



Package an App with CodeBuild



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Project created
You have successfully created the following project: nextwork-web-build

Create a notification rule for this project X

Developer Tools > CodeBuild > Build projects > nextwork-web-build

nextwork-web-build

Actions ▾ Create trigger Edit Clone Debug build Start build with overrides Start build

Configuration

Source provider GitHub	Primary repository miguelhhuerto/nextwork-devops-webapp	Artifacts upload location nextwork-build-artifacts-miguel	Service role <code>arn:aws:iam::084828560751:role/service-role/codebuild-nextwork-web-build-service-role</code>
Public builds Disabled			

Build history Batch history Project details Build triggers Metrics

Build history Stop build View artifacts View logs Delete builds Retry build

Introducing today's project!

What is AWS CodeBuild?

AWS CodeBuild is a fully managed service that compiles code and runs tests

How I used CodeBuild in this project

Today I used CodeBuild to compile and test my project.

One thing I didn't expect in this project was...

I didn't expect the number of roadblocks I would hit in the project.

This project took me...

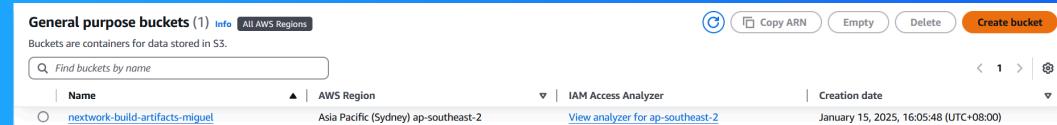
1 hour and 30 minutes.

Set up an S3 bucket

I started my project by creating an S3 bucket because I want this bucket to be the storage of the build artifact.

The key artifact that this S3 bucket will capture is called a WAR file, or Web Application Archive, or Web Application Resource

This artifact is important because it contains all resources that a server could need to host our web app



Set up a CodeBuild project

Source

My CodeBuild project's Source configuration specifies the location of the code which CodeBuild will fetch, and package into a WAR file. and I selected GitHub

Environment

My CodeBuild project's Environment configuration means the configurations for all the software and settings that the web app needs to run properly, and I selected On-demand, Managed image, EC2, and Standard.

Artifacts

My CodeBuild project's Artifacts configuration means the files that CodeBuild will generate while building the project and I selected S3 as the storage for it.

Logs

My CodeBuild project's Logs configuration means I will allow the tracking of CloudWatch Logs on this project, and I selected to enable it.

Create a buildspec.yml file

I created a buildspec.yml file in my project because this tells CodeBuild what code to run line by line in building the web app.

```
! buildspec.yml
1   version: 0.2
2
3   phases:
4     install:
5       runtime-versions:
6         java: corretto8
7     pre_build:
8       commands:
9         - echo Initializing environment
10        - export CODEARTIFACT_AUTH_TOKEN=`aws codeartifact get-authorization-token --domain nextwork --domain-owner 084828560751` --query au
11    build:
12      commands:
13        - echo Build started on `date`
14        - mvn -s settings.xml compile
15    post_build:
16      commands:
17        - echo Build completed on `date`
18        - mvn -s settings.xml package
19    artifacts:
20      files:
21        - target/nextwork-web-project.war
22      discard-paths: no
23
```

Create a CodeBuild build project

My buildspec.yml file has four stages

The first two phases in my buildspec.yml file are install and pre-build.

The third phase in my buildspec.yml file is the build phase.

The fourth phase in my buildspec.yml is the post-build.

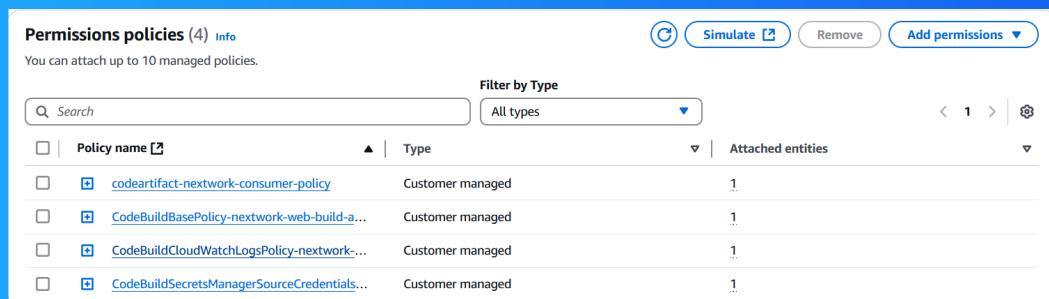
Modify CodeBuild's IAM role

Before building my CodeBuild project, I modified its service role first.

My project's service role was first created when setting up CodeArtifact.

I attached a new policy called codeartifact-nextwork-consumer-policy

Attaching this policy means allowing services to access the resources in CodeArtifact.



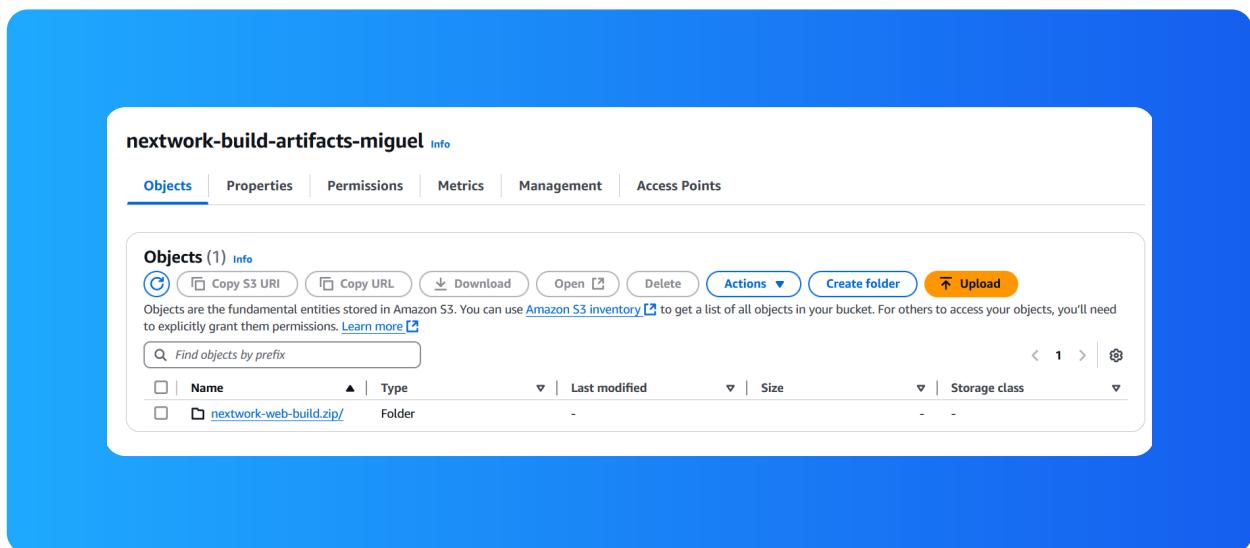
My first project build □

To build my project, all I had to do was go to CodeBuild and click 'StartBuild'

The build process in CodeBuild took more than a few minutes.

Once the build is complete, I checked the S3 bucket for the Build Artifacts.

I saw nextwork-web-project.zip, which verified that the build was completed successfully.





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