

Azure DevOps

1. Configure dashboard and queries for work items.

The screenshot shows the Azure DevOps interface for managing queries. On the left, a sidebar menu includes options like Overview, Boards, Work items, Backlogs, Sprints, Queries (which is selected), Delivery Plans, Analytics views, Repos, and Pipelines. The main area is titled "Queries" and shows a "Favorites" section with a single entry: "My favorites". At the top right, there are buttons for "+ New query", "Import work items", and a search bar. Below the favorites, there's a table with columns for Title, Folder, and Last modified by. The "Editor" tab is selected in the navigation bar at the bottom, and the "Run query" button is visible. The "Filters for top level work items" section contains three clauses: "Changed Date > @Today - 180", "Accepted Date = @StartOfDay", and "State = Done". The "Filters for linked work items" section contains two clauses: "Changed Date > @Today - 180" and "Work Item Type = [Any]".

Queries > My Queries

Run query Save Column options :

Results Editor Charts

Query type: Flat list of work items

Filters for top level work items

And/Or	Field *	Operator	Value
+ X	Changed Date	>	@Today - 180
+ X	Work Item Type	=	[Any]
+ X	State	=	[Any]

Add new clause

ID	Work Item Type	Title	Assigned To	State	Tags
2	Task	Create a new item in feature branch	:	To Do	

Queries > My Queries

Run query New Save

Results Editor Charts

Query type: Flat list of work items

New query

Name *

Default Query

New folder *

My Queries

Cancel OK

Work Item Type Task Create a new item in feature branch Assigned To State To

Azure DevOps 22BDO10038 / demo / Overview / Dashboards

Search Edit

demo Team - Overview Modified Just now by Ayush Pandey

This dashboard doesn't have widgets just yet!

Add one or more widgets to gain visibility into your team's progress.

Add a widget

demo

Overview Summary Dashboards Wiki Boards Repos Pipelines Test Plans Artifacts

demo

Add, edit, move or resize your widgets **Done Editing**

Query Tile **Configure widget**

Chart for Work Items **Configure widget**

Velocity

Set iteration dates to use this widget.

Add Widget

Search widgets

- Assigned to Me**
Allows team members to quickly view and manage work assigned to them.
- Build History**
Shows the build history of a selected build pipeline.
- Burndown**
Displays burndown across multiple teams and multiple sprints. Create a release burndown or bug burndown.
- Burnup**
Displays burnup across multiple teams and multiple sprints. Create a release

Don't see a widget? Explore the [Extension Gallery](#)

Project settings

Add, edit, move or resize your widgets **Done Editing**

Velocity

Set iteration dates to use this widget.

[Set iteration dates](#)

Sprint Burndown

Set iteration dates to use this widget.

Add Widget

Search widgets

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Displays burnup across multiple teams and multiple sprints. Create a release

Don't see a widget? Explore the [Extension Gallery](#)

Add

Queries > My Queries > Default Query **Run query** **New** **Save** **Column options**

1 of 1 work items
1 selected

Results **Editor** **Charts**

ID	Work Item Type	Title
2	Task	<input checked="" type="checkbox"/> Create a new item in feature branch

Assigned To

2 [TASK 2*](#) [Create a new item in feature branch](#)

Save

No one selected

0 Comments Add Tag

State Done To Do Doing Done

Reason To Do

Area Doing

Iteration ✓ Done

Details

Description

Click to add Description.

Azure DevOps 22BDO10038 / demo / Overview / Dashboards

D demo +

Overview Summary Dashboards Wiki Boards Repos Pipelines Test Plans Artifacts

Default Query Chart for Work Items

1 Work items Configure widget

Velocity Set iteration dates to use this widget.

Configuration

Title * Default Query

Query Default Query < Shared Queries Default Query

Conditional formatting + Add rule

Save Close

The screenshot shows the Azure DevOps interface for managing dashboards. On the left, there's a sidebar with various navigation options like Overview, Summary, Dashboards, etc. The 'Dashboards' option is selected. The main area displays a dashboard with a 'Default Query' chart showing 1 work item and a 'Velocity' section. A configuration overlay is open on the right, titled 'Configuration'. It has fields for 'Title' (set to 'Default Query') and 'Query' (set to 'Default Query' under 'Shared Queries'). There are also sections for 'Conditional formatting' and 'Add rule'. At the bottom of the overlay are 'Save' and 'Close' buttons.

Configuration

X

Title *

Default Query by Assigned To

Width

Height

2

2

Query*

i

Default Query

v

Chart type

Pie

v

Group by

i

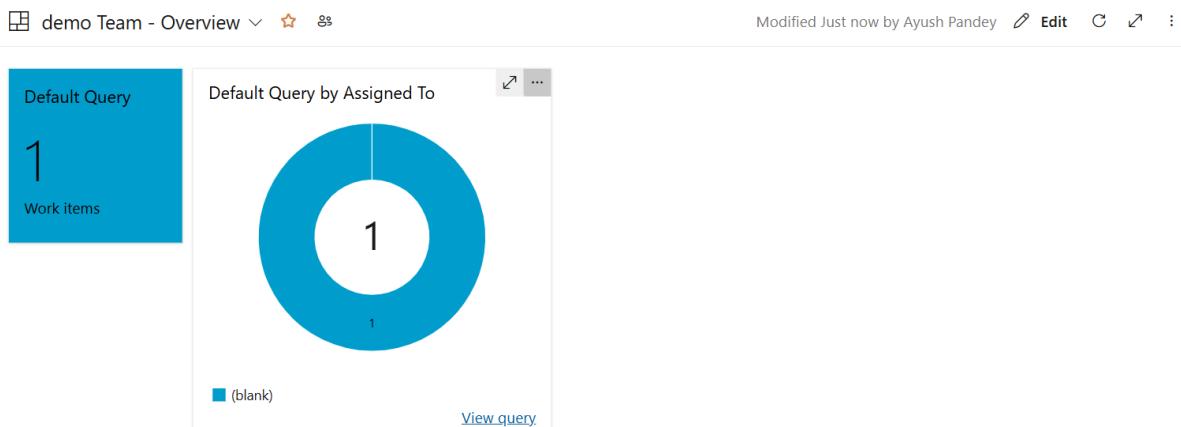
Assigned To

v



Save

Close



2. Use pipeline variables while configuring pipelines.

azure-pipeline.yml –

trigger:

branches:

include:

- main
- feature
- develop

exclude:

- experimental

paths:

include:

- hello.txt
- src/*

exclude:

```
- docs/*  
  
pr:  
  
branches:  
  
  include:  
  
    - main  
  
pool:  
  
  name: 'Default'  
  
variables:  
  
  - name: appName  
  
    value: 'MyApp'  
  
  - name: deployEnv  
  
    value: 'production'  
  
  - name: greeting  
  
    value: 'Hello from Azure DevOps!'  
  
stages:  
  
  - stage: CI  
  
    variables:  
  
      - name: stageGreeting  
  
        value: 'Hello from CI stage!'  
  
    jobs:  
  
      - job: BuildAndTest  
  
        steps:  
  
          - task: CmdLine@2  
  
            displayName: 'Say Hello with Variables'  
  
            inputs:  
  
              script: echo "$(greeting) Pipeline is running for $(appName)!"  
  
          - task: CmdLine@2  
  
            displayName: 'Show Info'  
  
            inputs:
```

```
script: |
  echo "Current branch: $(Build.SourceBranchName)"
  echo "Build reason: $(Build.Reason)"
  echo "Agent name: $(Agent.Name)"
  echo "$(stageGreeting)"

- task: CmdLine@2
  displayName: 'Read Hello File (Windows)'
  condition: eq(variables['Agent.OS'], 'Windows_NT')
  inputs:
    script: |
      echo "Checking if hello.txt exists..."
      if exist hello.txt (
        echo "Found hello.txt! Reading content:"
        type hello.txt
      ) else (
        echo "hello.txt not found"
      )
  - task: CmdLine@2
    displayName: 'Read Hello File (Linux/Mac)'
    condition: ne(variables['Agent.OS'], 'Windows_NT')
    inputs:
      script: |
        echo "Checking if hello.txt exists..."
        if [ -f hello.txt ]; then
          echo "Found hello.txt! Reading content:"
          cat hello.txt
        else
          echo "hello.txt not found"
        fi
```

```
- stage: Deploy  
dependsOn:  
- CI  
condition: succeeded()  
jobs:  
- deployment: DeployJob  
environment:  
name: $(deployEnv)  
strategy:  
runOnce:  
deploy:  
steps:  
- task: CmdLine@2  
displayName: 'Deploy Step with Variables'  
inputs:  
script: echo "Deploying $(appName) to $(deployEnv)..."
```

Validate and save

X

Validate and commit azure-pipelines.yml to the repository.

Validation

 Pipeline is valid.

Commit message

Update v1 azure-pipelines.yml for Azure Pipelines

Optional extended description

Added variables in yml

- Commit directly to the main branch
- Create a new branch for this commit

Cancel

Save

Variables

X

Search variables

+



stageGreeting
= Hello CI stage



retryCount
= 3



deployRegion
= eastus



enableFeatureX
= true



artifactName
= drop



appName
= demo

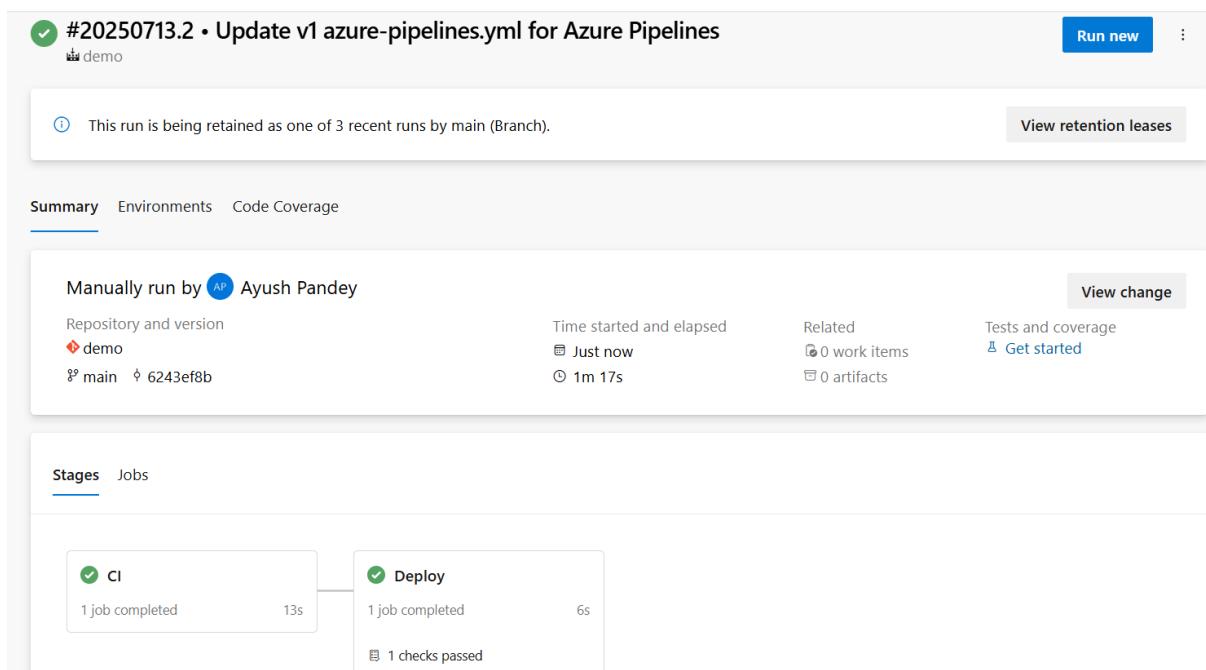
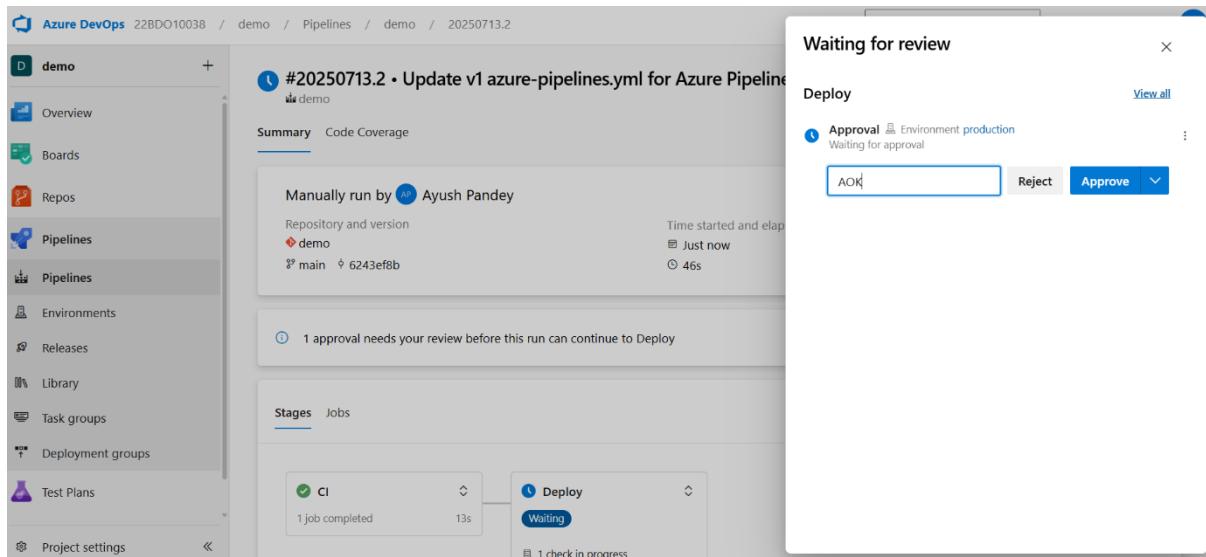


buildConfig
= Release

[Learn about variables](#)

Cancel

Save



3. Use variable and task groups in pipelines and set scopes for different stages.

The screenshot shows the Azure DevOps Pipelines Library page. On the left, there's a sidebar with project navigation: Overview, Boards, Repos, Pipelines (selected), Pipelines, Environments, Releases, Library (selected), Task groups, Deployment groups, Test Plans, and Project settings. The main area is titled "Variable groups" with a sub-section "New variable group". It includes a placeholder icon "(x)", a description "Create groups of variables that you can share across multiple pipelines.", and a prominent blue button "+ Variable group". Below the button, there's a link "Learn more about variable groups".

Library > Common Setting*

Variable group Pipeline permissions

Properties

Variable group name

Common Setting

Description

These are some common setting variables for demo pipeline

Link secrets from an Azure key vault as variables

Variables

Name ↑	Value	
deployEnv	production	
appName	demoApp	
deployRegion	eastus	

← demo

Variables

Validate and save

main demo / azure-pipelines.yml *

```
16 pr:
17   branches:
18     include:
19       main
20
21 pool:
22   name: 'Default'
23
24 variables:
25   group: Common Setting
26
27 stages:
28   stage: CI
29   variables:
30     stageGreeting: 'Hello from CI stage!'
31   jobs:
32     job: BuildAndTest
33     steps:
34       script: echo "$(greeting) Pipeline is running for $(appName)!"
35       displayName: 'Say Hello with Variables'
36
37     script: |
```

Tasks

Search tasks

-  .NET Core
Build, test, package, or publish a dotnet applicatio...
-  Android signing
Sign and align Android APK files
-  Ant
Build with Apache Ant
-  App Center distribute
Distribute app builds to testers and users via Visu...
-  App Center test
Test app packages with Visual Studio App Center
-  Archive files
Compress files into .7z, .tar.gz, or .zip

Validate and save



Validate and commit azure-pipelines.yml to the repository.

