

```
Plan: 1 to add, 0 to change, 0 to destroy.

Note: You didn't use the -out option to save this plan, so Terraform can't guarantee to take exactly these actions if you
run "terraform apply" now.
sriha@MacBook-Air-2 tf-az-1 % terraform apply

Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the
following symbols:
+ create

Terraform will perform the following actions:

# azurem_resource_group.helloterraform will be created
+ resource "azurem_resource_group" "helloterraform" {
+   id           = (known after apply)
+   location     = "eastus"
+   name         = "terraformtest"
}

Plan: 1 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

azurem_resource_group.helloterraform: Creating...
azurem_resource_group.helloterraform: Creation complete after 2s [id=/subscriptions/7b4e4a5b-67a2-4f1b-90f8-7ec349cbd306/
resourceGroups/terraformtest]

Apply complete! Resources: 1 added, 0 changed, 0 destroyed.
```

```
Terraform has been successfully initialized!

You may now begin working with Terraform. Try running "terraform plan" to see
any changes that are required for your infrastructure. All Terraform commands
should now work.

If you ever set or change modules or backend configuration for Terraform,
rerun this command to reinitialize your working directory. If you forget, other
commands will detect it and remind you to do so if necessary.
sriha@MacBook-Air-2 tf-az-1 % terraform plan

Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the
following symbols:
+ create

Terraform will perform the following actions:

# azurem_resource_group.helloterraform will be created
+ resource "azurem_resource_group" "helloterraform" {
+   id           = (known after apply)
+   location     = "eastus"
+   name         = "terraformtest"
}

Plan: 1 to add, 0 to change, 0 to destroy.

Note: You didn't use the -out option to save this plan, so Terraform can't guarantee to take exactly these actions if you
run "terraform apply" now.
sriha@MacBook-Air-2 tf-az-1 % terraform apply

Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the
following symbols:
+ create
```

Microsoft Azure

Search resources, services, and docs (G+)

peris@northeastern.edu
NORTHEASTERN UNIVERSITY (N...)

Home > Resource groups >

Resource groups

Northeastern University (northeastern.onmicrosoft...)

Create

Manage view

Filter for any field...

Name ↑

NetworkWatcherRG

NetworkWatcherRG

PeriResourceGroup

PeriResourceGroupWindows

terraformtest

terraformtest

Resource group

Search

Create

Manage view

Delete resource group

Refresh

Export to CSV

Open query

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

Essentials

Subscription (move)

Azure for Students

Subscription ID

7b4e4a5b-67a2-4f1b-90f8-7ec349cbd306

Tags (edit)

Click here to add tags

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

Give feedback

Home > Resource groups >

Resource groups

Northeastern University (northeastern.onmicrosoft...)

+ Create ⚙️ Manage view ▾ ...

Filter for any field...

Name ↑↓

- NetworkWatcherRG ...
- NetworkWatcherRG ...
- PeriResourceGroup ...
- PeriResourceGroupWindows ...
- terraform201** ...

terraform201

Resource group

Search

+ Create ⚙️ Manage view ▾ 🗑️ Delete resource group 🔄 Refresh ⬇️ Export to CSV 🔗 Open query ...

JSON View

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

Essentials

Subscription ([move](#))
[Azure for Students](#)

Subscription ID
7b4e4a5b-67a2-4f1b-90f8-7ec349cbd306

Tags ([edit](#))
[Click here to add tags](#)

Deployments
[No deployments](#)

Location
East US

Resources Recommendations

Filter for any field... Type equals all × Location equals all × Add filter

Showing 1 to 7 of 7 records. ☐ Show hidden types ⓘ No grouping ▾ List view ▾

<input type="checkbox"/> Name ↑↓	Type ↑↓	Location ↑↓	
<input type="checkbox"/> diagf2f5ed29effa6975	Storage account	East US	...
<input type="checkbox"/> myNetworkSecurityGroup	Network security group	East US	...
<input type="checkbox"/> myNIC	Network Interface	East US	...
<input type="checkbox"/> myOsDisk	Disk	East US	...
<input type="checkbox"/> myPublicIP	Public IP address	East US	...

