

</>

# Automated Builds CI+CD

By Alejandro Ávila Rodríguez

# Index

- Automated Builds & DevOps
- What is CI/CD
- Elements of a CI/CD Pipeline
  - Source Stage
  - Build Stage
  - Test Stage
  - Deploy Stage
- Why use a CI/CD Pipeline
- Market Study
- Setting Up a CI/CD environment with GitHub Actions
- Bonus

< / >

# Automated Builds

# Automated Builds & DevOps

- DevOps: Group of techniques to deploy high-speed quality products
- Automated Builds: Process of converting files and other assets to a software product that works in its final form (traditional building) automatically.

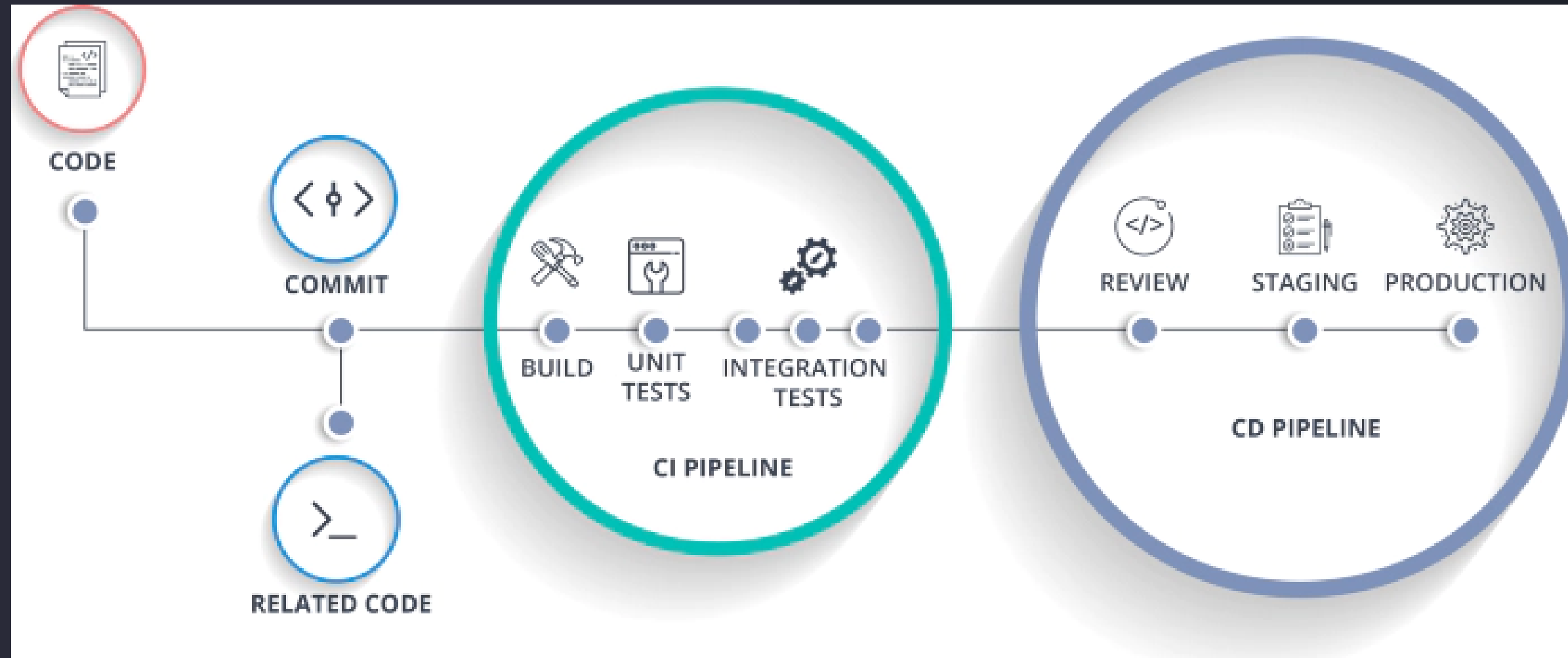


< / >

# CI/CD Pipeline

# What is CI

# What is CD



MARKET STUDY: CHOOSING THE BEST CI/CD TOOL

Name	Minutes/month	Megabites
GitHub Actions	2000	500 MB
Jenkins	∞ *	∞ *
Circle CI	2500 credits/week**	Depends on the OS
GitLab	400	10GB

