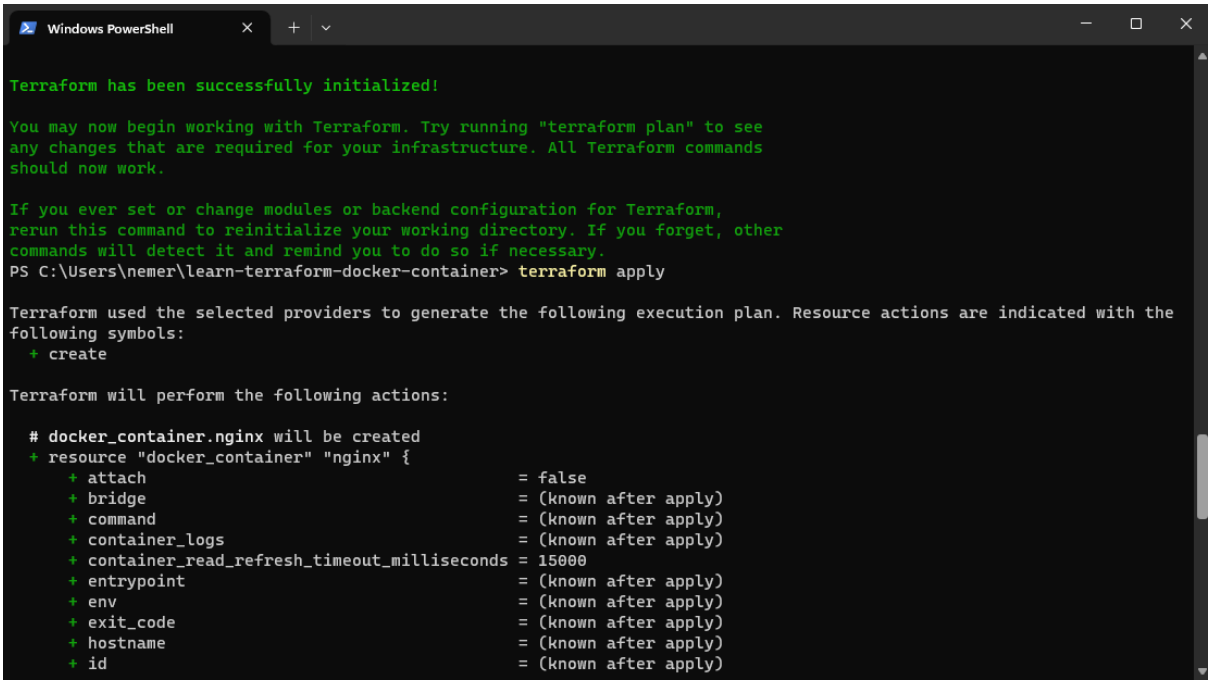
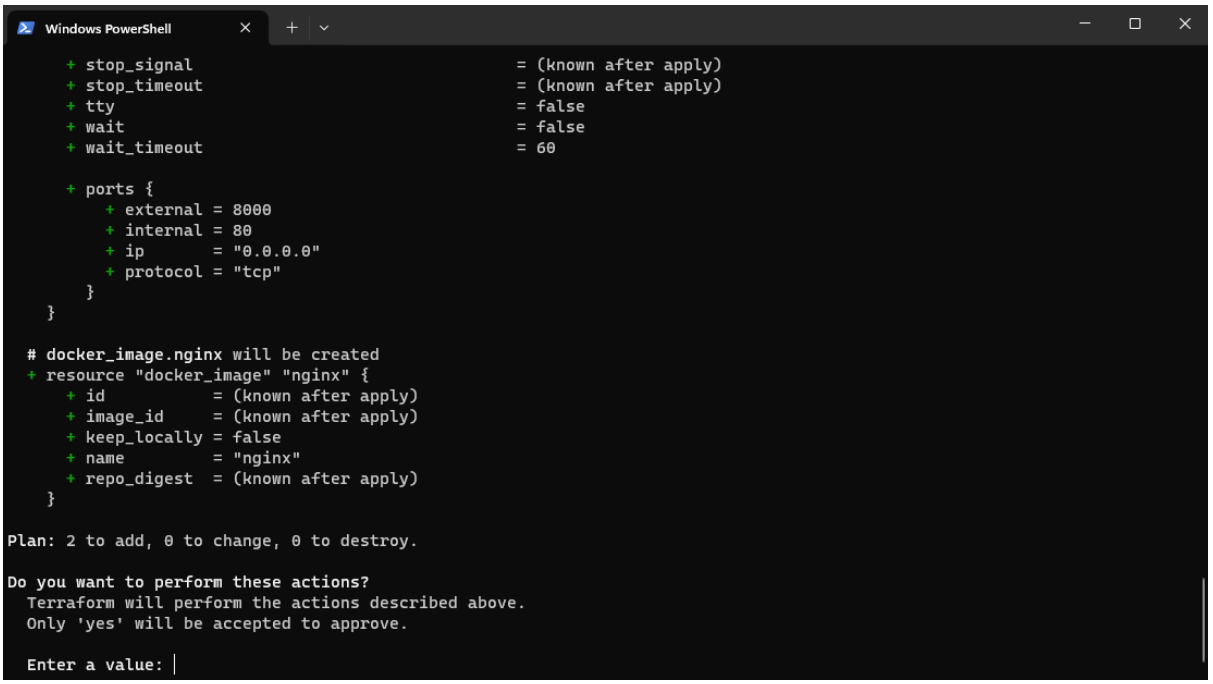
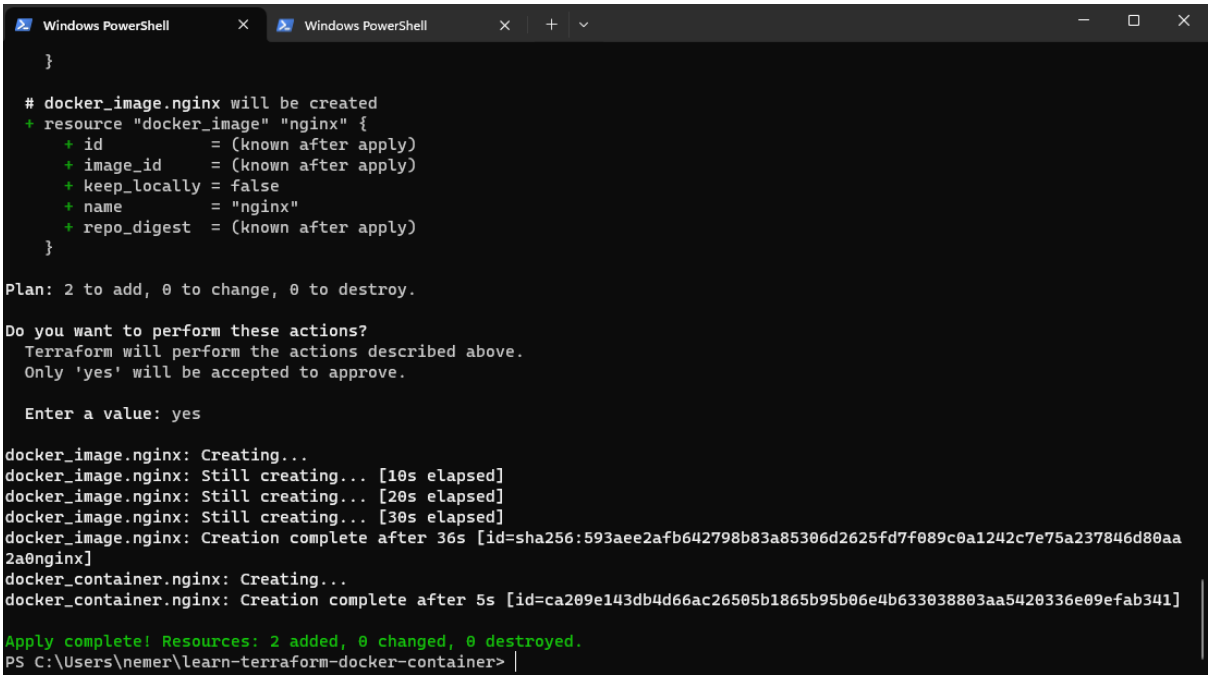