Validation

 Pipeline is valid.

Commit message

Update v2 azure-pipelines.yml for Azure Pipelines

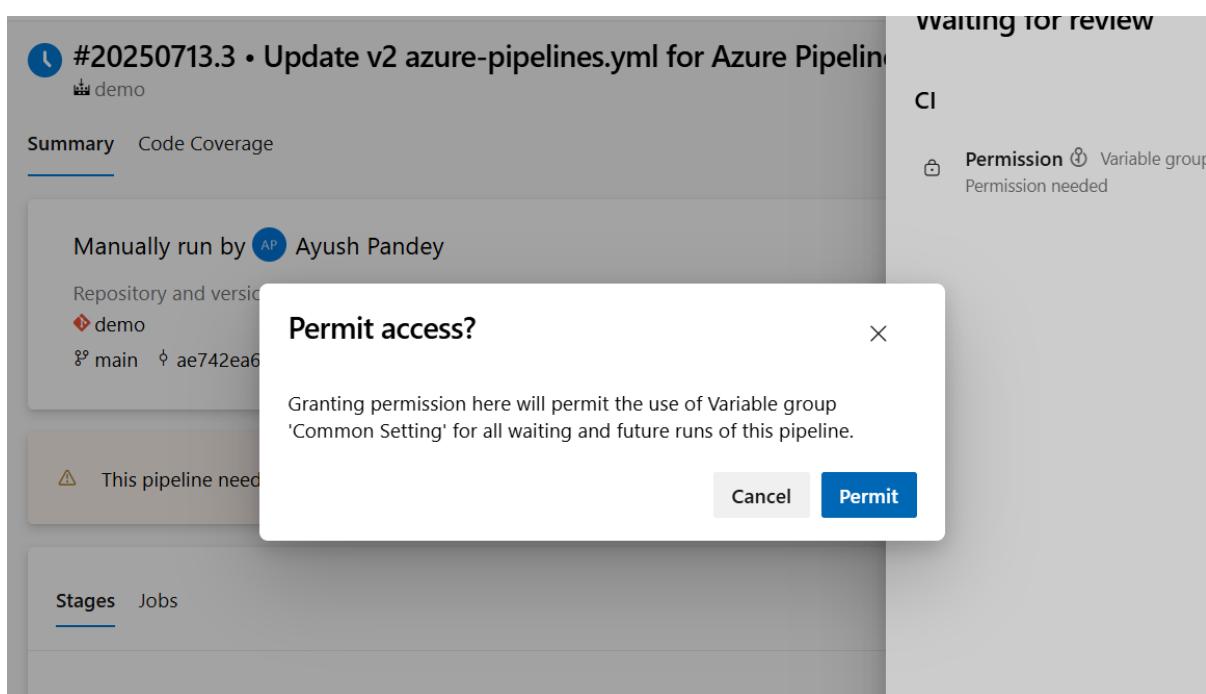
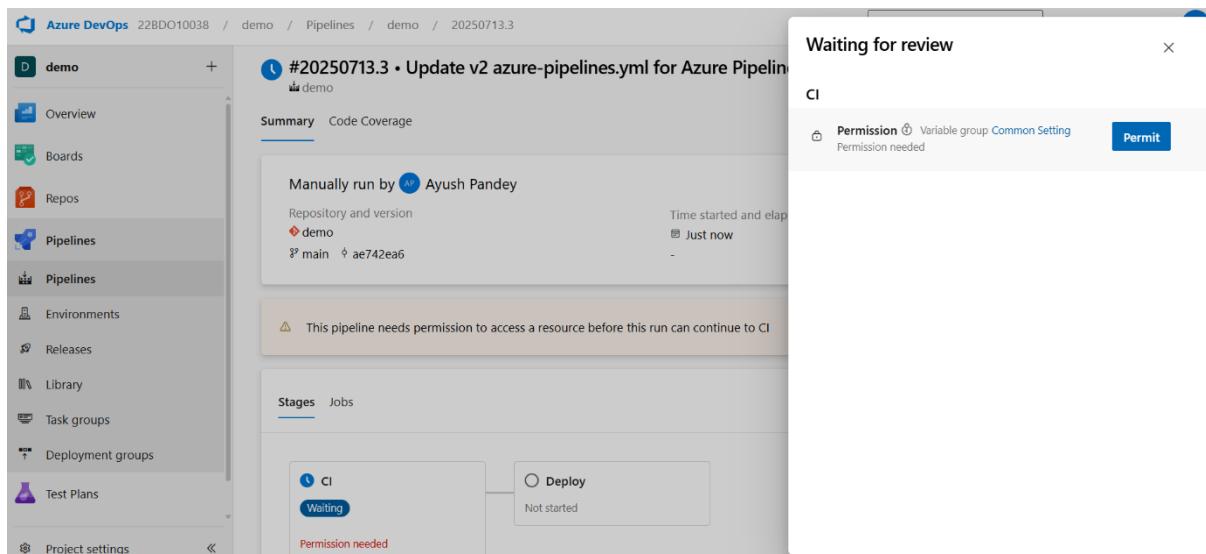
Optional extended description

Added variable group

- Commit directly to the main branch
- Create a new branch for this commit

Cancel

Save



demo / Pipelines / demo / 20250713.3

#20250713.3 • Update v2 azure-pipelines.yml for Azure Pipelines

Manually run by Ayush Pandey

Summary Code Coverage

Repository and version

demo
main ae742ea6

Time started and elapsed

Just now
41s

1 approval needs your review before this run can continue to Deploy

Stages Jobs

CI Deploy

1 job completed 16s Waiting 1 check in progress

Waiting for review

Deploy

Approval Environment production
Waiting for approval

AOK Reject Approve

#20250713.3 • Update v2 azure-pipelines.yml for Azure Pipelines

This run is being retained as one of 3 recent runs by main (Branch).

Run new

Summary Environments Code Coverage

Manually run by Ayush Pandey

View change

Repository and version

demo
main ae742ea6

Time started and elapsed

Today at 2:51 pm
1m 12s

Related

0 work items
0 artifacts

Tests and coverage

Get started

Stages Jobs

CI Deploy

1 job completed 16s 1 job completed 6s 1 checks passed

The screenshot shows the Azure DevOps pipeline editor interface. On the left, there's a sidebar with a tree view of files: demo, .azure-pipe, build-an, src, .gitignore, azure-pipe, hello.txt, local_git.txt, mvnw, mvnw.cmd, pom.xml, and README.n. The main area shows the contents of build-and-test-template.yml:

```
1 parameters:
2   greeting: 'Default Greeting'
3   appName: 'DefaultApp'
4   stageGreeting: 'Default Stage Greeting'
5
6 steps:
7   - script: echo "${{ parameters.greeting }} Pipeline is running for ${{ parameters.appName }}!"
8     displayName: 'Say Hello with Variables'
9
10  - script: |
11    echo "Current branch: ${Build.SourceBranchName}"
12    echo "Build reason: ${Build.Reason}"
13    echo "Agent name: ${Agent.Name}"
14    echo "${{ parameters.stageGreeting }}"
15    displayName: 'Show Info'
16
17  - script: |
18    echo "Checking if hello.txt exists..."
19    if exist hello.txt (
20      echo "Found hello.txt! Reading content:"
21      type hello.txt
22    ) else (
23      echo "hello.txt not found"
24    )
25    displayName: 'Read Hello File (Windows)'
26  condition: eq(variables['Agent.OS'], 'Windows_NT')
```

Commit



Comment

Added build-and-test-template.yml

Branch name

main

Work items to link

Search work items by ID or title

Cancel

Commit

A screenshot of the Azure Pipelines interface. At the top, the pipeline name is "#20250713.4 • Update v3 azure-pipelines.yml for Azure Pipelines". Below it, there's a summary section with tabs for "Summary" (selected) and "Code Coverage". The "Summary" tab shows that the run was manually triggered by Ayush Pandey. It displays repository information ("demo", branch "main", commit "042c4a83"), start time ("Just now"), and duration ("1m 25s"). A note indicates "1 approval needs your review before this run can continue to Deploy". To the right, a modal window titled "Waiting for review" is open, showing an "Approval" step for the "production" environment, which is currently "Waiting for approval". Buttons for "Comment (optional)", "Reject", and "Approve" are present, with "Approve" being highlighted.

A screenshot of the Azure Pipelines interface showing a completed pipeline run. The run is identified by the same identifier as the previous screenshot. The summary section shows the run was triggered by Ayush Pandey. Repository details, start time ("Today at 3:06 pm"), and duration ("2m 8s") are listed. A "View 2 changes" button is visible. The "Stages" tab is selected, showing two stages: "CI" (completed, 15s) and "Deploy" (completed, 7s). The "Deploy" stage has a note indicating "1 check passed".

azure-pipeline.yaml -

trigger:

branches:

include:

- **main**

- **feature**

```
- develop

exclude:
- experimental

paths:
include:
- hello.txt
- src/*

exclude:
- docs/*

pr:
branches:
include:
- main

pool:
name: 'Default'

variables:
- group: Common Setting
- name: globalVar
  value: 'This is global'
- name: greeting
  value: 'Hello from Azure DevOps!'

stages:
- stage: CI

variables:
- name: stageGreeting
  value: 'Hello from CI stage!'
- name: scopedVar
  value: 'CI-stage-specific'

jobs:
```

```
- job: BuildAndTest

  steps:
    - task: CmdLine@2

      displayName: 'Say Hello with All Variables'

      inputs:
        script: |
          echo "$(greeting) Pipeline is running for $(appName)!"
          echo "Global var: ${globalVar}"
          echo "Group var appName: ${appName}"
          echo "Scoped var in CI: ${scopedVar}"
          echo "Stage Greeting: ${stageGreeting}"

    - task: CmdLine@2

      displayName: 'Show Build Info'

      inputs:
        script: |
          echo "Current branch: ${Build.SourceBranchName}"
          echo "Build reason: ${Build.Reason}"
          echo "Agent name: ${Agent.Name}"

    - task: CmdLine@2

      displayName: 'Read Hello File (Windows)'

      condition: eq(variables['Agent.OS'], 'Windows_NT')

      inputs:
        script: |
          echo "Checking if hello.txt exists..."
          if exist hello.txt (
            echo "Found hello.txt! Reading content:"
            type hello.txt
          ) else (
            echo "hello.txt not found"
```

```
)  
- task: CmdLine@2  
  displayName: 'Read Hello File (Linux/Mac)'  
  condition: ne(variables['Agent.OS'], 'Windows_NT')  
  inputs:  
    script: |  
      echo "Checking if hello.txt exists..."  
      if [ -f hello.txt ]; then  
        echo "Found hello.txt! Reading content:"  
        cat hello.txt  
      else  
        echo "hello.txt not found"  
      fi  
- stage: Deploy  
  dependsOn:  
    - CI  
  condition: succeeded()  
  variables:  
    - name: scopedVar  
      value: 'Deploy-stage-specific'  
  jobs:  
    - deployment: DeployJob  
      environment:  
        name: $(deployEnv)  
      strategy:  
        runOnce:  
          deploy:  
            steps:  
              - task: CmdLine@2
```

```
displayName: 'Deploy Step with All Variables'
```

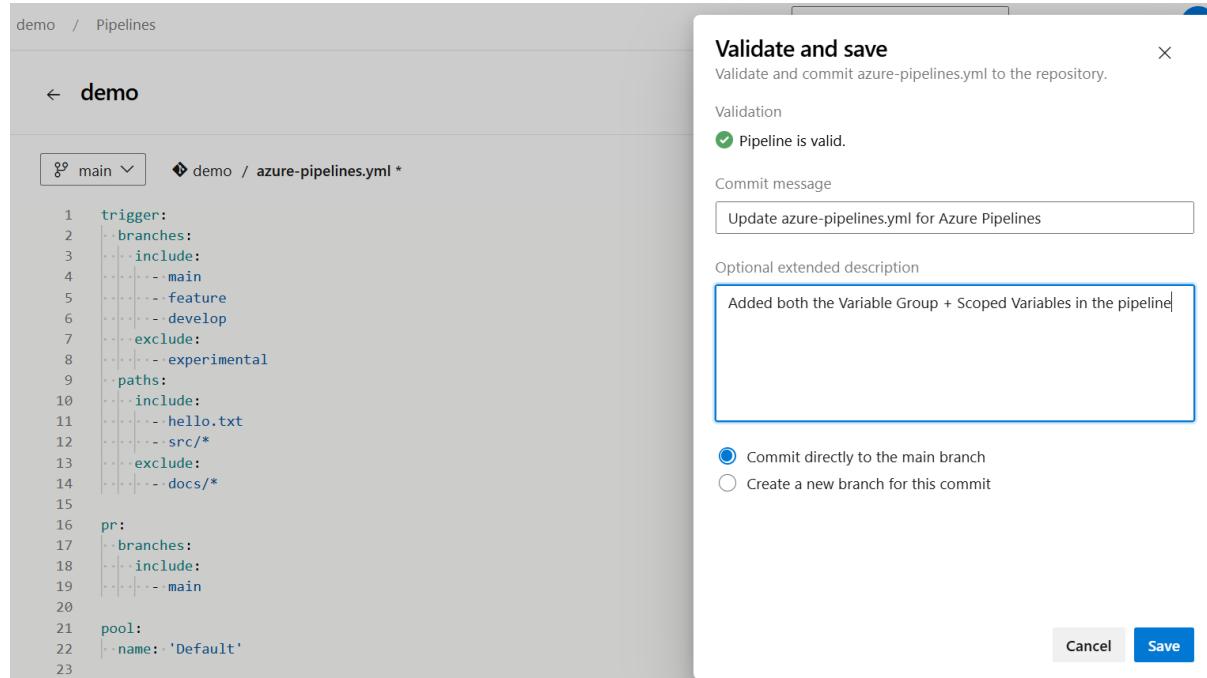
```
inputs:
```

```
script: |
```

```
echo "Deploying $(appName) to $(deployEnv)..."
```

```
echo "Global var: ${globalVar}"
```

```
echo "Scoped var in Deploy: ${scopedVar}"
```



#20250713.5 • Update azure-pipelines.yml for Azure Pipelines

demo / Pipelines / demo / 20250713.5

Summary Code Coverage

Manually run by Ayush Pandey

Repository and version

- demo
- main 4f82e6f7

Time started and elapsed

- Just now
- 39s

1 approval needs your review before this run can continue to Deploy

Stages Jobs

CI Deploy

1 job completed 16s 1 check in progress

Waiting for review

Deploy

Approval Environment production Waiting for approval

AOK Reject Approve

#20250713.5 • Update azure-pipelines.yml for Azure Pipelines

demo

Run new

This run is being retained as one of 3 recent runs by main (Branch).

View retention leases

Summary Environments Code Coverage

Manually run by Ayush Pandey

View change

Repository and version

- demo
- main 4f82e6f7

Time started and elapsed

- Just now
- 1m 13s

Related

- 0 work items
- 0 artifacts

Tests and coverage

Get started

Stages Jobs

CI Deploy

1 job completed 16s 1 job completed 8s 1 checks passed

4. Create a service connection.

22BDO10038 / demo / Settings / Service connections

Project Settings

- Notifications
- Service hooks
- Dashboards

Boards

- Project configuration
- Team configuration
- GitHub connections

Pipelines

- Agent pools
- Parallel jobs
- Settings
- Test management
- Release retention

Service connections

- XAML build services

Repos

Create your first service connection

Service connections help you manage, protect, and reuse authentications to external services.

