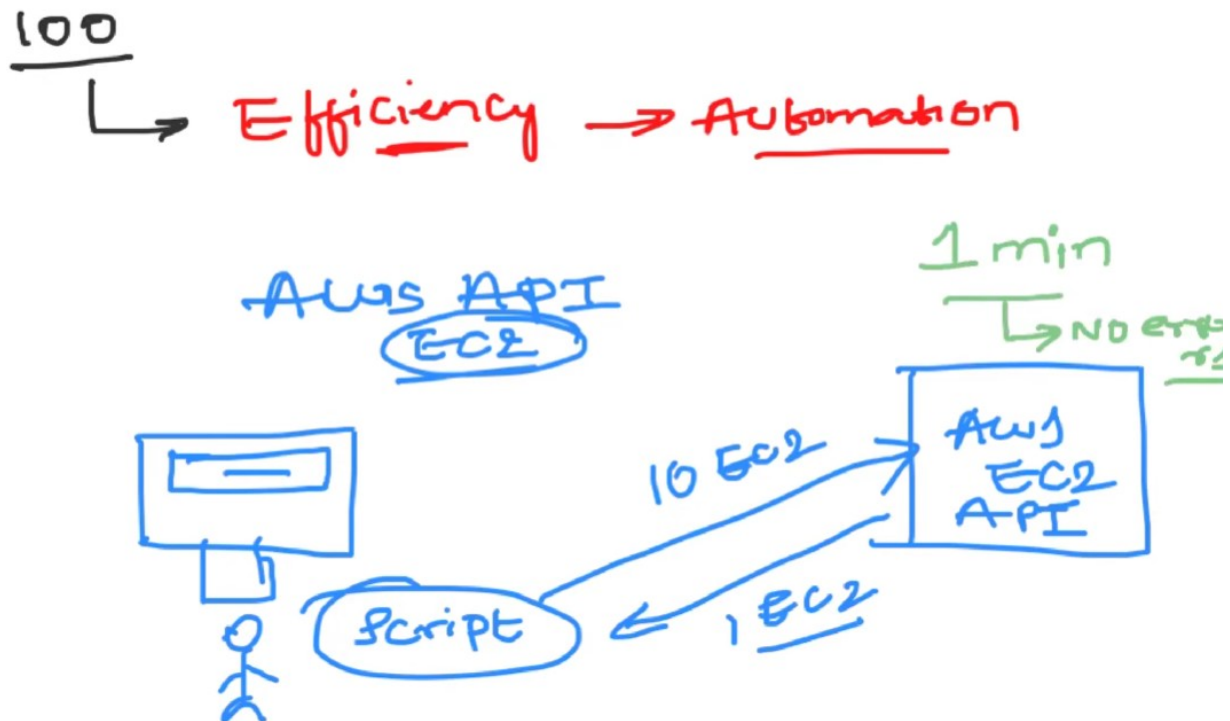


Day 4 - How to create Virtual Machines ?

- In AWS, we can create VM in web browser from aws console UI, in return we will get the IP address and related specifications of that VM through console UI.
- In Azure, we can create VM in web browser from Azure portal, in return we will get the IP address and related specifications of that VM through Azure Portal.
- if the user want to create 100nos of VM's daily its possible to create through Console \ portal, but its not efficient.
- to create VM's efficiently we can use AWS E2 API, using script. by this we can create N Number of VM's easily.

