

# Mandatory Assignment 02 - IaC IIKG3005

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## Prerequisites

### Terraform

First, you need to create the backend storage account and container in Azure. This can be done by running the following commands:

```
az login
az account set --subscription <subscription_id>
az group create --resource-group <resource_group_name> --location <location>
az storage account create --name <storage_account_name> --resource-group
<resource_group_name> --location <location> --sku Standard_LRS
az storage container create --name <container_name> --account-name
<storage_account_name>
```

Then, you need to create a service principal with the following command:

```
az ad sp create-for-rbac --name <service_principal_name> --role contributor --
scopes /subscriptions/<subscription_id>/resourceGroups/<resource_group_name>
```

It's also beneficial to create environment variables for the service principal credentials, the different values can be gotten when creating the service principal:

```
$env:ARM_CLIENT_ID=<client_id>
$env:ARM_CLIENT_SECRET=<client_secret>
$env:ARM_CLIENT_TENANT_ID=<tenant_id>
$env:ARM_SUBSCRIPTION_ID=<subscription_id>
```

### GitHub

You also need to create GitHub repository secrets for the service principal credentials, the following have to be created.

Go to the repository, then Settings -> Secrets and Variables -> Actions -> New repository secret.

```
AZURE_CLIENT_ID
AZURE_CLIENT_SECRET
AZURE_TENANT_ID
AZURE_SUBSCRIPTION_ID

AZURE_CREDENTIALS
```

```
{
  "clientId": "",
  "clientSecret": "",
  "subscriptionId": "",
  "tenantId": "",
  "activeDirectoryEndpointUrl": "https://login.microsoftonline.com",
  "resourceManagerEndpointUrl": "https://management.azure.com/",
  "activeDirectoryGraphResourceId": "https://graph.windows.net/",
  "sqlManagementEndpointUrl": "https://management.core.windows.net:8443/",
  "galleryEndpointUrl": "https://gallery.azure.com/",
  "managementEndpointUrl": "https://management.core.windows.net/"
}
```

## Terraform Workspaces

The following workspaces have to be created:

```
terraform workspace new dev
terraform workspace new stage
terraform workspace new prod
```

## Terraform Variables

The terraform.tfvars file has to be filled out correctly, for the delivery this will be provided in the zip file. Note that the backend storage account and container has to be created before running the terraform scripts.

## HOWTO

Below is a guide on how to use the Terraform scripts, and how it is set up with GitHub Actions.

## GitHub

This repository is set up with GitHub Actions, and the workflow can be found in the .github/workflows folder. The following workflows are set up:

- **devstageprodweb.yml** - This workflow is triggered when a push is done, or on a pull request, and will run the terraform init and plan command for each terraform workspace.
  - It will then check the commit message for the following keywords:
    - **[apply dev]** - This will run the terraform apply command on dev, and deploy the dev infrastructure.
    - **[destroy dev]** - This will cancel the terraform destroy command on dev, and destroy the dev infrastructure.
  - The same goes for **stage** and **prod**.
    - **[apply all]** - This will run the terraform apply command on all workspaces, and deploy the infrastructure for all workspaces.
    - **[destroy all]** - This will cancel the terraform destroy command on all workspaces, and destroy the infrastructure for all workspaces.

- Anything else will not cause the workflow to apply the infrastructure, but only validate the terraform scripts.
- The **dev** and **stage** workspace do not have any protection rules, so the workflow will run the terraform apply command for these workspaces.
- The **prod** workspace is protected, so the workflow will not run the terraform apply command for this workspace until it is manually approved.
- **validate.yml** - This workflow is triggered when a push is done to a different branch than the **main** branch, and all it does is validate the terraform configuration with the **terraform validate** command.
  - After it has been validated, you can create a pull request to the **main** branch, and the **devstageprod.yml** workflow will run.
- **tfsec.yml** - This workflow is triggered when **validate.yml** is finished, and will run the **tfsec** command to check for security issues in the terraform scripts.
  - This currently fails as there are some security issues in the terraform scripts, but I have not fixed them.
- **tflint.yml** - This workflow is triggered when **validate.yml** is finished, and will run the **tflint** command to check for errors in the terraform scripts.

In the future I would like to set up a workflow that runs the terraform validate command when a pull request is created, and then run the terraform apply command when the pull request is merged. But I have not been able to figure out how to do this yet, and did not have time to do it for this assignment.

In this repository I have protected my main branch, so any changes must be done through pull requests, unless you force it to main.

This is done to ensure that the code is valid, and that the pull request can be merged.

## Terraform

The Terraform scripts are set up with the following structure:

```
./openterra
├── .terraform
├── keyvault
│   ├── main.tf
│   ├── outputs.tf
│   └── variables.tf
├── network
│   ├── main.tf
│   ├── outputs.tf
│   └── variables.tf
├── storageaccount
│   ├── main.tf
│   ├── outputs.tf
│   └── variables.tf
└── virtualmachine
    ├── main.tf
    └── outputs.tf
```

```
|   └─variables.tf  
├─main.tf  
├─locals.tf  
├─outputs.tf  
├─terraform.tfvars  
├─providers.tf  
└─variables.tf
```

When everything is deployed, there will be three resource groups that contain resources for each workspace. These resources and resource groups are named with the workspace as a suffix, so that they are easily identifiable.

Most resources also have a tag with the workspace name, so that they are also easily identifiable in the Azure portal.

You can run the terraform commands manually, or you can use the GitHub Actions workflow to run the commands.

To run the terraform commands manually, you can use the following commands:

```
terraform init  
terraform plan -var-file="terraform.tfvars" -out="planfile"  
terraform apply "planfile"
```

To destroy the infrastructure, you can use the following commands:

```
terraform destroy
```

Make sure this is done in the correct workspace, or else you will destroy the wrong infrastructure, or get an error.

