

# 1. Setup Fargate (Optional)

## setup a Faragte profile

1

```
cd ~/environment/tfekscodes/extra/fargate
```

Initialize Terraform:

1

```
terraform init
```

Initializing the backend...

**\*\* OUTPUT TRUNCATED FOR BREVITY as similar to previous examples \*\***

Validate the Terraform code

1

```
terraform validate
```

Success! The configuration is valid.

Plan the deployment:

1

```
terraform plan -out tfplan
```

data.aws\_ssm\_parameter.sub-priv3: Reading...

data.aws\_ssm\_parameter.eks-vpc: Reading...

....

data.aws\_caller\_identity.current: Read complete after 0s [id=440018911661]

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\_eks\_fargate\_profile.fargate-profile will be created

```

+ resource "aws_eks_fargate_profile" "fargate-profile" {
  + arn          = (known after apply)
  + cluster_name = "mycluster1"
  + fargate_profile_name = "fargate1"
  + id          = (known after apply)
  + pod_execution_role_arn = (known after apply)
  + status      = (known after apply)
  + subnet_ids  = (sensitive value)
  + tags_all    = (known after apply)

  + selector {
    + namespace = "fargate*"
  }
  + selector {
    + namespace = "karpenter"
  }

  + timeouts {}
}

```

# aws\_iam\_policy.eks-fargate-logging-policy will be created

```

+ resource "aws_iam_policy" "eks-fargate-logging-policy" {
  + arn      = (known after apply)
  + description = "eks-fargate-logging-policy"
  + id      = (known after apply)
  + name     = (sensitive value)
  + name_prefix = (known after apply)
  + path     = "/"
  + policy   = jsonencode(
    {
      + Statement = [
        + {
          + Action = [
            + "logs:CreateLogStream",
            + "logs:CreateLogGroup",
            + "logs:DescribeLogStreams",

```

```

        + "logs:PutLogEvents",
      ]
      + Effect = "Allow"
      + Resource = "*"
    },
  ]
  + Version = "2012-10-17"
}
)
+ policy_id = (known after apply)
+ tags_all = (known after apply)
}

```

# aws\_iam\_role.FargatePodExecutionRole will be created

```

+ resource "aws_iam_role" "FargatePodExecutionRole" {
  + arn = (known after apply)
  + assume_role_policy = jsonencode(
    {
      + Statement = [
        + {
          + Action = "sts:AssumeRole"
          + Effect = "Allow"
          + Principal = {
            + Service = [
              + "eks.amazonaws.com",
              + "eks-fargate-pods.amazonaws.com",
            ]
          }
        },
      ]
    }
  + Version = "2012-10-17"
}
)
+ create_date = (known after apply)
+ force_detach_policies = false
+ id = (known after apply)

```

```

+ managed_policy_arns = (known after apply)
+ max_session_duration = 3600
+ name                = "mycluster1-eks-FargatePodExecutionRole"
+ name_prefix         = (known after apply)
+ path                = "/"
+ tags                = {
  + "Name" = "mycluster1-cluster/FargatePodExecutionRole"
}
+ tags_all            = {
  + "Name" = "mycluster1-cluster/FargatePodExecutionRole"
}
+ unique_id           = (known after apply)
}

```

# aws\_iam\_role\_policy\_attachment.AmazonEKSFargatePodExecutionRolePolicy will be created

```

+ resource "aws_iam_role_policy_attachment" "AmazonEKSFargatePodExecutionRolePolicy" {
  + id      = (known after apply)
  + policy_arn = "arn:aws:iam::aws:policy/AmazonEKSFargatePodExecutionRolePolicy"
  + role     = (known after apply)
}

```

# aws\_iam\_role\_policy\_attachment.eks-fargate-logging-policy will be created

```

+ resource "aws_iam_role_policy_attachment" "eks-fargate-logging-policy" {
  + id      = (known after apply)
  + policy_arn = (known after apply)
  + role     = (known after apply)
}

```

Plan: 5 to add, 0 to change, 0 to destroy.

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Saved the plan to: tfplan

To perform exactly these actions, run the following command to apply:

terraform apply "tfplan"

Build the environment:

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terraform apply tfplan

aws\_iam\_role.FargatePodExecutionRole: Creating...

aws\_iam\_policy.eks-fargate-logging-policy: Creating...

aws\_iam\_policy.eks-fargate-logging-policy: Creation complete after 1s  
[id=arn:aws:iam::440018911661:policy/eks-fargate-log-policy-f23f39c2e634f9ae]

aws\_iam\_role.FargatePodExecutionRole: Creation complete after 1s [id=mycluster1-eks-FargatePodExecutionRole]

aws\_eks\_fargate\_profile.fargate-profile: Creating...

aws\_iam\_role\_policy\_attachment.AmazonEKSFargatePodExecutionRolePolicy: Creating...

aws\_iam\_role\_policy\_attachment.eks-fargate-logging-policy: Creating...

aws\_iam\_role\_policy\_attachment.eks-fargate-logging-policy: Creation complete after 0s [id=mycluster1-eks-FargatePodExecutionRole-20230416172917926200000002]

aws\_iam\_role\_policy\_attachment.AmazonEKSFargatePodExecutionRolePolicy: Creation complete after 0s  
[id=mycluster1-eks-FargatePodExecutionRole-20230416172917932700000003]

aws\_eks\_fargate\_profile.fargate-profile: Still creating... [10s elapsed]

....

aws\_eks\_fargate\_profile.fargate-profile: Still creating... [1m20s elapsed]

aws\_eks\_fargate\_profile.fargate-profile: Creation complete after 1m27s [id=mycluster1:fargate1]

Apply complete! Resources: 5 added, 0 changed, 0 destroyed.