

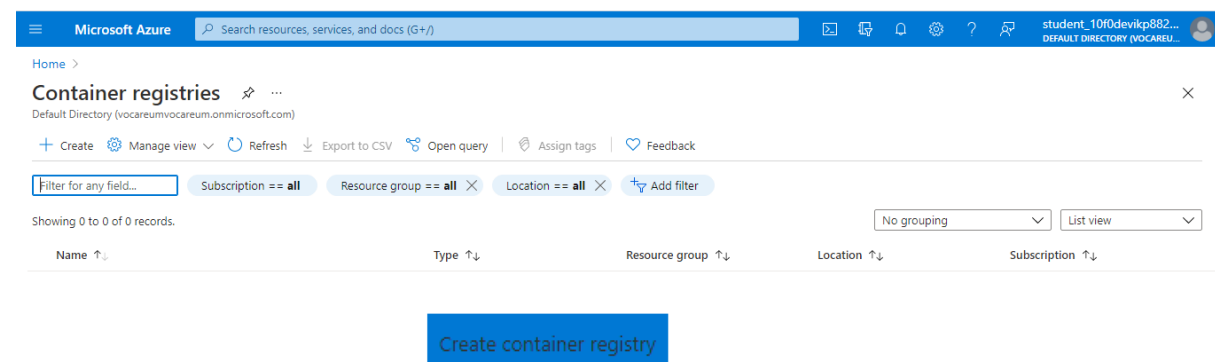
Contents

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1 Azure container Registry and creation

Azure Container Registry allows you to build, store, and manage container images and artifacts in a private registry for all types of container deployments. Use Azure container registries with your existing container development and deployment pipelines. Use Azure Container Registry Tasks to build container images in Azure on-demand, or automate builds triggered by source code updates, updates to a container's base image, or timers. *Documentation* : <https://docs.microsoft.com/en-us/azure/container-registry/>

Create container Register




Create container registry ...

Subscription *	<div>Production 1</div>
Resource group *	<div>Regroup_3mku</div> <div>Create new</div>
Instance details	
Registry name *	<div>SathiContRegDemo</div> <div>.azurecr.io</div>
Location *	<div>West US</div>
Availability zones ⓘ	<input type="checkbox"/> Enabled
<div><div>ⓘ</div> Availability zones are enabled on premium registries and in regions that support availability zones. Learn more</div>	
SKU * ⓘ	<div>Basic</div>

[Review + create](#)

[< Previous](#)

[Next: Networking >](#)

 Validation passed

Basics Networking Encryption Tags [Review + create](#)

Registry details

Basics

Registry name	SathiContRegDemo
Subscription	Production 1
Resource Group	Regroup_3mku
Location	West US
Availability zones	Disabled
SKU	Premium

Networking

SathiContRegDemo
Container registry

Search (Ctrl+/) Move Delete Update

Overview
Activity log
Access control (IAM)
Tags
Quick start
Events
Settings
Access keys
Encryption
Identity
Networking

Tell us about your experience using Azure Container Registry →

Essentials

Resource group (change) : Regroup_3mku	Login server : sathicontregdemo.azurecr.io
Location : West US	Creation date : 7/9/2021, 11:35 AM GMT+5:30
Subscription (change) : Production 1	SKU : Premium
Subscription ID : f700a502-f4c5-42f4-8f1d-cacab88d7d39	Provisioning state : Succeeded

Usage

Included in SKU	Used	Additional storage
500 GiB	0.00 GiB	0.00 GiB

ACR Tasks
Build, Run, Push and Patch containers in Azure with ACR Tasks. Tasks supports Windows, Linux and ARM with QEMU.
[Learn more](#)

Home > SathiContRegDemo

SathiContRegDemo | Repositories

Search (Ctrl+/) Refresh

Search to filter repositories ...

Repositories ↑↓

No result

Settings
Access keys
Encryption
Identity
Networking
Security
Locks
Services
Repositories
Webhooks

2 Docker setup on local machine

<https://docs.microsoft.com/en-us/windows/wsl/install-win10>

<https://docs.docker.com/docker-for-windows/install/>

<https://docs.docker.com/get-started/>

Download and Install wsl and docker

docs.docker.com/docker-for-windows/install/

Apps Ultimatix - Digitally... TCS web mail Welcome to HDFC... ICICI Bank Login | I... CET 2017 ML desk-dr.ind.sgcib.c... New T

docker docs Search the docs Home Guides Product manuals Reference Samples

/ Product manuals / Docker Desktop / Windows / Install Docker Desktop for Windows

Docker Desktop

- Overview
- Mac
- Windows
- Install Docker Desktop for Windows

Welcome to Docker Desktop for Windows. This page contains information about Docker Desktop for Windows system requirements, download URL, installation instructions, and automatic updates.

Docker Desktop for Windows

By downloading Docker Desktop, you agree to the terms of the [Docker Software End User License Agreement](#) and the [Docker Data Processing Agreement](#).

