

Creating the AWS infrastructure by using Terraform. Here is a high level of overview and example of creating entire services for 3 tier applications. Please stop creating your infrastructure manually, just go with Terraform which is literally fun and easy way!

1. **VPC, Subnets, and Route Tables**
2. **Internet Gateway (IGW)**
3. **NAT Gateway**
4. **Elastic Load Balancer (ELB)**
5. **Security Groups**
6. **EC2 Instances**
7. **VPC Endpoints**
8. **Transit Gateway**
9. **VPC Peering**
10. **Direct Connect**

Here is an example of how to start building this infrastructure using Terraform:

Step 1: Setup Your Terraform Files

Create a directory for your Terraform configuration and then create the following files:

- main.tf
- variables.tf
- outputs.tf

Step 2: Initialize and Apply Terraform Configuration

1. Initialize your Terraform configuration:

terraform init

2. Apply the Terraform configuration:

terraform apply

Additional Steps

1. **NAT Gateway:**
 - Create an Elastic IP for the NAT Gateway.

- Create the NAT Gateway in the public subnet.
- Update the private subnet route table to route internet-bound traffic through the NAT Gateway.

2. VPC Endpoints:

- Create VPC Endpoints for services like S3 and DynamoDB.

3. Transit Gateway:

- Create a Transit Gateway and attach it to your VPCs.

4. VPC Peering:

- Establish VPC Peering connections between your VPCs.

5. Direct Connect:

- Set up Direct Connect to link your on-premises network to your VPC.

For detailed configurations of these additional steps, refer to the Terraform AWS Provider Documentation.

Here is similarly created high level infrastructure visualization:

