Terraform-Azurerm-RGs for Dev-Test Environments

1A. Before Deployment in Portal for Development Environment

1B. After Deployment in Portal for Development Environment

database-dev
Resource group

Search

- Overview
- Activity log
- Access control (IAM)
- Tags
- Resource visualizer
- Events

Settings
- Deployments
- Security
- Policies
- Properties
- Locks

Cost Management
- Cost analysis
- Cost alerts (preview)
- Budgets
- Advisor recommendations

Monitoring
- Insights (preview)

+ Create | Manage view ∨ | Delete resource group | Refresh | Export to CSV | Open query | Assign tags | → Move ∨ | Delete | ...

∧ Essentials   JSON View

Subscription (move)   : Azure subscription 1   Deployments : No deployments
Subscription ID   : 9305bb20-ec55-4ee4-a68c-ee0db160dd61   Location : West Europe
Tags (edit)   : costcenter : 155   createdBy : terraform   env : dev

Resources   **Recommendations**

Filter for any field...   Type equals **all** ✕   Location equals **all** ✕   Add filter

Showing 0 to 0 of 0 records.   ☐ Show hidden types ⓘ   No grouping   List view

Name ↑↓   Type ↑↓   Location ↑↓

No resources match your filters
Try changing or clearing your filters.

Clear filters

---

devstorageaccount-dev
Resource group

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∧ Essentials   JSON View

Subscription (move)   : Azure subscription 1   Deployments : No deployments
Subscription ID   : 9305bb20-ec55-4ee4-a68c-ee0db160dd61   Location : West Europe
Tags (edit)   : costcenter : 101   createdBy : terraform   env : dev

Resources   **Recommendations**

Filter for any field...   Type equals **all** ✕   Location equals **all** ✕   Add filter

