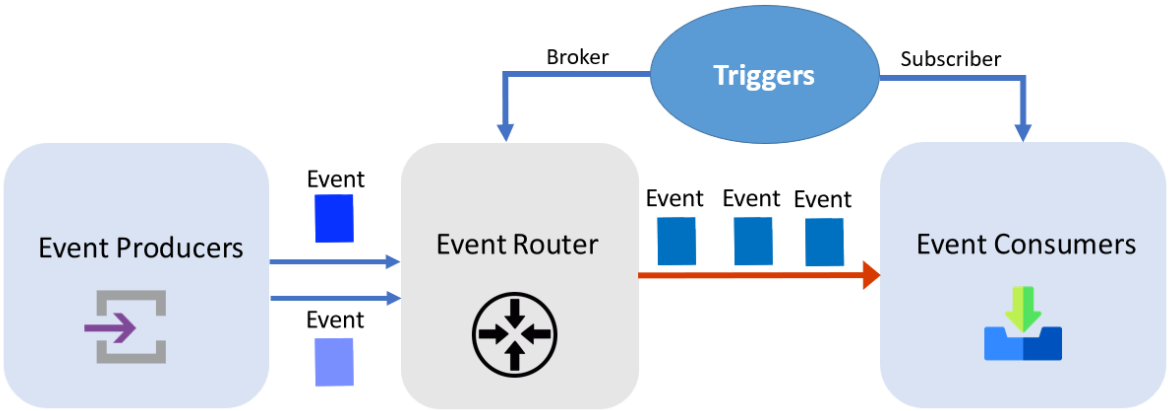
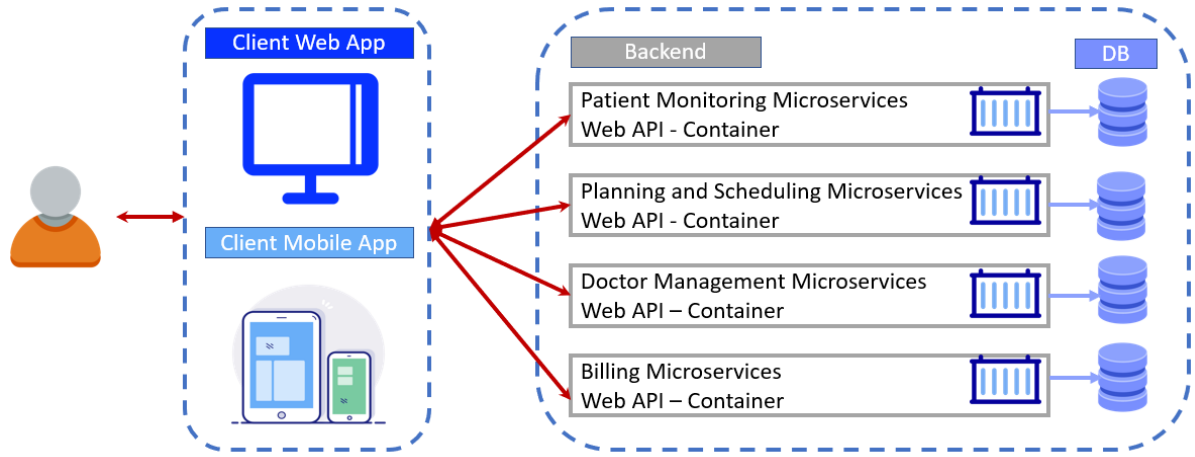
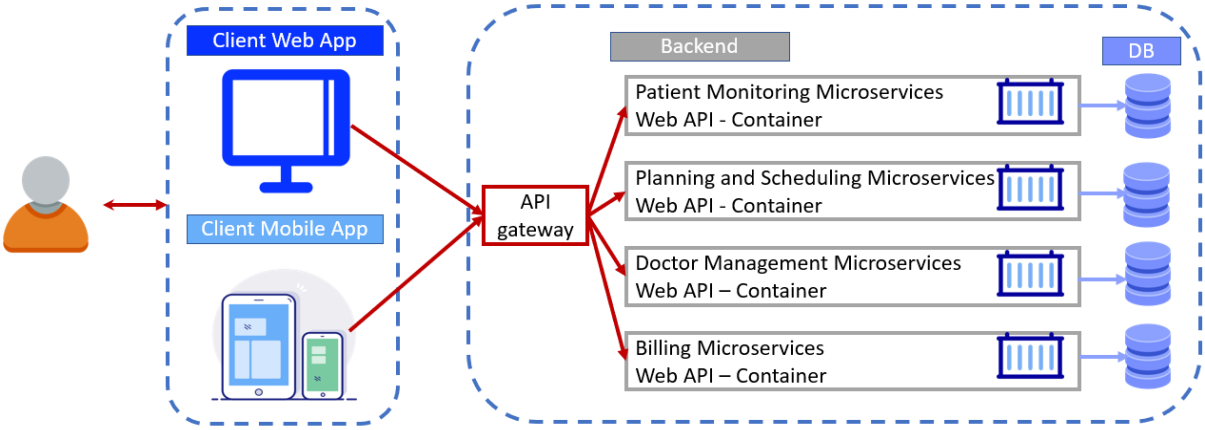
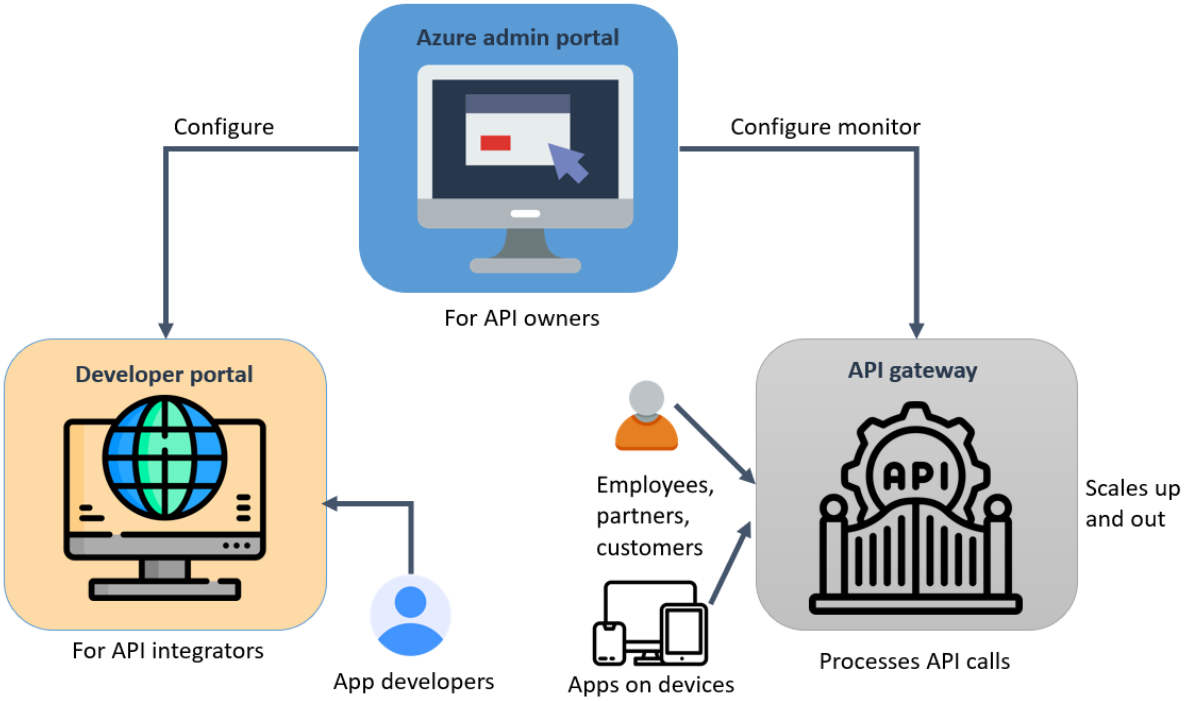
Chapter 1: Introduction to Serverless Architecture, Event-Driven Architecture and Cloud Databases

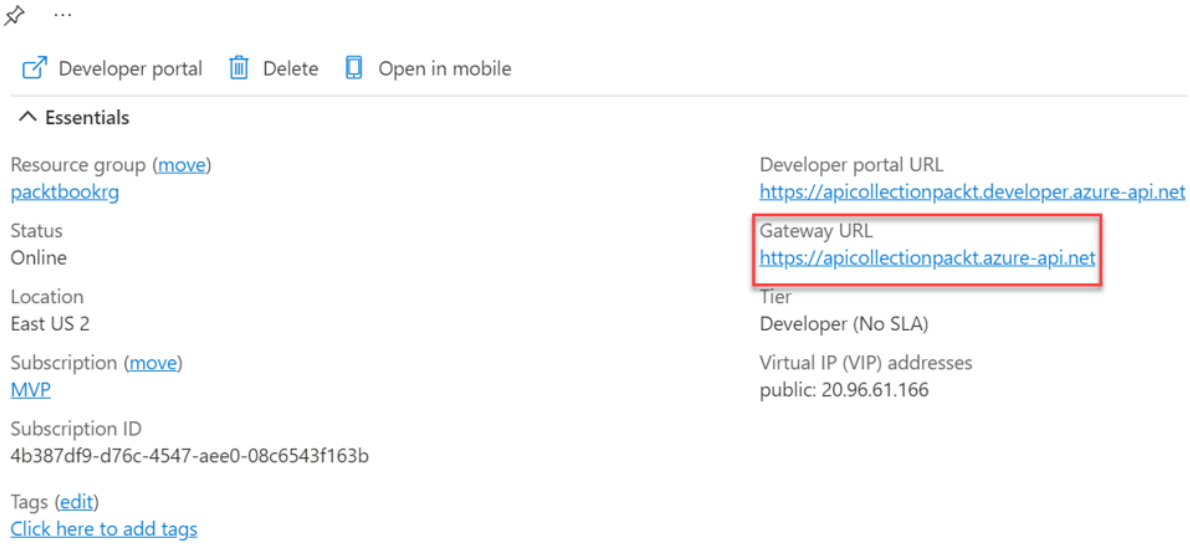


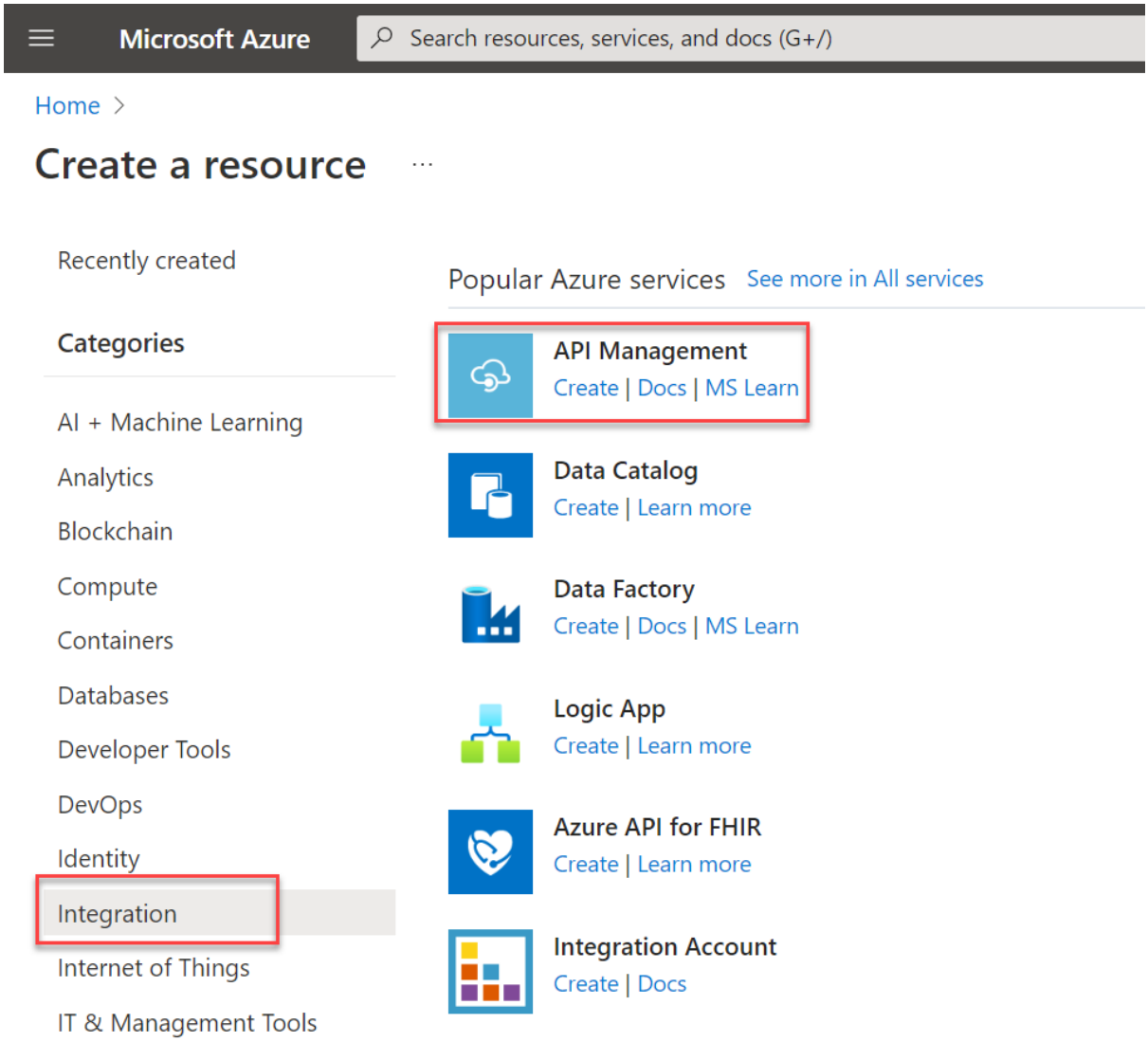
Chapter 2: API Management – Import, Manage, and Publish Your First API






Azure admin portal
Configure
Configure monitor
For API owners
Developer portal
API gateway
Employees, partners, customers
Scales up and out
For API integrators
App developers
Apps on devices
Processes API calls


Developer portal
Delete
Open in mobile
Essentials
Resource group (move)
packtbookrg
Status
Online
Location
East US 2
Subscription (move)
MVP
Subscription ID
4b387df9-d76c-4547-aee0-08c6543f163b
Tags (edit)
Click here to add tags
Developer portal URL
https://apicollectionpackt.developer.azure-api.net
Gateway URL
https://apicollectionpackt.azure-api.net
Tier
Developer (No SLA)
Virtual IP (VIP) addresses
public: 20.96.61.166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Recently created
Categories
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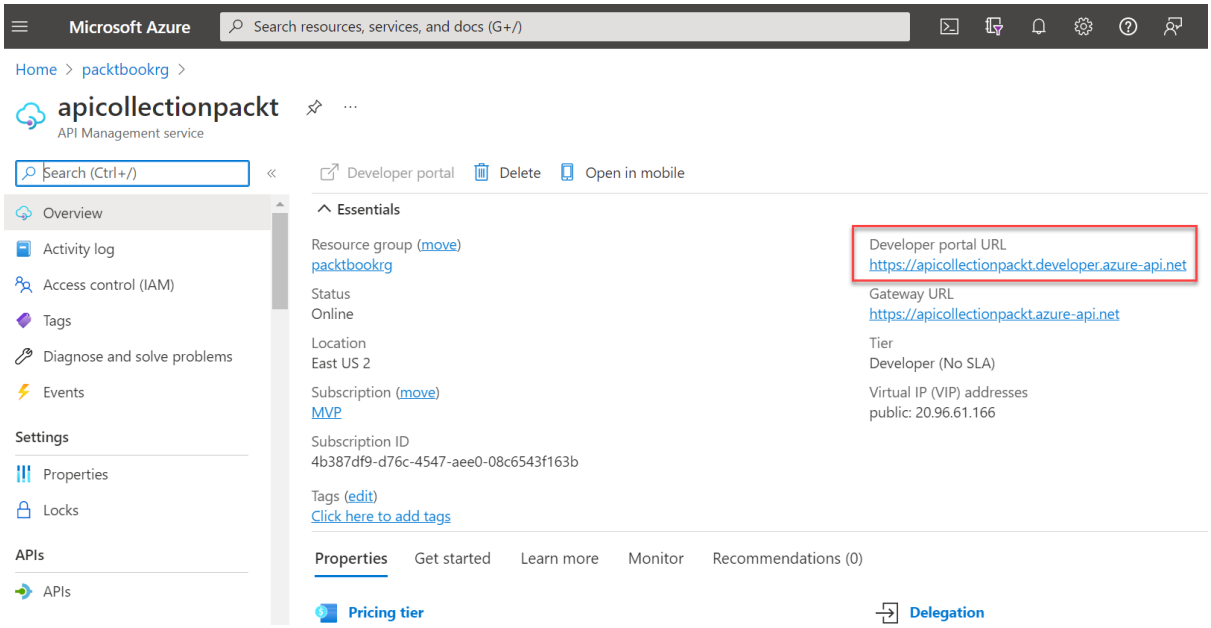
Blockchain
Compute
Containers
Databases
Developer Tools
DevOps
Identity
Integration
Internet of Things
IT & Management Tools
Popular Azure services
See more in All services
API Management
Create | Docs | MS Learn
Data Catalog
Create | Learn more
Data Factory
Create | Docs | MS Learn
Logic App
Create | Learn more
Azure API for FHIR
Create | Learn more
Integration Account
Create | Docs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Home
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apicollectionpackt
API Management service
Search (Ctrl+/)
Developer portal
Delete
Open in mobile
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Events
Settings
Properties
Locks
APIs
APIs
Essentials
Resource group (move)
packtbookrg
Status
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Subscription ID
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Tags (edit)
Click here to add tags
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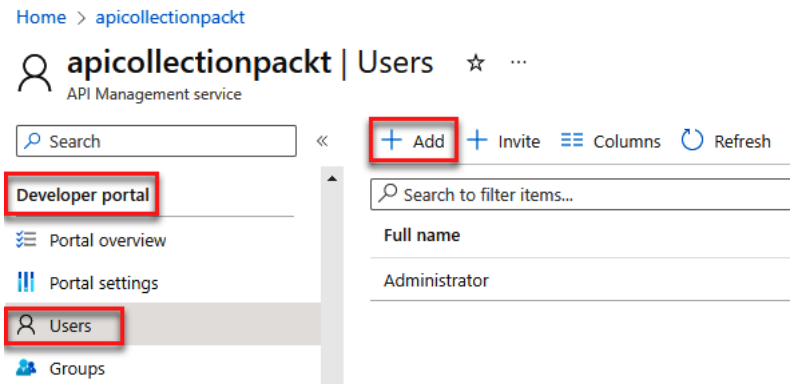
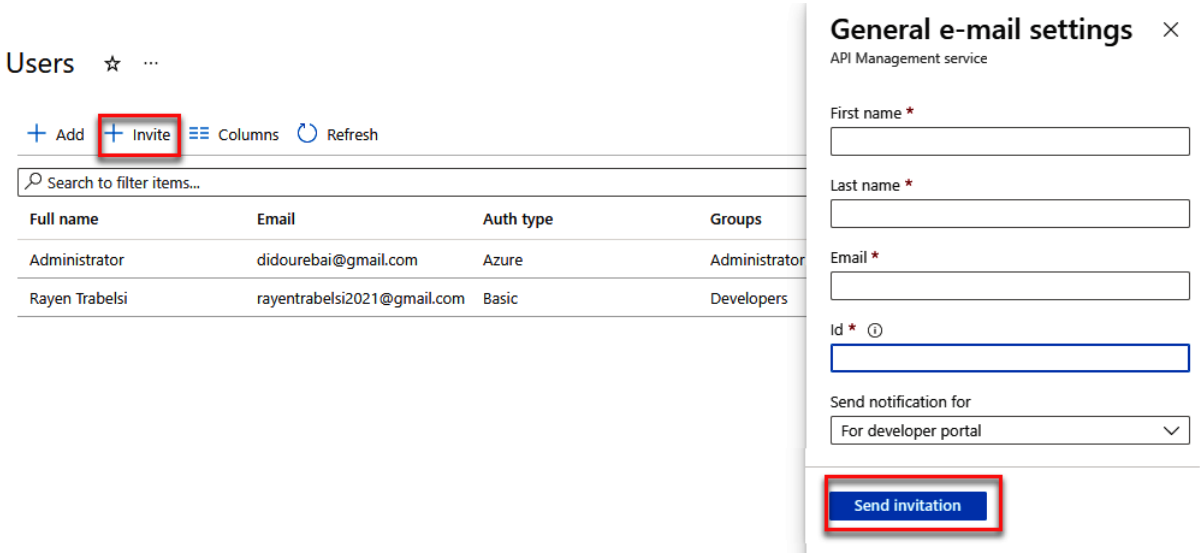
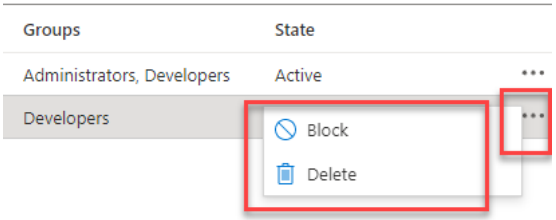
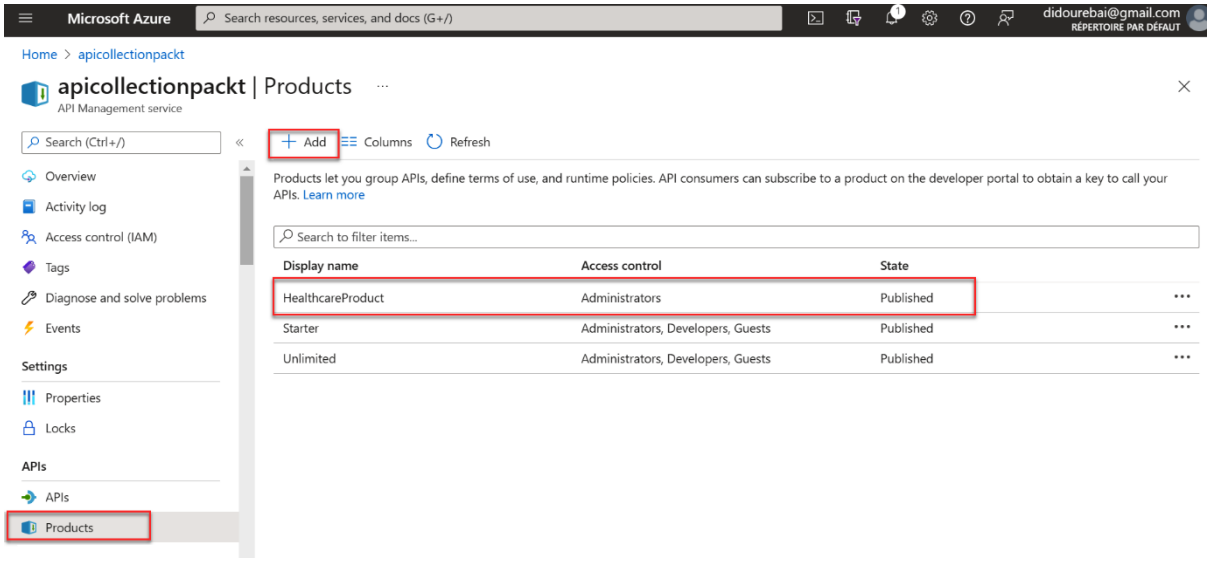
Tier
Developer (No SLA)
Virtual IP (VIP) addresses
public: 20.96.61.166
Properties
Get started
Learn more
Monitor
Recommendations (0)
Pricing tier
Delegation


Home > apicollectionpackt
apicollectionpackt | Users
API Management service
Search
Add
Invite
Columns
Refresh
Developer portal
Portal overview
Portal settings
Users
Groups
Search to filter items...
Full name
Administrator


Users
Add
Invite
Columns
Refresh
Search to filter items...
Full name
Email
Auth type
Groups
Administrator
didourebai@gmail.com
Azure
Administrator
Rayen Trabelsi
rayentrabelsi2021@gmail.com
Basic
Developers
General e-mail settings
API Management service
First name *
Last name *
Email *
Id *
Send notification for
For developer portal
Send invitation


Groups
State
Administrators, Developers
Active
Developers
Block
Delete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API Management service
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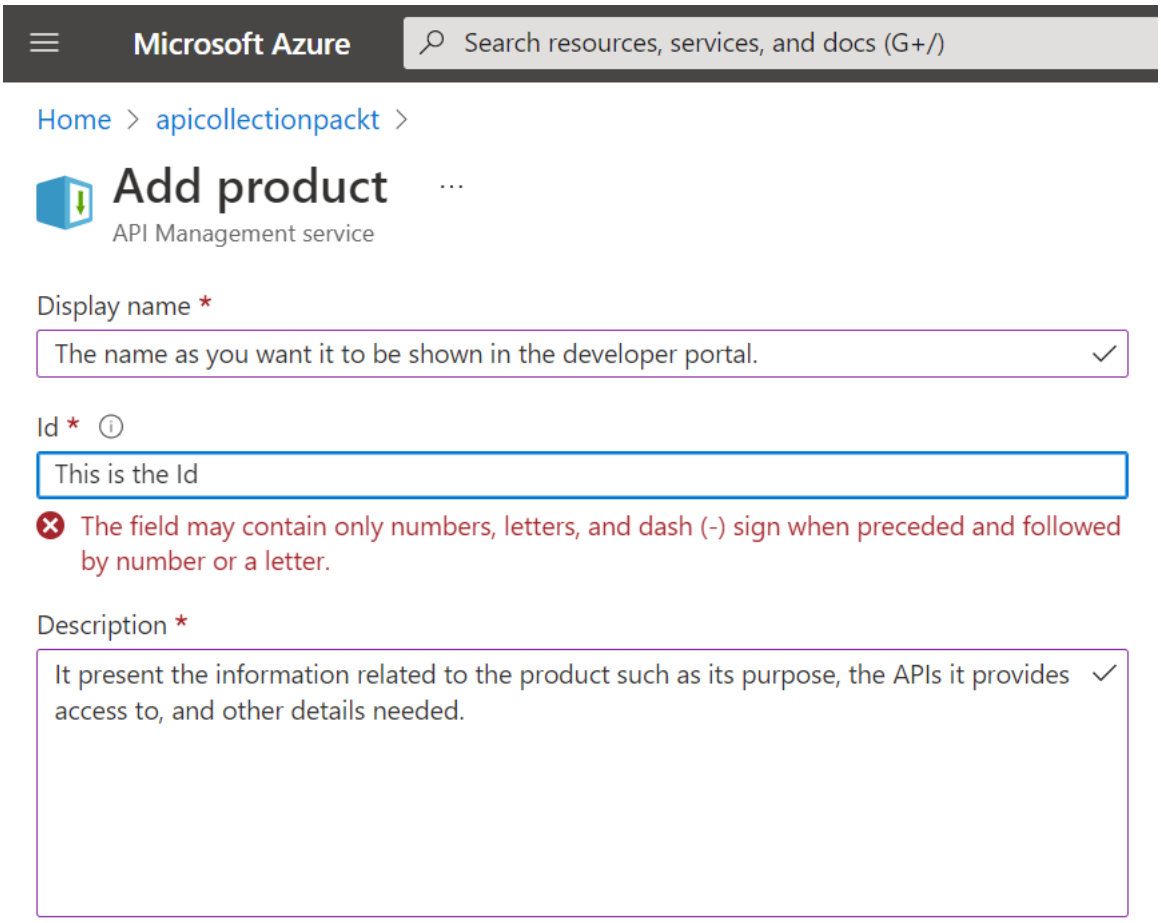
Access control (IAM)
Tags
Diagnose and solve problems
Events
Settings
Properties
Locks
APIs
APIs
Products
Products let you group APIs, define terms of use, and runtime policies. API consumers can subscribe to a product on the developer portal to obtain a key to call your APIs. Learn more
Search to filter items...
Display name
Access control
State
HealthcareProduct
Administrators
Published
Starter
Administrators, Developers, Guests
Published
Unlimited
Administrators, Developers, Guests
Published


Microsoft Azure
Search resources, services, and docs (G+/)
Home > apicollectionpackt >
Add product
API Management service
Display name *
The name as you want it to be shown in the developer portal.
Id *
This is the Id
The field may contain only numbers, letters, and dash (-) sign when preceded and followed by number or a letter.
Description *
It present the information related to the product such as its purpose, the APIs it provides access to, and other details needed.

Home > apicollectionpackt >

Add product

API Management service

Published

Requires subscription

Requires approval

Subscription count limit

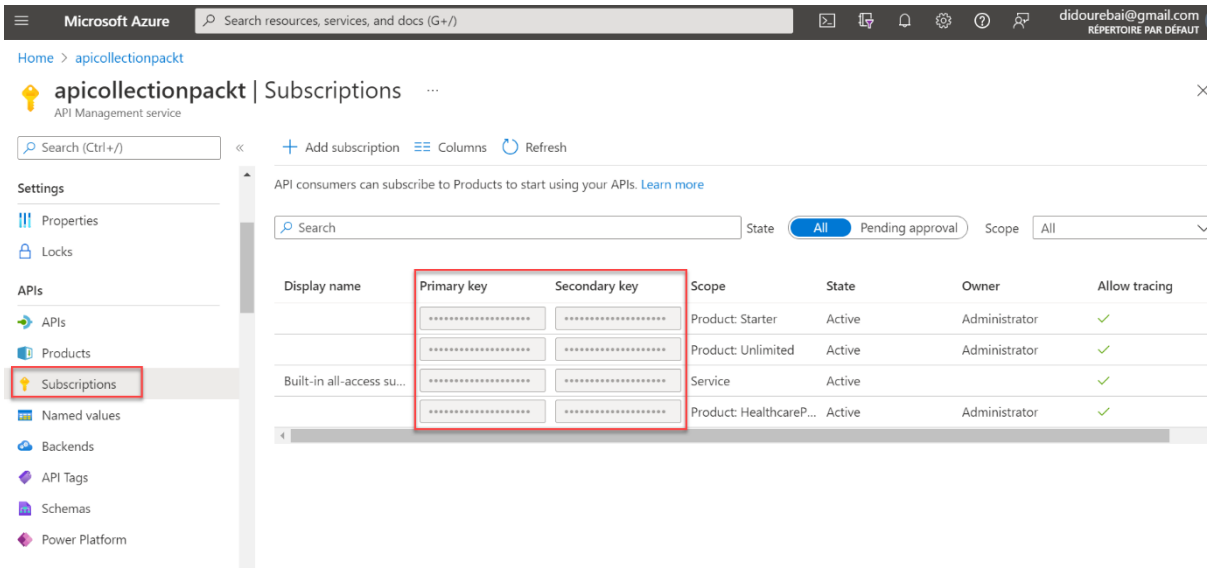
2000

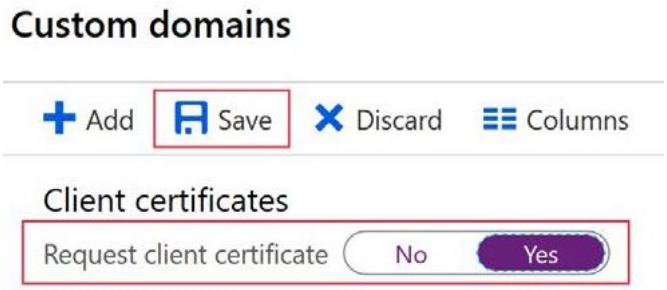
Legal terms

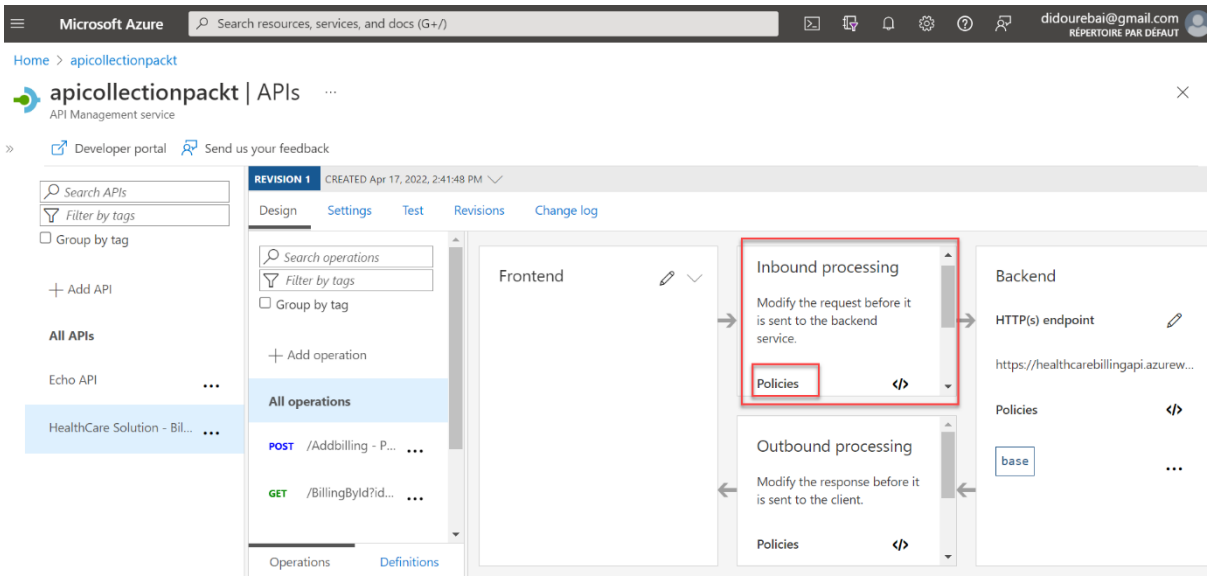
You can include the terms of use for the product which subscribers must accept in order to use the product.

APIs

Create




Custom domains
Add
Save
Discard
Columns
Client certificates
Request client certificate
No
Yes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Developer portal
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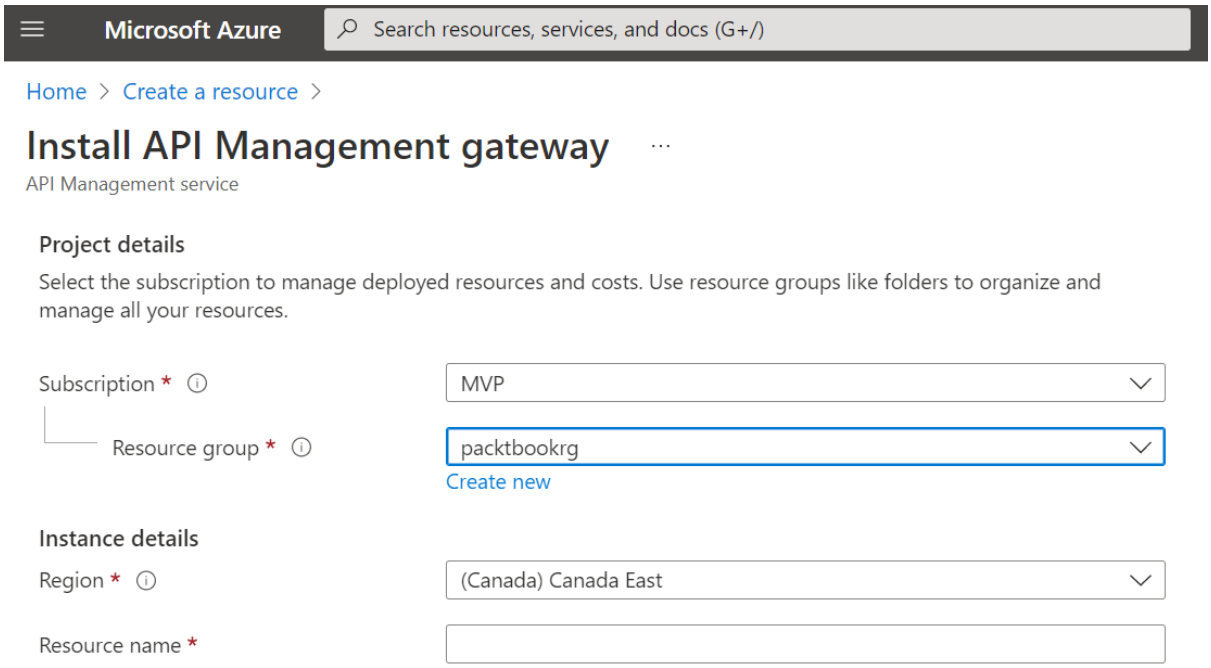
Search APIs
Filter by tags
Group by tag
Add API
All APIs
Echo API
HealthCare Solution - Bil...
REVISION 1
CREATED Apr 17, 2022, 2:41:48 PM
Design
Settings
Test
Revisions
Change log
Search operations
Filter by tags
Group by tag
Add operation
All operations
POST /Addbilling - P...
GET /BillingById?id...
Operations
Definitions
Frontend
Inbound processing
Modify the request before it is sent to the backend service.
Policies
Outbound processing
Modify the response before it is sent to the client.
Policies
Backend
HTTP(s) endpoint
https://healthcarebillingapi.azurew...
Policies
base


Microsoft Azure
Search resources, services, and docs (G+/)
Home > Create a resource >
Install API Management gateway
API Management service
Project details
Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.
Subscription *
MVP
Resource group *
packtbookrg
Create new
Instance details
Region *
(Canada) Canada East
Resource name *

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

Home > Create a resource >

Install API Management gateway ...