Create service connection

New service connection

X

Choose a service or connection type

Search connection types

-  Azure Repos/Team Foundation Server
-  Azure Resource Manager
-  Azure Service Bus
-  Bitbucket Cloud
-  Cargo
-  Chef
-  Docker Host
-  Docker Registry
-  Generic

Learn more

Next

New Azure service connection

X

Azure Resource Manager

Identity type

App registration (automatic)

Recommended



[Need help choosing a connection type?](#)

Credential

Workload identity federation

Recommended



Scope level



Subscription



Management Group



Machine Learning Workspace

Subscription

Azure subscription 1 (4af928af-144b-44ea-a5ad-9fe8d622b...)



If you can't find subscription you need, please [create manually](#).

Resource group



Specify to limit access to the chosen resource group only.

Service Connection Name

demo con

[← demo con](#)

ID: e9c3e004-e098-4dda-82f7-7263f2af9654

[Edit](#) [⋮](#)

[Overview](#) [Usage history](#) [Approvals and checks](#)

Details

Service connection type

 Azure Resource Manager
using workload identity federation with openid connect
[Manage service connection roles](#)
[Manage App registration](#)

Creator

 AP Ayush Pandey
22BDO10038@cuchd.in

Workload Identity federation details

Issuer:
<https://login.microsoftonline.com/34bd8bed-2ac1-41ae-9f08-4e0a3f11706c/v2.0>

Subject identifier:
[/eid1/c/pub/t/7Yu9NMEqrkGfCE4KPxFwbA/a/rISbSSETf0KqFyZ8ppdXmA/sc/43bd1bda-1269-4020-a8e0-4c1f95128e7c/e9c3e004-e098-4dda-82f7-7263f2af9654](https://eid1/c/pub/t/7Yu9NMEqrkGfCE4KPxFwbA/a/rISbSSETf0KqFyZ8ppdXmA/sc/43bd1bda-1269-4020-a8e0-4c1f95128e7c/e9c3e004-e098-4dda-82f7-7263f2af9654)

5. Create a Linux/Windows self-hosted agent.

22BDO10038 / demo / Settings / Agent pools

Search [Filter](#) [Reset](#) [AP](#)

Project Settings
demo

Agent pools

Name	Queued jobs	Running jobs
Azure Pipelines		
Default		

[Security](#) [Add pool](#)

General

- [Overview](#)
- [Teams](#)
- [Permissions](#)
- [Notifications](#)
- [Service hooks](#)
- [Dashboards](#)

Boards

- [Project configuration](#)
- [Team configuration](#)
- [GitHub connections](#)

Pipelines

- [Agent pools](#)
- [Parallel jobs](#)

Add agent pool

X

Agent pools are shared across an organization.

Pool to link:

- New Existing

Pool type:

- Managed DevOps Pool

Reduce the effort spent in maintaining custom agents by creating a Microsoft managed pool of scalable agents. [Learn more](#).

- Self-hosted

Create a pool of custom agents hosted on your own infrastructure for maximum control and flexibility. [Learn more](#).

- Azure virtual machine scale set

Create a pool of custom agents based on an Azure Virtual machine scale set hosted in your own Azure subscription. [View configuration instructions](#).

Name:

Self

Description (optional):

Create

Create a new personal access token

X

Name

self

Organization

22BDO10038



Expiration (UTC)

30 days



8/12/2025



Scopes

Authorize the scope of access associated with this token

Scopes Full access

Custom defined

Create

Cancel

```
Microsoft Windows [Version 10.0.26100.4652]
(c) Microsoft Corporation. All rights reserved.
```

```
C:\Windows\System32>cd C:\selfagent
```

```
C:\selfagent>.\config.cmd
```

```
/ \ \ \ / \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ 
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ 
agent v4.258.1                                (commit 8292055)
```

```
>> Connect:
```

```

Enter server URL > https://dev.azure.com/22BD010038
Enter authentication type (press enter for PAT) >
Enter personal access token > *****
Connecting to server ...

>> Register Agent:

Enter agent pool (press enter for default) > Self
Enter agent name (press enter for AYUSH) >
Scanning for tool capabilities.
Connecting to the server.
Successfully added the agent
Testing agent connection.
Enter work folder (press enter for _work) >
2025-07-13 11:28:40Z: Settings Saved.
Enter run agent as service? (Y/N) (press enter for N) > Y
Enter enable SERVICE_SID_TYPE_UNRESTRICTED for agent service (Y/N) (press enter for N) > Y
Enter User account to use for the service (press enter for NT AUTHORITY\NETWORK SERVICE) >
Granting file permissions to 'NT AUTHORITY\NETWORK SERVICE'.
Service vstsagent.22BD010038.Self.AYUSH successfully installed
Service vstsagent.22BD010038.Self.AYUSH successfully set recovery option
Service vstsagent.22BD010038.Self.AYUSH successfully set to delayed auto start
Service vstsagent.22BD010038.Self.AYUSH successfully set SID type
Service vstsagent.22BD010038.Self.AYUSH successfully configured
Enter whether to prevent service starting immediately after configuration is finished? (Y/N) (press enter for N) >
Service vstsagent.22BD010038.Self.AYUSH started successfully

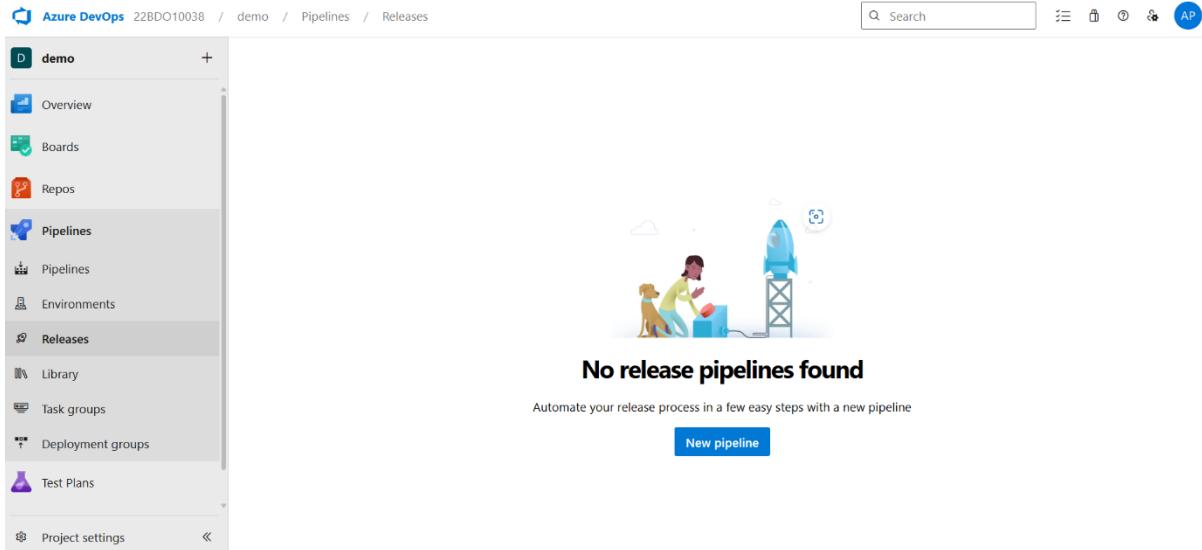
C:\selfagent>

```

The screenshot shows the Azure DevOps Project Settings interface for a project named 'demo'. The left sidebar shows navigation options like General, Boards, Pipelines, and Agent pools. The main area is titled 'Self' under 'Agents' and displays a table of agents:

Name	Last run	Current status	Agent version	Enabled
AYUSH		Idle	4.258.1	<input checked="" type="checkbox"/> On

6. Apply pre and post-deployment approvers in the release pipeline.



All pipelines > **New release pipeline** Save Create release ...

Pipeline Tasks Variables Retention Options History

Artifacts | + Add

+ Add an artifact

Schedule not set

Stages | + Add

Stage

Production

Delete Move ...

Properties ^

Name and owners of the stage

Stage name

Production

Stage owner

AP Ayush Pandey

All pipelines > New release pipeline

Pipeline Tasks Variables Retention Options History

Artifacts | + Add

Add an artifact

Schedule not set

Stages | + Add ▾

Production 1 job, 0 task

Add an artifact

Source type

Build Azure Repos ... GitHub TFVC

[5 more artifact types ▾](#)

Project * demo

Source (build pipeline) * demo

Default version * Latest

Source alias * _demo

(i) No version is available for demo or the latest version has no artifacts to publish. Please check the source pipeline.

Save Create release

All pipelines > New release pipeline

Pipeline Tasks Variables Retention Options History

Artifacts | + Add

_demo

Schedule not set

Stages | + Add ▾

Production 1 job, 0 task

Pre-deployment conditions

Production

Triggers ▾ Define the trigger that will start deployment to this stage

Pre-deployment approvals ^ Enabled

Select the users who can approve or reject deployments to this stage

Approvers

Ayush Pandey Search users and groups for approvers

Timeout

30 Days ▾

Approval policies

- The user requesting a release or deployment should not approve it
- Revalidate identity of approver before completing the approval.
- Skip approval if the same approver approved the previous stage

Pipeline Tasks Variables Retention Options History

Artifacts | + Add



Schedule not set

Stages | + Add ▾

Production
1 job, 0 task

Post-deployment conditions

Production

Post-deployment approvals ▾

Enabled

Select the users who can approve or reject deployments to this stage

Approvers

Ayush Pandey [X](#) Search users and groups for approvers

Timeout

30

Days ▾

Approval policies

- The user requesting a release or deployment should not approve it
- Revalidate identity of approver before completing the approval. [\(i\)](#)

→] Gates

Disabled

Create a new release

New release pipeline

Pipeline ▾

Click on a stage to change its trigger from automated to manual.

Production

Stages for a trigger change from automated to manual. [\(i\)](#)

		▼
--	--	---

Artifacts ▾

Select the version for the artifact sources for this release

Source alias

Version

_demo

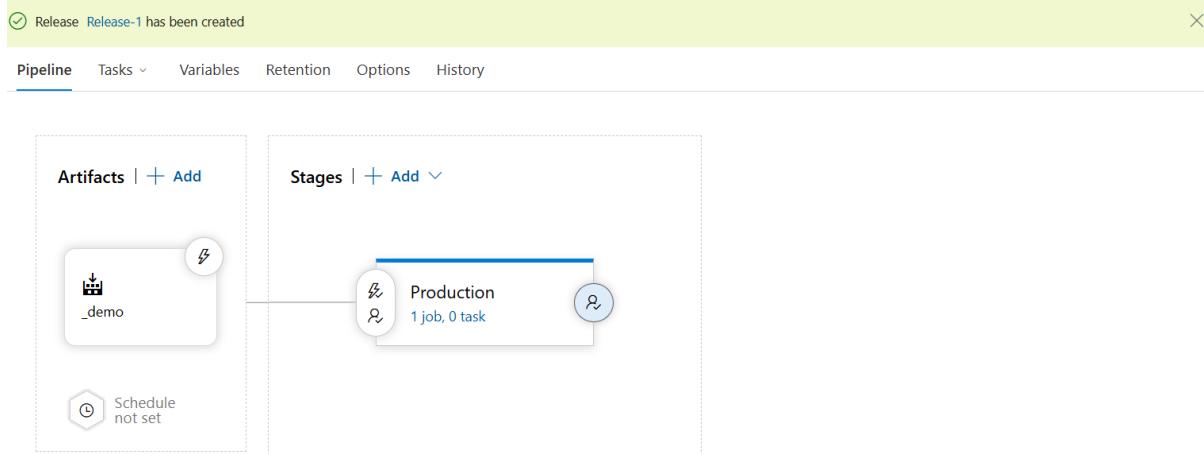
20250713.5

▼

Release description

--	--	--

[Create](#)[Cancel](#)



7. Create a CI/CD pipeline to build and push a Docker image to ACR and deploy to AKS.

```
ayush [ ~ ]$ az group create --name docked --location eastus
{
  "id": "/subscriptions/4af928af-144b-44ea-a5ad-9fe8d622bd21/resourceGroups/docked",
  "location": "eastus",
  "managedBy": null,
  "name": "docked",
  "properties": {
    "provisioningState": "Succeeded"
  },
  "tags": null,
  "type": "Microsoft.Resources/resourceGroups"
}

ayush [ ~ ]$ az acr create --resource-group docked --name acrdocked --sku Basic
{
  "adminUserEnabled": false,
  "anonymousPullEnabled": false,
  "autoGeneratedDomainNameLabelScope": "Unsecure",
  "creationDate": "2025-07-13T12:16:50.234463+00:00",
  "dataEndpointEnabled": false,
  "dataEndpointHostNames": [],
  "encryption": {
    "keyVaultProperties": null,
    "status": "disabled"
  },
  "id": "/subscriptions/4af928af-144b-44ea-a5ad-9fe8d622bd21/resourceGroups/docked/providers/Microsoft.ContainerRegistry/registries/acrdocked",
  "identity": null,
  "location": "eastus",
  "loginServer": "acrdocked.azurecr.io",
  "metadataSearch": "Disabled",
  "name": "acrdocked",
  "networkRuleBypassOptions": "AzureServices",
  "networkRuleSet": null,
  "policies": {
    "azureAdAuthenticationAsArmPolicy": {
      "status": "enabled"
    },
    "exportPolicy": {
      "status": "enabled"
    },
    "quarantinePolicy": {
      "status": "disabled"
    },
    "retentionPolicy": {
      "days": 7,
    }
  }
}
```

```

    "softDeletePolicy": {
      "lastUpdatedTime": "2025-07-13T12:16:57.373328+00:00",
      "retentionDays": 7,
      "status": "disabled"
    },
    "trustPolicy": {
      "status": "disabled",
      "type": "Notary"
    }
  },
  "privateEndpointConnections": [],
  "provisioningState": "Succeeded",
  "publicNetworkAccess": "Enabled",
  "resourceGroup": "docked",
  "roleAssignmentMode": "LegacyRegistryPermissions",
  "sku": {
    "name": "Basic",
    "tier": "Basic"
  },
  "status": null,
  "systemData": {
    "createdAt": "2025-07-13T12:16:50.234463+00:00",
    "createdBy": "22BDO10038@cuchd.in",
    "createdByType": "User",
    "lastModifiedAt": "2025-07-13T12:16:50.234463+00:00",
    "lastModifiedBy": "22BDO10038@cuchd.in",
    "lastModifiedByType": "User"
  },
  "tags": {},
  "type": "Microsoft.ContainerRegistry/registries",
  "zoneRedundancy": "Disabled"
}

