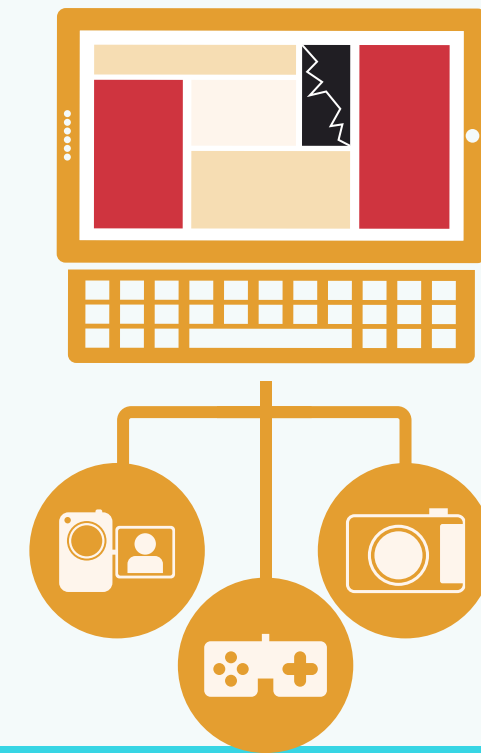


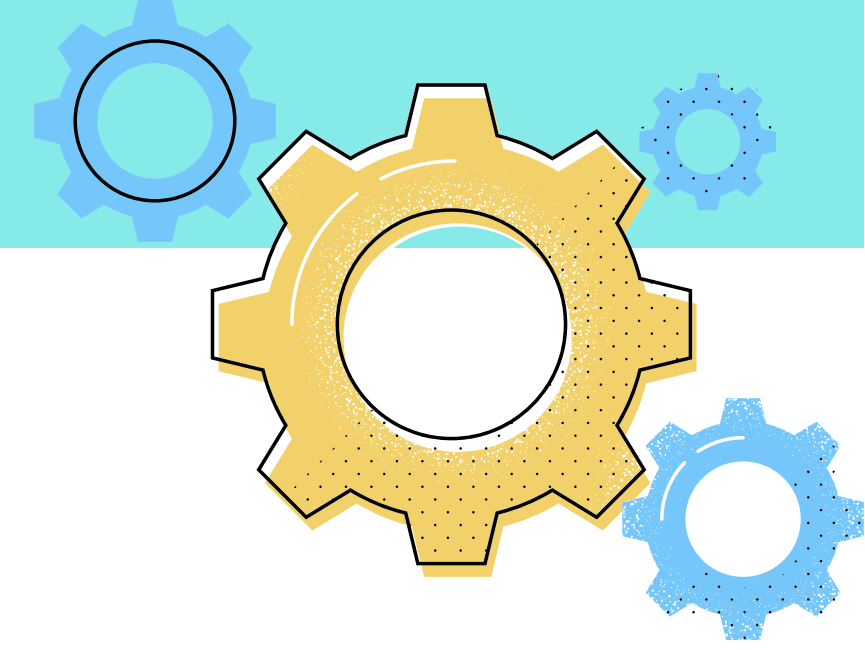
Deploy cluster of web server

Topics covered:

- Introduction to meta parameter count
- Introduction to arguments and attributes
- Declare meta parameter arguments count
- Declare output variable and interpolate the attribute value of `public_ip` , once resource is created



Arguments for resources



Arguments are resource configurations names and values we declare in our terraform code..

Required arguments(ec2) :

ami

instance_type

Optional arguments(ec2):

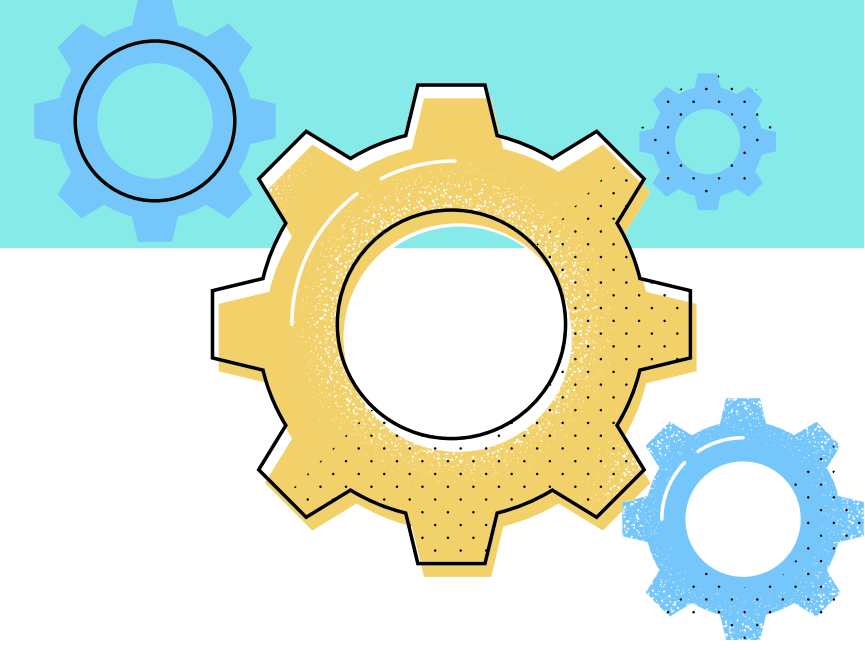
key_name

availability_zone

monitoring

Note: search for any terraform resource in terraform.io and go to that resource page where all the arguments are listed