< Page 1 ▾ of 1 >

[Give feedback](#)

```
resourceGroups/terraform201/providers/Microsoft.Network/networkInterfaces/myNIC]
azurerm_network_interface_security_group_association.example: Creating...
azurerm_network_interface_security_group_association.example: Creation complete after 0s [id=/subscriptions/7b4e4a5b-67a2-4f1b-90f8-7ec349cbd306/resourceGroups/terraform201/providers/Microsoft.Network/networkInterfaces/myNIC/subscriptions/7b4e4a5b-67a2-4f1b-90f8-7ec349cbd306/resourceGroups/terraform201/providers/Microsoft.Network/networkSecurityGroups/myNetworkSecurityGroup]
azurerm_storage_account.storage201: Still creating... [20s elapsed]
azurerm_storage_account.storage201: Creation complete after 23s [id=/subscriptions/7b4e4a5b-67a2-4f1b-90f8-7ec349cbd306/resourceGroups/terraform201/providers/Microsoft.Storage/storageAccounts/diaf2f5ed29effa6975]
azurerm_linux_virtual_machine.vm201: Creating...
azurerm_linux_virtual_machine.vm201: Still creating... [10s elapsed]
azurerm_linux_virtual_machine.vm201: Still creating... [20s elapsed]
azurerm_linux_virtual_machine.vm201: Creation complete after 22s [id=/subscriptions/7b4e4a5b-67a2-4f1b-90f8-7ec349cbd306/resourceGroups/terraform201/providers/Microsoft.Compute/virtualMachines/myTfVm]
```

Apply complete! Resources: 11 added, 0 changed, 0 destroyed.

Outputs:

```
public_ip_address = "172.174.65.30"
resource_group_name = "terraform201"
```

```
sriha@MacBook-Air-2 tf-az-2 % terraform destroy
tls_private_key.example_ssh: Refreshing state... [id=f3aeae83f8d4f537d971470a31cfefca0187152e]
azurerem_resource_group.rg201: Refreshing state... [id=/subscriptions/7b4e4a5b-67a2-4f1b-90f8-7ec349cbd306/resourceGroups/terraform201]
random_id.randomId: Refreshing state... [id=8vXtKe_6aXU]
azurerem_virtual_network.network201: Refreshing state... [id=/subscriptions/7b4e4a5b-67a2-4f1b-90f8-7ec349cbd306/resourceGroups/terraform201/providers/Microsoft.Network/virtualNetworks/myVnet]
azurerem_public_ip.ips201: Refreshing state... [id=/subscriptions/7b4e4a5b-67a2-4f1b-90f8-7ec349cbd306/resourceGroups/terraform201/providers/Microsoft.Network/publicIPAddresses/myPublicIP]
azurerem_network_security_group.nsg201: Refreshing state... [id=/subscriptions/7b4e4a5b-67a2-4f1b-90f8-7ec349cbd306/resourceGroups/terraform201/providers/Microsoft.Network/networkSecurityGroups/myNetworkSecurityGroup]
azurerem_storage_account.storage201: Refreshing state... [id=/subscriptions/7b4e4a5b-67a2-4f1b-90f8-7ec349cbd306/resourceGroups/terraform201/providers/Microsoft.Storage/storageAccounts/diaf2f5ed29effa6975]
azurerem_subnet.subnet201: Refreshing state... [id=/subscriptions/7b4e4a5b-67a2-4f1b-90f8-7ec349cbd306/resourceGroups/terraform201/providers/Microsoft.Network/virtualNetworks/myVnet/subnets/mySubnet]
azurerem_network_interface.nic201: Refreshing state... [id=/subscriptions/7b4e4a5b-67a2-4f1b-90f8-7ec349cbd306/resourceGroups/terraform201/providers/Microsoft.Network/networkInterfaces/myNIC]
azurerem_network_interface_security_group_association.example: Refreshing state... [id=/subscriptions/7b4e4a5b-67a2-4f1b-90f8-7ec349cbd306/resourceGroups/terraform201/providers/Microsoft.Network/networkInterfaces/myNIC|subscriptions/7b4e4a5b-67a2-4f1b-90f8-7ec349cbd306/resourceGroups/terraform201/providers/Microsoft.Network/networkSecurityGroups/myNetworkSecurityGroup]
azurerem_linux_virtual_machine.vm201: Refreshing state... [id=/subscriptions/7b4e4a5b-67a2-4f1b-90f8-7ec349cbd306/resourceGroups/terraform201/providers/Microsoft.Compute/virtualMachines/myTfVm]
```

Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the following symbols:

- destroy

Terraform will perform the following actions:

```
# azurerem_linux_virtual_machine.vm201 will be destroyed
- resource "azurerem_linux_virtual_machine" "vm201" {
  - admin_username           = "sri" -> null
  - allow_extension_operations = true -> null
  - computer_name            = "sriVM" -> null
  - disable_password_authentication = true -> null
  - encryption_at_host_enabled = false -> null
  - extensions_time_budget     = "PT1H30M" -> null
  - id                        = "/subscriptions/7b4e4a5b-67a2-4f1b-90f8-7ec349cbd306/resourceGroups/terraform201/providers/Microsoft.Compute/virtualMachines/myTfVm" -> null
  - location                 = "eastus" -> null
  - max_bid_price             = -1 -> null
  - name                     = "myTfVm" -> null
  - network_interface_ids     = [
    - "/subscriptions/7b4e4a5b-67a2-4f1b-90f8-7ec349cbd306/resourceGroups/terraform201/providers/Microsoft.Network/networkInterfaces/myNIC",
  ] -> null
  - patch_assessment_mode     = "ImageDefault" -> null
  - patch_mode                 = "ImageDefault" -> null
  - platform_fault_domain     = -1 -> null
  - priority                  = "Regular" -> null
```

```
sriha@MacBook-Air-2 tf-aws-1 % terraform init
```

Initializing the backend...

Initializing provider plugins...

- Finding hashicorp/aws versions matching "~> 3.0"...
- Installing hashicorp/aws v3.75.2...
- Installed hashicorp/aws v3.75.2 (signed by HashiCorp)

Terraform has created a lock file `.terraform.lock.hcl` to record the provider selections it made above. Include this file in your version control repository so that Terraform can guarantee to make the same selections by default when you run "terraform init" in the future.

Warning: Version constraints inside provider configuration blocks are deprecated

```
on providers.tf line 3, in provider "aws":
3:     version = "~> 3.0"
```

Terraform 0.13 and earlier allowed provider version constraints inside the provider configuration block, but that is now deprecated and will be removed in a future version of Terraform. To silence this warning, move the provider version constraint into the `required_providers` block.

Terraform has been successfully initialized!

You may now begin working with Terraform. Try running "terraform plan" to see any changes that are required for your infrastructure. All Terraform commands should now work.

If you ever set or change modules or backend configuration for Terraform, rerun this command to reinitialize your working directory. If you forget, other commands will detect it and remind you to do so if necessary.

```
sriha@MacBook-Air-2 tf-aws-1 %
```

```

    + http_endpoint           = (known after apply)
    + http_put_response_hop_limit = (known after apply)
    + http_tokens              = (known after apply)
    + instance_metadata_tags    = (known after apply)
  }

+ network_interface {
  + delete_on_termination = (known after apply)
  + device_index          = (known after apply)
  + network_interface_id  = (known after apply)
}

+ root_block_device {
  + delete_on_termination = (known after apply)
  + device_name           = (known after apply)
  + encrypted              = (known after apply)
  + iops                   = (known after apply)
  + kms_key_id             = (known after apply)
  + tags                   = (known after apply)
  + throughput             = (known after apply)
  + volume_id              = (known after apply)
  + volume_size            = (known after apply)
  + volume_type            = (known after apply)
}
}

```

Plan: 1 to add, 0 to change, 0 to destroy.

