AWS Setup

Create IAM User

- Sign in to the AWS Management Console and open the IAM console at https://console.aws.amazon.com/iam/.
- In the navigation pane, choose "Users".
- Select "Add User", name the user CLI, and select "Programmatic Access"
- Continue with Permissions and choose "Attach existing policies directly" -> "AmazonEC2FullAccess", "IAMFullAccess", and "AmazonS3FullAccess"
- Continue with default settings until you reach the step "Create User"
- To download the key pair, choose Download .csv file. Store the keys in a secure location. You will not have access to the secret access key again after this dialog box closes. Keep the keys confidential.

Setup AWS CLI

- Install AWS-CLI on your computer using `sudo apt install awscli` or follow https://docs.aws.amazon.com/cli/latest/userguide/install-cliv2.html
- Configure AWS: Run `aws configure` and provide the IAM credentials, choose us-east-1 as region and json as output format.
- Create ssh key: `shell script mkdir -p ~/.ssh/ aws ec2 create-key-pair --key-name dlad-aws --query "KeyMaterial" --output text > ~/.ssh/dlad-aws.pem chmod 400 ~/.ssh/dlad-aws.pem`
- Create security group: `shell script aws ec2 create-security-group --group-name dlad-sg --description "DLAD Security Group" aws ec2 authorize-security-group-ingress --group-name dlad-sg --protocol tcp --port 22 --cidr 0.0.0.0/0`
- Create policies, roles, and instance profile to grant permissions to ec2 instances (https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/iam-roles-for-amazon-ec2.html#launch-instance-with-role). This is necessary for aws_stop_self.sh and S3 access from the ec2 instance. `shell script cd path/to/this/repositoy aws iam create-role --role-name dlad-role --assume-role-policy-document file://aws_configs/ec2-role-trust-policy.json aws iam put-role-policy --role-name dlad-role --policy-name EC2-Terminate-Permissions --policy-document file://aws_configs/ec2-terminate-policy.json aws iam put-role-policy --role-name dlad-role --policy-name S3-Permissions --policy-document file://aws_configs/s3-access-policy.json aws iam create-instance-profile --instance-profile-name dlad-instance-profile aws iam add-role-to-instance-profile --instance-profile-name dlad-instance-profile --role-name dlad-role`