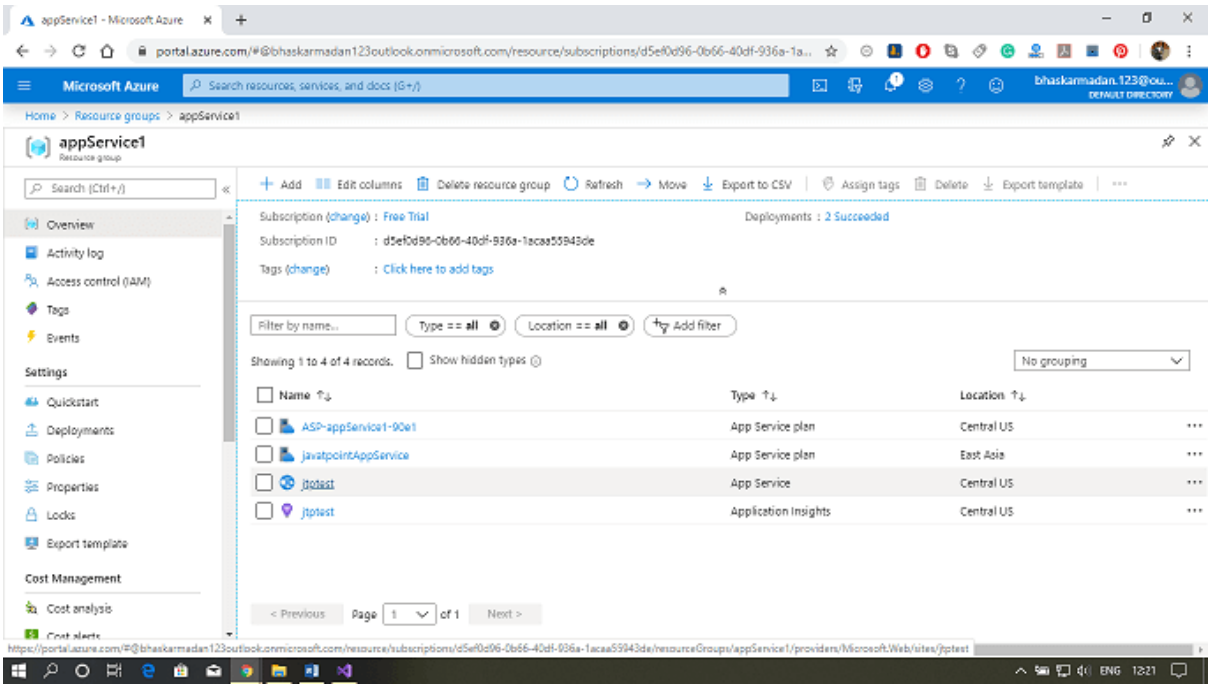
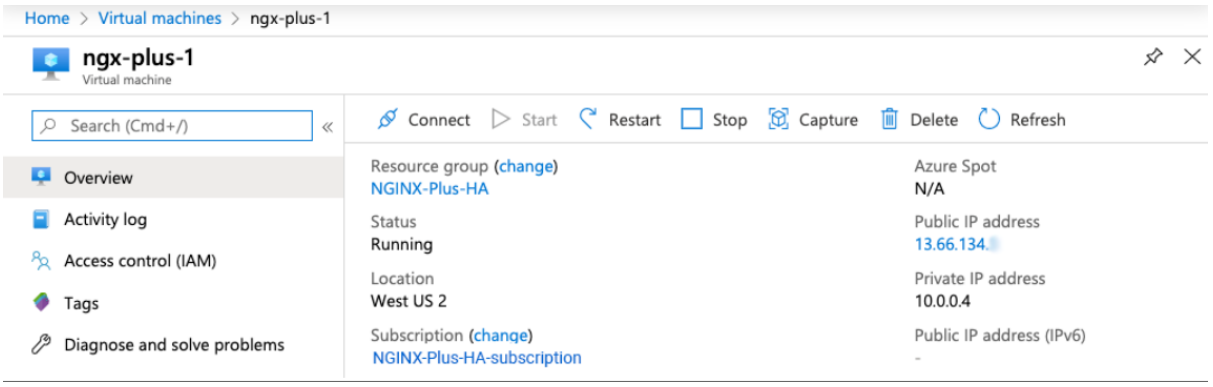
# CI/CD documentation using Azure DevOps and Azure portal

