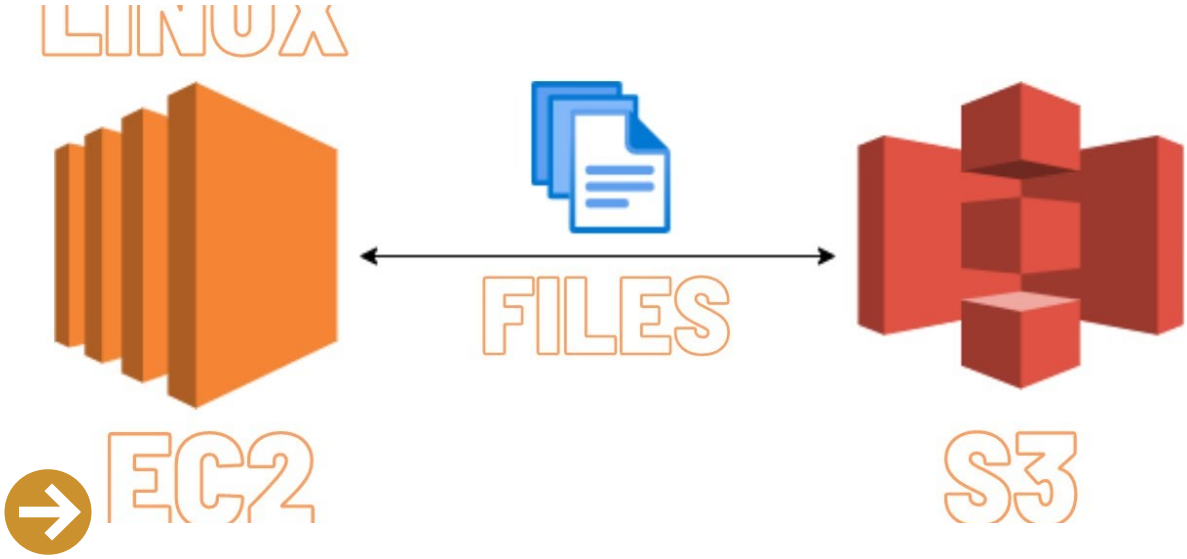


S3 Upload Automation Script

Code Docs

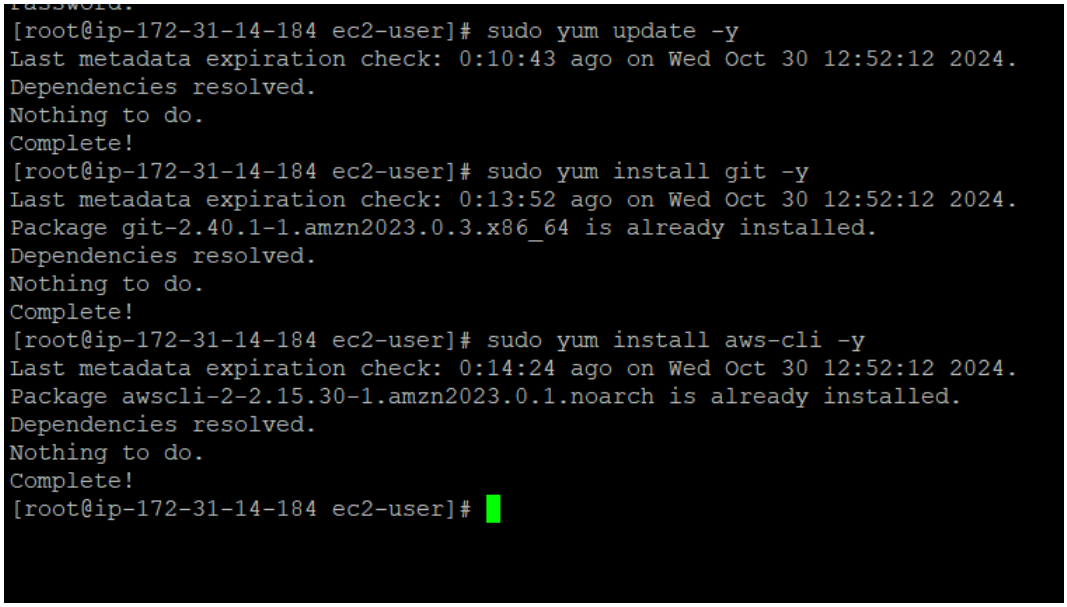
Aa Name
S3 Upload Automation Script

Step-1

- Create an **EC2 instance** in AWS and log in to it.
- Update your EC2 instance by running the following commands to install Git

```
yum update -y
yum install git -y
```