```

```

ayush [ ~ ]$ az aks create --resource-group docked --name aksdockded --node-count 1 --enable-addons monitoring --generate-ssh-keys --attach-acr acrdocked
SSH key files '/home/ayush/.ssh/id_rsa' and '/home/ayush/.ssh/id_rsa.pub' have been generated under ~/.ssh to allow SSH access to the VM. If using machines without permanent storage like Azure Cloud Shell without an attached file share, back up your keys to a safe location
AAD role propagation done[########################################] 100.0000%
{
  "aadProfile": null,
  "addonProfiles": {
    "omsagent": {
      "config": {
        "logAnalyticsworkspaceResourceID": "/subscriptions/4af928af-144b-44ea-a5ad-9fe8d622bd21/resourceGroups/DefaultResourceGroup-EUS/providers/Microsoft.OperationalInsights/workspaces/Defaultworkspace-4af928af-144b-44ea-a5ad-9fe8d622bd21-EUS",
        "useAADAuth": "true"
      },
      "enabled": true,
      "identity": null
    }
  },
  "agentPoolProfiles": [
    {
      "availabilityZones": null,
      "capacityReservationGroupId": null,
      "count": 1,
      "creationData": null,
      "currentOrchestratorVersion": "1.32.5",
      "eTag": null,
      "enableAutoScaling": false,
      "enableEncryptionAtHost": false,
      "enableFips": false,
      "enableNodePublicIp": false,
      "enableUltraSsd": false,
      "gpuInstanceProfile": null,
      "gpuProfile": null,
      "hostGroupId": null,
      "image": "mcr.microsoft.com/aks/distro:1.32.5",
      "labelFilter": null,
      "location": "westus2",
      "maxPods": 110,
      "nodeOsDiskSizeGb": 200,
      "nodeOsDiskType": "StandardSSD_LRS",
      "nodeVmSize": "Standard_DS2_v2",
      "osDiskSizeGb": 200,
      "osType": "Linux",
      "podCidr": "10.10.0.0/16",
      "pullSecret": null,
      "pushImage": null,
      "replicaSetCount": 3,
      "vmPriority": "LowPriority"
    }
  ],
  "apiserverProfile": {
    "port": 443
  },
  "autoScalerProfile": {
    "minCount": 1,
    "maxCount": 10
  },
  "dnsProfile": {
    "dnsServiceIP": "10.10.0.10",
    "fqdn": "aksdockded.westus2.aks.net",
    "nameservers": [
      "10.10.0.10"
    ]
  },
  "httpProfile": {
    "port": 80
  },
  "identityProfile": {
    "type": "SystemAssigned"
  },
  "imagePullSecrets": [
    {
      "name": "aci-docker-registry-auth"
    }
  ],
  "nodePools": [
    {
      "name": "nodepool1",
      "nodeCount": 1,
      "nodeRole": "Node"
    }
  ],
  "nodeVirtualMachineScaleSets": [
    {
      "name": "nodepool1"
    }
  ],
  "nodeVirtualMachineSize": "Standard_DS2_v2"
}

```

```
"servicePrincipalProfile": {  
    "clientId": "msi",  
    "secret": null  
},  
"sku": {  
    "name": "Base",  
    "tier": "Free"  
},  
"storageProfile": {  
    "blobCsiDriver": null,  
    "diskCsiDriver": {  
        "enabled": true  
    },  
    "fileCsiDriver": {  
        "enabled": true  
    },  
    "snapshotController": {  
        "enabled": true  
    }  
},  
"supportPlan": "KubernetesOfficial",  
"systemData": null,  
"tags": null,  
"type": "Microsoft.ContainerService/ManagedClusters",  
"upgradeSettings": null,  
"windowsProfile": null,  
"workloadAutoScalerProfile": {  
    "keda": null,  
    "verticalPodAutoscaler": null  
}  
}  
}  
ayush [ ~ ]$
```

The screenshot shows the Azure DevOps interface. On the left, there's a sidebar with 'Project Settings' selected, showing sections like General, Boards, Pipelines, etc. The main area displays a 'Create your first service connection' dialog. The dialog has a title 'New service connection' and a sub-instruction 'Choose a service or connection type'. It includes a search bar labeled 'Search connection types' and a list of connection types with radio buttons. The 'Azure Resource Manager' option is selected. Other options listed include Azure Repos/Team Foundation Server, Azure Service Bus, Bitbucket Cloud, Cargo, Chef, Docker Host, Docker Registry, and Generic. At the bottom right of the dialog is a 'Next' button.

New Azure service connection

X

Azure Resource Manager

Identity type

App registration (automatic)

Recommended



[Need help choosing a connection type?](#)

Credential

Workload identity federation

Recommended



Scope level



Subscription



Management Group



Machine Learning Workspace

Subscription

Azure subscription 1 (4af928af-144b-44ea-a5ad-9fe8d622b...)



If you can't find subscription you need, please [create manually](#).

Resource group

docked



Specify to limit access to the chosen resource group only.

Service Connection Name

azure-connection

Resource group

docked



Specify to limit access to the chosen resource group only.

Service Connection Name

azure-connection

Service Management Reference (optional)

Provide a Service Management Reference if your organization requires one to be configured on Entra ID App registrations.

Description (optional)

Security

- Grant access permission to all pipelines

[Learn more](#)

[Troubleshoot](#)

Back

Save

← azure-connection

[Edit](#)

ID: 740b9068-937f-4623-ad4c-c0d43fa6e804

[Overview](#) [Usage history](#) [Approvals and checks](#)

Details

Service connection type



Azure Resource Manager
using workload identity federation with openid connect
[Manage service connection roles](#)
[Manage App registration](#)

Creator



Ayush Pandey
22BDO10038@cuchd.in

Workload Identity federation details

Issuer:

<https://login.microsoftonline.com/34bd8bed-2ac1-41ae-9f08-4e0a3f11706c/v2.0>

Subject identifier:

</eid1/c/pub/t/7Yu9NMEqrkGfCE4KPxFwbA/a/rISbSSETf0KqFyZ8ppdXmA/sc/43bd1bda-1269-4020-a8e0-4c1f95128e7c/740b9068-937f-4623-ad4c-c0d43fa6e804>

```
Ayush Pandey@Ayush MINGW64 /s/docked (main)
$ git init
Reinitialized existing Git repository in s:/docked/.git/
Ayush Pandey@Ayush MINGW64 /s/docked (main)
$ git remote -v

Ayush Pandey@Ayush MINGW64 /s/docked (main)
$ git add .
warning: in the working copy of 'Dockerfile', LF will be replaced by CRLF the next time Git touches it
warning: in the working copy of 'app/index.js', LF will be replaced by CRLF the next time Git touches it
warning: in the working copy of 'azure-pipeline.yml', LF will be replaced by CRLF the next time Git touches it
warning: in the working copy of 'k8s/deployment.yaml', LF will be replaced by CR LF the next time Git touches it
warning: in the working copy of 'k8s/service.yaml', LF will be replaced by CRLF the next time Git touches it

Ayush Pandey@Ayush MINGW64 /s/docked (main)
$ git commit -m "initial commit"
[main (root-commit) 54d810c] initial commit
 5 files changed, 101 insertions(+)
 create mode 100644 Dockerfile
 create mode 100644 app/index.js
 create mode 100644 azure-pipeline.yml
 create mode 100644 k8s/deployment.yaml
 create mode 100644 k8s/service.yaml

Ayush Pandey@Ayush MINGW64 /s/docked (main)
$ git remote add origin https://22BDO10038@dev.azure.com/22BDO10038/docked/_git/docked

Ayush Pandey@Ayush MINGW64 /s/docked (main)
$ git push origin --all
Enumerating objects: 9, done.
Counting objects: 100% (9/9), done.
Delta compression using up to 8 threads
Compressing objects: 100% (8/8), done.
Writing objects: 100% (9/9), 1.55 KiB | 792.00 KiB/s, done.
Total 9 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Analyzing objects... (9/9) (4 ms)
remote: Validating commits... (1/1) done (0 ms)
remote: Storing packfile... done (90 ms)
remote: Storing index... done (39 ms)
remote: Updating refs... done (164 ms)
remote: We noticed you're using an older version of Git. For the best experience, upgrade to a newer version.
To https://dev.azure.com/22BDO10038/docked/_git/docked
 * [new branch]      main -> main
```

Azure DevOps Repository View

The repository 'dockeds' contains the following files:

- app
- k8s
- azure-pipeline.yml
- Dockerfile

New pipeline

Configure your pipeline

Select an existing YAML file

Branch: main

Path: /azure-pipeline.yml

Cancel Continue

New pipeline

Review your pipeline YAML

Variables Run

```

trigger:
--main

variables:
--dockerRegistryServiceConnection: 'azure-connection'
--imageRepository: 'myapp'
--containerRegistry: 'acrdocked.azurecr.io'
--dockerfilePath: 'Dockerfile'
--tag: 'latest'

stages:
--stage: Build
--displayName: 'Build and Push Docker Image'
--jobs:
--job: DockerBuild
--pool:
--vmImage: 'ubuntu-latest'
--steps:
--Settings

```

New service connection

X

 Docker Registry

 Generic

 GitHub

 GitHub Enterprise Server

 Incoming WebHook

 Jenkins

 Jira

 Kubernetes

 Maven

 NuGet

[Learn more](#)

Next

New Docker Registry service connection

X

Registry type

- Docker Hub Others Azure Container Registry

Authentication Type

Service Principal



Subscription

Azure subscription 1 (4af928af-144b-44ea-a5ad-9fe8d622b...)



Azure container registry

acrdocked



Service connection details

Service Connection Name

acr-connection

Service Management Reference (optional)

← acr-connection

[Edit](#)

ID: d859590a-0ee6-4098-9b59-448f29ca7355

[Overview](#) [Usage history](#) [Approvals and checks](#)

Details

Service connection type



Docker Registry
using service principal authentication

Creator



Ayush Pandey
22BDO10038@cuchd.in

docked / Pipelines / docked / 20250713.7

⌚ #20250713.7 • Update azure-pipeline.yml for Azure Pipelines
dockeds

[Summary](#) [Code Coverage](#)

Manually run by Ayush Pandey

Repository and version

dockeds
main ↴ cca5590e

Time started and elap

Today at 6:56 pm

⚠ This pipeline needs permission to access a resource before this run can continue to Build

[Stages](#) [Jobs](#)

⌚ Build and Push Dock...

[Waiting](#)

Permission needed

⌚ Deploy to AKS

[Not started](#)

Waiting for review

Build and Push Docker Image

[Permission](#) Agent pool Default
Permission needed

[Permit](#)

azure-pipeline.yml –

trigger:

- main

variables:

```
acrServiceConnection: 'acr-connection'  
azureServiceConnection: 'azure-connection'  
imageRepository: 'myapp'  
containerRegistry: 'acrdocked.azurecr.io'  
dockerfilePath: 'Dockerfile'  
tag: 'latest'
```

stages:

- stage: Build

displayName: 'Build and Push Docker Image'

jobs:

- job: DockerBuild

displayName: 'Build Docker Image'

pool:

name: 'Default'

steps:

- task: Docker@2

displayName: 'Build and Push to ACR'

inputs:

containerRegistry: \$(acrServiceConnection)

repository: \$(imageRepository)

command: buildAndPush

Dockerfile: \$(dockerfilePath)

tags: |

\$(tag)

```
- stage: Deploy
  displayName: 'Deploy to AKS'
  dependsOn: Build
  jobs:
    - job: DeployK8s
      displayName: 'Deploy to Kubernetes'
      pool:
        name: 'Default'
      steps:
        - task: Kubernetes@1
          displayName: 'Deploy manifests to AKS'
          inputs:
            connectionType: 'Azure Resource Manager'
            azureSubscriptionEndpoint: $(azureServiceConnection)
            azureResourceGroup: 'docked'
            kubernetesCluster: 'aksdockded'
            useClusterAdmin: true
            command: apply
            arguments: '-f k8s/deployment.yaml -f k8s/service.yaml'
```

#20250713.24 • Updated azure-pipeline.yml

docked

ⓘ This run is being retained as one of 3 recent runs by main (Branch). View retention leases

[Summary](#) [Code Coverage](#)

Manually run by Ayush Pandey

Repository and version

docked
main ce02ceaa

Time started and elapsed

Today at 7:56 pm
1m 22s

Related

0 work items
0 artifacts

Tests and coverage

Get started

View 9 changes

Warnings 1

No data was written into the file C:\agent_work_temp\task_outputs\build_1752416798384.txt
Build and Push Docker Image • Build Docker Image • Build and Push to ACR

[Stages](#) [Jobs](#)

[Stages](#) [Jobs](#)

Build and Push Docker Image
1 job completed 22s

Deploy to AKS
1 job completed 19s

8. Create a CI/CD pipeline to build and push a Docker image to ACR and deploy to ACI.

New Azure service connection

X

Azure Resource Manager

Identity type

App registration (automatic)

Recommended



[Need help choosing a connection type?](#)

Credential

Workload identity federation

Recommended



Scope level

- Subscription
- Management Group
- Machine Learning Workspace

Subscription

Azure subscription 1 (4af928af-144b-44ea-a5ad-9fe8d622b...)



If you can't find subscription you need, please [create manually](#).

Resource group

docked



Specify to limit access to the chosen resource group only.

Resource group

docked



Specify to limit access to the chosen resource group only.

Service Connection Name

azure-connection

Service Management Reference (optional)

Provide a Service Management Reference if your organization requires one to be configured on Entra ID App registrations.

Description (optional)

Security

- Grant access permission to all pipelines

[Learn more](#)

[Troubleshoot](#)

Back

Save

[← azure-connection](#)

ID: 854269b0-495e-4845-9714-25a4e2f9b13a

[Edit](#) [⋮](#)

[Overview](#) Usage history Approvals and checks

Details

Service connection type Creator

 Azure Resource Manager using workload identity federation with openid connect

[Manage service connection roles](#) [Manage App registration](#)

Ayush Pandey 22BDO10038@cuchd.in

Workload Identity federation details

Issuer: <https://login.microsoftonline.com/34bd8bed-2ac1-41ae-9f08-4e0a3f11706c/v2.0>

Subject identifier: </eid1/c/pub/t/7Yu9NMEqrkGfCE4KPxFwbA/a/rISbSSETf0KqFyZ8ppdXmA/sc/43bd1bda-1269-4020-a8e0-4c1f95128e7c/854269b0-495e-4845-9714-25a4e2f9b13a>

docked / Pipelines

✓ Connect ✓ Select ✓ Configure Review

New pipeline

Review your pipeline YAML

❖ docked / [azure-pipelines.yml](#) * ⏺

```
1 trigger:
2   branches:
3     include:
4       - main
5
6 variables:
7   imageName: myapp
8   acrName: ayushregistry.azurecr.io
9   containerGroupName: myacigroup
10  resourceGroup: myResourceGroup
11  location: eastus
12
13 stages:
14   stage: BuildAndPush
15   displayName: 'Build and Push Docker Image to ACR'
16   jobs:
17     job: Build
18     pool:
19       name: 'Default'
```

Save and run

Saving will commit `azure-pipelines.yml` to the repository.

Commit message

Optional extended description

Commit directly to the main branch
 Create a new branch for this commit

Save and run

docked / Pipelines / docked (19) / 20250713.1

#20250713.1 • Set up CI with Azure Pipelines

↳ docked (19)

Summary Code Coverage

Individual CI by Ayush Pandey

Repository and version

↳ docked
⌚ main ⚡ ff77bce8

This pipeline needs permission to run.

Stages Jobs

Build and Push Docker Image to ACR

Waiting for review

Permission Agent pool Default
Permission needed

Permit

Permit access?

Granting permission here will permit the use of Agent pool 'Default' for all waiting and future runs of this pipeline.

Cancel Permit

Build and Push Dock... Waiting Deploy to Azure Cont... Not started

Permission needed

docked / Pipelines / docked (19) / 20250714.11

#20250714.11 • Update azure-pipelines.yml for Azure Pipelines

↳ docked (19)

Summary Code Coverage

Manually run by Ayush Pandey

Repository and version

↳ docked
⌚ main ⚡ e08afece

Time started and elapsed

⌚ Just now
⌚ 27s

Related

⌚ 0 work items
⌚ 0 artifacts

Tests and coverage

Get started

View 26 changes

Stages Jobs

Build and Push Docker Image to ACR

Build 24s

Deploy to Azure Container Registry

Not started

Cancel

The screenshot shows the Azure DevOps Pipelines interface. On the left, there's a sidebar with various navigation options: Overview, Boards, Repos, Pipelines (which is selected), Pipelines, Environments, Releases, Library, Task groups, Deployment groups, Test Plans, and Project settings. The main area displays a pipeline run titled '#20250714.11 • Update azure-pipelines.yml for Azure Pipelines'. It shows a summary card with details: manually run by Ayush Pandey, repository and version docked (main e08afec), time started and elapsed just now (1m 2s), related work items (0), and artifacts (0). Below this is a Stages tab showing two stages: 'Build and Push Dock...' (completed) and 'Deploy to Azure Cont...' (not started).