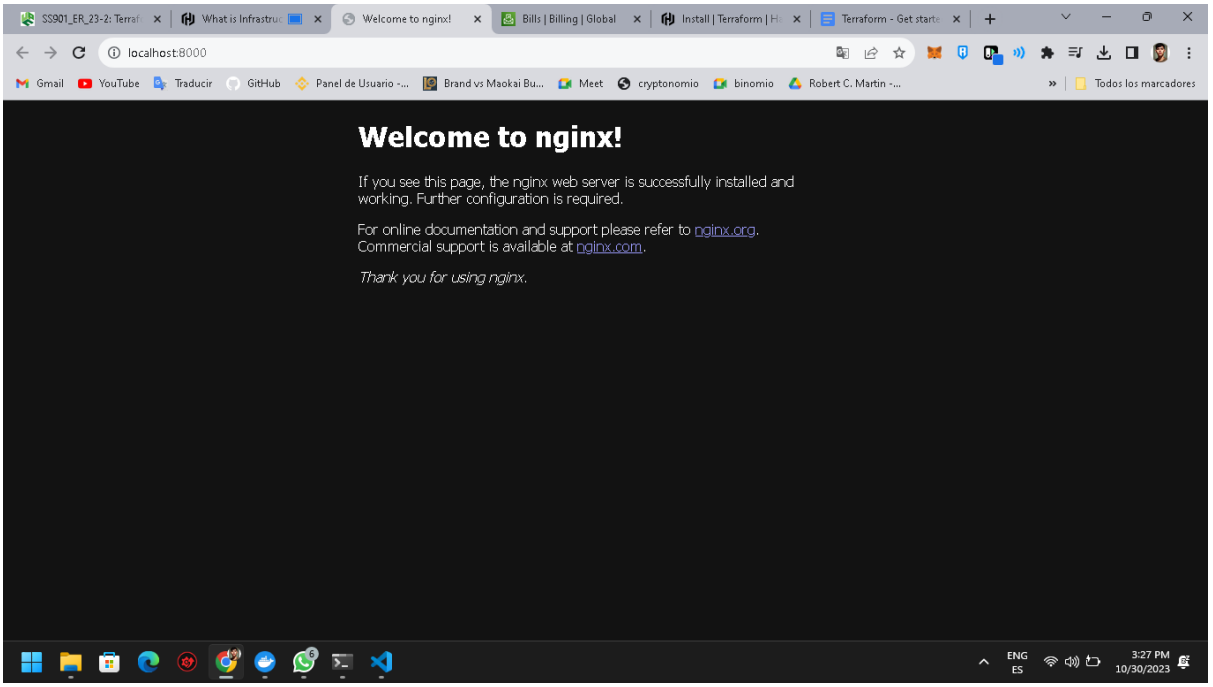
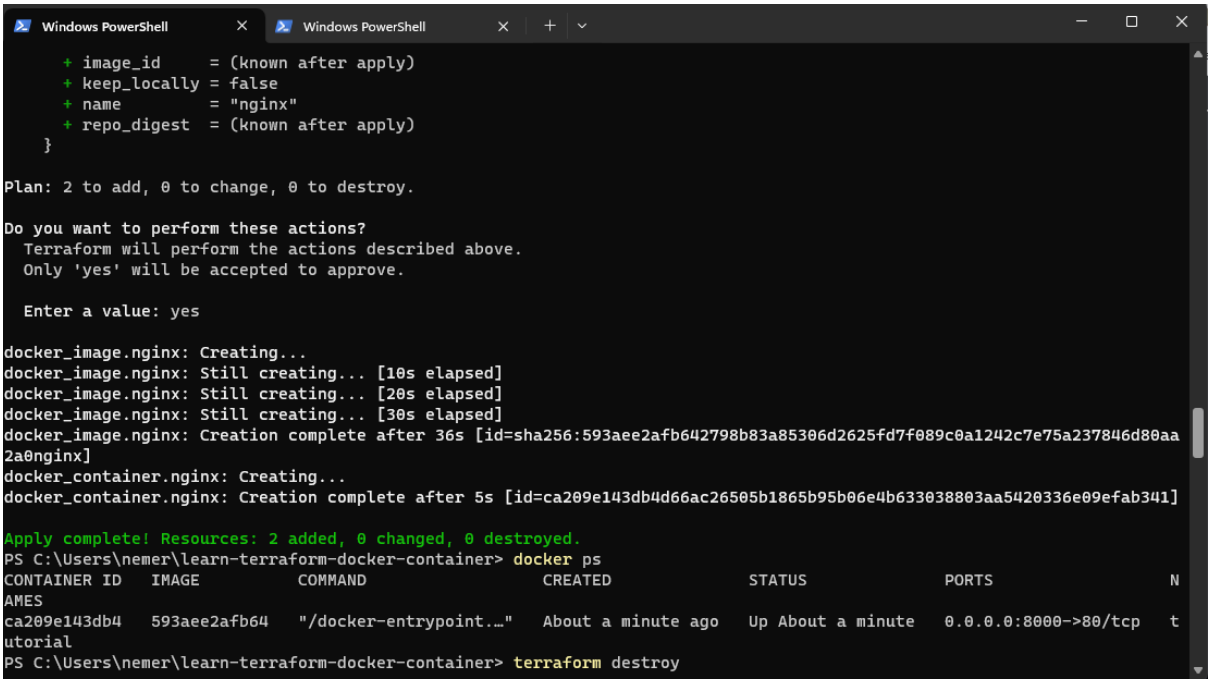
Install terraform

