

**Exploring one idea that our  
our app team find useful:**

**Establish a http mock service that has  
durable, reusable, predictable test data  
that can be used for app development,  
automatic and explorative tests**

- Karl Erik Bergaust, Consultant 7N
- Currently at Norwegian Air Shuttle IT
- Developer: Backend, Backend for front end, former App developer

# Challenges - http service

- Shift-left (automated testing earlier in the pipeline)
- Complex backend (with external dependencies)
- Real test data expires (bookings, travels)
- Stable http backend locally for development

# Mock http services

tomakehurst / wiremock

Unwatch

155

Unstar

2,821

Fork

805

<> Code

🔔 Issues 143

🔗 Pull requests 19

📁 Projects 1

📖 Wiki

📊 Insights

A tool for mocking HTTP services

📄 1,584 commits

🌿 45 branches

📦 75 releases

👤 91 contributors

📄 Apache-2.0

Branch: master

New pull request

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tomakehurst Merge pull request #1010 from SheyMouse/patch-1

Latest commit 781a644 10 days ago

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Repositories (89)

All			
 <a href="#">rodolpheche/wiremock</a> public   automated build	21 STARS	1M+ PULLS	<a href="#">DETAILS</a>
 <a href="#">ekino/wiremock</a> public   automated build	4 STARS	100K+ PULLS	<a href="#">DETAILS</a>
 <a href="#">grubert65/wiremock-for-pandamonium</a> public	0 STARS	10K+ PULLS	<a href="#">DETAILS</a>

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intuit / karate

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Branch: master karate / karate-netty / Create new file Upload files Find file History

ptrthomas somewhat ambitious refactoring of karate js api doc Latest commit d606ee0 on Jul 14

..

src	fix standalone pom to include version in artifact	4 months ago
README.md	somewhat ambitious refactoring of karate js api doc	4 months ago
pom.xml	fix standalone pom to include version in artifact	4 months ago

README.md

## Karate Netty

API Test-Doubles Made **Simple.**

And [Consumer Driven Contracts](#) made easy.

# Getting started - installation

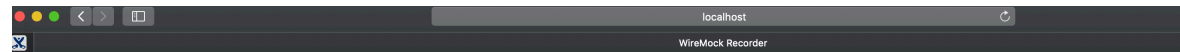
- Docker Desktop
- docker-compose.yaml
- docker-compose up

```
version: "3"
services:
  wiremock:
    image: rodolpheche/wiremock:latest
    ports:
      - "9191:8080"
    volumes:
      - ./__files:/home/wiremock/__files/
      - ./mappings:/home/wiremock/mappings/
    command:
      - -verbose
      - -global-response-templating
```

[illegible]

# Getting started - recording

- localhost:9191/\_\_admin/recorder
- <https://itunes.apple.com/search>



**WM** WireMock Recorder

Target URL

<https://itunes.apple.com/search>

Recording...

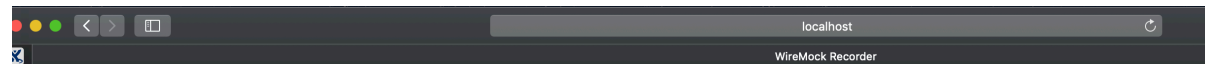
Record

Stop



# Getting started - after recording

- Tidy up the recordings:
  - Request matching
  - Separate response body file
- mappings folder (request/response files)
- \_\_files (data files used by the mapping files)



