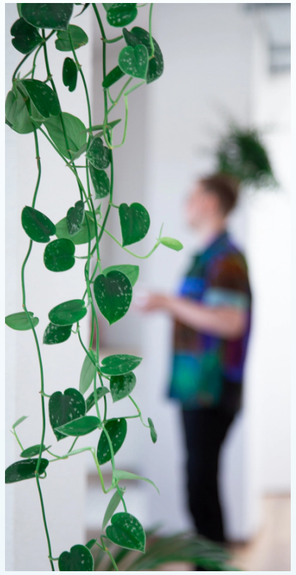
# Configure Once, Run Everywhere

How and Why to Use a Common Configuration for Dev, Testing, and CI Environments

garden



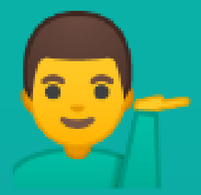
# About Garden

- Founded in 2018
- Headquartered in Berlin, Germany (with users and customers around the globe)
- We provide an automation platform for cloud native development and testing
- Open Core

# My dislikes

- Frequent context switching
- Repetition
- Vagueness

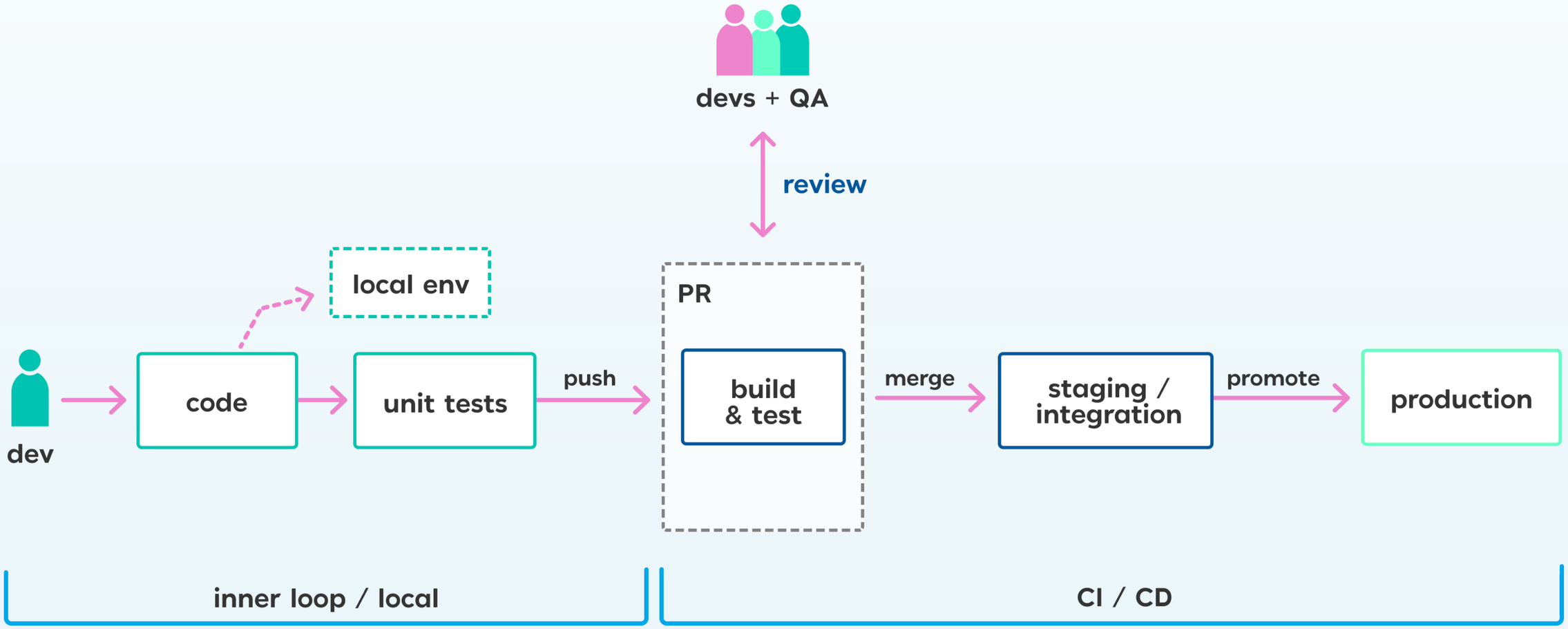
# My likes



- Flow state
- Smooooth automation
- Clarity and sincerity
- 80s Japanese synth-pop