9. Create a CI/CD pipeline to build a .NET application and deploy it to Azure App Service.

```
Microsoft Windows [Version 10.0.26100.4652]
(c) Microsoft Corporation. All rights reserved.

S:\demo.net>dotnet new sln -o HelloWorldApp
The template "Solution File" was created successfully.

S:\demo.net>dir
Volume in drive S is ZAP
Volume Serial Number is 82E2-3E5E

Directory of S:\demo.net

14-07-2025 14:15    <DIR>          .
14-07-2025 14:15    <DIR>          HelloWorldApp
          0 File(s)           0 bytes
          2 Dir(s)  735,212,904,448 bytes free

S:\demo.net>cd HelloWorldApp

S:\demo.net\HelloWorldApp>dotnet new mvc -n HelloWorldApp.Web
The template "ASP.NET Core Web App (Model-View-Controller)" was created successfully.
This template contains technologies from parties other than Microsoft, see https://aka.ms/aspnetcore/8.0-third-party-notices for details.

Processing post-creation actions...
Restoring S:\demo.net\HelloWorldApp\HelloWorldApp.Web\HelloWorldApp.Web.csproj:
  Determining projects to restore...
  Restored S:\demo.net\HelloWorldApp\HelloWorldApp.Web\HelloWorldApp.Web.csproj (in 72 ms).
Restore succeeded.

S:\demo.net\HelloWorldApp>dir
Volume in drive S is ZAP
Volume Serial Number is 82E2-3E5E

Directory of S:\demo.net\HelloWorldApp

14-07-2025 14:16    <DIR>          .
14-07-2025 14:15    <DIR>          ..
14-07-2025 14:15            441 HelloWorldApp.sln
14-07-2025 14:16    <DIR>          HelloWorldApp.Web
          1 File(s)           441 bytes
          3 Dir(s)  735,204,605,952 bytes free

S:\demo.net\HelloWorldApp>dotnet sln HelloWorldApp.sln add HelloWorldApp.Web\HelloWorldApp.Web.csproj
Project 'HelloWorldApp.Web\HelloWorldApp.Web.csproj' added to the solution.

S:\demo.net\HelloWorldApp>dotnet restore
Determining projects to restore...
All projects are up-to-date for restore.

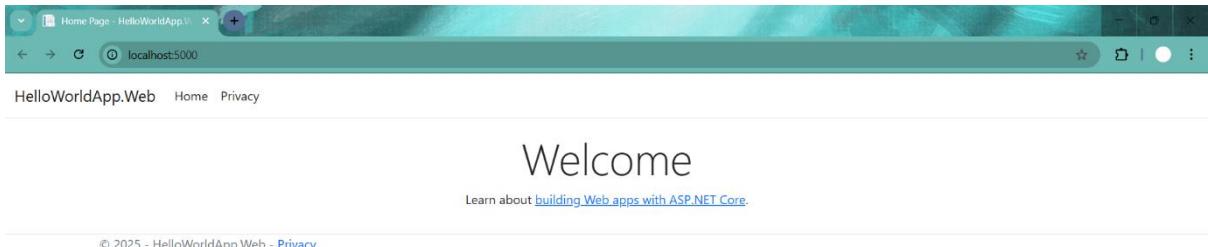
S:\demo.net\HelloWorldApp>dotnet build --no-restore --configuration release
HelloWorldApp.Web -> S:\demo.net\HelloWorldApp\HelloWorldApp.Web\bin\Release\net8.0\HelloWorldApp.Web.dll

Build succeeded.
  0 Warning(s)
  0 Error(s)

Time Elapsed 00:00:10.04
```

```
S:\demo.net\HelloWorldApp>dotnet S:\demo.net\HelloWorldApp\HelloWorldApp.Web\bin\Release\net8.0\HelloWorldApp.Web.dll
info: Microsoft.AspNetCore.DataProtection.KeyManagement.XmlKeyManager[63]
      User profile is available. Using 'C:\Users\Ayush Pandey\AppData\Local\ASP.NET\DataProtection-Keys' as key repository and Windows DPAPI to encrypt keys
      at rest.
warn: Microsoft.AspNetCore.StaticFiles.StaticFileMiddleware[16]
      The WebRootPath was not found: S:\demo.net\HelloWorldApp\wwwroot. Static files may be unavailable.
info: Microsoft.Hosting.Lifetime[14]
      Now listening on: http://localhost:5000
info: Microsoft.Hosting.Lifetime[8]
      Application started. Press Ctrl+C to shut down.
info: Microsoft.Hosting.Lifetime[8]
      Hosting environment: Production
info: Microsoft.Hosting.Lifetime[8]
      Content root path: S:\demo.net\HelloWorldApp
info: Microsoft.AspNetCore.Hosting.Diagnostics[1]
      Request starting HTTP/1.1 GET http://localhost:5000/ - -
warn: Microsoft.AspNetCore.HttpsPolicy.HttpsRedirectionMiddleware[3]
      Failed to determine the https port for redirect.
info: Microsoft.AspNetCore.Routing.EndpointMiddleware[0]
      Executing endpoint 'HelloWorldApp.Web.Controllers.HomeController.Index (HelloWorldApp.Web)'
info: Microsoft.AspNetCore.Mvc.Infrastructure.ControllerActionInvoker[102]
      Route matched with {action = "Index", controller = "Home"}. Executing controller action with signature Microsoft.AspNetCore.Mvc.IActionResult Index()
on controller HelloWorldApp.Web.Controllers.HomeController (HelloWorldApp.Web).
info: Microsoft.AspNetCore.Mvc.ViewFeatures.ViewResultExecutor[1]
      Executing ViewResult, running view Index.
info: Microsoft.AspNetCore.Mvc.ViewFeatures.ViewResultExecutor[4]
      Executed ViewResult - view Index executed in 117.8574ms.
info: Microsoft.AspNetCore.Mvc.Infrastructure.ControllerActionInvoker[105]
      Executed action HelloWorldApp.Web.Controllers.HomeController.Index (HelloWorldApp.Web) in 147.3098ms
info: Microsoft.AspNetCore.Routing.EndpointMiddleware[1]
      Executed endpoint 'HelloWorldApp.Web.Controllers.HomeController.Index (HelloWorldApp.Web)'
info: Microsoft.AspNetCore.Hosting.Diagnostics[2]
      Request finished HTTP/1.1 GET http://localhost:5000/ - 200 - text/html; charset=utf-8 245.0632ms
info: Microsoft.AspNetCore.Hosting.Diagnostics[1]
      Request starting HTTP/1.1 GET http://localhost:5000/lib/bootstrap/dist/css/bootstrap.min.css - -
info: Microsoft.AspNetCore.Hosting.Diagnostics[2]
      Request finished HTTP/1.1 GET http://localhost:5000/lib/bootstrap/dist/css/bootstrap.min.css - 404 0 - 6.1868ms
info: Microsoft.AspNetCore.Hosting.Diagnostics[16]
      Request reached the end of the middleware pipeline without being handled by application code. Request path: GET http://localhost:5000/lib/bootstrap/di
st/css/bootstrap.min.css, Response status code: 404
info: Microsoft.AspNetCore.Hosting.Diagnostics[1]
```

```
S:\demo.net\HelloWorldApp>cd HelloWorldApp.Web
S:\demo.net\HelloWorldApp\HelloWorldApp.Web>dotnet S:\demo.net\HelloWorldApp\HelloWorldApp.Web\bin\Release\net8.0\HelloWorldApp.Web.dll
info: Microsoft.Hosting.Lifetime[14]
      Now listening on: http://localhost:5000
info: Microsoft.Hosting.Lifetime[8]
      Application started. Press Ctrl+C to shut down.
info: Microsoft.Hosting.Lifetime[8]
      Hosting environment: Production
info: Microsoft.Hosting.Lifetime[8]
      Content root path: S:\demo.net\HelloWorldApp\HelloWorldApp.Web
warn: Microsoft.AspNetCore.HttpsPolicy.HttpsRedirectionMiddleware[3]
      Failed to determine the https port for redirect.
|
```



The screenshot shows the Visual Studio IDE interface. The left pane displays the code for 'Index.cshtml' under the 'Views > Home' folder. The code includes C# logic to set ViewData["Title"] and an HTML template with a heading and a link. The right pane shows the 'EXPLORER' view with the project structure for 'HELLOWORLDAPP.WEB'. The structure includes 'bin', 'Controllers', 'Models', 'obj', 'Properties', 'Views', 'Home', and files like 'Index.cshtml', 'Privacy.cshtml', 'ViewImports.cs', 'ViewStart.cshtml', 'wwwroot', 'appsettings.Development.json', 'appsettings.json', 'HelloWorldApp.Web.cs', and 'Program.cs'. A search bar at the top right contains the text 'HelloWorldApp.Web'.

```
1 @{
2     ViewData["Title"] = "Home Page";
3 }
4
5 <div class="text-center">
6     <h1 class="display-4">Welcome to CICD Pipeline for .Net project
```

```
S:\demo.net\HelloWorldApp\HelloWorldApp.Web>code .
S:\demo.net\HelloWorldApp\HelloWorldApp.Web>dotnet publish --no-build --configuration release
HelloWorldApp.Web -> S:\demo.net\HelloWorldApp\HelloWorldApp.Web\bin\release\net8.0\publish\
S:\demo.net\HelloWorldApp\HelloWorldApp.Web>
```

Create new project

X

Project name *

HelloWebApp

Description

Visibility



Public

Anyone on the internet can view the project. Certain features like TFVC are not supported.



New project is being created...



Only people you give access to will be able to view this project.

▼ Advanced

Cancel

Create

Azure DevOps 22BDO10038 / HelloWebApp / Overview / Summary

Search

☰ ⌂ ⓘ ⚙️ ⚙️ AP

HelloWebApp

Overview Summary Dashboards Wiki Boards Repos Pipelines Test Plans Artifacts

HelloWebApp

Welcome to the project!

No stats are available at this moment
Setup a service to see project activity.

```
S:\demo.net\HelloWorldApp\HelloWorldApp.Web>cd ..
S:\demo.net\HelloWorldApp>git init
Initialized empty Git repository in S:/demo.net/HelloWorldApp/.git/
S:\demo.net\HelloWorldApp>git add .
warning: in the working copy of 'HelloWorldApp.Web/bin/Release/net8.0/publish/wwwroot/lib/bootstrap/dist/css/bootstrap-grid.css', LF will be replaced by CRLF
F the next time Git touches it
warning: in the working copy of 'HelloWorldApp.Web/bin/Release/net8.0/publish/wwwroot/lib/bootstrap/dist/css/bootstrap-grid.min.css', LF will be replaced by CRLF
the next time Git touches it
warning: in the working copy of 'HelloWorldApp.Web/bin/Release/net8.0/publish/wwwroot/lib/bootstrap/dist/css/bootstrap-grid rtl.css', LF will be replaced by CRLF
the next time Git touches it
warning: in the working copy of 'HelloWorldApp.Web/bin/Release/net8.0/publish/wwwroot/lib/bootstrap/dist/css/bootstrap-grid rtl.min.css', LF will be replaced by CRLF
the next time Git touches it
warning: in the working copy of 'HelloWorldApp.Web/bin/Release/net8.0/publish/wwwroot/lib/bootstrap/dist/css/bootstrap-reboot.css', LF will be replaced by CRLF
the next time Git touches it
warning: in the working copy of 'HelloWorldApp.Web/bin/Release/net8.0/publish/wwwroot/lib/bootstrap/dist/css/bootstrap-reboot.min.css', LF will be replaced by CRLF
the next time Git touches it
warning: in the working copy of 'HelloWorldApp.Web/bin/Release/net8.0/publish/wwwroot/lib/bootstrap/dist/css/bootstrap-reboot rtl.css', LF will be replaced by CRLF
the next time Git touches it
warning: in the working copy of 'HelloWorldApp.Web/bin/Release/net8.0/publish/wwwroot/lib/bootstrap/dist/css/bootstrap-reboot rtl.min.css', LF will be replaced by CRLF
the next time Git touches it
warning: in the working copy of 'HelloWorldApp.Web/bin/Release/net8.0/publish/wwwroot/lib/bootstrap/dist/css/bootstrap-utilities.css', LF will be replaced by CRLF
the next time Git touches it
warning: in the working copy of 'HelloWorldApp.Web/bin/Release/net8.0/publish/wwwroot/lib/bootstrap/dist/css/bootstrap-utilities.min.css', LF will be replaced by CRLF
the next time Git touches it
warning: in the working copy of 'HelloWorldApp.Web/bin/Release/net8.0/publish/wwwroot/lib/bootstrap/dist/css/bootstrap-utilities rtl.css', LF will be replaced by CRLF
the next time Git touches it
warning: in the working copy of 'HelloWorldApp.Web/bin/Release/net8.0/publish/wwwroot/lib/bootstrap/dist/css/bootstrap-utilities rtl.min.css', LF will be replaced by CRLF
the next time Git touches it
warning: in the working copy of 'HelloWorldApp.Web/bin/Release/net8.0/publish/wwwroot/lib/bootstrap/dist/js/bootstrap.bundle.js', LF will be replaced by CRLF
F the next time Git touches it
warning: in the working copy of 'HelloWorldApp.Web/bin/Release/net8.0/publish/wwwroot/lib/bootstrap/dist/js/bootstrap.bundle.min.js', LF will be replaced by CRLF
```

```
S:\demo.net\HelloWorldApp>git commit -m "initial commit"
[master (root-commit) c443398] initial commit
 187 files changed, 153573 insertions(+)
 create mode 100644 HelloWorldApp.Web\Controllers/HomeController.cs
 create mode 100644 HelloWorldApp.Web/HelloWorldApp.Web.csproj
 create mode 100644 HelloWorldApp.Web/Models/ErrorViewModel.cs
 create mode 100644 HelloWorldApp.Web/Program.cs
 create mode 100644 HelloWorldApp.Web/Properties/launchSettings.json
 create mode 100644 HelloWorldApp.Web/Views/Home/Index.cshtml
 create mode 100644 HelloWorldApp.Web/Views/Home/Privacy.cshtml
 create mode 100644 HelloWorldApp.Web/Views/Shared/Error.cshtml
 create mode 100644 HelloWorldApp.Web/Views/Shared/_Layout.cshtml
 create mode 100644 HelloWorldApp.Web/Views/Shared/_Layout.cshtml.css
 create mode 100644 HelloWorldApp.Web/Views/Shared/_ValidationScriptsPartial.cshtml
 create mode 100644 HelloWorldApp.Web/Views/_ViewImports.cshtml
 create mode 100644 HelloWorldApp.Web/Views/_ViewStart.cshtml
 create mode 100644 HelloWorldApp.Web/appsettings.Development.json
 create mode 100644 HelloWorldApp.Web/appsettings.json
 create mode 100644 HelloWorldApp.Web/bin/Release/net8.0>HelloWorldApp.Web.deps.json
 create mode 100644 HelloWorldApp.Web/bin/Release/net8.0>HelloWorldApp.Web.dll
 create mode 100644 HelloWorldApp.Web/bin/Release/net8.0>HelloWorldApp.Web.exe
 create mode 100644 HelloWorldApp.Web/bin/Release/net8.0>HelloWorldApp.Web.pdb
 create mode 100644 HelloWorldApp.Web/bin/Release/net8.0>HelloWorldApp.Web.runtimeconfig.json
 create mode 100644 HelloWorldApp.Web/bin/Release/net8.0>HelloWorldApp.Web.staticwebassets.runtime.json
 create mode 100644 HelloWorldApp.Web/bin/Release/net8.0/appsettings.Development.json
 create mode 100644 HelloWorldApp.Web/bin/Release/net8.0/appsettings.json
 create mode 100644 HelloWorldApp.Web/bin/Release/net8.0/publish/HelloWorldApp.Web.deps.json
 create mode 100644 HelloWorldApp.Web/bin/Release/net8.0/publish/HelloWorldApp.Web.dll
 create mode 100644 HelloWorldApp.Web/bin/Release/net8.0/publish/HelloWorldApp.Web.exe
 create mode 100644 HelloWorldApp.Web/bin/Release/net8.0/publish/HelloWorldApp.Web.pdb
 create mode 100644 HelloWorldApp.Web/bin/Release/net8.0/publish/HelloWorldApp.Web.runtimeconfig.json
 create mode 100644 HelloWorldApp.Web/bin/Release/net8.0/publish/appsettings.Development.json
 create mode 100644 HelloWorldApp.Web/bin/Release/net8.0/publish/appsettings.json
 create mode 100644 HelloWorldApp.Web/bin/Release/net8.0/publish/web.config
 create mode 100644 HelloWorldApp.Web/bin/Release/net8.0/publish/wwwroot/HelloWorldApp.Web.styles.css
 create mode 100644 HelloWorldApp.Web/bin/Release/net8.0/publish/wwwroot/css/site.css
 create mode 100644 HelloWorldApp.Web/bin/Release/net8.0/publish/wwwroot/favicon.ico
 create mode 100644 HelloWorldApp.Web/bin/Release/net8.0/publish/wwwroot/js/site.js
 create mode 100644 HelloWorldApp.Web/bin/Release/net8.0/publish/wwwroot/lib/bootstrap/LICENSE
 create mode 100644 HelloWorldApp.Web/bin/Release/net8.0/publish/wwwroot/lib/bootstrap/dist/css/bootstrap-grid.css
 create mode 100644 HelloWorldApp.Web/bin/Release/net8.0/publish/wwwroot/lib/bootstrap/dist/css/bootstrap-grid.css.map
```

```
S:\demo.net\HelloWorldApp>dir
 Volume in drive S is ZAP
 Volume Serial Number is 82E2-3E5E

 Directory of S:\demo.net\HelloWorldApp

14-07-2025 14:31    <DIR>    .
14-07-2025 14:15    <DIR>    ..
14-07-2025 14:17           1,027 HelloWorldApp.sln
14-07-2025 14:33    <DIR>    HelloWorldApp.Web
               1 File(s)      1,027 bytes
               3 Dir(s)   735,192,985,600 bytes free

S:\demo.net\HelloWorldApp>git add .
warning: in the working copy of 'HelloWorldApp.Web/.gitignore', LF will be replaced by CRLF the next time Git touches it

S:\demo.net\HelloWorldApp>git commit -m "Added .gitignore"
[master 744590d] Added .gitignore
 1 file changed, 415 insertions(+)
 create mode 100644 HelloWorldApp.Web/.gitignore

S:\demo.net\HelloWorldApp>
```

```

S:\demo.net\HelloWorldApp>git status
On branch master
nothing to commit, working tree clean

S:\demo.net\HelloWorldApp>git remote add origin https://22BD010038@dev.azure.com/22BD010038>HelloWebApp/_git/HelloWebApp
S:\demo.net\HelloWorldApp>git push -u origin --all
Enumerating objects: 152, done.
Counting objects: 100% (152/152), done.
Delta compression using up to 8 threads
Compressing objects: 100% (140/140), done.
Writing objects: 100% (152/152), 1002.46 KiB | 744.00 KiB/s, done.
Total 152 (delta 38), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Analyzing objects... (152/152) (843 ms)
remote: Validating commits... (2/2) done (1 ms)
remote: Storing packfile... done (124 ms)
remote: Storing index... done (37 ms)
remote: Updating refs... done (240 ms)
remote: We noticed you're using an older version of Git. For the best experience, upgrade to a newer version.
To https://dev.azure.com/22BD010038>HelloWebApp/_git/HelloWebApp
 * [new branch]      master -> master
branch 'master' set up to track 'origin/master'.

S:\demo.net\HelloWorldApp>