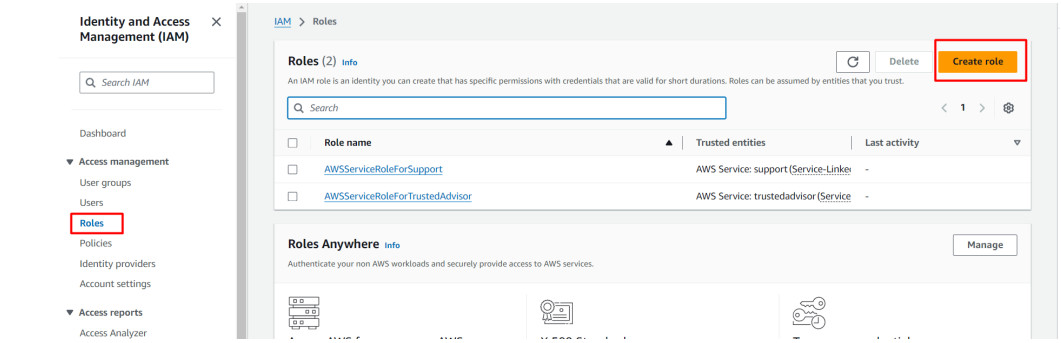
Cloning Git Repo to AWS S3 using Shell Script