API Management service

Organization name * Enter organization name

Administrator email * Enter administrator email

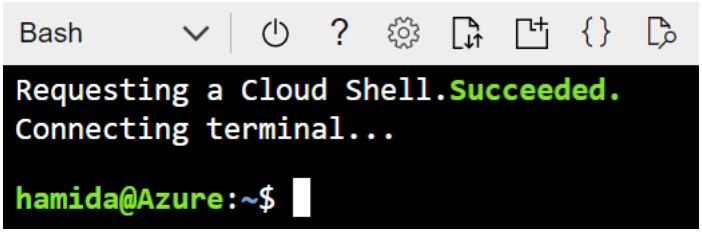
Pricing tier

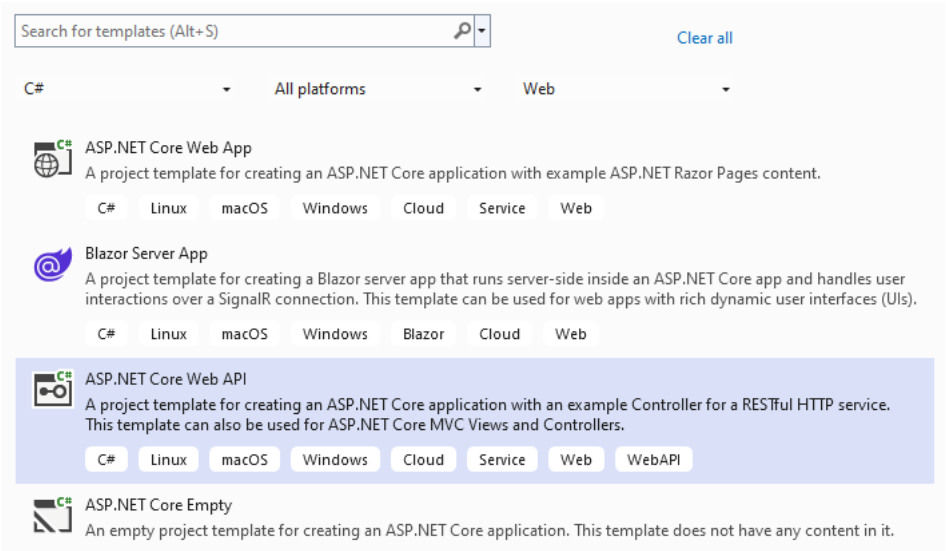
API Management pricing tiers vary in computing capacity per unit and the offered feature set - for example, support for virtual networks, multi-regional deployments, or self-hosted gateways. To accommodate more API requests, consider adding API Management service units instead. Learn more

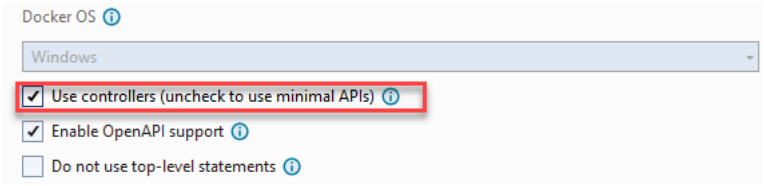
The Developer tier of API Management does not include SLA and should not be used for production purposes. Your service may experience intermittent outages, for example during upgrades. Learn more

Pricing tier: Developer (no SLA)

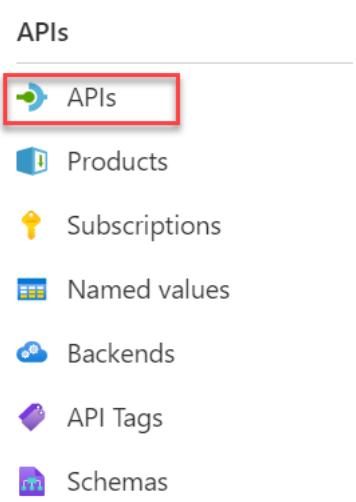
Review + create | < Previous | Next: Monitoring >

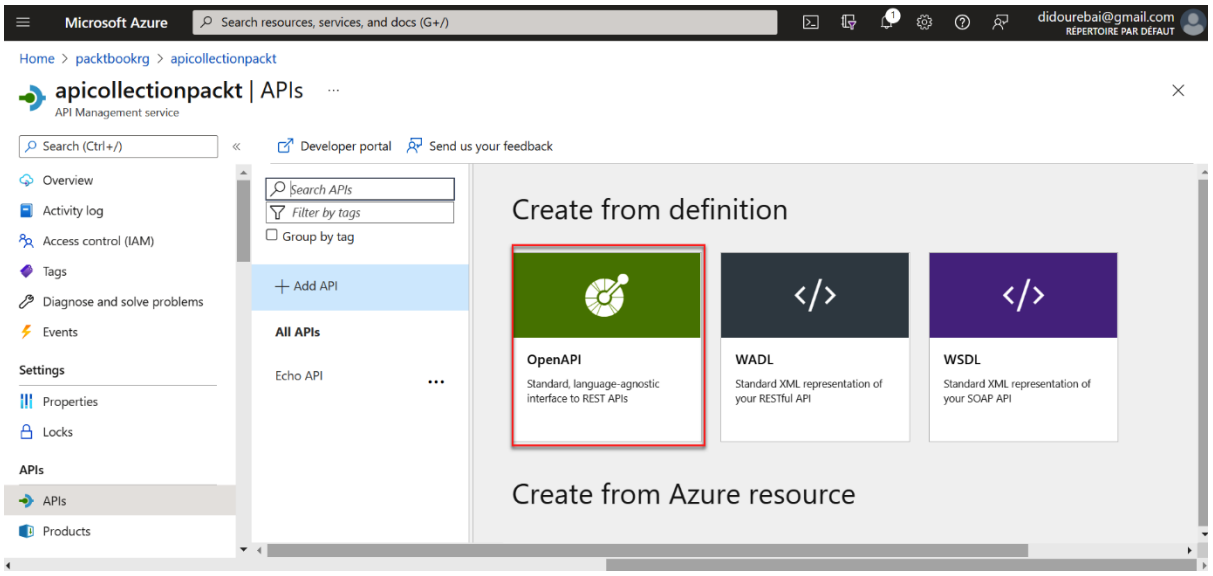







```
app.MapGet("/weatherforecast", (HttpContext httpContext) =>
{
    var forecast = Enumerable.Range(1, 5).Select(index =>
        new WeatherForecast
        {
            Date = DateTime.Now.AddDays(index),
            TemperatureC = Random.Shared.Next(-20, 55),
            Summary = summaries[Random.Shared.Next(summaries.Length)]
        })
        .ToArray();
    return forecast;
})
.WithName("GetWeatherForecast");
```


APIs
APIs
Products
Subscriptions
Named values
Backends
API Tags
Schemas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Access control (IAM)
Tags
Diagnose and solve problems
Events
Settings
Properties
Locks
APIs
APIs
Products
Search APIs
Filter by tags
Group by tag
Add API
All APIs
Echo API
Create from definition
OpenAPI
Standard, language-agnostic interface to REST APIs
WADL
Standard XML representation of your RESTful API
WSDL
Standard XML representation of your SOAP API
Create from Azure resource

Create from OpenAPI specification

Basic Full

* OpenAPI specification: https:// or Select a file (maximum size 4 MiB)

* Display name: e.g. Http Bin

* Name: e.g. httpbin

Description:

URL scheme: HTTP HTTPS Both

API URL suffix: e.g. httpbin

Base URL

http(s)://apicollectionpackt.azure-api.net

Tags: e.g. Booking

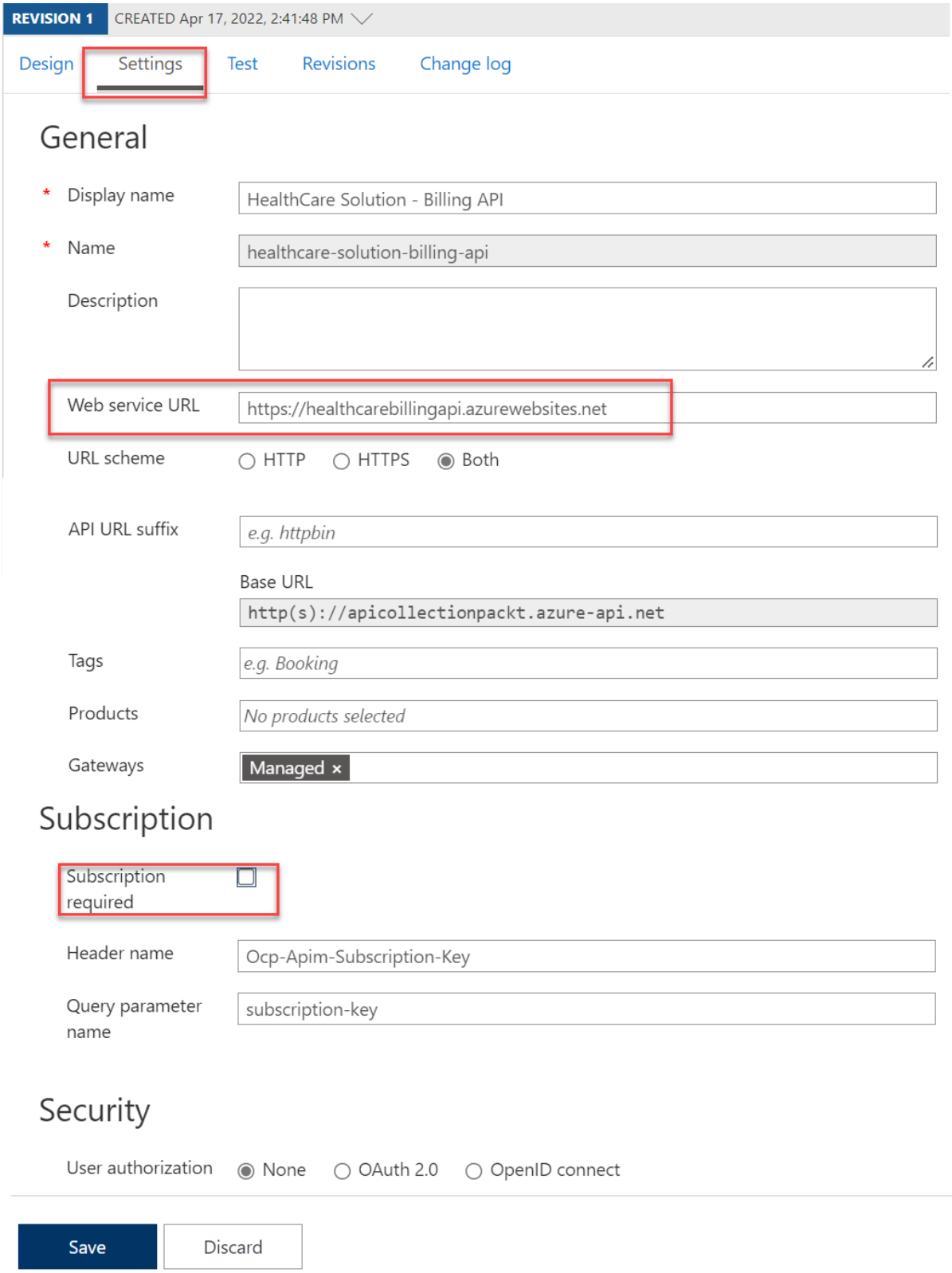
Products: No products selected

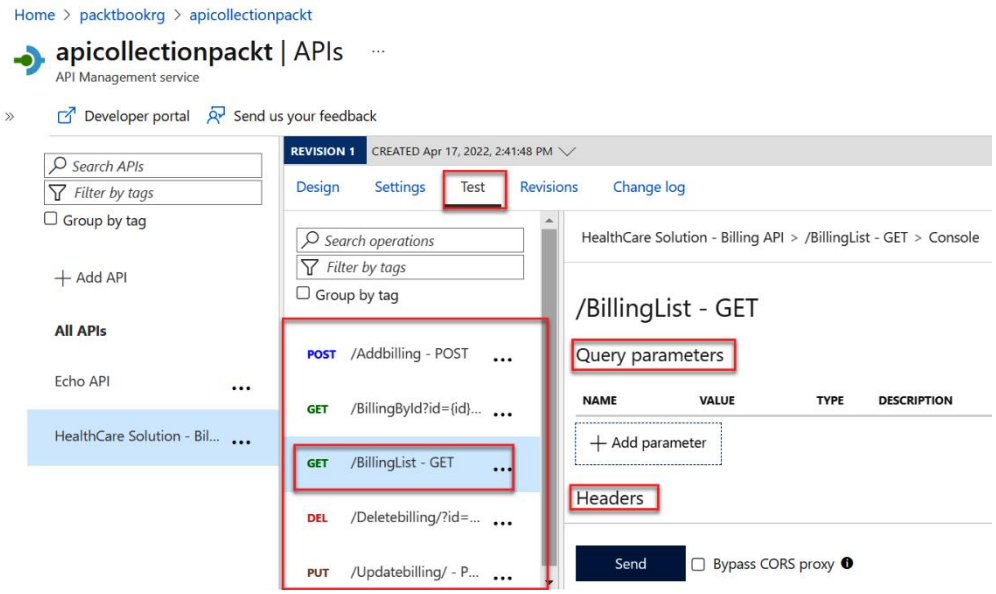
To publish the API, you must associate it with a product. Learn more.

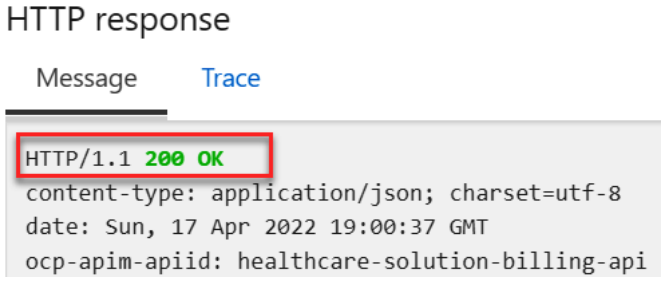
Gateways: Managed ×

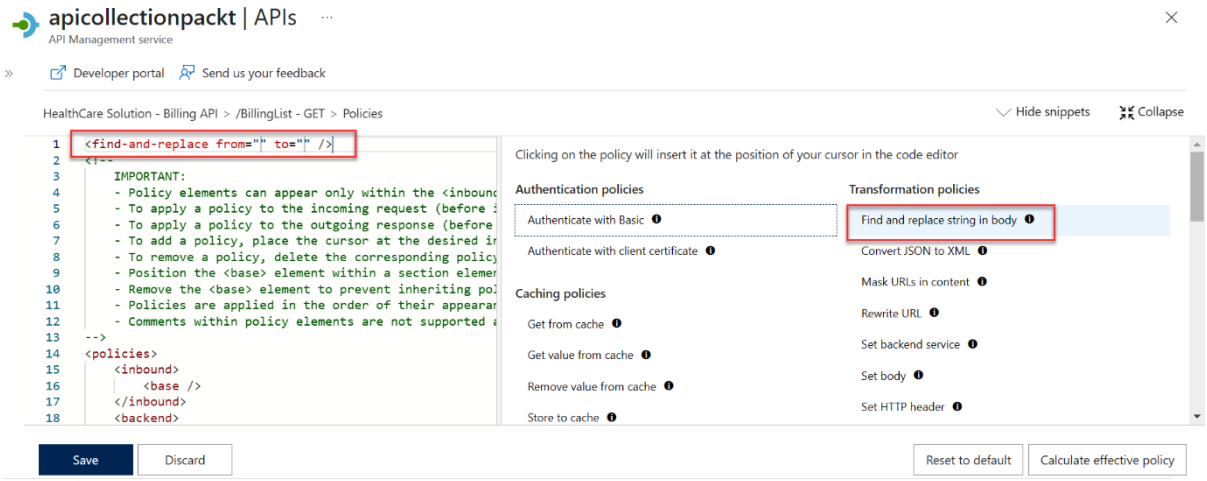
Version this API?

Create Cancel


REVISION 1
CREATED Apr 17, 2022, 2:41:48 PM
Design
Settings
Test
Revisions
Change log
General
* Display name
HealthCare Solution - Billing API
* Name
healthcare-solution-billing-api
Description
Web service URL
https://healthcarebillingapi.azurewebsites.net
URL scheme
HTTP
HTTPS
Both
API URL suffix
e.g. httpbin
Base URL
http(s)://apicollectionpackt.azure-api.net
Tags
e.g. Booking
Products
No products selected
Gateways
Managed ×
Subscription
Subscription required
Header name
Ocp-Apim-Subscription-Key
Query parameter name
subscription-key
Security
User authorization
None
OAuth 2.0
OpenID connect
Save
Discard

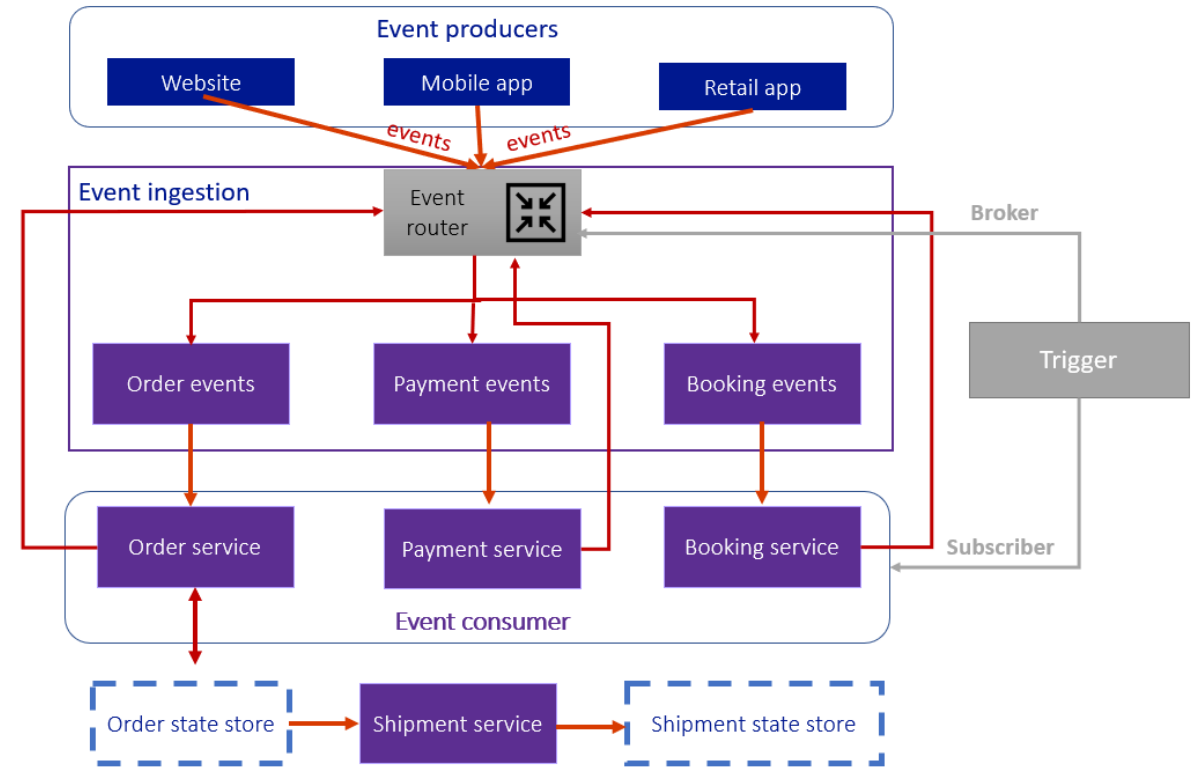

Home > packtbookrg > apicollectionpackt
apicollectionpackt | APIs
API Management service
Developer portal
Send us your feedback
Search APIs
Filter by tags
Group by tag
Add API
All APIs
Echo API
HealthCare Solution - Bil...
REVISION 1
CREATED Apr 17, 2022, 2:41:48 PM
Design
Settings
Test
Revisions
Change log
Search operations
Filter by tags
Group by tag
POST /Addbilling - POST
GET /BillingById?id={id}...
GET /BillingList - GET
DEL /Deletebilling/?id=...
PUT /Updatebilling/ - P...
HealthCare Solution - Billing API > /BillingList - GET > Console
/BillingList - GET
Query parameters
NAME
VALUE
TYPE
DESCRIPTION
Add parameter
Headers
Send
Bypass CORS proxy


HTTP response
Message
Trace
HTTP/1.1 200 OK
content-type: application/json; charset=utf-8
date: Sun, 17 Apr 2022 19:00:37 GMT
ocp-apim-apiid: healthcare-solution-billing-api

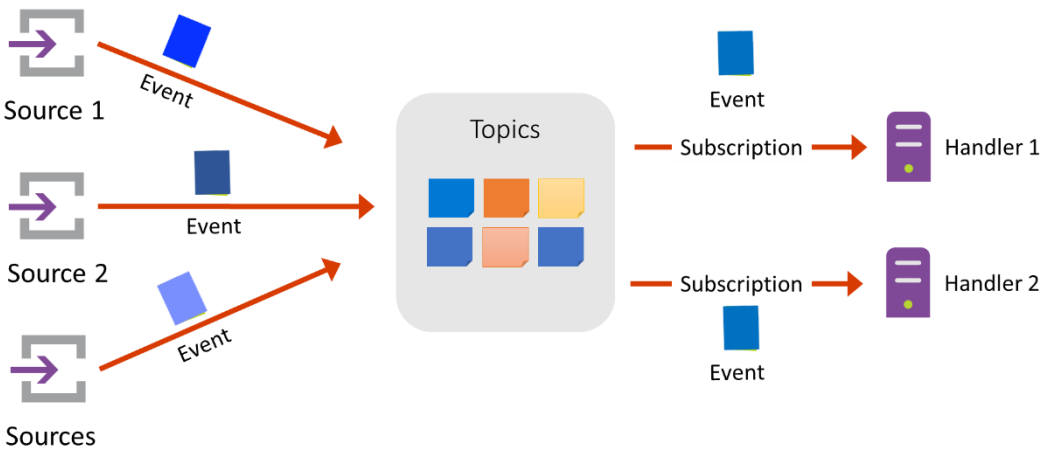

apicollectionpackt | APIs
API Management service
Developer portal
Send us your feedback
HealthCare Solution - Billing API > /BillingList - GET > Policies
Hide snippets
Collapse
<find-and-replace from="" to="" />
<!--
IMPORTANT:
- Policy elements can appear only within the <inbound
- To apply a policy to the incoming request (before
- To apply a policy to the outgoing response (before
- To add a policy, place the cursor at the desired in
- To remove a policy, delete the corresponding policy
- Position the <base> element within a section elemer
- Remove the <base> element to prevent inheriting pol
- Policies are applied in the order of their appearar
- Comments within policy elements are not supported
-->
<policies>
<inbound>
<base />
</inbound>
<backend>
Clicking on the policy will insert it at the position of your cursor in the code editor
Authentication policies
Authenticate with Basic
Authenticate with client certificate
Caching policies
Get from cache
Get value from cache
Remove value from cache
Store to cache
Transformation policies
Find and replace string in body
Convert JSON to XML
Mask URLs in content
Rewrite URL
Set backend service
Set body
Set HTTP header
Save
Discard
Reset to default
Calculate effective policy

Setting	Description
OpenAPI specification	This refers to the service implementing the API. Requests will be forwarded to this address. Once the URL is entered, most of the information needed in the form is automatically filled in.
Display name	This name will be displayed in the developer portal after configuration.
Name	This is a unique name for the API.
Description	This is optional to provide more information related to your API.
API URL suffix	API Management distinguishes APIs by their suffix. This suffix is unique for each API. It will be added to the base URL of the API Management service.

Chapter 3: Developing Event-Based and Message-Based Solutions



Event Grid



Home > Create a resource > Marketplace > Event Grid Topic >

Create Topic

Event Grid

Basics | Networking | Advanced | Tags | Review + create

Project Details

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

Subscription * MVP

Resource group *

Create new

Topic Details

Enter required settings for this topic.

Name *

Region *

Review + create | < Previous | Next: Networking >

Create Web App ...

Project Details

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

Subscription * : MVP

Resource Group * : packrg

Create new

Instance Details

Need a database? Try the new Web + Database experience.

Name * : eventgridviewersample .azurewebsites.net

Publish * : Code / Docker Container / Static Web App

Operating System * : Linux / Windows

Region * : East US 2

Not finding your App Service Plan? Try a different region or select your App Service Environment.

App Service Plan

App Service plan pricing tier determines the location, features, cost and compute resources associated with your app.
Learn more

Linux Plan (East US 2) * : (New) ASP-packrg-aeeb

Create new

Sku and size * : **Premium V2 P1v2**
210 total ACU, 3.5 GB memory
Change size

Zone redundancy

An App Service plan can be deployed as a zone redundant service in the regions that support it. This is a deployment time only decision. You can't make an App Service plan zone redundant after it has been deployed Learn more

Review + create | < Previous | Next : Docker >

Home > Create a resource >

Create Web App

Basics | Docker | Networking (preview) | Monitoring | Tags | Review + create

Pull container images from Azure Container Registry, Docker Hub or a private Docker repository. App Service will deploy the containerized app with your preferred dependencies to production in seconds.

Options: Single Container

Image Source: Docker Hub

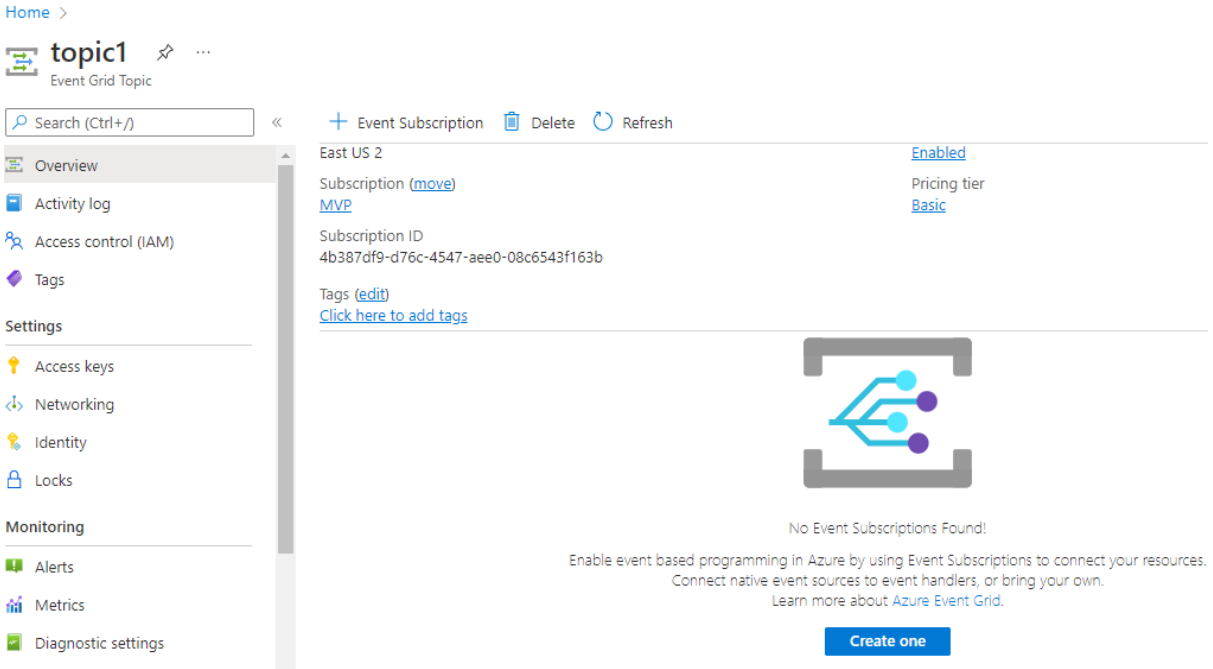
Docker hub options

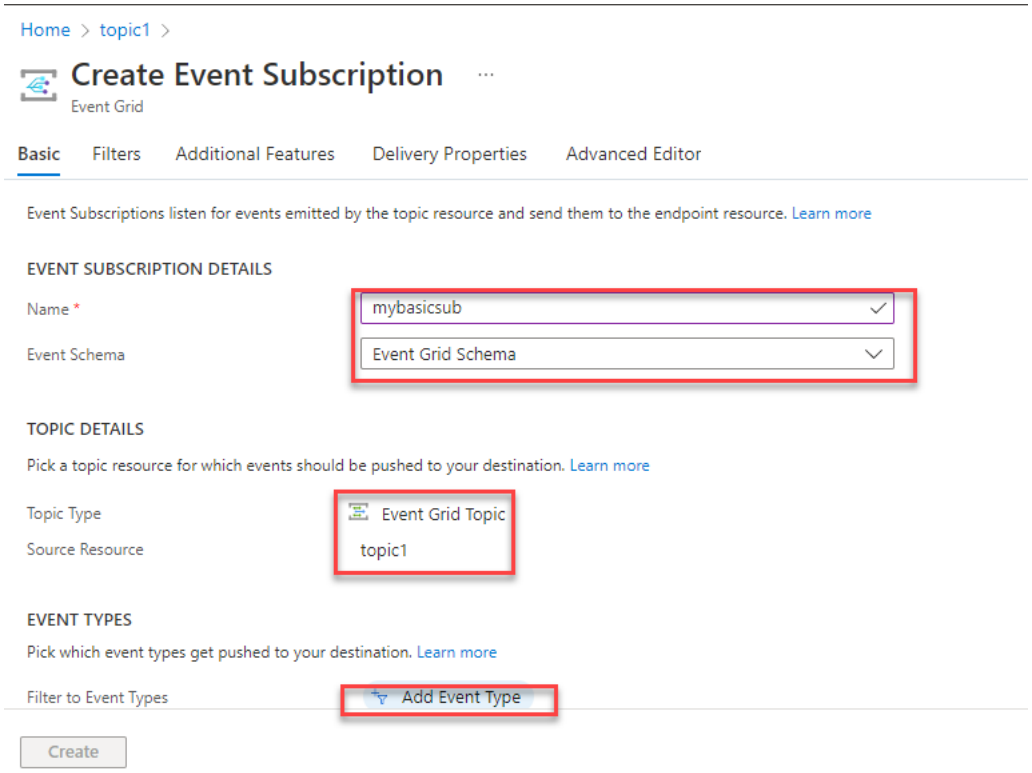
Access Type *: Public

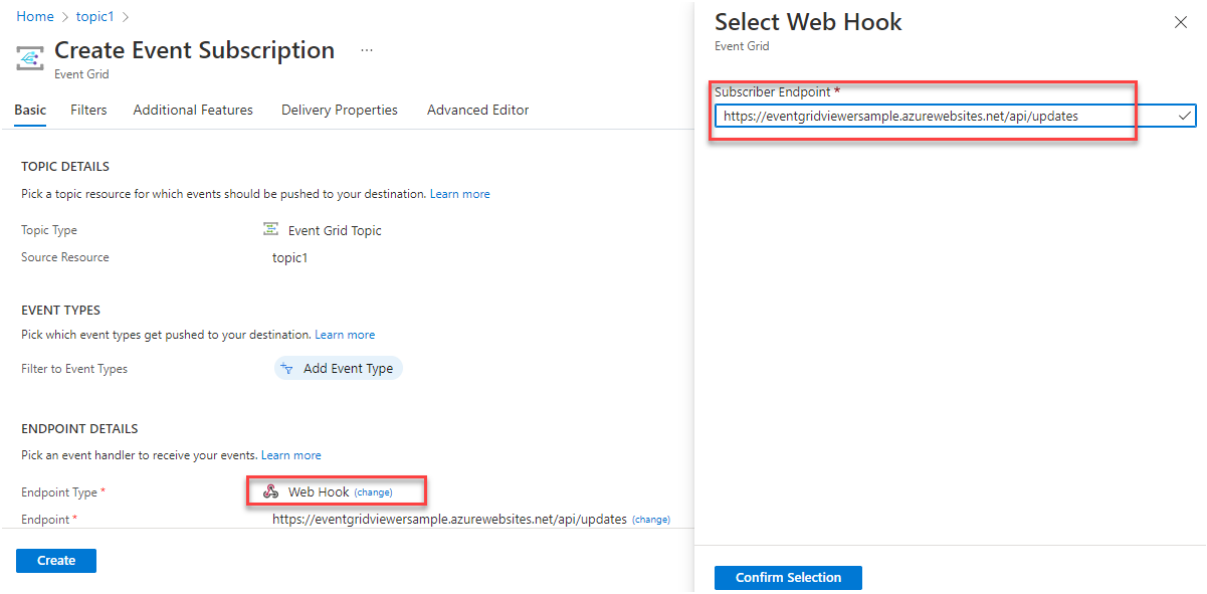
Image and tag *: microsoftlearning/azure-event-grid-viewer:latest

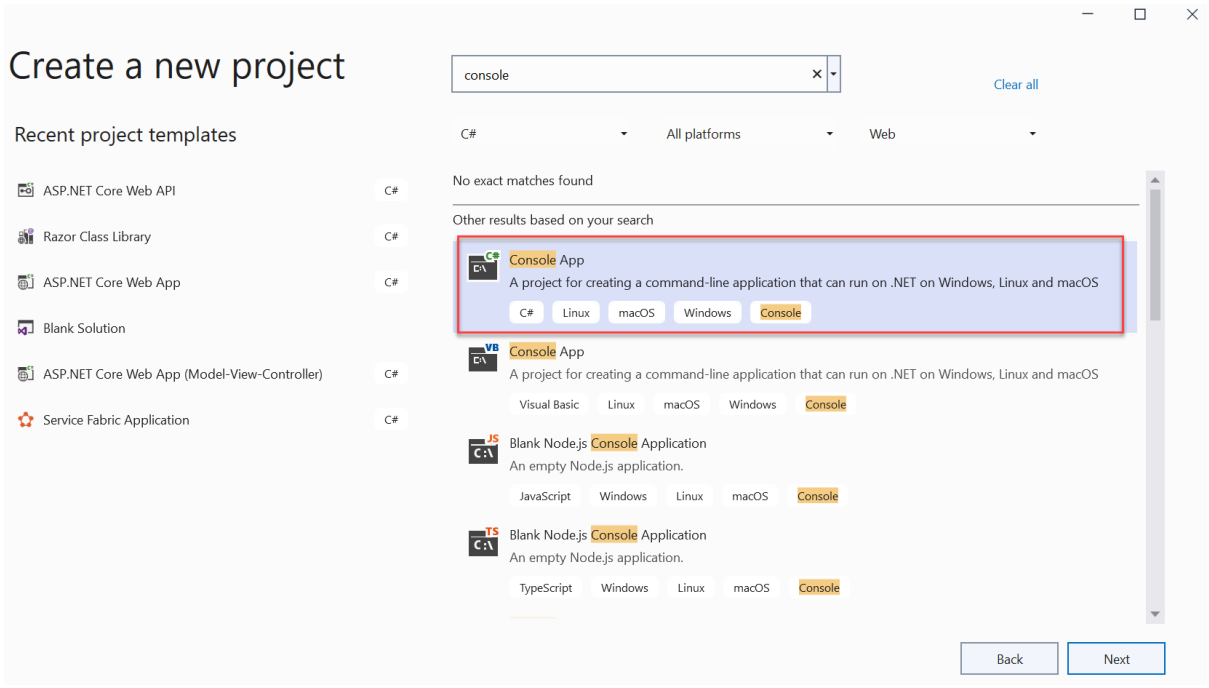
Startup Command:

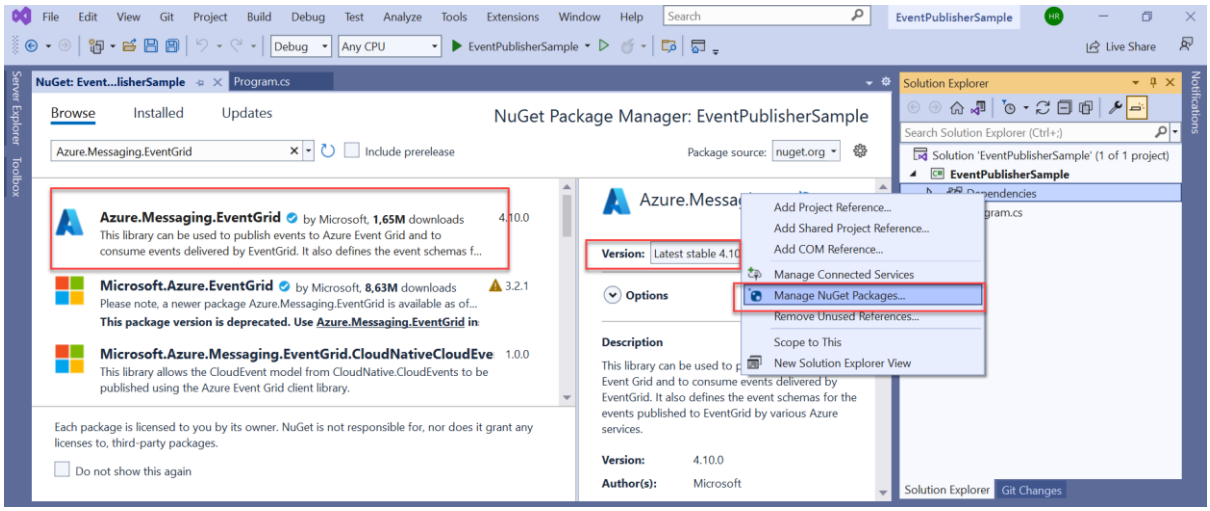
Review + create | < Previous | Next : Networking (preview) >

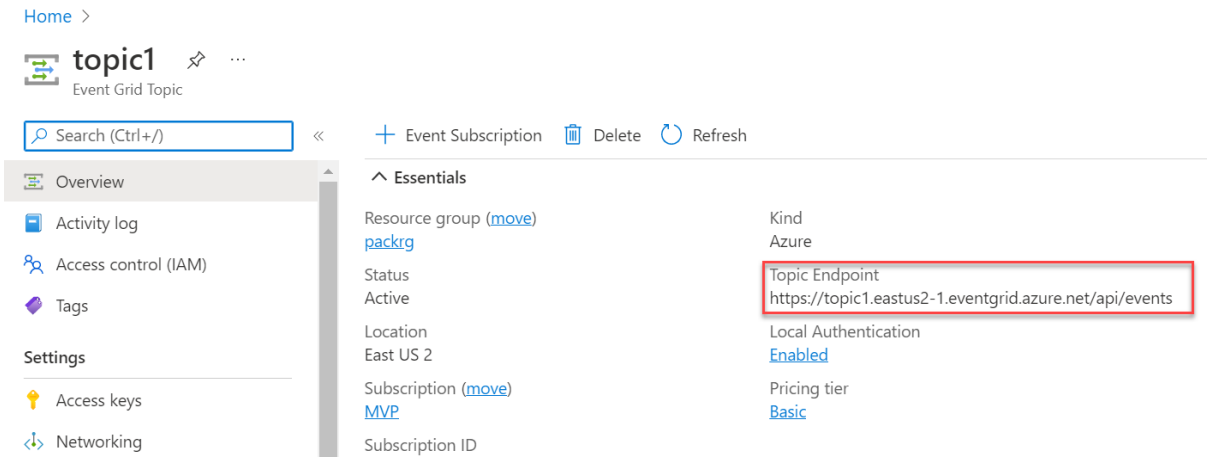



Home > topic1 >
Create Event Subscription
Event Grid
Basic
Filters
Additional Features
Delivery Properties
Advanced Editor
Event Subscriptions listen for events emitted by the topic resource and send them to the endpoint resource. Learn more
EVENT SUBSCRIPTION DETAILS
Name *
mybasicsub
Event Schema
Event Grid Schema
TOPIC DETAILS
Pick a topic resource for which events should be pushed to your destination. Learn more
Topic Type
Event Grid Topic
Source Resource
topic1
EVENT TYPES
Pick which event types get pushed to your destination. Learn more
Filter to Event Types
Add Event Type
Create

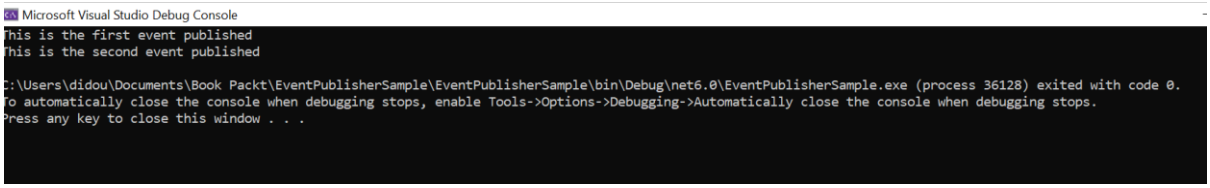

Home > topic1 >
Create Event Subscription
Event Grid
Basic
Filters
Additional Features
Delivery Properties
Advanced Editor
TOPIC DETAILS
Pick a topic resource for which events should be pushed to your destination. Learn more
Topic Type
Event Grid Topic
Source Resource
topic1
EVENT TYPES
Pick which event types get pushed to your destination. Learn more
Filter to Event Types
Add Event Type
ENDPOINT DETAILS
Pick an event handler to receive your events. Learn more
Endpoint Type *
Web Hook (change)
Endpoint *
https://eventgridviewersample.azurewebsites.net/api/updates (change)
Create
Select Web Hook
Event Grid
Subscriber Endpoint *
https://eventgridviewersample.azurewebsites.net/api/updates
Confirm Selection