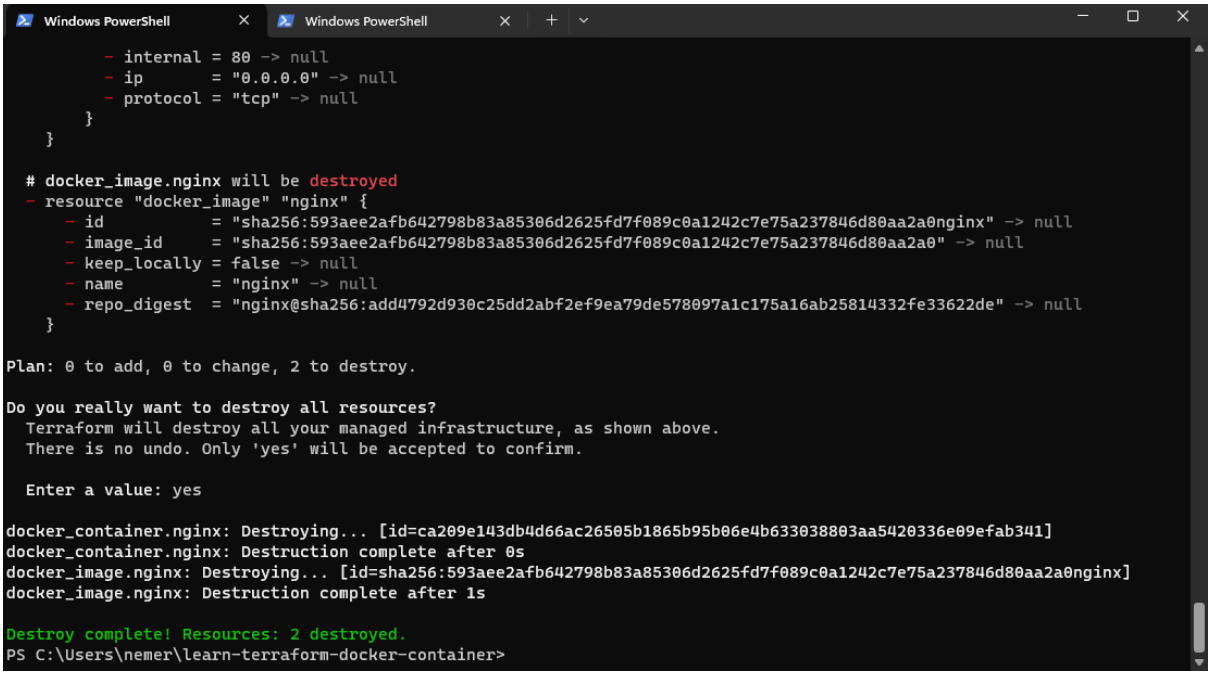




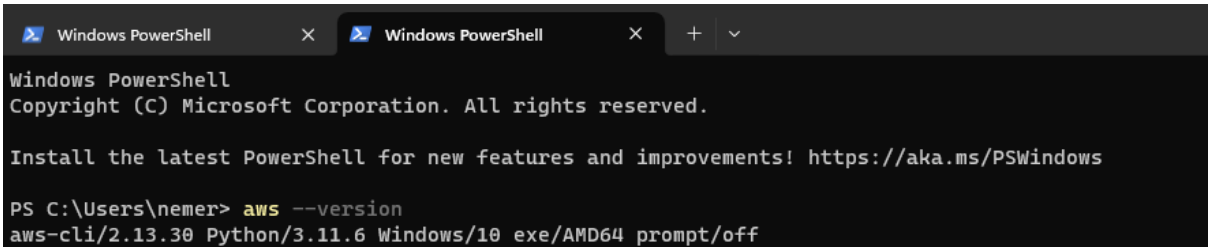

Windows PowerShell
Windows PowerShell
}
# docker_image.nginx will be created
+ resource "docker_image" "nginx" {
+ id = (known after apply)
+ image_id = (known after apply)
+ keep_locally = false
+ name = "nginx"
+ repo_digest = (known after apply)
}
Plan: 2 to add, 0 to change, 0 to destroy.
Do you want to perform these actions?
Terraform will perform the actions described above.
Only 'yes' will be accepted to approve.
Enter a value: yes
docker_image.nginx: Creating...
docker_image.nginx: Still creating... [10s elapsed]
docker_image.nginx: Still creating... [20s elapsed]
docker_image.nginx: Still creating... [30s elapsed]
docker_image.nginx: Creation complete after 36s [id=sha256:593aee2afb642798b83a85306d2625fd7f089c0a1242c7e75a237846d80aa2a0nginx]
docker_container.nginx: Creating...
docker_container.nginx: Creation complete after 5s [id=ca209e143db4d66ac26505b1865b95b06e4b633038803aa5420336e09efab341]
Apply complete! Resources: 2 added, 0 changed, 0 destroyed.
PS C:\Users\nemer\learn-terraform-docker-container>

