DATE : 26.02.2025

DT/NT : DT

LESSON : AWS

SUBJECT: SDK-BOTO3-CLOUD9

BATCH : B 303

AWS-DEVOPS

TECHPRO EDUCATION

techproeducation.com +1 (585) 304 29 59

Table of Contents

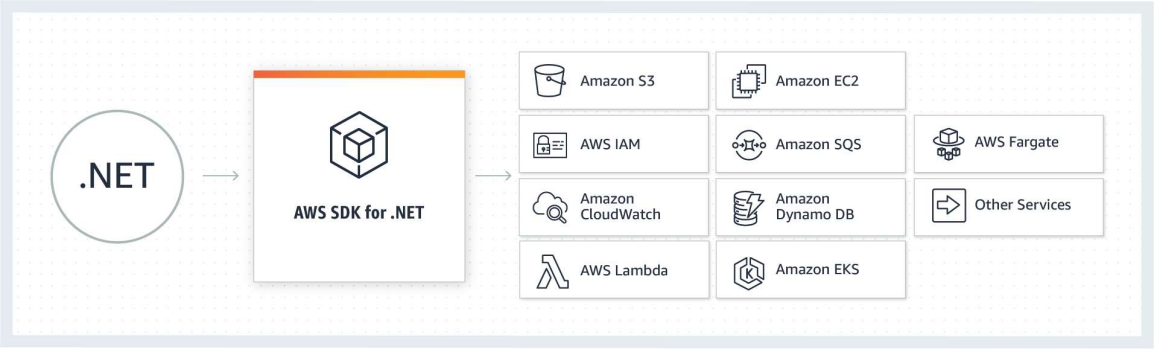
SDK
(Software Development Kit)

Software Development Kit(SDK)

The AWS SDK (Amazon Web Services Software Development Kit) is a set of tools and libraries that enable developers to programmatically access and use various services available on Amazon Web Services within their applications.

Software Development Kit(SDK)

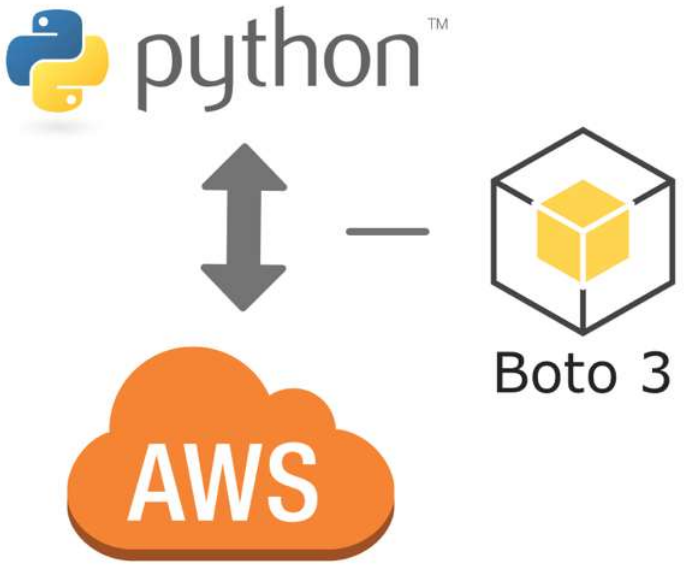
AWS SDKs simplify the complex API calls required to interact with AWS services. For example, uploading files to Amazon S3, performing database operations on Amazon DynamoDB, or managing Amazon EC2 instances becomes much easier with SDKs.



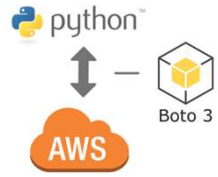
Software Development Kit(SDK)

AWS SDKs are available for popular programming languages, so developers can easily integrate AWS services in their preferred languages.

BOTO3

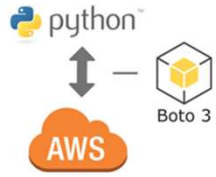


AWS SDK for Python (Boto 3)



AWS SDK for Python, known as "Boto3", is an official library for the Python language designed to access, manage, and use AWS services. Boto3 provides a rich set of APIs written in the Python programming language to interact with services from Amazon Web Services' vast catalogue. This library can be used to interact with almost any service available on AWS (such as Amazon S3, Amazon EC2, Amazon DynamoDB, Amazon SQS, Amazon SNS, and more).

AWS SDK for Python (Boto 3)

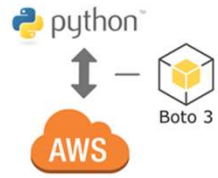


Features:

Easy to Use: Boto3 provides a simple and intuitive API for working with AWS services. Developers can use the natural syntax of the Python programming language to access and manage AWS services.

Comprehensive Support: Covers AWS's wide range of services and is updated as new services and features are added, enabling developers to take advantage of AWS's latest innovations.