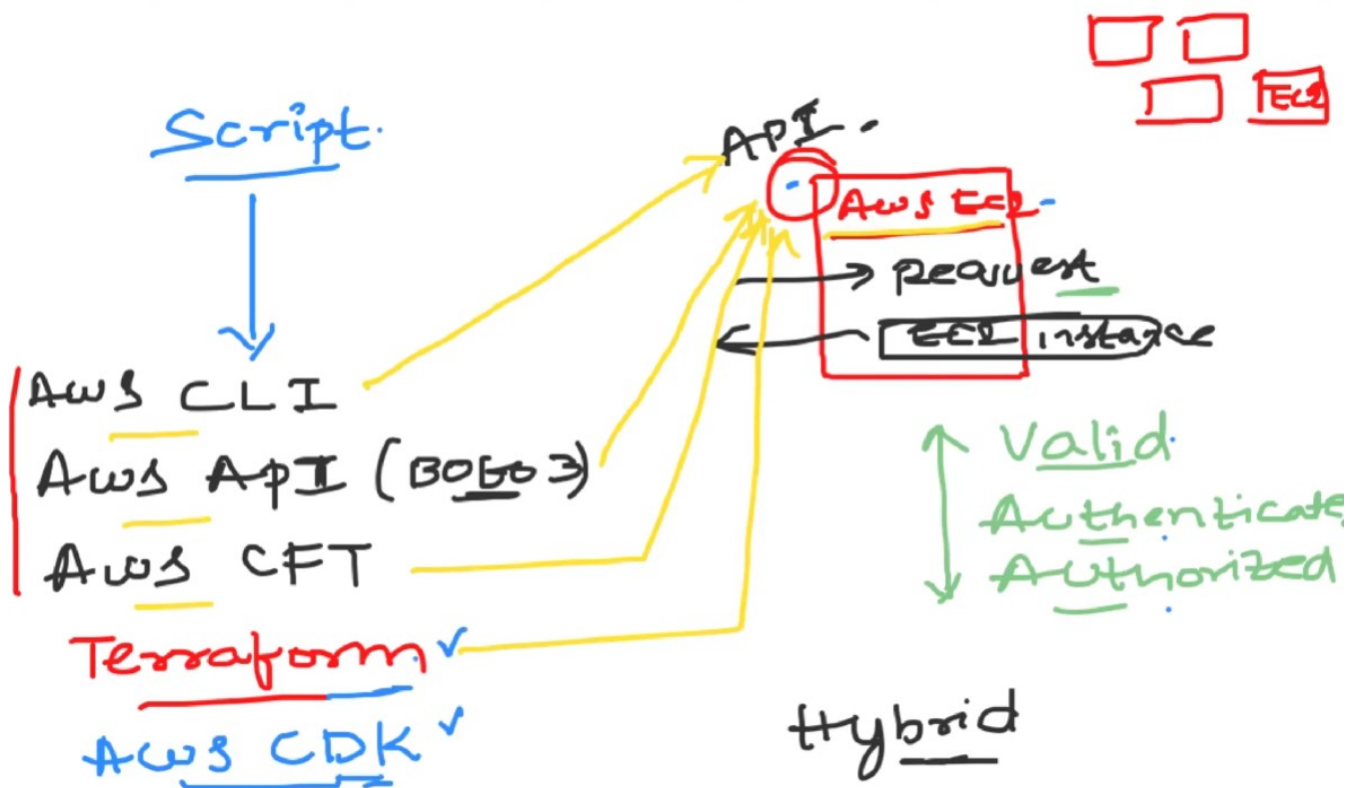


- when we make a request to AWS EC2 API, if the request is Validation(valid format), Authentication(AWS Access) & Authorization(access to create VM).

What is a Script ?

Script is a piece of code used in CLI to Call API. Scripting is **a way to automate tasks using simple scripting tools**. Scripts can be used to manage cloud resources, such as starting and stopping EC2 instances, performing backups, and expanding or contracting cloud capacity.

- AWS CLI
- AWS CFT(Cloud Formation Templates)
- AWS API(REST API)
- Using python we can use Boto 3 API
- Terraform(Any cloud), used in hybrid cloud model()
- AWS CDK(Cloud Development Kit) **NEW**



Creating AWS VM !

- Create an AWS free tier Account, login using the credentials.
- click on EC2 service, go to instances and click on launch instances.
- Name the VM(test), Choose an OS(Ubuntu), select free tier(Restricted resources) eligible in Instance Type.
- Create a new key value pair(test2256), select RSA key type and pem format.(PEM is for Mobaxterm/ OpenSSH & PPK is for PuTTY)
- click on create key value pair, which saves in local system.
- leave rest as it's, Launch the Instance simply.
- after couple of minutes AWS VM is created succersfully, now you can login from either UI or in terminal using key value pair.
- Public IP and SHH should be enabled

HOW TO LAUNCH EC2 INSTANCE FROM WINDOWS LAPTOP ?

- Open Instances in AWS Console,
- Download Mobaxterm, Click on Home edition & Then Installer Edition
- Install the EXE File by extracting files
- Agree, Next, Finish, Succesfully Installed
- Copy the IP Address of the VM Instance, Go to the sessions in Mobaxterm, select SHH, Paste the IP Address and anme the user of VM.
- Click on use private key, select the private key that you are downloaded, click on OK an accept it.