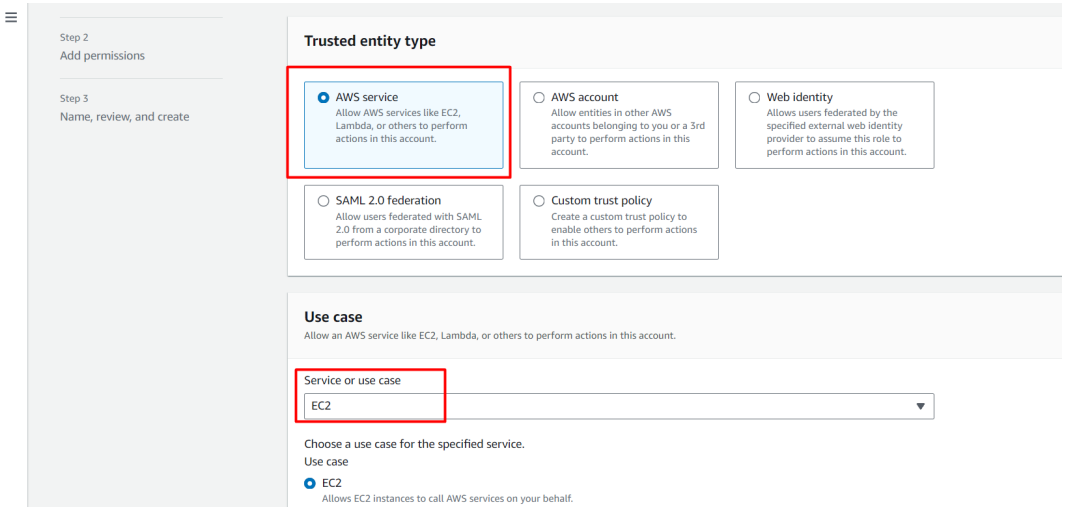


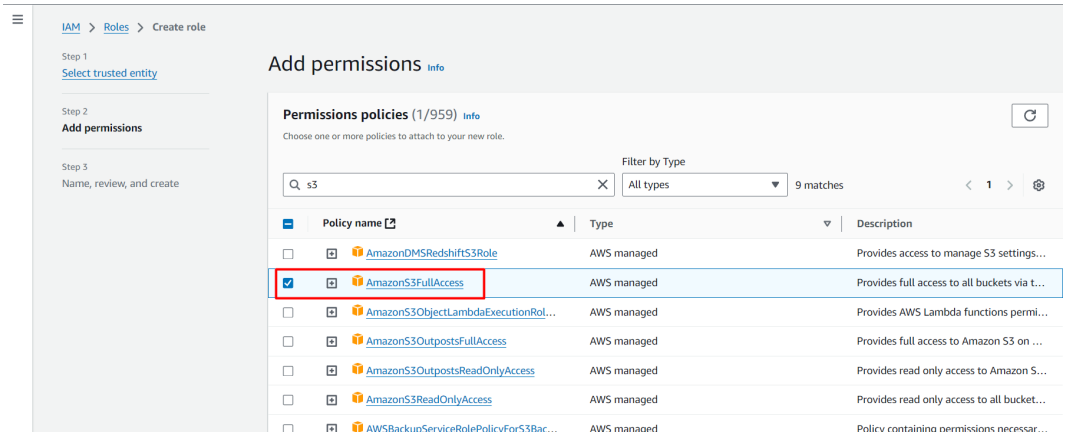
Step-2

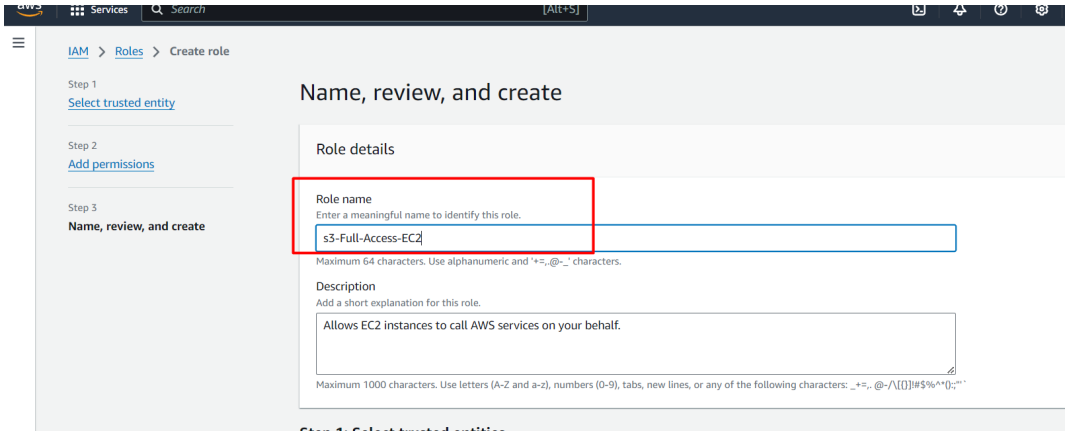
- Next, you need to assign **S3 access** to your EC2 instance.
- There are two ways to do this:
  1. **Create an IAM user**: You can create an IAM user, assign a policy to that user, and configure it in the EC2 instance.
  2. **Assign a role**: You can assign a role to the EC2 instance, which will give the entire instance access to S3.
- I will use the second method here.
- Go to the **AWS Management Console**, search for **IAM**, and click on **Roles**.
- Click on **Create Role**.
- Select **AWS Service**, choose **EC2**, give your role a name, add permissions for **S3 Full Access**, and then

click **Create Role**.