AWS SDK for Python (Boto 3)



Features:

High-Level and Low-Level Interfaces: Boto3 provides both high-level (Resource) and low-level (Client) interfaces for interacting with AWS services. High-level interfaces provide a more abstract interaction, while low-level interfaces offer more control and flexibility.

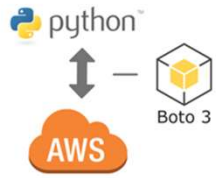
AWS SDK for Python (Boto 3)

Features:

Automated Configuration Management: AWS credentials and configuration settings can be automatically managed through a variety of methods (e.g., environment variables, configuration files, IAM roles, etc.), which simplifies security implementations.

Error Management: Provides helpful tools for handling errors returned from AWS services, which simplifies the debugging process.

AWS SDK for Python (Boto 3)



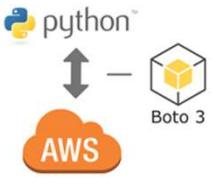
How to use it:

To start using Boto3, you first need to install the boto3 package via pip on a system with Python installed.

pip install boto3

You can then configure and use Boto3 with the AWS credentials (AWS Access Key ID and Secret Access Key) required to interact with AWS services.

AWS SDK for Python (Boto 3)




```python
import boto3

# S3 hizmeti için bir resource oluştur
s3_resource = boto3.resource('s3')

# Mevcut tüm bucket'ları listele
buckets = s3_resource.buckets.all()

# Bucket isimlerini yazdır
for bucket in buckets:
    print(bucket.name)
```