Run Daemon

Sathisha NM –image,container,acr,aks-3

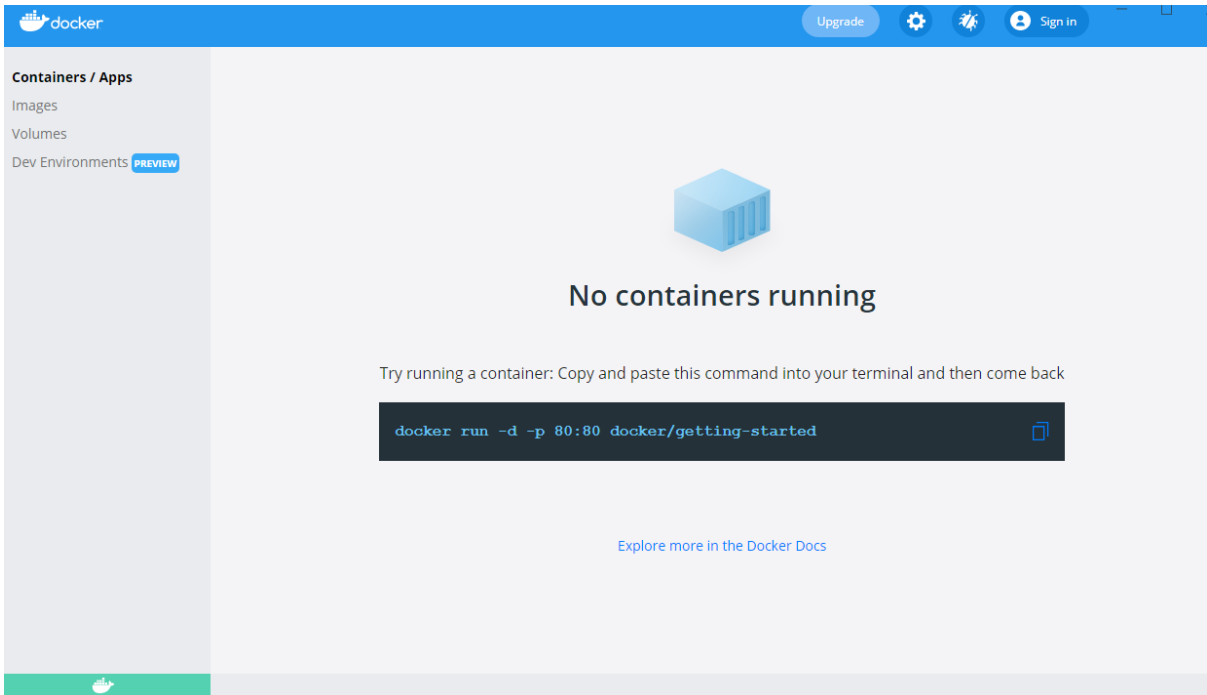
```
Administrator: Command Prompt
Microsoft Windows [Version 10.0.19042.1052]
(c) Microsoft Corporation. All rights reserved.

C:\WINDOWS\system32>"C:\Program Files\Docker\Docker\DockerCli.exe" -SwitchDaemon
```

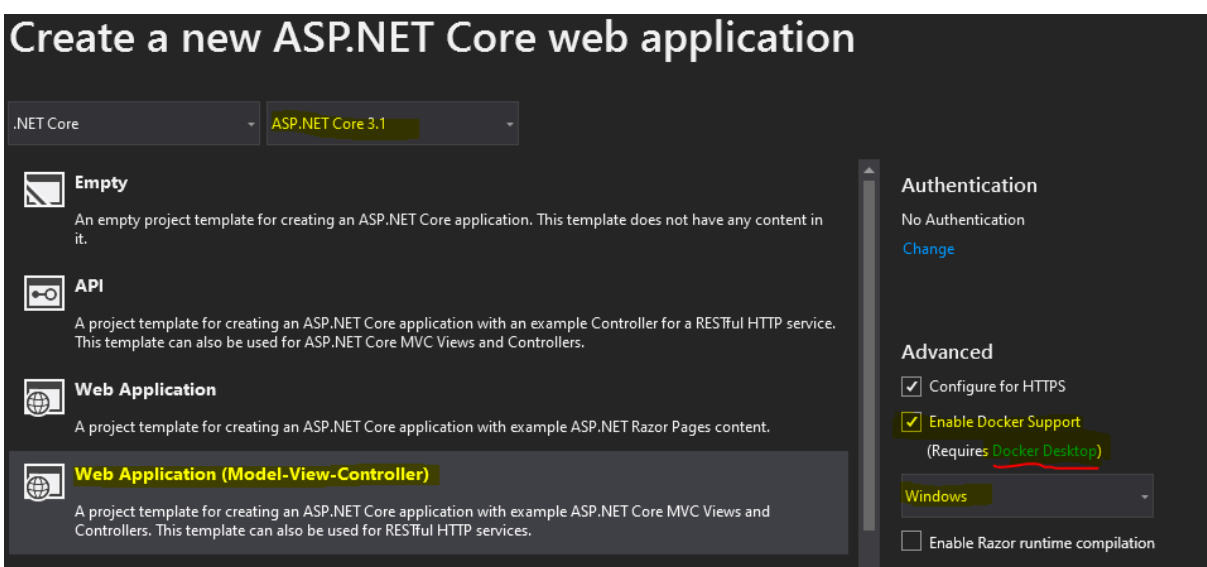
Check Version

```
C:\WINDOWS\system32>docker version
Client:
Cloud integration: 1.0.17
Version: 20.10.7
```