Showing 0 to 0 of 0 records.   ☐ Show hidden types ⓘ   No grouping   List view

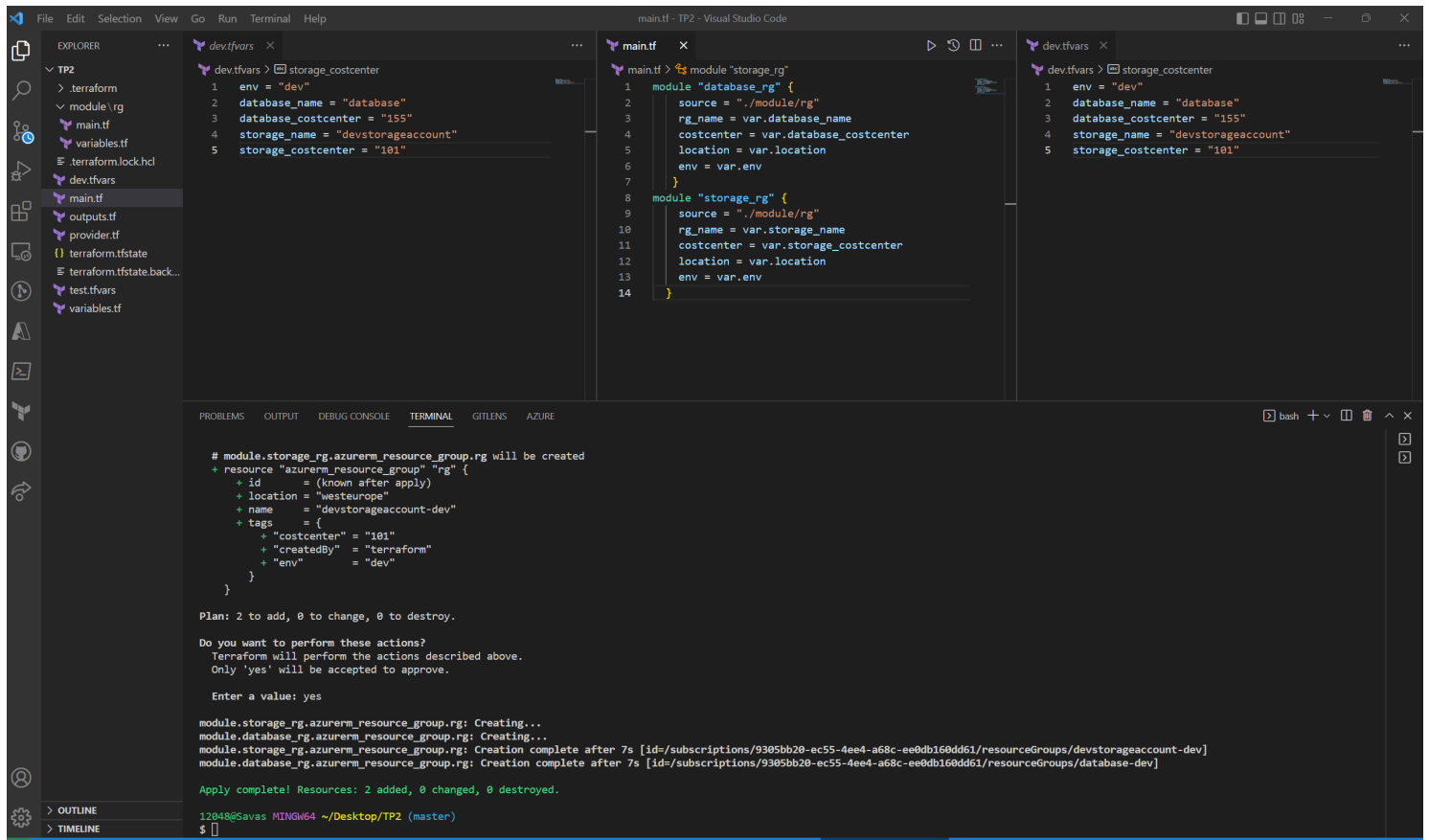Name ↑↓   Type ↑↓   Location ↑↓

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Learn more

1C. After Deployment in VS Code for Development Environment

File Edit Selection View Go Run Terminal Help main.tf - TP2 - Visual Studio Code

EXPLORER dev.tfvars × main.tf × dev.tfvars ×

TP2
- .terraform
- module \ rg
  - main.tf
  - variables.tf
- .terraform.lock.hcl
- dev.tfvars
- main.tf
- outputs.tf
- provider.tf
- {} terraform.tfstate
- terraform.tfstate.back...
- test.tfvars
- variables.tf

dev.tfvars > storage_costcenter

```
1  env = "dev"
2  database_name = "database"
3  database_costcenter = "155"
4  storage_name = "devstorageaccount"
5  storage_costcenter = "101"
```

main.tf > module "storage_rg"

```
1   module "database_rg" {
2       source = "./module/rg"
3       rg_name = var.database_name
4       costcenter = var.database_costcenter
5       location = var.location
6       env = var.env
7   }
8   module "storage_rg" {
9       source = "./module/rg"
10      rg_name = var.storage_name
11      costcenter = var.storage_costcenter
12      location = var.location
13      env = var.env
14  }
```

dev.tfvars > storage_costcenter

```
1  env = "dev"
2  database_name = "database"
3  database_costcenter = "155"
4  storage_name = "devstorageaccount"
5  storage_costcenter = "101"
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL GITLENS AZURE bash

```
  # module.storage_rg.azurerm_resource_group.rg will be created
  + resource "azurerm_resource_group" "rg" {
      + id        = (known after apply)
      + location  = "westeurope"
      + name      = "devstorageaccount-dev"
      + tags      = {
          + "costcenter" = "101"
          + "createdBy"  = "terraform"
          + "env"        = "dev"
        }
    }

Plan: 2 to add, 0 to change, 0 to destroy.

Do you want to perform these actions?
  Terraform will perform the actions described above.
  Only 'yes' will be accepted to approve.

  Enter a value: yes

module.storage_rg.azurerm_resource_group.rg: Creating...
module.database_rg.azurerm_resource_group.rg: Creating...
module.storage_rg.azurerm_resource_group.rg: Creation complete after 7s [id=/subscriptions/9305bb20-ec55-4ee4-a68c-ee0db160dd61/resourceGroups/devstorageaccount-dev]
module.database_rg.azurerm_resource_group.rg: Creation complete after 7s [id=/subscriptions/9305bb20-ec55-4ee4-a68c-ee0db160dd61/resourceGroups/database-dev]

Apply complete! Resources: 2 added, 0 changed, 0 destroyed.

