

## Task 1: AWS Account Configuration

## 1. Install AWS CLI, Terraform

```
prkpo@ubuntu24:~$ aws --version
aws-cli/2.17.58 Python/3.12.6 Linux/6.8.0-41-generic exe/x86_64.ubuntu.24
prkpo@ubuntu24:~$ terraform --version
Terraform v1.9.6
on linux_amd64
prkpo@ubuntu24:~$ which tfenv
/usr/local/bin/tfenv
prkpo@ubuntu24:~$
```

## 2. Create IAM user, configure MFA

Identity and Access Management (IAM)

Dashboard

Access management

User groups

Users

Roles

Policies

Identity providers

Account settings

Access reports

Access Analyzer

External access

Unshared access

Analyzer settings

Credential report

Organization activity

Service control policies

Related content

[IAM Identity Center](#)
[AWS Organizations](#)

rsschool

Summary

ARN

arn:aws:iam::478714564863:user:rsschool

Console access

Enabled with MFA

Access key 1

Create access key

Created

September 25, 2024, 22:15 [UTC+04:00]

Last console sign-in

Never

Permissions

Groups (1)

Tags (1)

Security credentials

Last Accessed

Permissions policies (7)

Permissions are defined by policies attached to the user directly or through groups.

Q Search

Filter by Type

All types

<input type="checkbox"/>	Policy name	Type	Attached via
<input type="checkbox"/>	AmazonEC2FullAccess	AWS managed	Directly
<input type="checkbox"/>	AmazonEventBridgeFullAccess	AWS managed	Directly
<input type="checkbox"/>	AmazonRoute53FullAccess	AWS managed	Directly
<input type="checkbox"/>	AmazonS3FullAccess	AWS managed	Directly
<input type="checkbox"/>	AmazonSQSFullAccess	AWS managed	Directly
<input type="checkbox"/>	AmazonVPCFullAccess	AWS managed	Directly
<input type="checkbox"/>	IAMFullAccess	AWS managed	Directly

←

AM

Amazon Web Services

rsschool@478714564863

Включены одноразовые пароли

Вы можете использовать создаваемые этим приложением одноразовые пароли для проверки входа в систему.

Одноразовый пароль

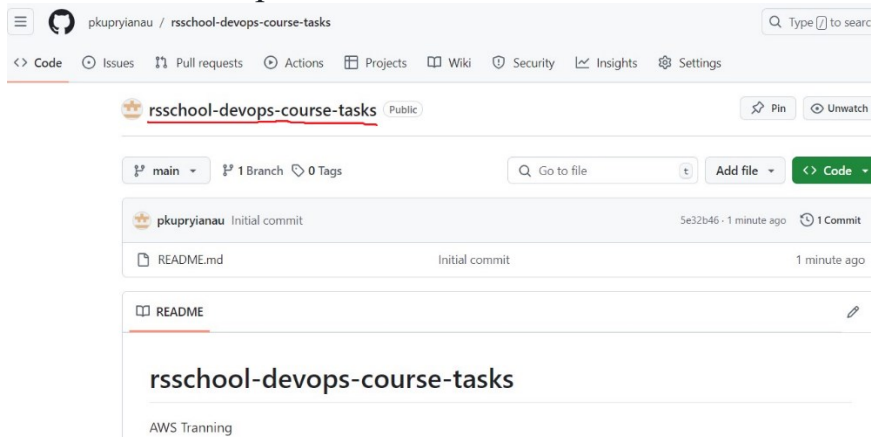
861 365

### 3. Configure AWS cli

```
prkpo@ubuntu24:~/aws$ cat credentials
[default]
aws_access_key_id = AKIAW65M4087C6U85M
aws_secret_access_key = aoFHim+WAbsiZKJ3Y3BJ3y[REDACTED]
prkpo@ubuntu24:~/aws$ cat config
[sso-session rsschool]
sso_start_url = https://478714564863.signin.aws.amazon.com/console
sso_region = eu-north-1
sso_registration_scopes = sso:account:access
[default]
region = eu-central-1
prkpo@ubuntu24:~/aws$
```