## Showcase of Successful Workflow

The following screenshots show the successful workflow and the deployed infrastructure. These can also be viewed publicly on my GitHub profile: [IIKG3005](#)

Apply to Dev

### Workflow in GitHub

#### Successful Workflow

- Waiting for approval to apply infrastructure to prod
- The complete run of the workflow can be found [here](#)

Terraform CI/CD

apply dev #22

Cancel workflow

Summary

Jobs

Run details

dev\_stage

stage\_prod

prod

Usage

Workflow file

Triggered via push 4 minutes ago

Status

Total duration

Artifacts

OblivionLimbo pushed

0301bbd

dev

Waiting

-

-

OblivionLimbo requested your review to deploy to production

Review deployments

devstageprod.yaml

on: push

dev\_stage

3m 44s

stage\_prod

20s

prod

production waiting for review

Deployment protection rules

Reviewers, timers, and other rules protecting deployments in this run

Start all waiting jobs

Event

Environments

Comment

OblivionLimbo requested review

production

-

Terraform Validate

Validate Infrastructure

apply dev #23

Summary

Jobs

Run details

Validate

Usage

Workflow file

Triggered via push 7 minutes ago

Status

Total duration

Artifacts

OblivionLimbo pushed

0301bbd

dev

Success

20s

-

validate.yaml

on: push

Validate

10s

tflint

Terraform Linter

Terraform Linter #14

Summary

Jobs

Run details

tflint

Usage

Workflow file

Triggered via workflow run 7 minutes ago

Status

Total duration

Artifacts

OblivionLimbo completed

658b589

Success

11s

-

tflint.yaml

on: workflow\_run

tflint

3s

tfsec

← Terraform Security Check

✖

Terraform Security Check #14

Summary

Jobs

Security Check

Run details

Usage

Workflow file

Triggered via workflow run 7 minutes ago

Status

Total duration

Artifacts

OblivionLimbo

 completed 

↗ 658b589

Failure

21s

—

tfsec.yml

on: workflow\_run

✖ Security Check

13s

```
4005
4006     timings
4007     -----
4008     disk i/o           266.004µs
4009     parsing            8.455089ms
4010     adaptation        170.828µs
4011     checks            3.606537ms
4012     total             12.498458ms
4013
4014     counts
4015     -----
4016     modules downloaded  0
4017     modules processed   5
4018     blocks processed    103
4019     files read          16
4020
4021     results
4022     -----
4023     passed              13
4024     ignored              0
4025     critical            0
4026     high                 1
4027     medium               1
4028     low                  6
4029
4030     13 passed, 8 potential problem(s) detected.
4031
4032
```

As stated above, the tfsec workflow fails as there are some security issues in the terraform scripts, but I have not fixed them.

## Terraform Plan

**dev\_stage**  
succeeded 8 minutes ago in 3m 44s

Search logs

▼ ✓ Terraform plan 7s

```
496       + min_lower    = 0
497       + min_numeric  = 0
498       + min_special  = 0
499       + min_upper    = 0
500       + number       = true
501       + numeric      = true
502       + result       = (known after apply)
503       + special      = false
504       + upper        = false
505     }
506
507 Plan: 20 to add, 0 to change, 0 to destroy.
508
509 Changes to Outputs:
510   + openterra_rg_location = "westeurope"
511   + openterra_rg_name     = "rg-openterra-dev"
512
513
514
515 Note: You didn't use the -out option to save this plan, so Terraform can't
516 guarantee to take exactly these actions if you run "terraform apply" now.
517 Releasing state lock. This may take a few moments...
```

▼ ✓ Check last commit message 0s

```
1  ▶ Run echo "::set-output name=message::$(git log --format=%B -n 1)"
10 Warning: The `set-output` command is deprecated and will be disabled soon.
    Please upgrade to using Environment Files. For more information see:
    https://github.blog/changelog/2022-10-11-github-actions-deprecating-save-state-and-set-output-commands/
```

## Infrastructure Applied

```

dev_stage
succeeded 8 minutes ago in 3m 44s

Search logs

v [x] Conditionally run Terraform action 3m 14s
572 module.keyvault.azure_key_vault.kv: Still creating... [1m40s elapsed]
573 module.keyvault.azure_key_vault.kv: Still creating... [1m40s elapsed]
574 module.keyvault.azure_key_vault.kv: Still creating... [1m50s elapsed]
575 module.keyvault.azure_key_vault.kv: Still creating... [2m0s elapsed]
576 module.keyvault.azure_key_vault.kv: Still creating... [2m10s elapsed]
577 module.keyvault.azure_key_vault.kv: Still creating... [2m20s elapsed]
578 module.keyvault.azure_key_vault.kv: Still creating... [2m30s elapsed]
579 module.keyvault.azure_key_vault.kv: Still creating... [2m40s elapsed]
580 module.keyvault.azure_key_vault.kv: Still creating... [2m50s elapsed]
581 module.keyvault.azure_key_vault.kv: Creation complete after 2m53s
[id=/subscriptions/***/resourceGroups/rg-openterra-
dev/providers/Microsoft.KeyVault/vaults/kv-devtj431]
582 module.keyvault.azure_key_vault_secret.vm_password: Creating...
583 module.keyvault.azure_key_vault_secret.vm_username: Creating...
584 module.keyvault.azure_key_vault_secret.sa_accesskey: Creating...
585 module.keyvault.azure_key_vault_secret.vm_username: Creation complete after
1s [id=https://kv-devtj431.vault.azure.net/secrets/vm-
username/0a82614f58e94d63a7c9dec97e3a1e1d]
586 module.keyvault.azure_key_vault_secret.vm_password: Creation complete after
1s [id=https://kv-devtj431.vault.azure.net/secrets/vm-
password/d581cd43c576431b8b577be098af0e0a]
587 module.keyvault.azure_key_vault_secret.sa_accesskey: Creation complete after
1s [id=https://kv-devtj431.vault.azure.net/secrets/sa-
accesskey/da4e59755fc6427ba7c9aa99a3a83495]
588 Releasing state lock. This may take a few moments...
589
590 Apply complete! Resources: 20 added, 0 changed, 0 destroyed.
591
592 Outputs:
593
594 openterra_rg_location = "westeurope"
595 openterra_rg_name = "rg-openterra-dev"

> [x] Post Checkout 0s

v [x] Complete job 0s

1 Cleaning up orphan processes

```

## Azure Portal

I will omit showing all of the items in the Azure portal, as there are a lot of them, and it would take a lot of space. I will show the resource groups, and some of the resources in the resource groups, such as the web container and the static web page.