```

Azure DevOps 22BD010038 / HelloWebApp / Repos / Files / ◆ HelloWebApp

◆ master / Type to find a file or folder...

Files

Contents History

Name	Last change	Commits
HelloWorldApp.Web	Just now	744590d4 Added .gitignore ayush2442
HelloWorldApp.sln	5m ago	c4433985 initial commit ayush2442

Set up build Clone

Azure DevOps 22BD010038 / HelloWebApp / Pipelines

◆ HelloWebApp

Select a source

Azure Repos Git GitHub GitHub Enterprise Server Subversion Bitbucket Cloud

Other Git

Select your repository

Tell us where your sources are.
You can customize how to get these sources from the repository later.

Team project: HelloWebApp

Repository: HelloWebApp

Default branch for manual and scheduled builds: master

Continue

… > HelloWebApp-Build-Pipeline

Tasks Variables Triggers Options History | Save & queue Discard | Summary Queue ...

Pipeline
Build pipeline

Get sources
HelloWebApp master

Agent job 1
Run on agent

Restore
.NET Core

Build
.NET Core

Test
Disabled: .NET Core

Publish
.NET Core

Publish Artifact
Publish build artifacts

Name *
HelloWebApp-Build-Pipeline

Agent pool ⓘ | Pool information | Manage ⚙️
Azure Pipelines

Agent Specification *
windows-2019

Parameters ⓘ | Unlink all
Project(s) to restore and build ⚙️
**/*.csproj

Project(s) to test ⚙️
/*[Tt]ests/.csproj

Run pipeline

X

Select parameters below and manually run the pipeline

Save comment

|

Agent pool

Azure Pipelines

▼

Agent Specification *

windows-2019

▼

Branch/tag

master

▼

Select the branch, commit, or tag

Advanced options

Variables

>

3 variables defined

Demands

>

This pipeline has no defined demands



Enable system diagnostics

Cancel

Save and run

#20250714.1 • Added .gitignore

This run is being retained as one of 3 recent runs by master (Branch).

Run new

View retention leases

Summary Code Coverage

Manually run by Ayush Pandey

Repository and version

HelloWebApp

master 744590d4

Time started and elapsed

Today at 2:42 pm 1m 5s

Related 0 work items

Tests and coverage

Get started

Jobs		
Name	Status	Duration
Agent job 1	Success	59s

Azure DevOps 228DO10038 / HelloWebApp / Pipelines

Search

Overview Boards Repos Pipelines Environments Releases Library Task groups Deployment groups Test Plans

HelloWebApp

... > HelloWebApp-Build-Pipeline

Triggers Options History Save & queue Discard Summary Queue ...

Continuous integration

HelloWebApp Enabled

Scheduled + Add

No builds scheduled

Build completion + Add

Build when another build completes

Enable continuous integration

Batch changes while a build is in progress

Branch filters

Type Include Branch specification master

+ Add

Path filters

+ Add

File Edit Selection View Go Run ...

HelloWorldApp.Web

@ Index.cshtml .gitignore

Views > Home > @ Index.cshtml

```
1  @{
2      ViewData["Title"] = "Home Page";
3  }
4
5  <div class="text-center">
6      <h1 class="display-4">Welcome to CICD Pipeline for .Net project - Creating the entire build and release pipeline</h1>
7      <p>Learn about <a href="https://learn.microsoft.com/aspnet/core">building Web apps with ASP.NET Core</a>.</p>
8  </div>
```

EXPLORER OPEN EDITORS

OPEN EDITORS

Index.cshtml .gitignore HELLOWORLDAPP.WEB

bin Controllers Models obj Properties Views Home Index.cshtml Privacy.cshtml

```

S:\demo.net\HelloWorldApp>git add .
S:\demo.net\HelloWorldApp>git commit -m "title updated"
[master d0c9bda] title updated
 1 file changed, 1 insertion(+), 1 deletion(-)

S:\demo.net\HelloWorldApp>git push origin master
Enumerating objects: 11, done.
Counting objects: 100% (11/11), done.
Delta compression using up to 8 threads
Compressing objects: 100% (6/6), done.
Writing objects: 100% (6/6), 575 bytes | 575.00 KiB/s, done.
Total 6 (delta 3), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Analyzing objects... (6/6) (6 ms)
remote: Validating commits... (1/1) done (0 ms)
remote: Storing packfile... done (33 ms)
remote: Storing index... done (43 ms)
remote: Updating refs... done (184 ms)
remote: We noticed you're using an older version of Git. For the best experience, upgrade to a newer version.
To https://dev.azure.com/22BDO10038>HelloWebApp/_git/HelloWebApp
 744590d..d0c9bda master -> master

S:\demo.net\HelloWorldApp>

```

← HelloWebApp-Build-Pipeline

[Edit](#) [Run pipeline](#)

Runs Branches Analytics

Description	Stages	Created
#20250714.2 • title updated ⌚ Individual CI for 🏠 master ⌚ d0c9bda0	⌚	⌚ Just now ⌚ 8s
#20250714.1 • Added .gitignore ⌚ Manually run by 🏠 master ⌚ 744590d4 ✅	✅	⌚ 6m ago ⌚ 1m 5s

```

ayush [ ~ ]$ az webapp create --name demoapp-ayush1 --resource-group demo.net --plan DemoAppServicePlan --runtime "DOTNETCORE:9.0" --deployment-local-git
Local git is configured with url of 'https://None@demoapp-ayush1.scm.azurewebsites.net/demoapp-ayush1.git'
{
  "availabilityState": "Normal",
  "clientAffinityEnabled": true,
  "clientCertEnabled": false,
  "clientCertExclusionPaths": null,
  "clientCertMode": "Required",
  "cloningInfo": null,
  "containerSize": 0,
  "customDomainVerificationId": "9F09F6F94C86E822C9B379625F45E70D23C09A5098A0F721F498093D8A477DA4",
  "dailyMemoryTimeQuota": 0,
  "daprConfig": null,
  "defaultHostName": "demoapp-ayush1.azurewebsites.net",
  "deploymentLocalGitUrl": "https://None@demoapp-ayush1.scm.azurewebsites.net/demoapp-ayush1.git",
  "enabled": true,
  "enabledHostNames": [
    "demoapp-ayush1.azurewebsites.net",
    "demoapp-ayush1.scm.azurewebsites.net"
  ],
  "endToEndEncryptionEnabled": false,
  "extendedLocation": null,
  "ftpPublishingUrl": "ftps://waws-prod-blu-565.ftp.azurewebsites.windows.net/site/wwwroot",
  "hostNameSslStates": [
    {
      "certificateResourceId": null,
      "hostType": "Standard",
      "ipBasedSslResult": null,
      "ipBasedSslState": "NotConfigured",
      "name": "demoapp-ayush1.azurewebsites.net",
      "sslState": "Disabled",
      "thumbprint": null
    }
  ]
}

```

```

        "sitePrivateLinkHostEnabled": null,
        "storageType": null,
        "supportedTlsCipherSuites": null,
        "tracingOptions": null,
        "use32BitWorkerProcess": null,
        "virtualApplications": null,
        "vnetName": null,
        "vnetPrivatePortsCount": null,
        "vnetRouteAllEnabled": null,
        "webSocketsEnabled": null,
        "websiteTimeZone": null,
        "winAuthAdminState": null,
        "winAuthTenantState": null,
        "windowsConfiguredStacks": null,
        "windowsFxVersion": null,
        "xManagedServiceIdentityId": null
    },
    "slotSwapStatus": null,
    "state": "Running",
    "storageAccountRequired": false,
    "suspendedTill": null,
    "tags": null,
    "targetSwapSlot": null,
    "trafficManagerHostNames": null,
    "type": "Microsoft.Web/sites",
    "usageState": "Normal",
    "virtualNetworkSubnetId": null,
    "vnetContentShareEnabled": false,
    "vnetImagePullEnabled": false,
    "vnetRouteAllEnabled": false,
    "workloadProfileName": null
}
}

```

```

ayush [ ~ $ az webapp create --name demoapp-qa-ayush1 --resource-group demo.net --pla
n DemoAppServicePlan --runtime "DOTNETCORE:9.0" --deployment-local-git
Local git is configured with url of 'https://None@demoapp-qa-ayush1.scm.azurewebsites.net/demoapp-qa-ayush1.git'
{
    "availabilityState": "Normal",
    "clientAffinityEnabled": true,
    "clientCertEnabled": false,
    "clientCertExclusionPaths": null,
    "clientCertMode": "Required",
    "cloningInfo": null,
    "containerSize": 0,
    "customDomainVerificationId": "9F09F6F94C86E822C9B379625F45E70D23C09A5098A0F721F498093D8A477DA4",
    "dailyMemoryTimeQuota": 0,
    "daprConfig": null,
    "defaultHostName": "demoapp-qa-ayush1.azurewebsites.net",
    "deploymentLocalGitUrl": "https://None@demoapp-qa-ayush1.scm.azurewebsites.net/demoapp-qa-ayush1.git",
    "enabled": true,
    "enabledHostNames": [
        "demoapp-qa-ayush1.azurewebsites.net",
        "demoapp-qa-ayush1.scm.azurewebsites.net"
    ],
    "endToEndEncryptionEnabled": false,
    "extendedLocation": null,
    "ftpPublishingUrl": "ftps://waws-prod-blu-565.ftp.azurewebsites.windows.net/site/wwwroot",
    "hostNameSslStates": [
        {
            "certificateResourceId": null,
            "hostType": "Standard",
            "ipBasedSslResult": null,
            "ipBasedSslState": "NotConfigured",
            "name": "demoapp-qa-ayush1.azurewebsites.net",
            "sslState": "Disabled"
        }
    ]
}

```

```

    "sitePrivateLinkHostEnabled": null,
    "storageType": null,
    "supportedTlsCipherSuites": null,
    "tracingOptions": null,
    "use32BitWorkerProcess": null,
    "virtualApplications": null,
    "vnetName": null,
    "vnetPrivatePortsCount": null,
    "vnetRouteAllEnabled": null,
    "webSocketsEnabled": null,
    "websiteTimeZone": null,
    "winAuthAdminState": null,
    "winAuthTenantState": null,
    "windowsConfiguredStacks": null,
    "windowsFxVersion": null,
    "xManagedServiceIdentityId": null
},
"slotSwapStatus": null,
"state": "Running",
"storageAccountRequired": false,
"suspendedTill": null,
"tags": null,
"targetSwapSlot": null,
"trafficManagerHostNames": null,
"type": "Microsoft.Web/sites",
"usageState": "Normal",
"virtualNetworkSubnetId": null,
"vnetContentShareEnabled": false,
"vnetImagePullEnabled": false,
"vnetRouteAllEnabled": false,
"workloadProfileName": null
}
}

```

```

ayush [ ~ ]$ az webapp create --name demoapp-dev-ayush1 --resource-group demo.net --pl
an DemoAppServicePlan --runtime "DOTNETCORE:9.0" --deployment-local-git
Local git is configured with url of 'https://None@demoapp-dev-ayush1.scm.azurewebsites.net/demoapp-dev-ayush1.git'
{
  "availabilityState": "Normal",
  "clientAffinityEnabled": true,
  "clientCertEnabled": false,
  "clientCertExclusionPaths": null,
  "clientCertMode": "Required",
  "cloningInfo": null,
  "containerSize": 0,
  "customDomainVerificationId": "9F09F6F94C86E822C9B379625F45E70D23C09A5098A0F721F498093D8A477DA4",
  "dailyMemoryTimeQuota": 0,
  "daprConfig": null,
  "defaultHostName": "demoapp-dev-ayush1.azurewebsites.net",
  "deploymentLocalGitUrl": "https://None@demoapp-dev-ayush1.scm.azurewebsites.net/demoapp-dev-ayush1.git",
  "enabled": true,
  "enabledHostNames": [
    "demoapp-dev-ayush1.azurewebsites.net",
    "demoapp-dev-ayush1.scm.azurewebsites.net"
  ],
  "endToEndEncryptionEnabled": false,
  "extendedLocation": null,
  "ftpPublishingUrl": "ftps://waws-prod-blu-565.ftp.azurewebsites.windows.net/site/wwwroot",
  "hostNameSslStates": [
    {
      "certificateResourceId": null,
      "hostType": "Standard",
      "ipBasedSslResult": null,
      "ipBasedSslState": "NotConfigured",
      "name": "demoapp-dev-ayush1.azurewebsites.net",
      "sslState": "Disabled",
    }
  ]
}

```

```

    "sitePrivateLinkHostEnabled": null,
    "storageType": null,
    "supportedTlsCipherSuites": null,
    "tracingOptions": null,
    "use32BitWorkerProcess": null,
    "virtualApplications": null,
    "vnetName": null,
    "vnetPrivatePortsCount": null,
    "vnetRouteAllEnabled": null,
    "webSocketsEnabled": null,
    "websiteTimeZone": null,
    "winAuthAdminState": null,
    "winAuthTenantState": null,
    "windowsConfiguredStacks": null,
    "windowsFxVersion": null,
    "xManagedServiceIdentityId": null
},
"slotSwapStatus": null,
"state": "Running",
"storageAccountRequired": false,
"suspendedTill": null,
"tags": null,
"targetSwapSlot": null,
"trafficManagerHostNames": null,
"type": "Microsoft.Web/sites",
"usageState": "Normal",
"virtualNetworkSubnetId": null,
"vnetContentShareEnabled": false,
"vnetImagePullEnabled": false,
"vnetRouteAllEnabled": false,
"workloadProfileName": null
}

```

Home > Resource groups >

Resource groups

Chandigarh University (cuchd.in)

+ Create Manage view ...

