DevOps Engineer English Essentials

Must-know terms and phrases for DevOps and SRE engineers — CI/CD, containers, infrastructure, incidents.

https://coderslingo.com/resources/cheatsheets/devops-engineer-essentials/

CI/CD

pipeline — The automated sequence of steps that builds, tests and ships your code.
CI — Continuous Integration — merging and testing changes frequently and automatically.
CD — Continuous Delivery/Deployment — automatically shipping changes to production.
build — Compiling and packaging the code into a runnable form.
artifact — The output of a build (a binary, an image, a zip) stored for later deploy.
deploy — Releasing a new version of the software to an environment.
rollback — Reverting to the previous known-good version after a bad deploy.
canary — Releasing to a small slice of traffic first to catch problems early.
blue-green — Running two identical environments and switching traffic between them.
feature flag — A toggle that turns a feature on or off without redeploying.
staging — A production-like environment used to test before going live.
smoke test — A quick check after deploy that the basics still work.
gate — A required check (tests, approval) that must pass before the pipeline proceeds.
runner / agent — The machine that executes pipeline jobs.

Containers & orchestration

container — A lightweight, isolated package of an app and its dependencies.
image — The immutable template a container is started from.
registry — A store for container images (Docker Hub, ECR, GHCR).
pod — The smallest deployable unit in Kubernetes — one or more containers together.
node — A worker machine in a cluster that runs pods.
cluster — A set of nodes managed together by an orchestrator like Kubernetes.
orchestration — Automatically scheduling, scaling and healing containers.
autoscaling — Adding or removing instances automatically based on load.
horizontal scaling — Adding more instances; vertical scaling means making each one bigger.
service mesh — A layer that manages traffic, security and observability between services.
ingress — The rules that route external traffic into a cluster.
sidecar — A helper container running alongside the main one in the same pod.
liveness probe — A health check that restarts a container if it stops responding.

Infrastructure

provision — To create and configure infrastructure (servers, networks, databases).
IaC — Infrastructure as Code — defining infra in version-controlled files.
state — IaC tools' record of what infrastructure currently exists.
drift — When real infrastructure no longer matches what the code declares.
idempotent — An operation you can run repeatedly with the same end result.
immutable infrastructure — Replacing servers instead of changing them in place.
secret — A sensitive value (password, token) stored and injected securely.
environment — A named deployment target — dev, staging, production.
load balancer — A component that distributes traffic across instances.
reverse proxy — A server that forwards client requests to backend services.
DNS — The system that maps domain names to IP addresses.
TLS certificate — The credential that enables encrypted HTTPS connections.

Reliability & on-call

SLO — Service Level Objective — the reliability target you commit to internally.
SLA — Service Level Agreement — the reliability promise made to customers.
SLI — Service Level Indicator — the actual metric you measure (e.g. % of fast requests).
error budget — The allowed amount of unreliability before you must stop shipping risky changes.
incident — An unplanned disruption to a service that needs a response.
severity (SEV) — How serious an incident is — SEV1 is critical, SEV3 is minor.
on-call — Being responsible for responding to alerts during a shift.
alert — An automated notification that something is wrong.
pager / paging — Being notified urgently, often outside hours, to handle an incident.
runbook — A step-by-step guide for handling a known operational task or incident.
postmortem — A blameless write-up after an incident explaining cause and fixes.
MTTR — Mean Time To Recovery — average time to restore service after failure.
observability — Understanding system state from logs, metrics and traces.
mitigation — A quick action that reduces impact before the root cause is fixed.
root cause — The underlying reason an incident happened, not just the symptom.
toil — Repetitive manual work that should be automated away.

Key phrases used at work

“We’re seeing elevated error rates in production — opening a SEV2 now.”

“Update: we’ve mitigated by rolling back to the previous release; investigating root cause.”

“Current status: customer-facing impact is contained, monitoring for the next 30 minutes.”

“I’m paging the database team — this is beyond what on-call can resolve alone.”

“We’ve burned through most of our error budget this month, so let’s hold risky deploys.”

“The canary is healthy after 10% for an hour — promoting to 100%.”

“Heads up: the deploy to staging is blocked by a failing smoke test. No action needed yet.”

“There’s config drift on the prod cluster — Terraform plan shows three unmanaged changes.”

“Let’s gate this behind a feature flag so we can roll it back instantly if needed.”

“The pipeline is red — the build step is failing on a missing dependency.”

“I’ll write up the postmortem; it’s blameless, so let’s focus on the systemic fix.”

“The pods are getting OOM-killed — we need to bump the memory limit.”

“Autoscaling kicked in during the spike and held latency within the SLO.”

“This alert is noisy and not actionable — let’s tune the threshold to cut the toil.”

“Escalating to the platform team; I’ve added the dashboard link and the relevant logs.”

“Confirmed recovery — MTTR was about 18 minutes. I’ll send the incident summary.”

“We should make this idempotent so re-running the deploy script is always safe.”

“The certificate expires Friday — I’ve scheduled the renewal and added an alert.”

“Yesterday: migrated the CI to the new runners. Today: writing the rollback runbook.”

“Quick question before I proceed: do we want blue-green or a rolling deploy for this service?”