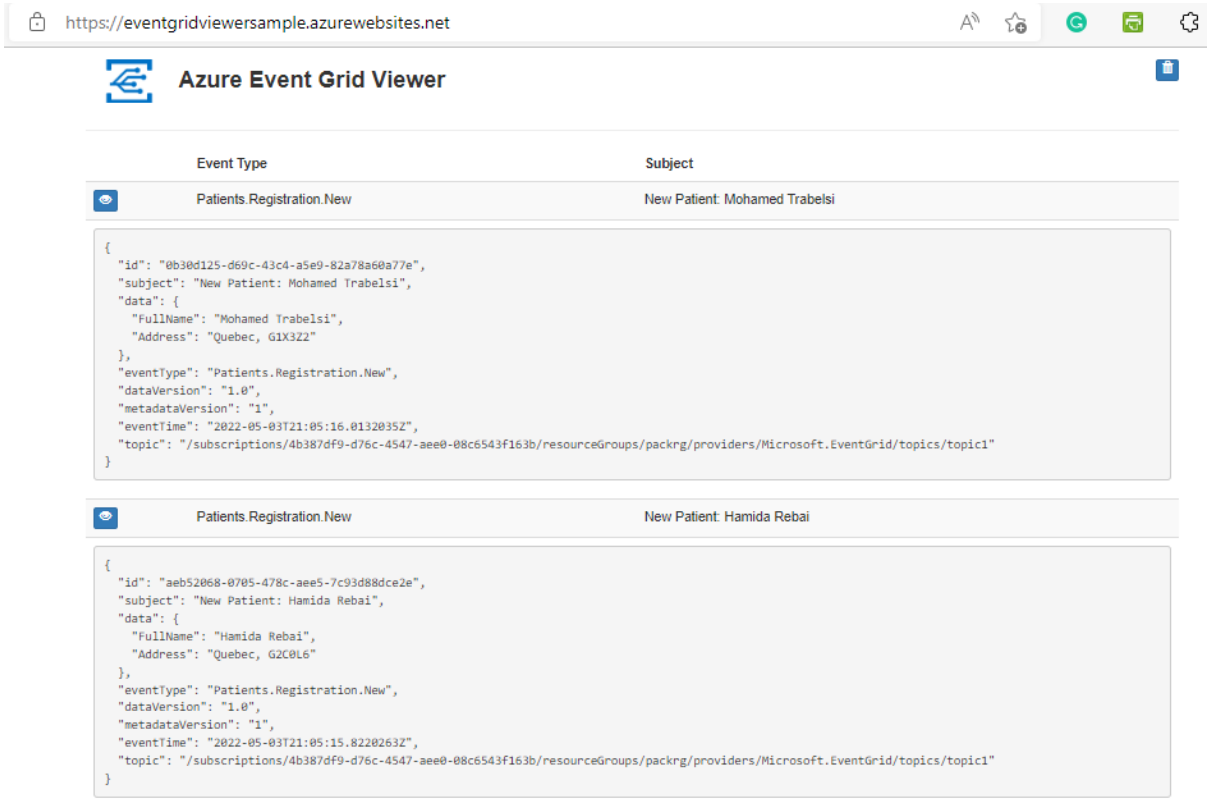

Create a new project
console
Clear all
Recent project templates
C#
All platforms
Web
ASP.NET Core Web API
Razor Class Library
ASP.NET Core Web App
Blank Solution
ASP.NET Core Web App (Model-View-Controller)
Service Fabric Application
No exact matches found
Other results based on your search
Console App
A project for creating a command-line application that can run on .NET on Windows, Linux and macOS
Console App
A project for creating a command-line application that can run on .NET on Windows, Linux and macOS
Blank Node.js Console Application
An empty Node.js application.
Blank Node.js Console Application
An empty Node.js application.
Back
Next

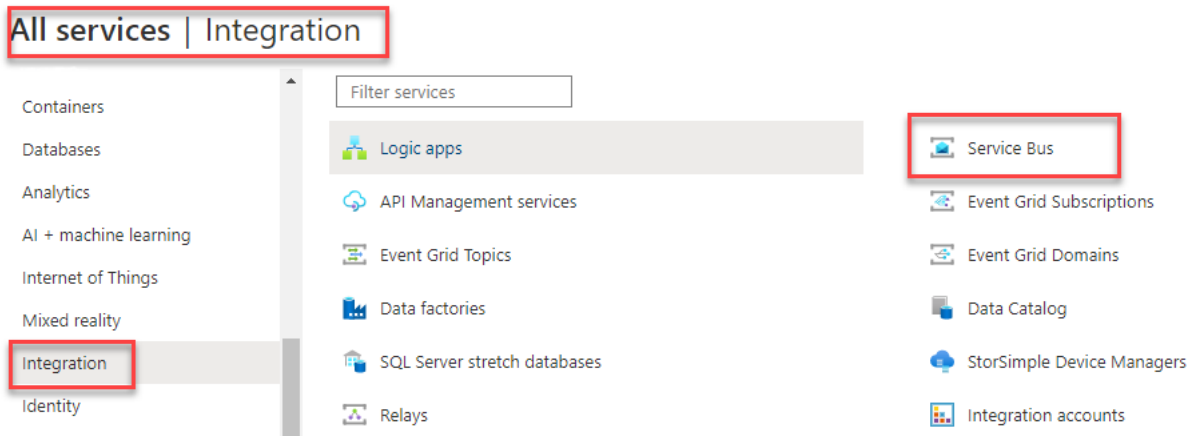

NuGet Package Manager: EventPublisherSample
Azure.Messaging.EventGrid
Microsoft.Azure.EventGrid
Microsoft.Azure.Messaging.EventGrid.CloudNativeCloudEve
Add Project Reference...
Add Shared Project Reference...
Add COM Reference...
Manage Connected Services
Manage NuGet Packages...
Remove Unused References...
Scope to This
New Solution Explorer View

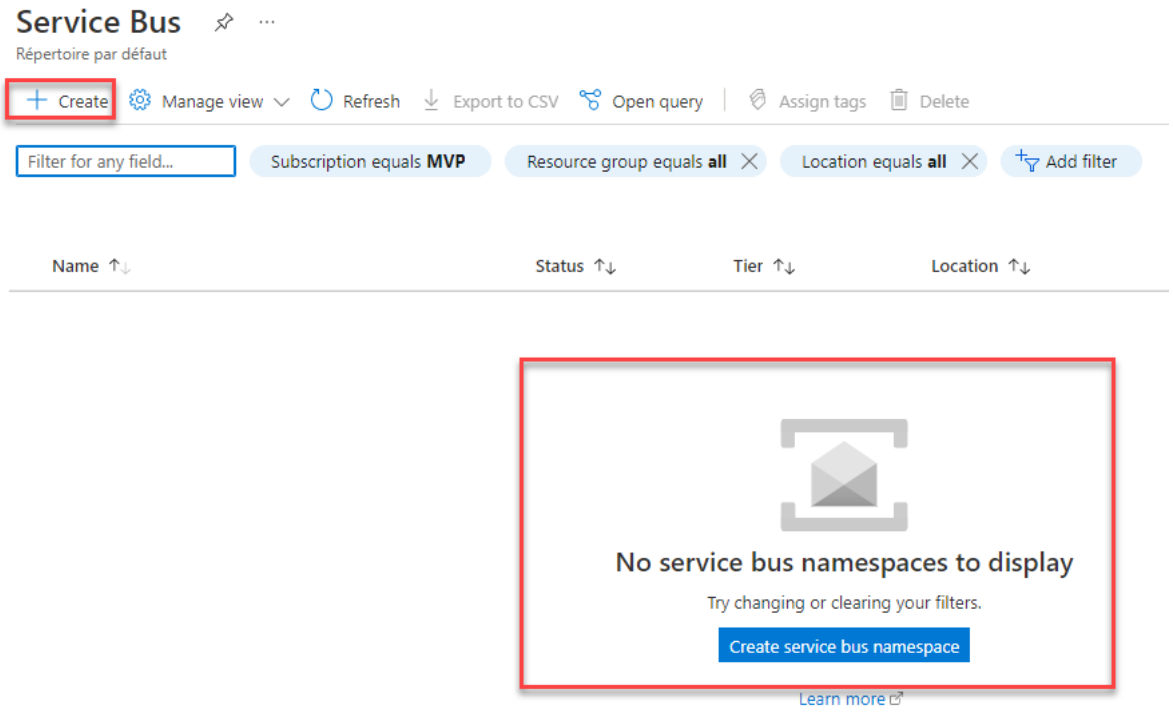

Home
topic1
Event Grid Topic
Search (Ctrl+/)
Event Subscription
Delete
Refresh
Overview
Activity log
Access control (IAM)
Tags
Settings
Access keys
Networking
Essentials
Resource group (move)
packrg
Status
Active
Location
East US 2
Subscription (move)
MVP
Subscription ID
Kind
Azure
Topic Endpoint
https://topic1.eastus2-1.eventgrid.azure.net/api/events
Local Authentication
Enabled
Pricing tier
Basic

Home > topic1
topic1 | Access keys
Event Grid Topic
Search (Ctrl+/)
Overview
Activity log
Access control (IAM)
Tags
Settings
Access keys
Networking
Access keys are used to authenticate an application publishing events to this Azure Event Grid Topic. We recommend regenerating your keys regularly and storing them securely. You are provided with two access keys so that you can maintain connections using one key while regenerating the other.
Name
Key
Key 1
F75EVs4Elsvkb212kpr1bK7j+Fqh9MDxmFSWX4hKYG8=
Key 2
2RphOfJC+qabCeSWPHI2u6qLiOJkW/Wx02aUjfFIDxQ=


Microsoft Visual Studio Debug Console
This is the first event published
This is the second event published
C:\Users\didou\Documents\Book Packt\EventPublisherSample\EventPublisherSample\bin\Debug\net6.0\EventPublisherSample.exe (process 36128) exited with code 0.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .


https://eventgridviewersample.azurewebsites.net
Azure Event Grid Viewer
Event Type
Subject
Patients.Registration.New
New Patient: Mohamed Trabelsi
{
"id": "0b30d125-d69c-43c4-a5e9-82a78a60a77e",
"subject": "New Patient: Mohamed Trabelsi",
"data": {
"FullName": "Mohamed Trabelsi",
"Address": "Quebec, G1X3Z2"
},
"eventType": "Patients.Registration.New",
"dataVersion": "1.0",
"metadataVersion": "1",
"eventTime": "2022-05-03T21:05:16.0132035Z",
"topic": "/subscriptions/4b387df9-d76c-4547-aee0-08c6543f163b/resourceGroups/packrg/providers/Microsoft.EventGrid/topics/topic1"
}
Patients.Registration.New
New Patient: Hamida Rebai
{
"id": "aeb52068-0705-478c-aee5-7c93d88dce2e",
"subject": "New Patient: Hamida Rebai",
"data": {
"FullName": "Hamida Rebai",
"Address": "Quebec, G2C0L6"
},
"eventType": "Patients.Registration.New",
"dataVersion": "1.0",
"metadataVersion": "1",
"eventTime": "2022-05-03T21:05:15.8220263Z",
"topic": "/subscriptions/4b387df9-d76c-4547-aee0-08c6543f163b/resourceGroups/packrg/providers/Microsoft.EventGrid/topics/topic1"
}


All services | Integration
Containers
Databases
Analytics
AI + machine learning
Internet of Things
Mixed reality
Integration
Identity
Filter services
Logic apps
API Management services
Event Grid Topics
Data factories
SQL Server stretch databases
Relays
Service Bus
Event Grid Subscriptions
Event Grid Domains
Data Catalog
StorSimple Device Managers
Integration accounts


Service Bus
Répertoire par défaut
Create
Manage view
Refresh
Export to CSV
Open query
Assign tags
Delete
Filter for any field...
Subscription equals MVP
Resource group equals all
Location equals all
Add filter
Name
Status
Tier
Location
No service bus namespaces to display
Try changing or clearing your filters.
Create service bus namespace
Learn more

Home > Create a resource >

Create namespace

Service Bus

Basics | Networking | Tags | Review + create

Project Details

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

Subscription * : MVP

Resource group * : (New) packrg

Create new

Instance Details

Enter required settings for this namespace.

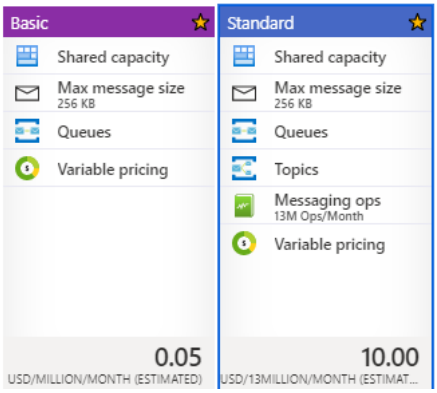
Namespace name * : appointmentqueue .servicebus.windows.net

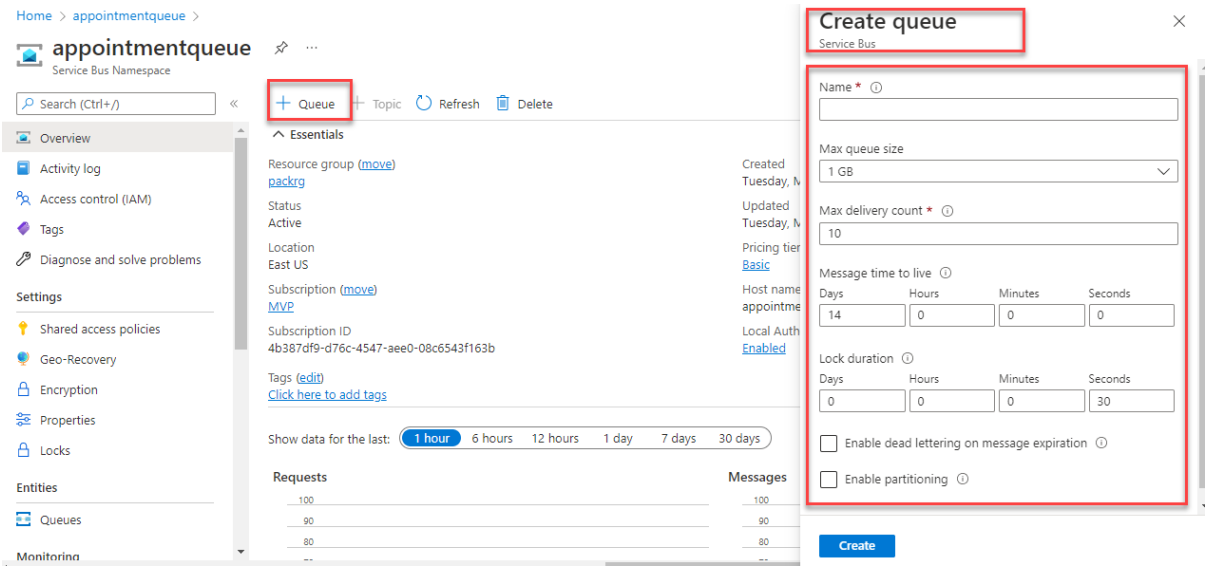
Location * : East US

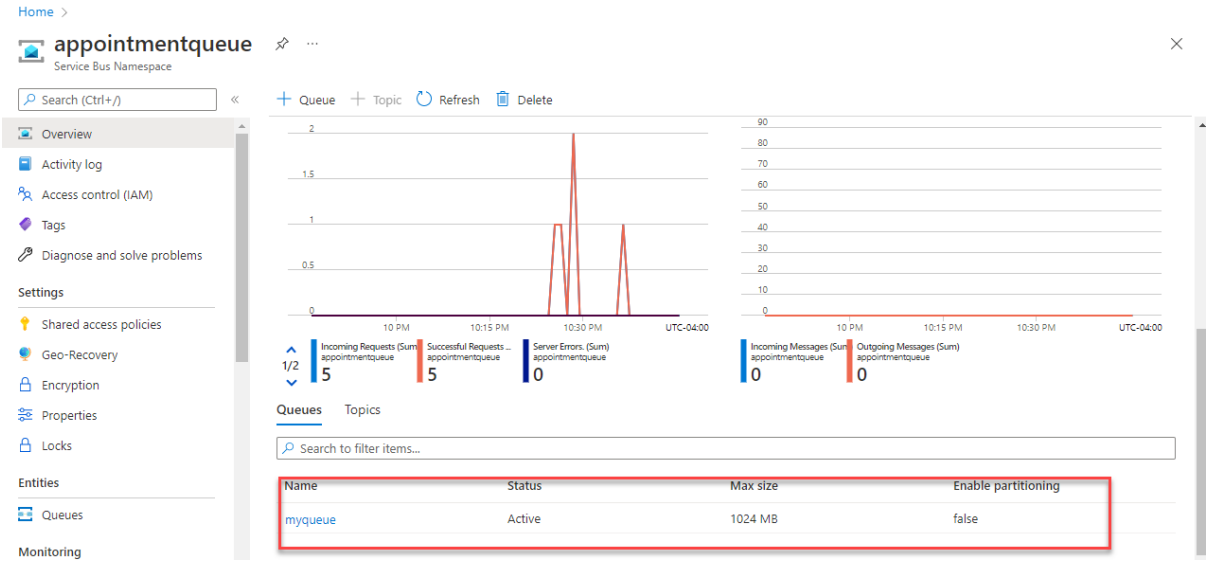
Pricing tier * : Basic (~$0.05 USD per 1M Operations per Month)

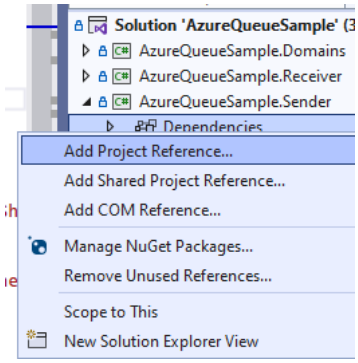
Browse the available plans and their features

Review + create | < Previous | Next: Networking >

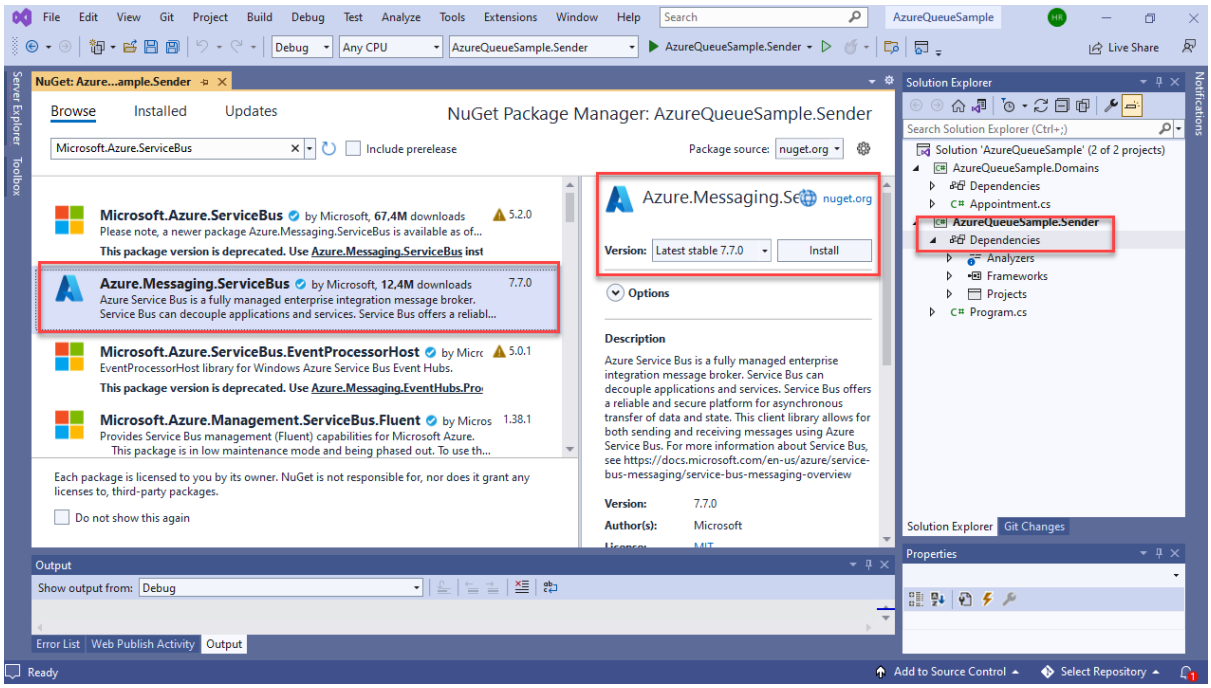


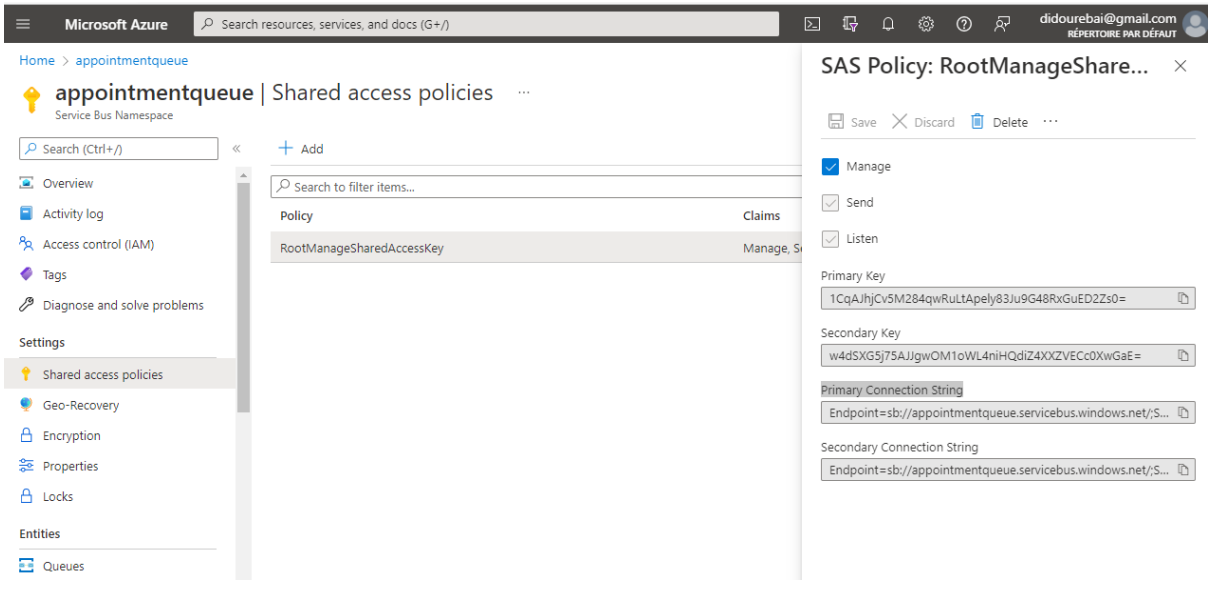

Home > appointmentqueue >
appointmentqueue
Service Bus Namespace
Search (Ctrl+/)
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Settings
Shared access policies
Geo-Recovery
Encryption
Properties
Locks
Entities
Queues
Monitoring
Queue
Topic
Refresh
Delete
Essentials
Resource group (move)
packrg
Status
Active
Location
East US
Subscription (move)
MVP
Subscription ID
4b387df9-d76c-4547-aee0-08c6543f163b
Tags (edit)
Click here to add tags
Created
Updated
Pricing tier
Basic
Host name
Local Auth
Enabled
Show data for the last:
1 hour
6 hours
12 hours
1 day
7 days
30 days
Requests
Messages
Create queue
Service Bus
Name *
Max queue size
1 GB
Max delivery count *
10
Message time to live
Days
Hours
Minutes
Seconds
14
0
0
0
Lock duration
0
0
0
30
Enable dead lettering on message expiration
Enable partitioning
Create

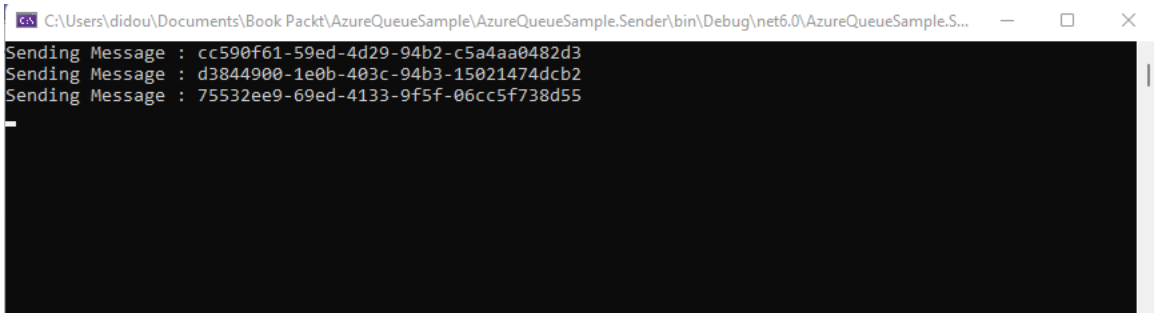

Home >
appointmentqueue
Service Bus Namespace
Search (Ctrl+/)
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Settings
Shared access policies
Geo-Recovery
Encryption
Properties
Locks
Entities
Queues
Monitoring
Queue
Topic
Refresh
Delete
Queues
Topics
Search to filter items...
Name
Status
Max size
Enable partitioning
myqueue
Active
1024 MB
false


Solution 'AzureQueueSample' (3
AzureQueueSample.Domains
AzureQueueSample.Receiver
AzureQueueSample.Sender
Dependencies
Add Project Reference...
Add Shared Project Reference...
Add COM Reference...
Manage NuGet Packages...
Remove Unused References...
Scope to This
New Solution Explorer View

AzureQueueSample.Sender
<Project Sdk="Microsoft.NET.Sdk">
<PropertyGroup>
<OutputType>Exe</OutputType>
<TargetFramework>net7.0</TargetFramework>
<ImplicitUsings>enable</ImplicitUsings>
<Nullable>enable</Nullable>
</PropertyGroup>
<ItemGroup>
<PackageReference Include="Azure.Messaging.ServiceBus" Version="7.7.0" />
<PackageReference Include="Newtonsoft.Json" Version="13.0.1" />
</ItemGroup>
<ItemGroup>
<ProjectReference Include="..\AzureQueueSample.Domains\AzureQueueSample.Domains.csproj" />
</ItemGroup>
</Project>
Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'AzureQueueSample' (3 of 3 projects)
AzureQueueSample.Domains
AzureQueueSample.Receiver
AzureQueueSample.Sender
Dependencies
Analyzers
Frameworks
Packages
Projects
AzureQueueSample.Domains
Program.cs

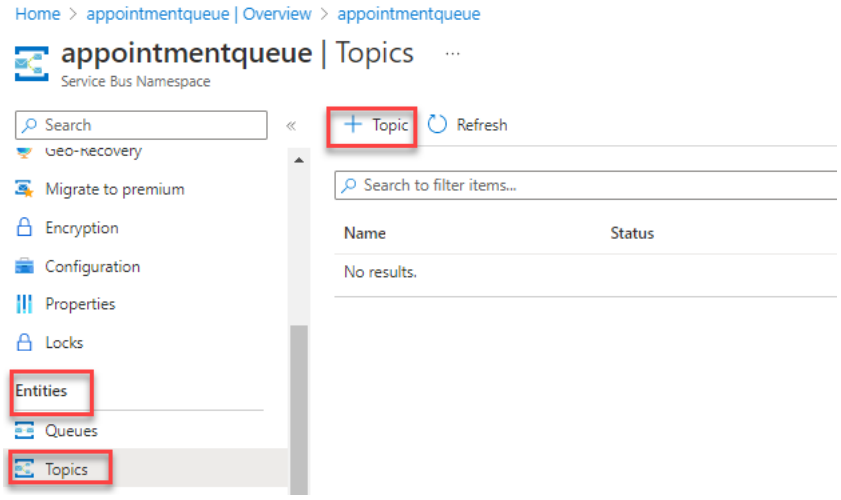

File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help
Search
AzureQueueSample
Debug
Any CPU
AzureQueueSample.Sender
Live Share
NuGet: Azure...ample.Sender
Browse
Installed
Updates
NuGet Package Manager: AzureQueueSample.Sender
Microsoft.Azure.ServiceBus
Include prerelease
Package source: nuget.org
Microsoft.Azure.ServiceBus by Microsoft, 67,4M downloads 5.2.0
Please note, a newer package Azure.Messaging.ServiceBus is available as of...
This package version is deprecated. Use Azure.Messaging.ServiceBus inst
Azure.Messaging.ServiceBus by Microsoft, 12,4M downloads 7.7.0
Azure Service Bus is a fully managed enterprise integration message broker.
Service Bus can decouple applications and services. Service Bus offers a reliabl...
Microsoft.Azure.ServiceBus.EventProcessorHost by Micr 5.0.1
EventProcessorHost library for Windows Azure Service Bus Event Hubs.
This package version is deprecated. Use Azure.Messaging.EventHubs.Pro
Microsoft.Azure.Management.ServiceBus.Fluent by Micros 1.38.1
Provides Service Bus management (Fluent) capabilities for Microsoft Azure.
This package is in low maintenance mode and being phased out. To use th...
Each package is licensed to you by its owner. NuGet is not responsible for, nor does it grant any licenses to, third-party packages.
Do not show this again
Azure.Messaging.Se nuget.org
Version: Latest stable 7.7.0
Install
Options
Description
Azure Service Bus is a fully managed enterprise integration message broker. Service Bus can decouple applications and services. Service Bus offers a reliable and secure platform for asynchronous transfer of data and state. This client library allows for both sending and receiving messages using Azure Service Bus. For more information about Service Bus, see https://docs.microsoft.com/en-us/azure/service-bus-messaging/service-bus-messaging-overview
Version: 7.7.0
Author(s): Microsoft
Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'AzureQueueSample' (2 of 2 projects)
AzureQueueSample.Domains
Dependencies
Appointment.cs
AzureQueueSample.Sender
Dependencies
Analyzers
Frameworks
Projects
Program.cs
Solution Explorer
Git Changes
Properties
Output
Show output from: Debug
Error List
Web Publish Activity
Output
Ready
Add to Source Control
Select Repository

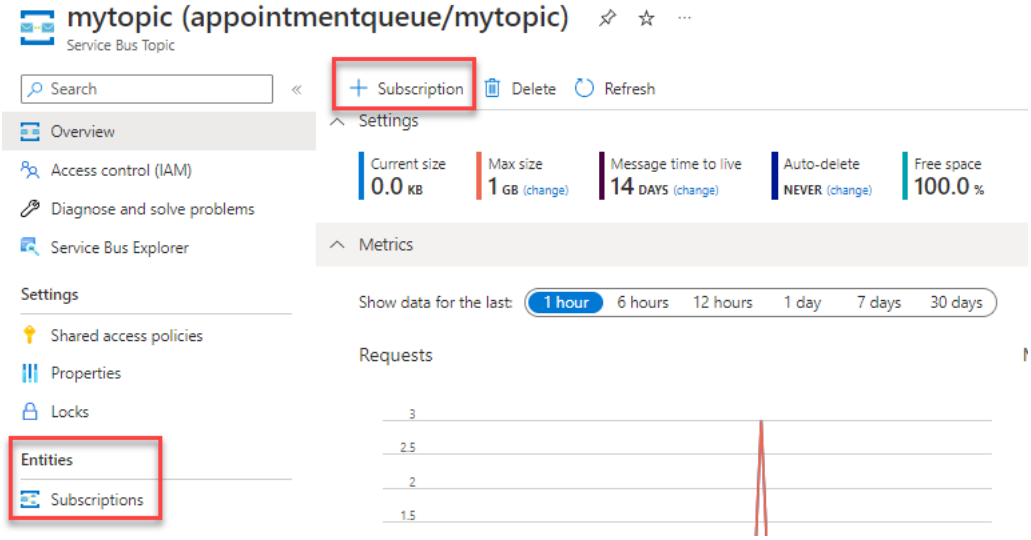

Microsoft Azure
Search resources, services, and docs (G+/)
didourebai@gmail.com
RÉPERTOIRE PAR DÉFAUT
Home > appointmentqueue
appointmentqueue | Shared access policies
Service Bus Namespace
Search (Ctrl+/)
Add
Search to filter items...
Policy
Claims
RootManageSharedAccessKey
Manage,
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Settings
Shared access policies
Geo-Recovery
Encryption
Properties
Locks
Entities
Queues
SAS Policy: RootManageShare...
Save
Discard
Delete
Manage
Send
Listen
Primary Key
1CqAJhjCv5M284qwRuLtApely83Ju9G48RxGuED2Zs0=
Secondary Key
w4dSXG5j75AJJgwOM1oWL4niHQdiZ4XXZVECc0XwGaE=
Primary Connection String
Endpoint=sb://appointmentqueue.servicebus.windows.net/;S...
Secondary Connection String
Endpoint=sb://appointmentqueue.servicebus.windows.net/;S...

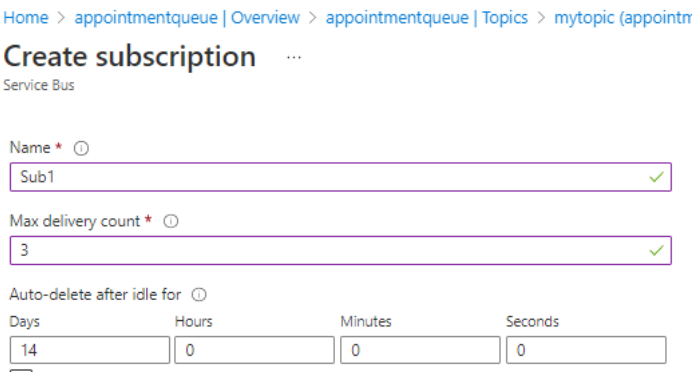

C:\Users\didou\Documents\Book Packt\AzureQueueSample\AzureQueueSample.Sender\bin\Debug\net6.0\AzureQueueSample.S...
Sending Message : cc590f61-59ed-4d29-94b2-c5a4aa0482d3
Sending Message : d3844900-1e0b-403c-94b3-15021474dcb2
Sending Message : 75532ee9-69ed-4133-9f5f-06cc5f738d55

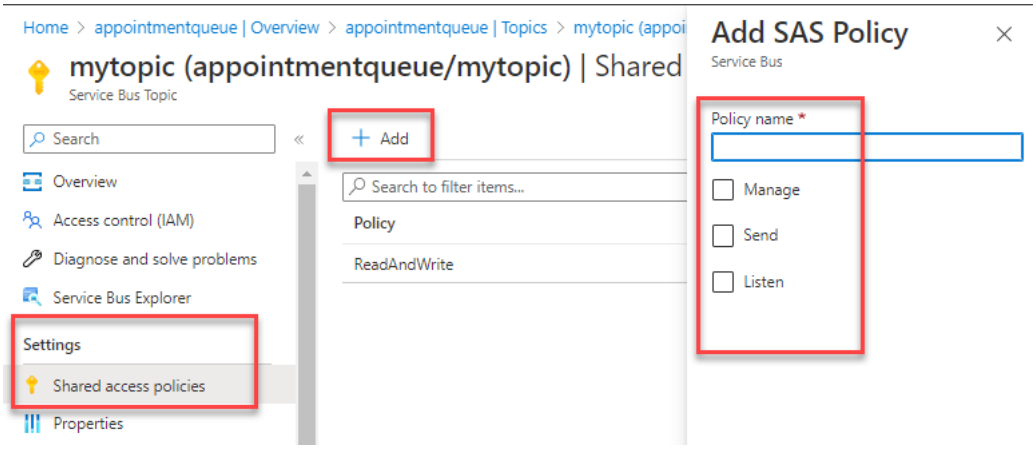
Queue
Topic
Refresh
Delete
Requests
Messages
1 PM
1:15 PM
1:30 PM
1:45 PM
UTC-05:00
Incoming Requests (Sum) appointmentqueue 13
Successful Requests ... appointmentqueue 13
Server Errors. (Sum) appointmentqueue 0
User Errors. (Sum) appointmentqueue 0
Incoming Messages (Sum) appointmentqueue 3
Outgoing Messages (Sum) appointmentqueue 1
Queues
Topics
Search to filter items...
Name
Status
Max size
Enable partitioning
myqueue
Active
1024 MB
false

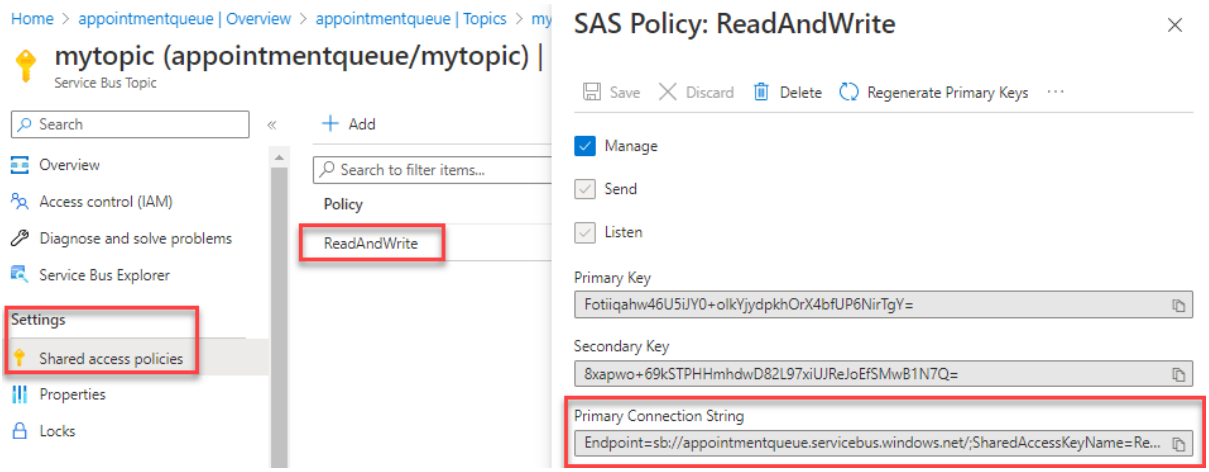
Message Counts
Active 6 MESSAGES
Scheduled 0 MESSAGES
Dead-letter 0 MESSAGES
Transfer 0 MESSAGES
Transfer dead-letter 0 MESSAGES
Metrics
Show data for the last:
1 hour
6 hours
12 hours
1 day
7 days
30 days
Requests
Messages
1 PM
1:15 PM
1:30 PM
1:45 PM
UTC-05:00
myqueue appointmentqueue 17
myqueue appointmentqueue 17
myqueue appointmentqueue 0
myqueue appointmentqueue 0
myqueue appointmentqueue 6
myqueue appointmentqueue 2

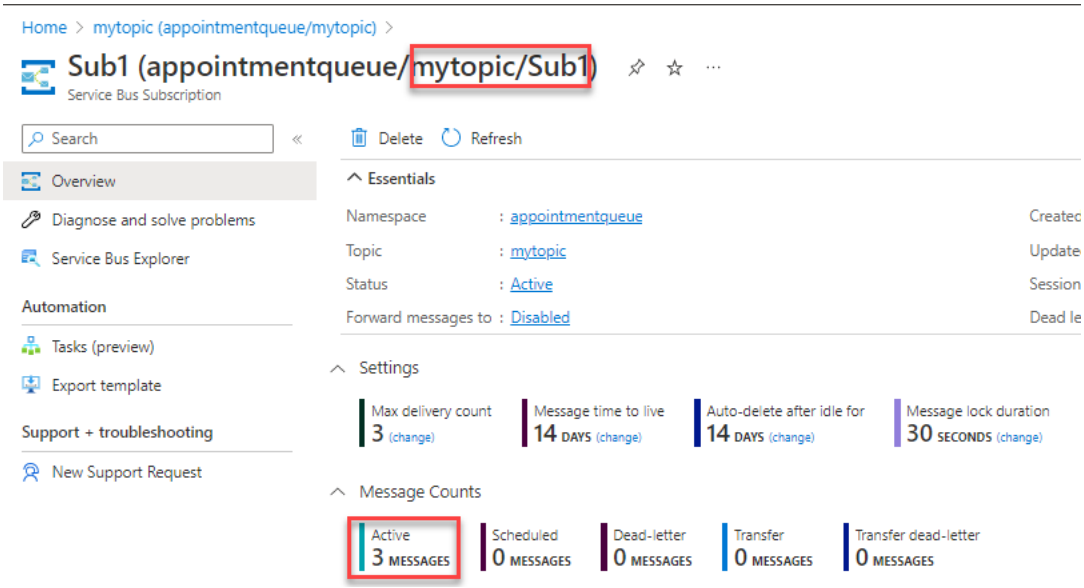

Home > appointmentqueue | Overview > appointmentqueue
appointmentqueue | Topics
Service Bus Namespace
Search
Topic
Refresh
Geo-recovery
Migrate to premium
Encryption
Configuration
Properties
Locks
Entities
Queues
Topics
Search to filter items...
Name
Status
No results.