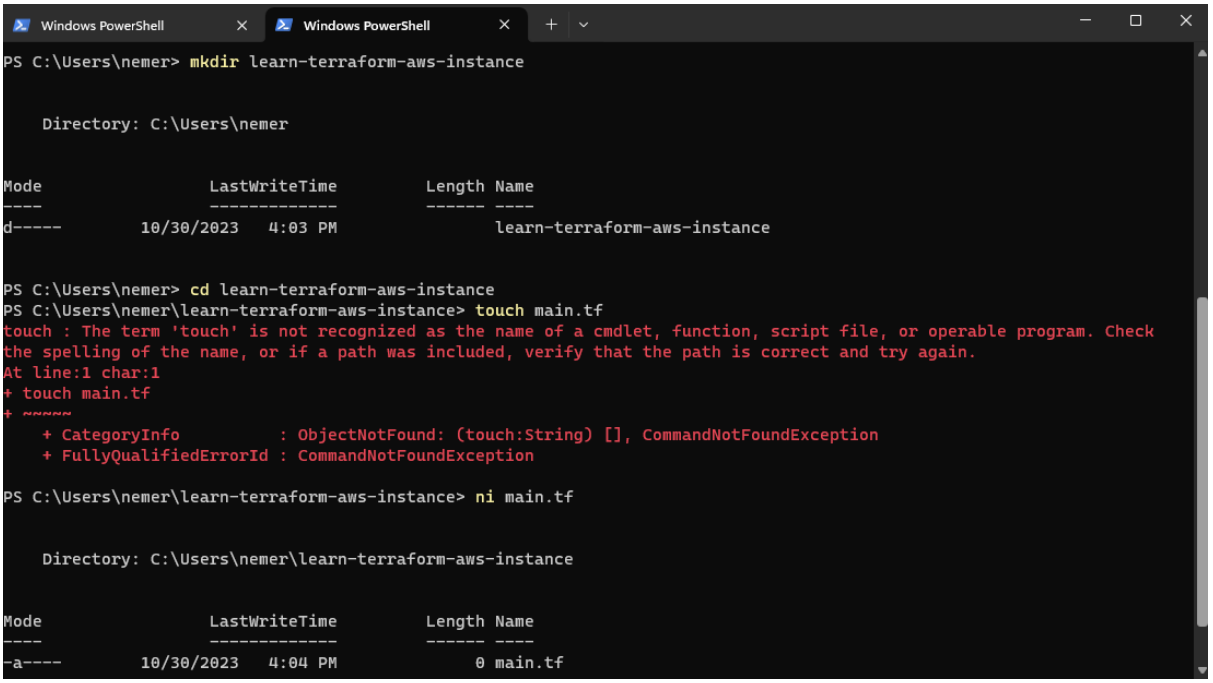

localhost:8000
Welcome to nginx!
If you see this page, the nginx web server is successfully installed and working. Further configuration is required.
For online documentation and support please refer to nginx.org.
Commercial support is available at nginx.com.
Thank you for using nginx.

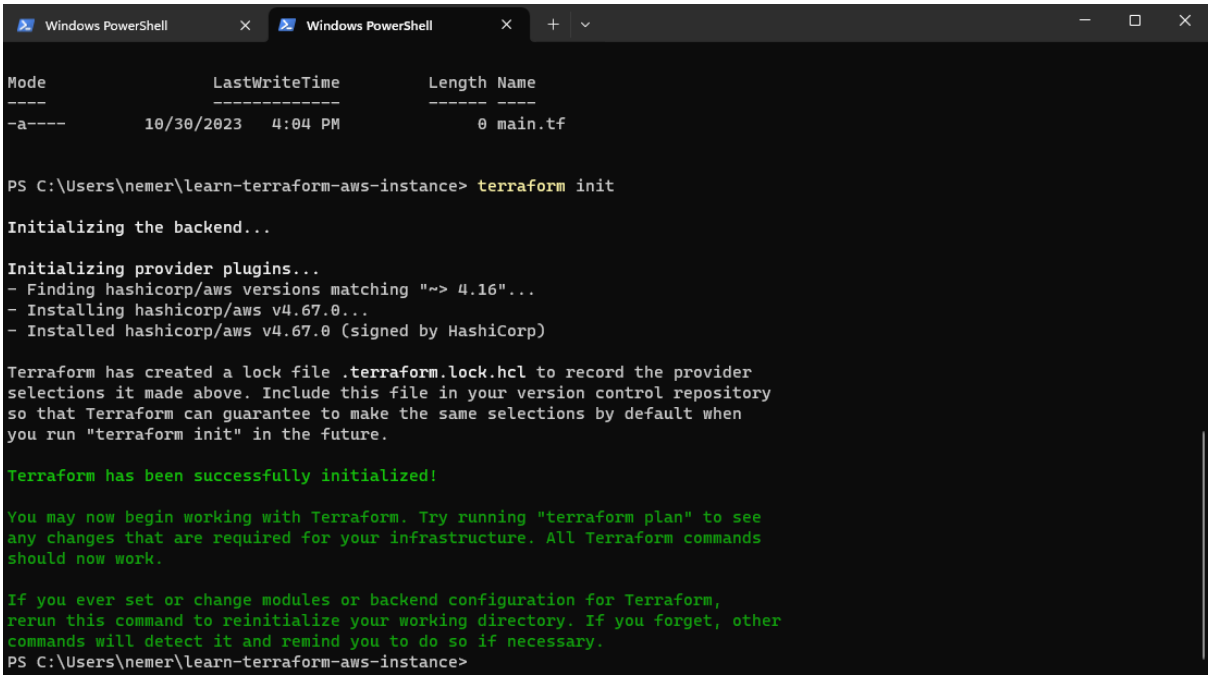

Windows PowerShell
Windows PowerShell
+ image_id = (known after apply)
+ keep_locally = false
+ name = "nginx"
+ repo_digest = (known after apply)
}
Plan: 2 to add, 0 to change, 0 to destroy.
Do you want to perform these actions?
Terraform will perform the actions described above.
Only 'yes' will be accepted to approve.
Enter a value: yes
docker_image.nginx: Creating...
docker_image.nginx: Still creating... [10s elapsed]
docker_image.nginx: Still creating... [20s elapsed]
docker_image.nginx: Still creating... [30s elapsed]
docker_image.nginx: Creation complete after 36s [id=sha256:593aee2afb642798b83a85306d2625fd7f089c0a1242c7e75a237846d80aa2a0nginx]
docker_container.nginx: Creating...
docker_container.nginx: Creation complete after 5s [id=ca209e143db4d66ac26505b1865b95b06e4b633038803aa5420336e09efab341]
Apply complete! Resources: 2 added, 0 changed, 0 destroyed.
PS C:\Users\nemer\learn-terraform-docker-container> docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
ca209e143db4 593aee2afb64 "/docker-entrypoint.…" About a minute ago Up About a minute 0.0.0.0:8000->80/tcp tutorial
PS C:\Users\nemer\learn-terraform-docker-container> terraform destroy