# What makes the current dev/CI/CD experience less than ideal?

# Problems with the traditional dev process



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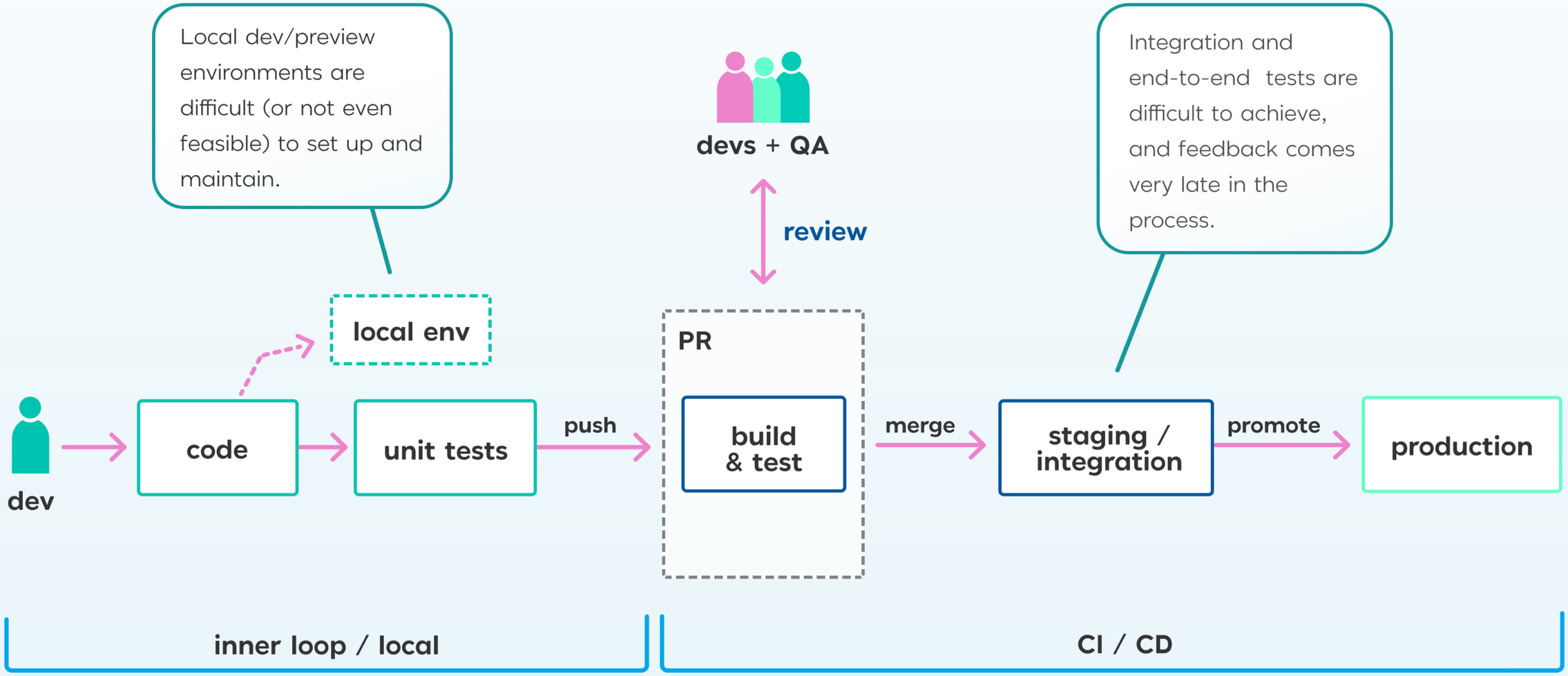