Resource Group

rg-openterra-dev

Resource group

Search

CreateManage viewDelete resource groupRefreshExport to CSVOpen queryAssign tagsMoveDeleteExport templateOpen in mobile

Overview

Activity log

Access control (IAM)

Tags

Resource visualizer

Events

Settings

Deployments

Security

Deployment stacks

Policies

Properties

Locks

Cost Management

Cost analysis

Cost alerts (preview)

Budgets

Advisor recommendations

Monitoring

Essentials

Subscription (move): sub\_tenant01ntru

Subscription ID: 5513747a-818d-4f48-83b0-da2b2fd4cb97

Deployments: No deployments

Location: West Europe

Tags (edit): billing\_code: Billingcompany: OpenTerraenvironment: devowner: kristojuproject: OpenTerra-Github Actions

ResourcesRecommendations

Filter for any field...Type equals allLocation equals allAdd filter

Showing 1 to 9 of 9 records. Show hidden typesNo groupingList view

Name	Type	Location
kv-devtj43l	Key vault	West Europe
nsg-dev	Network security group	West Europe
sadevje61a	Storage account	West Europe
vm-dev	Virtual machine	West Europe
vm-dev_OsDisk_1_5bc2fe1fad084e2db18f67b5c0115fe9	Disk	West Europe
vm-nic-dev	Network Interface	West Europe
vm-pip-name-dev	Public IP address	West Europe
vnet-dev	Virtual network	West Europe
websadevje61a	Storage account	West Europe

Web Container

Home > Resource groups > rg-openterra-dev > websadevje61a

websadevje61a | Containers

Storage account

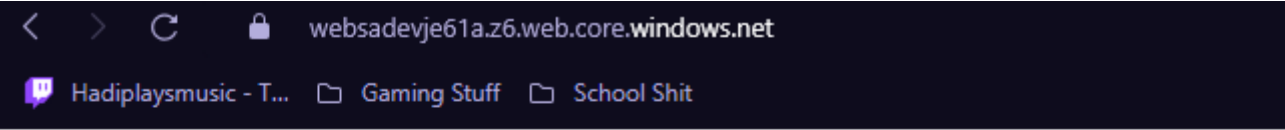
Search

ContainerChange access levelRestore containersRefreshDeleteGive feedback

Search containers by prefixShow deleted containers

Name	Last modified	Anonymous access level	Lease state
\$logs	11/5/2023, 3:58:49 PM	Private	Available
\$web	11/5/2023, 3:58:49 PM	Private	Available

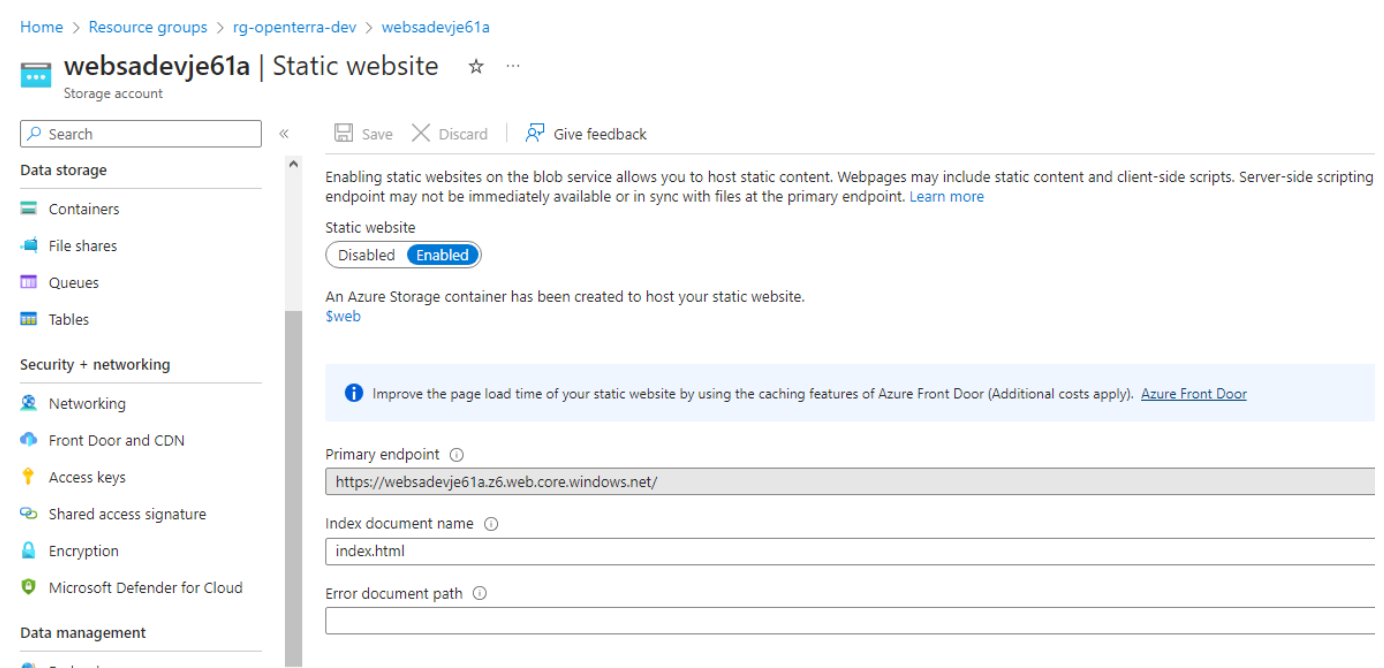
Static Website



Made with Terraform - CI/CD pipeline

dev

There is no output in the Github workflow for the static website endpoint URL, because I use modules, but it can be found in the Azure portal, under the static website blade.



Apply to All

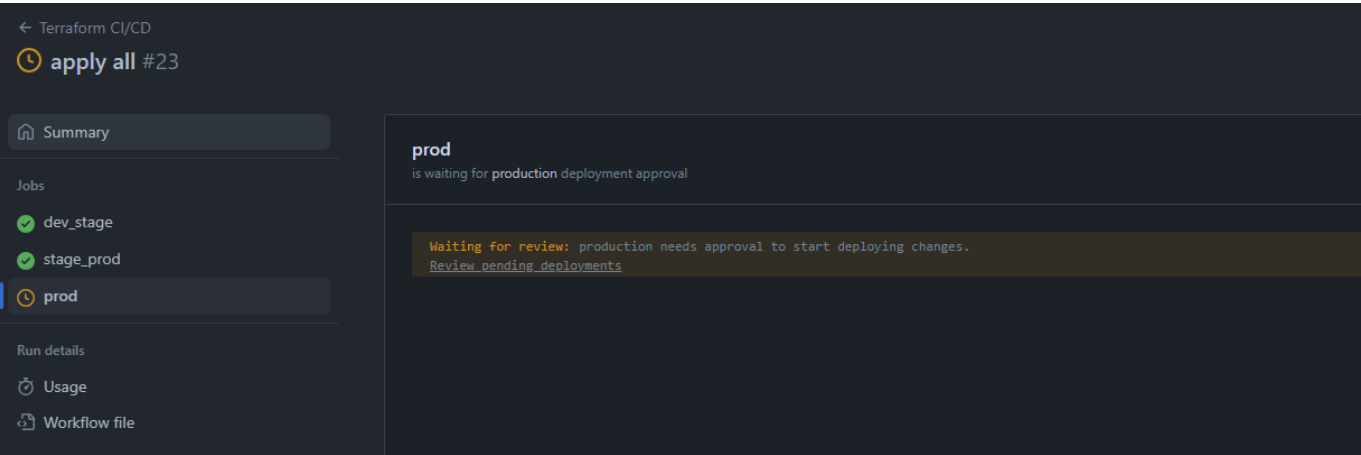
Committing with **apply all** in the commit message will run the terraform apply command for all workspaces, and deploy the infrastructure for all workspaces.

