

CI/CD Vocabulary Cheat Sheet

This cheat sheet provides quick reference definitions of common CI/CD terms, and highlights how different platforms (GitHub, GitLab, BitBucket, AWS, Azure, GCP) label similar concepts.

Core Vocabulary

- **CI:** (Continuous Integration): Practice of merging code changes frequently, automatically building and testing them.
- **CD:** (Continuous Development/Delivery/Deployment): Automating the release of code to staging or production environments.
- **Pipeline:** Automated series of steps (build, test, deploy).
- **Runner/Agent:** A server or container that executes pipeline jobs.
- **Artifact:** The packaged result of a build (e.g., .war file, Docker image).
- **Environment:** A runtime target (dev, staging, production).
- **Secrets/Variables:** Stored credentials and config values (API keys, DB passwords).

Platform Vocabulary Comparison

Concept	GitHub	GitLab	BitBucket	AWS	Azure	GCP
Pipeline	Workflow	Pipeline	Pipeline	CodePipeline	Pipeline	Cloud Build
Job/Step	Job	Job	Step	Action	Job	Build Step
Runner	Runner	Runner	Runner	CodeBuild	Agent	Worker Pool
Repo	Repository	Repository	Repository	CodeCommit	Repos	Cloud Source Repos
Secrets	Secrets	CI/CD Variables	Repository Variables	Secrets Manager / SSM	Variable Groups / Key Vault	Secret Manager

Quick Tips

- Different platforms use different terms for the same concepts. Always map them before starting.
- Artifacts are often stored in cloud-native services (e.g., AWS S3, Azure Artifacts, GCP Artifact Registry).
- Use secrets managers instead of plain text variables when possible.
- Runners/Agents may incur costs depending on usage (GitHub hosted vs. self-hosted, etc.).