*\*You host the infrastructure*

*\*\*Credits are used instead of minutes, the credit usage depends on the type of platform*

< / >

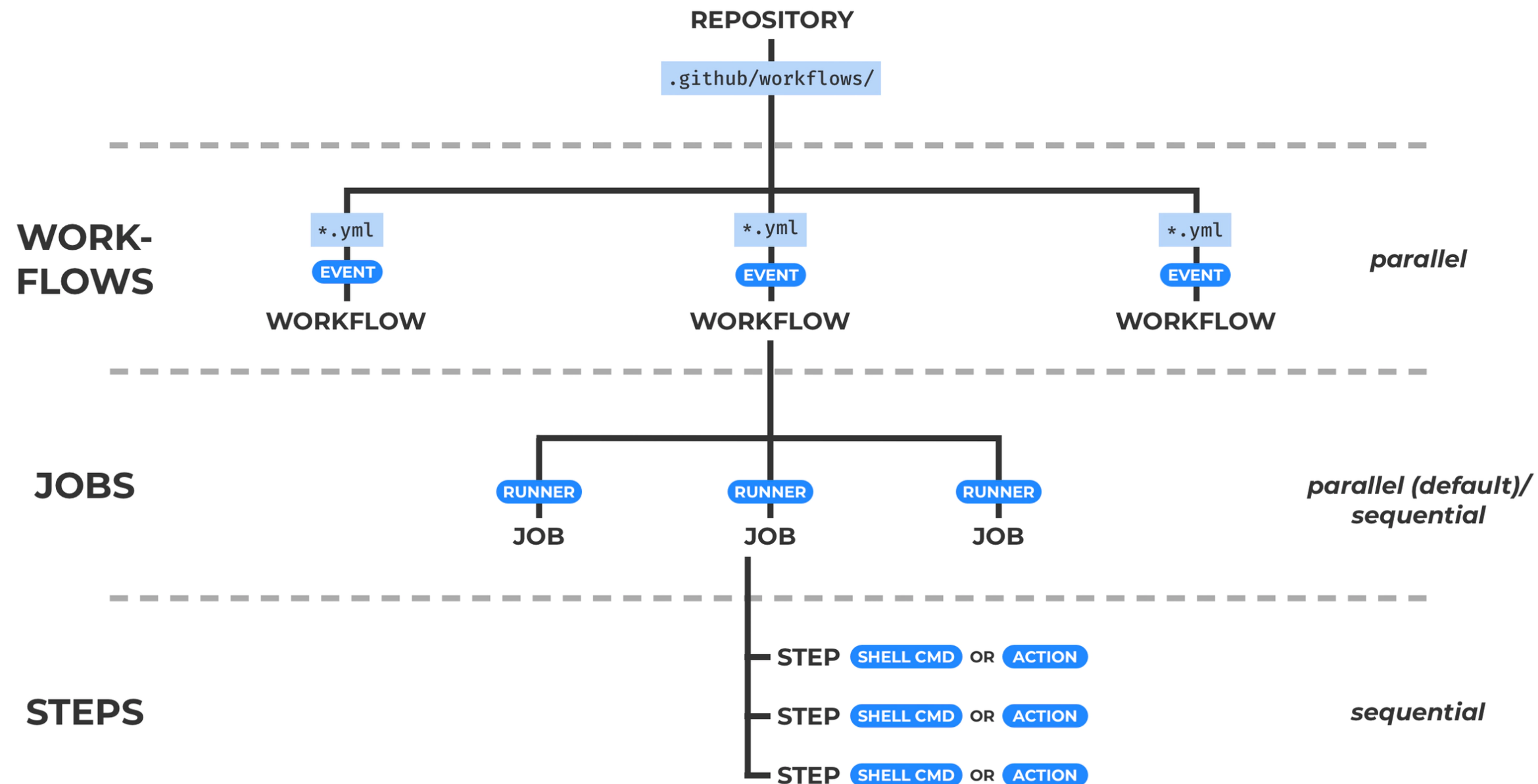
# GitHub Actions



# Basic Concepts of GitHub Actions



GitHub Actions



< / >

# Setting Up Actions

< / >

## Bonus: Automatic Releases