**WM** WireMock Recorder

Target URL

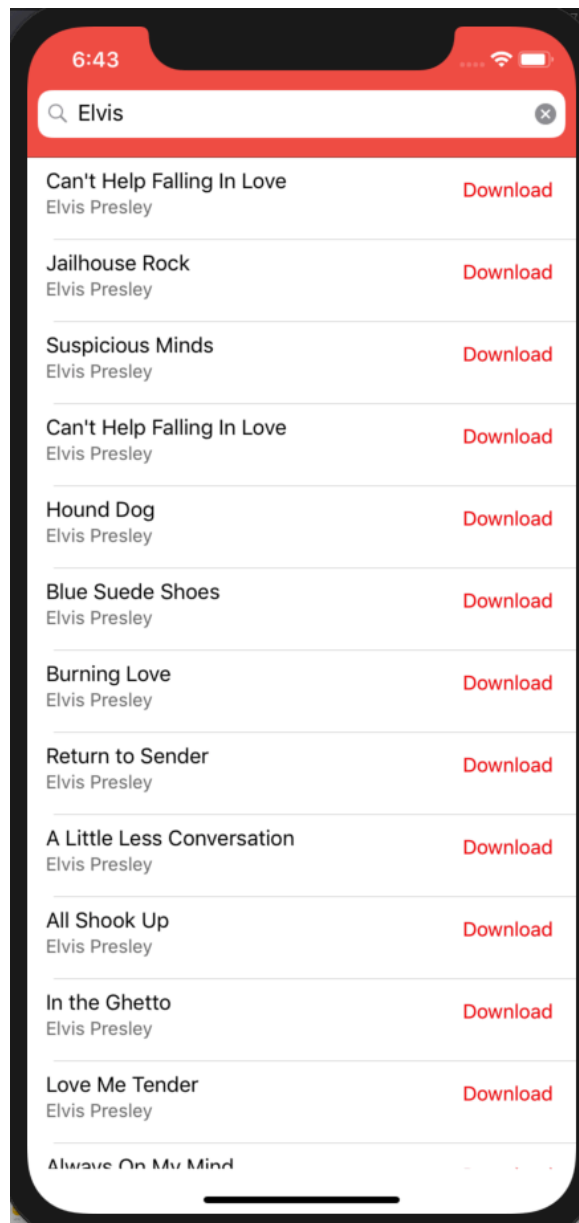
<https://itunes.apple.com/search>

Captured 1 stub mappings.

Record

Stop

# Demo



<https://www.raywenderlich.com/567-urlsession-tutorial-getting-started>

<https://itunes.apple.com/search>

# Demo

- Concepts:
  - Recording
  - Requests matching
  - Proxying to real server

# Other useful concepts - Stateful behaviour

- Request something initially (“Started” is required and default)
- Make a transition to a new state —> “CheckedIn”
- Match new retrievals with a new state
- In the MAPPINGS request files:

```
"scenarioName" : "ABC001_CHECKIN",  
"requiredScenarioState" : "Started",
```

```
"scenarioName" : "ABC001_CHECKIN",  
"requiredScenarioState" : "Started",  
"newScenarioState" : "CheckedIn",
```

```
"scenarioName" : "ABC001_CHECKIN",  
"requiredScenarioState" : "CheckedIn",
```

# Other useful concepts - Response Templates

- Need a datetime to be tomorrow at 15:25:00
- (days, months, minutes, seconds + -)

```
"TimeToOrder": "{{now offset='1 days' format='yyyy-MM-dd'}}T15:25:00+01:00",
```

# Other useful concepts - <http://wiremock.org/docs/>

[Docs](#)[About](#)[GitHub](#)[Mailing List](#)[External Resources](#)[Pro Support](#)[MockLab](#)[Getting Started](#)[The JUnit 4.x Rule](#)[Java \(Non-JUnit\) Usage](#)[Configuration](#)[Running as a Standalone Process](#)[Stubbing](#)[Verifying](#)[Request Matching](#)[Proxying](#)[Record and Playback \(New\)](#)[Response Templating](#)[Record and Playback \(Legacy\)](#)[Simulating Faults](#)[Stateful Behaviour](#)[HTTPS](#)[Extending WireMock](#)[Android](#)[Spring Boot](#)[Stub Metadata](#)[Admin API Reference](#)

## Home - WireMock User Documentation

WireMock is an HTTP mock server. At its core it is web server that can be primed to serve canned responses to particular requests (stubbing) and that captures incoming requests so that they can be checked later (verification).

It also has an assortment of other useful features including record/playback of interactions with other APIs, injection of faults and delays, simulation of stateful behaviour.

