Deploy dockerise node.js application on azure container instance through azure devops pipeline using arm template

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Project settings «

Select a source

| Azure Repos Git | GitHub | GitHub Enterprise Server | Subversion | Bitbucket Cloud |

Other Git

ⓘ Authorized using connection: GitHub connection 1   Change ⌄

Select your repository

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

Repository * | Manage on GitHub ↗

gajendragangwar123/aciWithARM   ···

Default branch for manual and scheduled builds *

master   ···

Continue

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Project settings «

··· ⟩ **Arm deploy**

Tasks Variables Triggers Options History   🖫 Save & queue ⌄   ↺ Discard   ☰ Summary   ▷ Queue   ···

Pipeline
Build pipeline   ···

⟊ **Get sources**
    gajendragangwar123/aciWithARM   ⑂ master

Agent job 1   +
    Run on agent

📄 **Arm template**   ✓ ⋮⋮
    Copy files

📄 **sourcecode**
    Copy files

⬆ **Publish Artifact: drop**
    Publish build artifacts

Copy files ⓘ   🔗 Link settings   ⟨/⟩ View YAML   🗑 Remove

Task version 2.* ⌄

Display name * ⓘ

Arm template

Source Folder ⓘ

ARMTemplates   ···

Contents * ⓘ

**

Target Folder * ⓘ

$(build.artifactstagingdirectory)/ARMTemplates

Advanced ⌄

Control Options ⌄

Output Variables ⌄

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Arm deploy

Tasks Variables Triggers Options History

Save & queue Discard Summary Queue ...

Pipeline
Build pipeline

Get sources
gajendragangwar123/aciWithARM master

Agent job 1
Run on agent

Arm template
Copy files

sourcecode
Copy files

Publish Artifact: drop
Publish build artifacts

Copy files

Link settings View YAML Remove

Task version 2.*

Display name *
sourcecode

Source Folder
SourceCode

Contents *
**

Target Folder *
$(build.artifactstagingdirectory)/SourceCode

Advanced

Control Options

Search

Arm deploy

Tasks Variables Triggers Options History   Save & queue ∨   Discard   Summary   ▷ Queue   ⋯

Pipeline
Build pipeline   ⋯

Get sources
gajendragangwar123/aclWithARM   ⚯ master

Agent job 1   +
Run on agent

Arm template
Copy files

sourcecode
Copy files

Publish Artifact: drop   ✓
Publish build artifacts

Publish build artifacts ⓘ   🔗 Link settings   📄 View YAML   🗑 Remove

Task version   1.* ∨

Display name *
Publish Artifact: drop

Path to publish * ⓘ
$(Build.ArtifactStagingDirectory)   ⋯

Artifact name * ⓘ
drop

Artifact publish location * ⓘ
Azure Pipelines   ∨

Advanced ∨

Control Options ∨

Output Variables ∨

Search

All pipelines › ↑ New release pipeline (8)   💾 Save   🎯 Create release   ⋯

Pipeline Tasks ∨ Variables Retention Options History

ARM
Deployment process   ⋯

Agent job   +
Run on agent

build   ✓
⊞ Docker

push
⊞ Docker

ARM Template instance
ARM template deployment

Azure subscription ⓘ | Manage ↗
ARm connection   ∨   ↻
ⓘ Scoped to subscription 'Free Trial'

Azure Container Registry ⓘ
gajendraregistry1   ∨   ↻

Action * ⓘ
Build an image   ∨

Docker File * ⓘ
$(System.DefaultWorkingDirectory)/_Arm
deploy/drop/SourceCode/Dockerfile   ⋯

Build Arguments ⓘ

☑ Use Default Build Context ⓘ

Image Name * ⓘ
$(Build.Repository.Name):$(Build.BuildId)

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All pipelines > New release pipeline (8)

Save   Create release   ...

Pipeline   Tasks ∨   Variables   Retention   Options   History

ARM
Deployment process   ...

Agent job   +
Run on agent

build
Docker

push   ✓
Docker

ARM Template instance
ARM template deployment

Display name *
push

Container Registry Type *   ⓘ
Azure Container Registry   ∨

Azure subscription   ⓘ | Manage ⧉
ARm connection   ∨
ⓘ Scoped to subscription 'Free Trial'

Azure Container Registry   ⓘ
gajendraregistry1   ∨

Action *   ⓘ
Push an image   ∨

Image Name *   ⓘ
$(Build.Repository.Name):$(Build.BuildId)

☑ Qualify Image Name   ⓘ

Additional Image Tags   ⓘ

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Save   Create release   ...