You are viewing a new version of Browse experience. Click here to access the old experience.

- Name ↑
- demo.net
- ai_finance-app-insights_cd376eb6-
- DefaultResourceGroup-EUS
- demo.net
- NetworkWatcherRG
- rg-finance-app

demo.net Resource group

Overview

Activity log

Access control (IAM)

Tags

Resource visualizer

Events

Settings

Cost Management

Monitoring

Automation

Help

Essentials

Resources Recommendations

Filter for any field... Type equals all Location equals all Add filter

Showing 1 to 4 of 4 records. Show hidden types No grouping List view

Name ↑	Type ↑	Location ↑
<input checked="" type="checkbox"/> demoapp-ayush1	App Service	East US
<input checked="" type="checkbox"/> demoapp-dev-ayush1	App Service	East US
<input checked="" type="checkbox"/> demoapp-qa-ayush1	App Service	East US
<input checked="" type="checkbox"/> DemoAppServicePlan	App Service plan	East US

Showing 1 - 5 of 5. Display 50 count: < Previous Page 1 of 1 Next > Give feedback

Azure DevOps 22BDO10038 / HelloWebApp / Pipelines / Releases

All pipelines > New release pipeline

Pipeline Tasks Variables Retention Options History

Artifacts | + Add Stages | + Add Stage 1 Select a template

+ Add an artifact Schedule not set

Select a template

Or start with an Empty job

Search

Featured

- Azure App Service deployment Deploy your application to Azure App Service. Choose from Web App on Windows, Linux, containers, Function Apps, or WebJobs.
- Deploy a Java app to Azure App Service Deploy a Java application to an Azure Web App.
- Deploy a Node.js app to Azure App Service Deploy a Node.js application to an Azure Web App.
- Deploy a PHP app to Azure App Service and Azure Database for MySQL Deploy a PHP application to an Azure Web App and database to Azure Database for MySQL.
- Deploy a Python app to Azure App Service and Azure database for MySQL Deploy a Python Django, Bottle, or Flask application to an Azure Web App and database to Azure Database for MySQL.

Apply

Azure DevOps 22BDO10038 / HelloWebApp / Pipelines / Releases

All pipelines > New release pipeline

Pipeline Tasks Variables Retention Options History

Artifacts | + Add Stages | + Add Stage 1

+ Add an artifact Schedule not set

Add an artifact

Source type

- Build
- Azure Repos ...
- GitHub
- TFVC

5 more artifact types ▾

Project * HelloWebApp

Source (build pipeline) * HelloWebApp-Build-Pipeline

Default version * Latest

Source alias * _HelloWebApp-Build-Pipeline

22BDO10038 / HelloWebApp / Settings / Service connections

Project Settings HelloWebApp

General

- Overview
- Teams
- Permissions
- Notifications
- Service hooks
- Dashboards

Boards

- Project configuration
- Team configuration
- GitHub connections

Pipelines

- Agent pools
- Parallel jobs

Create your first service connection

Service connections help you manage, protect, and connect to external services.

Create service connection

New service connection

Choose a service or connection type

Search connection types

- Azure Repos/Team Foundation Server
- Azure Resource Manager
- Azure Service Bus
- Bitbucket Cloud
- Cargo
- Chef
- Docker Host
- Docker Registry
- Generic

Learn more

Next

New Azure service connection

X

Azure Resource Manager

Identity type

App registration (automatic)

Recommended



[Need help choosing a connection type?](#)

Credential

Workload identity federation

Recommended



Scope level

- Subscription
- Management Group
- Machine Learning Workspace

Subscription

Azure subscription 1 (4af928af-144b-44ea-a5ad-9fe8d622b...)



If you can't find subscription you need, please [create manually](#).

Resource group



Specify to limit access to the chosen resource group only.

Service Connection Name

Azure Subs

Service Connection Name

Azure Subs

Service Management Reference (optional)

Provide a Service Management Reference if your organization requires one to be configured on Entra ID App registrations.

Description (optional)

Security

- Grant access permission to all pipelines

[Learn more](#)

[Troubleshoot](#)

[Back](#)

[Save](#)

All pipelines > New release pipeline

Save Create release ...

Pipeline Tasks Variables Retention Options History

Stage 1
Deployment process

Run on agent Run on agent

Deploy Azure App Service

Stage name
Stage 1

Parameters
Azure subscription *

Azure Subs

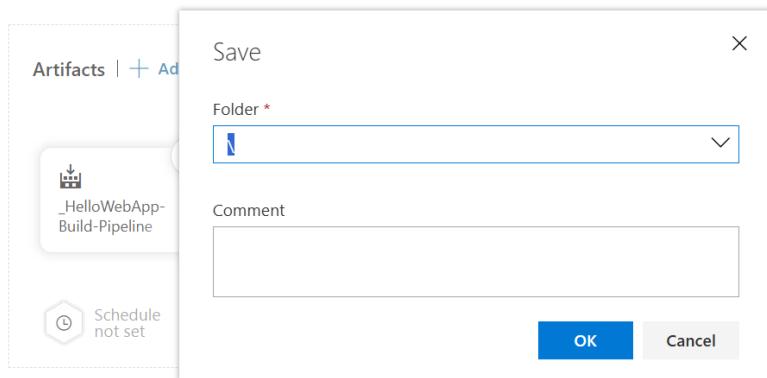
/subscriptions/4af928af-144b-44ea-a5ad-9fe8d622bd21

App type
Web App on Linux

App service name *
demoapp-dev-ayush1

This field is linked to 1 setting in 'Deploy Azure App Service'

Startup command

[Pipeline](#) [Tasks](#) [Variables](#) [Retention](#) [Options](#) [History](#)

Create a new release

New release pipeline

Pipeline ^

Click on a stage to change its trigger from automated to manual.

Stage 1

Stages for a trigger change from automated to manual.

Artifacts ^

Select the version for the artifact sources for this release

Source alias	Version	
_HelloWebApp-Build-Pipeline	20250714.2	

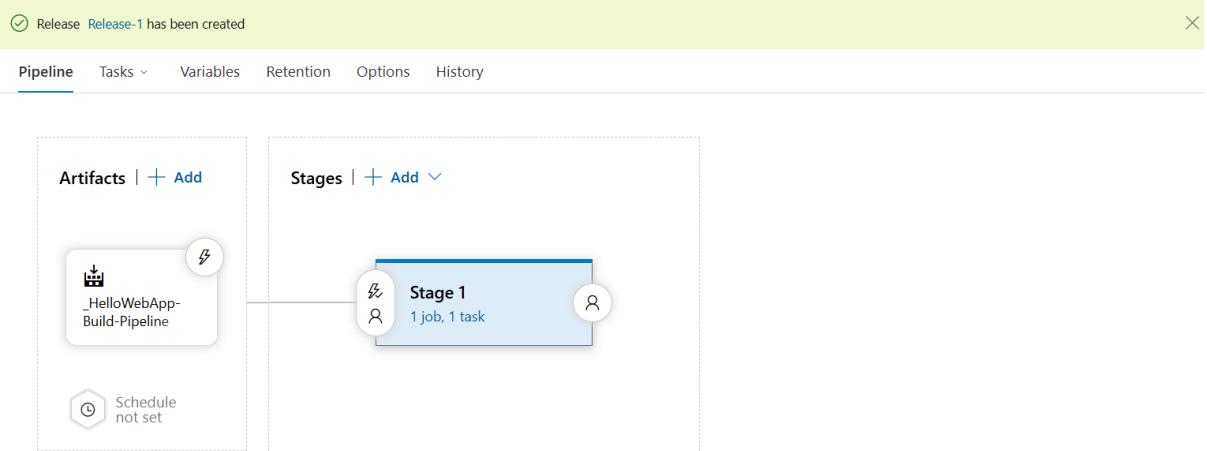
Release description

Create

Cancel

All pipelines > New release pipeline

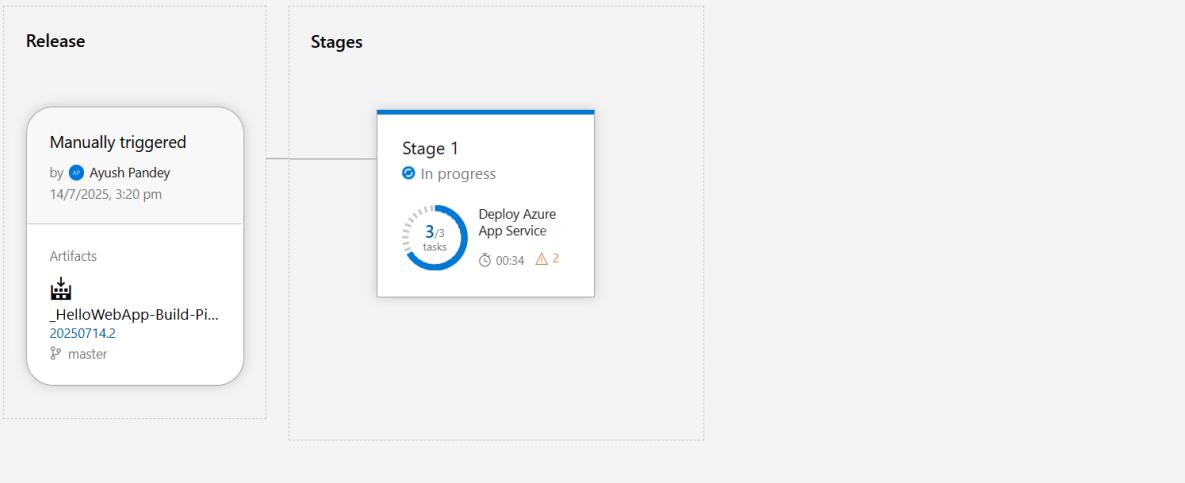
Save Create release ...



New release pipeline > Release-1

Help

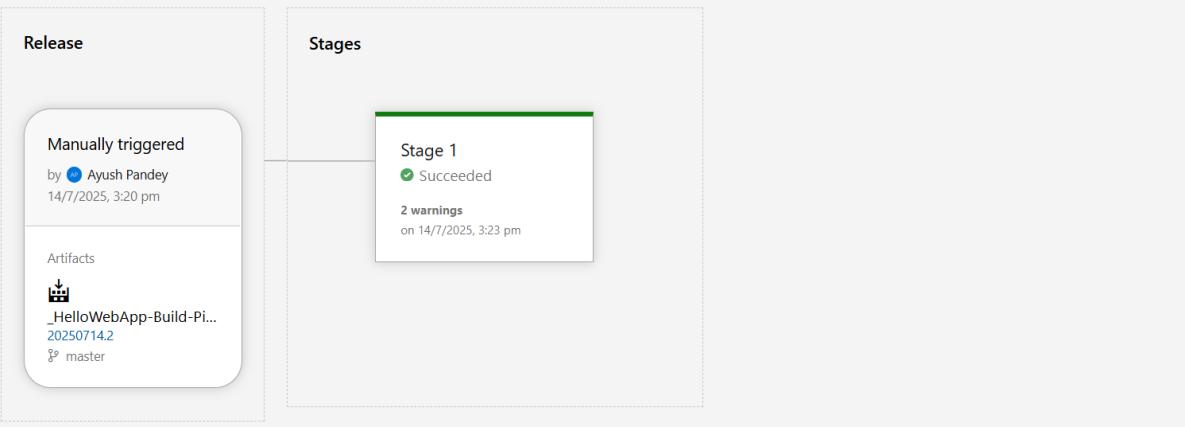
Pipeline Variables History + Deploy Cancel Refresh Edit ...

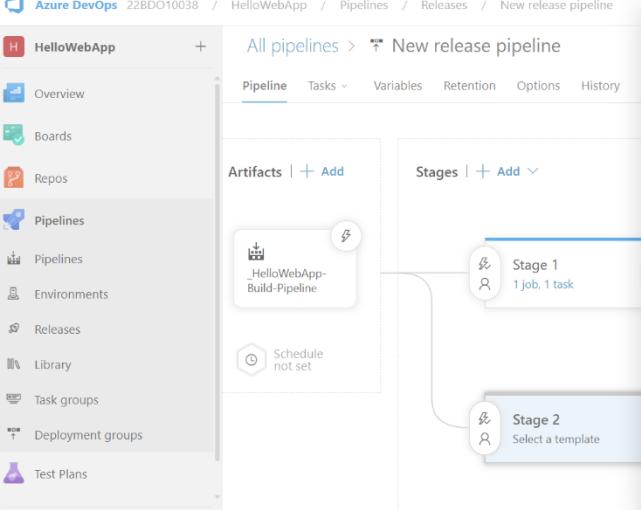


New release pipeline > Release-1

Help

Pipeline Variables History + Deploy Cancel Refresh Edit ...



 Azure DevOps 22BDO10038 / HelloWebApp / Pipelines / Releases / New release pipeline

Artifacts | + Add

Stages | + Add ▾

- Stage 1 1 job, 1 task
- Stage 2 Select a template

Select a template
Or start with an  Empty job

Featured

-  **Azure App Service deployment**
Deploy your application to Azure App Service. Choose from Web App on Windows, Linux, containers, Function Apps, or WebJobs.
-  **Deploy a Java app to Azure App Service**
Deploy a Java application to an Azure Web App.
-  **Deploy a Node.js app to Azure App Service**
Deploy a Node.js application to an Azure Web App.
-  **Deploy a PHP app to Azure App Service and Azure Database for MySQL**
Deploy a PHP application to an Azure Web App and database to Azure Database for MySQL.
-  **Deploy a Python app to Azure App Service and Azure database for MySQL**
Deploy a Python Django, Bottle, or Flask application to an Azure Web App and database to Azure Database for MySQL.

Save  Create release ...

All pipelines > New release pipeline

Pipeline Tasks Variables Retention Options History

Stage 2
Deployment process

Run on agent
 Run on agent

Deploy Azure App Service
 Azure App Service deploy

Stage name
Stage 2

Parameters ⓘ |  Unlink all
Azure subscription *  Manage

Azure Subs  

App type  

Web App on Linux

App service name *  
demoapp-qa-ayush1

This field is linked to 1 selected app service: demoapp-qa-ayush1

Startup command  

Save  Create release ...

