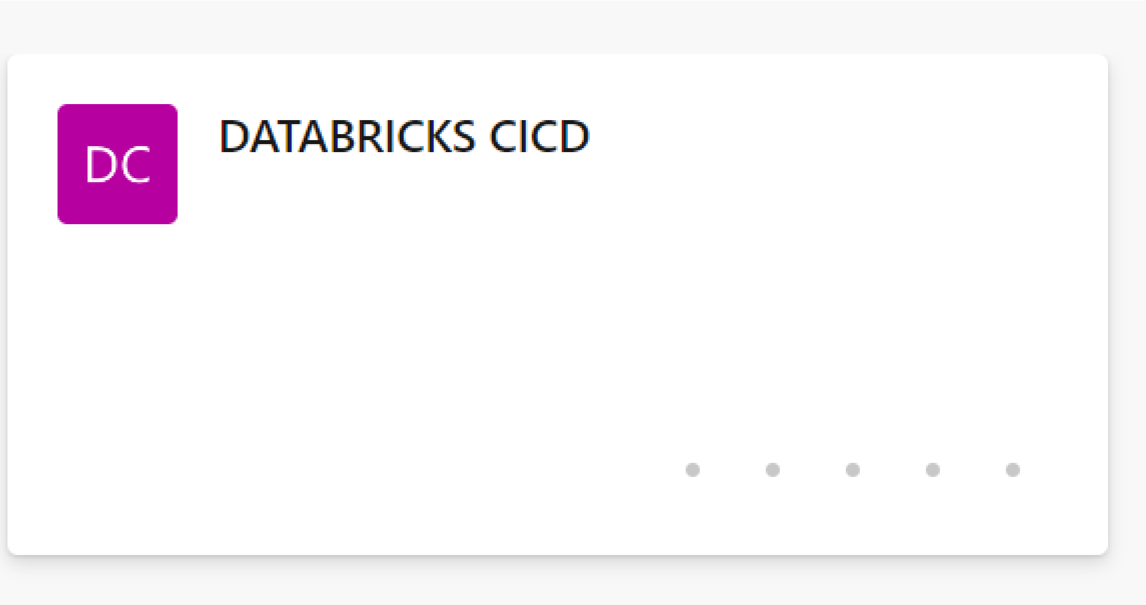
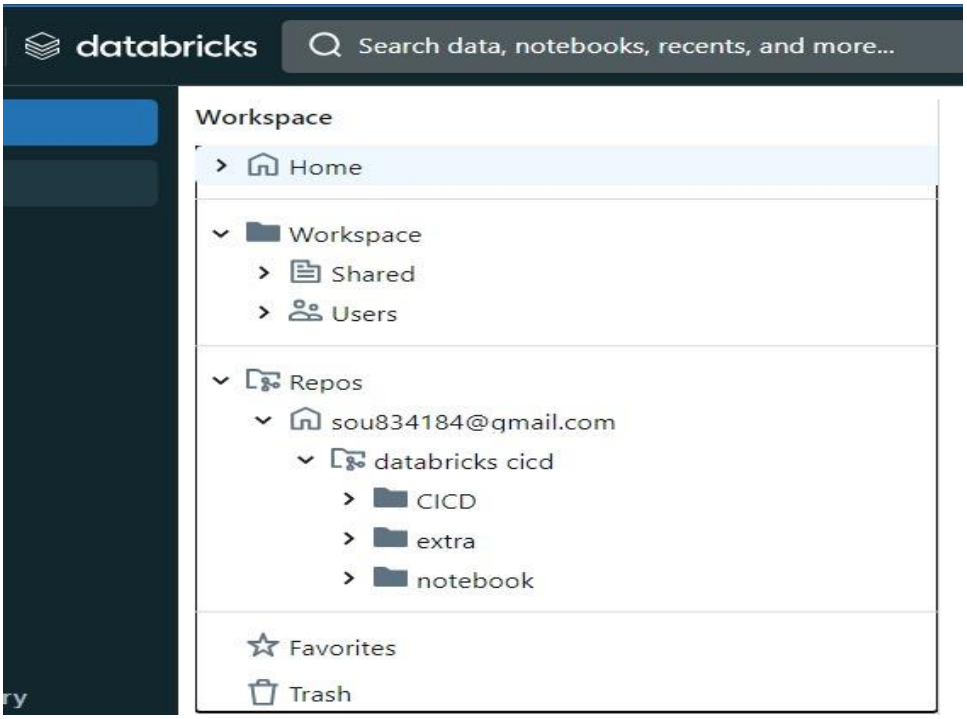
Demo CI_CD