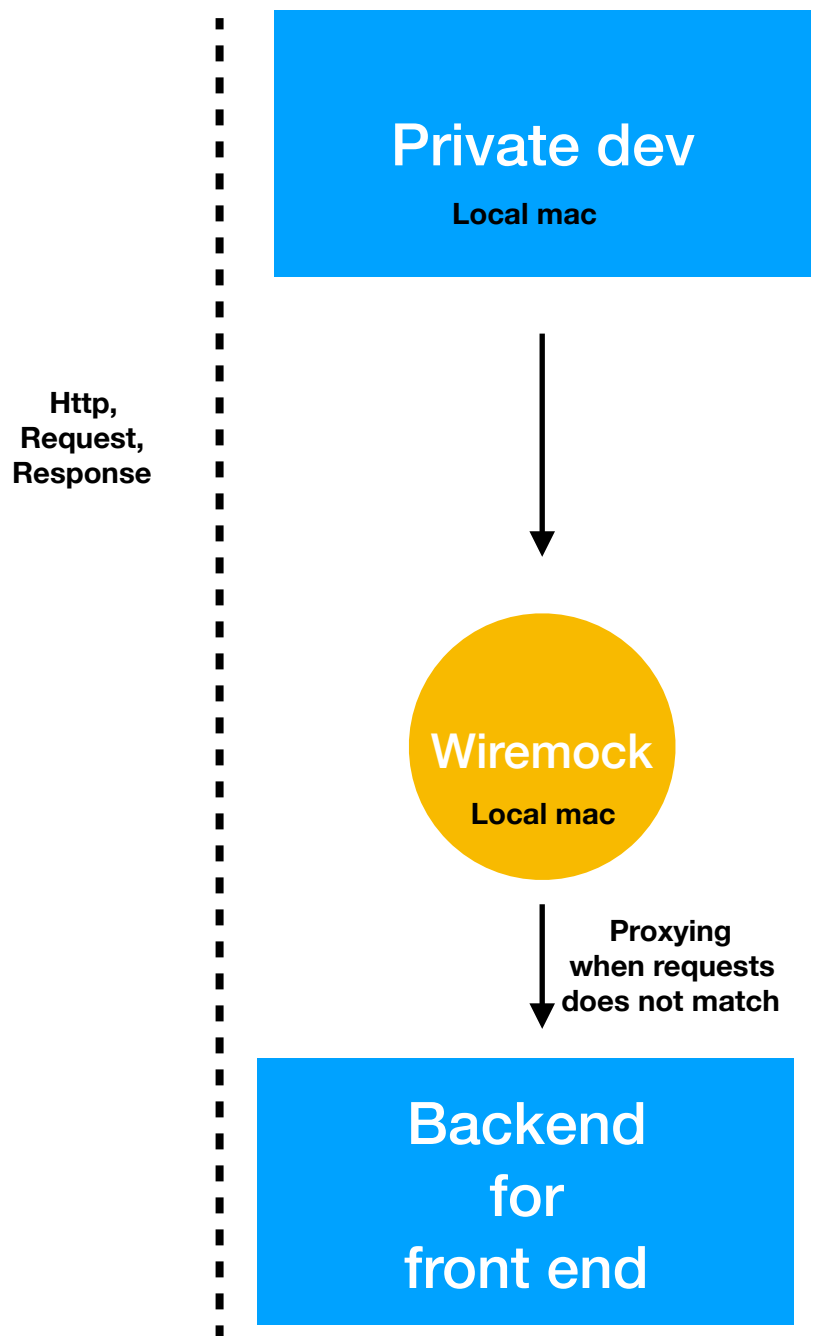
It can be used as a library by any JVM application, or run as a standalone process either on the same host as the system under test or a remote server.

All of WireMock's features are accessible via its REST (JSON) interface and its Java API. Additionally, stubs can be configured via JSON files.

