AWS SDK for Python Boto3
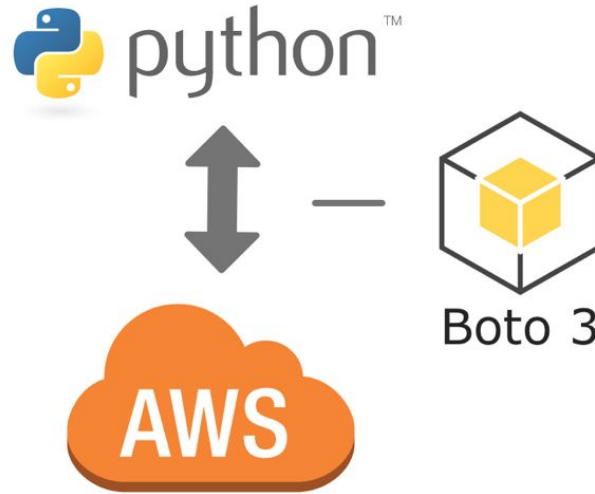
Boto3

Boto3 is the **AWS SDK** (Software Development Kit) for **Python**. It enables you to create, update, and delete AWS resources with your **Python scripts**. It is basically a **Python library**.

CLARUSWAY
WAY TO REINVENT YOURSELF

Boto3

Installation

`pip install boto3` (pip3 install boto3 for Python3)

Configuration / Credentials

`aws configure` >> **if AWS CLI installed**

`~/.aws`

`config  credentials` >> **if AWS CLI not installed**

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- A session initiates the connectivity to AWS services. A default session uses the default credential profile(e.g. ~/.aws/credentials, or assume your EC2 using IAM instance profile)

Default session

Custom session

```python
import boto3

# Using the default session
sqs = boto3.client('sqs')
s3 = boto3.resource('s3')
```

```python
import boto3
import boto3.session

# Create your own session
my_session = boto3.session.Session()
```

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Boto3
Client vs Resource

Client

- Low-level AWS service access
- Exposes botocore client to the developer
- Supports all AWS service operations

`s3 = boto3.client('s3')`

Resource

- Higher-level, object oriented API
- Exposes sub processes of AWS resources
- Does not provide 100% coverage of AWS API

`s3 = boto3.resource('s3')`

Boto3
Using Boto3

```python
import boto3

# Use Amazon S3
s3 = boto3.resource('s3')

# Print out all bucket names
for bucket in s3.buckets.all():
    print(bucket.name)

```

Boto3
Using Boto3

```python
import boto3

# Use Amazon S3
s3 = boto3.resource('s3')

# Upload a new file
data = open('test.jpg', 'rb')
s3.Bucket('my-bucket').put_object(Key='test.jpg', Body=data)
```

THANKS!

Any questions?

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