Run –Green indicator shows its successfully running



3 Create sample .net core MVC app with docker file



```

C:\Users\Smt.Narayanamma\source\repos\WebContainerDemo\WebContainerDemo>dotnet build
Microsoft (R) Build Engine version 16.8.0+126527ff1 for .NET
Copyright (C) Microsoft Corporation. All rights reserved.

    Determining projects to restore...
    All projects are up-to-date for restore.
    WebContainerDemo -> C:\Users\Smt.Narayanamma\source\repos\WebContainerDemo\WebContainerDemo\bin\Debug\netcoreapp3.1\WebContainerDemo.dll
    WebContainerDemo -> C:\Users\Smt.Narayanamma\source\repos\WebContainerDemo\WebContainerDemo\bin\Debug\netcoreapp3.1\WebContainerDemo.Views.dll

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

Time Elapsed 00:00:03.38

```

DOCKER FILE

```

Dockerfile
5
6 FROM mcr.microsoft.com/dotnet/core/aspnet:3.1 AS base
7 WORKDIR /app
8 EXPOSE 80
9 EXPOSE 443
10
11 FROM mcr.microsoft.com/dotnet/core/sdk:3.1 AS build
12 WORKDIR /src
13 COPY ["WebContainerDemo/WebContainerDemo.csproj", "WebContainerDemo/"]
14 RUN dotnet restore "WebContainerDemo/WebContainerDemo.csproj"
15 COPY . .
16 WORKDIR "/src/WebContainerDemo"
17 RUN dotnet build "WebContainerDemo.csproj" -c Release -o /app/build
18
19 FROM build AS publish
20 RUN dotnet publish "WebContainerDemo.csproj" -c Release -o /app/publish
21
22 FROM base AS final
23 WORKDIR /app
24 COPY --from=publish /app/publish .
25 ENTRYPOINT ["dotnet", "WebContainerDemo.dll"]

```

3 Create and Push image to azure container registry

```

C:\Users\Smt.Narayanamma\source\repos\WebContainerDemo\WebContainerDemo>docker images
REPOSITORY TAG IMAGE ID CREATED SIZE

```

```

C:\Users\Smt.Narayanamma\source\repos\WebContainerDemo>docker build . -t sathisfirstdockerimage:v1 -f WebContainerDemo/DockerFile

```

When docker file and solution are not in same folder , naviagte to solution level folder and specifiy docker file path eg: `-f WebContainerDemo/Dockerfile` , if not you will get cache key error . Also make sure that your docker is running and internet is up to download metadata from microsoft . `build.` says that source is from same folder `-t sathisfirstdockerimage` will be image name , v1 will be version tag. First time build should take good time as it will download .net run time(212MB) along with our project which is prerequest /dependency

```

=> [build 1/7] FROM mcr.microsoft.com/dotnet/core/sdk:3.1@sha256:93683294b914c3370bf7871d9397812452f4f05af7bfec854af149b36366e31c
=> => resolve mcr.microsoft.com/dotnet/core/sdk:3.1@sha256:93683294b914c3370bf7871d9397812452f4f05af7bfec854af149b36366e31c
> exporting to image
> => exporting layers
> => writing image sha256:b21495df4174758b52ebfd8c9a17331c1f3fdd48dd036370ba704bde13829d09
> => naming to docker.io/library/sathisfirstdockerimage:v1

```

```

C:\Users\Smt.Narayanamma\source\repos\WebContainerDemo>docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
sathisfirstdockerimage v1 b21495df4174 2 minutes ago 212MB

```

Images on disk

1 images

Total size: 212.19 MB

IN USE

UNUSED

Clean up...

LOCAL

REMOTE REPOSITORIES

Q

Search

Sort by

▼

	TAG	IMAGE ID	CREATED	SIZE
sathifirstdockerimage	v1	b21495df4174	less than a minute ago	212.19 MB

SathiContRegDemo | Access keys

Container registry

- Overview
- Activity log
- Access control (IAM)
- Tags
- Quick start
- Events
- Settings
- Access keys**
- Encryption

Registry name: SathiContRegDemo

Login server: sathicontregdemo.azurecr.io

Admin user:

Enabled: ☒

Name	Password	Regenerate
password	e9JyA5npgSfpyK8le3=jM3esLqo696BY	<input type="button" value="Regenerate"/>
password2	fDBqwM0jfMJsVN7jFmdJh/JCfpggFtk6	<input type="button" value="Regenerate"/>

Copy to clipboard

docker login --username SathiContRegDemo sathicontregdemo.azurecr.io

```
C:\Users\Smt.Narayanamma\source\repos\WebContainerDemo>docker login --username SathiContRegDemo sathicontregdemo.azurecr.io
Password:
Error response from daemon: Get https://sathicontregdemo.azurecr.io/v2/: unauthorized: authentication required, visit https://aka.ms/acr/authorization for more information.

C:\Users\Smt.Narayanamma\source\repos\WebContainerDemo>docker login --username SathiContRegDemo sathicontregdemo.azurecr.io --password e9JyA5npgSfpyK8le3=jM3esLqo696BY
WARNING! Using --password via the CLI is insecure. Use --password-stdin.
Login Succeeded

C:\Users\Smt.Narayanamma\source\repos\WebContainerDemo>
```