Warning: Version constraints inside provider configuration blocks are deprecated

on providers.tf line 3, in provider "aws":
 3: version = "~> 3.0"

Terraform 0.13 and earlier allowed provider version constraints inside the provider configuration block, but that is now deprecated and will be removed in a future version of Terraform. To silence this warning, move the provider version constraint into the required_providers block.

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

```

aws_instance.my-test-instance-sri: Creating...
aws_instance.my-test-instance-sri: Still creating... [10s elapsed]
aws_instance.my-test-instance-sri: Still creating... [20s elapsed]
aws_instance.my-test-instance-sri: Creation complete after 25s [id=i-04ee72ce6ce032366]

```

Apply complete! Resources: 1 added, 0 changed, 0 destroyed.

sriha@MacBook-Air-2 tf-aws-1 %

Instance summary for i-04ee72ce6ce032366 (test-instance-sri) [Info](#)

Updated less than a minute ago



Connect

Instance state ▼

Actions ▼

Instance ID i-04ee72ce6ce032366 (test-instance-sri)	Public IPv4 address 54.167.203.158 open address	Private IPv4 addresses 172.31.90.68
IPv6 address -	Instance state Running	Public IPv4 DNS ec2-54-167-203-158.compute-1.amazonaws.com open address
Hostname type IP name: ip-172-31-90-68.ec2.internal	Private IP DNS name (IPv4 only) ip-172-31-90-68.ec2.internal	Elastic IP addresses -
Answer private resource DNS name -	Instance type t2.micro	AWS Compute Optimizer finding Opt-in to AWS Compute Optimizer for recommendations. Learn more
Auto-assigned IP address 54.167.203.158 [Public IP]	VPC ID vpc-03067680ee24f282f	Auto Scaling Group name -
IAM Role -	Subnet ID subnet-0951bc9deb15495ea	

[Details](#) [Security](#) [Networking](#) [Storage](#) [Status checks](#) [Monitoring](#) [Tags](#)▼ Instance details [Info](#)

Platform Ubuntu (Inferred)	AMI ID ami-01d08089481510ba2	Monitoring disabled
Platform details Linux/UNIX	AMI name ubuntu/images/hvm-ssd/ubuntu-focal-20.04-amd64-server-20221018	Termination protection Disabled
Stop protection Disabled	Launch time Mon Nov 14 2022 12:03:28 GMT-0500 (Eastern Standard)	AMI location amazon/ubuntu/images/hvm-ssd/ubuntu-focal-20.04-

Plan: 0 to add, 0 to change, 1 to destroy.

Warning: Version constraints inside provider configuration blocks are deprecated

on providers.tf line 3, in provider "aws":
3: version = "~> 3.0"

Terraform 0.13 and earlier allowed provider version constraints inside the provider configuration block, but that is now deprecated and will be removed in a future version of Terraform. To silence this warning, move the provider version constraint into the required_providers block.

Do you really want to destroy all resources?

Terraform will destroy all your managed infrastructure, as shown above.
There is no undo. Only 'yes' will be accepted to confirm.

Enter a value: yes

```
aws_instance.my-test-instance-sri: Destroying... [id=i-04ee72ce6ce032366]
aws_instance.my-test-instance-sri: Still destroying... [id=i-04ee72ce6ce032366, 10s elapsed]
aws_instance.my-test-instance-sri: Still destroying... [id=i-04ee72ce6ce032366, 20s elapsed]
aws_instance.my-test-instance-sri: Still destroying... [id=i-04ee72ce6ce032366, 30s elapsed]
aws_instance.my-test-instance-sri: Still destroying... [id=i-04ee72ce6ce032366, 40s elapsed]
aws_instance.my-test-instance-sri: Destruction complete after 41s
```

Destroy complete! Resources: 1 destroyed.

sriha@MacBook-Air-2 tf-aws-1 %

```
sriha@MacBook-Air-2 tf-aws-2 % terraform init
```

Initializing the backend...