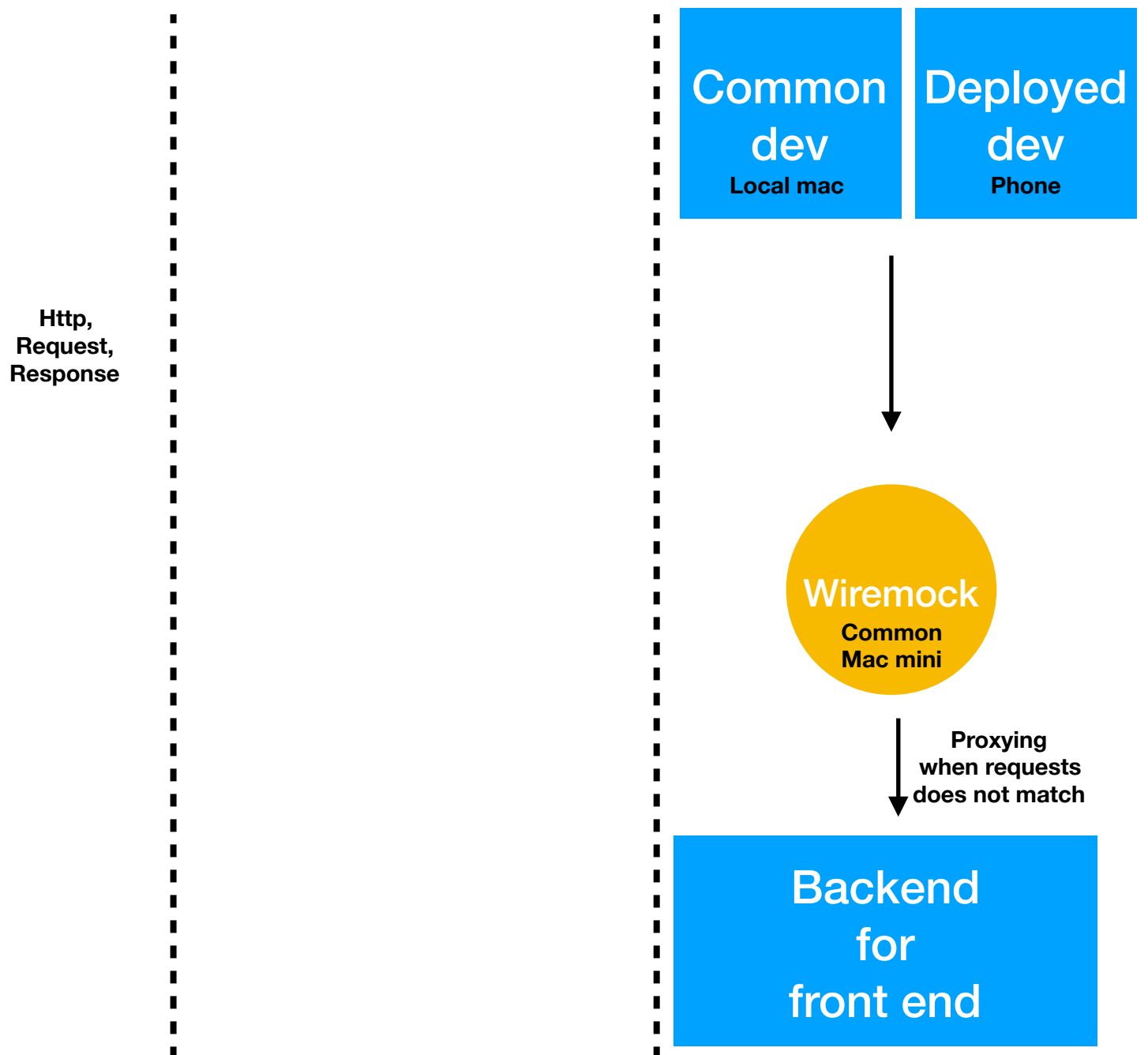
If you have any questions that aren't answered here please post them on the [mailing list](#).

Ready to try it? Head to the [Getting Started](#) page.