Tag the image b/n local and remote location

```
C:\Users\Smt.Narayanamma\source\repos\WebContainerDemo>docker images
REPOSITORY          TAG          IMAGE ID          CREATED          SIZE
sathifirstdockerimage v1          b21495df4174     27 minutes ago  212MB
```

docker tag sathifirstdockerimage:v1 sathicontregdemo.azurecr.io/sathifirstdockerimage:v1

```
C:\Users\Smt.Narayanamma\source\repos\WebContainerDemo>docker images
REPOSITORY          TAG          IMAGE ID          CREATED          SIZE
sathifirstdockerimage v1          b21495df4174     30 minutes ago  212MB

C:\Users\Smt.Narayanamma\source\repos\WebContainerDemo>docker tag sathifirstdockerimage:v1 sathicontregdemo.azurecr.io/sathifirstdockerimage:v1

C:\Users\Smt.Narayanamma\source\repos\WebContainerDemo>docker images
REPOSITORY          TAG          IMAGE ID          CREATED          SIZE
sathifirstdockerimage v1          b21495df4174     30 minutes ago  212MB
sathicontregdemo.azurecr.io/sathifirstdockerimage v1    b21495df4174     30 minutes ago  212MB
```

docker push sathicontregdemo.azurecr.io/sathifirstdockerimage:v1

```
C:\Users\Smt.Narayanamma\source\repos\WebContainerDemo>docker push sathicontregdemo.azurecr.io/sathifirstdockerimage:v1
The push refers to repository [sathicontregdemo.azurecr.io/sathifirstdockerimage]
53da8099f52b: Pushed
5f70bf18a086: Pushed
d91ccedca273: Pushed
540b35ee11b3: Pushed
b2c669501e5b: Pushed
11d081e2b7c0: Pushed
4987333e5cc2: Pushed
764055ebc9a7: Pushed
v1: digest: sha256:95f2ecc543ce4652a993ba0febb4986fca949c701c2c42b4a03697085182c71b size: 1999

C:\Users\Smt.Narayanamma\source\repos\WebContainerDemo>
```

Microsoft Azure | Search resources, services, and docs (G+/I)

Home > SathiContRegDemo > Repositories

SathiContRegDemo | Repositories

Container registry

Search (Ctrl+/) Refresh

Search to filter repositories ...

Repositories ↑↓

sathifirstdockerimage ...

sathifirstdockerimage

Repository

Refresh Delete repository

Essentials JSON View

Repository	sathifirstdockerimage	Tag count	1
Last updated date	7/9/2021, 3:50 PM GMT+5:30	Manifest count	1

Search to filter tags ...

Tags ↑↓

v1 ...

4 AKS – create and deploy ACR image to cluster/pod

Azure Kubernetes Service (AKS) is a managed Kubernetes service that lets you quickly deploy and manage clusters:

Kubernetes Service.

Home > Kubernetes services

Default Directory (vocareumvocareum.onmicrosoft.com)

Create Manage view Refresh Export to CSV Open query Assign tags Feedback

Filter for any field... Subscription == all Type == all Resource group == all Location == all Add filter

Showing 0 to 0 of 0 records.

No grouping List view

Name ↑↓ Type ↑↓ Resource group ↑↓ Kuberne... ↑↓ Location ↑↓ Subscription ↑↓

No Kubernetes services to display

Use Azure Kubernetes Service to create and manage Kubernetes clusters. Azure will handle cluster operations, including creating, scaling, and upgrading, freeing up developers to focus on their application. To get started, create a cluster with Azure Kubernetes Service.

Learn more

Create Kubernetes cluster

Basics Node pools Authentication Networking Integrations Tags Review + create

Azure Kubernetes Service (AKS) manages your hosted Kubernetes environment, making it quick and easy to deploy and manage containerized applications without container orchestration expertise. It also eliminates the burden of ongoing operations and maintenance by provisioning, upgrading, and scaling resources on demand, without taking your applications offline. [Learn more about Azure Kubernetes Service](#)

Project details

Select a subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription * ⓘ Production 1

Resource group * ⓘ Regroup_3mku

[Create new](#)

Kubernetes cluster name * ⓘ

Region * ⓘ

Availability zones ⓘ

High availability is recommended for standard configuration.

Kubernetes version * ⓘ

Primary node pool

The number and size of nodes in the primary node pool in your cluster. For production workloads, at least 3 nodes are recommended for resiliency. For development or test workloads, only one node is required. If you would like to add additional node pools or to see additional configuration options for this node pool, go to the 'Node pools' tab above. You will be able to add additional node pools after creating your cluster. [Learn more about node pools in Azure Kubernetes Service](#)

Node size * ⓘ **Standard DS2 v2**
 Standard DS2_v2 is recommended for standard configuration.
[Change size](#)

Scale method * ⓘ ☒ Manual
☐ Autoscale

Node count * ⓘ

[Review + create](#)

[< Previous](#)

[Next : Node pools >](#)

[Basics](#) [Node pools](#) [Authentication](#) [Networking](#) [Integrations](#) [Tags](#) [Review + create](#)

Connect your AKS cluster with additional services.