TECHPRO EDUCATION

CLOUD9

The Easy Way to Develop in the Cloud

TECHPRO EDUCATION

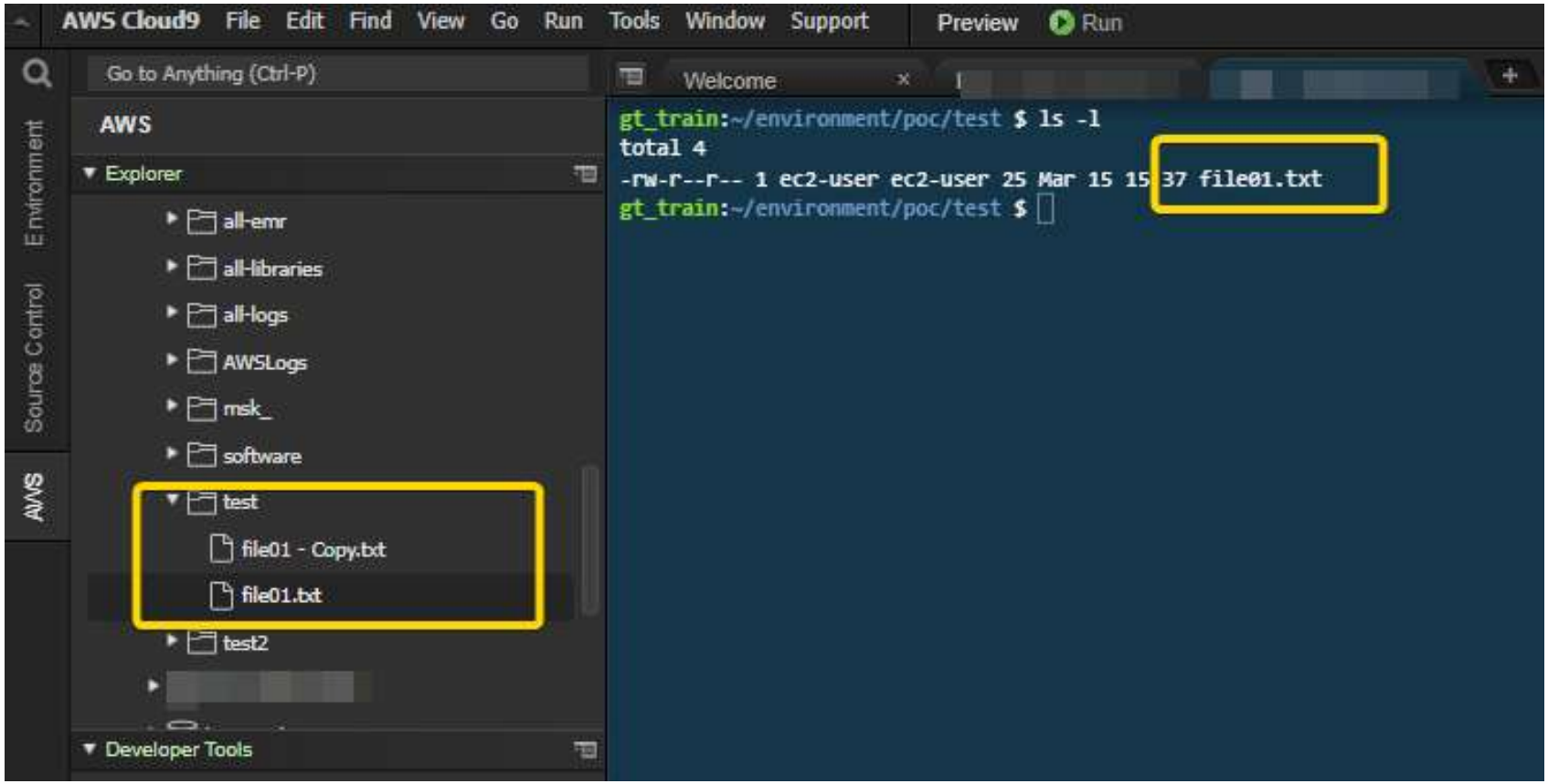
CLOUD9

AWS **Cloud9** is a cloud-based integrated development environment (IDE) from Amazon Web Services (AWS). It provides a platform for developers to write, run and debug code directly from a web browser.

CLOUD9

Cloud9 runs on AWS cloud infrastructure and offers integration with a wide range of AWS services and tools, allowing developers to easily develop, test and deploy applications on AWS.

CLOUD9


AWS Cloud9 File Edit Find View Go Run Tools Window Support
Preview
Run
Go to Anything (Ctrl-P)
Welcome
AWS
Explorer
all-emr
all-libraries
all-logs
AWSLogs
msk_
software
test
file01 - Copy.txt
file01.txt
test2
Developer Tools
Environment
Source Control
AWS
gt_train:~/environment/poc/test $ ls -l
total 4
-rw-r--r-- 1 ec2-user ec2-user 25 Mar 15 15:37 file01.txt
gt_train:~/environment/poc/test $

CLOUD9

Features:

Browser Based Coding: Cloud9 allows you to write, run and debug code directly from your web browser without requiring any additional software installation. This makes your development environment accessible from anywhere and any computer.

CLOUD9

Features:

Automatic AWS Configuration: Cloud9 automatically configures the AWS credentials and access management you need when developing using AWS services. This simplifies security and access configuration when working with AWS resources.

CLOUD9

Features:

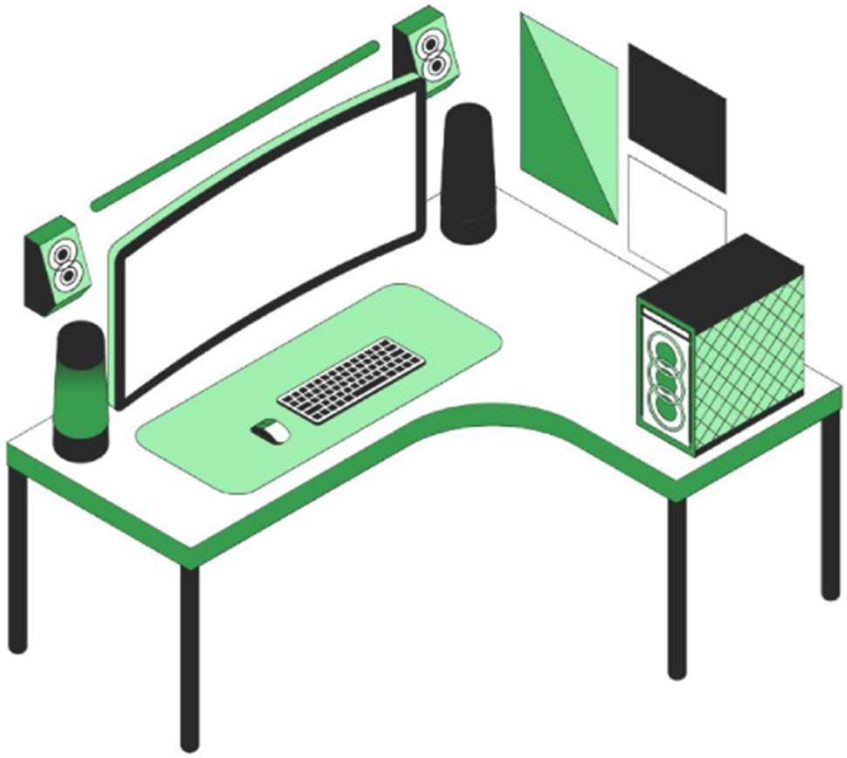
Integrated Debugging: Cloud9 includes built-in debugging tools for popular programming languages, allowing you to run your code step-by-step and easily find and fix bugs.

Flexible Work Environment: Developers can customise their work environment according to their own needs. Cloud9 offers support for multiple programming languages and frameworks and integrates popular development tools and terminals.

CLOUD9

Features:

Collaborative Coding: Cloud9 offers collaborative editing features that allow team members to work together on the same codebase in real-time. This is ideal for teams working remotely.



Do you have any questions?

Send it to us! We hope you learned something new.