12048@Savas MINGW64 ~/Desktop/TP2 (master)
$
```
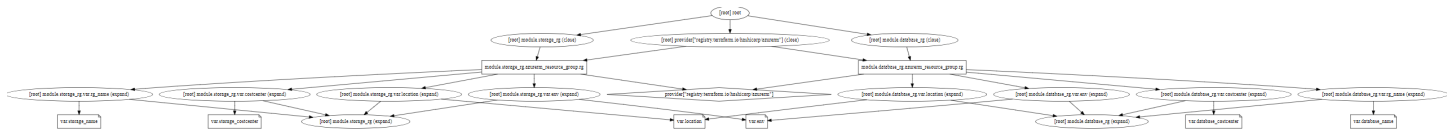
OUTLINE

TIMELINE

1D. After Deployment-Graphical Visualization for Development Environment

2A. After Deployment in Portal for Test Environment

Home >

Resource groups
deop.ca (deop.ca)

+ Create   Manage view ∨   Refresh   ↓ Export to CSV   Open query   Assign tags

Filter for any field...   Subscription equals **all**   Location equals **all** ✕   + Add filter

🛡 **0** Unsecure resources   🐞 **0** Recommendations

No grouping ∨   ≡ List view ∨

☐	Name ↑↓	Subscription ↑↓	Location ↑↓	
☐	database-test	Azure subscription 1	East US	•••
☐	teststorageaccount-test	Azure subscription 1	East US	•••

< Previous   Page 1 ∨ of 1   Next >   Showing 1 to 2 of 2 records.   Give feedback

---

database-test
Resource group

🔍 Search   «

Overview

Activity log

Access control (IAM)

Tags

Resource visualizer

Events

Settings

Deployments

Security

Policies

Properties

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Cost Management

Cost analysis

Cost alerts (preview)

Budgets

Advisor recommendations

+ Create   Manage view ∨   🗑 Delete resource group   Refresh   ↓ Export to CSV   Open query   Assign tags   → Move ∨   🗑 Delete   •••

∧ Essentials   JSON View

Subscription (move) : Azure subscription 1		Deployments : No deployments	
Subscription ID : 9305bb20-ec55-4ee4-a68c-ee0db160dd61		Location : East US	
Tags (edit) : costcenter : 255 createdBy : terraform env : test			

Resources   Recommendations

Filter for any field...   Type equals **all** ✕   Location equals **all** ✕   + Add filter

Showing 0 to 0 of 0 records.   ☐ Show hidden types ⓘ

No grouping ∨   ≡ List view ∨

Name ↑↓	Type ↑↓	Location ↑↓

No resources match your filters
Try changing or clearing your filters.

teststorageaccount-test
Resource group

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Monitoring

+ Create   Manage view ∨   🗑 Delete resource group   ↻ Refresh   Export to CSV   Open query   Assign tags   → Move ∨   🗑 Delete   ⋯

JSON View

∧ Essentials

Subscription (move)   : Azure subscription 1
Subscription ID   : 9305bb20-ec55-4ee4-a68c-ee0db160dd61
Tags (edit)   :   costcenter : 202   createdBy : terraform   env : test

Deployments :   No deployments
Location   : East US

Resources   Recommendations

Filter for any field...   Type equals **all** ✕   Location equals **all** ✕   +⊽ Add filter

Showing 0 to 0 of 0 records.   ☐ Show hidden types ⓘ

No grouping   List view

Name ↑↓   Type ↑↓   Location ↑↓

No resources match your filters
Try changing or clearing your filters.

Clear filters

2B. After Deployment in VS Code for Development Environment

File Edit Selection View Go Run Terminal Help   test.tfvars - TP2 - Visual Studio Code

EXPLORER

∨ TP2
- .terraform
- ∨ module \ rg
  - main.tf
  - variables.tf
- .terraform.lock.hcl
- dev.tfvars
- main.tf
- outputs.tf
- provider.tf
- { } terraform.tfstate
- terraform.tfstate.back...
- test.tfvars
- variables.tf

dev.tfvars
```
1    env = "dev"
2    database_name = "database"
3    database_costcenter = "155"
4    storage_name = "devstorageaccount"
5    storage_costcenter = "101"
```

main.tf
```
1    module "database_rg" {
2        source = "./module/rg"
3        rg_name = var.database_name
4        costcenter = var.database_costcenter
5        location = var.location
6        env = var.env
7    }
8    module "storage_rg" {
9        source = "./module/rg"
10       rg_name = var.storage_name
11       costcenter = var.storage_costcenter
12       location = var.location
13       env = var.env
14   }
```