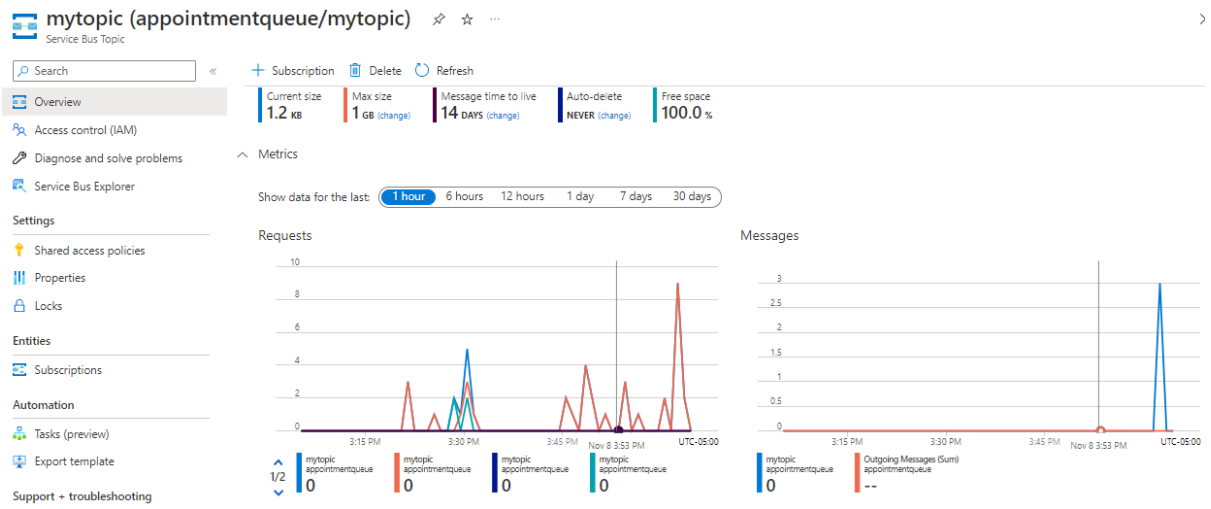

mytopic (appointmentqueue/mytopic)
Service Bus Topic
Search
Subscription
Delete
Refresh
Overview
Access control (IAM)
Diagnose and solve problems
Service Bus Explorer
Settings
Shared access policies
Properties
Locks
Entities
Subscriptions
Settings
Current size
0.0 KB
Max size
1 GB (change)
Message time to live
14 DAYS (change)
Auto-delete
NEVER (change)
Free space
100.0 %
Metrics
Show data for the last:
1 hour
6 hours
12 hours
1 day
7 days
30 days
Requests
3
2.5
2
1.5

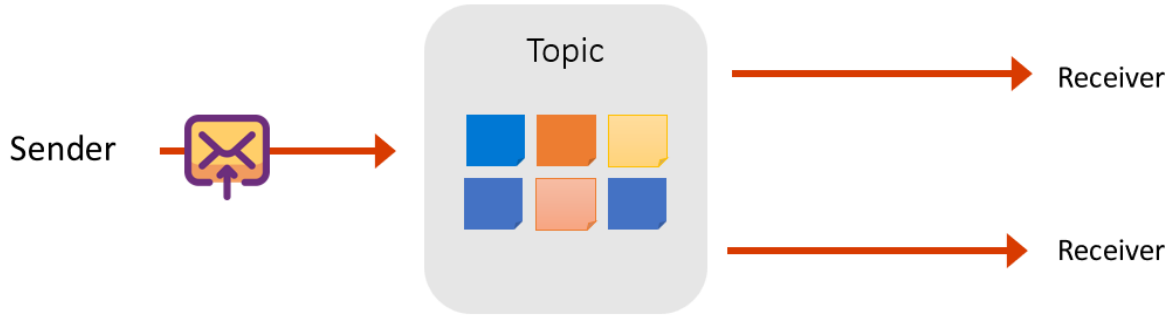

Home > appointmentqueue | Overview > appointmentqueue | Topics > mytopic (appointm
Create subscription
Service Bus
Name *
Sub1
Max delivery count *
3
Auto-delete after idle for
Days
Hours
Minutes
Seconds
14
0
0
0


Home > appointmentqueue | Overview > appointmentqueue | Topics > mytopic (appoi
mytopic (appointmentqueue/mytopic) | Shared
Service Bus Topic
Search
Add
Overview
Access control (IAM)
Diagnose and solve problems
Service Bus Explorer
Settings
Shared access policies
Properties
Search to filter items...
Policy
ReadAndWrite
Add SAS Policy
Service Bus
Policy name *
Manage
Send
Listen


Home > appointmentqueue | Overview > appointmentqueue | Topics > my
mytopic (appointmentqueue/mytopic) |
Service Bus Topic
Search
Add
Overview
Access control (IAM)
Diagnose and solve problems
Service Bus Explorer
Settings
Shared access policies
Properties
Locks
Search to filter items...
Policy
ReadAndWrite
SAS Policy: ReadAndWrite
Save
Discard
Delete
Regenerate Primary Keys
Manage
Send
Listen
Primary Key
Fotiiqahw46U5iJY0+olkYjydpkhOrX4bfUP6NirTgY=
Secondary Key
8xapwo+69kSTPHHmhdwD82L97xiUJReJoEfSMwB1N7Q=
Primary Connection String
Endpoint=sb://appointmentqueue.servicebus.windows.net/;SharedAccessKeyName=Re...

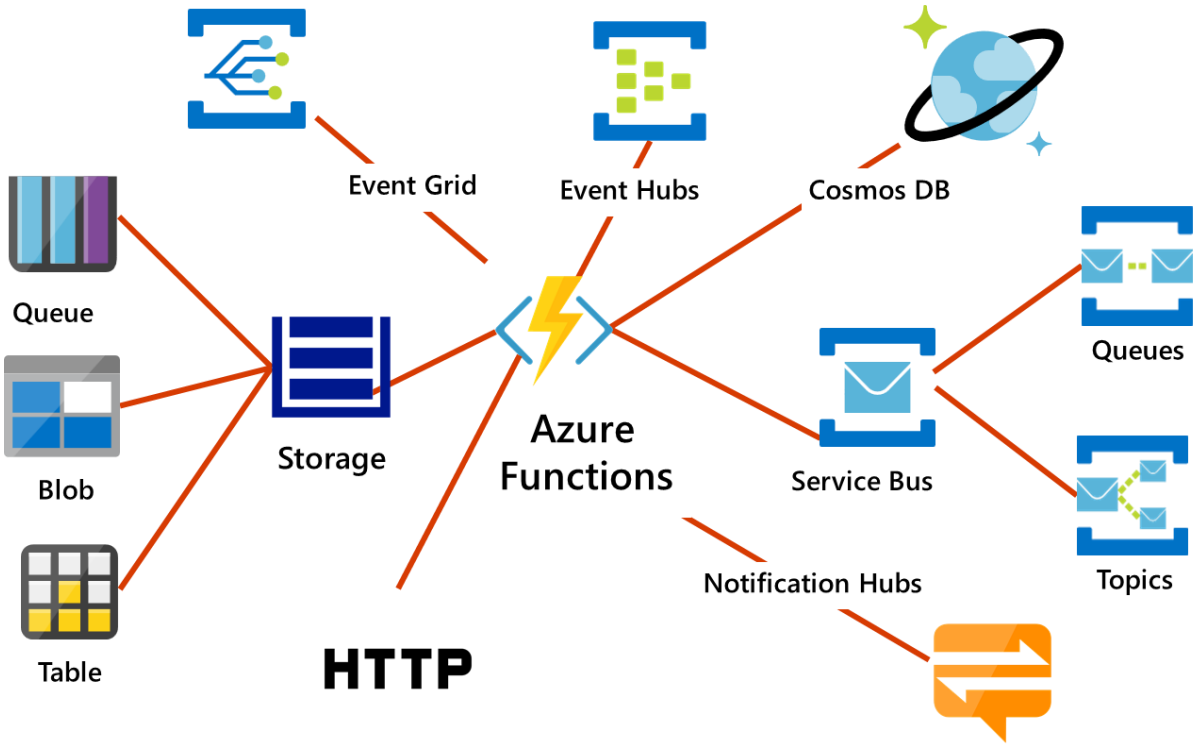

Home > mytopic (appointmentqueue/mytopic) >
Sub1 (appointmentqueue/mytopic/Sub1)
Service Bus Subscription
Search
Overview
Diagnose and solve problems
Service Bus Explorer
Automation
Tasks (preview)
Export template
Support + troubleshooting
New Support Request
Delete
Refresh
Essentials
Namespace : appointmentqueue
Topic : mytopic
Status : Active
Forward messages to : Disabled
Createc
Update
Session
Dead le
Settings
Max delivery count
3 (change)
Message time to live
14 DAYS (change)
Auto-delete after idle for
14 DAYS (change)
Message lock duration
30 SECONDS (change)
Message Counts
Active
3 MESSAGES
Scheduled
0 MESSAGES
Dead-letter
0 MESSAGES
Transfer
0 MESSAGES
Transfer dead-letter
0 MESSAGES

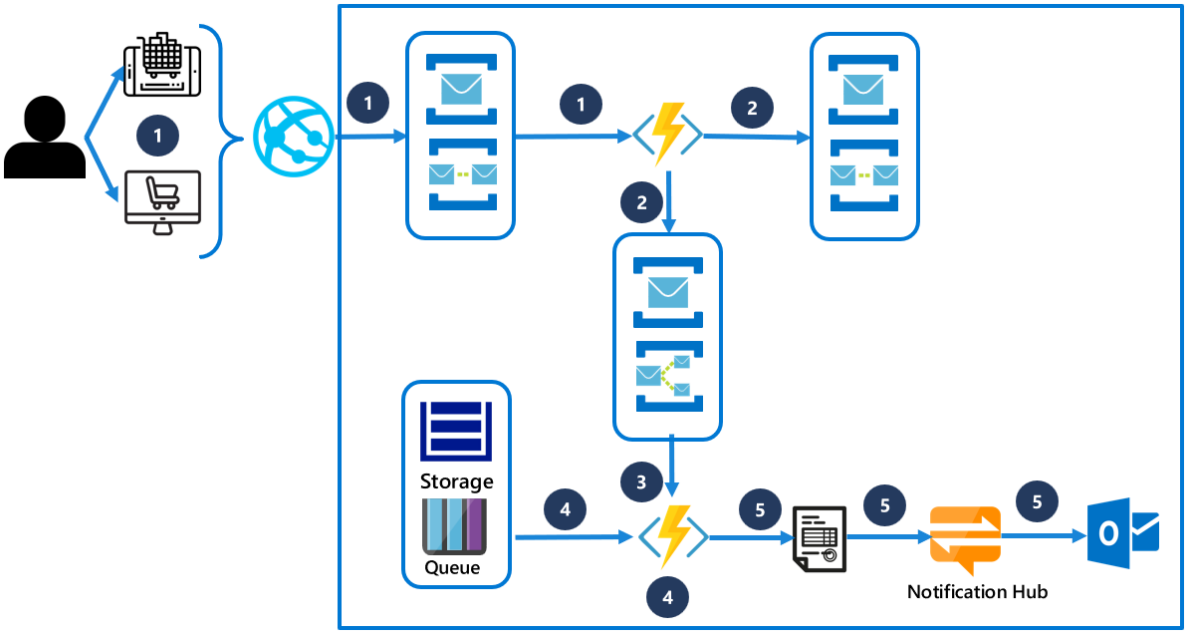


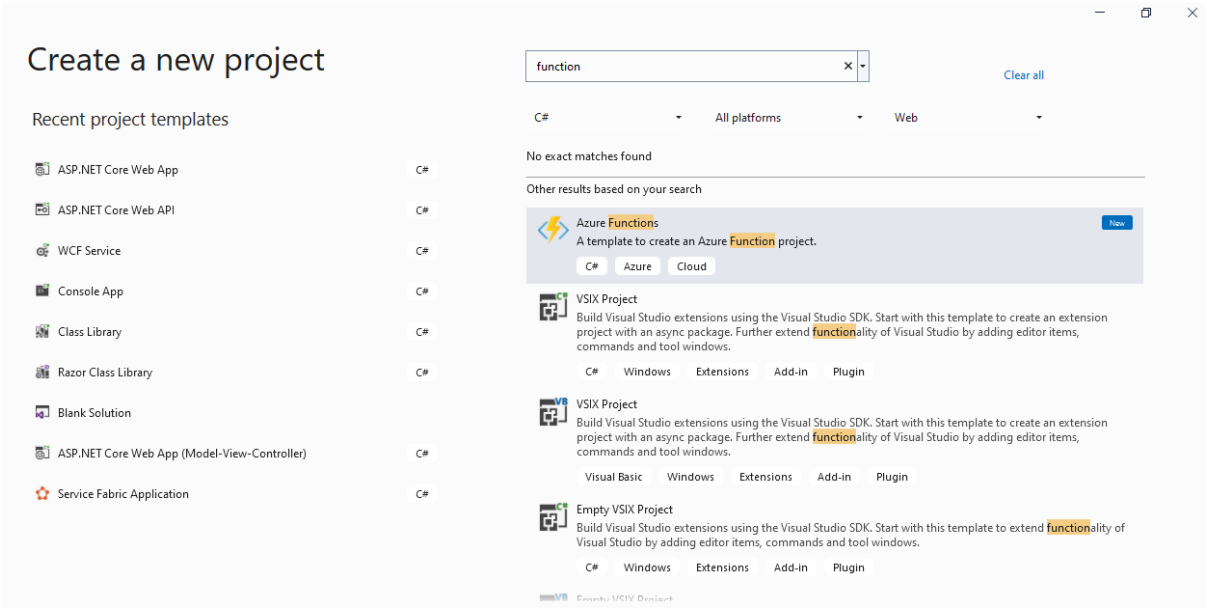


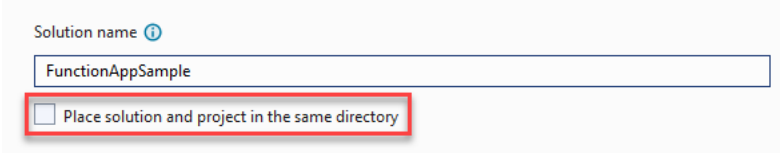
Topic with two subscriptions including messages

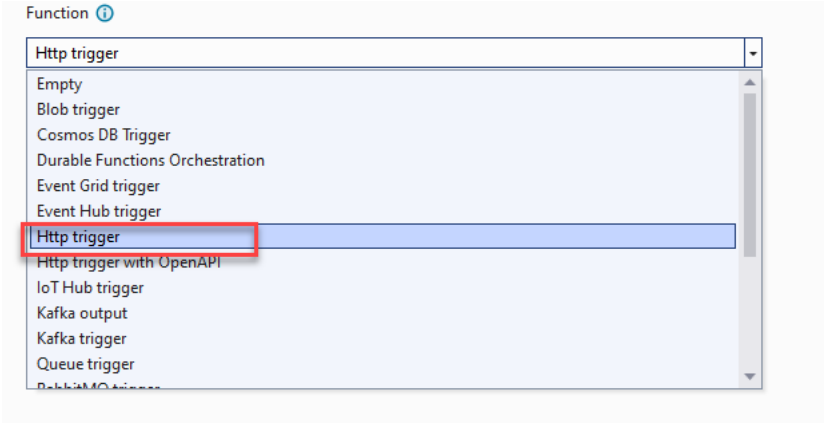
Chapter 4: Creating and Deploying a Function App in Azure

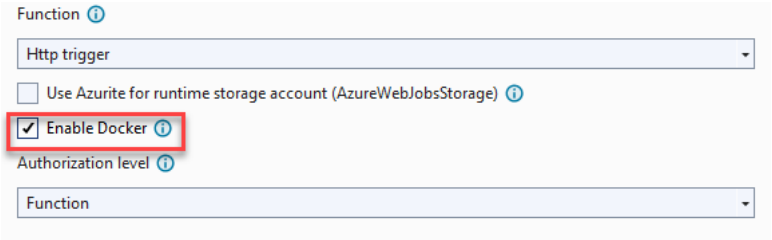





Create a new project
Recent project templates
ASP.NET Core Web App
ASP.NET Core Web API
WCF Service
Console App
Class Library
Razor Class Library
Blank Solution
ASP.NET Core Web App (Model-View-Controller)
Service Fabric Application
function
Clear all
C#
All platforms
Web
No exact matches found
Other results based on your search
Azure Functions
A template to create an Azure Function project.
New
C# Azure Cloud
VSIX Project
Build Visual Studio extensions using the Visual Studio SDK. Start with this template to create an extension project with an async package. Further extend functionality of Visual Studio by adding editor items, commands and tool windows.
C# Windows Extensions Add-in Plugin
VSIX Project
Build Visual Studio extensions using the Visual Studio SDK. Start with this template to create an extension project with an async package. Further extend functionality of Visual Studio by adding editor items, commands and tool windows.
Visual Basic Windows Extensions Add-in Plugin
Empty VSIX Project
Build Visual Studio extensions using the Visual Studio SDK. Start with this template to extend functionality of Visual Studio by adding editor items, commands and tool windows.
C# Windows Extensions Add-in Plugin


Solution name
FunctionAppSample
Place solution and project in the same directory


Function
Http trigger
Empty
Blob trigger
Cosmos DB Trigger
Durable Functions Orchestration
Event Grid trigger
Event Hub trigger
Http trigger
Http trigger with OpenAPI
IoT Hub trigger
Kafka output
Kafka trigger
Queue trigger


Function
Http trigger
Use Azurite for runtime storage account (AzureWebJobsStorage)
Enable Docker
Authorization level
Function

Additional information

Azure Functions

C# Azure Cloud

Functions worker

.NET 6

Function

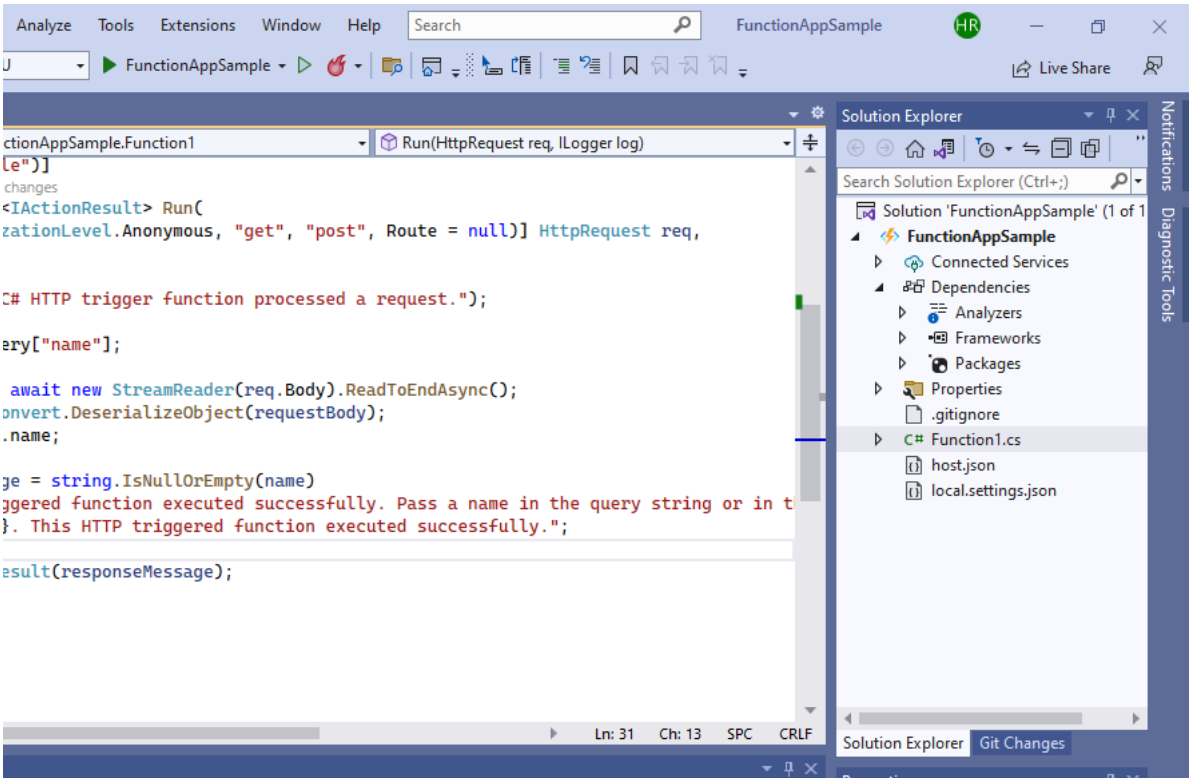
Http trigger

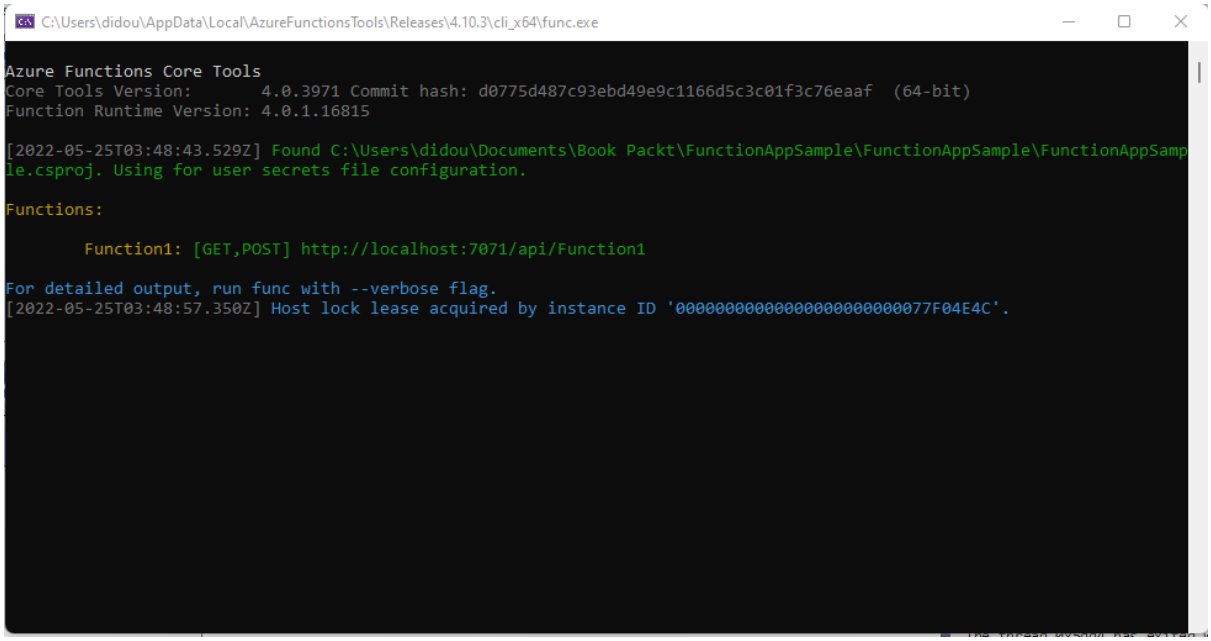
Use Azurite for runtime storage account (AzureWebJobsStorage)

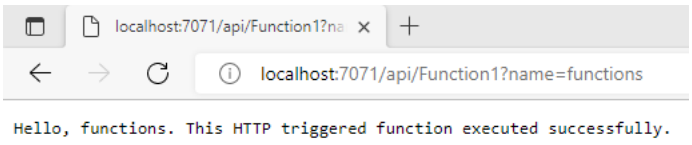
Enable Docker

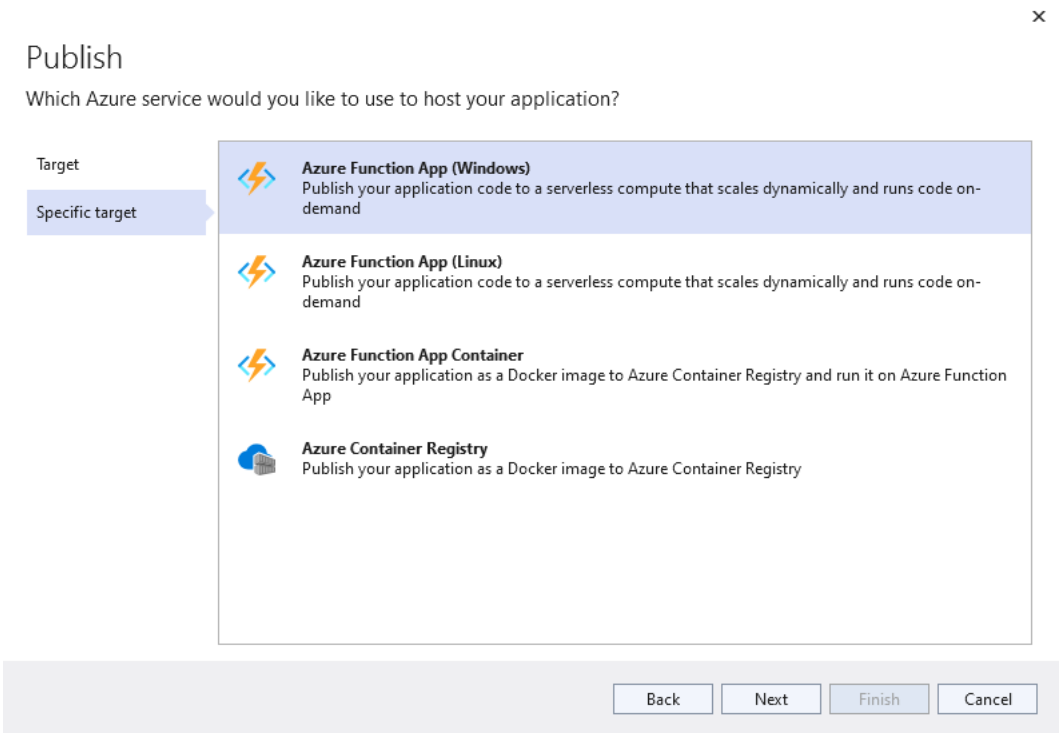
Authorization level

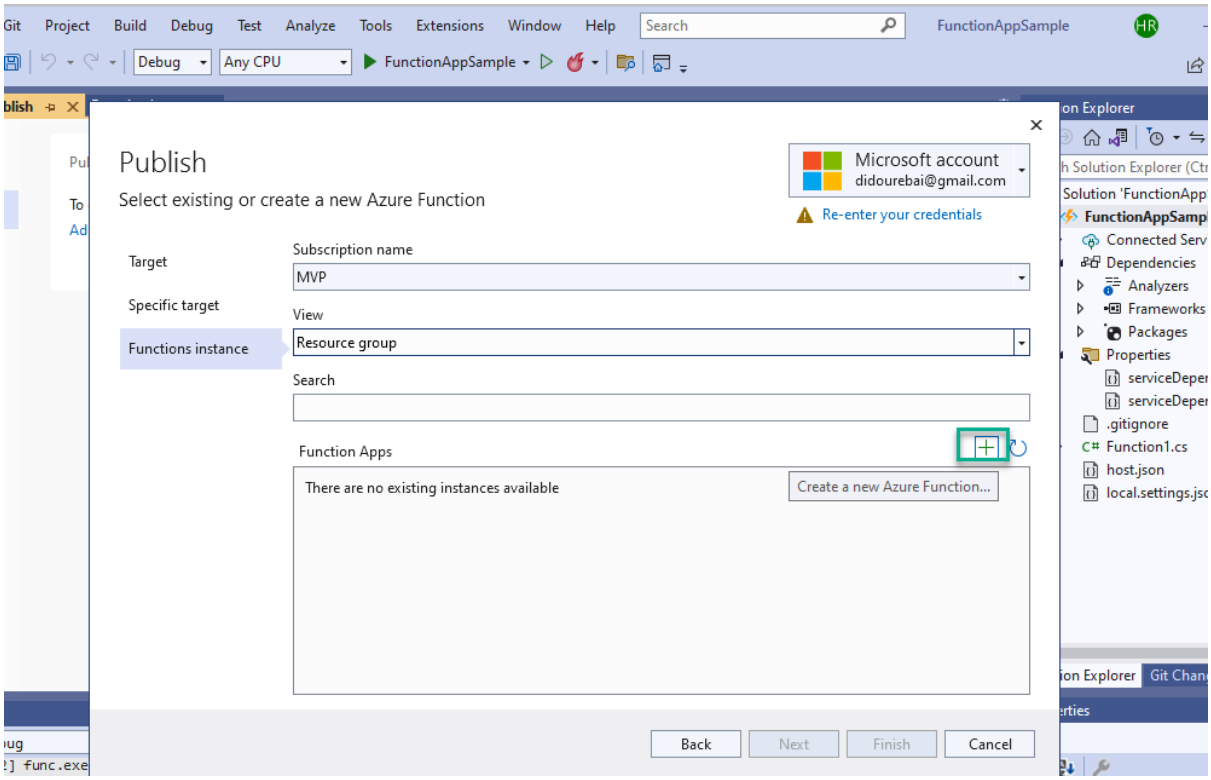
Anonymous

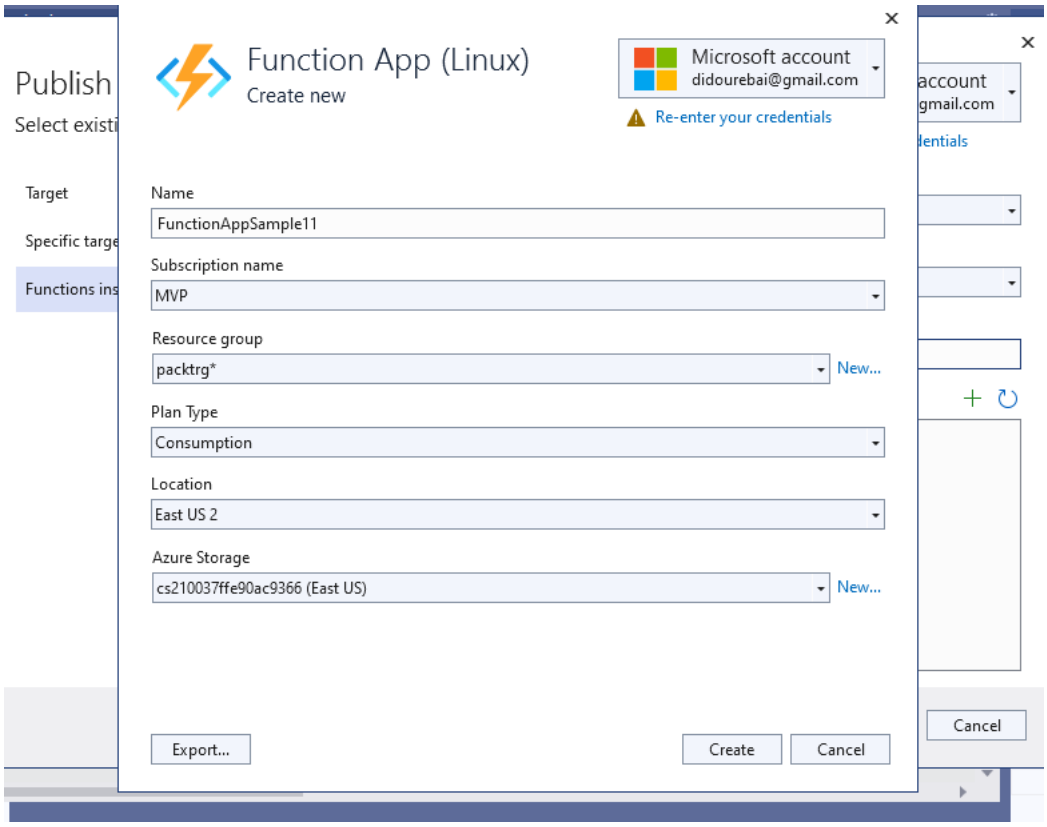


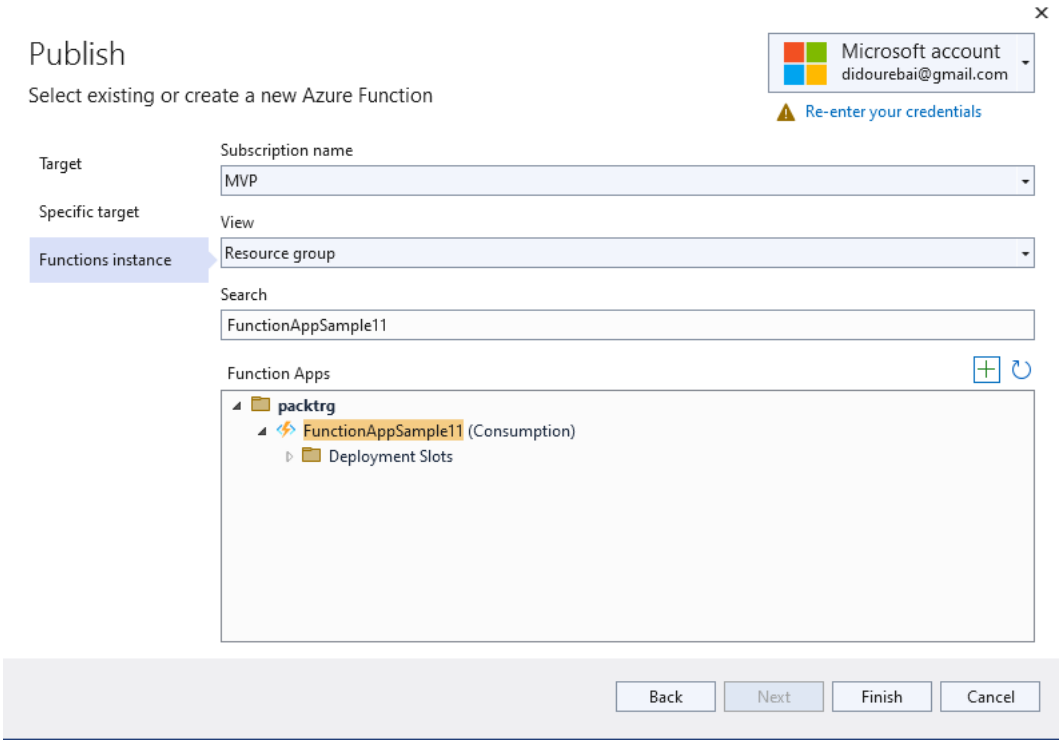

C:\Users\didou\AppData\Local\AzureFunctionsTools\Releases\4.10.3\cli_x64\func.exe
Azure Functions Core Tools
Core Tools Version: 4.0.3971 Commit hash: d0775d487c93ebd49e9c1166d5c3c01f3c76eaaf (64-bit)
Function Runtime Version: 4.0.1.16815
[2022-05-25T03:48:43.529Z] Found C:\Users\didou\Documents\Book Packt\FunctionAppSample\FunctionAppSample\FunctionAppSample.csproj. Using for user secrets file configuration.
Functions:
Function1: [GET,POST] http://localhost:7071/api/Function1
For detailed output, run func with --verbose flag.
[2022-05-25T03:48:57.350Z] Host lock lease acquired by instance ID '00000000000000000000000077F04E4C'.

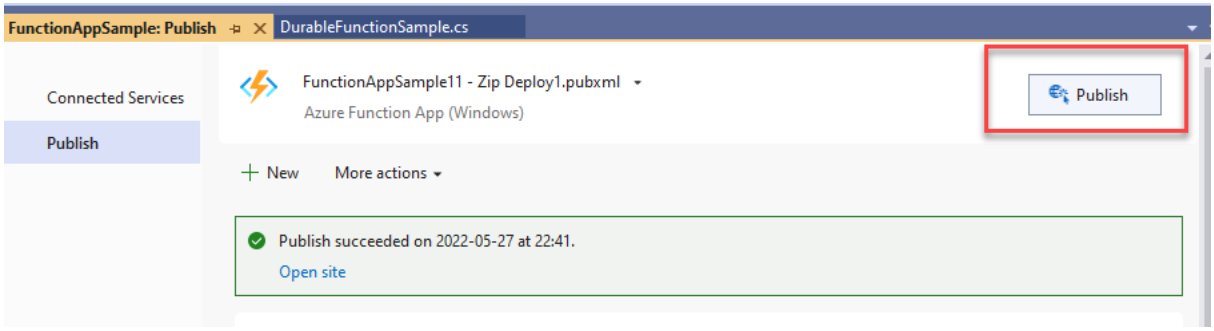

localhost:7071/api/Function1?na
localhost:7071/api/Function1?name=functions
Hello, functions. This HTTP triggered function executed successfully.

