What is boto3?

Boto is a python package that provides a programmatic access connectivity to AWS.

AWS has become a leader in cloud computing. We have different ways to automate any task or to automate AWS Infrastructure provisioning.

1. Shell Scripting

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| --- | --- |
| To see list of IAM users in AWS? | $aws iam list-users |
| To see only list of user names | $aws iam list-users | awk –F user/ ‘ { print $2} ‘ | aws ‘ { print $1} ’ |
| To list group of IAM | $aws iam list-groups-for-user –user-name username |
| To list user form the group | $aws iam list-groups-for-user –user-name username awk –F group/ ‘ { print$2 } ’ |awk ‘ { print $1 } ’ |
| To see username |  |

1. Python Scripting

(These two with AWSCLI commands)

Python scripting with boto3

* Boto3 is the name of the python open source SDK/module/package for AWS.
* It allows you to directly create, Update, and delete AWS resources from your python scripts.
* It’s completed in many ways but is rich SDK for AWS.
* Boto3 written on top of botocore which is low-level interface to the AWS API.
* Botocore is the basics for the AWS-CLI which is also written in python.
* Compare to botocore, boto3 contains a lot of great object and methods to easily work with any of AWS Service.

Installation of boto3 module?

* Pip install boto3
* #pyhotn
* >>import boto3
* >>import botocore

How to use boto3 for s3 service?

The core concept of boto3 are:

* Resource :Higher-level object to access AWS services
* Client : Low-level object to access AWS services
* Meta : Object to enter into client object from resource object.
* Session : It stores Configuration state and allows you to create AWS service resources objects and client’s objects. (object to get connect with particular AWS account or IAM User account )
* Collections : a tool to iterate and manipulate groups of resources.
* Paginators : Automatic paging of responses.
* Waiters : a way to block until a certain state has been reached.

First two important steps to write python boto3 scripts for AWS