

## Advance Devops-5

**Aim: To install and configure terraform on windows**

### Theory:

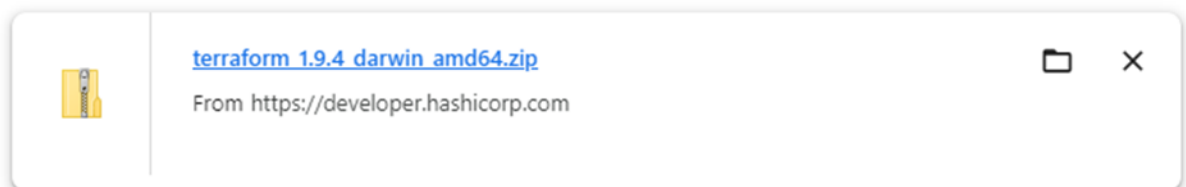
Terraform is an infrastructure as code (IaC) tool that allows you to build, change, and version infrastructure safely and efficiently. This includes low-level components such as computer instances, storage, and networking, as well as high level components such as DNS entries, SaaS features, etc.

Terraform can manage infrastructure on multiple cloud platforms. Terraforms state allows you to track resource changes throughout your deployments. You can commit your configurations to version control to safely collaborate on infrastructure. Terraform plugins called providers let Terraform interact with cloud platform and other services via their application programming interfaces (APIs).

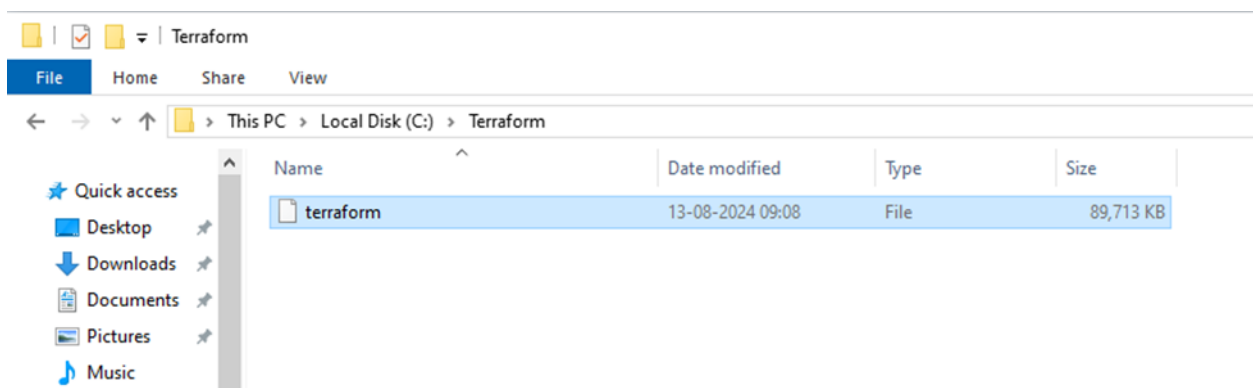
### Steps to install terraform:

- 1) Go to [https://developer.hashicorp.com/terraform/install?product\\_intent=terraform](https://developer.hashicorp.com/terraform/install?product_intent=terraform)

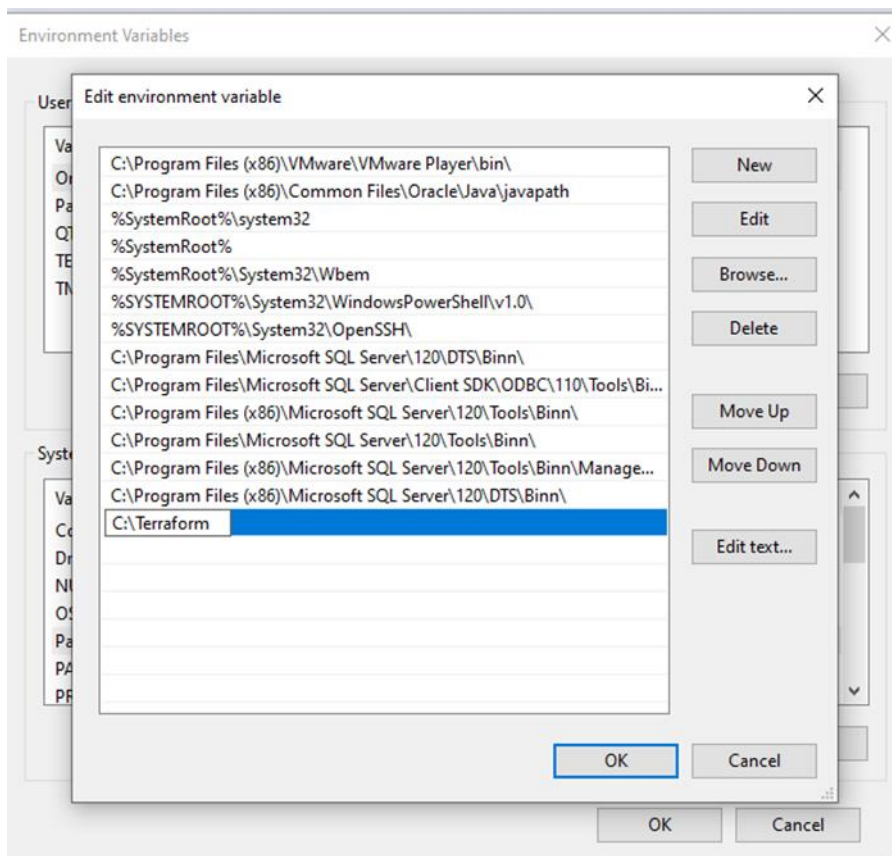
Today



- 1)
- 2) Download the file into C:/Terraform



- 3) Add terraform in environment variable



4) Go to cmd and check

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C:\Users\INF513-9>terraform
Usage: terraform [global options] <subcommand> [args]

The available commands for execution are listed below.
The primary workflow commands are given first, followed by
less common or more advanced commands.

Main commands:
  init      Prepare your working directory for other commands
  validate  Check whether the configuration is valid
  plan      Show changes required by the current configuration
  apply     Create or update infrastructure
  destroy   Destroy previously-created infrastructure

All other commands:
  console   Try Terraform expressions at an interactive command prompt
  fmt       Reformat your configuration in the standard style
  force-unlock Release a stuck lock on the current workspace
  get       Install or upgrade remote Terraform modules
  graph     Generate a Graphviz graph of the steps in an operation
  import    Associate existing infrastructure with a Terraform resource
  login     Obtain and save credentials for a remote host
  logout    Remove locally-stored credentials for a remote host
  metadata  Metadata related commands
  output    Show output values from your root module
  providers Show the providers required for this configuration
  refresh   Update the state to match remote systems
  
```

## Conclusion:

In conclusion, installing and configuring Terraform on Windows involves downloading the

Terraform executable, adding it to your system's PATH, and verifying the installation through the command line. By following these steps, users can efficiently manage infrastructure as code, enabling streamlined deployment and management of cloud resources. With its simple syntax and powerful capabilities, Terraform enhances productivity and collaboration in DevOps practices, making it a valuable tool for modern infrastructure management