# Development and test environment - IOS and Android

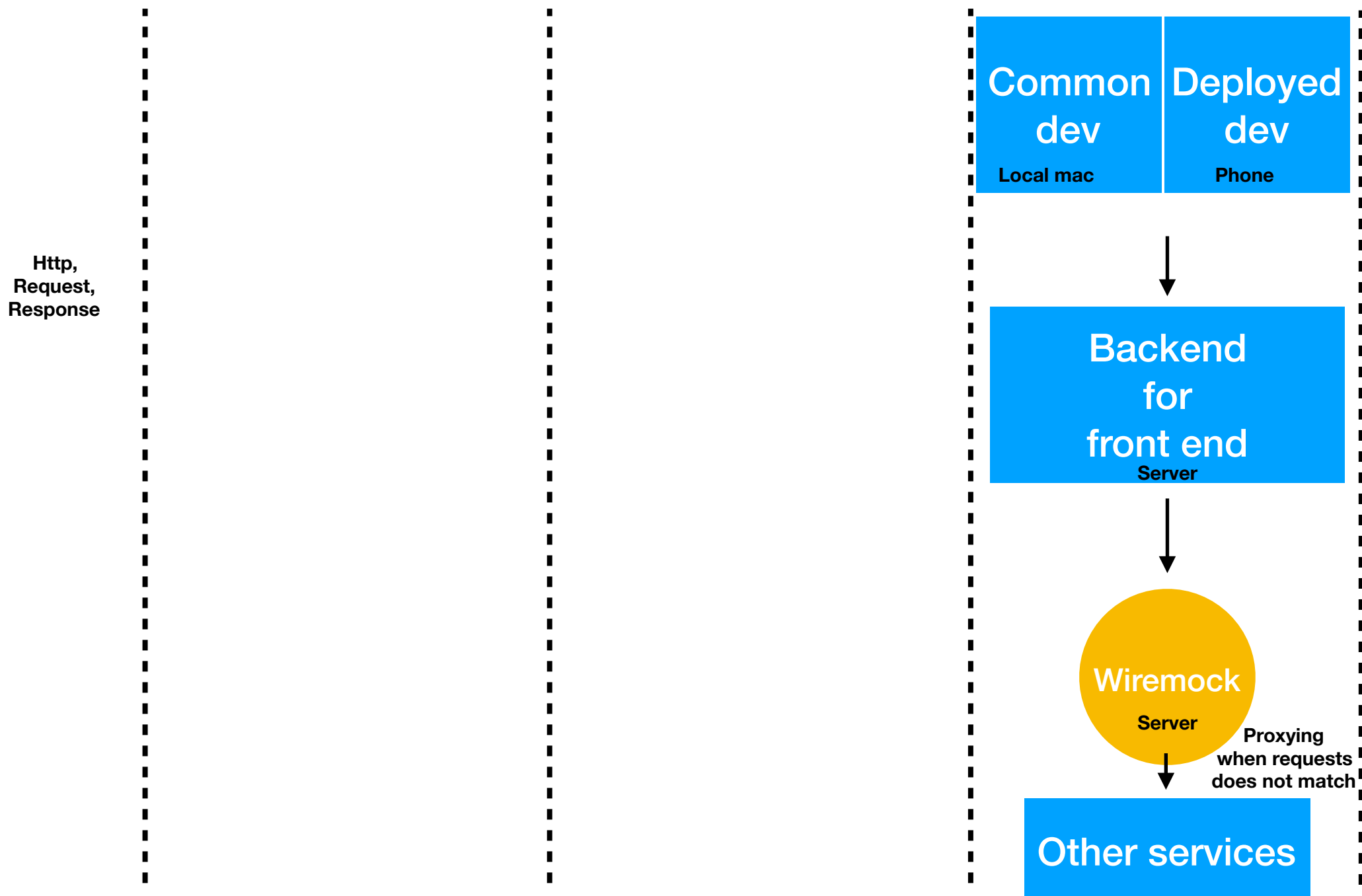


# Development and test environment - IOS and Android

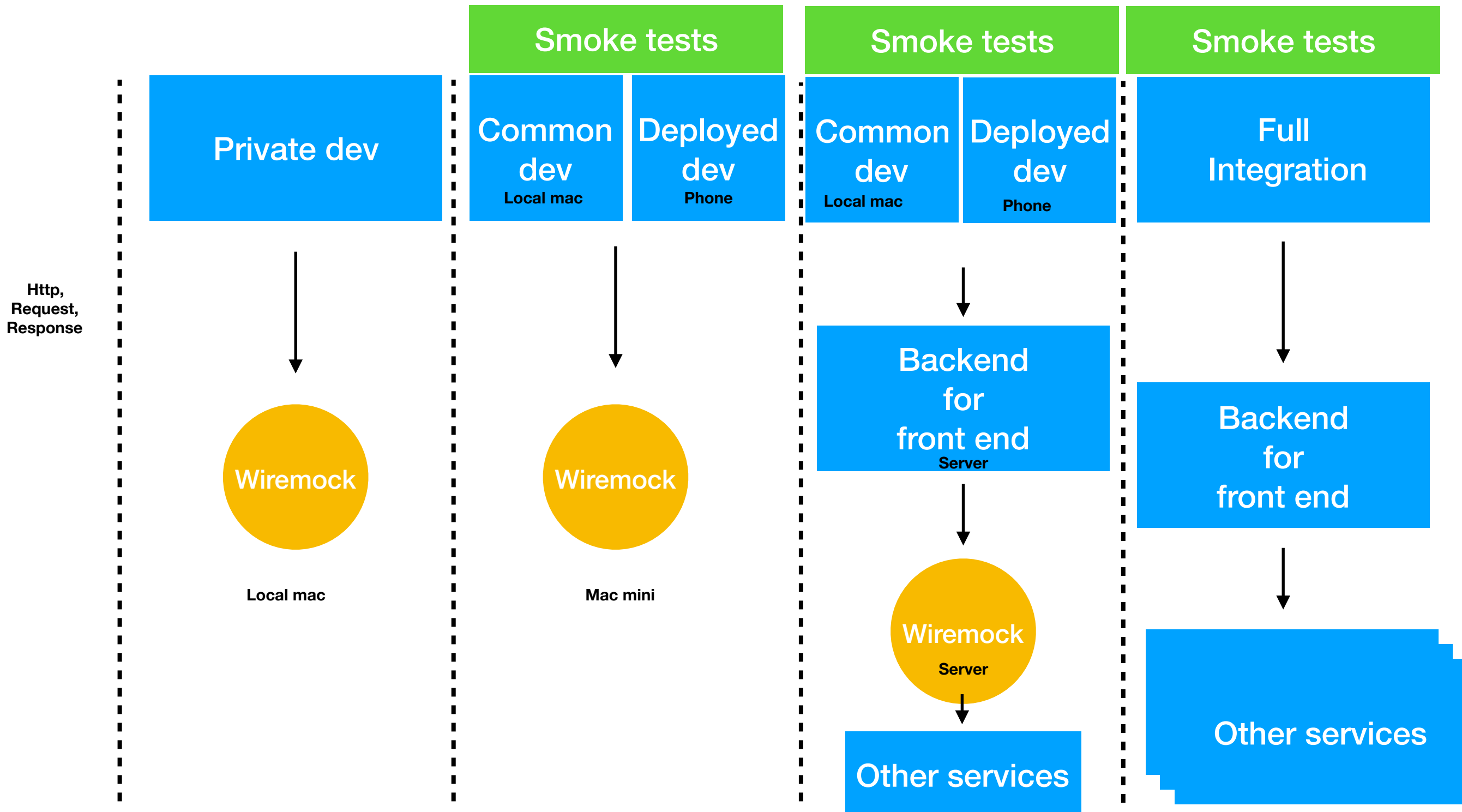




# Development and test environment - iOS and Android



# Development and test environment - IOS and Android



# Tools suggestions

- Dockerized Wiremock with Recording, Request matching and Templating (<http://wiremock.org>)
- Alternative - KarateDSL (<https://github.com/intuit/karate>)
- Docker CE (<https://www.docker.com>)
- Visual Studio Code (<https://code.visualstudio.com>)
  - With: Prettify JSON and Json escaper
- <http://jsonpath.com>

# Thank you

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