Azure Container Registry

Connect your cluster to an Azure Container Registry to enable seamless deployments from a private image registry. You can create a new registry or choose one you already have. [Learn more about Azure Container Registry](#)

Container registry

[Create new](#)

Azure Monitor

In addition to the CPU and memory metrics included in AKS by default, you can enable Container Insights for more comprehensive data on the overall performance and health of your cluster. Billing is based on data ingestion and retention settings.

[Learn more about container performance and health monitoring](#)

[Learn more about pricing](#)

Container monitoring ☒ Enabled ☐ Disabled

Azure monitor is recommended for standard configuration.

Disable above container monitoring as it not working

Home > microsoft.aks-20210709162414 > sathisaksdemo >

agentpool | Overview

Node pool

Search (Ctrl+/) << Upgrade Kubernetes Scale node pool Delete Refresh

Overview

Nodes

Configuration

Essentials

Status : Running (3/3 nodes ready)

Availability zones : 1, 2, 3

Mode : System

Operating system : Linux

Properties Monitoring

Node pool

Max pods per node	110
Public IPs per node	Disabled
Autoscaling	Disabled
Azure Spot instance	Disabled
Maximum price	N/A
Scale eviction policy	N/A
Node image version	AKSUbuntu-1804gen2containerd-

Scale agentpool

You can scale the number of nodes in your cluster to increase the total amount of cores and memory available for your container applications. [Learn more](#)

Scale method

☒ Manual

☐ Autoscale - **Recommended**

This option is recommended so that the cluster is automatically sized correctly for the current running workloads.

Node count

3

Node pool capacity

Virtual machine size: Standard DS2 v2 (2 vcpus, 7 GiB memory)

Cores: 6 vCPUs

Memory: 21 GiB

Apply Cancel

Create Yaml File : <https://docs.microsoft.com/en-us/azure/aks/kubernetes-walkthrough-portal#run-the-application>

apiVersion: apps/v1

kind: Deployment

metadata:

name: sathifirstdockerimage

spec:

replicas: 1

selector:

matchLabels:

app: sathifirstdockerimage

template:

metadata:

labels:

app: sathifirstdockerimage

spec:

nodeSelector:

"beta.kubernetes.io/os": linux

containers:

- name: sathifirstdockerimage

image: sathicontregdemo.azurecr.io/sathifirstdockerimage:v1

resources:

requests:

cpu: 100m

memory: 128Mi

limits:

cpu: 250m

memory: 256Mi

ports:

- containerPort: 80

env:

- name: REDIS

value: "sathifirstdockerimage"

apiVersion: v1

kind: Service

metadata:

name: sathifirstdockerimage

spec:

type: LoadBalancer

ports:

- port: 80

selector:

app: sathifirstdockerimage

<https://docs.microsoft.com/en-us/azure/aks/tutorial-kubernetes-prepare-app>

Deploy above yaml using portal as below or command `kubectl apply -f sathifirstdockerimage.yaml`

The screenshot shows the Azure portal interface for deploying a Kubernetes application. The top navigation bar includes the Microsoft Azure logo and a search bar. The left sidebar shows the 'Workloads' section selected. The main content area displays the 'Add with YAML' workflow.

YAML Editor: The YAML file content is as follows:

```
1 apiVersion: apps/v1
2 kind: Deployment
3 metadata:
4   name: sathifirstdockerimage
5 spec:
6   replicas: 1
7   selector:
8     matchLabels:
9       app: sathifirstdockerimage
10  template:
11    metadata:
12      labels:
13        app: sathifirstdockerimage
14    spec:
15      nodeSelector:
16        "beta.kubernetes.io/os": linux
17      containers:
18        - name: sathifirstdockerimage
```

Confirmation Dialogs: Two confirmation dialogs are shown, both with a close button (X) in the top right corner. The first dialog says "Creating the service" and the second says "Creating the deployment", both for the service 'sathifirstdockerimage'.

Deployment Status Table: The table shows the deployment status after the workflow is completed. The table has columns for Name, Namespace, Ready, Up-to-date, Available, and Age.

Name	Namespace	Ready	Up-to-date	Available	Age
sathifirstdockerimage	default	0/1	1	0	One minute

+ Add Delete Refresh Show labels

Deployments **Pods** Replica sets Stateful sets Daemon sets Jobs Cron jobs

Filter by pod name: Enter the full pod name
Filter by label selector: foo=bar,key!=value
Status: All statuses
Filter by namespace: All namespaces

<input type="checkbox"/>	Name	Namespace	Ready	Status	Restart count	Age ↑	Pod IP	Node
<input type="checkbox"/>	sathifirstdockerimage-8...	default	1/1	Running	0	2 minutes	10.244.2.2	aks-agentpool-2130218
<input type="checkbox"/>	azure-ip-masq-agent-xf...	kube-system	1/1	Running	0	6 minutes	10.240.0.4	aks-agentpool-2130218

+ Add Delete Refresh Show labels

Deployments Pods **Replica sets** Stateful sets Daemon sets Jobs Cron jobs

Filter by replica set name: Enter the full replica set name
Filter by label selector: foo=bar,key!=value
Filter by namespace: All namespaces

<input type="checkbox"/>	Name	Namespace	Ready	Current	Age ↑	Images
<input type="checkbox"/>	sathifirstdockerimage-86b7888cc4	default	1/1	1	3 minutes	sathiconregdemo.azurecr.io/sat...

