

# Connect to a Repository

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## Assignment Overview

This assignment will test the students' overall understanding of working with AWS CodeCommit, connecting to and cloning a repository.

In the IAM console, you can configure Git credentials for AWS CodeCommit repositories, and then use those credentials for HTTPS connections. With a static user name and password, you can also use these credentials with third-party tools and individual development environments (IDEs) that support HTTPS authentication.

## Step1: Initial configuration for CodeCommit

Follow these steps for setting up an Amazon Web Services account, creating an IAM user, and configuring CodeCommit access.

### To create and configure an IAM user for accessing CodeCommit

1. Create an AWS account [here](#) by clicking on **Sign Up**.
2. Create an IAM user in your AWS account, or use an existing one. Ensure that the IAM user has an access key ID and secret access key.
3. Sign in to the AWS Management Console and open the IAM console [here](#).
4. Choose **Users** from the navigation pane of the IAM console, and then select the IAM user you wish to configure for CodeCommit access.
5. Choose **Add Permissions** on the **Permissions** tab.
6. Choose **Attach existing policies directly** in the **Grant Permissions** tab.
7. Select

AWSCodeCommitPowerUser

or another managed policy for CodeCommit access from the list of policies.

After you have selected the policy you want to attach, choose **Next: Review** to review the list of policies to attach to the IAM user. If the list is correct, choose to **Add permissions**.

Use the AWS CLI commands with CodeCommit by installing the AWS CLI.

### Note

CodeCommit requires AWS Key Management Service. Ensure there are no policies associated with the IAM user that restrict the AWS KMS actions required by CodeCommit if you are using an existing IAM user.

**First:** go to the `aws IAM page > users > add user`

**Second:** Ensure that the IAM user has an **access key ID** and **secret access key**.

The screenshot shows the AWS IAM 'Add user' console page. The page has a dark header with the AWS logo, a search bar, and navigation links for various services like EC2, VPC, S3, RDS, etc. The main content area is titled 'Add user' and has a progress indicator with five steps, where the first step is active. The first step is 'Set user details', which includes a text input for 'User name\*' containing 'codecommit' and a link to 'Add another user'. Below this is the 'Select AWS access type' section, which explains that users will primarily access AWS programmatically. It has two checked options: 'Access key - Programmatic access' (which enables an access key ID and secret access key) and 'Password - AWS Management Console access' (which enables a password for console sign-in). Under 'Console password\*', there are radio buttons for 'Autogenerated password' and 'Custom password' (which is selected), followed by a password input field and a 'Show password' checkbox. At the bottom, there are 'Cancel' and 'Next: Permissions' buttons. The footer contains a feedback link, a language selection note, and copyright information for 2022.


**Third:**


- Choose **Add Permissions** on the **Permissions** tab.
- Choose **Attach existing policies directly** in the **Set Permissions** tab.
- Select the **Permissions** for CodeCommit access from the list of policies.
- in this case the Permission is **AWSCodeCommitFullAccess**.


## Add user

1 2 3 4 5


### ▼ Set permissions

 Add user to group




 Copy permissions from existing user

 Attach existing policies directly

Create policy



Filter policies ▼  Showing 3 results

	Policy name ▼	Type	Used as
<input checked="" type="checkbox"/>	 AWSCodeCommitFullAccess	AWS managed	None
<input type="checkbox"/>	 AWSCodeCommitPowerUser	AWS managed	Permissions policy (2)
<input type="checkbox"/>	 AWSCodeCommitReadOnly	AWS managed	None

► Set permissions boundary

Cancel


Previous

Next: Tags




**Forth:** now press the create user button and download the csv file for the credn of the user ( we will need it to connect in the aws cli file

## Add user

1 2 3 4 5

 **Success**  
You successfully created the users shown below. You can view and download user security credentials. You can also email users instructions for signing in to the AWS Management Console. This is the last time these credentials will be available to download. However, you can create new credentials at any time.  
  
Users with AWS Management Console access can sign-in at: <https://568935291733.signin.aws.amazon.com/console>

Download .csv

	User	Access key ID	Secret access key	Email login instructions
►	 codecommit	AKIAY15ZPTNKX5NZZ7OP 	***** <a href="#">Show</a>	<a href="#">Send email</a> 

## Step 2: Creating credentials for Git connections via HTTPS

You need to create Git credentials for your IAM user after installing Git.

### *\*To set up HTTPS Git credentials for CodeCommit\**

1. Log in to the AWS Management Console and open the IAM console [here](#). Verify that you are logged in as the IAM user that will create and use the Git credentials for connections to CodeCommit.
2. Select your IAM user from the list of users in the **Users** section of the IAM console.
3. Select the **Security Credentials** tab, and then choose to **Generate** in the **HTTPS Git credentials for the AWS CodeCommit** section.