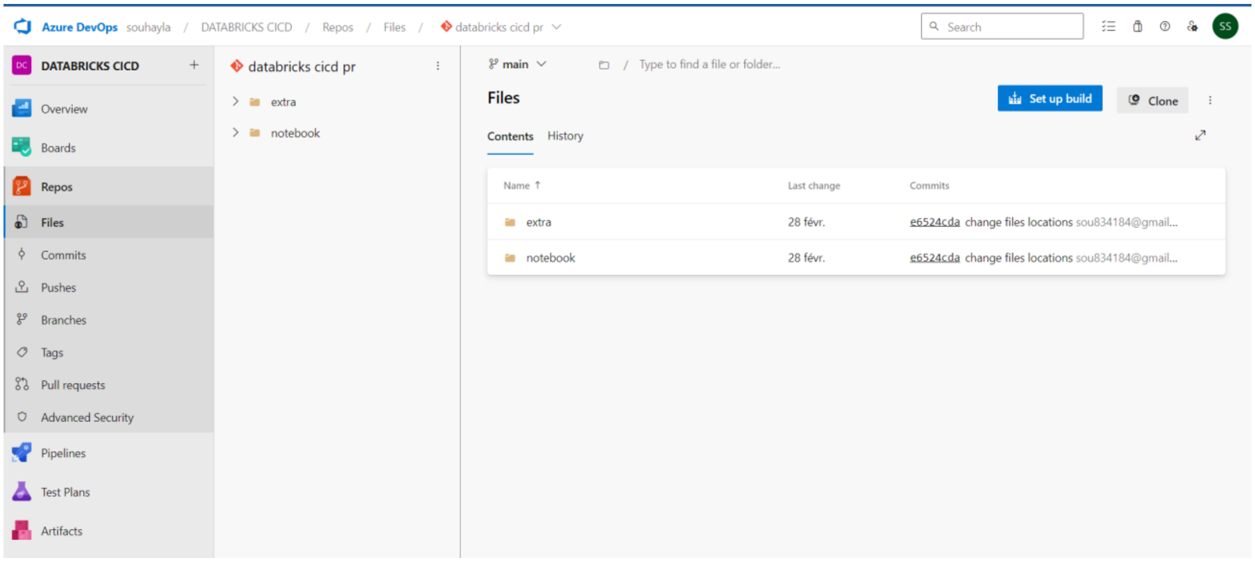
First, we create new project in azure DevOps