Microsoft Azure Search resources, services, and docs (G+)

Home > **sathiaksdemo** Kubernetes service

Search (Ctrl+/)

Overview

- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems
- Security
- Kubernetes resources
 - Namespaces
 - Workloads
 - Services and ingresses
 - Storage
 - Configuration
- Settings
 - Node pools
 - Cluster configuration

Connect Delete Refresh

The client 'student_10f0devikp882u8s@Azure' with object id '23c26d53-10f0devikp882u8s' over scope '/subscriptions/f700a502-4c5-42f4-8f1d-cacab88d7d39' was recently granted, please refresh your credentials.

Essentials

Resource group (change): Regroup_3mku
Status: Succeeded
Location: East US
Subscription (change): Production 1
Subscription ID: f700a502-4c5-42f4-8f1d-cacab88d7d39
Tags (change): Click here to add tags

Properties Capabilities

Kubernetes services

Encryption type: Encryption at-rest with a platform-managed key
Virtual node pools: Not enabled

Node pools

Node pools: 1 node pool

Connect to sathiaksdemo

Connect to your cluster using command line tooling to interact directly with cluster using kubectl, the command line tool for Kubernetes. Kubectl is available within the Azure Cloud Shell by default and can also be installed locally. [Learn more](#)

1. Open Cloud Shell or the Azure CLI
2. Run the following commands

```
az account set --subscription f700a502-4c5-42f4-8f1d-cacab88d7d39
```

```
az aks get-credentials --resource-group Regroup_3mku --name sathiaksdemo
```

Sample commands

Once you have run the command above to connect to the cluster, you can run any kubectl commands. Here are a few examples of useful commands you can try.

```
# List all deployments in all namespaces
kubectl get deployments --all-namespaces=true
```

```
# List all deployments in a specific namespace
# Format: kubectl get deployments --namespace <namespace-name>
kubectl get deployments --namespace kube-system
```

```
# List details about a specific deployment
# Format: kubectl describe deployment <deployment-name> --namespace <namespace-name>
kubectl describe deployment my-dep --namespace kube-system
```

```
# List pods using a specific label
# Format: kubectl get pods -l <label-key>=<label-value> --all-namespaces=true
kubectl get pods -l sathiconregdemo.azurecr.io/sat...
```

Connect To Azure CLI – (Enter required storage details)

```
student_10f0devikp882u8s@Azure:~$ az account set --subscription f700a502-4c5-42f4-8f1d-cacab88d7d39
student_10f0devikp882u8s@Azure:~$ az aks get-credentials --resource-group Regroup_3mku --name sathiaksdemo
Merged "sathiaksdemo" as current context in /home/student_10f0devikp882u8s/.kube/config
student_10f0devikp882u8s@Azure:~$ # List all deployments in all namespaces
student_10f0devikp882u8s@Azure:~$ kubectl get deployments --all-namespaces=true
NAMESPACE   NAME                               READY   UP-TO-DATE   AVAILABLE   AGE
default     sathifirstdockerimage             1/1     1             1           13m
kube-system coredns                           2/2     2             2           19m
kube-system coredns-autoscaler                1/1     1             1           19m
kube-system metrics-server          1/1     1             1           19m
kube-system tunnelfront            1/1     1             1           19m
student_10f0devikp882u8s@Azure:~$
```

kubectl get service sathifirstdockerimage --watch

```
student_10f0devikp882u8s@Azure:~$ kubectl get service sathifirstdockerimage --watch
NAME                TYPE          CLUSTER-IP   EXTERNAL-IP   PORT(S)          AGE
sathifirstdockerimage LoadBalancer  10.0.93.211   20.62.153.89  80:31339/TCP     15m
```

← → ↺ ⬆ ⚠ Not secure 20.62.153.89

Apps Ultimatrix - Digitally... TCS web mail Welcome to HDFC... ICICI Bank Login | I... CET 2017 ML desk-dr.ind.sgcib

WebContainerDemo Home Privacy

Welcome

Learn about [building Web apps with ASP.NET Core](#).

Sathisha NM –image,container,acr,aks-11

5 POD : SCALING

A pod is the smallest unit in Kubernetes that you create or deploy. A pod represents the application as a running process on your cluster.

Manually scale the number of Kubernetes pods from 3 to 5

sathiakdemo | Node pools

Search (Ctrl+/) < Add node pool Refresh Upgrade Kubernetes Scale node pool Delete Troubleshoot

Node pools Nodes

Node pools provide a space for applications to run. Node pools of different types can be added to the cluster to handle a variety of workloads, existing node pools can be scaled and upgraded, or node pools that are no longer needed can be deleted. Each node pool will contain nodes backed by virtual machines. [Learn more about node pools](#)

Node pool	Status	Node count	Mode	Kubernetes version	Node size	Operating system
agentpool	3/3 ready	3	System	1.19.11	Standard_DS2_v2	Linux

Upgrade Kubernetes Scale node pool Delete

You can scale the number of nodes in your cluster to increase the total amount of cores and memory available for your container applications. [Learn more](#)

Scale method

☒ Manual

☐ Autoscale - **Recommended**

This option is recommended so that the cluster is automatically sized correctly for the current running workloads.