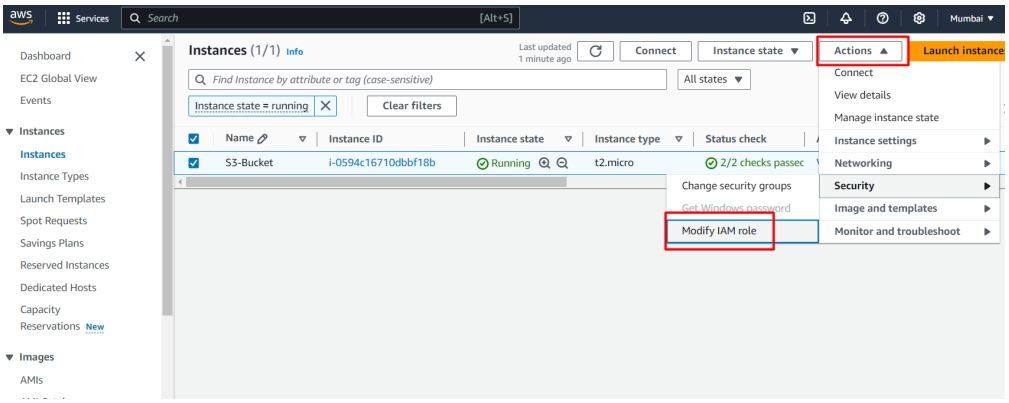


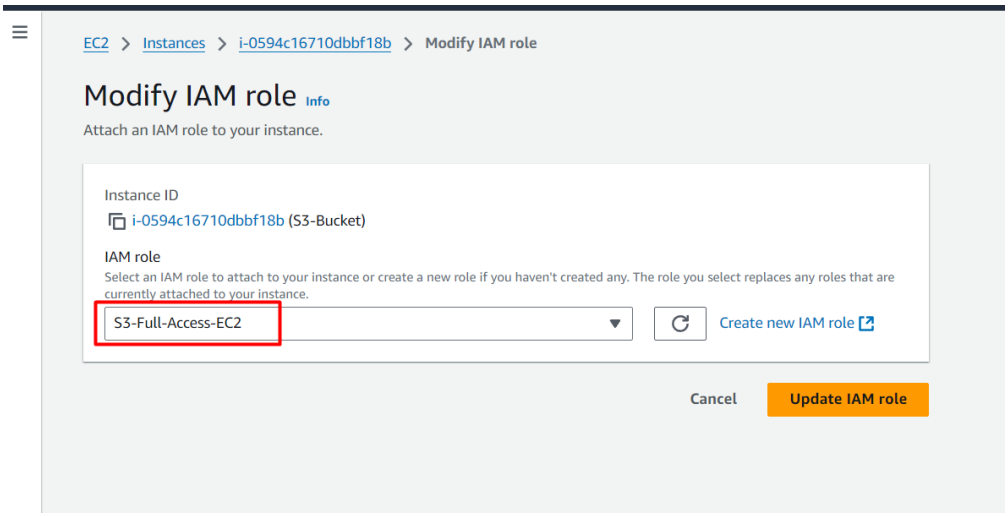




Step-3

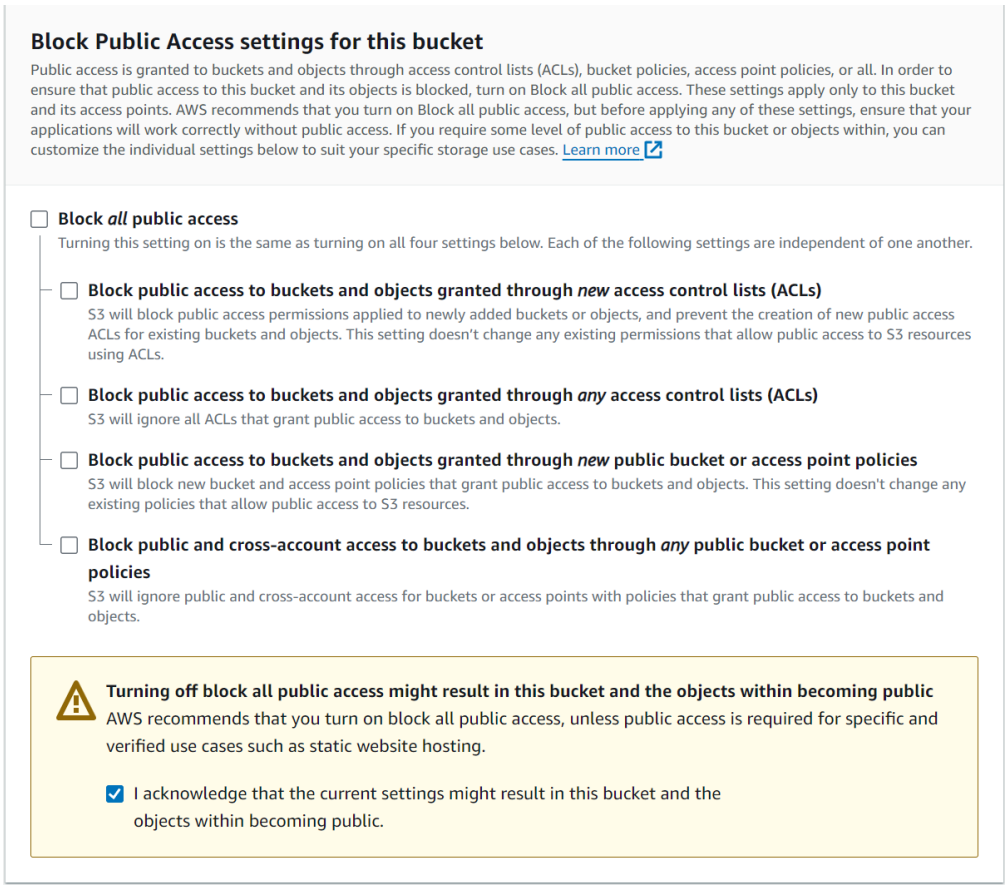
- Next, assign the role to your EC2 instance.
- Go to **EC2** in the console and select your EC2 instance.
- Click on **Actions** > **Security** > **Modify IAM Role**.
- Select the created role from the dropdown menu and click **Update IAM Role**.