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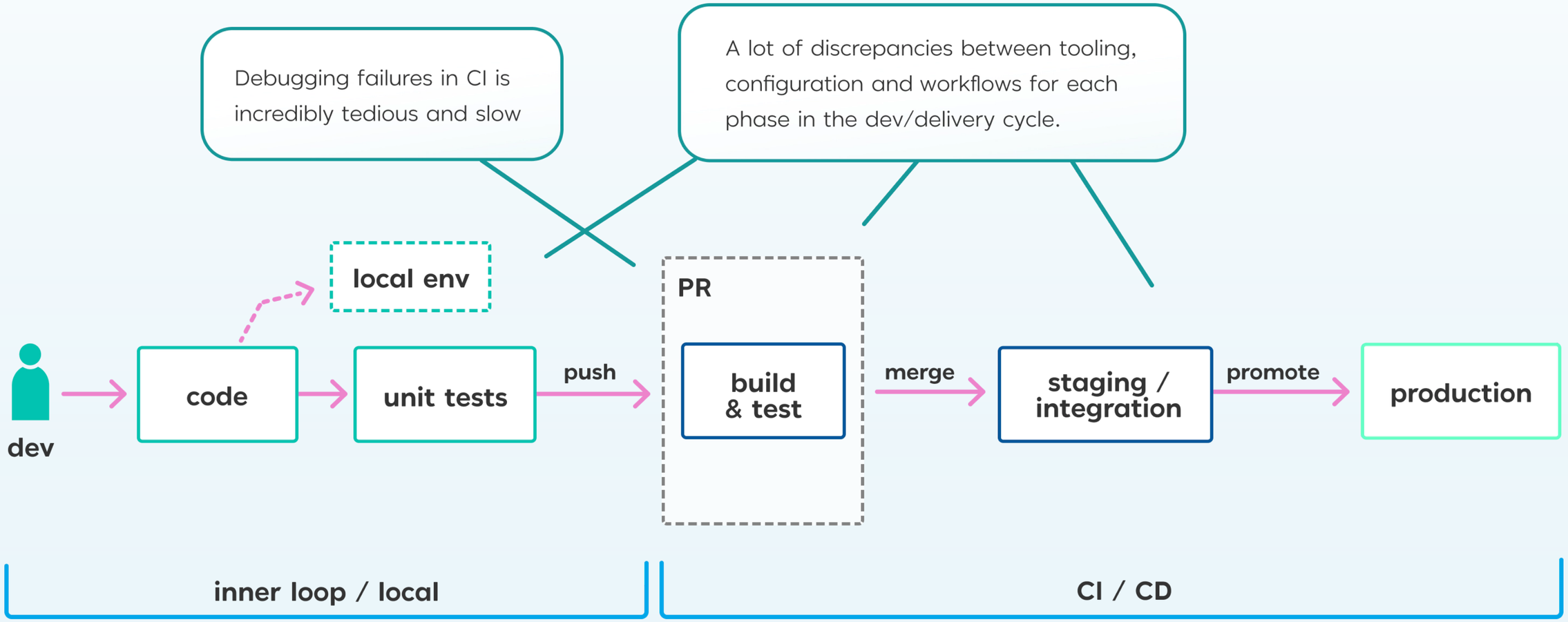
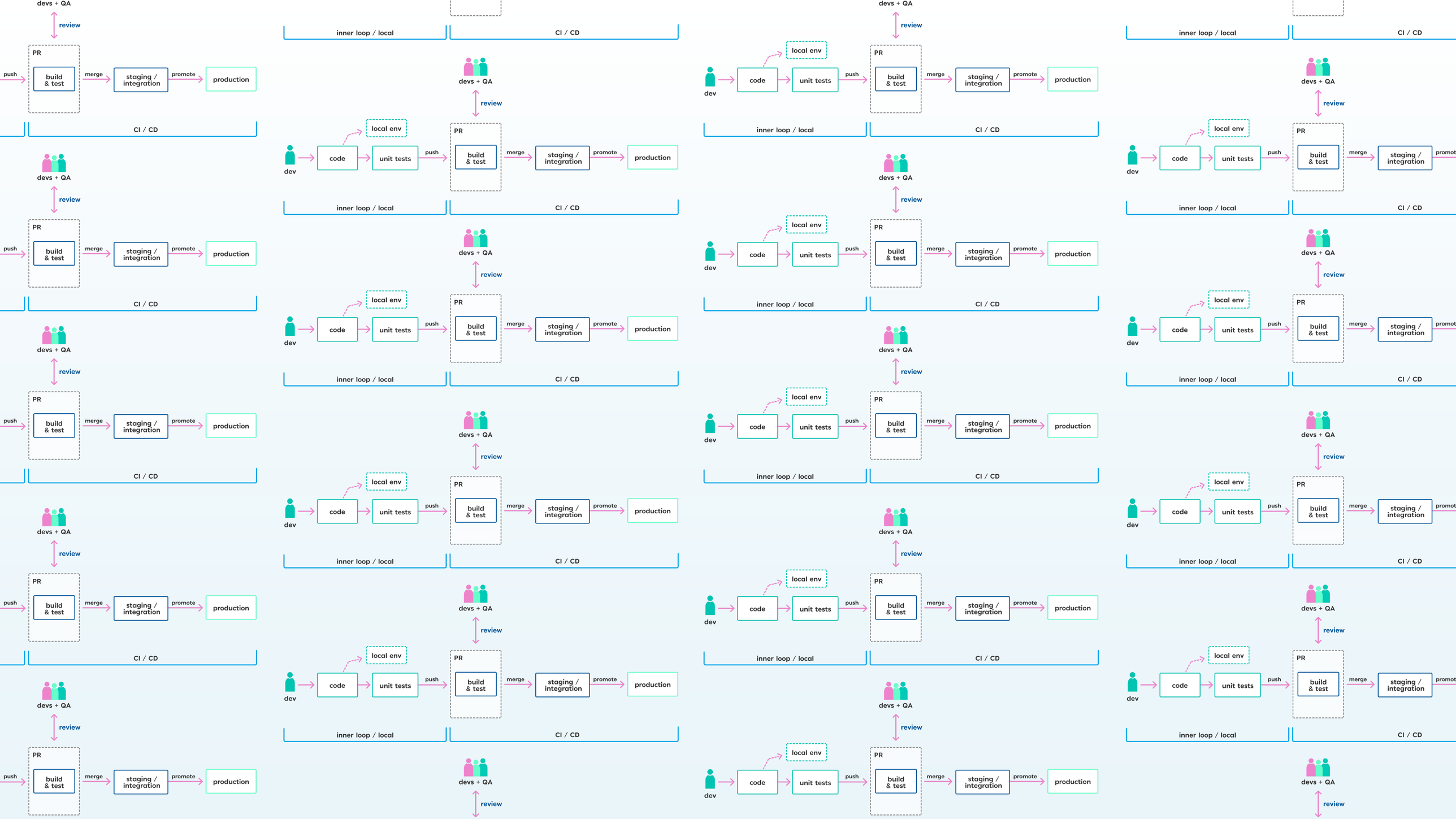