Node count

5

Node pool capacity

Virtual machine size: Standard DS2 v2 (2 vcpus, 7 GiB memory)

Cores: 6 vCPUs → 10 vCPUs (new)

Memory: 21 GiB → 35 GiB (new)

Apply Cancel

Do not apply above changes, we will apply via command

```
az aks scale --resource-group Regroup_3mku --name sathiakdemo --node-count 5
```

```
student_10f0devikp882u8s@Azure:~$ az aks scale --resource-group Regroup_3mku --name sathiakdemo --node-count 5
{
  "aadProfile": null,
  "addonProfiles": {
    "azurepolicy": {
```

Existing node pools can be scaled and upgraded, or node pools that are no longer needed can be deleted. Can be backed by virtual machines. [Learn more about node pools](#)

Node pool	Status	Node count	Mode	Kubernetes version
agentpool	Running	5/5 ready	System	1.19.11

Node count: 5

Node pool capacity

Virtual machine size: Standard DS2 v2 (2 vcpus, 7 GiB memory)

Cores: 10 vCPUs

Memory: 35 GiB

This option is recommended so that the cluster is automatically sized correctly for the current running workloads.

Create an autoscaling policy where the number of nodes is increased when the CPU utilization of the cluster exceeds 80% of their capacity up to a maximum of 15 pods

Console command :

```
kubectl autoscale deployment sathifirstdockerimage --cpu-percent=80 --min=3 --max=15
```

☒ Autoscale - Recommended

This option is recommended so that the cluster is automatically sized correctly for the current running workloads.

Node count range: 5 (Min: 1, Max: 1000)

Node pool capacity

Virtual machine size: Standard DS2 v2 (2 vcpus, 7 GiB memory)

Maximum cores: 10 vCPUs

Maximum memory: 35 GiB

```
student_10f0devikp882u8s@Azure:~$ kubectl autoscale deployment sathifirstdockerimage --cpu-percent=80 --min=3 --max=15
horizontalpodautoscaler.autoscaling/sathifirstdockerimage autoscaled
student_10f0devikp882u8s@Azure:~$
```

Opening the files, editing and re deploying

<https://docs.microsoft.com/en-us/azure/aks/tutorial-kubernetes-app-update?tabs=azure-cli>

Additional Information

Hosting image in container instance

Microsoft Azure

Search resources, services, and docs (G+)

Home > Container instances >

Container instances

Default Directory (vcareumvocareum.onmicrosof...

+ Create Manage view ...

Filter for any field...

Name ↑

No container instances to display

Use Azure Container Instances to create and manage Docker containers in Azure without having to set up virtual machines or manage additional infrastructure. To get started, create a container in Azure Container Instances.

[Learn more](#)

Create container instances

Create container instance

Subscription * Production 1

Resource group * Regroup_3mku [Create new](#)

Container details

Container name * sathicontinstdemo ✓

Region * (US) West US

Image source *
☐ Quickstart images
☒ Azure Container Registry
☐ Docker Hub or other registry

Registry * SathContRegDemo

Image * sathifirstdockerimage

Image tag * v1

OS type Linux

Size * 1 vcpu, 1.5 GiB memory, 0 gpus [Change size](#)

[Review + create](#) < Previous Next: Networking >

Microsoft Azure

Search resources, services, and docs (G+)

Home > Microsoft.ContainerInstances-20210709170128 >

sathiscontinstdemo

Container instances

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Overview

Activity log

Access control (IAM)

Tags

Settings

Containers

Identity

Properties

Locks

Monitoring

Metrics

Alerts

Automation

Essentials

Resource group (change) : Regroup_3mku

Status : Running

Location : West US

Subscription (change) : Production 1

Subscription ID : f700a502-f4c5-42f4-8f1d-cacab88d7d39

Tags (change) : [Click here to add tags](#)

OS type : Linux

IP address (Public) : 52.160.84.99

FQDN : ---

Container count : 1

CPU

100
90
80
70
60
50
40

Memory

1008
908
808
708
608
508
408

Home > Container instances >

Container instances

Default Directory (vocareumvocareum.onmicrosoft...

+ Create Manage view ...

Filter for any field...

Name ↑↓



No container instances to display

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Create container instances

Create container instance

Basics Networking Advanced Tags Review + create

Choose between three networking options for your container instance:

- **Public** will create a public IP address for your container instance.
- **Private** will allow you to choose a new or existing virtual network for your container instance. This is not yet available for Windows containers.
- **None** will not create either a public IP or virtual network. You will still be able to access your container logs using the command line.