Step-4

- Next, create an S3 bucket in AWS. Search for **S3** in the console, click **Create Bucket**, and give it a name. You can leave the rest of the settings as default.
- Uncheck **Block all public access** and click on **Create Bucket** to create the bucket.
- After creating the bucket, go to your EC2 instance and check if the S3 role is assigned properly by running the command `aws s3 ls`. This command will show the list of buckets.




```
[root@ip-172-31-14-184 ec2-user]# aws s3 ls
2024-10-30 16:41:59 bucket-script-ec2
```

Step-4

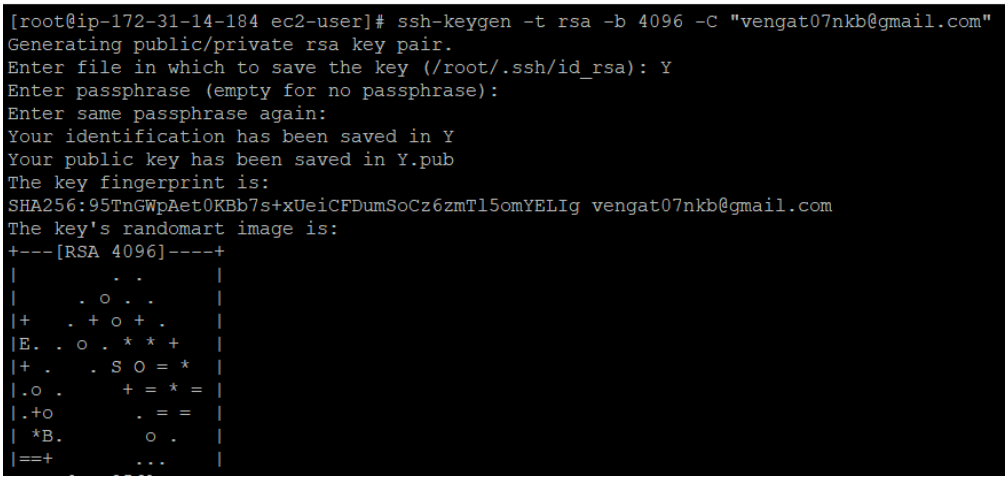
- Now, we need to connect GitHub to our EC2 instance by generating an SSH key.Run the following command to generate the SSH key:

```
bash
Copy code
ssh-keygen -t rsa -b 4096 -C "your_email@exampl
e.com"
```

```
#Replace "your_email@example.com" with your actu
al email address.
```

- Press Enter to save the key. To check the keys, run `ls -l /root/.ssh`, and to see your public key, use `cat /root/.ssh/id_rsa.pub`.

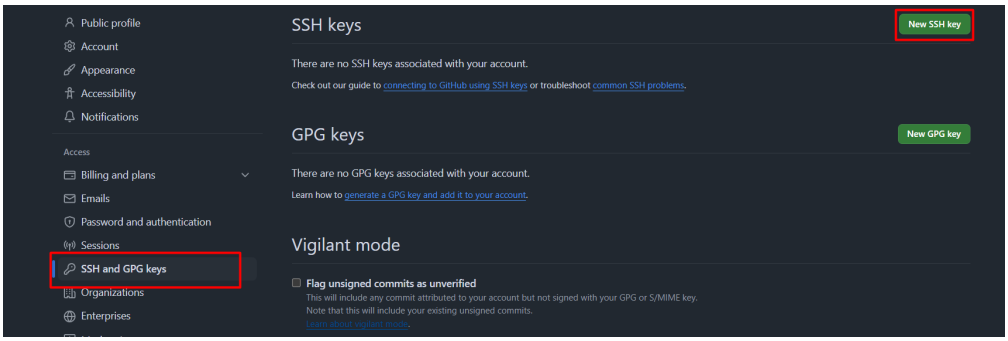
```
ls -l /root/.ssh
cat /root/.ssh/id_rsa.pub
```



Step-5

- Go to your GitHub account, click on **Settings**, and select **New SSH key**.
- Paste the key you copied from EC2.

