types

The background of the slide features abstract, flowing shapes in shades of orange and red. On the left side, there are several overlapping, wavy shapes in various tones of orange. On the right side, there are similar wavy shapes in shades of red and pink, creating a sense of movement and depth.

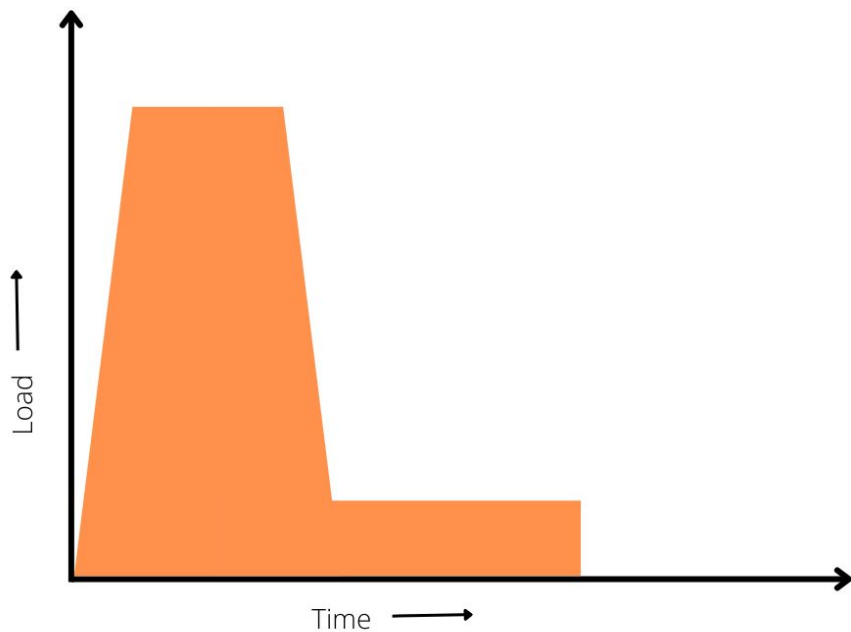
Load Testing



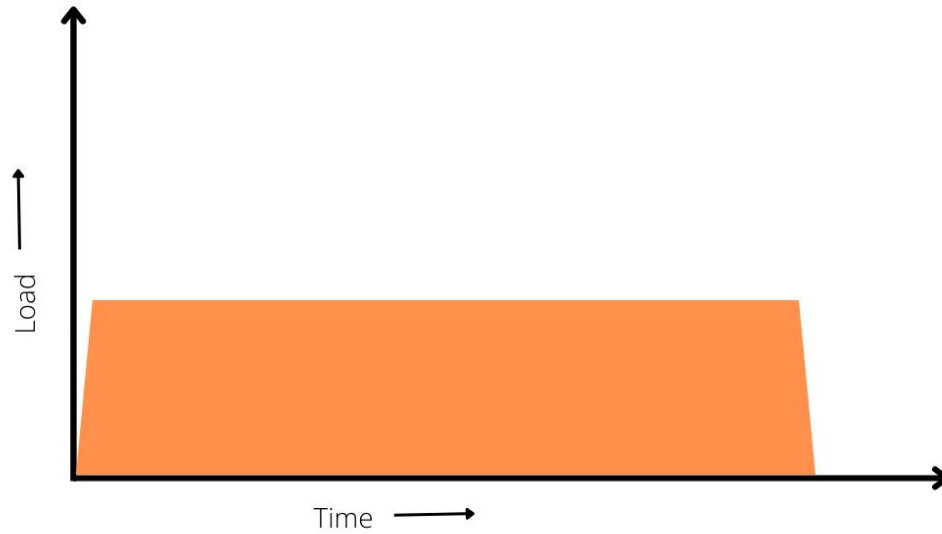
Stress Testing



Spike Testing



Soak Testing





What are the findings?