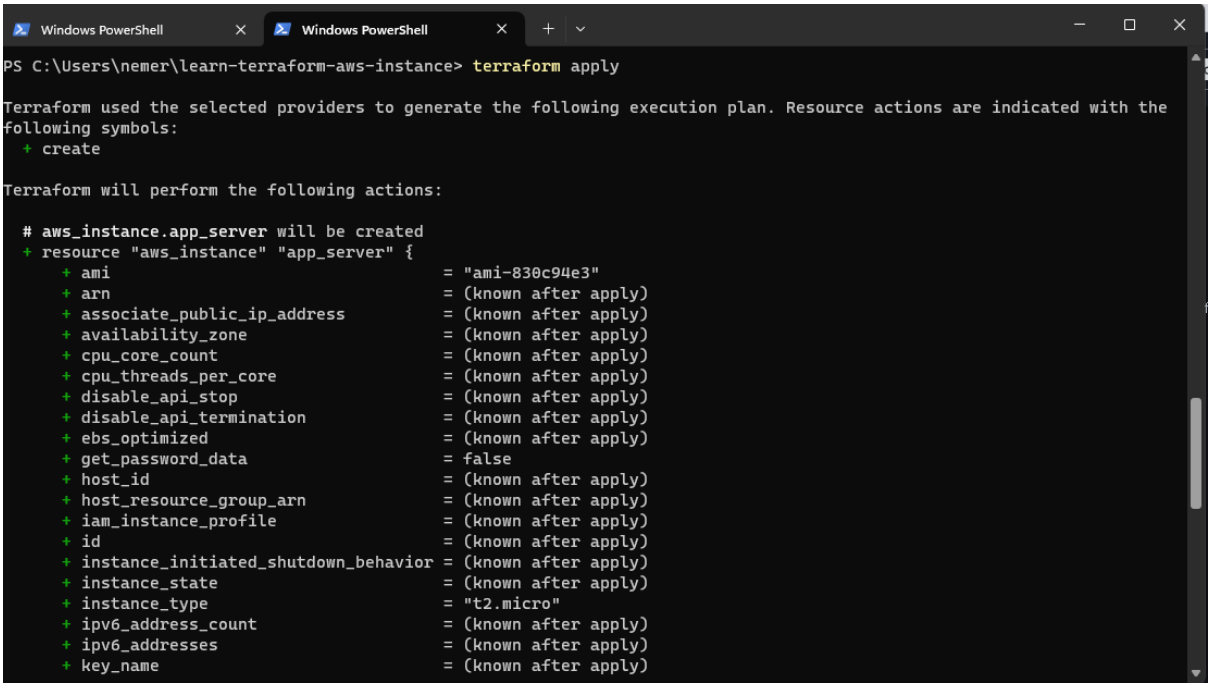

Windows PowerShell
Windows PowerShell
- internal = 80 -> null
- ip = "0.0.0.0" -> null
- protocol = "tcp" -> null
}
}
# docker_image.nginx will be destroyed
- resource "docker_image" "nginx" {
- id = "sha256:593aee2afb642798b83a85306d2625fd7f089c0a1242c7e75a237846d80aa2a0nginx" -> null
- image_id = "sha256:593aee2afb642798b83a85306d2625fd7f089c0a1242c7e75a237846d80aa2a0" -> null
- keep_locally = false -> null
- name = "nginx" -> null
- repo_digest = "nginx@sha256:add4792d930c25dd2abf2ef9ea79de578097a1c175a16ab25814332fe33622de" -> 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
docker_container.nginx: Destroying... [id=ca209e143db4d66ac26505b1865b95b06e4b633038803aa5420336e09efab341]
docker_container.nginx: Destruction complete after 0s
docker_image.nginx: Destroying... [id=sha256:593aee2afb642798b83a85306d2625fd7f089c0a1242c7e75a237846d80aa2a0nginx]
docker_image.nginx: Destruction complete after 1s
Destroy complete! Resources: 2 destroyed.
PS C:\Users\nemer\learn-terraform-docker-container>