Networking type ☒ Public ☐ Private ☐ None

DNS name label

sathifirstwebcontainerazure

.westus.azurecontainer.io

Ports

Ports protocol

Ports	Ports protocol
80	TCP
8082	TCP

Review + create

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sathicontinstdemo

Container instances

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Identity

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Locks

Monitoring

Essentials

Resource group (change) : Regroup_3mku

Status : Running

Location : West US

Subscription (change) : Production 1

Subscription ID : f700a502-44c5-42f4-8f1d-cacab88d7d39

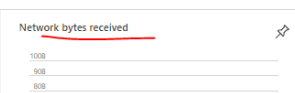
Tags (change) : Click here to add tags

OS type : Linux

IP address (Public) : 40.86.188.148

FQDN : sathifirstwebcontainerazure.westus.azurecontainer.io

Container count : 1



Not secure | sathifirstwebcontainerazure.westus.azurecontainer.io

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WebContainerDemo Home Privacy

Welcome

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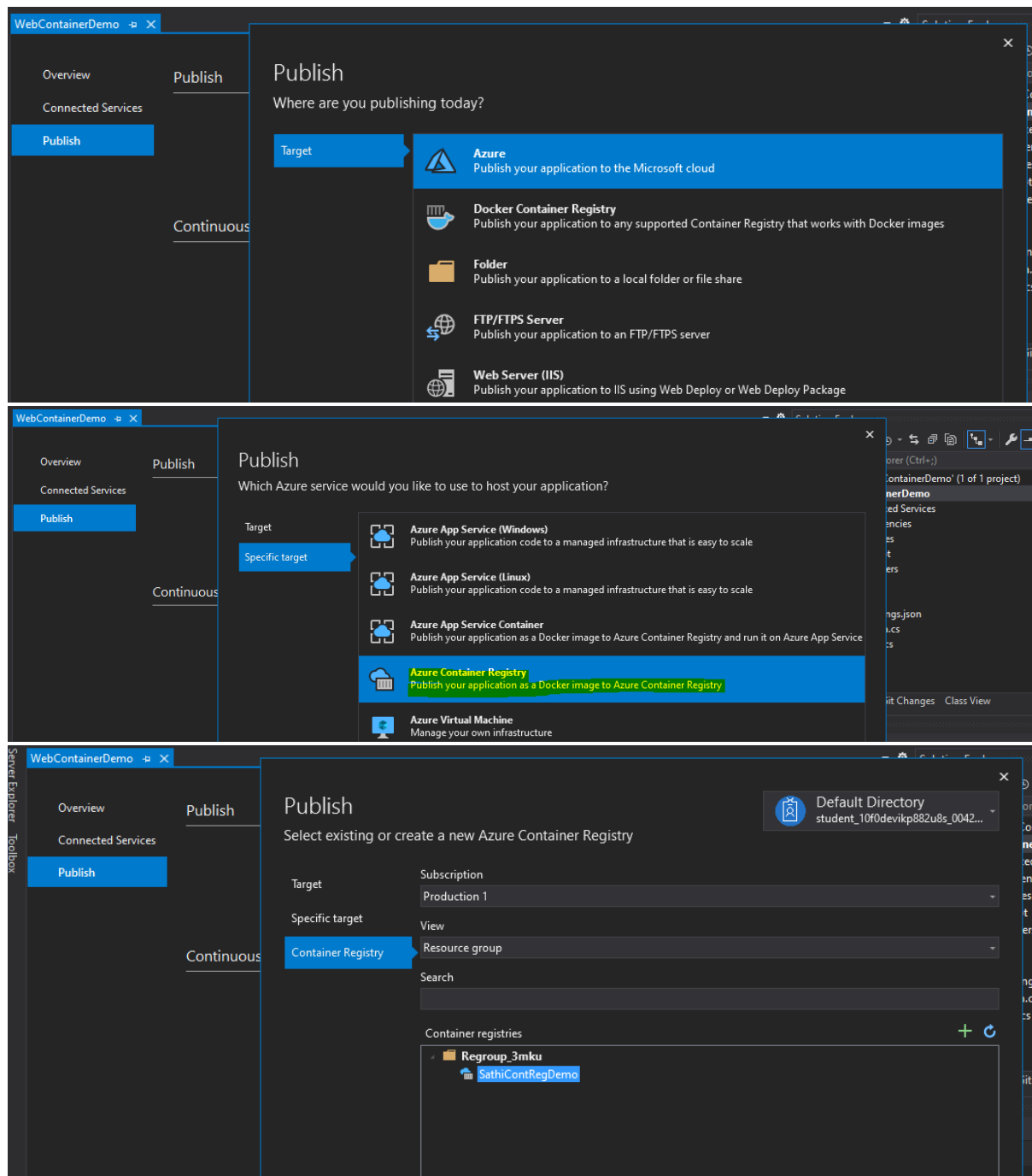
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Welcome

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Using Visual Studio:




Overview

Connected Services

Publish

Publish





Deploy your app to a folder, IIS, Azure, or another destination. [More info](#)

 SathiContRegDemo

Publish

New Edit Rename Delete

Summary

Image Tag	latest 	Edit Image Tag Manage in Azure portal
Repository	https://sathicontregdemo.azurecr.io 	
Subscription	Production 1 	
Configuration	Release 	

Continuous delivery

Automatically publish your application to Azure with continuous delivery. Click [Configure](#) to begin setup.