Attributes for resources



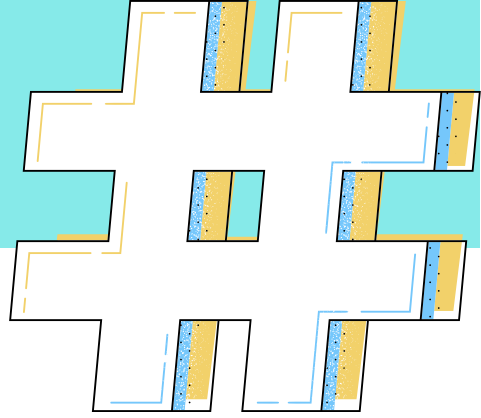
Attributes are terraform resource properties ,names and values after resource has been created.

Example :

id (instance id)
private_ip
public_ip
arn (amazon resource number)
key_name
instance_state

Note: search for any terraform resource in terraform.io and go to end of that resource page where all the attributes are listed

Declare count variable and tag the resources



Just define the value count variable , how many ec2 instance you want ..

```
resource "aws_instance" "My-Webserver" {  
  count = 3  
  ami = var.ami  
  instance_type = var.instance_type  
  vpc_security_group_ids = ["${aws_security_group.webserver_sg.id}"]  
  tags = {  
    Name = "My-Webserver-${count.index}"  
  }  
  key_name = "terraform"  
  user_data = <<-EOF  
  #!/bin/bash  
    exec > >(tee /var/log/user-data.log|logger -t user-data -s 2>/dev/console) 2>&1  
    /usr/bin/apt-get update  
    DEBIAN_FRONTEND=noninteractive /usr/bin/apt-get upgrade -yq  
    /usr/bin/apt-get install apache2 -y  
    /usr/sbin/ufw allow in "Apache Full"  
  /bin/echo "Hello world " >/var/www/html/index.html  
    instance_ip=`curl http://169.254.169.254/latest/meta-data/public-ipv4`  
    echo $instance_ip >>/var/www/html/index.html  
  EOF  
}
```

Output the resource attributes when its created



Declare a output variable with any meaningful name (you can specify any name, example "public_ip") and interpolate the attribute you want as output.

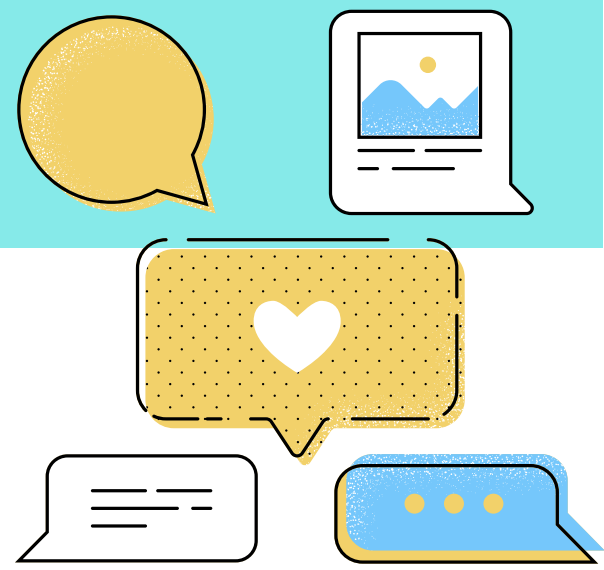
```
output "public_ip" {  
    value = [ "${aws_instance.My-Webserver.*.public_ip}" ]  
}
```

Note: notice the * in output variable syntax . count parameter creates number of resources and creates list of values. Star(*) prints all the values.

You can also specify index value such as 1 or 2 or 0 , output public IP would be for that specific instance..

```
output "public_ip" {  
value = [ "${aws_instance.My-Webserver.2.public_ip}" ]  
}
```

How can we get the public IP assigned to our lab system



Run below command to get public ip assigned to your lab system..

```
$ curl https://checkip.amazonaws.com
```

```
73.241.51.131
```

```
$
```

OR

Search in google.com "what is my ip "

OR

Go to <https://www.ipchicken.com/> and note current IP address