Step-by-Step Guide: Install & Setup Terraform on Windows

`1` Download Terraform

1. Go to the official Terraform website: https://www.terraform.io/downloads
2. Select Windows (64-bit) or Windows (386-bit) depending on your system.
3. Download the `.zip` file.

`2` Extract Terraform

1. Extract the downloaded `.zip` file to a folder, e.g.: `C:\Terraform`
2. Inside the folder, you should see `terraform.exe`.

`3` Add Terraform to System PATH

1. Press `Win + S`, search for **Environment Variables**, and open **Edit the system environment variables**.
2. Click **Environment Variables...**
3. Under **System Variables**, find `Path` → Click **Edit** → Click **New**
4. Add the folder path where `terraform.exe` is located, e.g.: `C:\Terraform`
5. Click **OK** → OK → OK to close all windows.

`4` Verify Installation

1. Open **Command Prompt** or **PowerShell**
2. Run:

```
terraform -version
```

3. You should see something like:

```
Terraform v1.13.4
on windows_386
```

✅Terraform is correctly installed.

5 Optional: Create a Working Folder

1. Create a folder for your Terraform projects, e.g.: `C:\TerraformProjects\MyFirstProject`
2. Inside the folder, create your `.tf` files.

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6 Initialize Terraform in a Project

1. Open **Command Prompt** in your project folder.
2. Run:

```
terraform init
```

3. Terraform downloads required providers and prepares the project.

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7 Test a Simple Terraform Plan

1. Create a simple `main.tf` for AWS EC2:

```
provider "aws" {
  region = "us-east-2"
}

resource "aws_instance" "example" {
  ami           = "ami-0c94855ba95c71c99"
  instance_type = "t3.micro"
}
```

2. Run:

```
terraform plan
terraform apply
```

3. Terraform will show the execution plan and ask for confirmation to deploy.

✅Tips

- Always check **Terraform version** after installation.
- Use **PowerShell or VS Code terminal** for best experience.
- For AWS, make sure **AWS CLI is installed and configured** (`aws configure`).