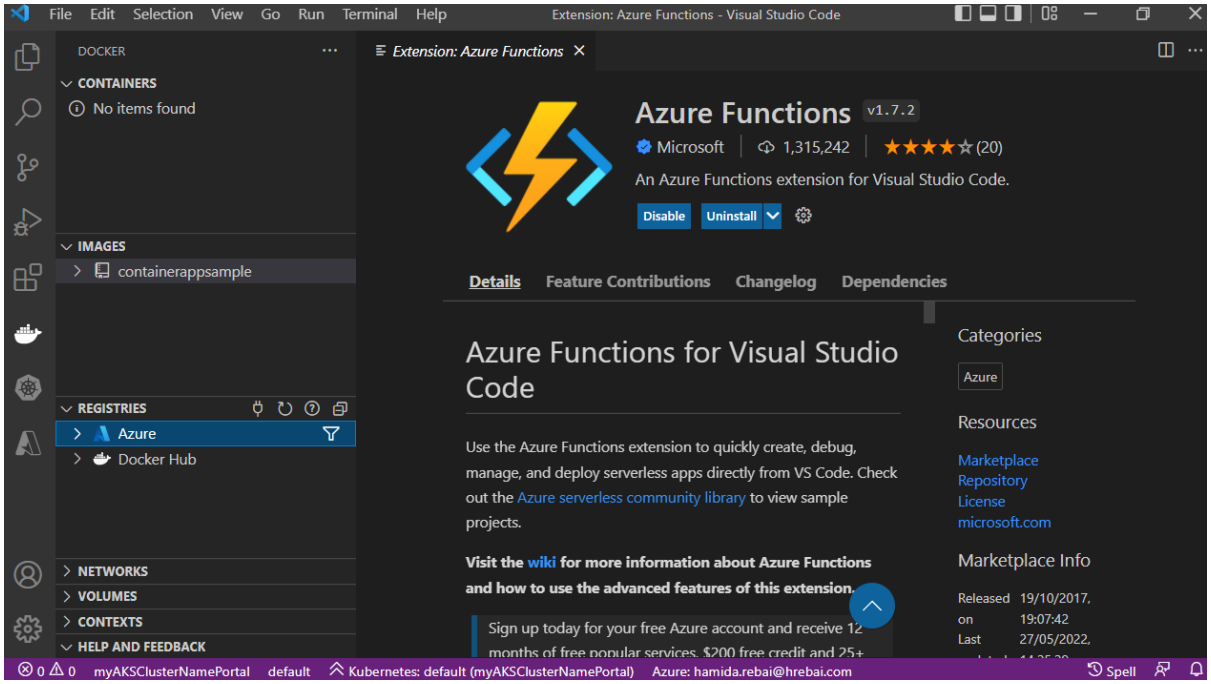

Publish
Which Azure service would you like to use to host your application?
Target
Specific target
Azure Function App (Windows)
Publish your application code to a serverless compute that scales dynamically and runs code on-demand
Azure Function App (Linux)
Publish your application code to a serverless compute that scales dynamically and runs code on-demand
Azure Function App Container
Publish your application as a Docker image to Azure Container Registry and run it on Azure Function App
Azure Container Registry
Publish your application as a Docker image to Azure Container Registry
Back
Next
Finish
Cancel

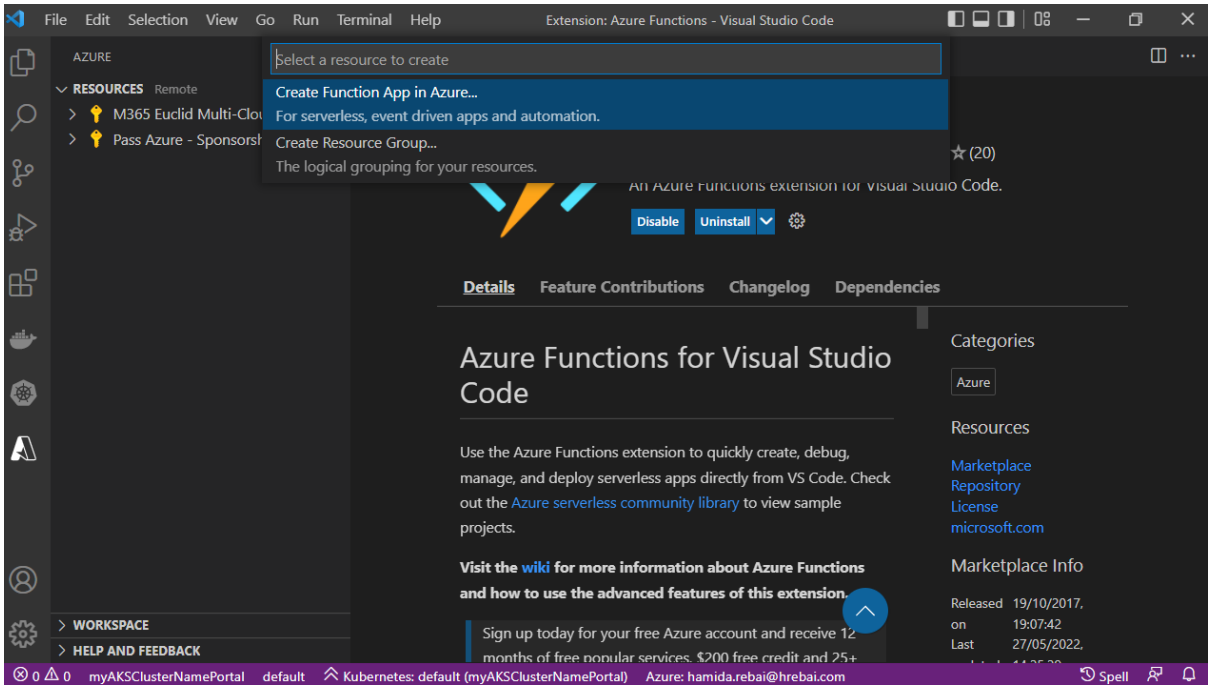

Git Project Build Debug Test Analyze Tools Extensions Window Help
Search
FunctionAppSample
Debug
Any CPU
FunctionAppSample
Publish
Select existing or create a new Azure Function
Microsoft account
didourebai@gmail.com
Re-enter your credentials
Target
Specific target
Functions instance
Subscription name
MVP
View
Resource group
Search
Function Apps
There are no existing instances available
Create a new Azure Function...
Back
Next
Finish
Cancel
Solution Explorer
Connected Serv
Dependencies
Analyzers
Frameworks
Packages
Properties
.gitignore
Function1.cs
host.json
local.settings.jsc

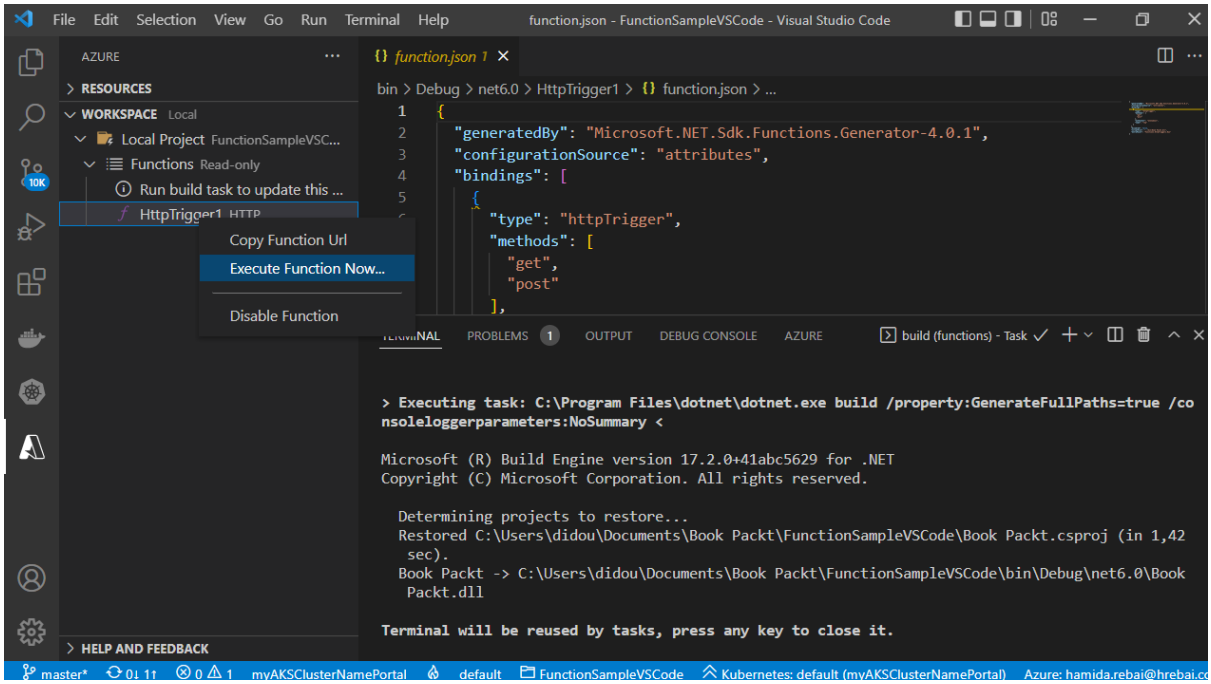

Publish
Function App (Linux)
Create new
Microsoft account
didourebai@gmail.com
Re-enter your credentials
Target
Specific targe
Functions ins
Name
FunctionAppSample11
Subscription name
MVP
Resource group
packtrg*
New...
Plan Type
Consumption
Location
East US 2
Azure Storage
cs210037ffe90ac9366 (East US)
New...
Export...
Create
Cancel
Cancel

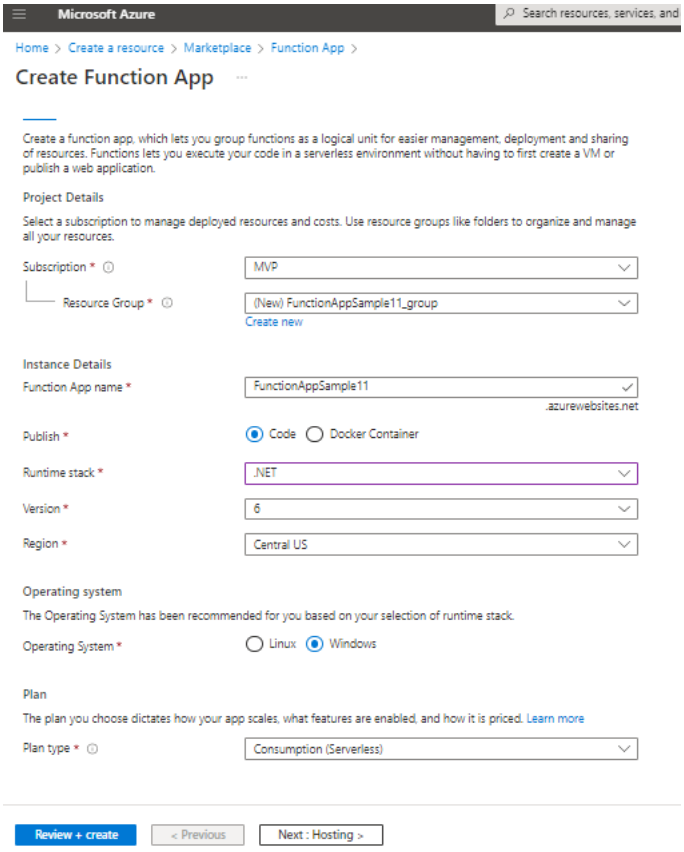

Publish
Select existing or create a new Azure Function
Microsoft account
didourebai@gmail.com
Re-enter your credentials
Target
Specific target
Functions instance
Subscription name
MVP
View
Resource group
Search
FunctionAppSample11
Function Apps
packtrg
FunctionAppSample11 (Consumption)
Deployment Slots
Back
Next
Finish
Cancel

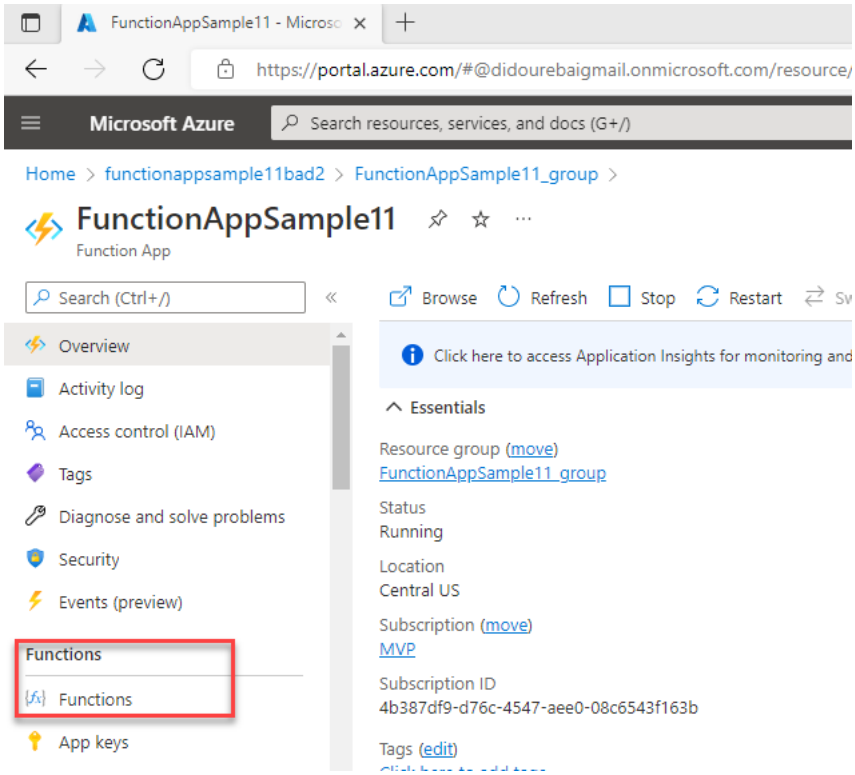

FunctionAppSample: Publish
DurableFunctionSample.cs
Connected Services
Publish
FunctionAppSample11 - Zip Deploy1.pubxml
Azure Function App (Windows)
Publish
New
More actions
Publish succeeded on 2022-05-27 at 22:41.
Open site

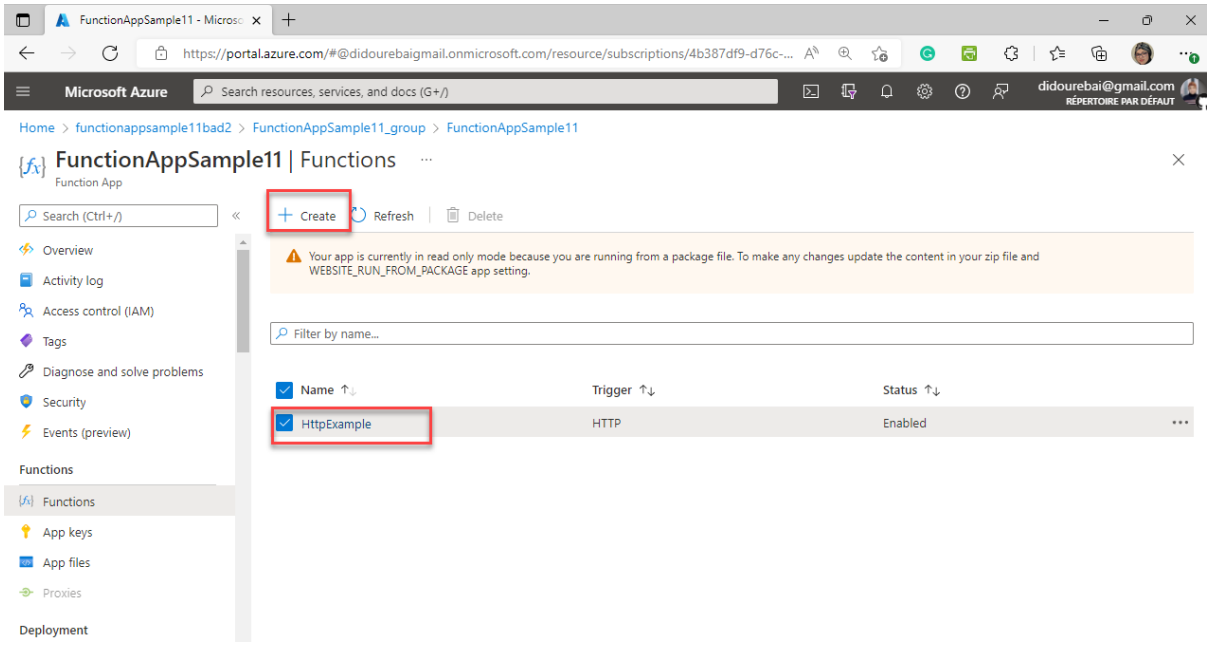

File Edit Selection View Go Run Terminal Help
Extension: Azure Functions - Visual Studio Code
DOCKER
CONTAINERS
No items found
IMAGES
containerappsample
REGISTRIES
Azure
Docker Hub
NETWORKS
VOLUMES
CONTEXTS
HELP AND FEEDBACK
Extension: Azure Functions
Azure Functions v1.7.2
Microsoft 1,315,242 ★★★★☆(20)
An Azure Functions extension for Visual Studio Code.
Disable Uninstall
Details Feature Contributions Changelog Dependencies
Azure Functions for Visual Studio Code
Use the Azure Functions extension to quickly create, debug, manage, and deploy serverless apps directly from VS Code. Check out the Azure serverless community library to view sample projects.
Visit the wiki for more information about Azure Functions and how to use the advanced features of this extension.
Sign up today for your free Azure account and receive 12
Categories
Azure
Resources
Marketplace
Repository
License
microsoft.com
Marketplace Info
Released 19/10/2017, 19:07:42
Last 27/05/2022,
myAKSClusterNamePortal default Kubernetes: default (myAKSClusterNamePortal) Azure: hamida.rebai@hrebai.com
Spell

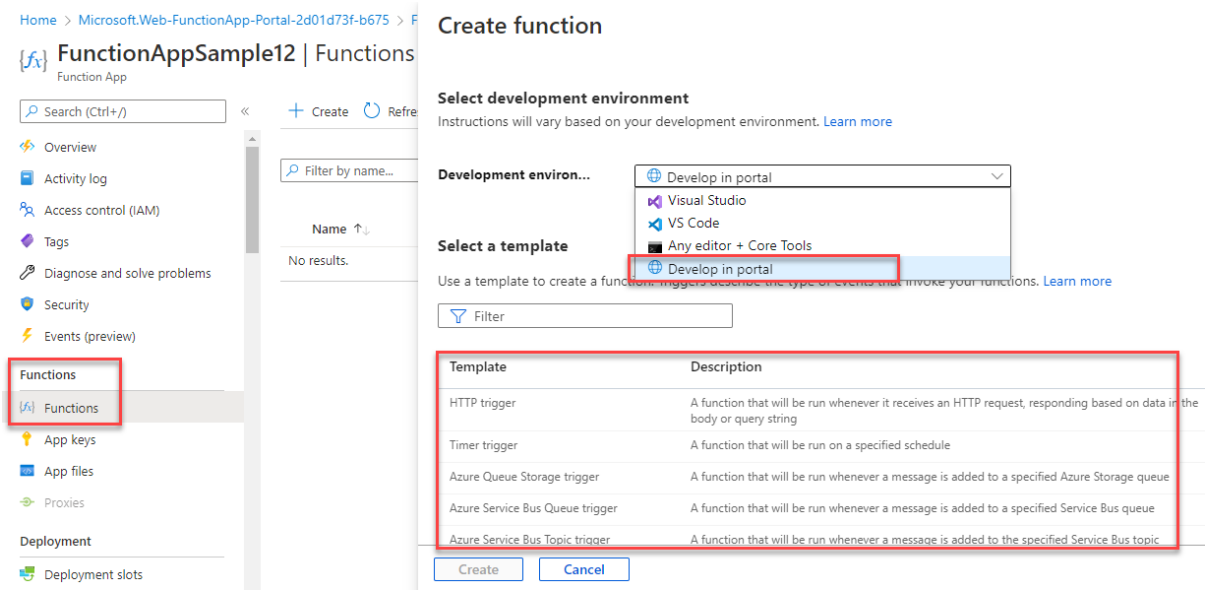

File Edit Selection View Go Run Terminal Help
Extension: Azure Functions - Visual Studio Code
AZURE
RESOURCES Remote
M365 Euclid Multi-Clou
Pass Azure - Sponsorsh
Select a resource to create
Create Function App in Azure...
For serverless, event driven apps and automation.
Create Resource Group...
The logical grouping for your resources.
WORKSPACE
HELP AND FEEDBACK
☆(20)
An Azure Functions extension for Visual Studio Code.
Disable Uninstall
Details Feature Contributions Changelog Dependencies
Azure Functions for Visual Studio Code
Use the Azure Functions extension to quickly create, debug, manage, and deploy serverless apps directly from VS Code. Check out the Azure serverless community library to view sample projects.
Visit the wiki for more information about Azure Functions and how to use the advanced features of this extension.
Sign up today for your free Azure account and receive 12
Categories
Azure
Resources
Marketplace
Repository
License
microsoft.com
Marketplace Info
Released 19/10/2017, 19:07:42
Last 27/05/2022,
myAKSClusterNamePortal default Kubernetes: default (myAKSClusterNamePortal) Azure: hamida.rebai@hrebai.com
Spell

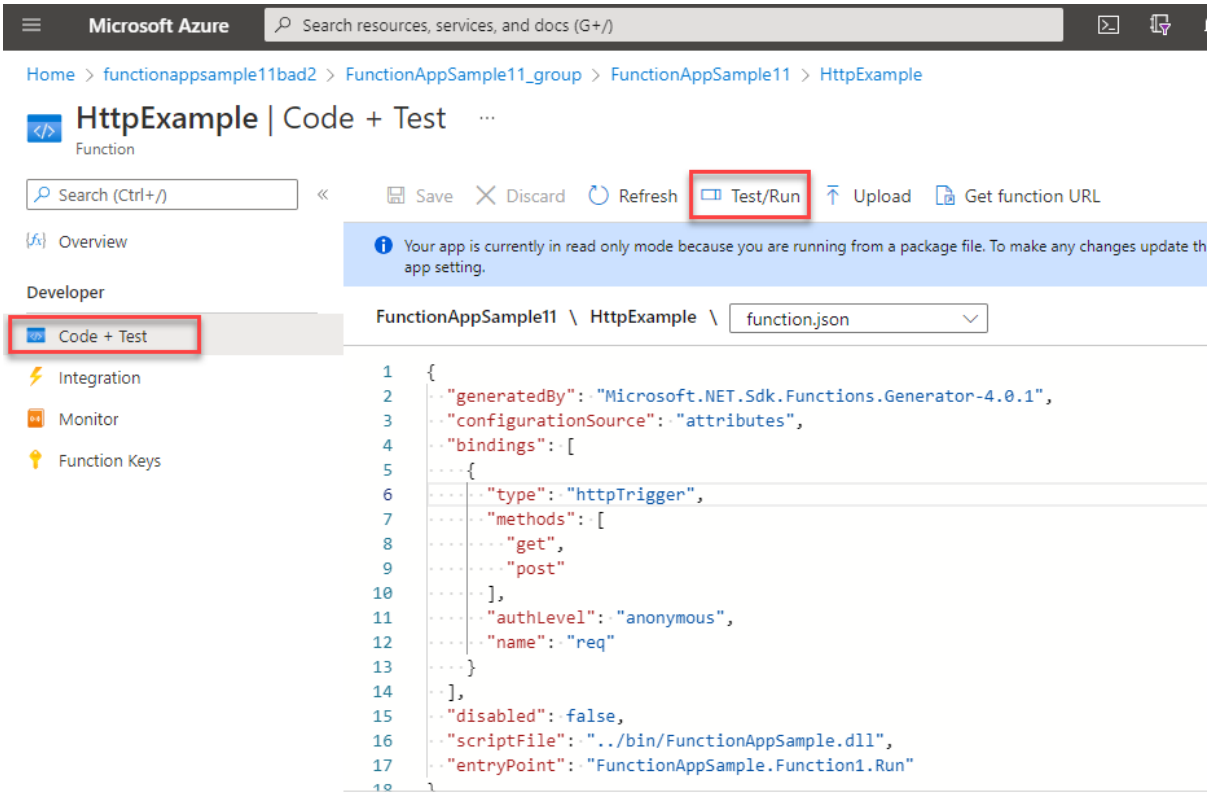

File Edit Selection View Go Run Terminal Help
function.json - FunctionSampleVSCode - Visual Studio Code
AZURE
RESOURCES
WORKSPACE Local
Local Project FunctionSampleVSC...
Functions Read-only
Run build task to update this ...
HttpTrigger1 HTTP
Copy Function Url
Execute Function Now...
Disable Function
HELP AND FEEDBACK
function.json 1
bin > Debug > net6.0 > HttpTrigger1 > function.json > ...
{
"generatedBy": "Microsoft.NET.Sdk.Functions.Generator-4.0.1",
"configurationSource": "attributes",
"bindings": [
{
"type": "httpTrigger",
"methods": [
"get",
"post"
],
PROBLEMS 1
OUTPUT
DEBUG CONSOLE
AZURE
build (functions) - Task
> Executing task: C:\Program Files\dotnet\dotnet.exe build /property:GenerateFullPaths=true /consoleloggerparameters:NoSummary <
Microsoft (R) Build Engine version 17.2.0+41abc5629 for .NET
Copyright (C) Microsoft Corporation. All rights reserved.
Determining projects to restore...
Restored C:\Users\didou\Documents\Book Packt\FunctionSampleVSCode\Book Packt.csproj (in 1,42 sec).
Book Packt -> C:\Users\didou\Documents\Book Packt\FunctionSampleVSCode\bin\Debug\net6.0\Book Packt.dll
Terminal will be reused by tasks, press any key to close it.
master*
myAKSClusterNamePortal
default
FunctionSampleVSCode
Kubernetes: default (myAKSClusterNamePortal)

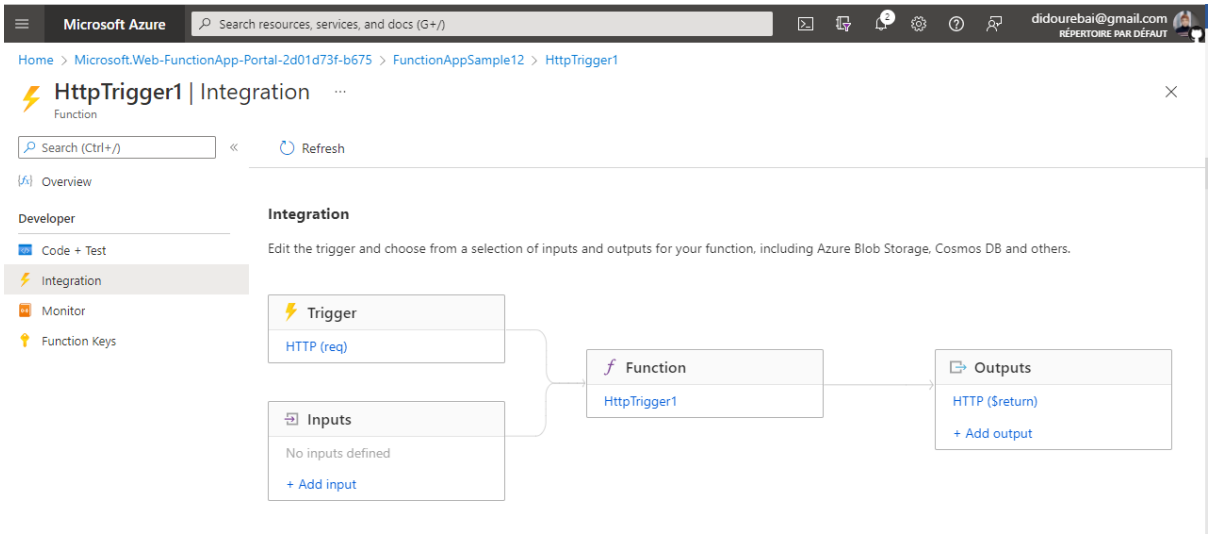

Microsoft Azure
Search resources, services, and
Home > Create a resource > Marketplace > Function App >
Create Function App
Create a function app, which lets you group functions as a logical unit for easier management, deployment and sharing of resources. Functions lets you execute your code in a serverless environment without having to first create a VM or publish a web application.
Project Details
Select a subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.
Subscription *
MVP
Resource Group *
(New) FunctionAppSample11_group
Create new
Instance Details
Function App name *
FunctionAppSample11
.azurewebsites.net
Publish *
Code
Docker Container
Runtime stack *
.NET
Version *
6
Region *
Central US
Operating system
The Operating System has been recommended for you based on your selection of runtime stack.
Operating System *
Linux
Windows
Plan
The plan you choose dictates how your app scales, what features are enabled, and how it is priced. Learn more
Plan type *
Consumption (Serverless)
Review + create
< Previous
Next : Hosting >

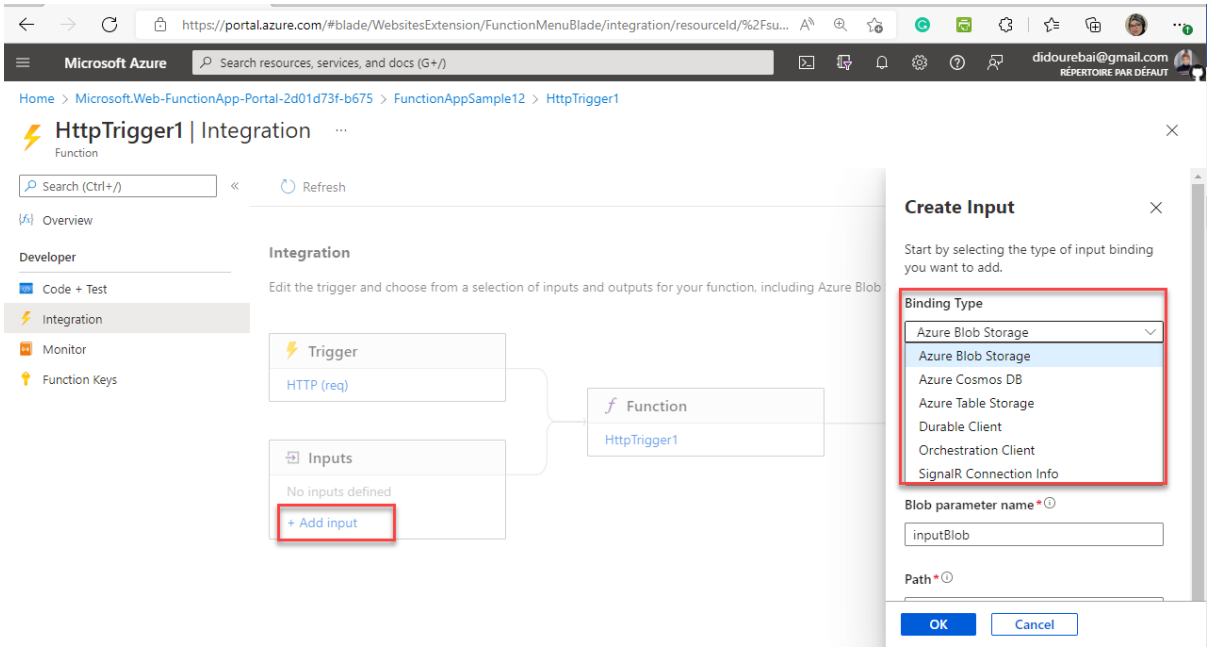

FunctionAppSample11 - Microso
https://portal.azure.com/#@didourebaigmail.onmicrosoft.com/resource/
Microsoft Azure
Search resources, services, and docs (G+/)
Home > functionappsample11bad2 > FunctionAppSample11_group >
FunctionAppSample11
Function App
Search (Ctrl+/)
Browse
Refresh
Stop
Restart
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Security
Events (preview)
Functions
Functions
App keys
Click here to access Application Insights for monitoring and
Essentials
Resource group (move)
FunctionAppSample11_group
Status
Running
Location
Central US
Subscription (move)
MVP
Subscription ID
4b387df9-d76c-4547-aee0-08c6543f163b
Tags (edit)

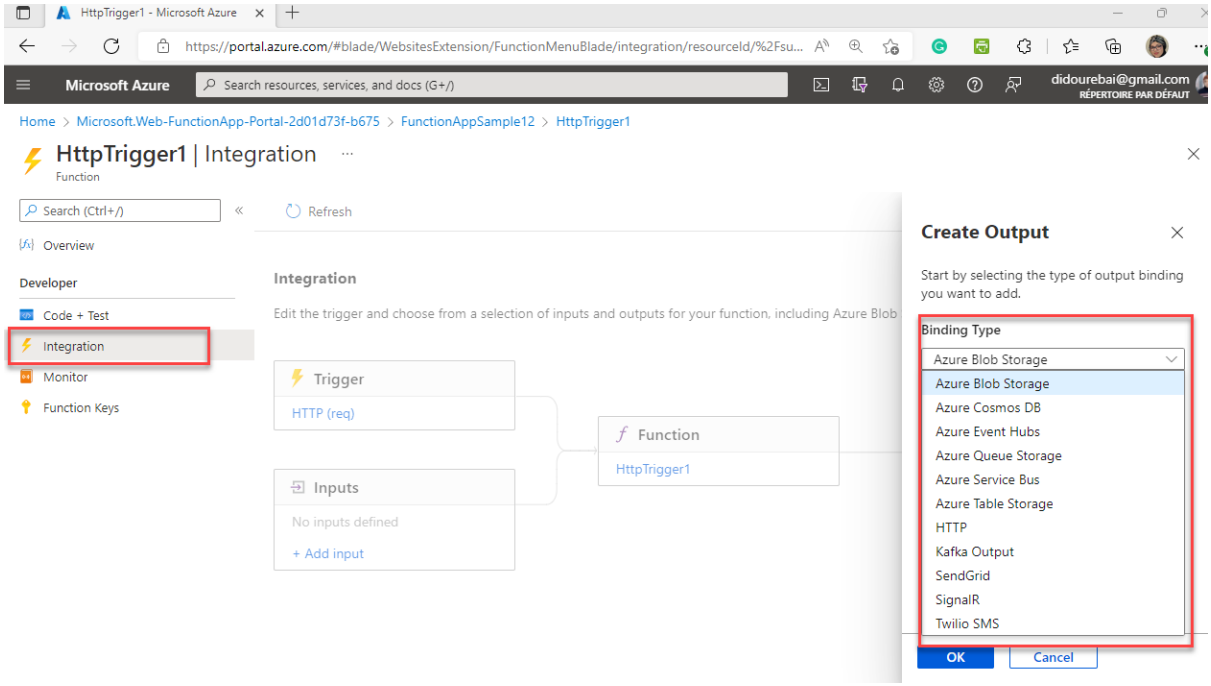

FunctionAppSample11 - Microso
https://portal.azure.com/#@didourebaigmail.onmicrosoft.com/resource/subscriptions/4b387df9-d76c-...
Microsoft Azure
Search resources, services, and docs (G+/)
didourebai@gmail.com
RÉPERTOIRE PAR DÉFAUT
Home > functionappsample11bad2 > FunctionAppSample11_group > FunctionAppSample11
FunctionAppSample11 | Functions
Function App
Search (Ctrl+/)
Create
Refresh
Delete
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Security
Events (preview)
Functions
Functions
App keys
App files
Proxies
Deployment
Your app is currently in read only mode because you are running from a package file. To make any changes update the content in your zip file and WEBSITE_RUN_FROM_PACKAGE app setting.
Filter by name...
Name
Trigger
Status
HttpExample
HTTP
Enabled


Home > Microsoft.Web-FunctionApp-Portal-2d01d73f-b675 >
FunctionAppSample12 | Functions
Function App
Search (Ctrl+/)
Create
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Security
Events (preview)
Functions
Functions
App keys
App files
Proxies
Deployment
Deployment slots
Filter by name...
Name
No results.
Create function
Select development environment
Instructions will vary based on your development environment. Learn more
Development environ...
Develop in portal
Visual Studio
VS Code
Any editor + Core Tools
Develop in portal
Select a template
Use a template to create a function. Learn more
Filter
Template
Description
HTTP trigger
A function that will be run whenever it receives an HTTP request, responding based on data in the body or query string
Timer trigger
A function that will be run on a specified schedule
Azure Queue Storage trigger
A function that will be run whenever a message is added to a specified Azure Storage queue
Azure Service Bus Queue trigger
A function that will be run whenever a message is added to a specified Service Bus queue
Azure Service Bus Topic trigger
A function that will be run whenever a message is added to the specified Service Bus topic
Create
Cancel


Microsoft Azure
Search resources, services, and docs (G+/)
Home > functionappsample11bad2 > FunctionAppSample11_group > FunctionAppSample11 > HttpExample
HttpExample | Code + Test
Function
Search (Ctrl+/)
Overview
Developer
Code + Test
Integration
Monitor
Function Keys
Save
Discard
Refresh
Test/Run
Upload
Get function URL
Your app is currently in read only mode because you are running from a package file. To make any changes update th
app setting.
FunctionAppSample11 \ HttpExample \ function.json
{
"generatedBy": "Microsoft.NET.Sdk.Functions.Generator-4.0.1",
"configurationSource": "attributes",
"bindings": [
{
"type": "httpTrigger",
"methods": [
"get",
"post"
],
"authLevel": "anonymous",
"name": "req"
}
],
"disabled": false,
"scriptFile": "../bin/FunctionAppSample.dll",
"entryPoint": "FunctionAppSample.Function1.Run"
}


Microsoft Azure
Search resources, services, and docs (G+/)
didourebai@gmail.com
RÉPERTOIRE PAR DÉFAUT
Home > Microsoft.Web-FunctionApp-Portal-2d01d73f-b675 > FunctionAppSample12 > HttpTrigger1
HttpTrigger1 | Integration
Function
Search (Ctrl+/)
Refresh
Overview
Developer
Code + Test
Integration
Monitor
Function Keys
Integration
Edit the trigger and choose from a selection of inputs and outputs for your function, including Azure Blob Storage, Cosmos DB and others.
Trigger
HTTP (req)
Inputs
No inputs defined
+ Add input
Function
HttpTrigger1
Outputs
HTTP ($return)
+ Add output


https://portal.azure.com/#blade/WebsitesExtension/FunctionMenuBlade/integration/resourceId/%2Fsu...
Microsoft Azure
Search resources, services, and docs (G+/)
didourebai@gmail.com
RÉPERTOIRE PAR DÉFAUT
Home > Microsoft.Web-FunctionApp-Portal-2d01d73f-b675 > FunctionAppSample12 > HttpTrigger1
HttpTrigger1 | Integration
Function
Search (Ctrl+/)
Refresh
Overview
Developer
Code + Test
Integration
Monitor
Function Keys
Integration
Edit the trigger and choose from a selection of inputs and outputs for your function, including Azure Blob
Trigger
HTTP (req)
Inputs
No inputs defined
+ Add input
Function
HttpTrigger1
Create Input
Start by selecting the type of input binding you want to add.
Binding Type
Azure Blob Storage
Azure Blob Storage
Azure Cosmos DB
Azure Table Storage
Durable Client
Orchestration Client
SignalR Connection Info
Blob parameter name *
inputBlob
Path *
OK
Cancel