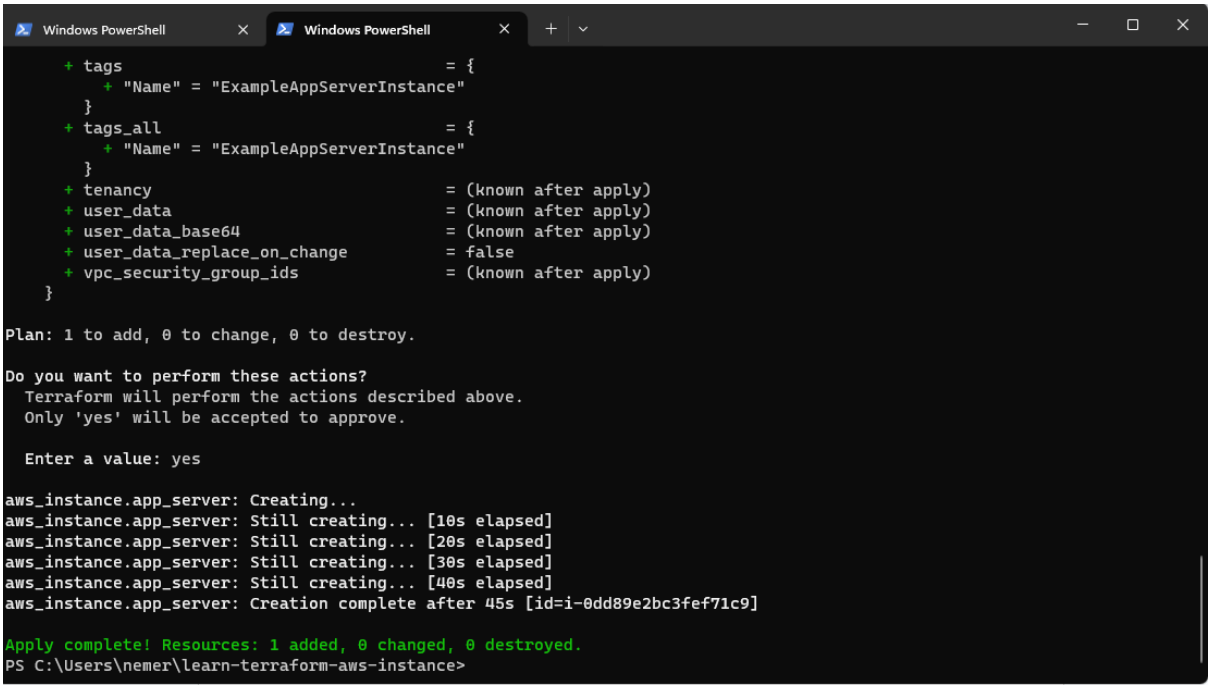
Build Infrastructure

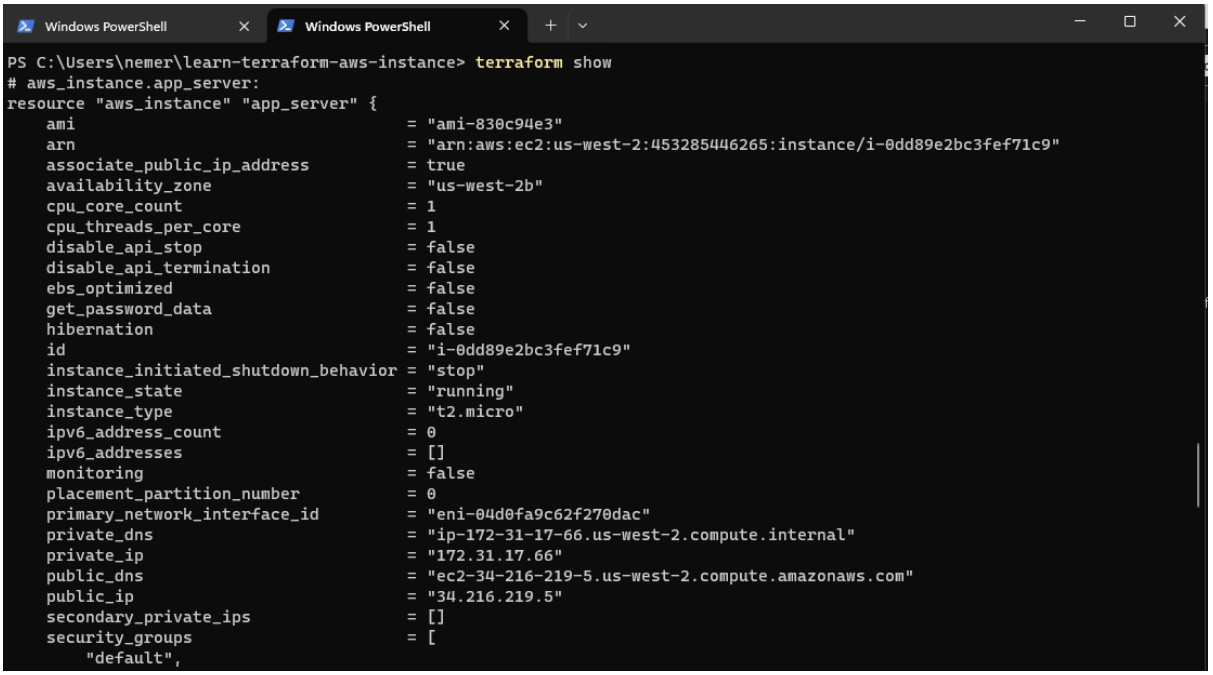


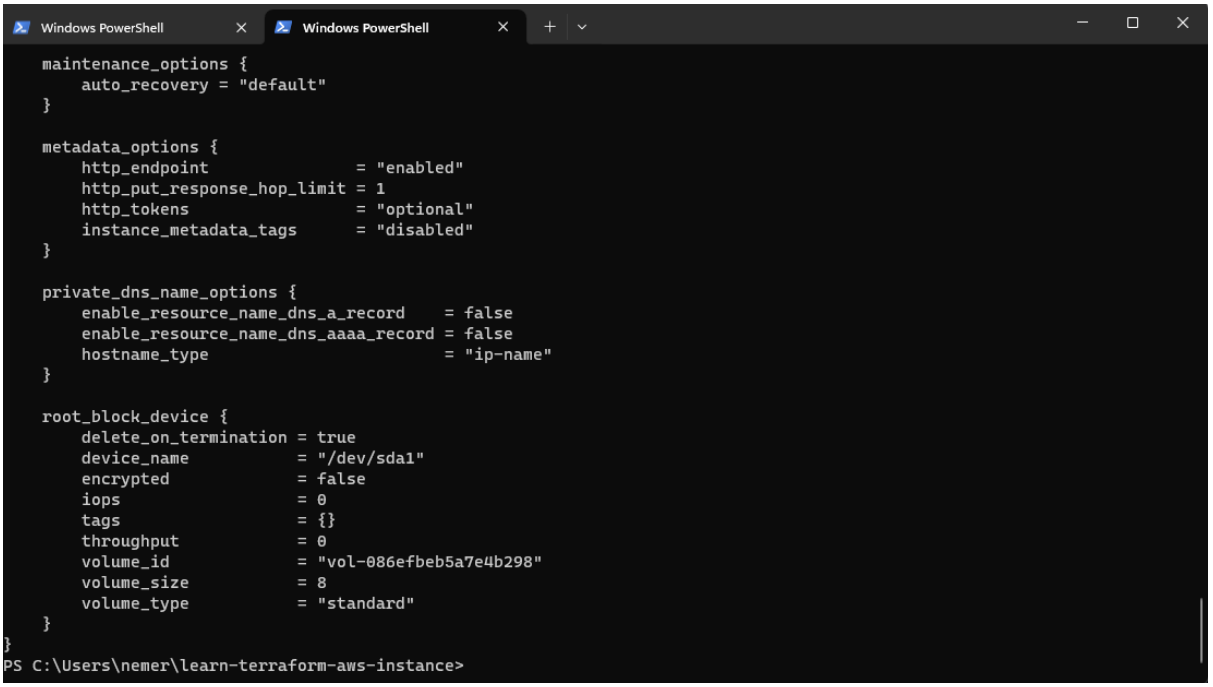


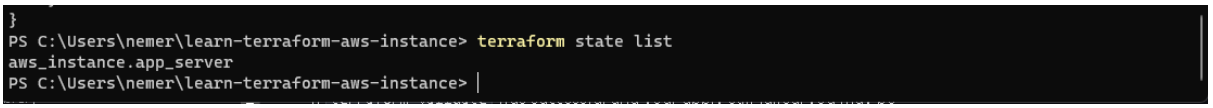

Windows PowerShell
Windows PowerShell
Mode LastWriteTime Length Name
-a---- 10/30/2023 4:04 PM 0 main.tf
PS C:\Users\nemer\learn-terraform-aws-instance> terraform init
Initializing the backend...
Initializing provider plugins...
- Finding hashicorp/aws versions matching "~> 4.16"...
- Installing hashicorp/aws v4.67.0...
- Installed hashicorp/aws v4.67.0 (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.
PS C:\Users\nemer\learn-terraform-aws-instance>

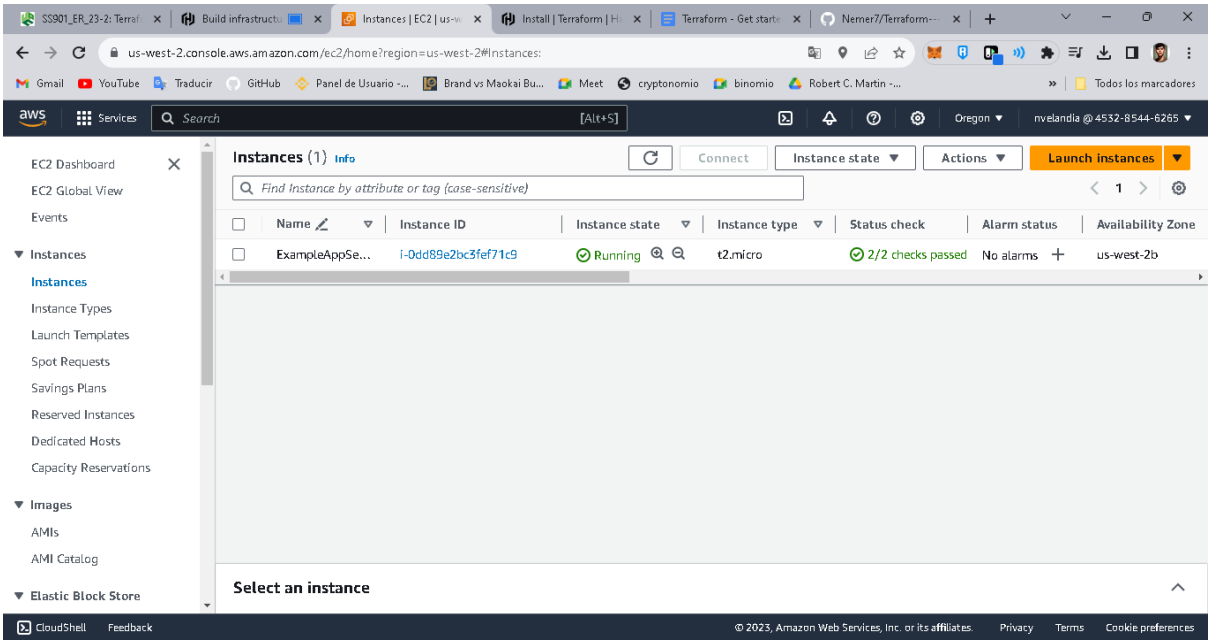

Windows PowerShell
Windows PowerShell
PS C:\Users\nemer\learn-terraform-aws-instance> terraform apply
Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the
following symbols:
+ create
Terraform will perform the following actions:
# aws_instance.app_server will be created
+ resource "aws_instance" "app_server" {
+ ami = "ami-830c94e3"
+ 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)
+ iam_instance_profile = (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 = (known after apply)


Windows PowerShell
Windows PowerShell
+ tags = {
+ "Name" = "ExampleAppServerInstance"
}
+ tags_all = {
+ "Name" = "ExampleAppServerInstance"
}
+ 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)
}
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.app_server: Creating...