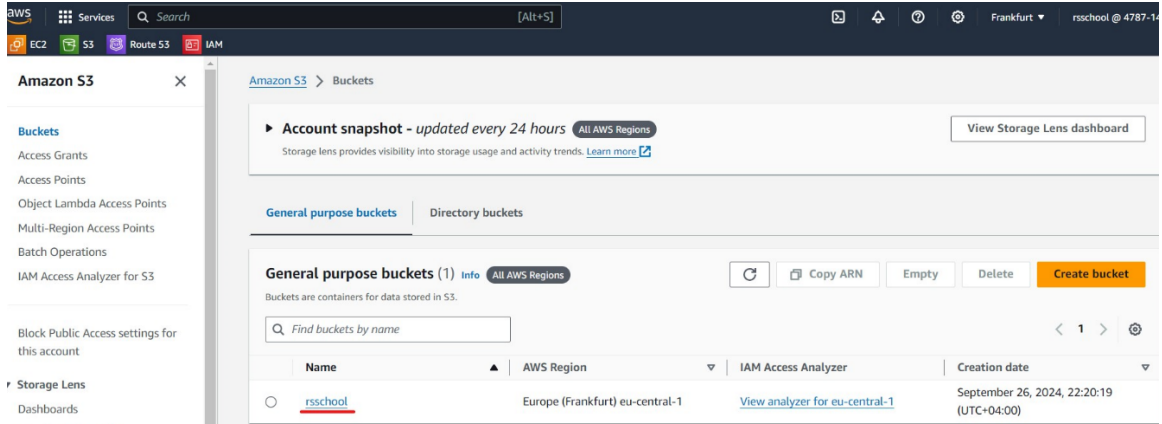
```
prkpo@ubuntu24:~/.aws$  
prkpo@ubuntu24:~/.aws$  
prkpo@ubuntu24:~/.aws$  
prkpo@ubuntu24:~/.aws$ aws ec2 describe-instance-types --instance-types t4g.nano  
{  
  "InstanceTypes": [  
    {  
      "InstanceType": "t4g.nano",  
      "CurrentGeneration": true,  
      "FreeTierEligible": false,  
      "SupportedUsageClasses": [  
        "on-demand",  
        "spot"  
      ],  
      "SupportedRootDeviceTypes": [  
        "ebs"  
      ],  
      "SupportedVirtualizationTypes": [  
        "hvm"  
      ],  
      "BareMetal": false,  
      "Hypervisor": "nitro",  
      "ProcessorInfo": {  
        "SupportedArchitectures": [  
          "arm64"  
        ]  
      }  
    }  
  ]  
}
```