HttpTrigger1 - Microsoft Azure
https://portal.azure.com/#blade/WebsitesExtension/FunctionMenuBlade/integration/resourceId/%2Fsu...
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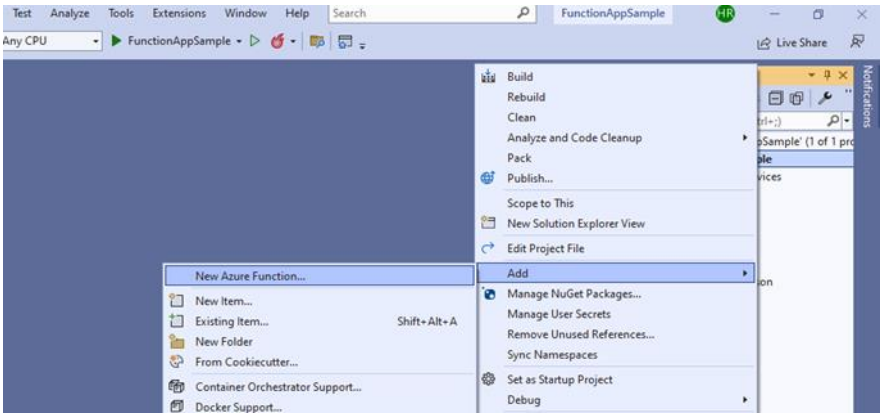
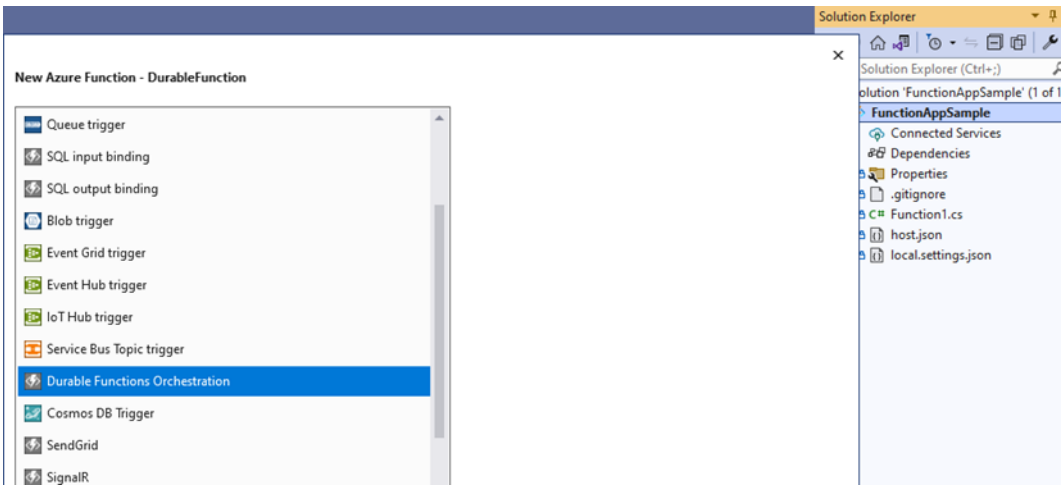
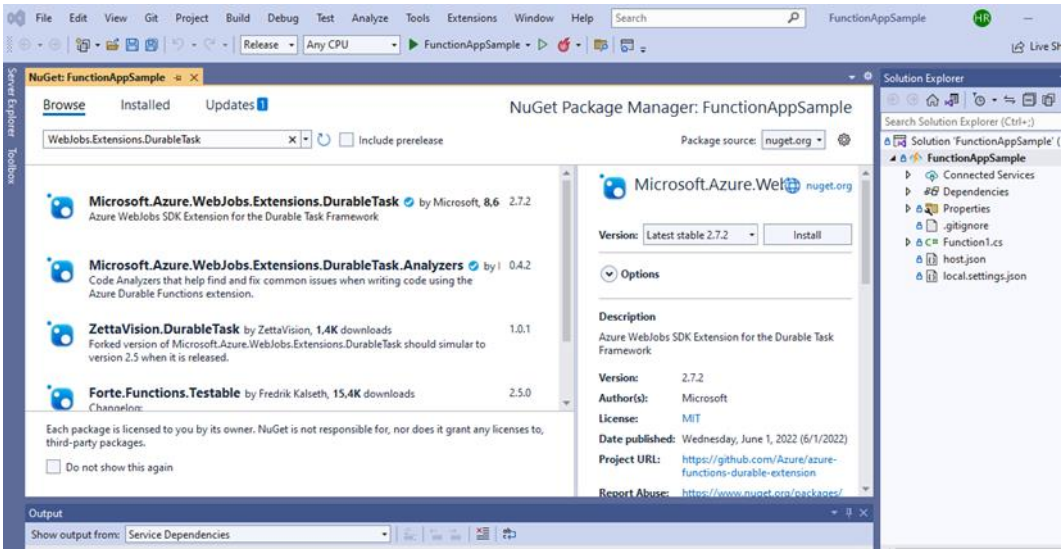
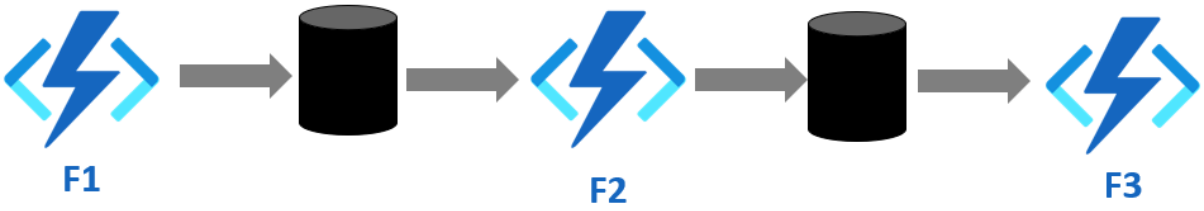
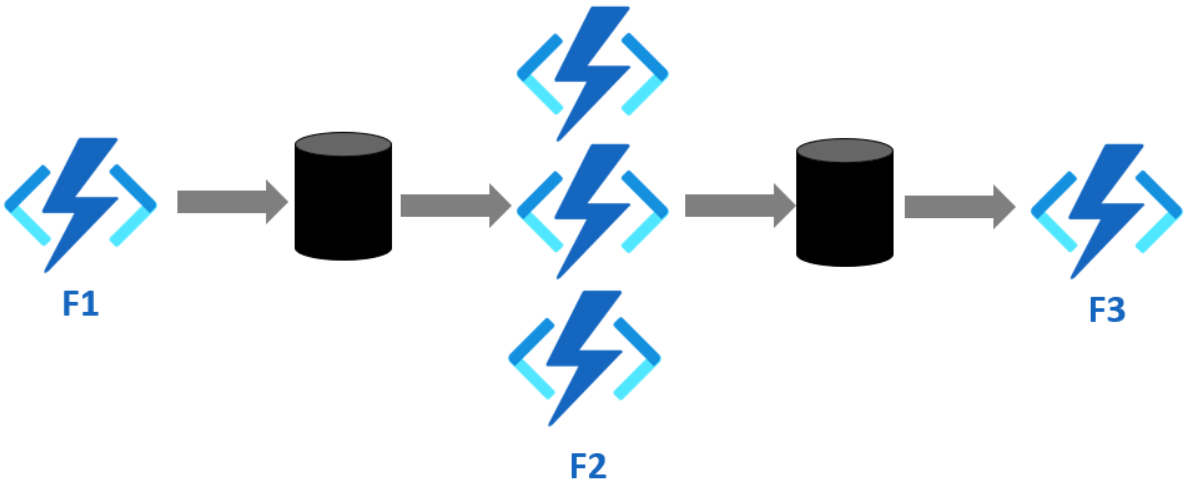
RÉPERTOIRE PAR DÉFAUT
Home > Microsoft.Web-FunctionApp-Portal-2d01d73f-b675 > FunctionAppSample12 > HttpTrigger1
HttpTrigger1 | Integration
Function
Search (Ctrl+/)
Refresh
Overview
Developer
Code + Test
Integration
Monitor
Function Keys
Integration
Edit the trigger and choose from a selection of inputs and outputs for your function, including Azure Blob
Trigger
HTTP (req)
Inputs
No inputs defined
+ Add input
Function
HttpTrigger1
Create Output
Start by selecting the type of output binding you want to add.
Binding Type
Azure Blob Storage
Azure Blob Storage
Azure Cosmos DB
Azure Event Hubs
Azure Queue Storage
Azure Service Bus
Azure Table Storage
HTTP
Kafka Output
SendGrid
SignalR
Twilio SMS
OK
Cancel

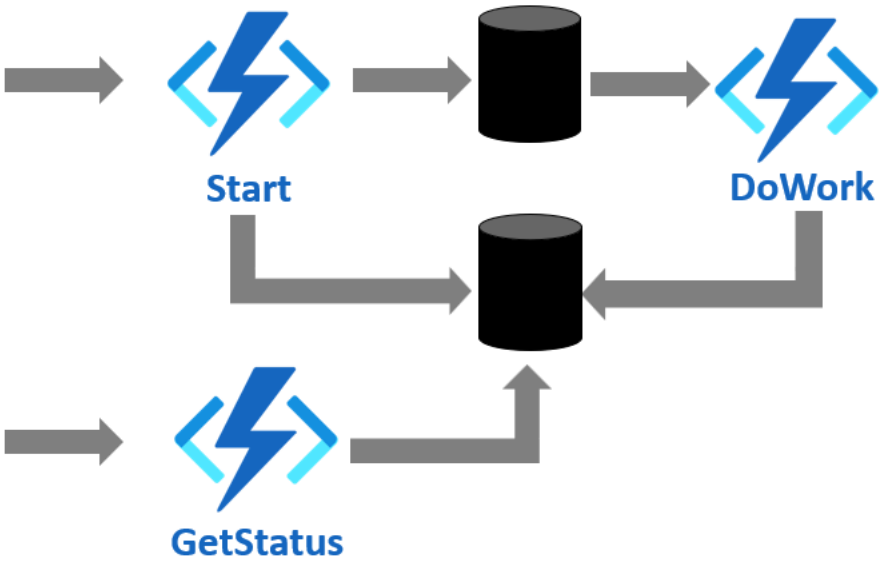

Test
Analyze
Tools
Extensions
Window
Help
Search
FunctionAppSample
Any CPU
FunctionAppSample
Live Share
Build
Rebuild
Clean
Analyze and Code Cleanup
Pack
Publish...
Scope to This
New Solution Explorer View
Edit Project File
Add
Manage NuGet Packages...
Manage User Secrets
Remove Unused References...
Sync Namespaces
Set as Startup Project
Debug
New Azure Function...
New Item...
Existing Item...
Shift+Alt+A
New Folder
From Cookiecutter...
Container Orchestrator Support...
Docker Support...
Notifications

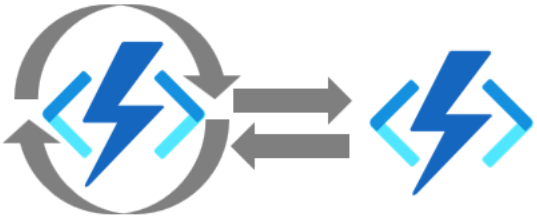

New Azure Function - DurableFunction
Queue trigger
SQL input binding
SQL output binding
Blob trigger
Event Grid trigger
Event Hub trigger
IoT Hub trigger
Service Bus Topic trigger
Durable Functions Orchestration
Cosmos DB Trigger
SendGrid
SignalR
Solution Explorer
Solution Explorer (Ctrl+;)
FunctionAppSample
Connected Services
Dependencies
Properties
.gitignore
Function1.cs
host.json
local.settings.json

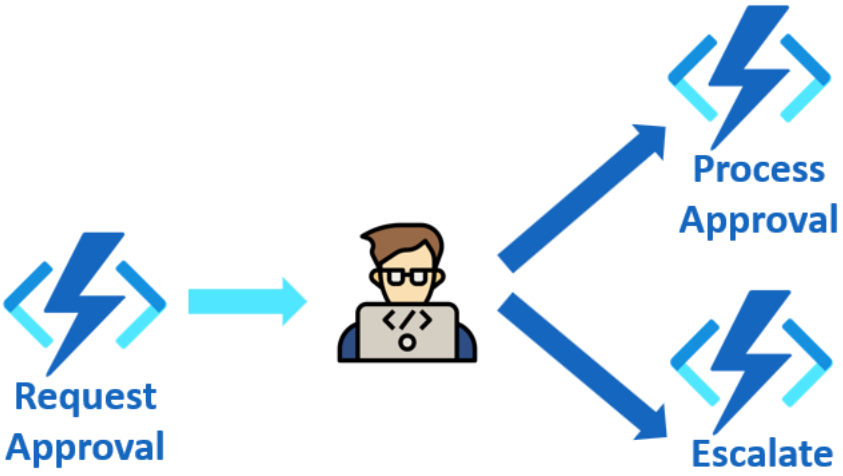

File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help
Search
FunctionAppSample
Release
Any CPU
FunctionAppSample
NuGet: FunctionAppSample
Browse
Installed
Updates 1
NuGet Package Manager: FunctionAppSample
WebJobs.Extensions.DurableTask
Include prerelease
Package source: nuget.org
Microsoft.Azure.WebJobs.Extensions.DurableTask by Microsoft, 8,6 2.7.2
Azure WebJobs SDK Extension for the Durable Task Framework
Microsoft.Azure.WebJobs.Extensions.DurableTask.Analyzers by I 0.4.2
Code Analyzers that help find and fix common issues when writing code using the Azure Durable Functions extension.
ZettaVision.DurableTask by ZettaVision, 1,4K downloads 1.0.1
Forked version of Microsoft.Azure.WebJobs.Extensions.DurableTask should simular to version 2.5 when it is released.
Forte.Functions.Testable by Fredrik Kalseth, 15,4K downloads 2.5.0
Each package is licensed to you by its owner. NuGet is not responsible for, nor does it grant any licenses to, third-party packages.
Do not show this again
Microsoft.Azure.WebJ nuget.org
Version: Latest stable 2.7.2
Install
Options
Description
Azure WebJobs SDK Extension for the Durable Task Framework
Version: 2.7.2
Author(s): Microsoft
License: MIT
Date published: Wednesday, June 1, 2022 (6/1/2022)
Project URL: https://github.com/Azure/azure-functions-durable-extension
Output
Show output from: Service Dependencies
Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'FunctionAppSample'
FunctionAppSample
Connected Services
Dependencies
Properties
.gitignore
Function1.cs
host.json
local.settings.json


F1
F2
F3

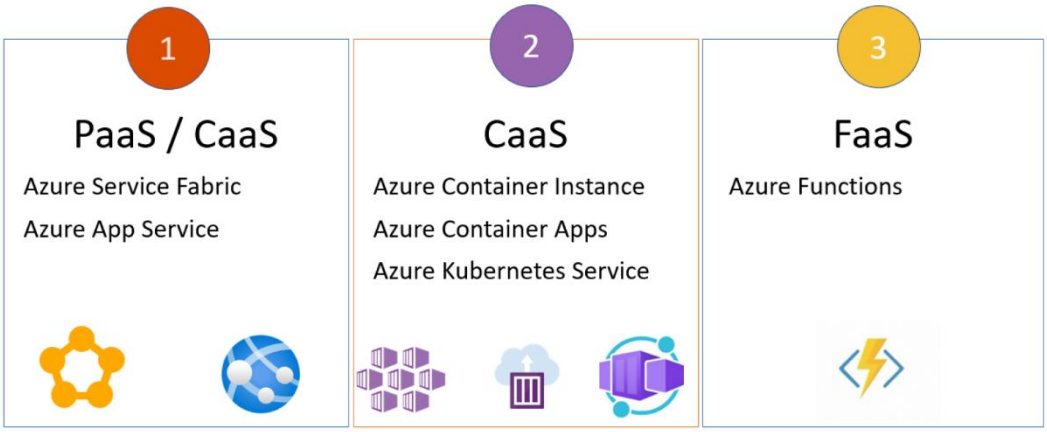

F1
F2
F3

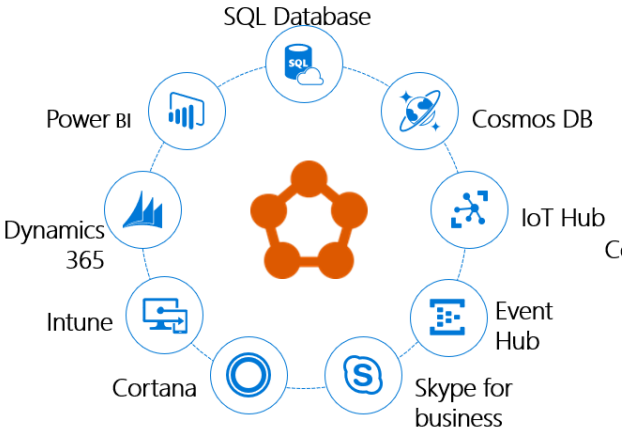

Start
DoWork
GetStatus

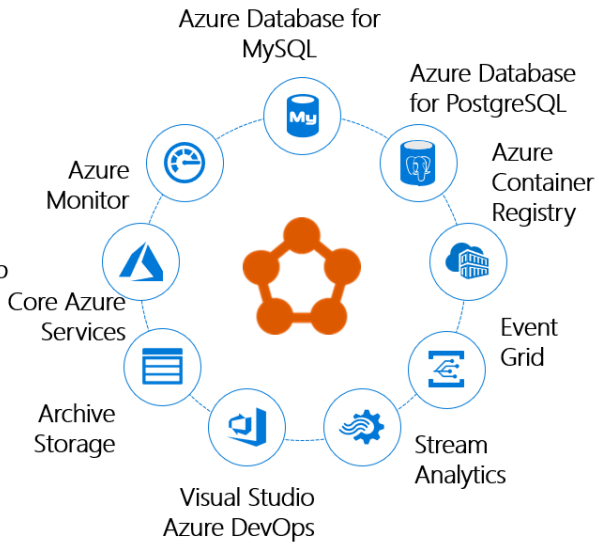


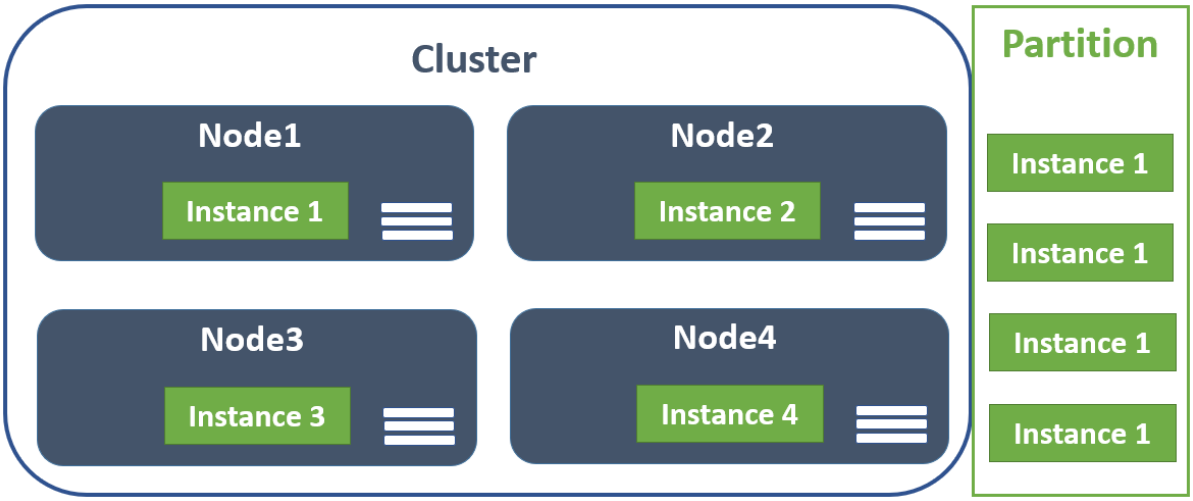

Process
Approval
Request
Approval
Escalate

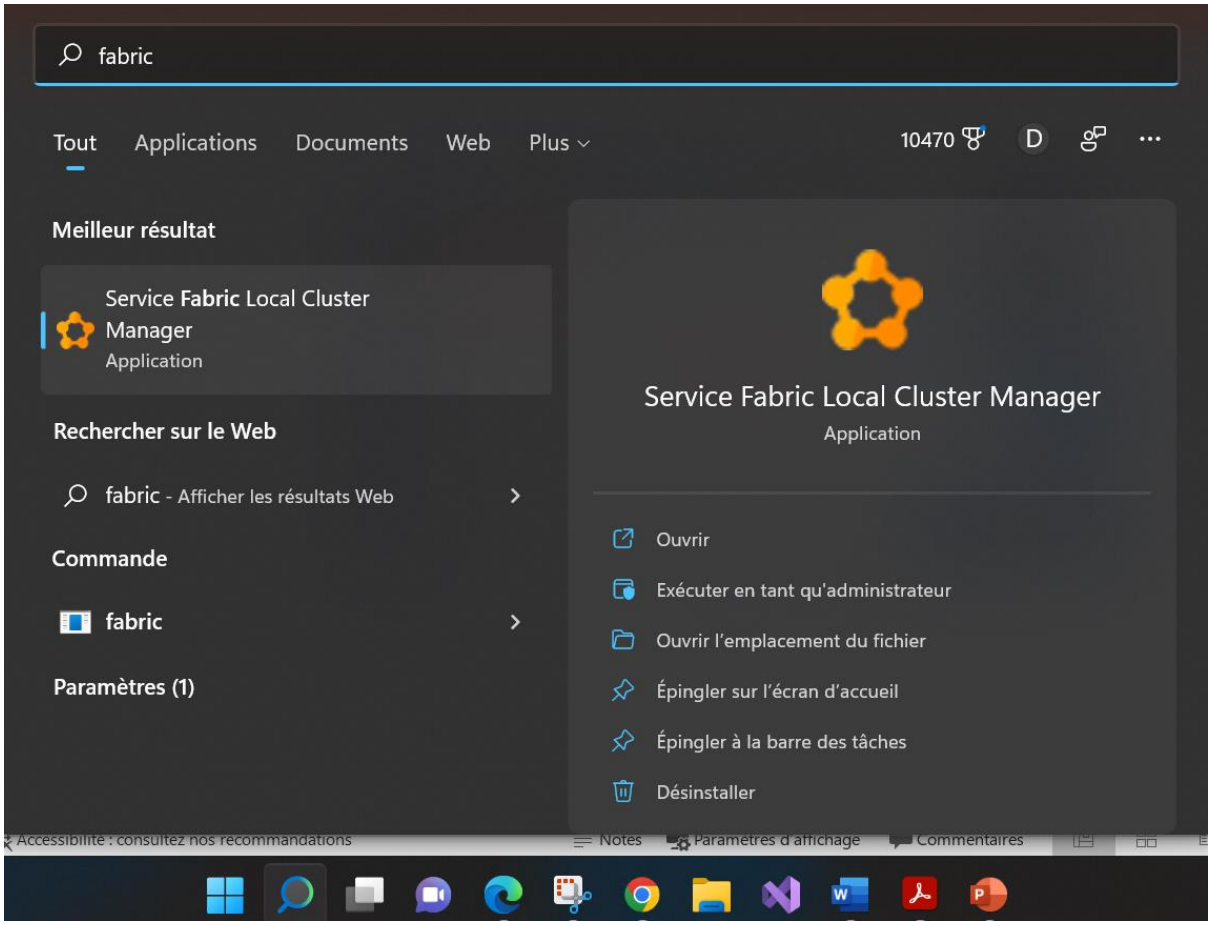
Chapter 5: Develop an Azure Service Fabric Distributed Application

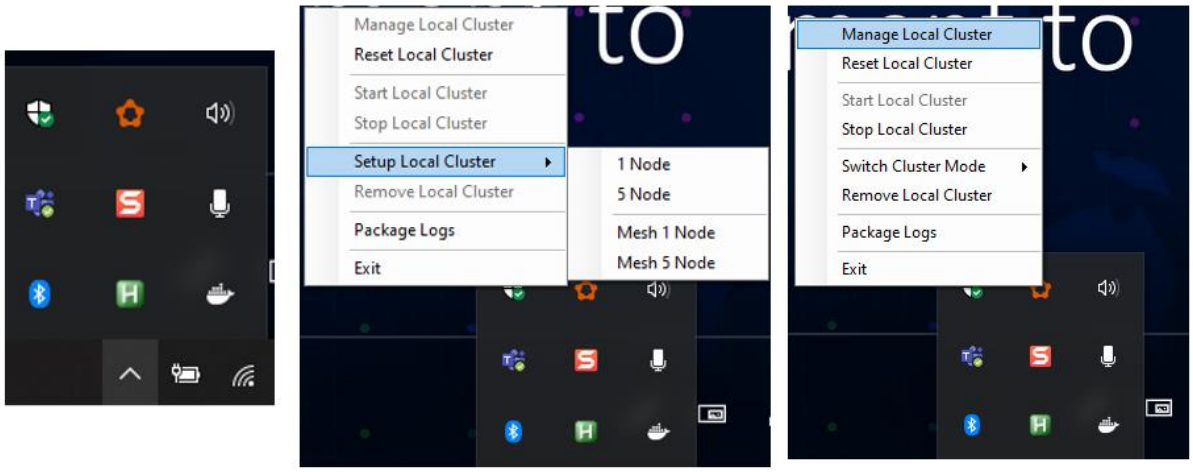


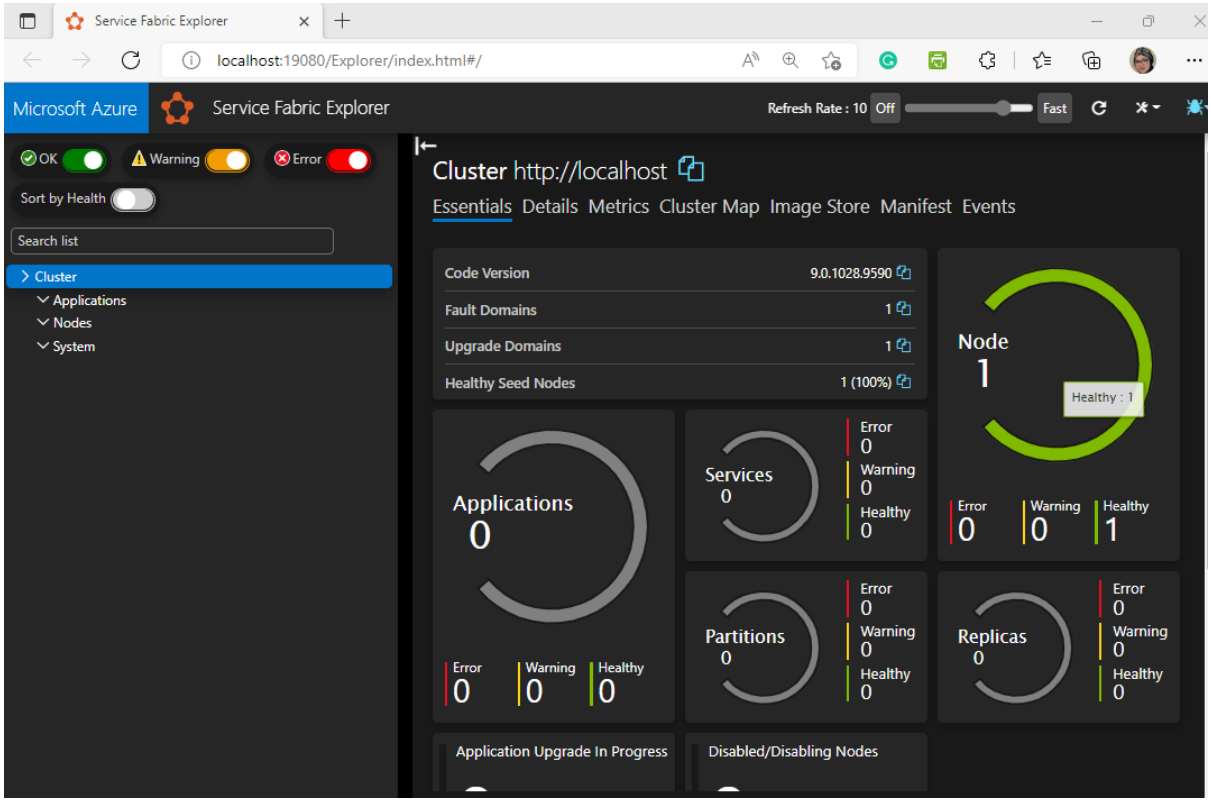


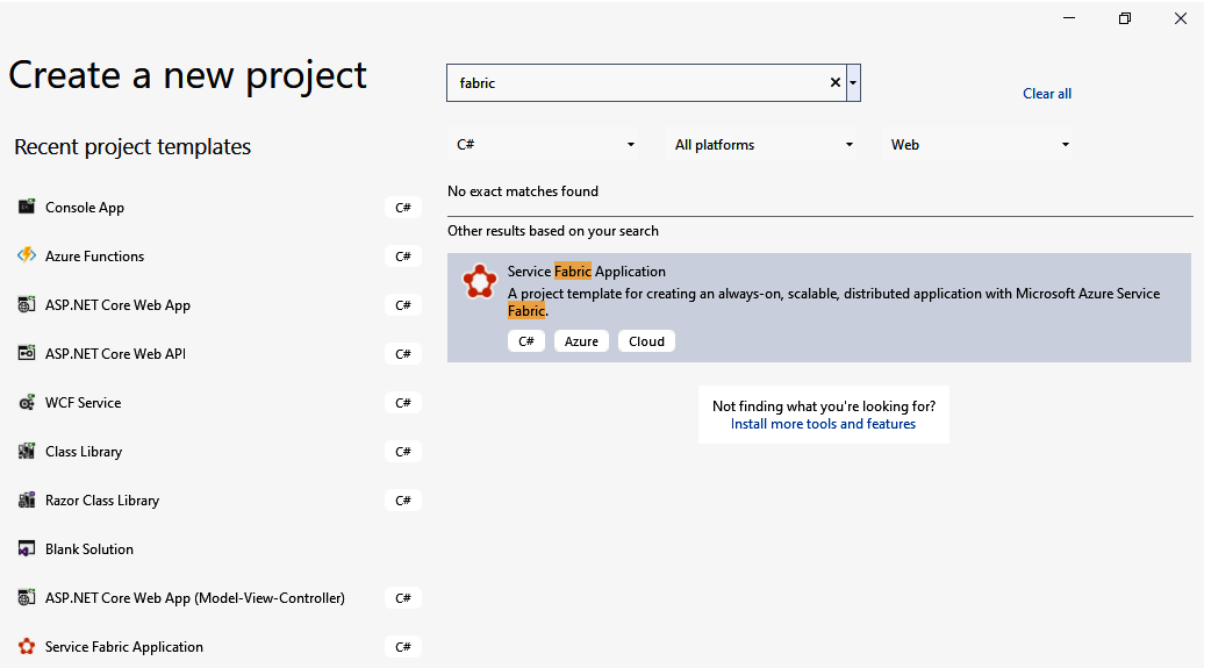


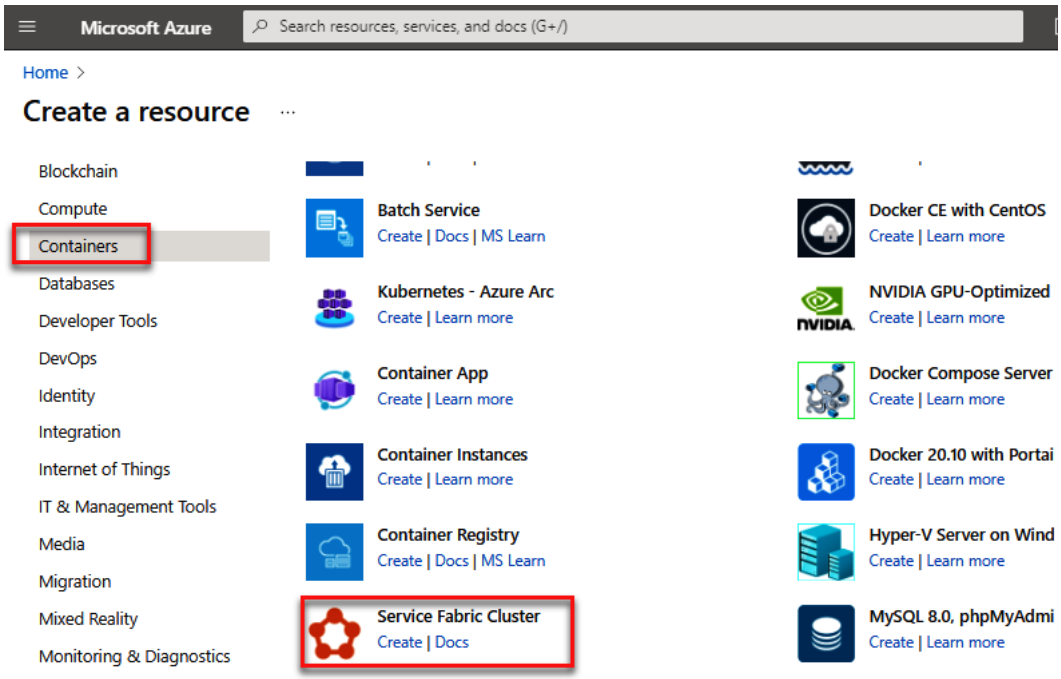

Cluster
Node1
Instance 1
Node2
Instance 2
Node3
Instance 3
Node4
Instance 4
Partition
Instance 1
Instance 1
Instance 1
Instance 1

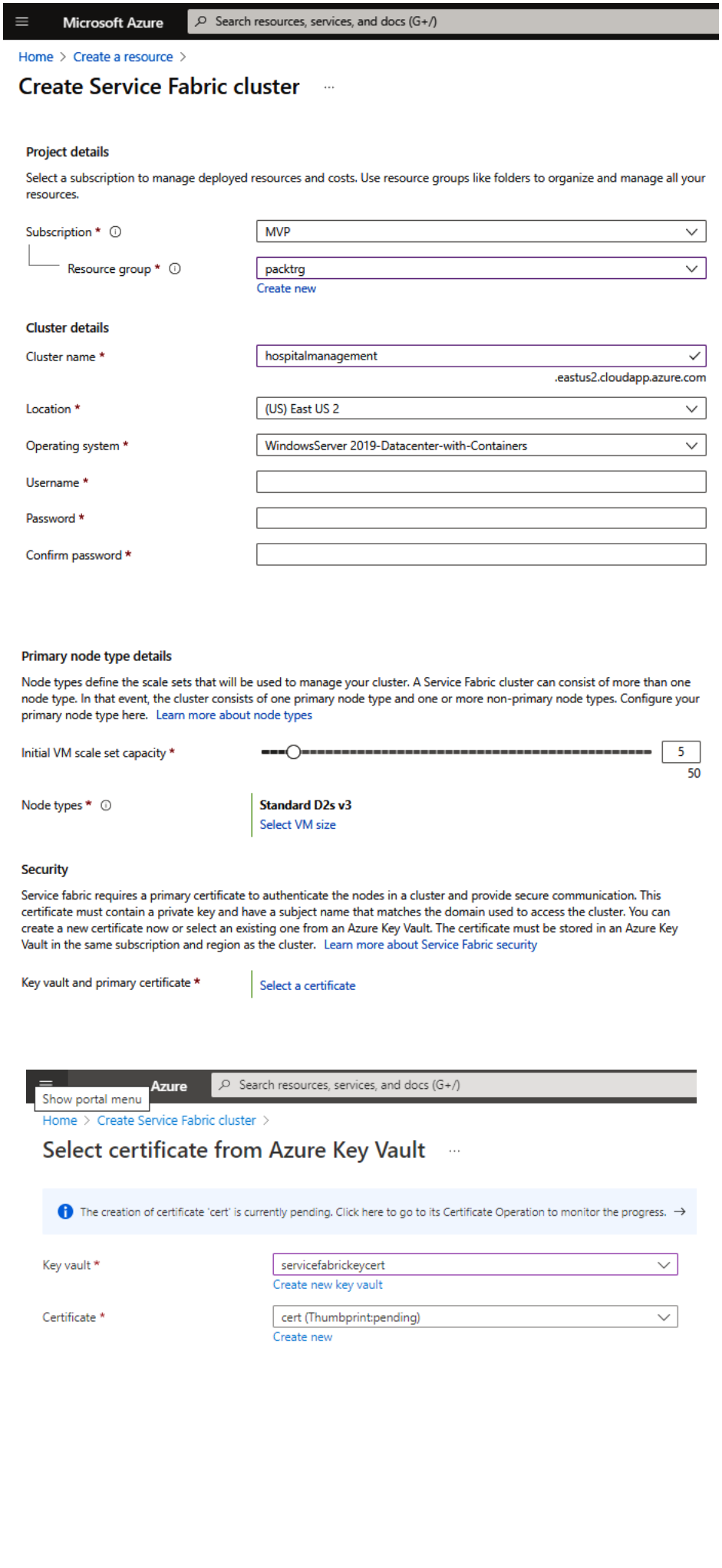

fabric
Tout
Applications
Documents
Web
Plus
10470
D
Meilleur résultat
Service Fabric Local Cluster Manager
Application
Rechercher sur le Web
fabric - Afficher les résultats Web
Commande
fabric
Paramètres (1)
Service Fabric Local Cluster Manager
Application
Ouvrir
Exécuter en tant qu'administrateur
Ouvrir l'emplacement du fichier
Épingler sur l'écran d'accueil
Épingler à la barre des tâches
Désinstaller
Accessibilité : consultez nos recommandations
Notes
Paramètres d'affichage
Commentaires

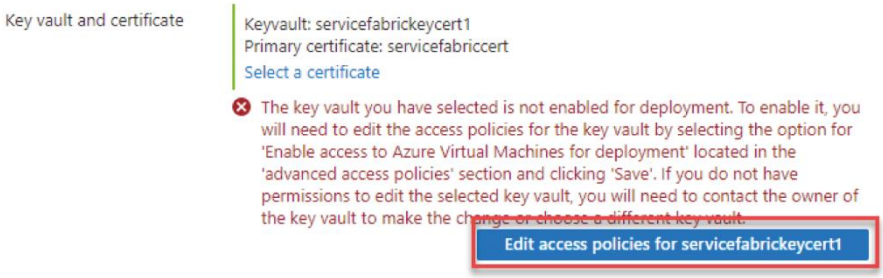

Manage Local Cluster
Reset Local Cluster
Start Local Cluster
Stop Local Cluster
Setup Local Cluster
Remove Local Cluster
Package Logs
Exit
1 Node
5 Node
Mesh 1 Node
Mesh 5 Node
Manage Local Cluster
Reset Local Cluster
Start Local Cluster
Stop Local Cluster
Switch Cluster Mode
Remove Local Cluster
Package Logs
Exit

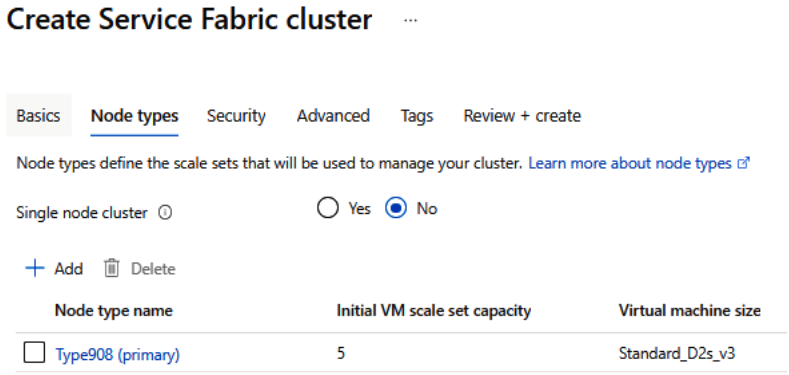

Service Fabric Explorer
localhost:19080/Explorer/index.html#/
Microsoft Azure
Service Fabric Explorer
Refresh Rate : 10
Off
Fast
OK
Warning
Error
Sort by Health
Search list
Cluster
Applications
Nodes
System
Cluster http://localhost
Essentials Details Metrics Cluster Map Image Store Manifest Events
Code Version 9.0.1028.9590
Fault Domains 1
Upgrade Domains 1
Healthy Seed Nodes 1 (100%)
Node 1
Healthy : 1
Error 0
Warning 0
Healthy 1
Applications 0
Error 0
Warning 0
Healthy 0
Services 0
Error 0
Warning 0
Healthy 0
Partitions 0
Error 0
Warning 0
Healthy 0
Replicas 0
Error 0
Warning 0
Healthy 0
Application Upgrade In Progress
Disabled/Disabling Nodes

