

Terraform





What is IaC (Infrastructure as Code)?



- IaC is a way to manage and provision infrastructure using code.
- You write code (like .tf files) instead of clicking on AWS console.
- It makes infrastructure consistent, repeatable, and version-controlled.





Why use Terraform?



- Open-source and cloud-agnostic (works with AWS, Azure, GCP, etc.)
- Automates infrastructure deployment.
- Easy syntax using HCL (HashiCorp Configuration Language).
- Supports version control and team collaboration.





Terraform vs CloudFormation





Cloud Support



- Terraform supports multi-cloud platforms like AWS, Azure, GCP.
- CloudFormation works only with AWS.





Language:



- Terraform uses HCL (HashiCorp Configuration Language) – very easy to read and write.
- CloudFormation uses JSON or YAML more complex and verbose.





Open Source:

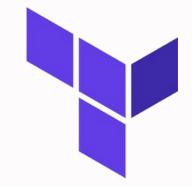


- Terraform is fully open-source, maintained by HashiCorp.
- CloudFormation is not open-source, it's owned and managed by AWS.





Community Support:



- Terraform has a large, active community and lots of learning resources.
- CloudFormation has limited community involvement and fewer tutorials.