Initializing provider plugins...

```
+ Finding latest version of hashicorp/aws...
+ Installing hashicorp/aws v4.39.0...
+ Installed hashicorp/aws v4.39.0 (signed by HashiCorp)
```

Terraform has created a lock file `.terraform.lock.hcl` to record the provider selections it made above. Include this file in your version control repository so that Terraform can guarantee to make the same selections by default when you run "terraform init" in the future.

Terraform has been successfully initialized!

You may now begin working with Terraform. Try running "terraform plan" to see any changes that are required for your infrastructure. All Terraform commands should now work.

If you ever set or change modules or backend configuration for Terraform, rerun this command to reinitialize your working directory. If you forget, other commands will detect it and remind you to do so if necessary.

```
sriha@MacBook-Air-2 tf-aws-2 %
```

Terraform will perform the following actions:

```
# aws_instance.myweb will be created
+ resource "aws_instance" "myweb" {
  + ami                    = "ami-09d069a04349dc3cb"
  + arn                   = (known after apply)
  + associate_public_ip_address = (known after apply)
  + availability_zone      = (known after apply)
  + cpu_core_count         = (known after apply)
  + cpu_threads_per_core   = (known after apply)
  + disable_api_stop       = (known after apply)
  + disable_api_termination = (known after apply)
  + ebs_optimized          = (known after apply)
  + get_password_data      = false
  + host_id                = (known after apply)
  + host_resource_group_arn = (known after apply)
  + id                     = (known after apply)
  + instance_initiated_shutdown_behavior = (known after apply)
  + instance_state         = (known after apply)
  + instance_type          = "t2.micro"
  + ipv6_address_count     = (known after apply)
  + ipv6_addresses        = (known after apply)
  + key_name               = "peripem"
  + monitoring             = (known after apply)
  + outpost_arn            = (known after apply)
  + password_data          = (known after apply)
  + placement_group        = (known after apply)
  + placement_partition_number = (known after apply)
  + primary_network_interface_id = (known after apply)
  + private_dns            = (known after apply)
  + private_ip             = (known after apply)
  + public_dns             = (known after apply)
  + public_ip              = (known after apply)
  + secondary_private_ips  = (known after apply)
  + security_groups        = [
    + "tenable-scanner-sri",
  ]
  + source_dest_check      = true
  + subnet_id              = (known after apply)
  + tags                   = {
    + "Name" = "myweb"
  }
  + tags_all               = {
    + "Name" = "myweb"
  }
  + tenancy                = (known after apply)
  + user_data              = (known after apply)
  + user_data_base64       = (known after apply)
  + user_data_replace_on_change = false
  + vpc_security_group_ids = (known after apply)

  + capacity_reservation_specification {
    + capacity_reservation_preference = (known after apply)
```

```

+ metadata_options {
  + http_endpoint      = (known after apply)
  + http_put_response_hop_limit = (known after apply)
  + http_tokens        = (known after apply)
  + instance_metadata_tags = (known after apply)
}

+ network_interface {
  + delete_on_termination = (known after apply)
  + device_index          = (known after apply)
  + network_card_index    = (known after apply)
  + network_interface_id  = (known after apply)
}

+ private_dns_name_options {
  + enable_resource_name_dns_a_record   = (known after apply)
  + enable_resource_name_dns_aaaa_record = (known after apply)
  + hostname_type                       = (known after apply)
}

+ root_block_device {
  + delete_on_termination = (known after apply)
  + device_name            = (known after apply)
  + encrypted              = (known after apply)
  + iops                   = (known after apply)
  + kms_key_id             = (known after apply)
  + tags                   = (known after apply)
  + throughput             = (known after apply)
  + volume_id              = (known after apply)
  + volume_size            = (known after apply)
  + volume_type            = (known after apply)
}
}

```

Plan: 1 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

```

aws_instance.myweb: Creating...
aws_instance.myweb: Still creating... [10s elapsed]
aws_instance.myweb: Still creating... [20s elapsed]
aws_instance.myweb: Still creating... [30s elapsed]
aws_instance.myweb: Still creating... [40s elapsed]
aws_instance.myweb: Creation complete after 43s [id=i-088dabe304329143e]