I will skip most of the workflow for this, but showcase that you need to approve prod, and that it will apply to all workspaces.

Dev will not be applied again, as it is already applied, and I will not showcase it again here.

Successful Workflow

- Waiting for approval to apply infrastructure to prod



Terraform CI/CD

apply all #23

Cancel workflow

Summary

Jobs

Run details

dev\_stage

stage\_prod

prod

Usage

Workflow file

Triggered via push 4 minutes ago

Status

Total duration

Artifacts

OblivionLimbo pushed

4c932e8 dev

Waiting

—

—

OblivionLimbo requested your review to deploy to production

Review deployments

devstageprod.yaml

on: push

dev\_stage

38s

stage\_prod

3m 21s

prod

production waiting for review

Deployment protection rules

Reviewers, timers, and other rules protecting deployments in this run

Start all waiting jobs

Event

Environments

Comment

OblivionLimbo

requested review

production

—

Approving for Prod

prod

is waiting for production deployment approval

Waiting for review: production ne

Review pending deployments

Review pending deployments

requested by OblivionLimbo in Terraform CI/CD #23

☒ production

Review needed from OblivionLimbo

Leave a comment:

LGTM

Reject

Approve and deploy 1

Workflow Completed

← Terraform CI/CD

✔ apply all #23

Summary

Jobs

Run details

dev\_stage

stage\_prod

prod

Usage

Workflow file

Re-run triggered 4 minutes ago

Status

Total duration

Artifacts

OblivionLimbo

4c932e8

dev

Success

3m 32s

—

devstageprod.yaml

on: push

dev\_stage

38s

stage\_prod

3m 21s

prod

3m 17s

Deployment protection rules

Reviewers, timers, and other rules protecting deployments in this run

Event

Environments

Comment

OblivionLimbo

approved 4 minutes ago

production

Stage

rg-openterra-stage

Resource group

Search

Create

Manage view

Delete resource group

Refresh

Export to CSV

Open query

Assign tags

Move

Delete

Export template

Open in mobile

Overview

Activity log

Access control (IAM)

Tags

Resource visualizer

Events

Settings

Deployments

Security

Deployment stacks

Policies

Properties

Locks

Cost Management

Cost analysis

Cost alerts (preview)

Budgets

Advisor recommendations

Monitoring

Insights (new)

Essentials

Subscription (move)

sub\_tenant01ntnu

Deployments

No deployments

Subscription ID

5513747a-818d-4f48-83b0-da2b2fd4cb97

Location

West Europe

Tags (edit)

billing\_code: Billing

company: OpenTerra

environment: stage

owner: kristoju

project: OpenTerra-Github Actions

Resources

Recommendations

Filter for any field...

Type equals all

Location equals all

Add filter

Showing 1 to 9 of 9 records.