aws_instance.app_server: Still creating... [10s elapsed]
aws_instance.app_server: Still creating... [20s elapsed]
aws_instance.app_server: Still creating... [30s elapsed]
aws_instance.app_server: Still creating... [40s elapsed]
aws_instance.app_server: Creation complete after 45s [id=i-0dd89e2bc3fef71c9]
Apply complete! Resources: 1 added, 0 changed, 0 destroyed.
PS C:\Users\nemer\learn-terraform-aws-instance>


Windows PowerShell
Windows PowerShell
PS C:\Users\nemer\learn-terraform-aws-instance> terraform show
# aws_instance.app_server:
resource "aws_instance" "app_server" {
ami = "ami-830c94e3"
arn = "arn:aws:ec2:us-west-2:453285446265:instance/i-0dd89e2bc3fef71c9"
associate_public_ip_address = true
availability_zone = "us-west-2b"
cpu_core_count = 1
cpu_threads_per_core = 1
disable_api_stop = false
disable_api_termination = false
ebs_optimized = false
get_password_data = false
hibernation = false
id = "i-0dd89e2bc3fef71c9"
instance_initiated_shutdown_behavior = "stop"
instance_state = "running"
instance_type = "t2.micro"
ipv6_address_count = 0
ipv6_addresses = []
monitoring = false
placement_partition_number = 0
primary_network_interface_id = "eni-04d0fa9c62f270dac"
private_dns = "ip-172-31-17-66.us-west-2.compute.internal"
private_ip = "172.31.17.66"
public_dns = "ec2-34-216-219-5.us-west-2.compute.amazonaws.com"
public_ip = "34.216.219.5"
secondary_private_ips = []
security_groups = [
"default",