All pipelines > New release pipeline

Pipeline Tasks Variables Retention Options History

Artifacts | + Add

Stages | + Add ▾

- Dev 1 job, 1 task
- QA 1 job, 1 task

Stage
QA

Properties ^
Name and owners of the stage

Stage name
QA

Stage owner
 Ayush Pandey 

Save  Create release ...

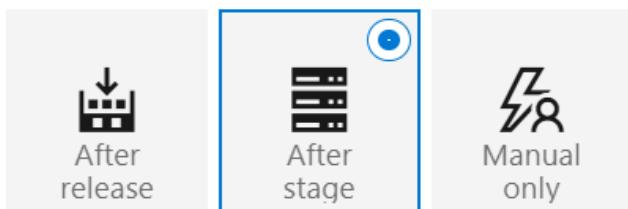
Pre-deployment conditions

QA

Triggers ^

Define the trigger that will start deployment to this stage

Select trigger ⓘ



Stages ⓘ



Artifact filters ⓘ

Disabled

All pipelines > New release pipeline

Create release ...

Pipeline Tasks Variables Retention Options History

The screenshot shows the "New release pipeline" configuration page. It includes sections for "Artifacts" (HelloWebApp-Build-Pipeline selected), "Stages" (Dev stage selected), "Triggers" (disabled), "Pre-deployment approvals" (enabled, approver Ayush Pananey), and "Approval policies" (checkboxes for user requesting approval, re-validation, and skip if approved previously).

Artifacts | + Add

Stages | + Add

Triggers ⓘ
Define the trigger that will start deployment to this stage

Pre-deployment approvals ^
Enabled
Select the users who can approve or reject deployments to this stage
Approvers ⓘ
Ayush Pananey | Search users and groups for approvers

Timeout ⓘ
30 Days

Approval policies
 The user requesting a release or deployment should not approve it
 Revalidate identity of approver before completing the approval. ⓘ
 Skip approval if the same approver approved the previous stage ⓘ

Pipeline Tasks Variables Retention Options History

Artifacts | + Add

- _HelloWebApp-Build-Pipeline
- Schedule not set

Stages | + Add

- Dev
1 job, 1 task

Continuous deployment trigger

Build: _HelloWebApp-Build-Pipeline

 Enabled

Creates a release every time a new build is available.

Build branch filters

No filters added.

[+ Add](#) | [▼](#)

Pull request trigger

Build: _HelloWebApp-Build-Pipeline

 Disabled

Enabling this will create a release every time a selected artifact is available as part of a pull request workflow

- 10.** Create a CI/CD pipeline to build a React application and deploy it to an Azure virtual machine.

```
ayush [ ~ ]$ ssh -i ~/.ssh/id_rsa azureuser@20.169.168.220
Welcome to Ubuntu 22.04.5 LTS (GNU/Linux 6.8.0-1030-azure x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/pro

System information as of Mon Jul 14 11:58:17 UTC 2025

System load: 0.0          Processes:           108
Usage of /:   7.5% of 28.89GB  Users logged in:    0
Memory usage: 35%          IPv4 address for eth0: 10.0.0.4
Swap usage:   0%

Expanded Security Maintenance for Applications is not enabled.

36 updates can be applied immediately.
20 of these updates are standard security updates.
To see these additional updates run: apt list --upgradable

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

New release '24.04.2 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

*** System restart required ***
Last login: Mon Jul 14 11:25:52 2025 from 20.253.192.12
azureuser@reactvm:~$ 
```

```
azureuser@reactvm:~$ sudo npm install -g serve
npm WARN EBADENGINE Unsupported engine {
npm WARN   EBADENGINE   package: 'serve@14.2.4',
npm WARN   EBADENGINE   required: { node: '>= 14' },
npm WARN   EBADENGINE   current: { node: 'v12.22.9', npm: '8.5.1' }
npm WARN   EBADENGINE }
npm WARN EBADENGINE Unsupported engine {
npm WARN   EBADENGINE   package: 'boxen@7.0.0',
npm WARN   EBADENGINE   required: { node: '>=14.16' },
npm WARN   EBADENGINE   current: { node: 'v12.22.9', npm: '8.5.1' }
npm WARN   EBADENGINE }
npm WARN EBADENGINE Unsupported engine {
npm WARN   EBADENGINE   package: 'camelcase@7.0.1',
npm WARN   EBADENGINE   required: { node: '>=14.16' },
npm WARN   EBADENGINE   current: { node: 'v12.22.9', npm: '8.5.1' }
npm WARN   EBADENGINE }

added 88 packages, and audited 89 packages in 5s

24 packages are looking for funding
  run `npm fund` for details

found 0 vulnerabilities
azureuser@reactvm:~$ sudo mkdir -p /var/www/reactapp
azureuser@reactvm:~$ sudo chown -R $USER:$USER /var/www/reactapp
azureuser@reactvm:~$
```

```
Microsoft Windows [Version 10.0.26100.4652]
(c) Microsoft Corporation. All rights reserved.

S:\reacted>npx create-react-app my-app

Creating a new React app in S:\reacted\my-app.

Installing packages. This might take a couple of minutes.
Installing react, react-dom, and react-scripts with cra-template...

added 1323 packages in 1m

269 packages are looking for funding
  run `npm fund` for details

Initialized a git repository.

Installing template dependencies using npm...

added 18 packages, and changed 1 package in 6s

269 packages are looking for funding
  run `npm fund` for details
Removing template package using npm...

removed 1 package, and audited 1341 packages in 4s

269 packages are looking for funding
  run `npm fund` for details

9 vulnerabilities (3 moderate, 6 high)

To address all issues (including breaking changes), run:
  npm audit fix --force

Run `npm audit` for details.

Created git commit.
```

```
Run `npm audit` for details.

Created git commit.

Success! Created my-app at S:\reacted\my-app
Inside that directory, you can run several commands:

  npm start
    Starts the development server.

  npm run build
    Bundles the app into static files for production.

  npm test
    Starts the test runner.

  npm run eject
    Removes this tool and copies build dependencies, configuration files
    and scripts into the app directory. If you do this, you can't go back!

We suggest that you begin by typing:

  cd my-app
  npm start

Happy hacking!

S:\reacted>cd my-app

S:\reacted\my-app>git init
Reinitialized existing Git repository in S:/reacted/my-app/.git/

S:\reacted\my-app>git add .

S:\reacted\my-app>git commit -m "initial commit"
On branch master
nothing to commit, working tree clean
```

Create new project

X

Project name *

reacted

Description

Visibility



Public

Anyone on the internet can view the project. Certain features like TFVC are not supported.



Private

Only people you give access to will be able to view this project.

▼ Advanced

Cancel

Create

Azure DevOps 22BDO10038 / reacted / Overview / Summary

Search

R reacted +

Overview

Summary

Dashboards

Wiki

Boards

Repos

Pipelines

Test Plans

Artifacts

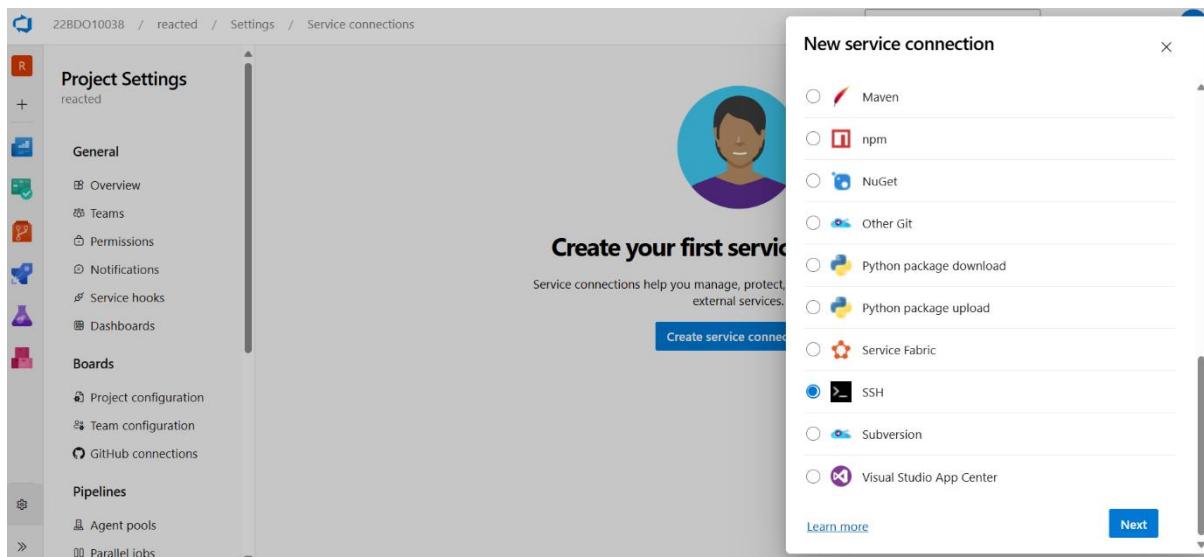
R reacted

Private Invite

No stats are available at this moment
Setup a service to see project activity.

Welcome to the project!

What service would you like to start with?



New SSH service connection

X

Host name

Host name or IP address of the remote machine.

Port number (optional)

Port number on the remote machine to use for connecting.

Private Key (optional)

Private Key for connecting to the endpoint

[Upload SSH private key file...](#)

Authentication

Username

Username for connecting to the endpoint

Password/Passphrase (optional)

Password for connecting to the endpoint

Username

Username for connecting to the endpoint

Password/Passphrase (optional)

Password for connecting to the endpoint

Service connection details

Service Connection Name

Description (optional)

Security

- Grant access permission to all pipelines

[Learn more](#)[Troubleshoot](#)[Back](#)[Save](#)

```
S:\reacted\my-app>git remote add origin https://22BD010038@dev.azure.com/22BD010038/reacted/_git/reacted
S:\reacted\my-app>git push -u origin --all
Enumerating objects: 22, done.
Counting objects: 100% (22/22), done.
Delta compression using up to 8 threads
Compressing objects: 100% (22/22), done.
Writing objects: 100% (22/22), 175.16 KiB | 9.73 MiB/s, done.
Total 22 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Analyzing objects... (22/22) (39 ms)
remote: Validating commits... (1/1) done (0 ms)
remote: Storing packfile... done (71 ms)
remote: Storing index... done (39 ms)
remote: Updating refs... done (180 ms)
remote: We noticed you're using an older version of Git. For the best experience, upgrade to a newer version.
To https://dev.azure.com/22BD010038/reacted/_git/reacted
 * [new branch]      master -> master
branch 'master' set up to track 'origin/master'.

S:\reacted\my-app>
```

master ✓ / azure-pipelines.yml

azure-pipelines.yml

Contents History Compare Blame ↗

① Committed ⚡ 5034a64f: Added azure-pipelines.yml

Create a pull request X

```
1 trigger:
2   branches:
3     include:
4       - main
5
6 variables:
7   buildDir: 'build'
8   vmPath: '/var/www/reactapp'
9   sshServiceConnection: 'azure-vm-ssh' # Replace with your service connection name
10
11 stages:
12 - stage: Build
13   displayName: Build React App
14   jobs:
15     - job: BuildJob
16       pool:
17         vmImage: 'ubuntu-latest'
18       steps:
19         - task: NodeTool@0
20           inputs:
21             versionSpec: '18.x'
22             displayName: 'Install Node.js'
```

✓ Connect ✓ Select ✓ Configure Review

New pipeline

Review your pipeline YAML

Variables Run ▾

reacted / azure-pipelines.yml ⚡

Show assistant

```
1 trigger:
2   branches:
3     include:
4       - main
5
6 variables:
7   buildDir: 'build'
8   vmPath: '/var/www/reactapp'
9   sshServiceConnection: 'azure-vm-ssh' # Replace with your service connection name
10
11 stages:
12 - stage: Build
13   displayName: Build React App
14   jobs:
15     - job: BuildJob
16       pool:
17         vmImage: 'ubuntu-latest'
18       steps:
19         - task: NodeTool@0
```

azure-pipelines.yml –

trigger:

branches:

include:

```
- main

variables:
- name: buildDir
  value: 'build'
- name: vmPath
  value: '/var/www/reactapp'
- name: sshServiceConnection
  value: 'azure-vm-ssh'

stages:
- stage: Build
  displayName: Build React App
  jobs:
- job: BuildJob
  pool:
    vmlImage: 'ubuntu-latest'
  steps:
- task: NodeTool@0
  inputs:
    versionSpec: '18.x'
  displayName: 'Install Node.js'
- task: CmdLine@2
  displayName: 'Build React App'
  inputs:
    script: |
      npm install
      npm run build
- task: CopyFiles@2
  inputs:
    SourceFolder: '$(System.DefaultWorkingDirectory)/$(buildDir)'
```

```
Contents: '**'

TargetFolder: '$(Build.ArtifactStagingDirectory)'

- task: ecdc45f6-832d-4ad9-b52b-ee49e94659be@1

inputs:

path: '$(Build.ArtifactStagingDirectory)'

artifactName: drop

- stage: Deploy

displayName: Deploy to Azure VM

dependsOn:

- Build

jobs:

- deployment: DeployJob

environment:

name: 'production'

strategy:

runOnce:

deploy:

steps:

- task: 30f35852-3f7e-4c0c-9a88-e127b4f97211@1

inputs:

alias: current

artifact: drop

- task: CopyFilesOverSSH@0

inputs:

sshEndpoint: '$(sshServiceConnection)'

sourceFolder: '$(Pipeline.Workspace)/drop'

contents: '**'

targetFolder: '$(vmPath)'

cleanTargetFolder: true
```

```
overwrite: true

- task: SSH@0

  inputs:

    sshEndpoint: '$(sshServiceConnection)'

    runOptions: 'inline'

    inline: |

      sudo pkill -f "serve" || true

      nohup serve -s $(vmPath) -l 80 > /dev/null 2>&1 &

    failOnStdErr: false
```

#20250714.1 • Added azure-pipelines.yml

reacted

Summary Code Coverage

Manually run by Ayush Pandey

View 2 changes

Repository and version

reacted

master → 5034a64f

Time started and elapsed

Just now

1m 10s

Related

0 work items

1 published

Tests and coverage

Get started

⚠ This pipeline needs permission to access a resource before this run can continue to Deploy to Azure VM

View

Stages Jobs

Build React App

1 job completed

53s

Deploy to Azure VM

Waiting

Permission needed

1 artifact

reacted / Pipelines / reacted / 20250714.1

#20250714.1 • Added azure-pipelines.yml

Manually run by Ayush Pandey

Repository and version
reacted
master ⚡ 5034a64f

Deploy to Azure VM

Permission Environment production
Permission needed

Permit

Permit access?

Granting permission here will permit the use of Environment 'production' for all waiting and future runs of this pipeline.

Cancel Permit

This pipeline needs permission to run in environment 'production'.

Stages Jobs

Build React App Deploy to Azure VM

1 job completed 53s Waiting
1 artifact

Permission needed

#20250714.2 • Added azure-pipelines.yml

Run new

This run is being retained as one of 3 recent runs by master (Branch).

View retention leases

Summary Environments Associated pipelines Code Coverage

Manually run by Ayush Pandey

Repository and version
reacted
master ⚡ 5034a64f

Time started and elapsed
Today at 5:57 pm
2m 37s

Related
0 work items
1 published

View 2 changes

Tests and coverage
Get started

Stages Jobs

Build React App Deploy to Azure VM

1 job completed 38s 1 job completed 1m 21s
1 artifact