#### 4. Create Github repo

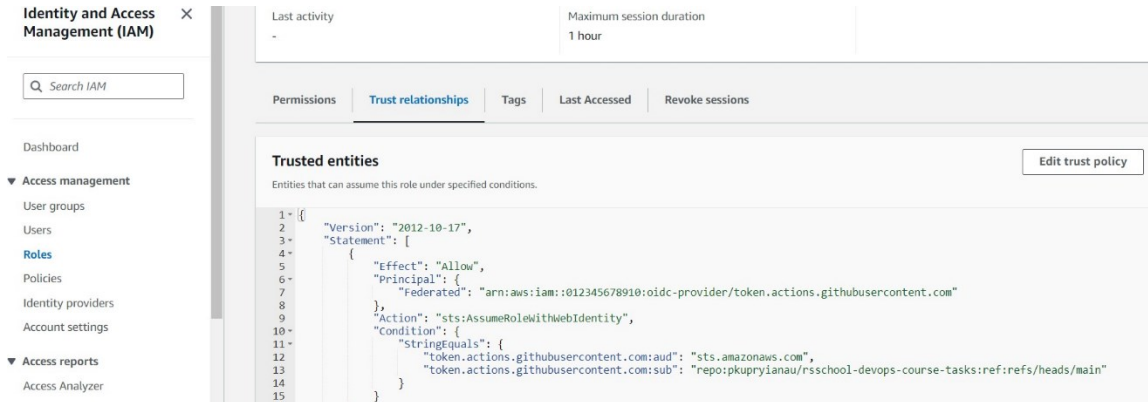


#### 5. Create S3 bucket from terraform

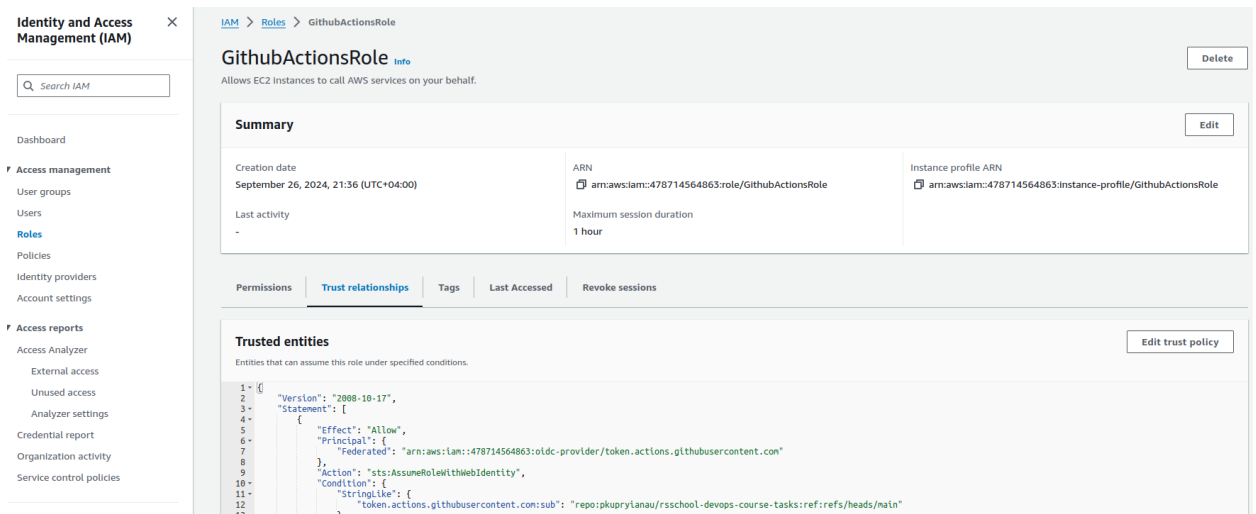
```
prkpo@ubuntu24:~/aws/Task1$  
prkpo@ubuntu24:~/aws/Task1$  
prkpo@ubuntu24:~/aws/Task1$  
prkpo@ubuntu24:~/aws/Task1$ terraform fmt  
main.tf  
prkpo@ubuntu24:~/aws/Task1$  
prkpo@ubuntu24:~/aws/Task1$  
prkpo@ubuntu24:~/aws/Task1$ terraform validate  
Success! The configuration is valid.  
  
prkpo@ubuntu24:~/aws/Task1$  
prkpo@ubuntu24:~/aws/Task1$  
prkpo@ubuntu24:~/aws/Task1$ cat main.tf  
terraform {  
  required_providers {  
    aws = {  
      source = "hashicorp/aws"  
      version = "5.50.0"  
    }  
  }  
}  
  
resource "aws_s3_bucket" "rsschool" {  
  bucket = "rsschool"  
  tags = {  
    Name = "MyS3Bucket"  
  }  
}  
  
prkpo@ubuntu24:~/aws/Task1$ terraform plan  
  
Terraform used the selected providers to generate the follow  
+ create  
  
Terraform will perform the following actions:  
  
# aws_s3_bucket.rsschool will be created  
+ resource "aws_s3_bucket" "rsschool" {  
  + acceleration_status = (known after apply)
```