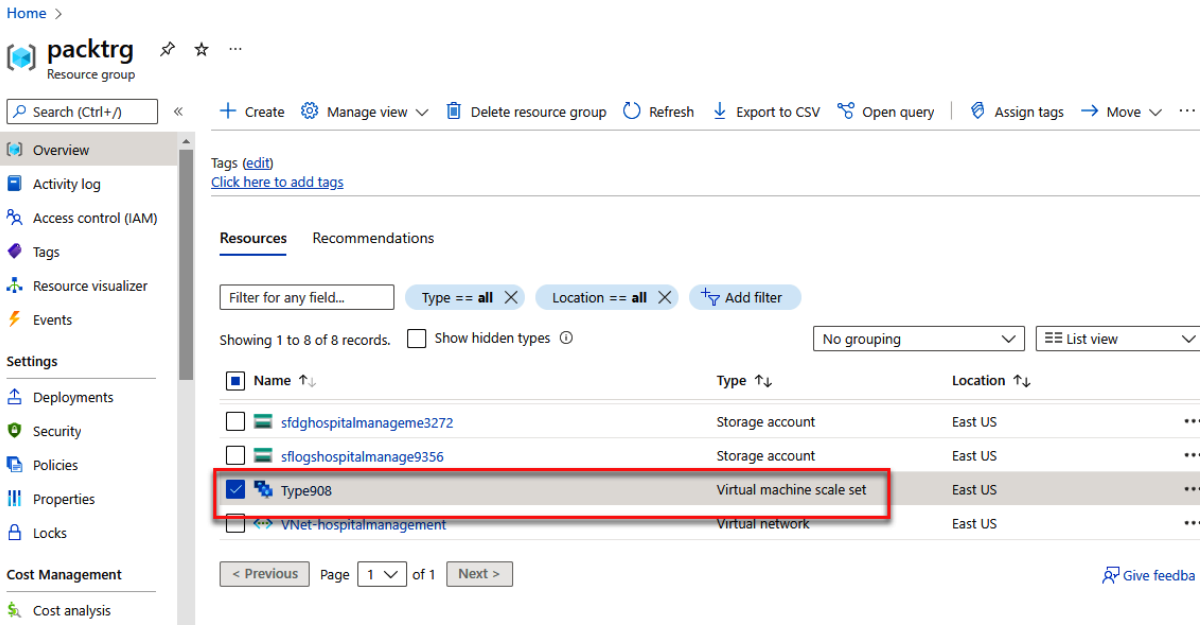

Create a new project
fabric
Clear all
Recent project templates
C#
All platforms
Web
Console App C#
Azure Functions C#
ASP.NET Core Web App C#
ASP.NET Core Web API C#
WCF Service C#
Class Library C#
Razor Class Library C#
Blank Solution
ASP.NET Core Web App (Model-View-Controller) C#
Service Fabric Application C#
No exact matches found
Other results based on your search
Service Fabric Application
A project template for creating an always-on, scalable, distributed application with Microsoft Azure Service Fabric.
C# Azure Cloud
Not finding what you're looking for?
Install more tools and features

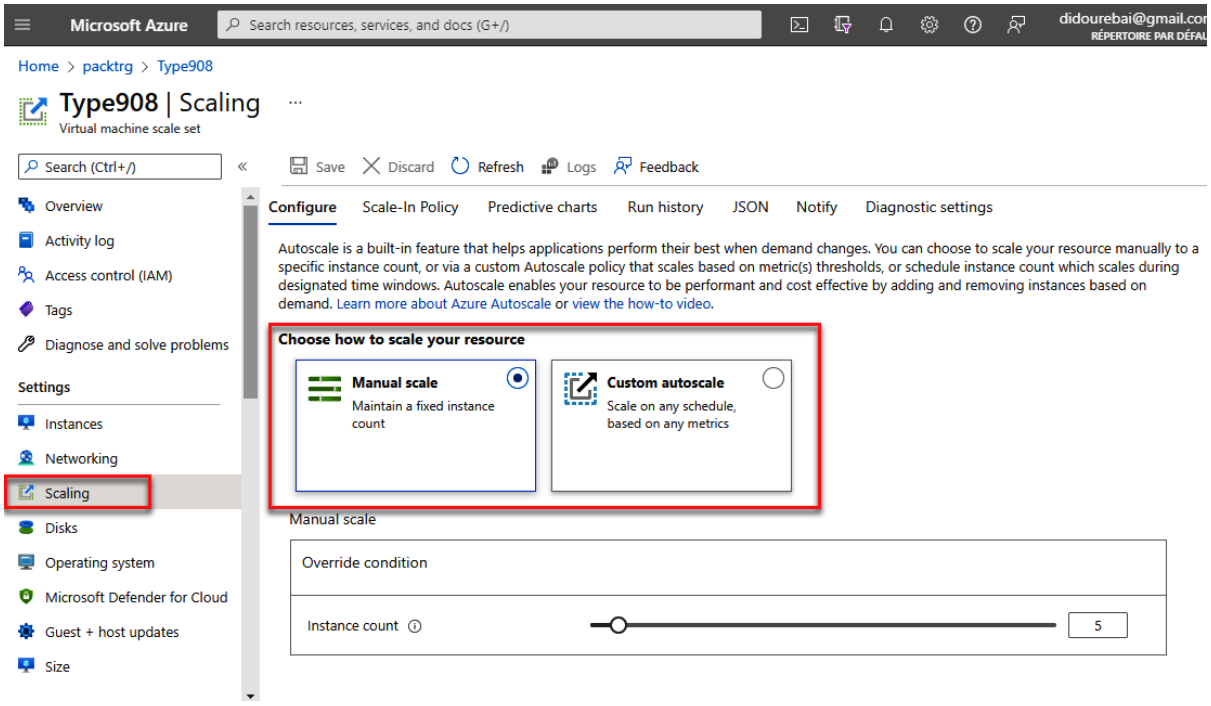

Microsoft Azure
Search resources, services, and docs (G+/)
Home
Create a resource
Blockchain
Compute
Containers
Databases
Developer Tools
DevOps
Identity
Integration
Internet of Things
IT & Management Tools
Media
Migration
Mixed Reality
Monitoring & Diagnostics
Batch Service
Create | Docs | MS Learn
Kubernetes - Azure Arc
Create | Learn more
Container App
Create | Learn more
Container Instances
Create | Learn more
Container Registry
Create | Docs | MS Learn
Service Fabric Cluster
Create | Docs
Docker CE with CentOS
Create | Learn more
NVIDIA GPU-Optimized
Create | Learn more
Docker Compose Server
Create | Learn more
Docker 20.10 with Portai
Create | Learn more
Hyper-V Server on Wind
Create | Learn more
MySQL 8.0, phpMyAdmi
Create | Learn more

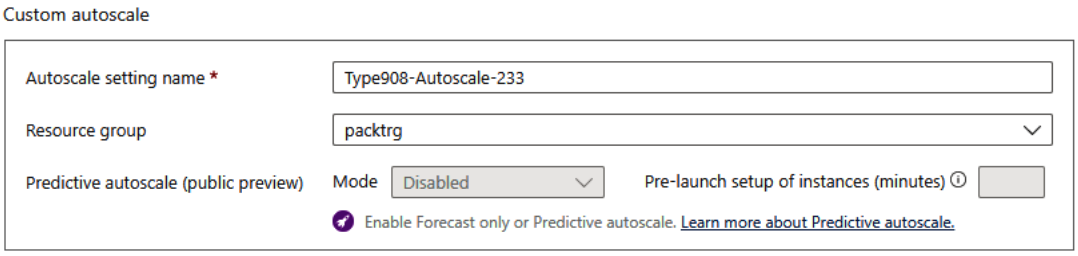

Microsoft Azure
Search resources, services, and docs (G+/)
Home > Create a resource >
Create Service Fabric cluster
Project details
Select a subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.
Subscription *
MVP
Resource group *
packtrg
Create new
Cluster details
Cluster name *
hospitalmanagement
.eastus2.cloudapp.azure.com
Location *
(US) East US 2
Operating system *
WindowsServer 2019-Datacenter-with-Containers
Username *
Password *
Confirm password *
Primary node type details
Node types define the scale sets that will be used to manage your cluster. A Service Fabric cluster can consist of more than one node type. In that event, the cluster consists of one primary node type and one or more non-primary node types. Configure your primary node type here. Learn more about node types
Initial VM scale set capacity *
5
50
Node types *
Standard D2s v3
Select VM size
Security
Service fabric requires a primary certificate to authenticate the nodes in a cluster and provide secure communication. This certificate must contain a private key and have a subject name that matches the domain used to access the cluster. You can create a new certificate now or select an existing one from an Azure Key Vault. The certificate must be stored in an Azure Key Vault in the same subscription and region as the cluster. Learn more about Service Fabric security
Key vault and primary certificate *
Select a certificate
Azure
Search resources, services, and docs (G+/)
Show portal menu
Home > Create Service Fabric cluster >
Select certificate from Azure Key Vault
The creation of certificate 'cert' is currently pending. Click here to go to its Certificate Operation to monitor the progress.
Key vault *
servicefabrickeycert
Create new key vault
Certificate *
cert (Thumbprint:pending)
Create new

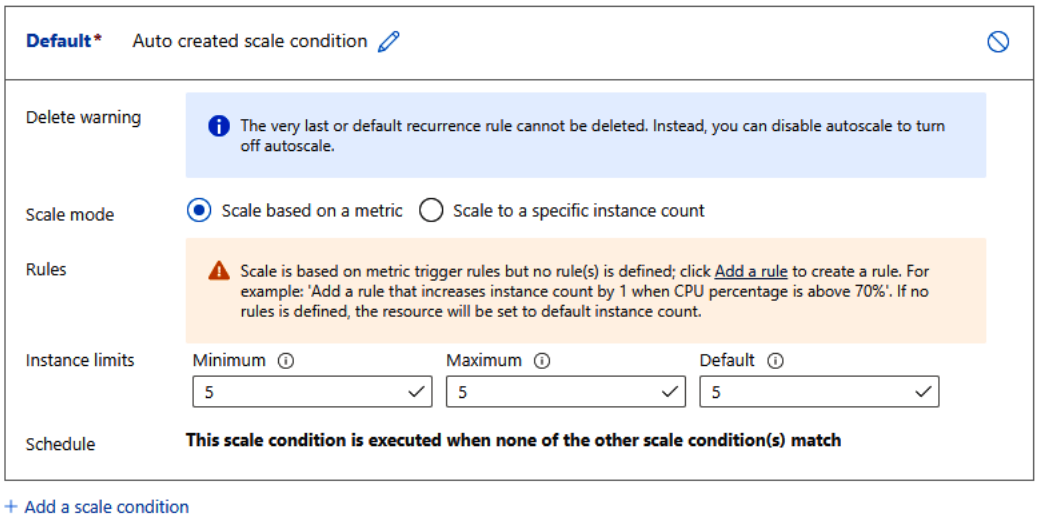

Key vault and certificate
Keyvault: servicefabrickeycert1
Primary certificate: servicefabriccert
Select a certificate
The key vault you have selected is not enabled for deployment. To enable it, you will need to edit the access policies for the key vault by selecting the option for 'Enable access to Azure Virtual Machines for deployment' located in the 'advanced access policies' section and clicking 'Save'. If you do not have permissions to edit the selected key vault, you will need to contact the owner of the key vault to make the change or choose a different key vault.
Edit access policies for servicefabrickeycert1

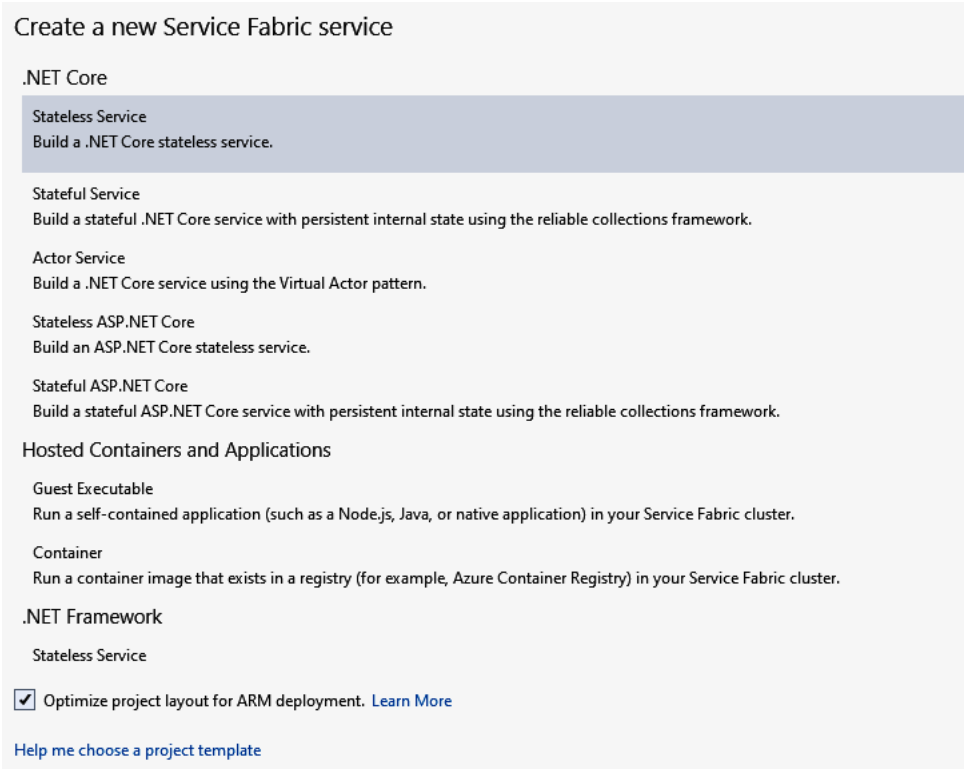

Create Service Fabric cluster
Basics
Node types
Security
Advanced
Tags
Review + create
Node types define the scale sets that will be used to manage your cluster. Learn more about node types
Single node cluster
Yes
No
Add
Delete
Node type name
Initial VM scale set capacity
Virtual machine size
Type908 (primary)
5
Standard_D2s_v3

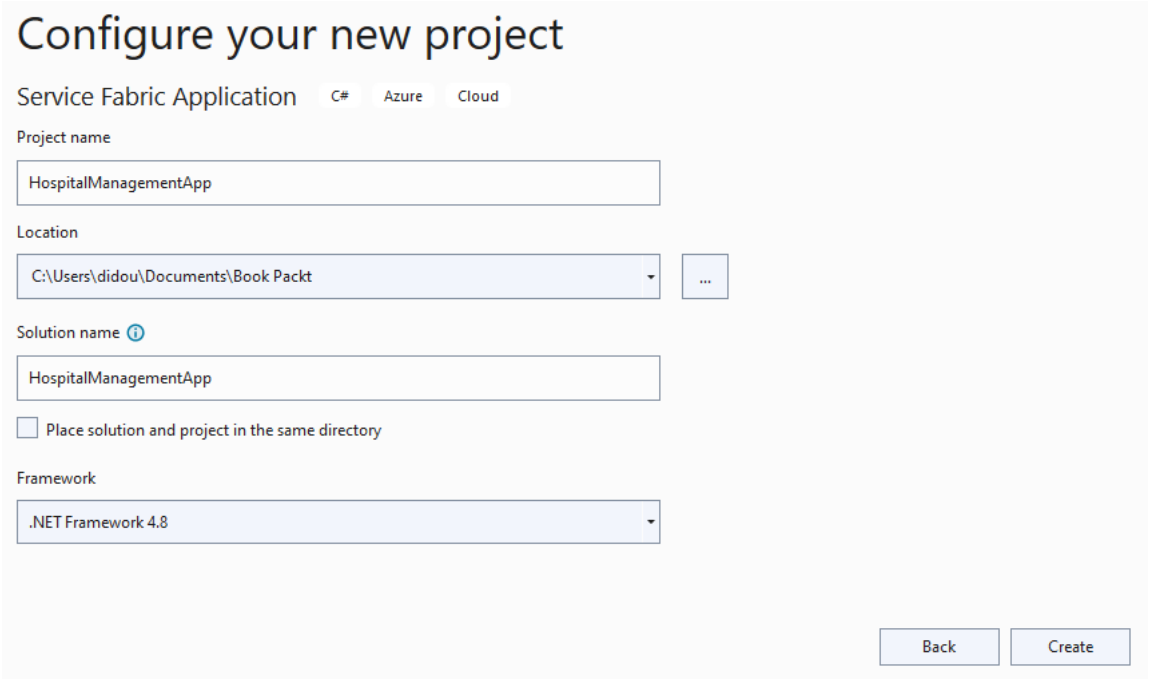

Home
packtrg
Resource group
Search (Ctrl+/)
Create
Manage view
Delete resource group
Refresh
Export to CSV
Open query
Assign tags
Move
Overview
Activity log
Access control (IAM)
Tags
Resource visualizer
Events
Settings
Deployments
Security
Policies
Properties
Locks
Cost Management
Cost analysis
Tags (edit)
Click here to add tags
Resources
Recommendations
Filter for any field...
Type == all
Location == all
Add filter
Showing 1 to 8 of 8 records.
Show hidden types
No grouping
List view
Name
Type
Location
sfdghospitalmanageme3272
Storage account
East US
sflogshospitalmanage9356
Storage account
East US
Type908
Virtual machine scale set
East US
VNet-hospitalmanagement
Virtual network
East US
< Previous
Page
1
of 1
Next >
Give feedba

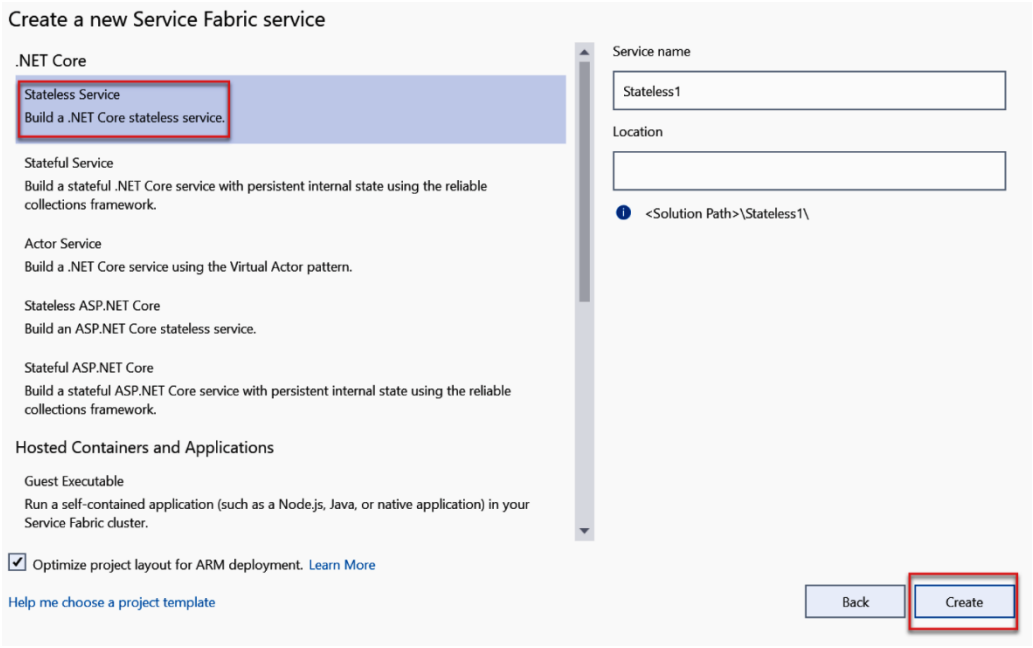

Microsoft Azure
Search resources, services, and docs (G+/)
didourebai@gmail.com
RÉPERTOIRE PAR DÉFAUT
Home > packtrg > Type908
Type908 | Scaling
Virtual machine scale set
Search (Ctrl+/)
Save
Discard
Refresh
Logs
Feedback
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Settings
Instances
Networking
Scaling
Disks
Operating system
Microsoft Defender for Cloud
Guest + host updates
Size
Configure
Scale-In Policy
Predictive charts
Run history
JSON
Notify
Diagnostic settings
Autoscale is a built-in feature that helps applications perform their best when demand changes. You can choose to scale your resource manually to a specific instance count, or via a custom Autoscale policy that scales based on metric(s) thresholds, or schedule instance count which scales during designated time windows. Autoscale enables your resource to be performant and cost effective by adding and removing instances based on demand. Learn more about Azure Autoscale or view the how-to video.
Choose how to scale your resource
Manual scale
Maintain a fixed instance count
Custom autoscale
Scale on any schedule, based on any metrics
Manual scale
Override condition
Instance count
5

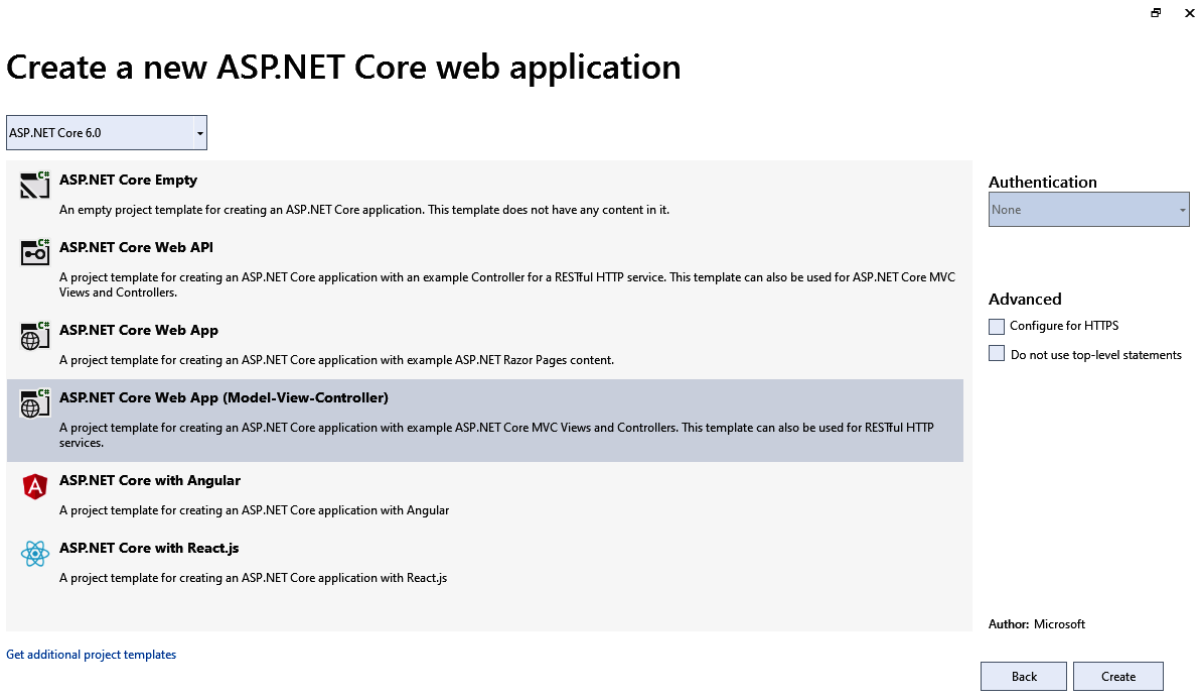

Custom autoscale
Autoscale setting name *
Type908-Autoscale-233
Resource group
packtrg
Predictive autoscale (public preview)
Mode
Disabled
Pre-launch setup of instances (minutes)
Enable Forecast only or Predictive autoscale. Learn more about Predictive autoscale.

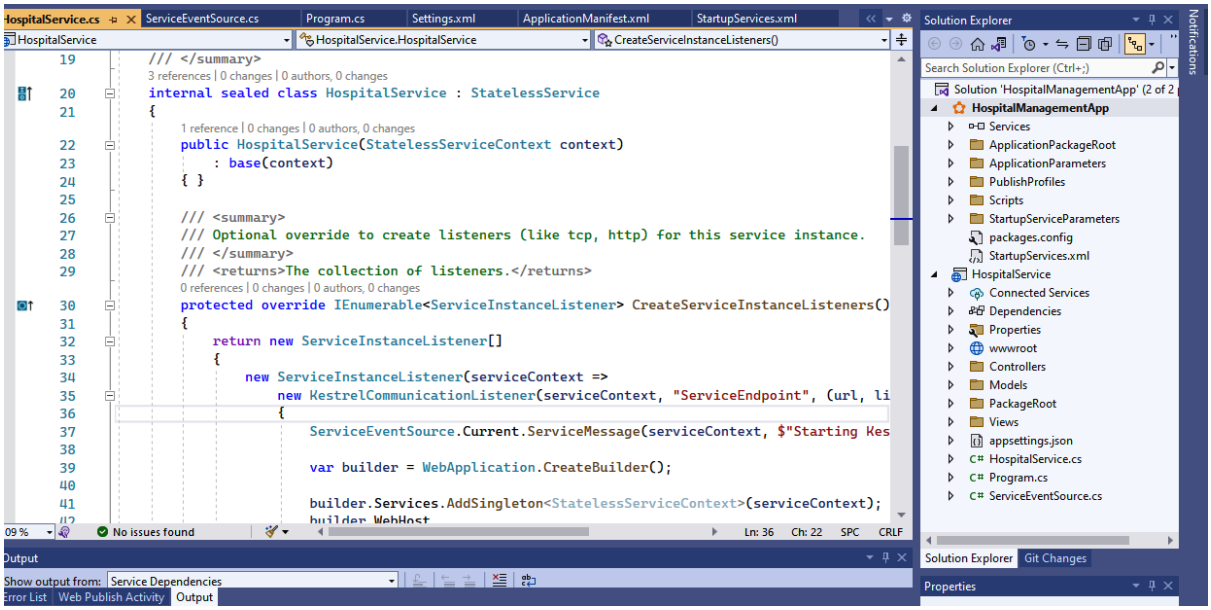

Default*
Auto created scale condition
Delete warning
The very last or default recurrence rule cannot be deleted. Instead, you can disable autoscale to turn off autoscale.
Scale mode
Scale based on a metric
Scale to a specific instance count
Rules
Scale is based on metric trigger rules but no rule(s) is defined; click Add a rule to create a rule. For example: 'Add a rule that increases instance count by 1 when CPU percentage is above 70%'. If no rules is defined, the resource will be set to default instance count.
Instance limits
Minimum
Maximum
Default
5
5
5
Schedule
This scale condition is executed when none of the other scale condition(s) match
+ Add a scale condition


Create a new Service Fabric service
.NET Core
Stateless Service
Build a .NET Core stateless service.
Stateful Service
Build a stateful .NET Core service with persistent internal state using the reliable collections framework.
Actor Service
Build a .NET Core service using the Virtual Actor pattern.
Stateless ASP.NET Core
Build an ASP.NET Core stateless service.
Stateful ASP.NET Core
Build a stateful ASP.NET Core service with persistent internal state using the reliable collections framework.
Hosted Containers and Applications
Guest Executable
Run a self-contained application (such as a Node.js, Java, or native application) in your Service Fabric cluster.
Container
Run a container image that exists in a registry (for example, Azure Container Registry) in your Service Fabric cluster.
.NET Framework
Stateless Service
Optimize project layout for ARM deployment. Learn More
Help me choose a project template

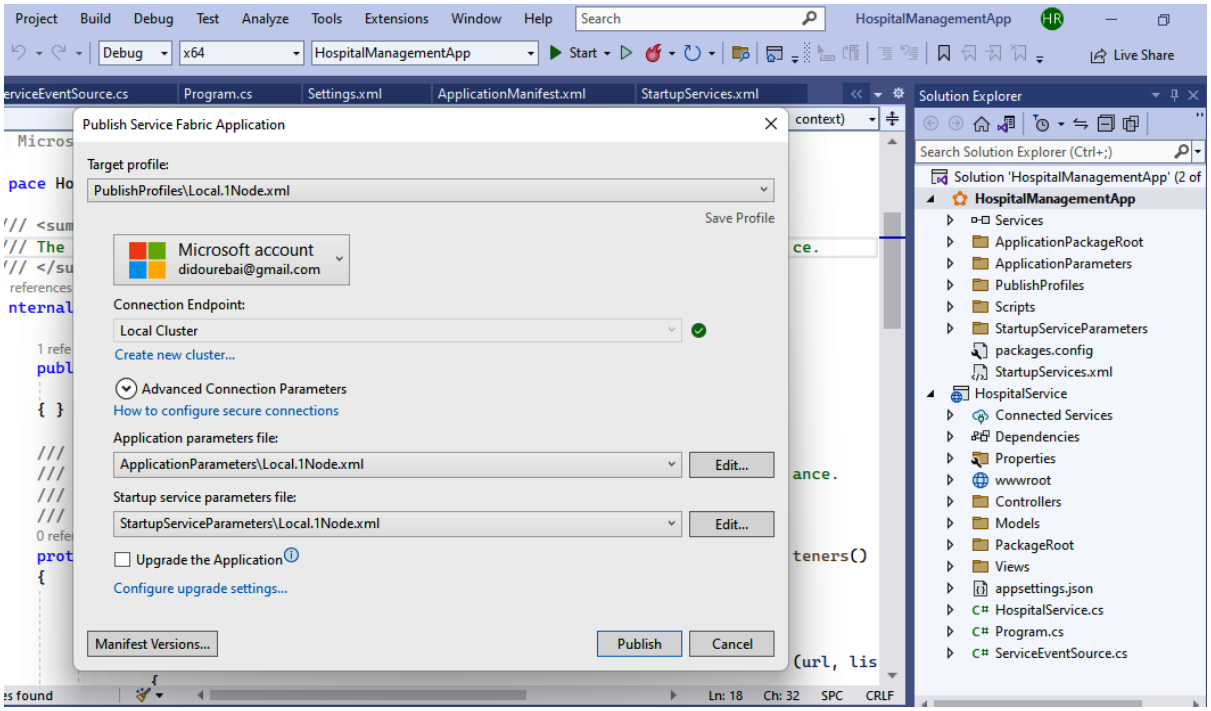

Configure your new project
Service Fabric Application
C#
Azure
Cloud
Project name
HospitalManagementApp
Location
C:\Users\didou\Documents\Book Packt
...
Solution name
HospitalManagementApp
Place solution and project in the same directory
Framework
.NET Framework 4.8
Back
Create

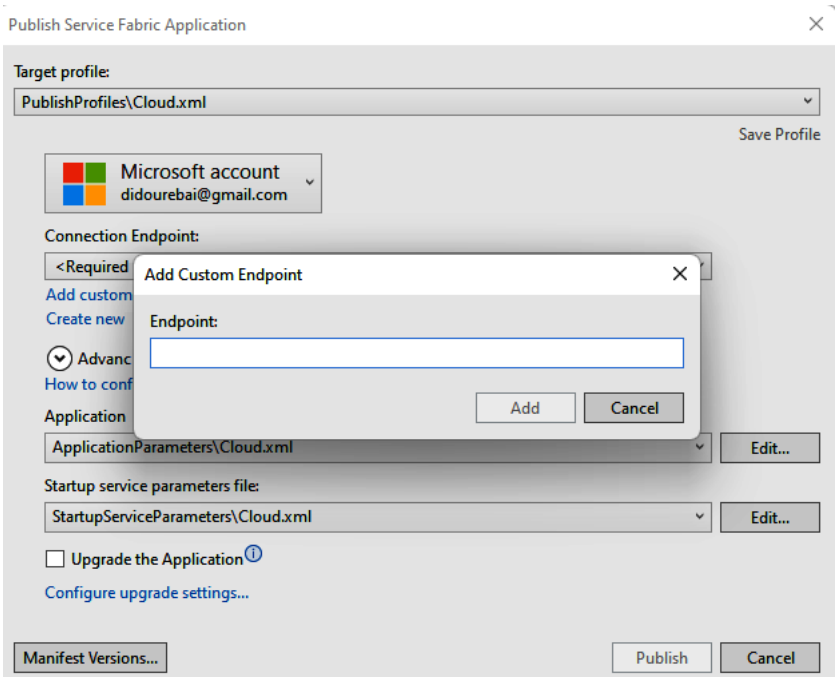

Create a new Service Fabric service
.NET Core
Stateless Service
Build a .NET Core stateless service.
Stateful Service
Build a stateful .NET Core service with persistent internal state using the reliable collections framework.
Actor Service
Build a .NET Core service using the Virtual Actor pattern.
Stateless ASP.NET Core
Build an ASP.NET Core stateless service.
Stateful ASP.NET Core
Build a stateful ASP.NET Core service with persistent internal state using the reliable collections framework.
Hosted Containers and Applications
Guest Executable
Run a self-contained application (such as a Node.js, Java, or native application) in your Service Fabric cluster.
Service name
Stateless1
Location
<Solution Path>\Stateless1\
Optimize project layout for ARM deployment. Learn More
Help me choose a project template
Back
Create

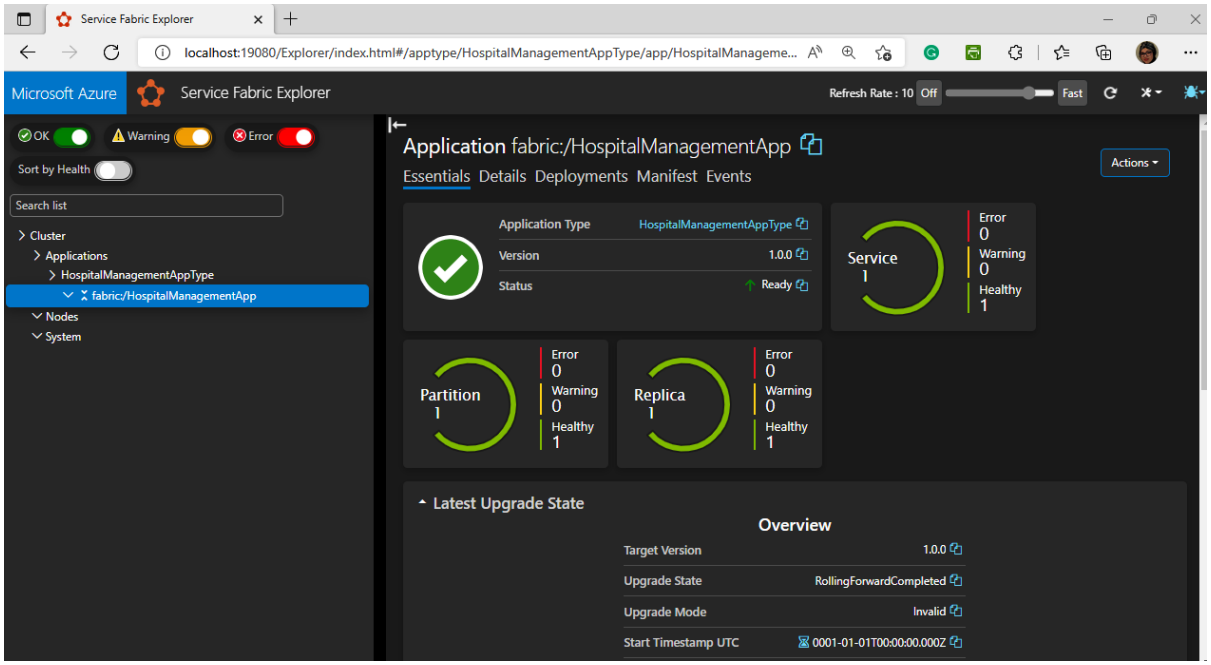

Create a new ASP.NET Core web application
ASP.NET Core 6.0
ASP.NET Core Empty
An empty project template for creating an ASP.NET Core application. This template does not have any content in it.
ASP.NET Core Web API
A project template for creating an ASP.NET Core application with an example Controller for a RESTful HTTP service. This template can also be used for ASP.NET Core MVC Views and Controllers.
ASP.NET Core Web App
A project template for creating an ASP.NET Core application with example ASP.NET Razor Pages content.
ASP.NET Core Web App (Model-View-Controller)
A project template for creating an ASP.NET Core application with example ASP.NET Core MVC Views and Controllers. This template can also be used for RESTful HTTP services.
ASP.NET Core with Angular
A project template for creating an ASP.NET Core application with Angular
ASP.NET Core with React.js
A project template for creating an ASP.NET Core application with React.js
Authentication
None
Advanced
Configure for HTTPS
Do not use top-level statements
Author: Microsoft
Get additional project templates
Back
Create

