

If you already have some DevOps experience, visit the detailed version with more topics.

Visit the Detailed Version

Find the detailed version of this roadmap along with resources and other roadmaps

<https://roadmap.sh>

DevOps

What is DevOps?

DevOps is all about bringing developers and operations teams together to improve software delivery. The key focus areas are automation, infrastructure and monitoring.

For further details, have a look at the FAQs below.

Learn about the file system, package managers, managing services, checking logs, bash scripting, permissions, pipes output redirection, common tools for text manipulation process monitoring, networking tools, CLI editors etc.

Pick Ubuntu if you have a little to no experience.

Learn about containerization. Be comfortable writing Docker files. Learn about troubleshooting. Get familiar with Alpine Linux. Learn about networking, storage, security.

Learn docker networking, storage, security, performance.

DevOps teams usually practice "git ops," i.e., making changes to your CI/CD pipeline, infrastructure, or server provisioning will involve making a pull request against the appropriate git repository.

Learn about git, create your GitHub profile.

Learn what "Infrastructure as Code" means. Learn about terraform and how to automate infrastructure creation.

If you deployed an application to AWS in previous step destroy the infrastructure and create it using terraform.

Learn about the concepts of CI/CD and how to implement in your projects using some CI/CD tool. There are several options available in this space, you can pick any one.

Integrate CI/CD into your apps using GitHub Actions.

Learn a Programming Language

Python

Go

Pick any Programming Language

You can pick any programming language. The purpose behind the language is to be able to write automation scripts to automate repetitive tasks.

Linux

Networking and Protocols

Docker

Learn about DNS, TCP/IP Protocols, SSH, ports, gateways, routing, ip addressing, and subnetting etc.

This will come in handy with deployments / troubleshooting

Git

AWS

Pick one of the cloud providers AWS, GCP or Azure. Start with core services e.g. in AWS VPC, EC2, S3, IAM and later RDS, Route53, Cloudwatch, ECS, EKS etc.

Create and deploy some dummy application to AWS.

Terraform

Ansible

GitHub Actions

Learn what is configuration management. Understand roles, playbooks, inventory management and automation.

Write some automation scripts e.g. db backups.

Nginx

nginx is commonly used for web serving, reverse proxying, caching, load balancing, media streaming, and more.

Learn the basic config options, TLS setup etc.

Job Ready

At this point, you should have enough knowledge to find a junior to mid-level (maybe even senior) DevOps position at any company depending on the depth of your knowledge.

Deepen your pool of knowledge and keep building projects till you find a job. Your job will teach you a lot as well.

Look at the detailed version for what else you don't know

DevOps Roadmap