devs + QA
review
PR
push
build & test
merge
staging / integration
promote
production
CI / CD
dev
code
local env
unit tests
inner loop / local

# The Garden approach: Configure Once, Run Anywhere

# The Stack Graph

- Codify all the build and runtime dependencies across your project.
- Garden uses this to **only build, deploy and test what's affected by your changes**—so that devs don't need to wait for full pipeline runs for every little change.

# Simple, distributed configuration

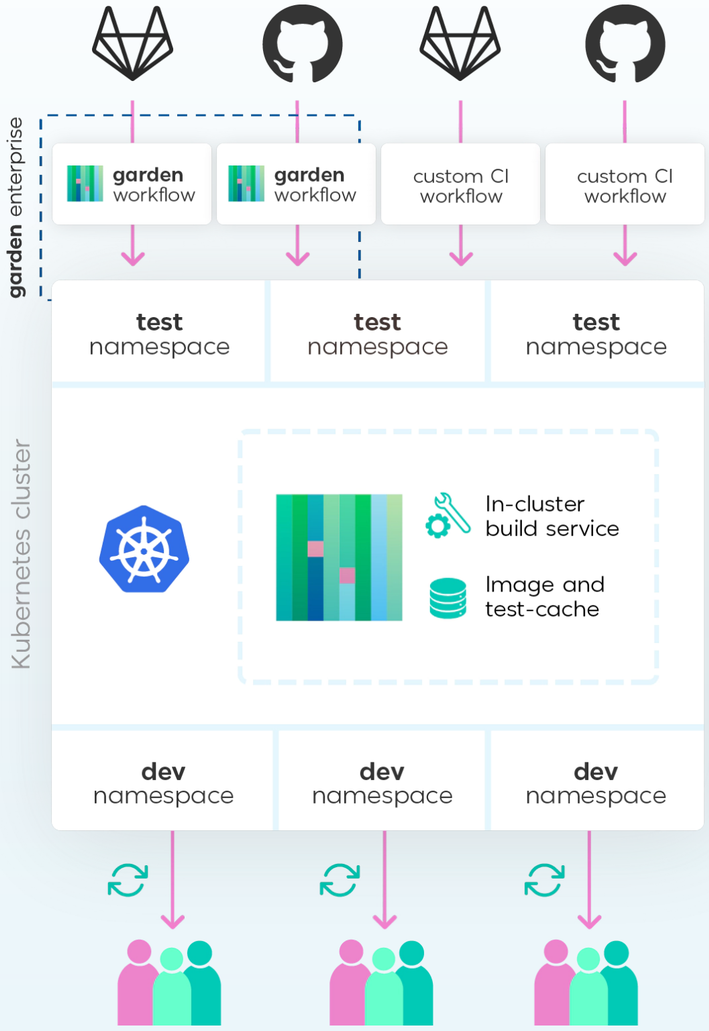
- Each component **describes itself**—It's a distributed system, so your configuration shouldn't be monolithic.
- Powerful templating syntax.
- Define **your own abstractions** through custom templates.

```
kind: Module
type: templated
template: api-service
name: users-api
inputs:
  servicePort: 8080
  ingressPath: /users
```