DC

DATABRICKS CICD

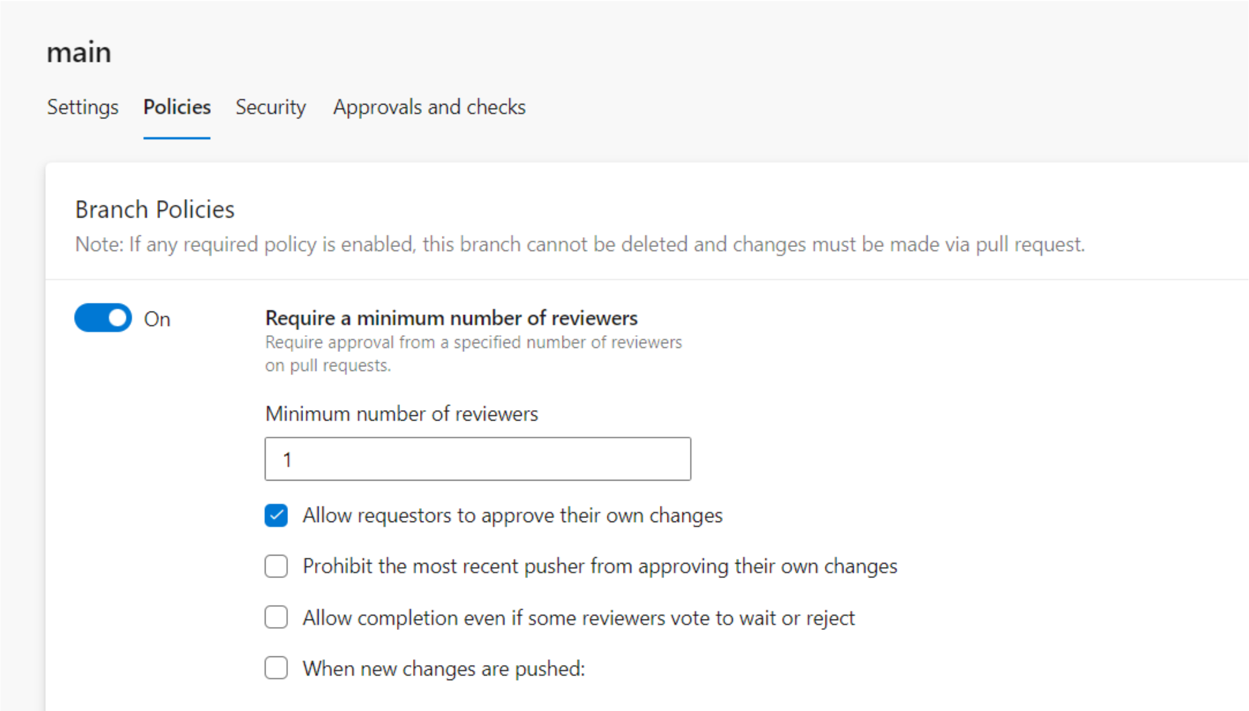
Here we attached the repos in databricks workspace





| Name ↑ | Last change | Commits |
|---|---|---|
| extra | 28 févr. | e6524cda change files locations sou834184@gmail... |
| notebook | 28 févr. | e6524cda change files locations sou834184@gmail... |

We try to create variables and an environment, and also give permissions for the pipeline we will create. Main branch protection is set up by enabling the 'Allow requesters to approve their changes' option. Note that I use this option because I am the only one working on that project; otherwise, it is not recommended to be done.



Branch Policies

Note: If any required policy is enabled, this branch cannot be deleted and changes must be made via pull request.

On **Require a minimum number of reviewers**

Require approval from a specified number of reviewers on pull requests.

Minimum number of reviewers: 1

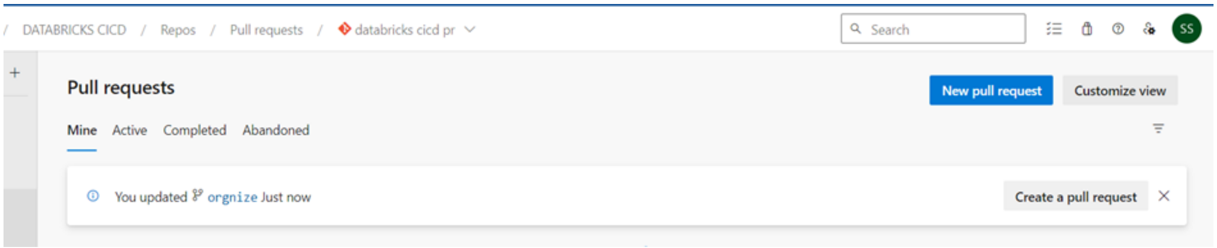
☑ Allow requestors to approve their own changes

