## Escape Room

Our goal is to assess your technical strengths, your ability to problem solve and troubleshoot. **Need help? vstoyko@paloaltonetworks.com**

**General instructions:**

* Get as far as you can.
* Feel free to ask questions at any time.
* We will check in on progress in 4 hours from the time you confirm receipt.
* Feel free to install any tools you may need on the provided VM.
* The development can be done locally and then transferred into the VM.
* You will be judged **only on what you were able to complete within the VM.**
* You can work on the tasks in any order.

**SSH into your test instance:**

**Public DNS: ec2-3-235-85-40.compute-1.amazonaws.com**

**Username: ec2-user**

**Secret ID (for .pem file): Shared via Zoom**

**Target goal overview:**

Build a solution that consists of the API script, a database and kubernetes deployment.

Two API calls must be made programmatically. The output of the second API call (compliance endpoint) should be saved to a database. Kubernetes deployment should consist of two pods:

* Pod one - runs an API script.
* Pod two - hosts a database (of your choosing) that would receive and persist the output of the API script.

**Tasks details in recommended order:**

1. Write code that makes two API calls and outputs the retrieved data.

First API call (“/login” endpoint) outputs the token that serves as an authentication mechanism for the second API call. Second API call outputs a JSON object that should eventually be stored in the database.

The API calls should be written in a programming language of your choice but not including bash, sh, powershell, etc. In general avoid scripting languages besides more full fledged languages like python, ruby, and others (3rd or 4th gen programming languages).

Both API calls have the same base URL but two different endpoints (see API docs below).

**Base URL: https://wgyl9brnpk.execute-api.us-east-1.amazonaws.com/prod**

**Credentials necessary for “/login” endpoint (first API call):**

* **Access Key ID: testuser**
* **Secret Access Key: testpassword**

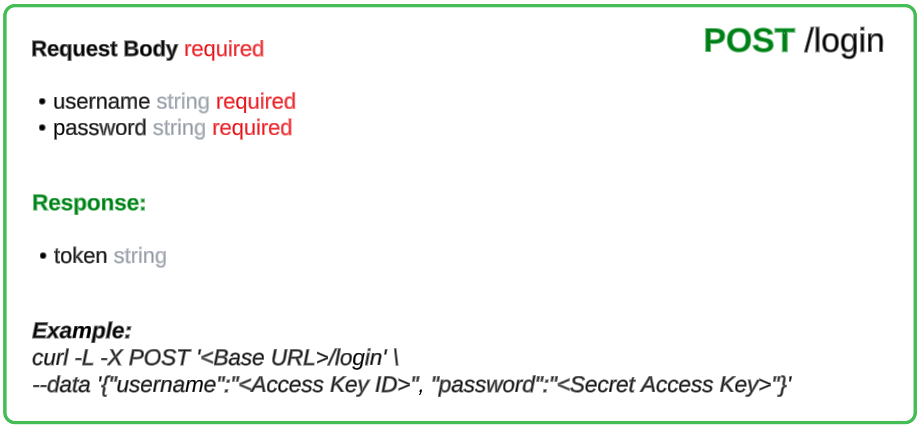
Documentation for the required API calls is below.

1. Take the script you just wrote and create an image/container to run this script. This will become the “API pod”.
2. Spin up a kubernetes cluster running locally on the host. You can use minikube or anything similar, it just needs to be running k8s.
3. Configure a pod for the database or any data storage as a second pod. This pod should be networked so that the “API pod” can reach it.
4. Modify the script so that the API call writes to the “database pod” to store the data. Try to choose specific fields from the API response and store them in the database.

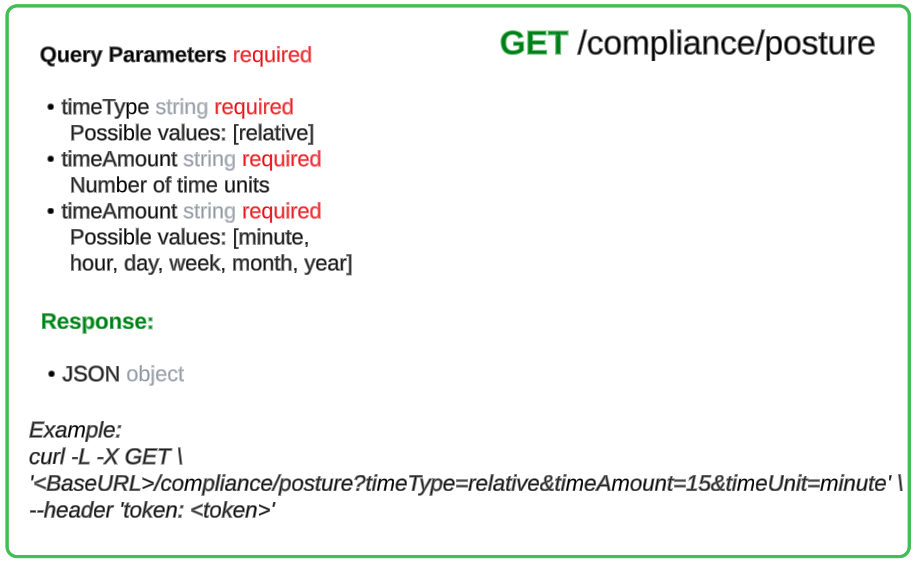
Good luck! Please do not hesitate to reach out for any clarifications.

**API Documentation:**

* **Login endpoint:**



* **Compliance Endpoint:**

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