# Install Terraform

**developer.hashicorp.com**/terraform/tutorials/certification-associate-tutorials/install-cli

Create a directory named `learn-terraform-docker-container`.

```
$ mkdir learn-terraform-docker-container
```

Then, navigate into it.

```
$ cd learn-terraform-docker-container
```

Paste the following Terraform configuration into a file and name it `main.tf`.

```
terraform {
  required_providers {
    docker = {
      source  = "kreuzwerker/docker"
      version = "~> 2.13.0"
    }
  }
}

provider "docker" {}

resource "docker_image" "nginx" {
  name         = "nginx:latest"
  keep_locally = false
}

resource "docker_container" "nginx" {
  image = docker_image.nginx.latest
  name  = "tutorial"
  ports {
    internal = 80
    external = 8000
  }
}
```

```
terraform {
  required_providers {
    docker = {
      source  = "kreuzwerker/docker"
      version = ">= 2.13.0"
    }
  }
}

provider "docker" {
  host    = "npipe:////.//pipe//docker_engine"
}

resource "docker_image" "nginx" {
  name         = "nginx:latest"
  keep_locally = false
}

resource "docker_container" "nginx" {
  image = docker_image.nginx.latest
  name  = "tutorial"
  ports {
    internal = 80
    external = 8000
  }
}
```

Initialize the project, which downloads a plugin that allows Terraform to interact with Docker.

```
$ terraform init
```

Provision the NGINX server container with `apply`. When Terraform asks you to confirm type `yes` and press `ENTER`.

```
$ terraform apply
```

Verify the existence of the NGINX container by visiting localhost:8000 in your web browser or running `docker ps` to see the container.

## Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to nginx.org.
Commercial support is available at nginx.com.

*Thank you for using nginx.*

```
$ docker ps
CONTAINER ID        IMAGE                      COMMAND                      CREATED
STATUS              PORTS                      NAMES
425d5ee58619        e791337790a6               "nginx -g 'daemon of…"   20 seconds
ago      Up 19 seconds       0.0.0.0:8000->80/tcp     tutorial
```

To stop the container, run `terraform destroy`.

```
$ terraform destroy
```

You've now provisioned and destroyed an NGINX webserver with Terraform.

## Next Steps

Next, you will create real infrastructure in the cloud of your choice.