☐ Prohibit the most recent pusher from approving their own changes

☐ Allow completion even if some reviewers vote to wait or reject

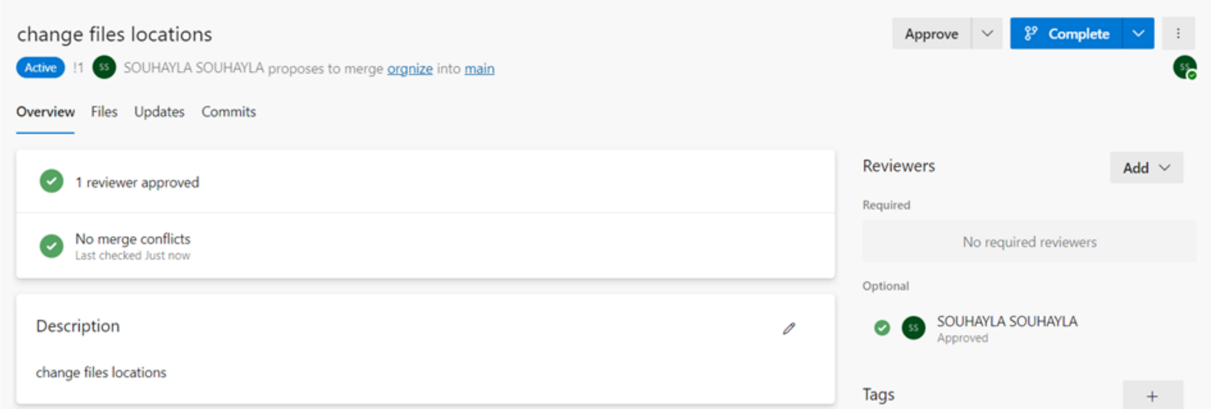
☐ When new changes are pushed:

So, when we make any changes to the main branch, meaning we need to create another branch and pull changes, we will follow this process.



You updated orgnize Just now

And



change files locations

SOUHAYLA SOUHAYLA proposes to merge orgnize into main

1 reviewer approved

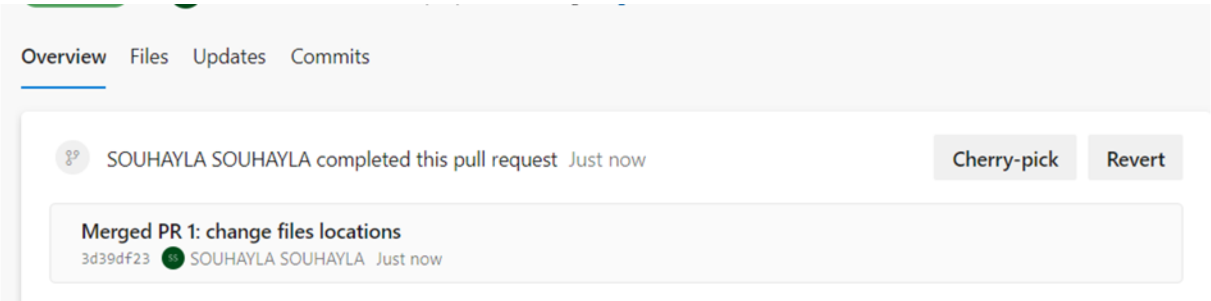
No merge conflicts
Last checked Just now

Description

change files locations

No required reviewers

SOUHAYLA SOUHAYLA
Approved



SOUHAYLA SOUHAYLA completed this pull request Just now

Merged PR 1: change files locations
3d39df23 SOUHAYLA SOUHAYLA Just now

So, when we make any changes to the main To automate this process, we will create a CI/CD template using Visual Studio Code. Follow these steps:

Connect Repo in Azure DevOps with Visual Studio Code:

Open Visual Studio Code.

Install the Azure DevOps extension.

Connect to your Azure DevOps repository.

Create CI/CD Pipeline Template:

In your Visual Studio Code project, create a new file named azure-pipelines.yml.

Add your CI/CD pipeline template to this file. Specify build and deployment steps.

Run CI/CD Pipeline:

Commit and push the azure-pipelines.yml file to your main branch.

