



Gauntlet Interview

Python assignment:
Cloud security misconfigurations in an
AWS test environment

Python Assignment

Goal of the assignment: Write a python script to identify misconfigured resources in a test Amazon Web Services (AWS) environment using the module "Boto3".

Task Details: For this assignment, we have chosen 3 services in AWS: S3 buckets, RDS and Security Groups. Following are the steps to be followed to complete the assignment:

1. Create an AWS account
2. Create an S3 bucket with following configurations:
 1. Publicly accessible
 2. Logging disabled
 3. Versioning disabled
3. Create RDS instances:
 1. Publicly accessible
 2. No delete protection
 3. Backup disabled
4. Create a Security Group:
 1. Publicly accessible mongo db port
 2. Unrestricted access to SSH
5. Create an IAM user with 'security-audit' permission and generate IAM access keys
6. Write a python script using boto3 module to identify the below security misconfigurations in the AWS account:
 1. Publicly accessible buckets and RDS instance
 2. Buckets with logging and versioning disabled
 3. RDS instances without delete protection and backup enabled
 4. Security groups allowing public access to SSH and mongodb port
7. [Optional] Document a vulnerability report