(Note:Make sure to specify which repository in Github you want to upload to S3)

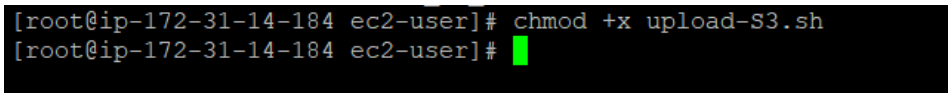


Step-6

- Now, we need to create a script to automate cloning the repository and uploading to S3.
- Below is the script code to execute this.
- **Important**: After creating the file, you need to give it executable permissions using `chmod +x <filename>` for it to run.

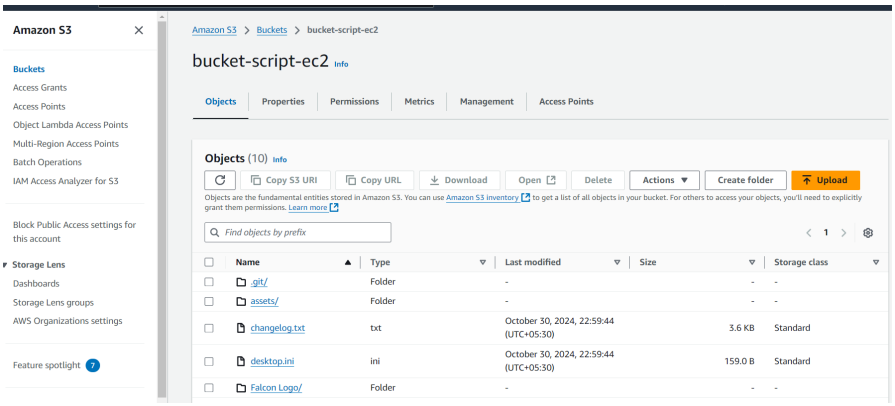
```
#!/bin/bash

# Variables
GIT_REPO_URL="git@github.com:Vengatesh-Bala/Falc
S3_BUCKET_NAME="bucket-script-ec2" # Replace wit
LOCAL_DIR="/tmp/Falcon-Fighters" # Temporary dir

# Step 1: Clone the Git Repository
echo "Cloning the repository from $GIT_REPO_URL
if [ -d "$LOCAL_DIR" ]; then
  rm -rf "$LOCAL_DIR"  # Remove the existing dir
fi

git clone "$GIT_REPO_URL" "$LOCAL_DIR"

if [ $? -ne 0 ]; then
```

```
  echo "Error: Failed to clone the Git repositor
  exit 1
fi

echo "Successfully cloned the repository."

# Step 2: Upload Files to S3
echo "Uploading files to S3 bucket $S3_BUCKET_NA
aws s3 cp "$LOCAL_DIR" "s3://$S3_BUCKET_NAME/" -

if [ $? -ne 0 ]; then
  echo "Error: Failed to upload files to S3."
  exit 1
fi

echo "Successfully uploaded files to S3 bucket $

# Clean up
rm -rf "$LOCAL_DIR"
echo "Deleted the local repository."
```



Step-7

- Run the script using `./filename`.
- You should see that the files are uploaded to your S3 bucket.


Amazon S3
Buckets
Access Grants
Access Points
Object Lambda Access Points
Multi-Region Access Points
Batch Operations
IAM Access Analyzer for S3
Block Public Access settings for this account
Storage Lens
Dashboards
Storage Lens groups
AWS Organizations settings
Feature spotlight 7
Amazon S3 > Buckets > bucket-script-ec2
bucket-script-ec2 Info
Objects
Properties
Permissions
Metrics
Management
Access Points
Objects (10) Info
Copy S3 URI
Copy URL
Download
Open
Delete
Actions
Create folder
Upload
Objects are the fundamental entities stored in Amazon S3. You can use Amazon S3 inventory to get a list of all objects in your bucket. For others to access your objects, you'll need to explicitly grant them permissions. Learn more
Find objects by prefix
Name
Type
Last modified
Size
Storage class
.git/ Folder - - -
assets/ Folder - - -
changelog.txt txt October 30, 2024, 22:59:44 (UTC+05:30) 3.6 KB Standard
desktop.ini ini October 30, 2024, 22:59:44 (UTC+05:30) 159.0 B Standard
Falcon Logo/ Folder - - -