Azure DevOps will detect the changes and trigger the CI/CD pipeline.

Test Pipeline:

Make changes to the main branch.

Create a pull request (PR) to trigger the CI/CD pipeline.

Ensure the changes are tested and validated.

Add Deployment Approval:

Modify the CI/CD pipeline to include an approval step after successful testing.

Configure the approval to require review and acceptance from the technical team or leader.

Review and Accept Changes:

After testing, the deployment will be held until manual approval is given.

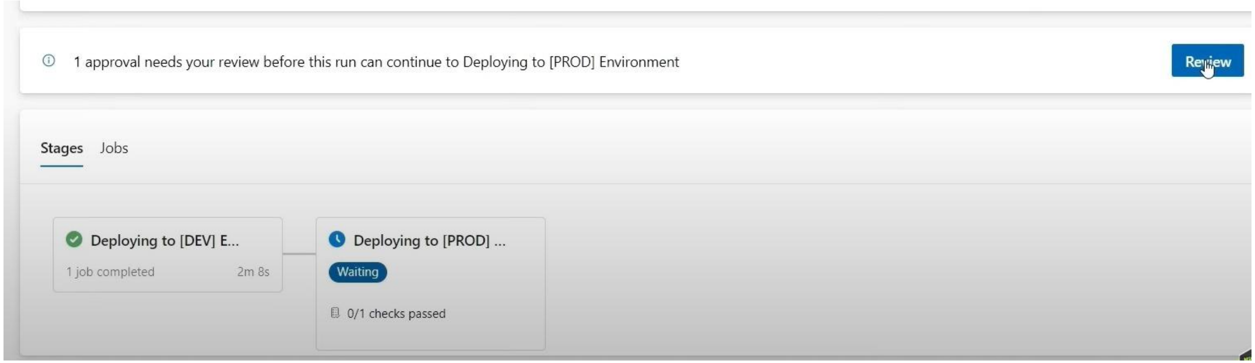
The technical team or leader reviews the changes in the PR and approves the deployment to the production environment.

Note:

For a small and initial project, i choose not to use unit tests.

My CI/CD pipeline is currently focused on tracking changes in Databricks.

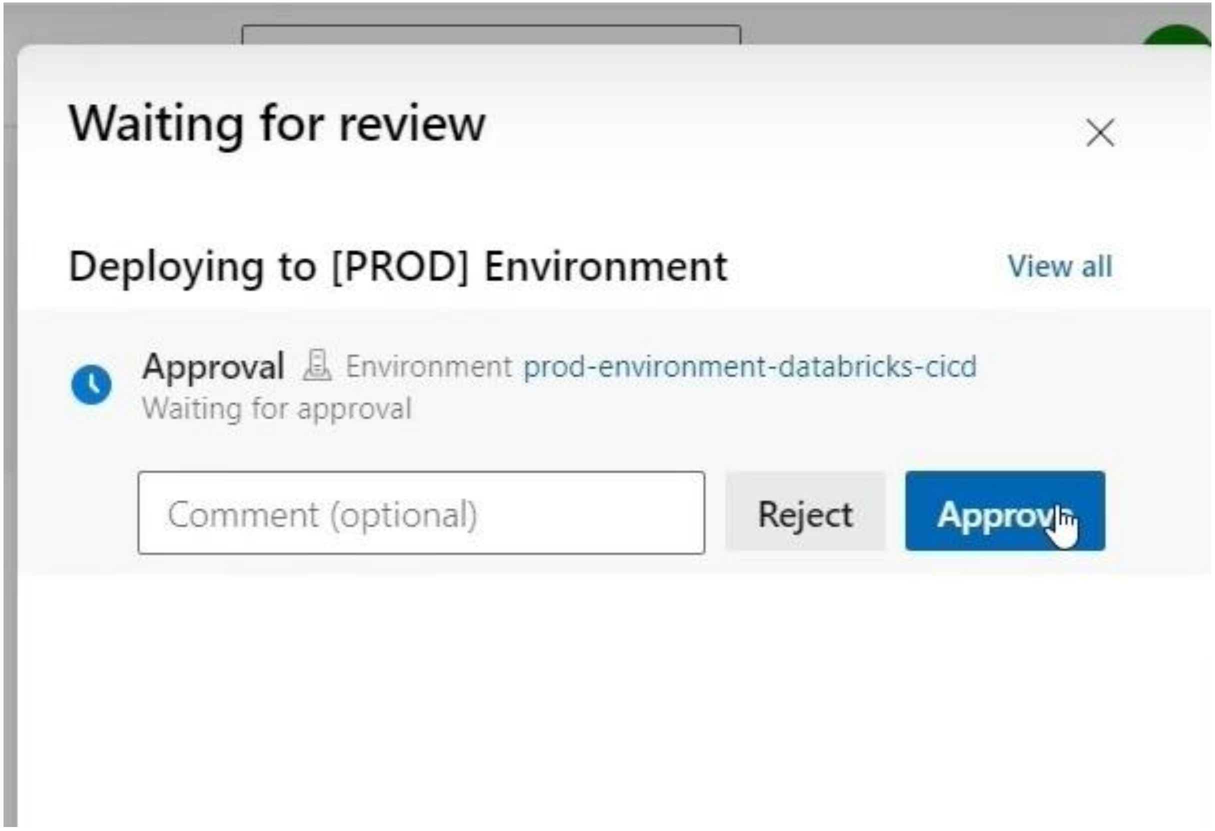
For a more comprehensive automated project, consider adding CI/CD pipelines for Azure Data Factory and Azure Synapse Analytics, meaning we need to create another branch and pull changes, we will follow this process.



