**Install Terraform in Local (Windows)**

* Browse – <https://developer.hashicorp.com/terraform/downloads> > Windows > Download
* Extract zip file to a folder (C:\Terraform).
* System Properties > Environment Variables > System Variables > Path > Add path – C:\Terraform
* Verify

$ terraform -version

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**Configure AWS CLI in local**

* Install AWS CLI & verify

$ aws --version

* Create user

IAM > Users > Create user

Username – admin > Check – Provide access to AWS Console > Choose – I want to create IAM user

* Generate access key

IAM > User > username (admin) > Create access key > Select – Command Line Interface > Next

* Create keypair

EC2 > Key pairs > Create key pair

Name – terraform-key > Key pair type – RSA > Private key file format – .pem

* Configure AWS

$ aws configure

AWS Access Key ID [\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*AGRT]: <access-key>

AWS Secret Access Key [\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*2s5C]: <secret-access-key>

Default region name [d]:

Default output format [d]:

Verify

$ aws sts get-caller-identity

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**Create S3 bucket & Dynamo DB table for Remote Backend**

* Create S3 bucket

$ aws s3api create-bucket \

  --bucket my-terraform-state-bucket-307025 \

  --region us-east-1 \

* Create Dynamo Table

$ aws dynamodb create-table \

--table-name terraform-lock \

--attribute-definitions AttributeName=LockID,AttributeType=S \

--key-schema AttributeName=LockID,KeyType=HASH \

--provisioned-throughput ReadCapacityUnits=5,WriteCapacityUnits=5

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**Initialize & Set workspace**

* Initialize working directory

$ terraform init

* Create workspaces

$ terraform workspace new dev

$ terraform workspace new prod

* Verify

$ terraform workspace new list

dev

prod

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**Create resources for dev environment**

* Select workspace

$ terraform workspace select dev

* Verify

$ terraform workspace show

dev

* Check execution plan

$ terraform plan -var-file="terraform-dev.tfvars"

* Apply changes

$ terraform apply -var-file="terraform-dev.tfvars"

* Verify

Browse – <ALB-URL>