test.tfvars
```
1    env = "test"
2    database_name = "database"
3    database_costcenter = "255"
4    storage_name = "teststorageaccount"
5    storage_costcenter = "202"
6    location = "East US"
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   GITLENS   AZURE

```
Enter a value: yes

module.database_rg.azurerm_resource_group.rg: Destroying... [id=/subscriptions/9305bb20-ec55-4ee4-a68c-ee0db160dd61/resourceGroups/database-dev]
module.storage_rg.azurerm_resource_group.rg: Destroying... [id=/subscriptions/9305bb20-ec55-4ee4-a68c-ee0db160dd61/resourceGroups/devstorageaccount-dev]
module.database_rg.azurerm_resource_group.rg: Still destroying... [id=/subscriptions/9305bb20-ec55-4ee4-a68c-...1/resourceGroups/database-dev, 10s elapsed]
module.storage_rg.azurerm_resource_group.rg: Still destroying... [id=/subscriptions/9305bb20-ec55-4ee4-a68c-ee0db160dd61/resourceGroups/database-dev, 10s elapsed]
module.database_rg.azurerm_resource_group.rg: Still destroying... [id=/subscriptions/9305bb20-ec55-4ee4-a68c-ee0db160dd61/resourceGroups/database-dev, 20s elapsed]
module.storage_rg.azurerm_resource_group.rg: Still destroying... [id=/subscriptions/9305bb20-ec55-4ee4-a68c-...1/resourceGroups/devstorageaccount-dev, 20s elapsed]
module.database_rg.azurerm_resource_group.rg: Still destroying... [id=/subscriptions/9305bb20-ec55-4ee4-a68c-...1/resourceGroups/database-dev, 31s elapsed]
module.storage_rg.azurerm_resource_group.rg: Still destroying... [id=/subscriptions/9305bb20-ec55-4ee4-a68c-ee0db160dd61/resourceGroups/database-dev, 31s elapsed]
module.storage_rg.azurerm_resource_group.rg: Still destroying... [id=/subscriptions/9305bb20-ec55-4ee4-a68c-...1/resourceGroups/devstorageaccount-dev, 41s elapsed]
module.database_rg.azurerm_resource_group.rg: Still destroying... [id=/subscriptions/9305bb20-ec55-4ee4-a68c-ee0db160dd61/resourceGroups/database-dev, 41s elapsed]
module.storage_rg.azurerm_resource_group.rg: Still destroying... [id=/subscriptions/9305bb20-ec55-4ee4-a68c-...1/resourceGroups/devstorageaccount-dev, 51s elapsed]
module.database_rg.azurerm_resource_group.rg: Still destroying... [id=/subscriptions/9305bb20-ec55-4ee4-a68c-ee0db160dd61/resourceGroups/database-dev, 51s elapsed]
module.storage_rg.azurerm_resource_group.rg: Still destroying... [id=/subscriptions/9305bb20-ec55-4ee4-a68c-...1/resourceGroups/devstorageaccount-dev, 1m1s elapsed]
module.database_rg.azurerm_resource_group.rg: Still destroying... [id=/subscriptions/9305bb20-ec55-4ee4-a68c-ee0db160dd61/resourceGroups/database-dev, 1m1s elapsed]
module.storage_rg.azurerm_resource_group.rg: Still destroying... [id=/subscriptions/9305bb20-ec55-4ee4-a68c-...1/resourceGroups/devstorageaccount-dev, 1m11s elapsed]
module.database_rg.azurerm_resource_group.rg: Still destroying... [id=/subscriptions/9305bb20-ec55-4ee4-a68c-ee0db160dd61/resourceGroups/database-dev, 1m11s elapsed]
module.storage_rg.azurerm_resource_group.rg: Destruction complete after 1m20s
module.database_rg.azurerm_resource_group.rg: Destruction complete after 1m20s
module.storage_rg.azurerm_resource_group.rg: Creating...
module.database_rg.azurerm_resource_group.rg: Creating...
module.storage_rg.azurerm_resource_group.rg: Creation complete after 1s [id=/subscriptions/9305bb20-ec55-4ee4-a68c-ee0db160dd61/resourceGroups/teststorageaccount-test]
module.database_rg.azurerm_resource_group.rg: Creation complete after 1s [id=/subscriptions/9305bb20-ec55-4ee4-a68c-ee0db160dd61/resourceGroups/database-test]

Apply complete! Resources: 2 added, 0 changed, 2 destroyed.

12048@Savas MINGW64 ~/Desktop/TP2 (master)
$
```