**Figure 1 \*CodeCommit Console\***



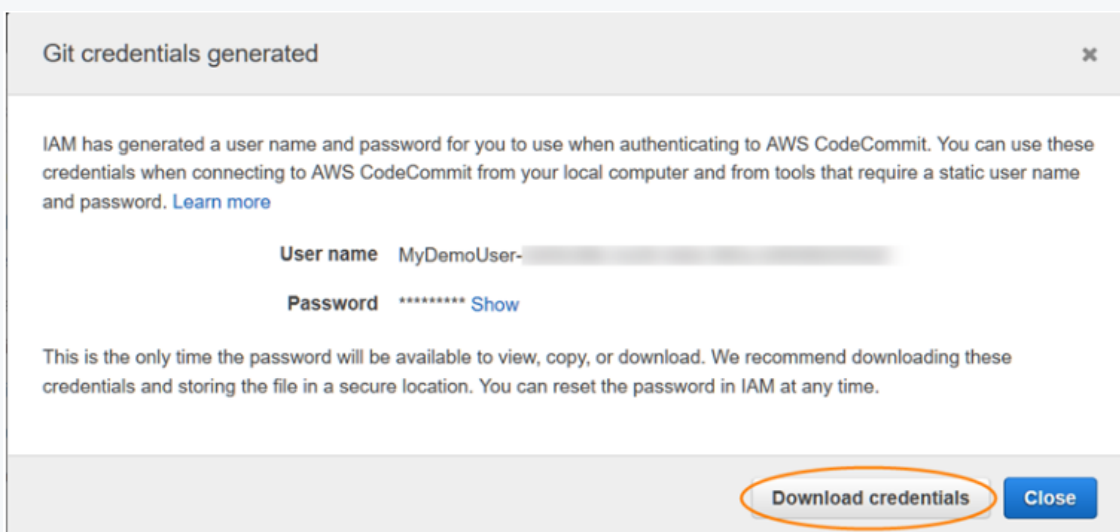
Note: *CodeCommit Console*. AWS CodeCommit User Guide. Retrieved April 20, 2022, from <https://docs.aws.amazon.com/codecommit/latest/userguide/setting-up-gc.html>.

#### Note

Your CodeCommit credentials can be viewed and managed directly in My Security Credentials.

\4. IAM will generate a user name and password for you. You can copy and paste this information into a secure file on your local computer, or you can download it as a .CSV file by choosing **Download credentials**. This information is required to connect to CodeCommit.

Figure 2 \*CodeCommit Console\*



Note: *CodeCommit Console*. AWS CodeCommit User Guide. Retrieved April 20, 2022, from <https://docs.aws.amazon.com/codecommit/latest/userguide/setting-up-gc.html>.

\5. After saving your credentials, choose **Close**.

#### Important!

This is your only chance to save your username and password. If you don't save them, you can copy the user name from the IAM console, but you won't be able to see the password. To view the password in that case, you must first reset it.

**First:**

- Select your IAM user from the list of users in the **Users** section of the IAM console.
- Select the **Security Credentials** tab, and then choose to **Generate** in the **HTTPS Git credentials for the AWS CodeCommit** section.

Generate credentials

×

✔ Your new credentials are available

Save your user name and password now (or download a credentials file).

This is the only time the password can be viewed or downloaded. You cannot recover it later. However, you can reset your password at any time.

You can use these credentials when connecting from your local computer or from tools that require a static user name and password. [Learn more](#)

User name	codecommit-at-568935291733	📋
Password	*****	Show

⬇️ Download credentials

Close

### Step 3: Connect to the CodeCommit console and clone the repository

If an administrator has already provided you with the name and connection details for the CodeCommit repository, you can skip this step and go directly to cloning the repository.

#### To connect to a CodeCommit repository

1. Visit [here](#) to open the CodeCommit console
2. Choose the AWS Region in which the repository was created in the region selector. Repositories are specific to an AWS Region.
3. Choose the repository you want to connect to from the list. Choose

Clone URL

and then the protocol you want to use to clone or connect to the repository. Your Clone URL will be copied.

- You will need to copy the HTTPS URL if you are using Git credentials with your IAM user or the credential helper included with the AWS CLI.
- When using the **git-remote-codecommit** command on a local computer, copy the HTTPS (GRC) URL.
- If you are using an SSH public/private key pair with your IAM user, copy the SSH URL.

#### Note

You will see the **Welcome** page instead of a list of repositories if no repositories are associated with your AWS account in the AWS Region where you are logged in.

4. Launch a terminal, command line, or Git shell. Run the **git clone** command with the HTTPS clone URL you copied. This will clone the repository. As an example, to clone a repository named `MyDemoRepo` into a local repository named `my-demo-repo` in the US East (Ohio) Region:

```
1 git clone https://git-codecommit.us-east-2.amazonaws.com/v1/repos/MyDemoRepo
   my-demo-repocopy
```

The repository's user name and password are required the first time you connect. Depending on your computer configuration, this prompt could appear from an operating system credential system (for instance, Keychain Access for macOS), from an embedded credential manager (for instance, Git Credential Manager included with Git for Windows), or from Git itself. Create an IAM user name and password for Git credentials (the ones you created in **Step 3: Creating Git credentials for HTTPS connections**). Depending on your operating system and other software, your credentials may be stored in a credential store or credential management tool. In that case, you will not be prompted again unless you change the password, deactivate the Git credentials, or delete the Git credentials from IAM.

You can install a credential store or credential management utility on your local computer if you don't have one already.

**First :** Switch to the IAM user Created earlier

**Then** connect via any SSH platform and configure the IAM user credentials

**The CMD Run** `aws configure --profile codecommit` and Enter the credentials for the IAM user you created earlier and the region

**Second:** Go to the aws CodeCommit page chose the repository and follow the connection steps:

- Run `git clone https://git-codecommit.me-south-1.amazonaws.com/v1/repos/MyFirstRepo` to clone repository

```
~\AWS CodeCommit > git clone https://git-codecommit.me-south-1.amazonaws.com/v1/repos/MyFirstRepo
Cloning into 'MyFirstRepo' ...
warning: You appear to have cloned an empty repository.
~\AWS CodeCommit > ls

Directory: C:\Users\MohanadSinan\AWS CodeCommit

Mode                LastWriteTime         Length Name
----                -
d-----            8/4/2022  11:46 AM                MyFirstRepo

~\AWS CodeCommit > cd .\MyFirstRepo\
~\..\MyFirstRepo > ls
~\..\MyFirstRepo > ls
```