## 6. Create IAM role for Github Action



## 7. Update right for Github Action




## 8. Create Github Action

```

prkpo@ubuntu24:~/aws/Task1/rsschool-devops-course-tasks$
prkpo@ubuntu24:~/aws/Task1/rsschool-devops-course-tasks$
prkpo@ubuntu24:~/aws/Task1/rsschool-devops-course-tasks$
prkpo@ubuntu24:~/aws/Task1/rsschool-devops-course-tasks$ ls -lsa
total 28
4 drwxrwxr-x 4 prkpo prkpo 4096 Sep 28 09:36 .
4 drwxrwxr-x 4 prkpo prkpo 4096 Sep 28 08:14 ..
4 drwxrwxr-x 8 prkpo prkpo 4096 Sep 28 09:41 .git
4 drwxr-xr-x 3 prkpo prkpo 4096 Sep 28 08:32 .github
4 -rw-r--r-- 1 prkpo prkpo 976 Sep 28 08:21 .gitignore
4 -rw-r--r-- 1 prkpo prkpo 217 Sep 28 09:10 main.tf
4 -rw-rw-r-- 1 prkpo prkpo 119 Sep 28 09:36 README.md
prkpo@ubuntu24:~/aws/Task1/rsschool-devops-course-tasks$ git log --oneline
2320728 (HEAD -> Task1) Add README
05766cf Check
0ff22dc Check mistakes
3e4d29c Add new branch Task1
e9c48c2 (origin/main, origin/HEAD, main) First commit
5e32b46 Initial commit
prkpo@ubuntu24:~/aws/Task1/rsschool-devops-course-tasks$

```



github-actions bot commented 6 minutes ago

Terraform Format and Style success

Terraform Initialization success


Terraform Validation success


► Validation Output

Terraform Plan success

► Show Plan

Pushed by: @pkupryanau, Action: pull\_request






Require approval from specific reviewers before merging
Rulesets ensure specific people approve pull requests before they're merged.
Add rule

✓
All checks have passed
1 successful check
Show all checks

✓
This branch has no conflicts with the base branch
Merging can be performed automatically.

Merge pull request
or view [command line instructions](#).


pkupryanau / rsschool-devops-course-tasks

<> Code
Issues
Pull requests 1
Actions
Projects
Wiki
Security
Insights
Settings

Back to pull request #1

✓ Add new branch Task1 #1

Summary

Jobs
✓ deploy

Run details
Usage
Workflow file

Triggered via pull request 3 minutes ago
Status
Total duration
Artifacts

pkupryanau opened #1 Task1
Success
38s
-

main.yml
on: pull\_request

✓ deploy 26s

Summary

Jobs

deploy

Run details

Usage

Workflow file

deploy

succeeded 45 minutes ago in 22s

> Set up job

> Git checkout

> Configure AWS credentials from AWS account

> Setup Terraform

> Terraform fmt

> Terraform Init

> Terraform Validate

> Terraform Plan

> Run actions/github-script@v6

> Terraform Plan Status

> Terraform Apply

```
1 Run terraform apply -auto-approve -input=false
2 terraform apply -auto-approve -input=false
3 shell: /usr/bin/bash --noprofile --norc -e -o pipefail {0}
4 env:
```

Amazon S3

Account snapshot - updated every 24 hours

General purpose buckets

rschool

Europe (Frankfurt) eu-central-1

September 28, 2024, 13:40:21 (UTC+04:00)

Re: [pkupryanau/rsschool-devops-course-tasks] Merge pull request #1 #3)

github-actions[bot] <notifications@github.com>  
кому: pkupryanau/rsschool-devops-course-tasks, мне, Mention

Terraform Format and Style success

Terraform Initialization success

Terraform Validation success

Validation Output

Success! The configuration is valid.

Terraform Plan success

Show Plan