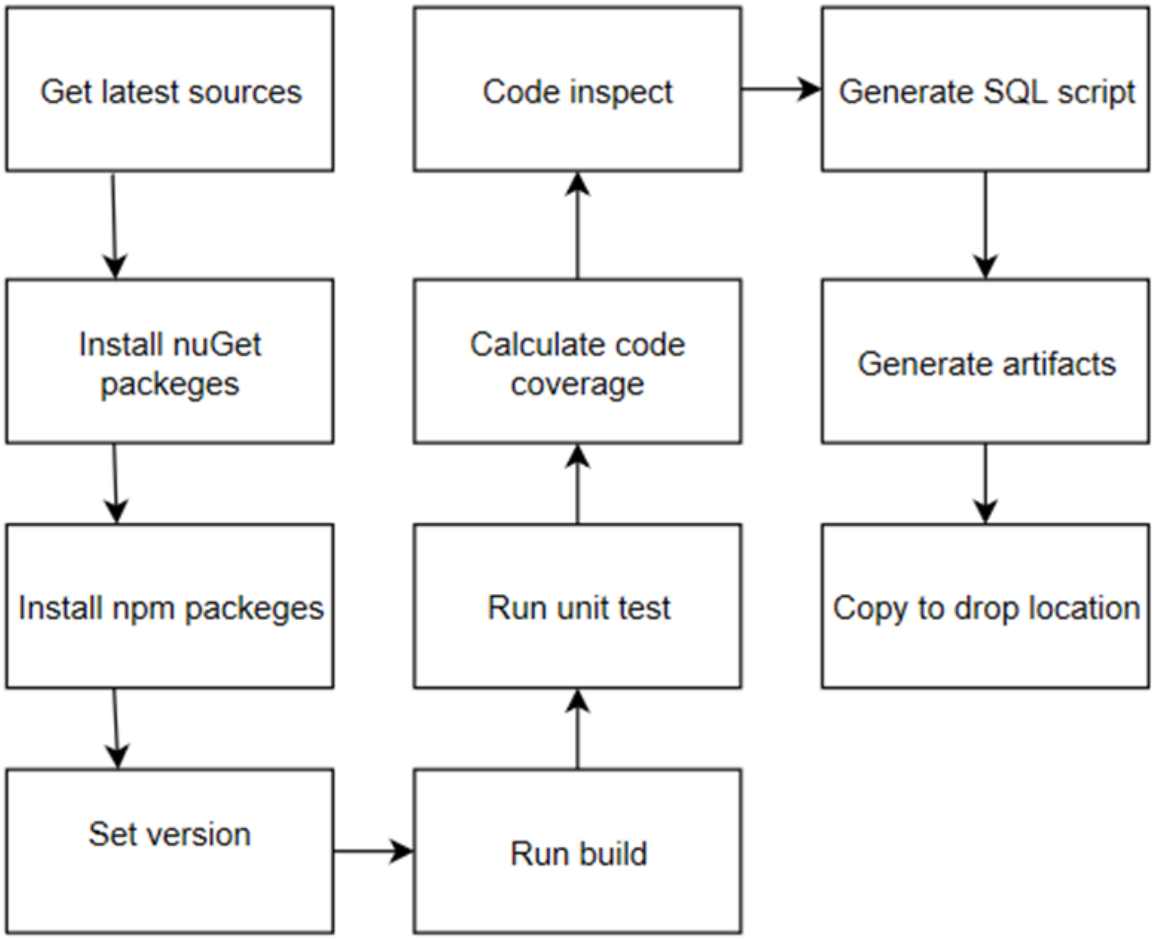
We create CI/CD on Azure DevOps and deploy it to VM and WebApp on Azure portal, before it create all needed resources