```

Apply complete! Resources: 1 added, 0 changed, 0 destroyed.

sriha@MacBook-Air-2 tf-aws-2 %

sg-06b62bbaf4b066662 - tenable-scanner-sri

Actions ▾

Details

Security group name 📁 tenable-scanner-sri	Security group ID 📁 sg-06b62bbaf4b066662	Description 📁 Web Security Group	VPC ID 📁 vpc-03067680ee24f282f 🔗
Owner 📁 101871923216	Inbound rules count 2 Permission entries	Outbound rules count 1 Permission entry	

Inbound rules

Outbound rules

Tags

🔔 You can now check network connectivity with Reachability Analyzer

Run Reachability Analyzer

✕

Inbound rules (2)



Manage tags

Edit inbound rules

🔍 Filter security group rules

< 1 > ⚙️

<input type="checkbox"/>	Name ▾	Security group rule... ▾	IP version ▾	Type ▾	Protocol ▾	Port range ▾	Source
<input type="checkbox"/>	-	sgr-0ee98c8174e131dee	IPv4	SSH	TCP	22	0.0.0.0/0
<input type="checkbox"/>	-	sgr-06e7e28a3a8b21e...	IPv4	Custom TCP	TCP	5000	0.0.0.0/0

```
}
- description = ""
- from_port   = 22
- ipv6_cidr_blocks = []
- prefix_list_ids = []
- protocol    = "tcp"
- security_groups = []
- self        = false
- to_port     = 22
},
- {
  - cidr_blocks = [
    - "0.0.0.0/0",
  ]
  - description = ""
  - from_port   = 5000
  - ipv6_cidr_blocks = []
  - prefix_list_ids = []
  - protocol    = "tcp"
  - security_groups = []
  - self        = false
  - to_port     = 5000
},
] -> null
- name           = "tenable-scanner-sri" -> null
- owner_id       = "101871923216" -> null
- revoke_rules_on_delete = false -> null
- tags           = {} -> null
- tags_all       = {} -> null
- vpc_id         = "vpc-03067680ee24f282f" -> null
}
```

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

Do you really want to destroy all resources?

Terraform will destroy all your managed infrastructure, as shown above.
There is no undo. Only 'yes' will be accepted to confirm.

Enter a value: yes

```
aws_instance.myweb: Destroying... [id=i-088dabe304329143e]
aws_instance.myweb: Still destroying... [id=i-088dabe304329143e, 10s elapsed]
aws_instance.myweb: Still destroying... [id=i-088dabe304329143e, 20s elapsed]
aws_instance.myweb: Still destroying... [id=i-088dabe304329143e, 30s elapsed]
aws_instance.myweb: Still destroying... [id=i-088dabe304329143e, 40s elapsed]
aws_instance.myweb: Destruction complete after 40s
aws_security_group.tenable: Destroying... [id=sg-06b62bbaf4b066662]
aws_security_group.tenable: Destruction complete after 2s
```

Destroy complete! Resources: 2 destroyed.

sriha@MacBook-Air-2 tf-aws-2 %

Security Groups (3) Info



Actions ▼

Export security groups to CSV ▼

Create security group

Filter security groups

< 1 > ⚙

<input type="checkbox"/>	Name ▼	Security group ID ▼	Security group name ▼	VPC ID ▼	Description ▼	Owner ▼	Inb
<input type="checkbox"/>	default-sg	sg-0350cab28e2edc92b	default	vpc-05355c79f1b937291 🔗	default VPC security gr...	101871923216	4 P
<input type="checkbox"/>	flask-react-security...	sg-085dcaa16b38b9fd3	flask-react-security-gr...	vpc-05355c79f1b937291 🔗	Flask React Security Gr...	101871923216	5 P
<input type="checkbox"/>	-	sg-075ffdc9838a2795c	default	vpc-03067680ee24f282f 🔗	default VPC security gr...	101871923216	1 P