Show hidden types

No grouping

List view

Name

Type

Location

kv-stage01si9

Key vault

West Europe

nsg-stage

Network security group

West Europe

sastagey9hu1

Storage account

West Europe

vm-nic-stage

Network Interface

West Europe

vm-pip-name-stage

Public IP address

West Europe

vm-stage

Virtual machine

West Europe

vm-stage\_OsDisk\_1\_97db3dd08f624213a90e335c3b7bc5e6

Disk

West Europe

vnet-stage

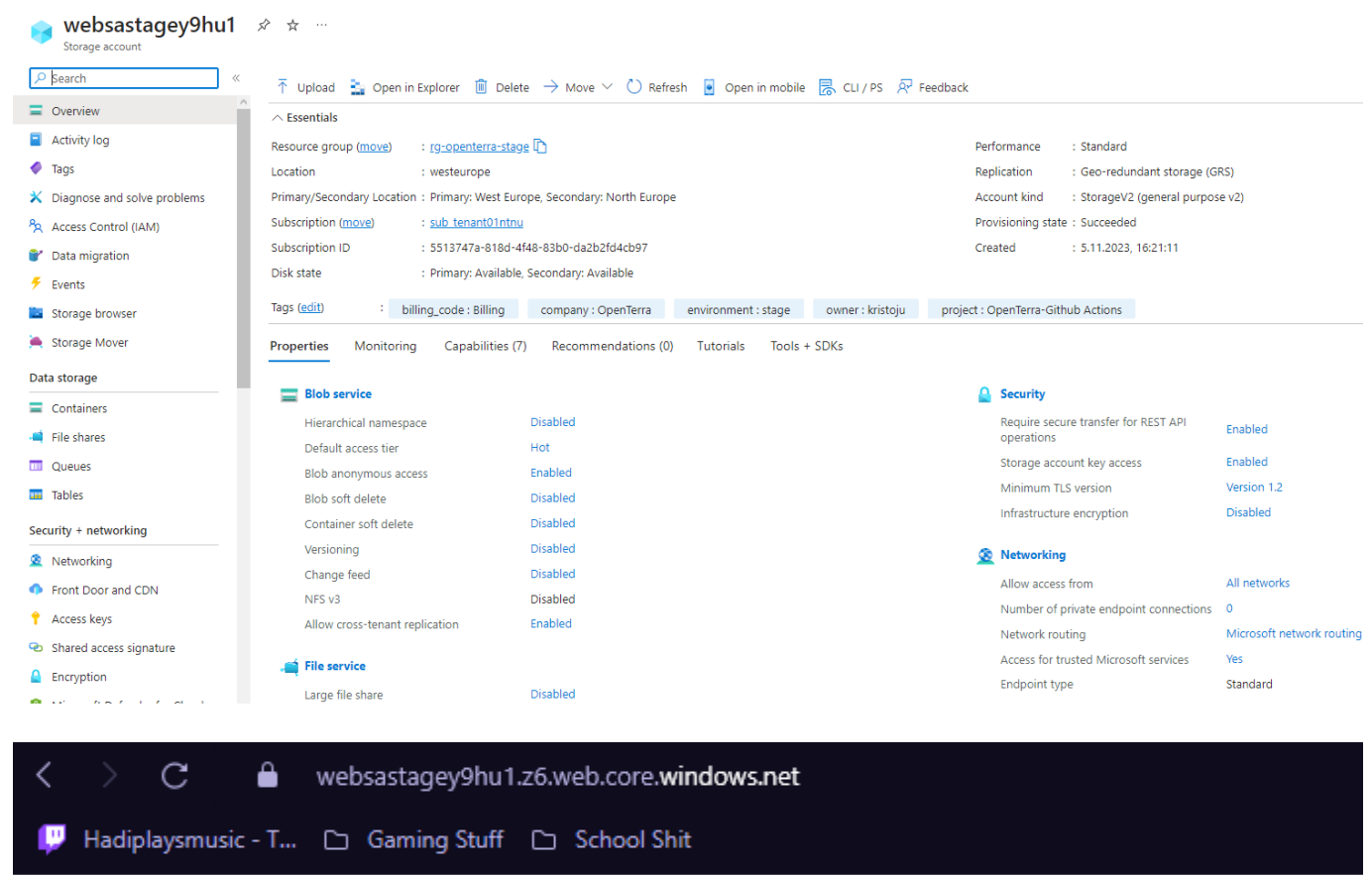
Virtual network

West Europe

websastagey9hu1

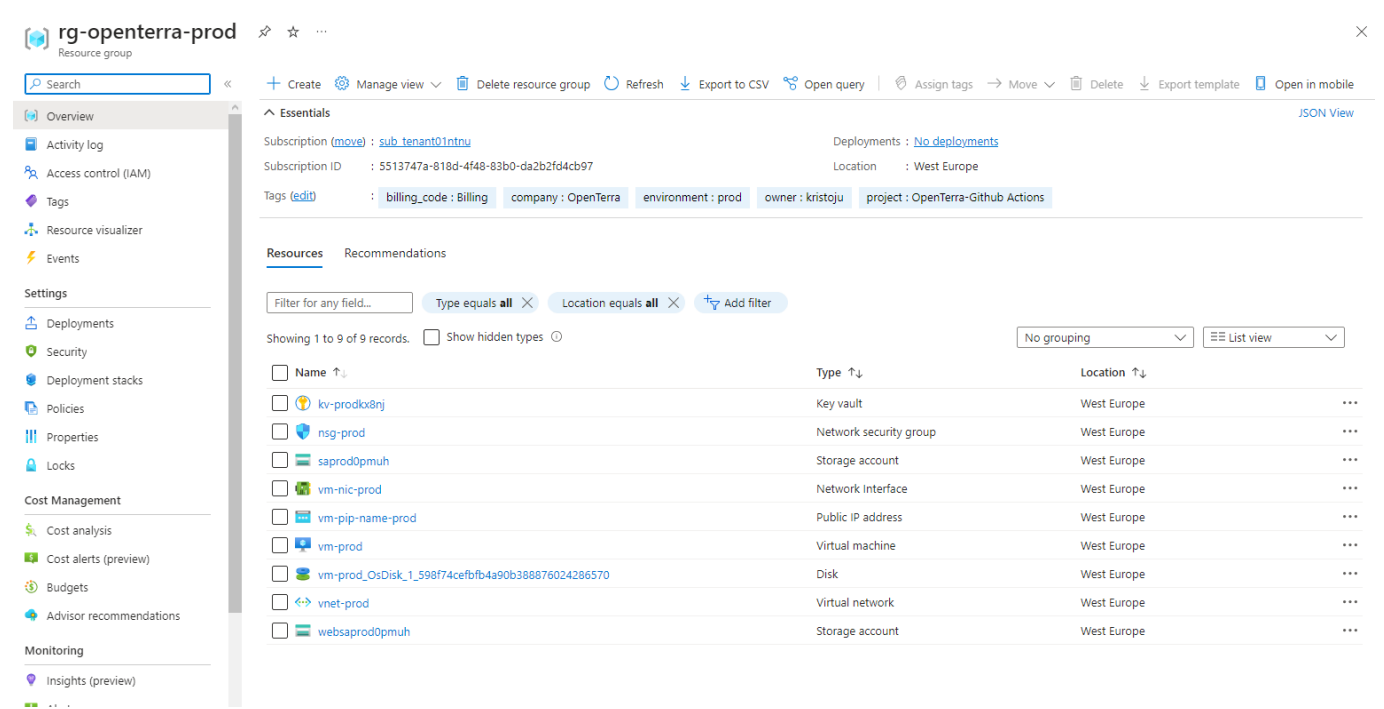
Storage account

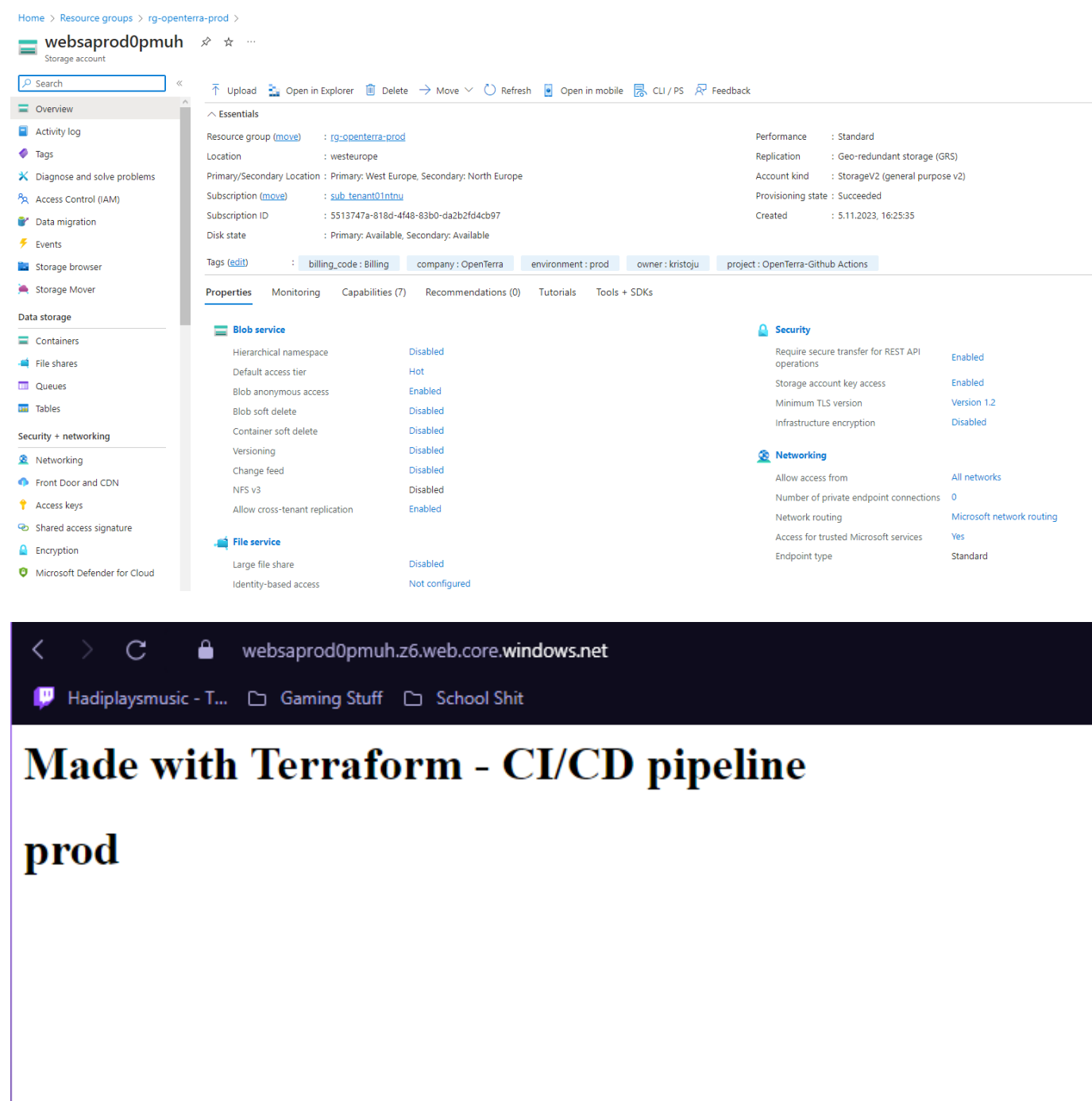
West Europe



# Made with Terraform - CI/CD pipeline stage

## Prod





Destroy All

Committing with **destroy all** in the commit message will cancel the terraform destroy command for all workspaces, and destroy the infrastructure for all workspaces.  
The full workflow can be viewed [here](#)

Terraform CI/CD

✓ destroy all #25

Summary

Jobs

Run details

dev\_stage

stage\_prod

prod

Usage

Workflow file

Triggered via push 11 minutes ago

Status

Total duration

Artifacts

OblivionLimbo pushed

✓ f73d887 dev

Success

10m 9s

—

devstageprod.yaml

on: push

dev\_stage

3m 25s

stage\_prod

3m 27s

prod

2m 39s

Deployment protection rules

Reviewers, timers, and other rules protecting deployments in this run

Event

Environments

Comment

OblivionLimbo

approved 4 minutes ago

production

LGTM!

Before Destroy

openterra

✕

All

Resource Groups (3)

Services (0)

Resources (0)

Marketplace (0)

Documentation (0)

Microsoft Entra ID (0)

Resource Groups

rg-openterra-dev

rg-openterra-stage

rg-openterra-prod

Continue searching in Microsoft Entra ID

After Destroy

openterra

✕

All

Services (0)


Resources (0)

Resource Groups (0)

Marketplace (0)

Documentation (0)

Microsoft Entra ID (0)





No results were found for "openterra".  
Try a different search term

Dev

dev\_stage

succeeded 8 minutes ago in 3m 25s

Q Search logs



Conditionally run Terraform action

3m 5s

750 module.StorageAccount.random\_string.random\_string: Destruction complete after 0s

751 module.VirtualMachine.azure\_rm\_linux\_virtual\_machine.linux\_vm: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...crosoft.Compute/virtualMachines/vm-dev, 30s elapsed]

