

# Using Terraform

Deploy Roost on AWS using Terraform

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# 1. Getting Started

Roost provides terraform scripts to spin up and configure the EaaS platform easily. Below are the steps for deploying Roost on AWS using Terraform

## High-Level Architecture

Roost Terraform scripts create the below components in the AWS cloud

[Roost-AWS-Architecture.png](#)

## Prerequisites

- User Account with Admin privileges / Policies enabled to run terraform scripts
- region
- route53\_hosted\_zone\_id
- ec2\_ami
- enterprise\_dns
- ip\_block\_vpc (VPC CIDR where Roost would be set up)
- okta\_client\_id or appropriate auth provider ( please refer [link](#) here )
- company

## Clone the Repo

```
https://github.com/roost-io/terraform.git
```

## 2. OAuth Provider Setup

Roost supports various authentication mechanisms as mentioned below

1. Github
2. Google
3. Microsoft
4. Linkedin
5. Okta

### OKTA Auth Client Setup

- Sign in to your OKTA account with admin privileges (*If you do not have an existing Okta account, then sign-up at [Home | Okta Developer](#)* )
- From the left navigation menu, go to Applications -> Applications.
- Select Create App Integration → OIDC - OpenID Connect → Web Application, then click Next
- Fill in the suitable **App integration name**, upload the logo.
- Add **Sign-in redirect URIs**
  - [https://<DNS\\_NAME>/login](https://<DNS_NAME>/login)
- Allow Access to users thru Assignments → Controlled Access
  - Select the groups of users or Allow access to everyone
- Save and Make a note of the Okta Client ID and the Client Secret (It is needed later in the config below)
- From the left navigation menu, go to Security -> API
- Make a note of **Issuer URI** for default Authorisation Server
  - something like [https://{your\\_domain}.okta.com/oauth2/default](https://{your_domain}.okta.com/oauth2/default)

### Google Auth Client Setup

- [Integrating Google Sign-In into your web app](#) | [Google Sign-In for Websites](#) | [Google Developers](#)
- Login to <https://console.cloud.google.com/apis/credentials>
- Create Credentials, Select OAuth Client and Application Type as Web Application
- Add Authorised JavaScript Origin as
  - <https://roostapi.roost.io:60001>

- [https://<DNS\\_NAME>](https://<DNS_NAME>)
- <http://localhost:3000>
- <http://localhost:4200>
- Add Authorised redirect URIs
  - [https://<DNS\\_NAME>/login](https://<DNS_NAME>/login)
  - [https://<DNS\\_NAME>/api/auth/redirect/google](https://<DNS_NAME>/api/auth/redirect/google)
  - <https://roostapi.roost.io:60001/auth/redirect/google>
- Download the JSON
- Make a note of the Google Client ID and the Client Secret (It is needed later in the config below)

# 3. Terraform variables

Please follow the below steps to modify terraform files to incorporate the

- Clone the GitHub repo.

```
git clone https://github.com/roost-io/terraform.git
```

- Copy terraform.tfvars.original as terraform.tfvars
- Fill in the below details

```
region
route53_hosted_zone_id
ec2_ami
enterprise_dns
ip_block_vpc (VPC CIDR where Roost would be setup)
okta_client_id or appropriate auth provider
company (Provided by Roost team)
```

## Terraform Variable Definitions

Field	Values	Description
prefix	"terraform-eaas"	
region	"us-west-1"	
az1_suffix	"b"	
az2_suffix	"c"	
deletion_protection	false	
route53_hosted_zone_id		
enterprise_dns	"eaas.example.com"	
ec2_ami	"ami-03df6dea56f8aa618"	
key_pair	"roost-eaas-keypair"	

generate_key_pair	true	
device_name	"sdh"	
ip_block_vpc	"172.32.255.192"	
instance_type_controlplane	"t3.large"	
instance_type_jumphost	"t3.micro"	
google_client_id		
google_client_secret		
github_client_id		
github_client_secret		
linkedin_client_id		
linkedin_client_secret		
azure_client_id		
azure_client_secret		
okta_client_id	"00a4bweaxcqn2sfTu5d7"	
okta_client_secret	"D5oRtWXUWcl9gp1312dVtuSoumU4 vrECO4wSsqAO"	
okta_issuer		
roost_jwt_token		
company		
company_logo	"https://roost.ai/hubfs/logos/Roost.ai- logo-gold.svg"	
enterprise_email_domain	"example.com"	
admin_email	"admin@email"	

senders_email	"sender@email"	
is_own_mysql	false	
mysql_host	"mysql_db_host_url"	
mysql_password	"Roost#123"	
mysql_username	"Roost"	
mysql_port	3306	
mysql_db_name	"roostio"	
mysql_root_password	"Admin#123"	
senders_email_pass		
email_smtp_host		