Pipeline   Tasks ∨   Variables   Retention   Options   History

ARM
Deployment process   ...

Agent job   +
Run on agent

build
Docker

push
Docker

ARM Template instance   ✓
ARM template deployment

Resource group *   ⓘ
$(resourceGroupName)   ∨

Location *   ⓘ
$(resourceGroupLocation)   ∨

Template ∧

Template location *
Linked artifact   ∨

Template *   ⓘ
$(System.DefaultWorkingDirectory)/_Arm
deploy/drop/ARMTemplates/ContainerInstance.azrm.json   ...

Template parameters   ⓘ
$(System.DefaultWorkingDirectory)/_Arm
deploy/drop/ARMTemplates/param.ContainerInstance.json   ...

Override template parameters   ⓘ
-noCpu "1" -memoryInGB "4" -registryServerName
gajendraregistry1.azurecr.io -registryUserName gajendraregistry1 -
registryPassword   ...

MERN Stack Example

ToDo List

Task

Create a Task

Assignee

Assignee

Status:

To Be Done

Submit

Now, we add some extra step in azure release pipeline(azure container creation using arm template)

Home > Subscriptions > Free Trial

Subscriptions
Default Directory

+ Add   Manage Policies   ...

Subscriptions == **global filter**

My role == **all**

Status == **all**

+ Add filter

Subscription name ↑↓

Free Trial   ...

< Previous   Page 1 of 1   Next >

Free Trial | Resource providers
Subscription   ...

🔍 pro   ✕   «

Diagnose and solve problems

Security

Settings

Programmatic deployment

Usage + quotas

Resource providers

Properties

Help

New Support Request

🔄 Re-register   Unregister   🔄 Refr

🔍 container

Provider

Microsoft.ContainerService

Microsoft.ContainerInstance

Microsoft.ContainerRegistry

Microsoft.HybridContainerService

Resource Provider Details
Microsoft.ContainerRegistry

Resource Types

registries

Default API Version: None

API Versions   API Profiles   Capabilities   Locations   JSON

API Versions

2023-01-01-preview

2022-12-01

2022-02-01-preview

2021-12-01-preview

2021-09-01

2021-08-01-preview

2021-06-01-preview

2020-11-01-preview

2019-12-01-preview

2019-05-01

2017-10-01

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All pipelines > ⚓ New release pipeline (9)   💾 Save   Create release   ...

Pipeline   Tasks ∨   Variables   Retention   Options   History

registry
Deployment process   ...

Agent job   +
Run on agent

azure conatiner registry arm template   ✓
ARM template deployment

PowerShell Script
PowerShell

build
Docker

Push an image
Docker

azure container instance arm template
ARM template deployment

Template location *
Linked artifact

Template *   ⓘ
$(System.DefaultWorkingDirectory)/_Arm
deploy/drop/ARMTemplates/ContainerRegistry.azrm.json

Template parameters   ⓘ

Override template parameters   ⓘ

Deployment mode *   ⓘ
Incremental

Advanced ∧

Deployment name   ⓘ
GetResourceNames_$(Release.ReleaseName)

Deployment outputs   ⓘ
DeploymentOutput

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Project settings

All pipelines >   ⊤ New release pipeline (9)

Save   Create release   ...

Pipeline   Tasks ⌄   Variables   Retention   Options   History

registry
Deployment process   ...

Agent job   +
Run on agent

azure conatiner registry arm template
ARM template deployment

PowerShell Script   ✓ ⋮
PowerShell

build
Docker

Push an image
Docker

azure container instance arm template
ARM template deployment

PowerShell ⓘ   View YAML   Remov

Task version | 2.*   ⌄ |

Display name *
| PowerShell Script |

Type ⓘ
○ File Path   ● Inline

Script *
```
$var=ConvertFrom-Json '$(DeploymentOutput)'
$REGISTRY_NAME=$var.registry_name.value
$REGISTRY_SERVER=$var.registry_server.value
$REGISTRY_USERNAME=$var.registry_username.value
$REGISTRY_PASSWORD=$var.registry_password.value
ECHO $var.registry_name.value
ECHO $var.registry_server.value
ECHO $var.registry_username.value
ECHO $var.registry_password.value
```

Preference Variables ⌄

Advanced ⌄