1 approval needs your review before this run can continue to Deploying to [PROD] Environment

Deploying to [DEV] E...
1 job completed 2m 8s

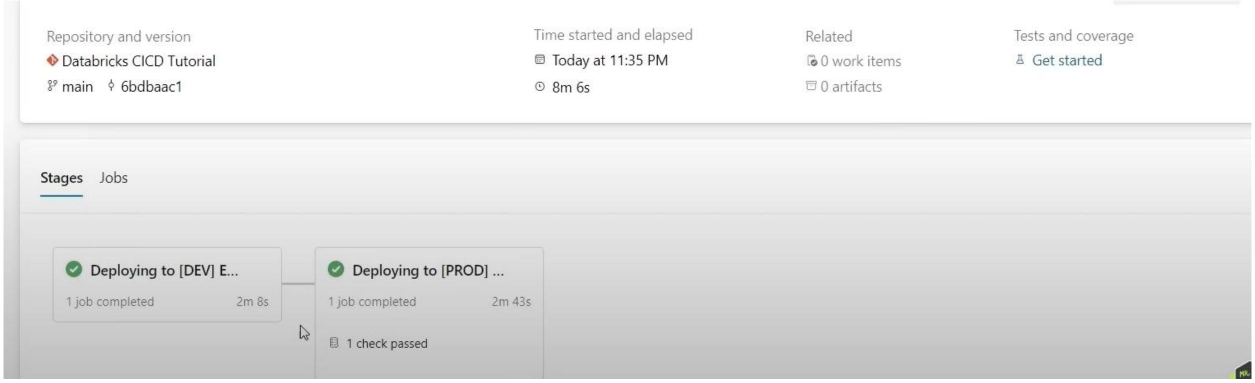
Deploying to [PROD] ...
Waiting
0/1 checks passed



Waiting for review

Deploying to [PROD] Environment

Approval Environment prod-environment-databricks-cicd
Waiting for approval



| Repository and version | Time started and elapsed | Related | Tests and coverage |
|---|---|---|---|
| Databricks CICD Tutorial | Today at 11:35 PM | 0 work items | Get started |
| main 6bdbaac1 | 8m 6s | 0 artifacts | |

Deploying to [DEV] E...
1 job completed 2m 8s

Deploying to [PROD] ...
1 job completed 2m 43s
1 check passed