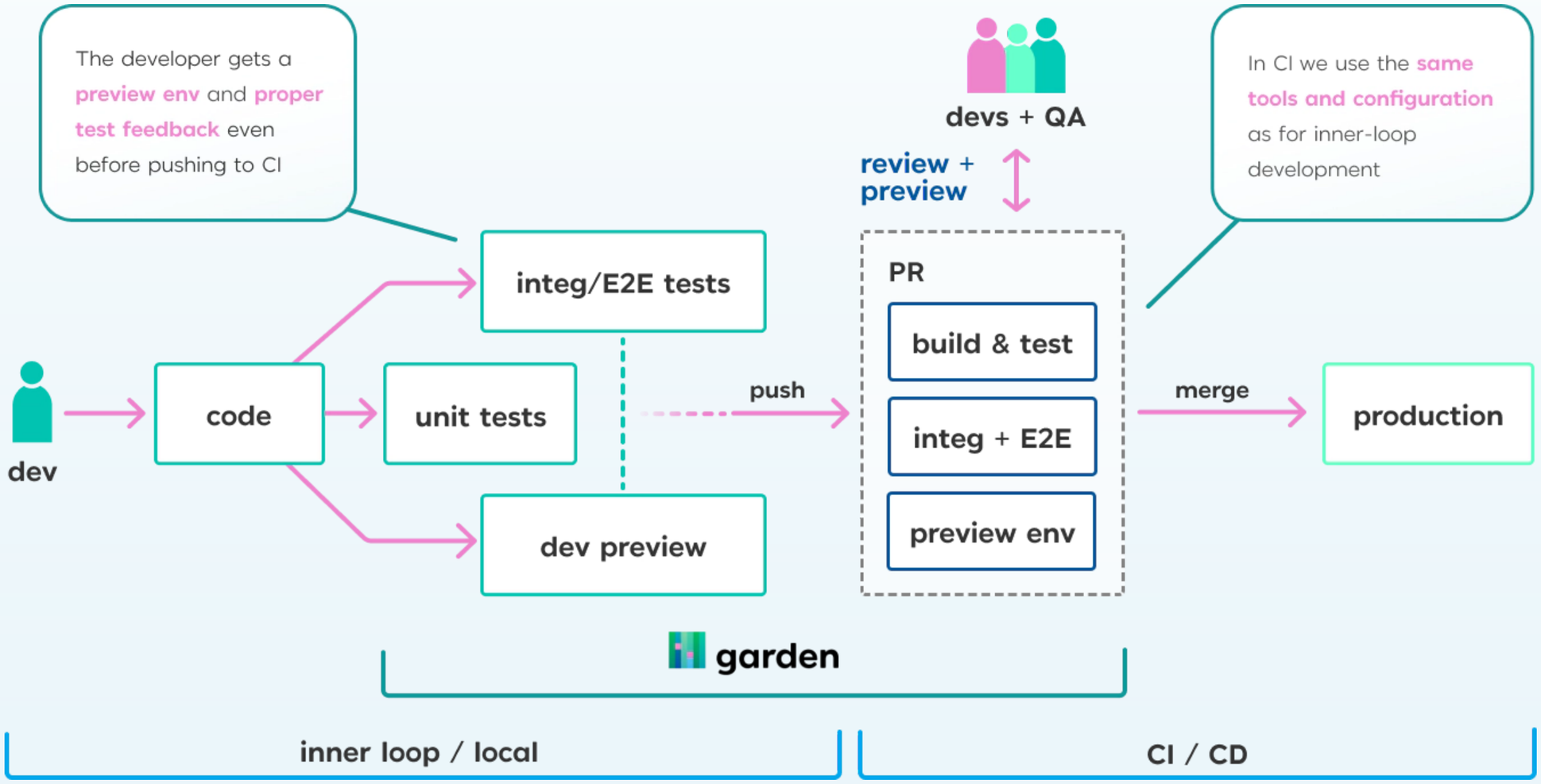
```
kind: Module
type: container
name: postgres
image: postgres:11.7-alpine
services:
  - name: postgres
    env:
      POSTGRES_USERNAME: ${secret.DB_USER}
      POSTGRES_PASSWORD: ${secret.DB_PASSWORD}
```

# Same setup for dev and CI

- Run garden deploy or garden test — the same during development and in CI
- Use the same cluster for both, and get a **shared cache** between all your developers and pipelines
- Waste less time debugging CI



# What this gives us



# DEMO

# A long list of benefits

- Production-like environments at every stage, on-demand
- Run all or individual integration tests at any stage, even before pushing to git.
  - Much faster to write and debug integ/e2e tests!
- No more pushing "asdfasdf" commits to CI for debugging
- Your build, test and deploy configuration is portable across CI systems
- Share build and test caches between developers and across dev + CI
- **Stay focused, stay in flow**

# Wrapping up

- To get started: docs.garden.io
- We'd love to hear what you think! Please ask us questions along the way: community.garden.io
- We're hiring: garden.io/careers
- jon@garden.io / @JonEdvald

# Q&A

# Thank you!