Windows PowerShell
Windows PowerShell
maintenance_options {
auto_recovery = "default"
}
metadata_options {
http_endpoint = "enabled"
http_put_response_hop_limit = 1
http_tokens = "optional"
instance_metadata_tags = "disabled"
}
private_dns_name_options {
enable_resource_name_dns_a_record = false
enable_resource_name_dns_aaaa_record = false
hostname_type = "ip-name"
}
root_block_device {
delete_on_termination = true
device_name = "/dev/sda1"
encrypted = false
iops = 0
tags = {}
throughput = 0
volume_id = "vol-086efbeb5a7e4b298"
volume_size = 8
volume_type = "standard"
}
}
PS C:\Users\nemer\learn-terraform-aws-instance>


}
PS C:\Users\nemer\learn-terraform-aws-instance> terraform state list
aws_instance.app_server
PS C:\Users\nemer\learn-terraform-aws-instance>


us-west-2.console.aws.amazon.com/ec2/home?region=us-west-2#Instances:
Services
Search
[Alt+S]
Oregon
nvelandia @ 4532-8544-6265
EC2 Dashboard
EC2 Global View
Events
Instances
Instances
Instance Types
Launch Templates
Spot Requests
Savings Plans
Reserved Instances
Dedicated Hosts
Capacity Reservations
Images
AMIs
AMI Catalog
Elastic Block Store
Instances (1) Info
Connect
Instance state
Actions
Launch instances
Find instance by attribute or tag (case-sensitive)
Name
Instance ID
Instance state
Instance type
Status check
Alarm status
Availability Zone
ExampleAppSe...
i-0dd89e2bc3fef71c9
Running
t2.micro
2/2 checks passed
No alarms
us-west-2b
Select an instance
CloudShell
Feedback
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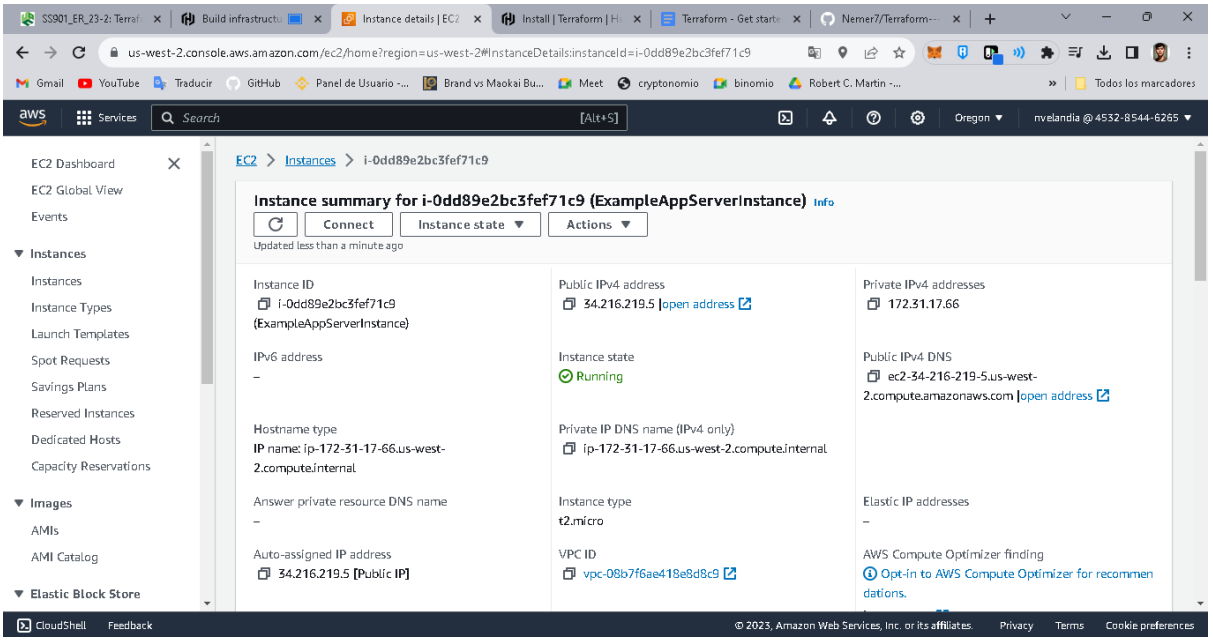
us-west-2.console.aws.amazon.com/ec2/home?region=us-west-2#InstanceDetails:instanceId=i-0dd89e2bc3fef71c9
Services
Search
[Alt+S]
Oregon
nvelandia @ 4532-8544-6265
EC2 Dashboard
EC2 Global View
Events
Instances
Instances
Instance Types
Launch Templates
Spot Requests
Savings Plans
Reserved Instances
Dedicated Hosts
Capacity Reservations
Images
AMIs
AMI Catalog
Elastic Block Store
EC2 > Instances > i-0dd89e2bc3fef71c9
Instance summary for i-0dd89e2bc3fef71c9 (ExampleAppServerInstance) Info
Connect
Instance state
Actions
Updated less than a minute ago
Instance ID
i-0dd89e2bc3fef71c9 (ExampleAppServerInstance)
Public IPv4 address
34.216.219.5 | open address
Private IPv4 addresses
172.31.17.66
IPv6 address
–
Instance state
Running
Public IPv4 DNS
ec2-34-216-219-5.us-west-2.compute.amazonaws.com | open address
Hostname type
IP name: ip-172-31-17-66.us-west-2.compute.internal
Private IP DNS name (IPv4 only)
ip-172-31-17-66.us-west-2.compute.internal
Answer private resource DNS name
–
Instance type
t2.micro
Elastic IP addresses
–
Auto-assigned IP address
34.216.219.5 [Public IP]
VPC ID
vpc-08b7f6ae418e8d8c9
AWS Compute Optimizer finding
Opt-in to AWS Compute Optimizer for recommendations.
CloudShell
Feedback
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Cookie preferences