- Bottlenecks
- Poor response times
- Errors/Outage
- Memory Usage
- Lack/Issues with Scaling

“

“It takes months to find a customer... seconds to lose one.” - Vince Lombardi

Importance of Performance Testing

APIs decides overall application performance

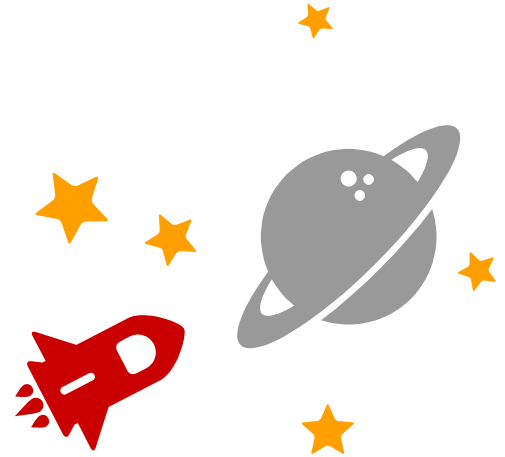
- Happy Customer
- Improved Quality product/APIs
- Increased Performance
- Faster Integration
- Improving Optimization

Tools for performance testing of APIs

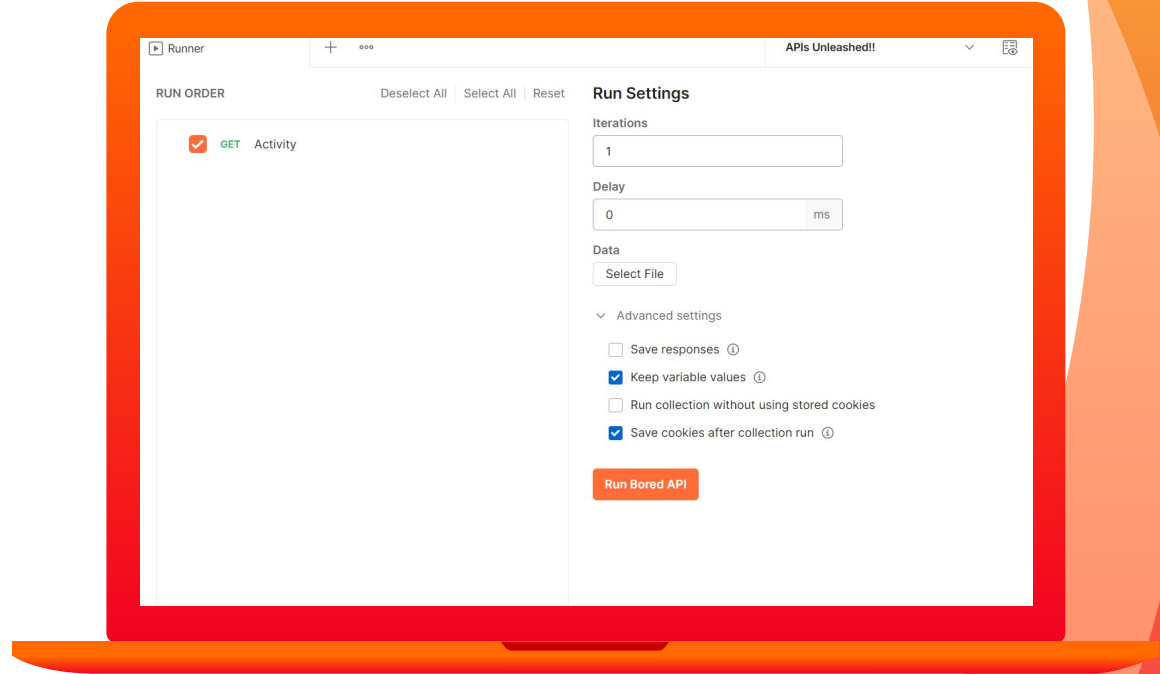
- Apache JMeter
- Gatling
- k6
- Loadrunner
- Blazemeter
- Locust



Demo



Postman - Collection Runner



k6

Converting Postman collections to k6 scripts

Prerequisites:

- Download and Install k6 open source
- Prebuilt Postman collections
- Install Node.js
- Install postman-to-k6 converter

Bonus tips!!

- Monitoring helps to understand the API performance and trends
- Recurring performance tests helps
- Document the deviations
- Don't underestimate Soak Testing

References:

- <https://github.com/grafana/k6>
- <https://k6.io/docs/test-types/>
- <https://k6.io/blog/load-testing-with-postman-collections/>
- <https://www.npmjs.com/package/@apideck/postman-to-k6>
- <https://github.com/grafana/postman-to-k6>
- <https://test-api.k6.io/>
- <https://github.com/apideck-libraries/postman-to-k6#options>
- <https://github.com/Pricilla09/TestFlix2022>

Thanks!

Any questions?

Credits

Special thanks to all the people who made and released these awesome resources for free:

- Presentation template by [SlidesCarnival](#)
- Photographs by [Unsplash](#)