752 module.keyvault.azure\_rm\_key\_vault.kv: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-.../Microsoft.KeyVault/vaults/kv-devtj43l, 10s elapsed]

753 module.keyvault.azure\_rm\_key\_vault.kv: Destruction complete after 15s

754 module.keyvault.random\_string.random\_string: Destroying... [id=tj43l]

755 module.keyvault.random\_string.random\_string: Destruction complete after 0s

756 module.VirtualMachine.azure\_rm\_linux\_virtual\_machine.linux\_vm: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...crosoft.Compute/virtualMachines/vm-dev, 40s elapsed]

757 module.VirtualMachine.azure\_rm\_linux\_virtual\_machine.linux\_vm: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...crosoft.Compute/virtualMachines/vm-dev, 50s elapsed]

758 module.VirtualMachine.azure\_rm\_linux\_virtual\_machine.linux\_vm: Destruction complete after 58s

759 module.VirtualMachine.azure\_rm\_network\_interface.vm\_nic: Destroying... [id=/subscriptions/\*\*\*/resourceGroups/rg-openterra-dev/providers/Microsoft.Network/networkInterfaces/vm-nic-dev]

760 module.VirtualMachine.azure\_rm\_network\_interface.vm\_nic: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...t.Network/networkInterfaces/vm-nic-dev, 10s elapsed]

761 module.VirtualMachine.azure\_rm\_network\_interface.vm\_nic: Destruction complete after 11s

762 module.VirtualMachine.azure\_rm\_public\_ip.pip\_vm: Destroying... [id=/subscriptions/\*\*\*/resourceGroups/rg-openterra-dev/providers/Microsoft.Network/publicIPAddresses/vm-pip-name-dev]

763 module.Network.azure\_rm\_subnet.subnet: Destroying... [id=/subscriptions/\*\*\*/resourceGroups/rg-openterra-dev/providers/Microsoft.Network/virtualNetworks/vnet-dev/subnets/subnet-dev]

764 module.VirtualMachine.azure\_rm\_public\_ip.pip\_vm: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...work/publicIPAddresses/vm-pip-name-dev, 10s elapsed]

765 module.Network.azure\_rm\_subnet.subnet: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...a1Networks/vnet-dev/subnets/subnet-dev, 10s elapsed]

766 module.Network.azure\_rm\_subnet.subnet: Destruction complete after 10s

767 module.Network.azure\_rm\_virtual\_network.vnet: Destroying... [id=/subscriptions/\*\*\*/resourceGroups/rg-openterra-dev/providers/Microsoft.Network/virtualNetworks/vnet-dev]