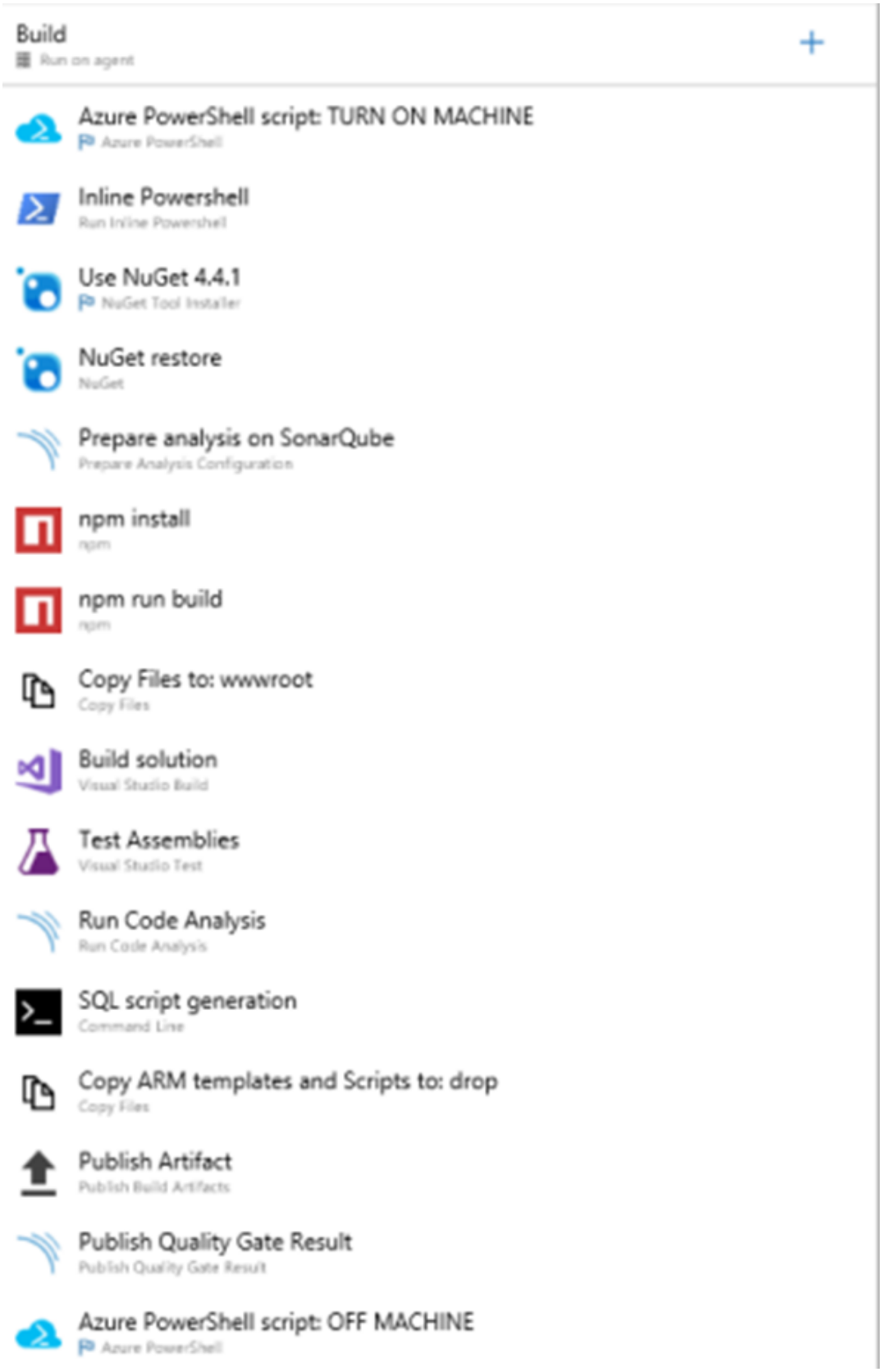



CI step it’s a process of build, test and publish artifacts to blob storage:

schema of CI process:



realization of CI process:

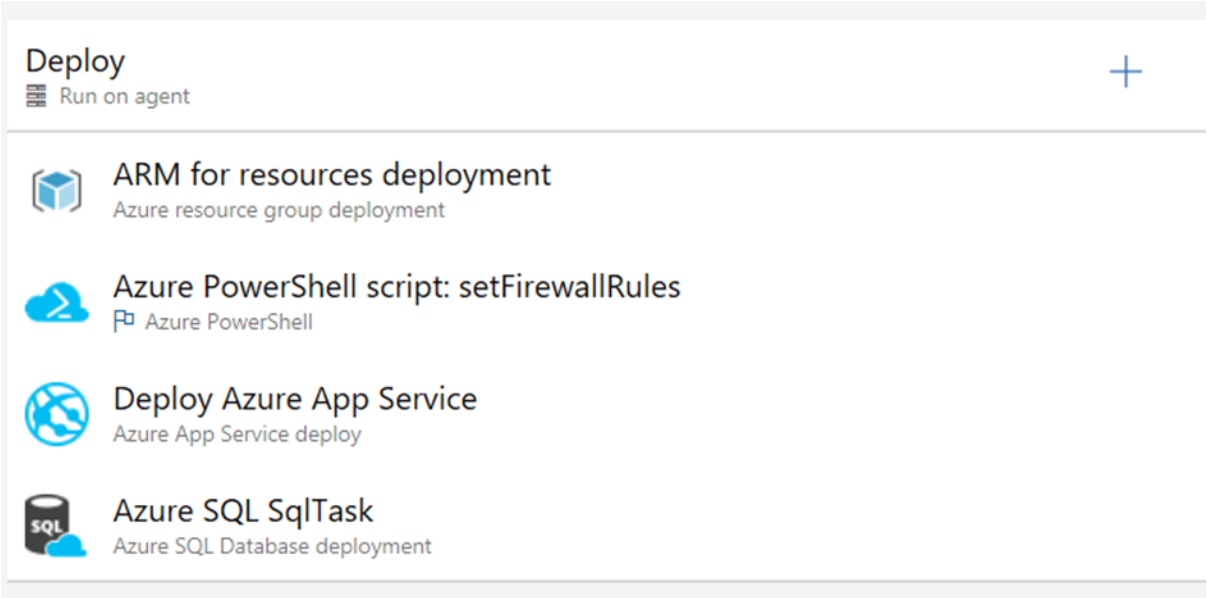


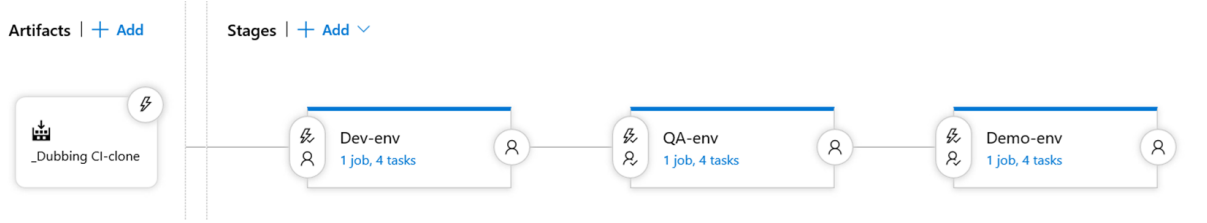

- pipeline triggers when new changes income to branch

- pull latest sources
- install packages
- build app
- run code coverage and code quality
- generate sql scripts
- publish artifacts

CD enables rapid and frequent software releases by automating the deployment process. It reduces manual intervention and streamlines the release pipeline, allowing organizations to deliver new features and updates to end-users more quickly.

For CD we implement a release pipeline on Azure DevOps for dev, stage and prod envs.




- CD pipeline triggers when new build version come
- ARM templates configure out resources
- Set firewall rules for all resources and traffic management

- Deploy build artifact to VM/WebApp
- Migrate DB

After full CI/CD runs we need to check access to our app from internet

In conclusion we got full automates infrastructure where have CI/CD process with code quality and security