**README:**

**Script Name :** AWS\_snapshot\_restore\_by\_date&time.py

**Scope :**  AWS hosted EC2 servers across all projects who leverages AWS snap native backup and snapshot uses same tagging as servers/VMs

**Functionality :** Automize Restoration of AWS snapshot (backups) to the source server to a specific date and time (script runs in UTC)

**Prerequisite:**

* Download & Install “Python 3.7 (and above) in the system/server from where the script will run
  + <https://www.python.org/downloads/>
  + <https://realpython.com/installing-python/>
* Install boto3 (AWS) SDK for python
  + pip install boto3
* Authenticate with respective AWS account (by one of the following methods)
  + Either use AWS keys (access key and secret access key)

**OR**

* Use role based access mechanism if management server (server/instance from which script will run) is in AWS account

**Guidelines to run the Script**

Script is written in python 3.7.4 , it is required boto3 module to be configured and connection with AWS account a must need

Once you run the script , following 2 steps(input) has to be given

1. Mention the instance id for which restoration needs to be initiated

2. Mention the specific date in "YYYY-MM-DD HH" format for which you want to restore the data. As an example i Want restore snap which was taken on 27th August 2019 @09 AM , then I need to pass on "2019-08-27 09" as the input parameter value ( script uses UTC as default time zone )



**Steps Script will Execute**

* Script will create volumes from the snaps which was created on the above given date and time.
* All new volumes will have tag values taken from ec2 instance- same tag as ec2 source instance has.
* Existing volumes which are already attached with the server/source instance will get detached and new volumes will be attached with same device address, ie - xvda, xvdc, etc.
* Start/Power-On the server

**Limitations**

* Script only can be used where Snapshots has same tagging values as source server has
* Script only can be used where snaps are created from source volume and the source volumes are current volumes attached in the server. As an example: if the snaps you want to restore are created from a different volumes other than the ones are currently associated, in that case this script wouldn’t work.