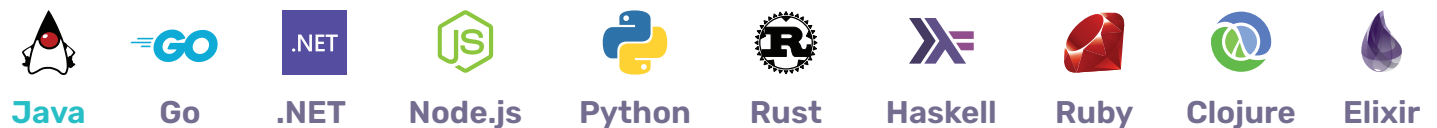# Test with real dependencies

Testcontainers is an open source framework for provisioning throwaway, on-demand containers for development and testing use cases. Testcontainers makes it easy to work with databases, message brokers, web browsers, or just about anything that can run in a Docker container.

Test dependencies as code `10+ languages`

No more need for mocks or complicated environment configurations. Define your test dependencies as code, then simply run your tests and containers will be created and then deleted.

With support for many languages and testing frameworks, all you need is Docker.

Java   **Go**   **.NET**   **Node.js**   **Python**   **Rust**   **Haskell**   **Ruby**   **Clojure**   **Elixir**

```
var redis = new GenericContainer("redis:5.0.3-alpine")
    .withExposedPorts(6379);
```

How Testcontainers can help you

Data access layer integration tests

Use a containerized instance of your database to test your data access layer code for complete compatibility, without requiring a complex setup on developer machines. Trust that your tests will always start with a known state.

UI/Acceptance tests

Use containerized web browsers, compatible with Selenium, to run automated UI tests. Each test gets a fresh, clean instance of the browser, without having to worry about variations in plugins or required updates.

Application integration tests

Run your application in a short-lived test mode with dependencies, such as databases, message queues or web servers, to give you a rich interactive and explorative testing environment.

50+ pre-configured modules for databases, message brokers, cloud emulators, and more...

Testcontainers Desktop by docker.

testcontainers.com/desktop

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