768 module.VirtualMachine.azure\_rm\_public\_ip.pip\_vm: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...work/publicIPAddresses/vm-pip-name-dev, 20s elapsed]

769 module.Network.azure\_rm\_virtual\_network.vnet: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...rosoft.Network/virtualNetworks/vnet-dev, 10s elapsed]

770 module.VirtualMachine.azure\_rm\_public\_ip.pip\_vm: Destruction complete after 21s

771 module.Network.azure\_rm\_virtual\_network.vnet: Destruction complete after 12s

772 azure\_rm\_resource\_group.openterra\_rg: Destroying... [id=/subscriptions/\*\*\*/resourceGroups/rg-openterra-dev]

773 azure\_rm\_resource\_group.openterra\_rg: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...d4cb97/resourceGroups/rg-openterra-dev, 10s elapsed]

774 azure\_rm\_resource\_group.openterra\_rg: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...d4cb97/resourceGroups/rg-openterra-dev, 20s elapsed]

775 azure\_rm\_resource\_group.openterra\_rg: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...d4cb97/resourceGroups/rg-openterra-dev, 30s elapsed]

776 azure\_rm\_resource\_group.openterra\_rg: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...d4cb97/resourceGroups/rg-openterra-dev, 40s elapsed]

777 azure\_rm\_resource\_group.openterra\_rg: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...d4cb97/resourceGroups/rg-openterra-dev, 50s elapsed]

778 azure\_rm\_resource\_group.openterra\_rg: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...d4cb97/resourceGroups/rg-openterra-dev, 1m0s elapsed]

779 azure\_rm\_resource\_group.openterra\_rg: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...d4cb97/resourceGroups/rg-openterra-dev, 1m10s elapsed]

780 azure\_rm\_resource\_group.openterra\_rg: Destruction complete after 1m19s

781

782 Destroy complete! Resources: 20 destroyed.

783

> Post Checkout

0s

> Complete job



0s

Stage

stage\_prod

succeeded 5 minutes ago in 3m 27s

Q Search logs



Conditionally run Terraform action

3m 5s

752 module.VirtualMachine.azure\_rm\_linux\_virtual\_machine.linux\_vm: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...rosoft.Compute/virtualMachines/vm-stage, 30s elapsed]

753 module.keyvault.azure\_rm\_key\_vault.kv: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...icrosoft.KeyVault/vaults/kv-stage01s19, 10s elapsed]

754 module.VirtualMachine.azure\_rm\_linux\_virtual\_machine.linux\_vm: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...rosoft.Compute/virtualMachines/vm-stage, 40s elapsed]

755 module.keyvault.azure\_rm\_key\_vault.kv: Destruction complete after 20s

756 module.keyvault.random\_string.random\_string: Destroying... [id=01s19]

757 module.keyvault.random\_string.random\_string: Destruction complete after 0s

758 module.VirtualMachine.azure\_rm\_linux\_virtual\_machine.linux\_vm: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...rosoft.Compute/virtualMachines/vm-stage, 50s elapsed]

759 module.VirtualMachine.azure\_rm\_linux\_virtual\_machine.linux\_vm: Destruction complete after 58s

760 module.VirtualMachine.azure\_rm\_network\_interface.vm\_nic: Destroying... [id=/subscriptions/\*\*\*/resourceGroups/rg-openterra-stage/providers/Microsoft.Network/networkInterfaces/vm-nic-stage]

761 module.VirtualMachine.azure\_rm\_network\_interface.vm\_nic: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...Network/networkInterfaces/vm-nic-stage, 10s elapsed]

762 module.VirtualMachine.azure\_rm\_network\_interface.vm\_nic: Destruction complete after 11s

763 module.Network.azure\_rm\_subnet.subnet: Destroying... [id=/subscriptions/\*\*\*/resourceGroups/rg-openterra-stage/providers/Microsoft.Network/virtualNetworks/vnet-stage/subnets/subnet-stage]

764 module.VirtualMachine.azure\_rm\_public\_ip.pip\_vm: Destroying... [id=/subscriptions/\*\*\*/resourceGroups/rg-openterra-stage/providers/Microsoft.Network/publicIPAddresses/vm-pip-name-stage]

765 module.Network.azure\_rm\_subnet.subnet: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...tworks/vnet-stage/subnets/subnet-stage, 10s elapsed]

766 module.VirtualMachine.azure\_rm\_public\_ip.pip\_vm: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...rk/publicIPAddresses/vm-pip-name-stage, 10s elapsed]

767 module.Network.azure\_rm\_subnet.subnet: Destruction complete after 11s

768 module.Network.azure\_rm\_virtual\_network.vnet: Destroying... [id=/subscriptions/\*\*\*/resourceGroups/rg-openterra-stage/providers/Microsoft.Network/virtualNetworks/vnet-stage]

769 module.VirtualMachine.azure\_rm\_public\_ip.pip\_vm: Destruction complete after 11s

770 module.Network.azure\_rm\_virtual\_network.vnet: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...oft.Network/virtualNetworks/vnet-stage, 10s elapsed]

771 module.Network.azure\_rm\_virtual\_network.vnet: Destruction complete after 11s

772 azure\_rm\_resource\_group.openterra\_rg: Destroying... [id=/subscriptions/\*\*\*/resourceGroups/rg-openterra-stage]

773 azure\_rm\_resource\_group.openterra\_rg: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...cb97/resourceGroups/rg-openterra-stage, 10s elapsed]

774 azure\_rm\_resource\_group.openterra\_rg: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...cb97/resourceGroups/rg-openterra-stage, 20s elapsed]

775 azure\_rm\_resource\_group.openterra\_rg: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...cb97/resourceGroups/rg-openterra-stage, 30s elapsed]

776 azure\_rm\_resource\_group.openterra\_rg: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...cb97/resourceGroups/rg-openterra-stage, 40s elapsed]

777 azure\_rm\_resource\_group.openterra\_rg: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...cb97/resourceGroups/rg-openterra-stage, 50s elapsed]

778 azure\_rm\_resource\_group.openterra\_rg: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...cb97/resourceGroups/rg-openterra-stage, 1m0s elapsed]

779 azure\_rm\_resource\_group.openterra\_rg: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...cb97/resourceGroups/rg-openterra-stage, 1m10s elapsed]

780 azure\_rm\_resource\_group.openterra\_rg: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...cb97/resourceGroups/rg-openterra-stage, 1m20s elapsed]

781 azure\_rm\_resource\_group.openterra\_rg: Destruction complete after 1m20s

782 Releasing state lock. This may take a few moments...

783

784 Destroy complete! Resources: 20 destroyed.

785

> Post Checkout

0s

> Complete job

0s

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Prod

prod

succeeded 2 minutes ago in 2m 39s

Search logs

2m 17s

Conditionally run Terraform action

745 module.keyvault.azure\_key\_vault.kv: Destroying... [id=/subscriptions/\*\*\*/resourceGroups/rg-openterra-prod/providers/Microsoft.KeyVault/vaults/kv-prodxx8nj]

746 module.keyvault.random\_password.password: Destruction complete after 0s

747 module.StorageAccount.azure\_rm\_storage\_account.sa: Destroying... [id=/subscriptions/\*\*\*/resourceGroups/rg-openterra-prod/providers/Microsoft.Storage/storageAccounts/saprod0pmuh]

748 module.StorageAccount.azure\_rm\_storage\_account.sa: Destruction complete after 3s

749 module.StorageAccount.random\_string.random\_string: Destroying... [id=0pmuh]

750 module.StorageAccount.random\_string.random\_string: Destruction complete after 0s

751 module.VirtualMachine.azure\_rm\_linux\_virtual\_machine.linux\_vm: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...rosoft.Compute/virtualMachines/vm-prod, 30s elapsed]

752 module.keyvault.azure\_rm\_key\_vault.kv: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...rosoft.KeyVault/vaults/kv-prodxx8nj, 10s elapsed]

753 module.keyvault.azure\_rm\_key\_vault.kv: Destruction complete after 14s

754 module.keyvault.random\_string.random\_string: Destroying... [id=xx8nj]

755 module.keyvault.random\_string.random\_string: Destruction complete after 0s

756 module.VirtualMachine.azure\_rm\_linux\_virtual\_machine.linux\_vm: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...rosoft.Compute/virtualMachines/vm-prod, 40s elapsed]

757 module.VirtualMachine.azure\_rm\_linux\_virtual\_machine.linux\_vm: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...rosoft.Compute/virtualMachines/vm-prod, 50s elapsed]

758 module.VirtualMachine.azure\_rm\_linux\_virtual\_machine.linux\_vm: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...rosoft.Compute/virtualMachines/vm-prod, 1m0s elapsed]

759 module.VirtualMachine.azure\_rm\_linux\_virtual\_machine.linux\_vm: Destruction complete after 1m3s

760 module.VirtualMachine.azure\_rm\_network\_interface.vm\_nic: Destroying... [id=/subscriptions/\*\*\*/resourceGroups/rg-openterra-prod/providers/Microsoft.Network/networkInterfaces/vm-nic-prod]

761 module.VirtualMachine.azure\_rm\_network\_interface.vm\_nic: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...rosoft.Network/networkInterfaces/vm-nic-prod, 10s elapsed]

762 module.VirtualMachine.azure\_rm\_network\_interface.vm\_nic: Destruction complete after 11s

763 module.VirtualMachine.azure\_rm\_public\_ip.pip\_vm: Destroying... [id=/subscriptions/\*\*\*/resourceGroups/rg-openterra-prod/providers/Microsoft.Network/publicIPAddresses/vm-pip-name-prod]

764 module.Network.azure\_rm\_subnet.subnet: Destroying... [id=/subscriptions/\*\*\*/resourceGroups/rg-openterra-prod/providers/Microsoft.Network/virtualNetworks/vnet-prod/subnets/subnet-prod]

765 module.VirtualMachine.azure\_rm\_public\_ip.pip\_vm: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...rosoft.Network/publicIPAddresses/vm-pip-name-prod, 10s elapsed]

766 module.Network.azure\_rm\_subnet.subnet: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...rosoft.Network/vnet-prod/subnets/subnet-prod, 10s elapsed]

767 module.Network.azure\_rm\_subnet.subnet: Destruction complete after 10s

768 module.Network.azure\_rm\_virtual\_network.vnet: Destroying... [id=/subscriptions/\*\*\*/resourceGroups/rg-openterra-prod/providers/Microsoft.Network/virtualNetworks/vnet-prod]

769 module.VirtualMachine.azure\_rm\_public\_ip.pip\_vm: Destruction complete after 12s

770 module.Network.azure\_rm\_virtual\_network.vnet: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...rosoft.Network/virtualNetworks/vnet-prod, 10s elapsed]

771 module.Network.azure\_rm\_virtual\_network.vnet: Destruction complete after 11s

772 azure\_rm\_resource\_group.openterra\_rg: Destroying... [id=/subscriptions/\*\*\*/resourceGroups/rg-openterra-prod]

773 azure\_rm\_resource\_group.openterra\_rg: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...rosoft.ResourceManagement/resourceGroups/rg-openterra-prod, 10s elapsed]

774 azure\_rm\_resource\_group.openterra\_rg: Still destroying... [id=/subscriptions/5513747a-818d-4f48-83b0-...rosoft.ResourceManagement/resourceGroups/rg-openterra-prod, 20s elapsed]

775 azure\_rm\_resource\_group.openterra\_rg: Destruction complete after 22s

776

777 Destroy complete! Resources: 20 destroyed.

778

Post Checkout

0s

Complete job

0s

Merge to Main

https://github.com/OblivionLimbo/IKKG3005/pull/11

Add more commits by pushing to the **dev** branch on **OblivionLimbo/IKKG3005**.

This branch is waiting to be deployed

1 waiting deployment

Show environments

Some checks haven't completed yet

3 successful and 1 waiting checks

Hide all checks

✓ Terraform CI/CD / dev\_stage (push)

Successful in 34s

Details

✓ Validate Infrastructure / Validate (push)

Successful in 7s

Details

✓ Terraform CI/CD / stage\_prod (push)

Successful in 20s

Details

⌚ Terraform CI/CD / prod (push)

Waiting

Details

✗ Merging is blocked

Missing successful production deployment.


☐ Merge without waiting for requirements to be met (bypass branch protections)

Merge pull request

You can also [open this in GitHub Desktop](#) or view [command line instructions](#).

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Add more commits by pushing to the `dev` branch on [OblivionLimbo/IKKG3005](#).




**This branch was successfully deployed**

1 active deployment

[Show environments](#)






**All checks have passed**

4 successful checks


[Show all checks](#)



**This branch has no conflicts with the base branch**

Merging can be performed automatically.

**Merge pull request**



You can also [open this in GitHub Desktop](#) or view [command line instructions](#).

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