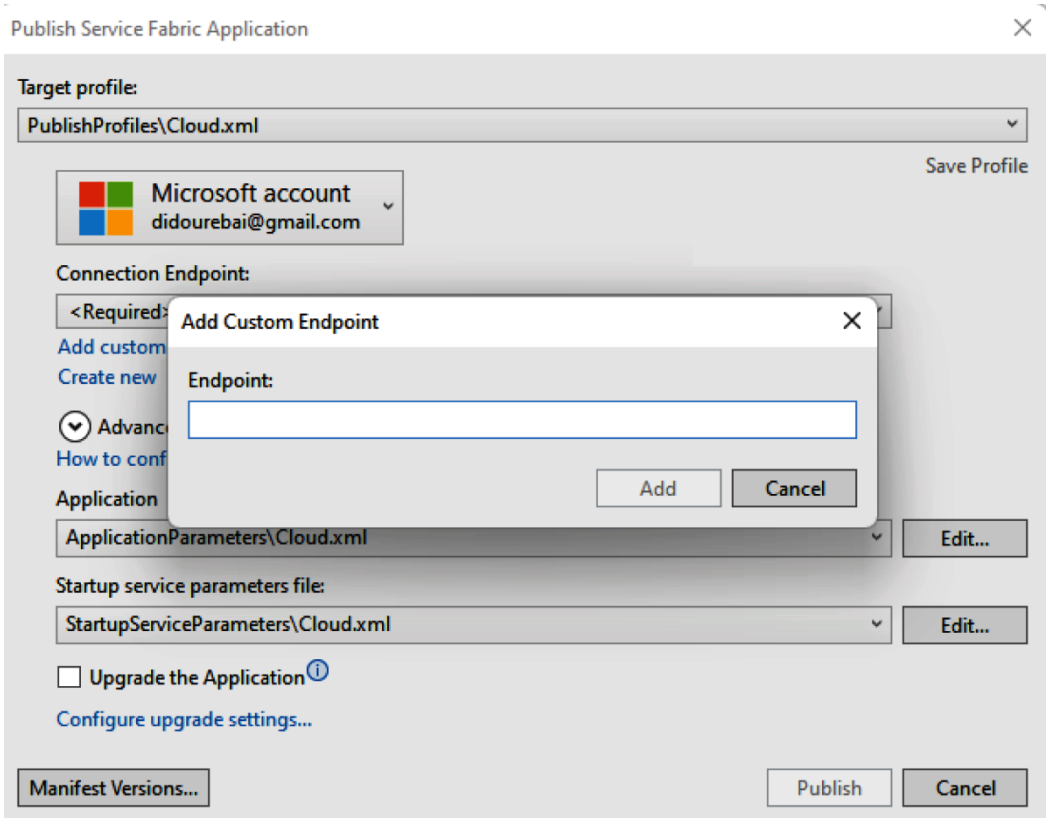

HospitalService.cs
ServiceEventSource.cs
Program.cs
Settings.xml
ApplicationManifest.xml
StartupServices.xml
HospitalService
HospitalService.HospitalService
CreateServiceInstanceListeners()
/// </summary>
3 references | 0 changes | 0 authors, 0 changes
internal sealed class HospitalService : StatelessService
{
1 reference | 0 changes | 0 authors, 0 changes
public HospitalService(StatelessServiceContext context)
: base(context)
{ }
/// <summary>
/// Optional override to create listeners (like tcp, http) for this service instance.
/// </summary>
/// <returns>The collection of listeners.</returns>
0 references | 0 changes | 0 authors, 0 changes
protected override IEnumerable<ServiceInstanceListener> CreateServiceInstanceListeners()
{
return new ServiceInstanceListener[]
{
new ServiceInstanceListener(serviceContext =>
new KestrelCommunicationListener(serviceContext, "ServiceEndpoint", (url, li
{
ServiceEventSource.Current.ServiceMessage(serviceContext, $"Starting Kes
var builder = WebApplication.CreateBuilder();
builder.Services.AddSingleton<StatelessServiceContext>(serviceContext);
builder.WebHost
No issues found
Ln: 36
Ch: 22
SPC
CRLF
Output
Show output from: Service Dependencies
Error List
Web Publish Activity
Output
Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'HospitalManagementApp' (2 of 2
HospitalManagementApp
Services
ApplicationPackageRoot
ApplicationParameters
PublishProfiles
Scripts
StartupServiceParameters
packages.config
StartupServices.xml
HospitalService
Connected Services
Dependencies
Properties
wwwroot
Controllers
Models
PackageRoot
Views
appsettings.json
HospitalService.cs
Program.cs
ServiceEventSource.cs
Solution Explorer
Git Changes
Properties
Notifications

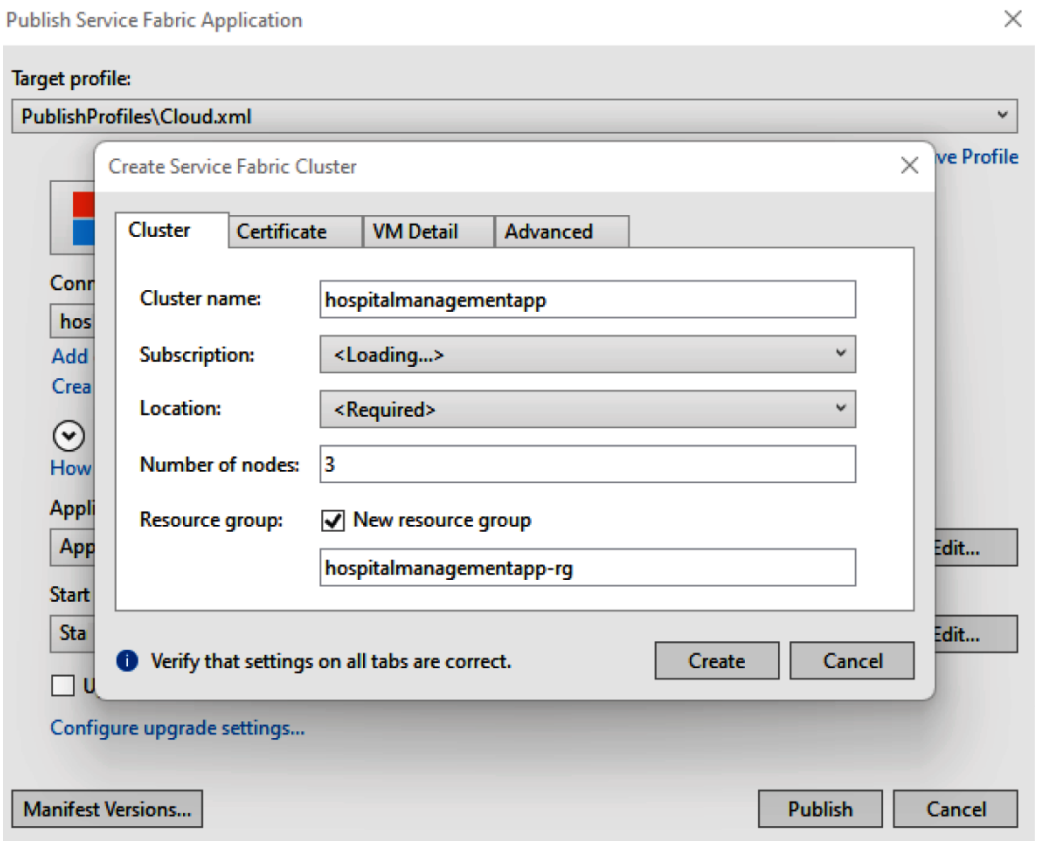
Settings.xml
ServiceManifest.xml
ApplicationManifest.xml
StartupServices.xml
HospitalService.csproj
</ExeHost>
</EntryPoint>
<EnvironmentVariables>
<EnvironmentVariable Name="ASPNETCORE_ENVIRONMENT" Value=""/>
</EnvironmentVariables>
</CodePackage>
<!-- Config package is the contents of the Config directory under PackageRoot that contains an
independently-updateable and versioned set of custom configuration settings for your service.
<ConfigPackage Name="Config" Version="1.0.0" />
<Resources>
<Endpoints>
<!-- This endpoint is used by the communication listener to obtain the port on which to
listen. Please note that if your service is partitioned, this port is shared with
replicas of different partitions that are placed in your code. -->
<Endpoint Protocol="http" Name="ServiceEndpoint" Type="Input" Port="8605" />
</Endpoints>
</Resources>
</ServiceManifest>

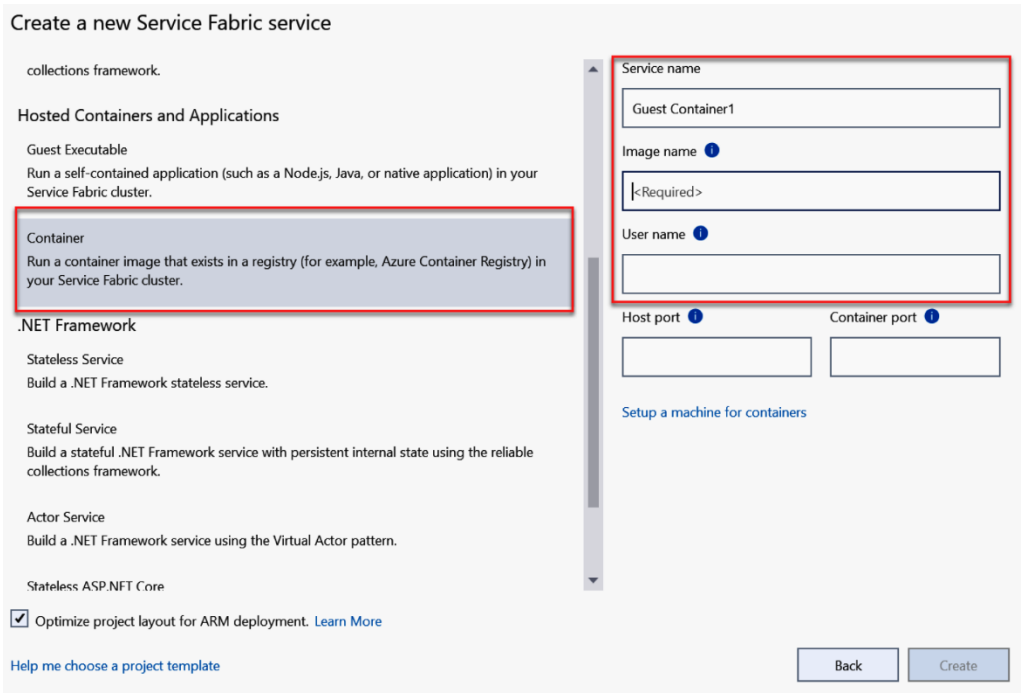

Project Build Debug Test Analyze Tools Extensions Window Help
Search
HospitalManagementApp
Debug
x64
HospitalManagementApp
Start
Live Share
ServiceEventSource.cs
Program.cs
Settings.xml
ApplicationManifest.xml
StartupServices.xml
Publish Service Fabric Application
Target profile:
PublishProfiles\Local.1Node.xml
Save Profile
Microsoft account
didourebai@gmail.com
Connection Endpoint:
Local Cluster
Create new cluster...
Advanced Connection Parameters
How to configure secure connections
Application parameters file:
ApplicationParameters\Local.1Node.xml
Edit...
Startup service parameters file:
StartupServiceParameters\Local.1Node.xml
Edit...
Upgrade the Application
Configure upgrade settings...
Manifest Versions...
Publish
Cancel
Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'HospitalManagementApp' (2 of
HospitalManagementApp
Services
ApplicationPackageRoot
ApplicationParameters
PublishProfiles
Scripts
StartupServiceParameters
packages.config
StartupServices.xml
HospitalService
Connected Services
Dependencies
Properties
wwwroot
Controllers
Models
PackageRoot
Views
appsettings.json
HospitalService.cs
Program.cs
ServiceEventSource.cs
Ln: 18
Ch: 32
SPC
CRLF


Publish Service Fabric Application
Target profile:
PublishProfiles\Cloud.xml
Save Profile
Microsoft account
didourebai@gmail.com
Connection Endpoint:
<Required
Add custom
Create new
Advanc
How to conf
Application
ApplicationParameters\Cloud.xml
Edit...
Startup service parameters file:
StartupServiceParameters\Cloud.xml
Edit...
Upgrade the Application
Configure upgrade settings...
Manifest Versions...
Publish
Cancel
Add Custom Endpoint
Endpoint:
Add
Cancel

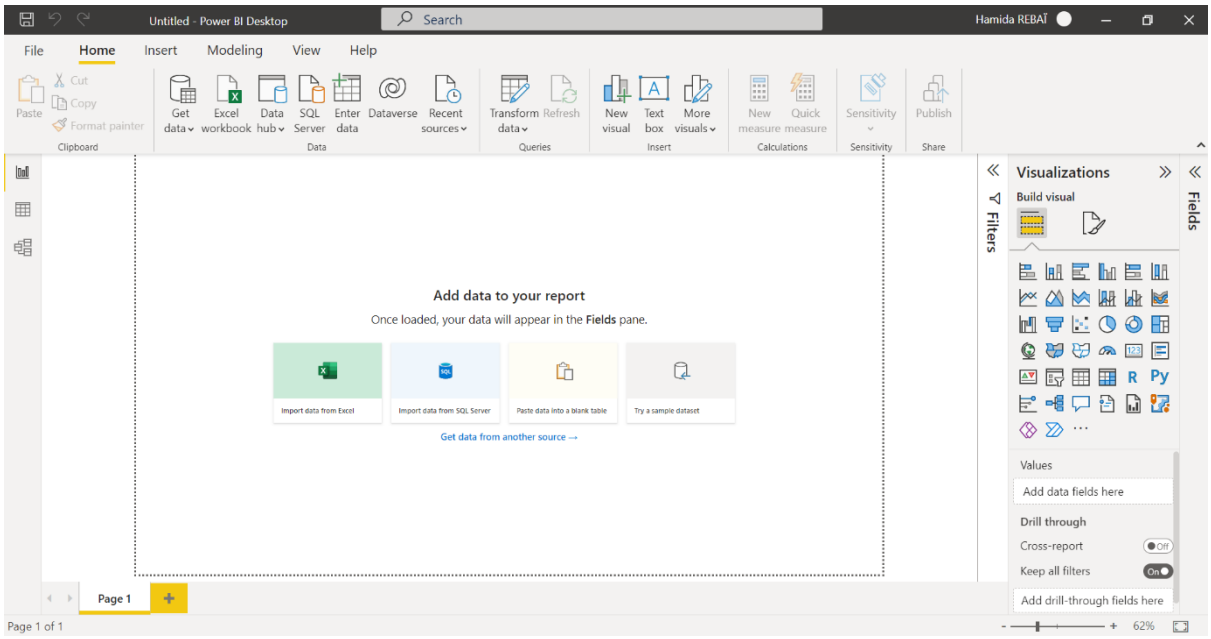

Service Fabric Explorer
localhost:19080/Explorer/index.html#/apptype/HospitalManagementAppType/app/HospitalManageme...
Microsoft Azure
Service Fabric Explorer
Refresh Rate : 10
Off
Fast
OK
Warning
Error
Sort by Health
Search list
Cluster
Applications
HospitalManagementAppType
fabric:/HospitalManagementApp
Nodes
System
Application fabric:/HospitalManagementApp
Actions
Essentials
Details
Deployments
Manifest
Events
Application Type
HospitalManagementAppType
Version
1.0.0
Status
Ready
Service
1
Error
0
Warning
0
Healthy
1
Partition
1
Error
0
Warning
0
Healthy
1
Replica
1
Error
0
Warning
0
Healthy
1
Latest Upgrade State
Overview
Target Version
1.0.0
Upgrade State
RollingForwardCompleted
Upgrade Mode
Invalid
Start Timestamp UTC
0001-01-01T00:00:00.000Z


Publish Service Fabric Application
Target profile:
PublishProfiles\Cloud.xml
Save Profile
Microsoft account
didourebai@gmail.com
Connection Endpoint:
<Required>
Add custom
Create new
Advanc
How to conf
Application
ApplicationParameters\Cloud.xml
Edit...
Startup service parameters file:
StartupServiceParameters\Cloud.xml
Edit...
Upgrade the Application
Configure upgrade settings...
Manifest Versions...
Publish
Cancel
Add Custom Endpoint
Endpoint:
Add
Cancel

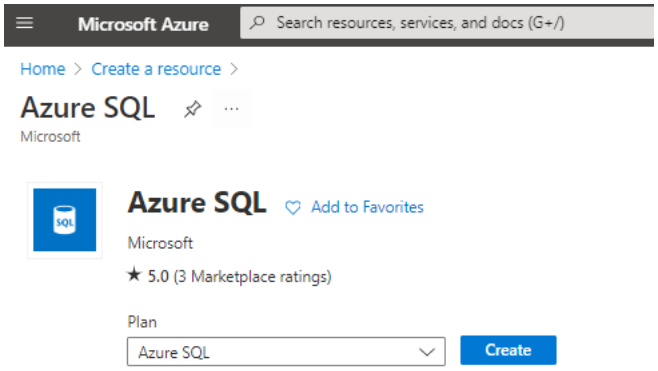

Publish Service Fabric Application
Target profile:
PublishProfiles\Cloud.xml
Create Service Fabric Cluster
Cluster
Certificate
VM Detail
Advanced
Cluster name:
hospitalmanagementapp
Subscription:
<Loading...>
Location:
<Required>
Number of nodes:
3
Resource group:
New resource group
hospitalmanagementapp-rg
Verify that settings on all tabs are correct.
Create
Cancel
Configure upgrade settings...
Manifest Versions...
Publish
Cancel

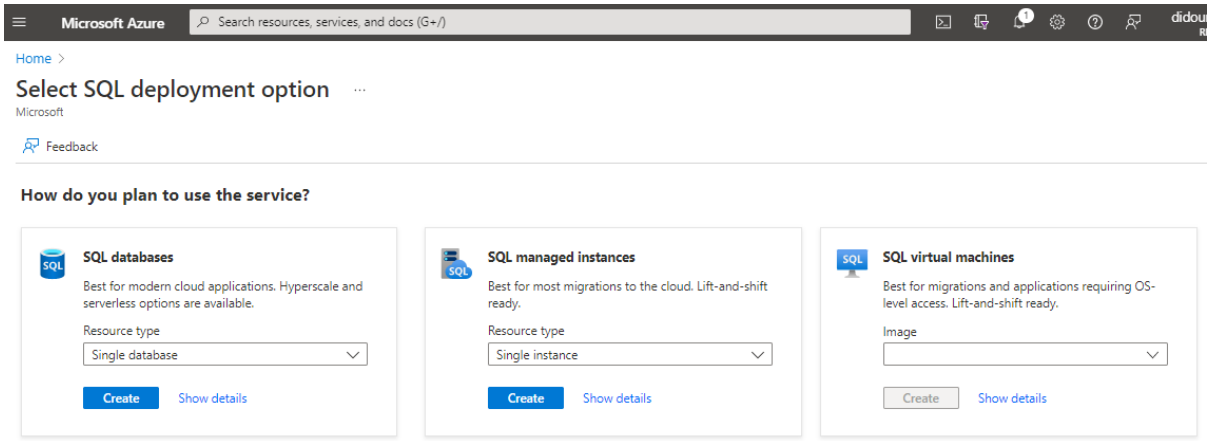

Create a new Service Fabric service
collections framework.
Hosted Containers and Applications
Guest Executable
Run a self-contained application (such as a Node.js, Java, or native application) in your Service Fabric cluster.
Container
Run a container image that exists in a registry (for example, Azure Container Registry) in your Service Fabric cluster.
.NET Framework
Stateless Service
Build a .NET Framework stateless service.
Stateful Service
Build a stateful .NET Framework service with persistent internal state using the reliable collections framework.
Actor Service
Build a .NET Framework service using the Virtual Actor pattern.
Stateless ASP.NET Core
Service name
Guest Container1
Image name
<Required>
User name
Host port
Container port
Setup a machine for containers
Optimize project layout for ARM deployment. Learn More
Help me choose a project template
Back
Create

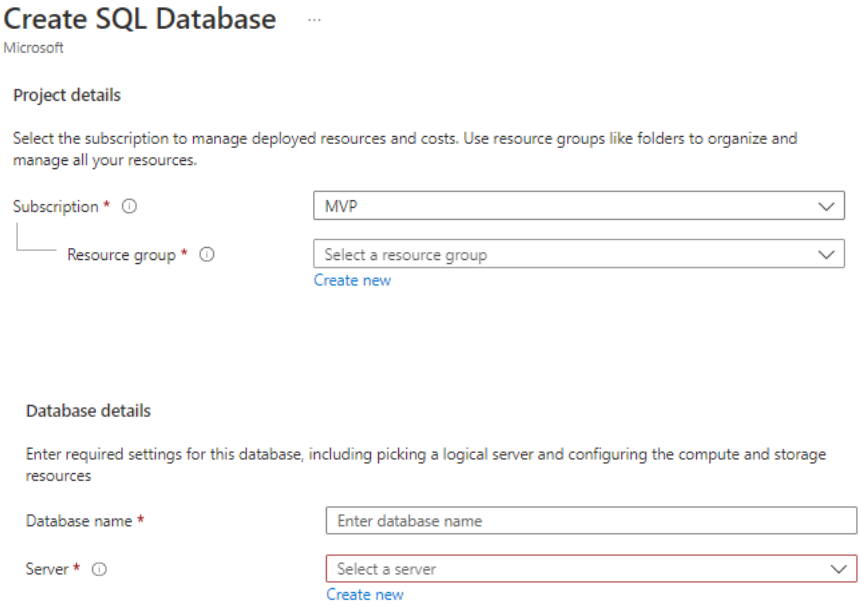
Chapter 6: Introduction to Application Data



Chapter 7: Working with Azure SQL Database







Home > Select SQL deployment option > Create SQL Database >

Create SQL Database Server

Microsoft

Server details

Enter required settings for this server, including providing a name and location. This server will be created in the same subscription and resource group as your database.

Server name *: Enter server name .database.windows.net

Location *: (US) East US

Authentication

Select your preferred authentication methods for accessing this server. Create a server admin login and password to access your server with SQL authentication, select only Azure AD authentication Learn more using an existing Azure AD user, group, or application as Azure AD admin Learn more , or select both SQL and Azure AD authentication.

Authentication method:
- (•) Use only Azure Active Directory (Azure AD) authentication
- ( ) Use both SQL and Azure AD authentication
- ( ) Use SQL authentication

Set Azure AD admin *: **Not Selected**
Set admin

Want to use SQL elastic pool? ⓘ: ( ) Yes (•) No

Workload environment:
- ( ) Development
- (•) Production

Compute + storage * ⓘ: **General Purpose**
Standard-series (Gen5), 2 vCores, 32 GB storage, zone redundant disabled
Configure database

Service and compute tier

Select from the available tiers based on the needs of your workload. The vCore model provides a wide range of configuration controls and offers Hyperscale and Serverless to automatically scale your database based on your workload needs. Alternately, the DTU model provides set price/performance packages to choose from for easy configuration. Learn more

Service tier: General Purpose (Scalable compute and storage options)
Compare service tiers

Compute tier:
- (•) **Provisioned** - Compute resources are pre-allocated. Billed per hour based on vCores configured.
- ( ) **Serverless** - Compute resources are auto-scaled. Billed per second based on vCores used.

Compute Hardware

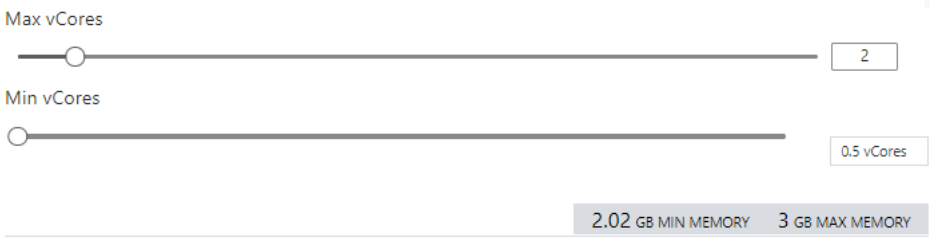
Select the hardware configuration based on your workload requirements. Availability of compute optimized, memory optimized, and confidential computing hardware depends on the region, service tier, and compute tier.

Hardware Configuration: **Standard-series (Gen5)**
up to 80 vCores, up to 415.23 GB memory
Change configuration

Cost summary

General Purpose (GP_Gen5_2)	
Cost per **vCore** (in EUR) [1]	93.71
vCores selected	x 2
Cost per **GB** (in EUR)	0.10
Max storage selected (in GB)	x 41.6
ESTIMATED COST / MONTH	191.45 EUR

NOTES



Network connectivity

Choose an option for configuring connectivity to your server via public endpoint or private endpoint. Choosing no access creates with defaults and you can configure connection method after server creation. Learn more

Connectivity method *

- No access
- Public endpoint
- Private endpoint

Firewall rules

Setting 'Allow Azure services and resources to access this server' to Yes allows communications from all resources inside the Azure boundary, that may or may not be part of your subscription. Learn more
Setting 'Add current client IP address' to Yes will add an entry for your client IP address to the server firewall.

Allow Azure services and resources to access this server * — No / Yes

Add current client IP address * — No / Yes

Basics | Networking | Security | Additional settings | Tags | Review + create

Customize additional configuration parameters including collation & sample data.

Data source

Start with a blank database, restore from a backup or select sample data to populate your new database.

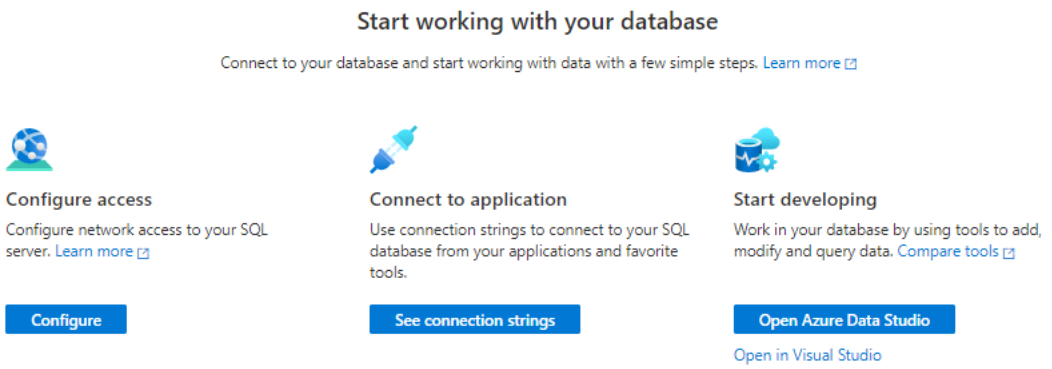
Use existing data * — None / Backup / Sample

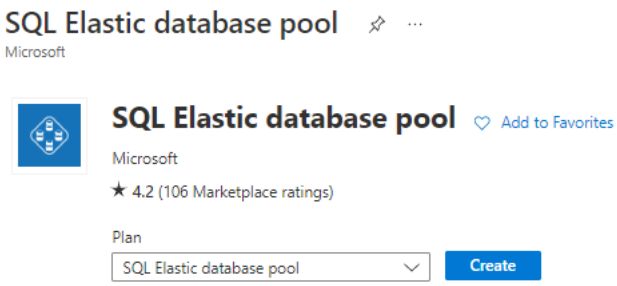
AdventureWorksLT will be created as the sample database.

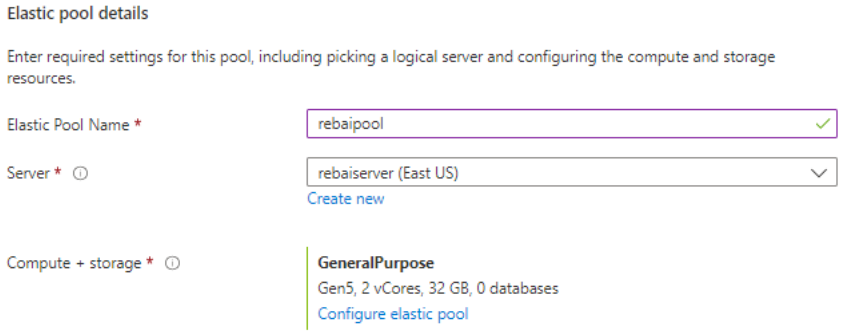
Database collation

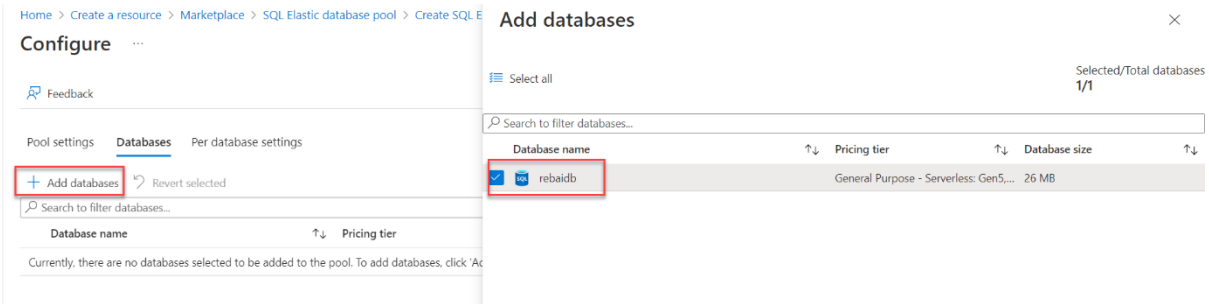
Database collation defines the rules that sort and compare data, and cannot be changed after database creation. The default database collation is SQL_Latin1_General_CP1_CI_AS. Learn more

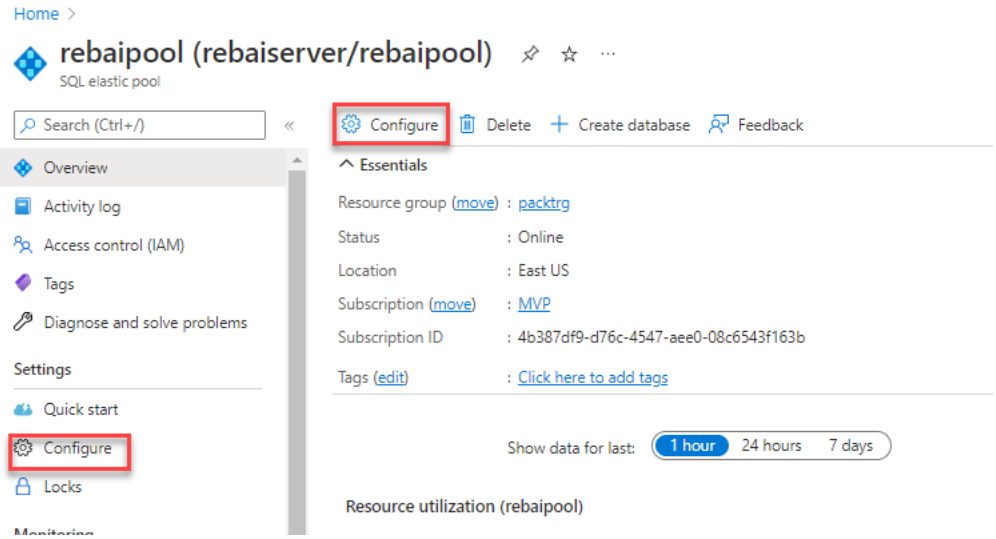
Collation — SQL_Latin1_General_CP1_CI_AS

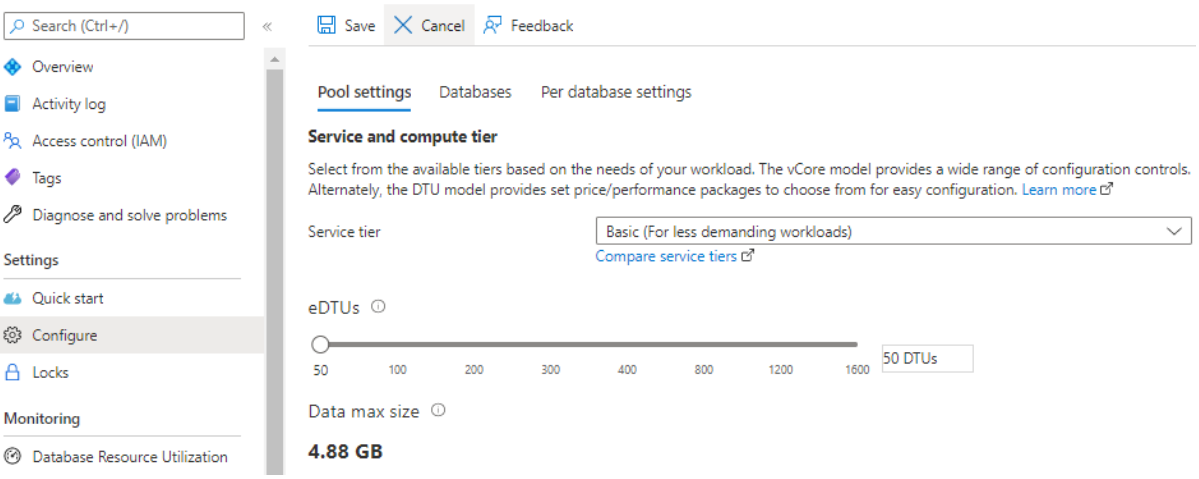

Start working with your database
Connect to your database and start working with data with a few simple steps. Learn more
Configure access
Configure network access to your SQL server. Learn more
Configure
Connect to application
Use connection strings to connect to your SQL database from your applications and favorite tools.
See connection strings
Start developing
Work in your database by using tools to add, modify and query data. Compare tools
Open Azure Data Studio
Open in Visual Studio

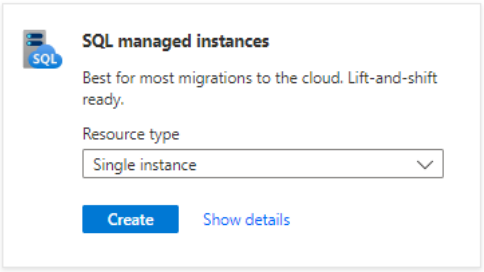

SQL Elastic database pool
Microsoft
SQL Elastic database pool
Add to Favorites
Microsoft
★ 4.2 (106 Marketplace ratings)
Plan
SQL Elastic database pool
Create

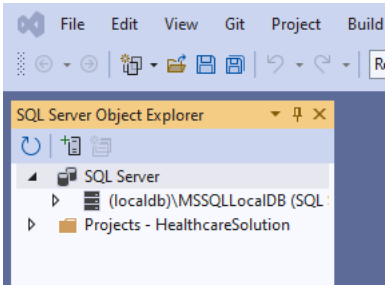

Elastic pool details
Enter required settings for this pool, including picking a logical server and configuring the compute and storage resources.
Elastic Pool Name *
rebaipool
Server *
rebaiserver (East US)
Create new
Compute + storage *
GeneralPurpose
Gen5, 2 vCores, 32 GB, 0 databases
Configure elastic pool

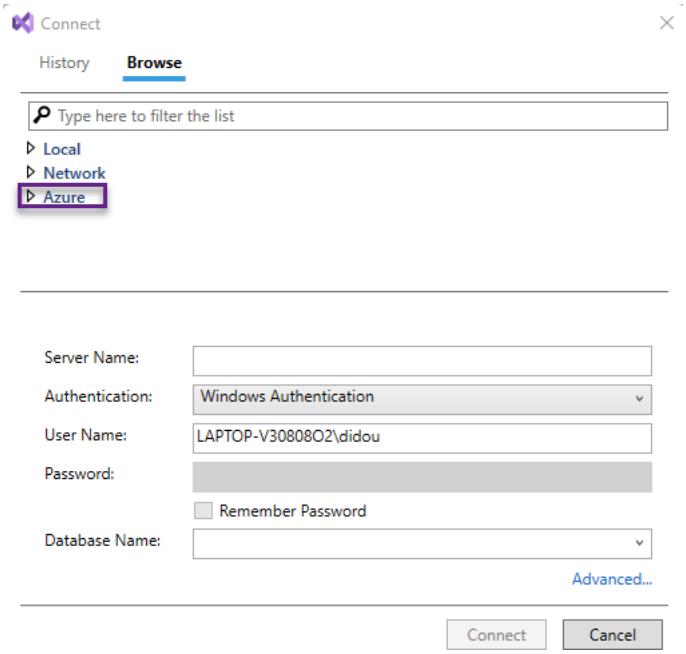

Home > Create a resource > Marketplace > SQL Elastic database pool > Create SQL E
Configure
Feedback
Pool settings
Databases
Per database settings
Add databases
Revert selected
Search to filter databases...
Database name
Pricing tier
Currently, there are no databases selected to be added to the pool. To add databases, click 'Ac
Add databases
Select all
Selected/Total databases
1/1
Search to filter databases...
Database name
Pricing tier
Database size
rebaidb
General Purpose - Serverless: Gen5,...
26 MB

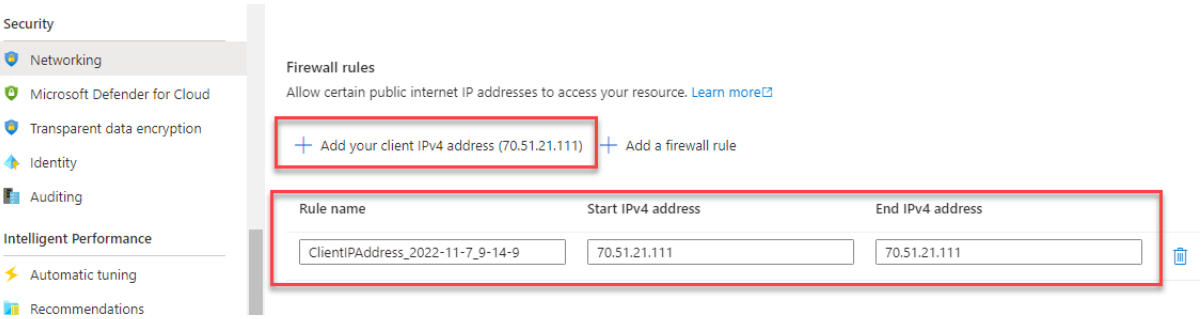

Home
rebaipool (rebaiserver/rebaipool)
SQL elastic pool
Search (Ctrl+/)
Configure
Delete
Create database
Feedback
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Settings
Quick start
Configure
Locks
Essentials
Resource group (move) : packtrg
Status : Online
Location : East US
Subscription (move) : MVP
Subscription ID : 4b387df9-d76c-4547-aee0-08c6543f163b
Tags (edit) : Click here to add tags
Show data for last: 1 hour 24 hours 7 days
Resource utilization (rebaipool)

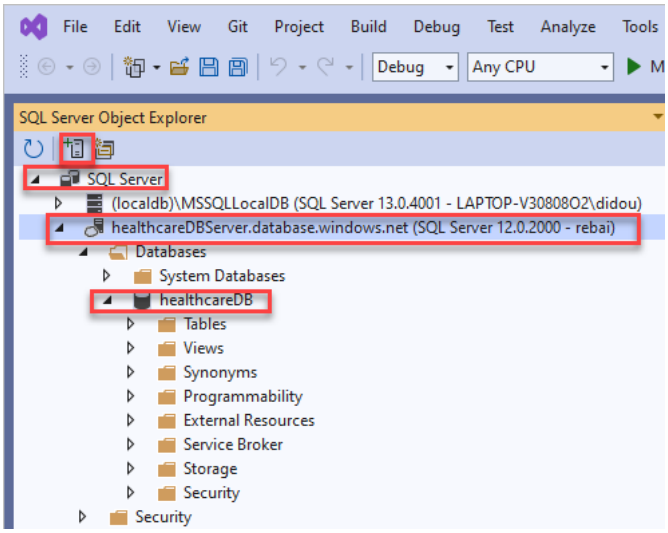

Search (Ctrl+/)
Save
Cancel
Feedback
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Settings
Quick start
Configure
Locks
Monitoring
Database Resource Utilization
Pool settings
Databases
Per database settings
Service and compute tier
Select from the available tiers based on the needs of your workload. The vCore model provides a wide range of configuration controls. Alternately, the DTU model provides set price/performance packages to choose from for easy configuration. Learn more
Service tier
Basic (For less demanding workloads)
Compare service tiers
eDTUs
50 100 200 300 400 800 1200 1600
50 DTUs
Data max size
4.88 GB

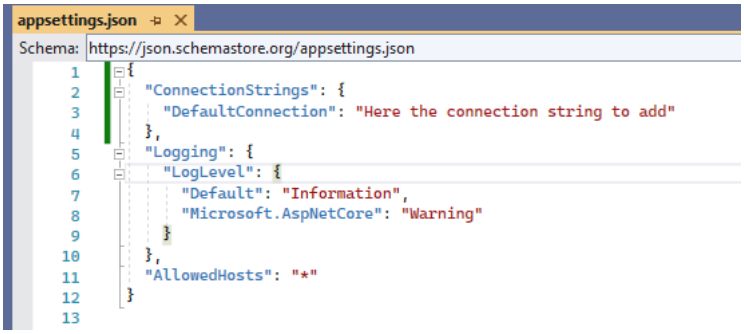

SQL managed instances
Best for most migrations to the cloud. Lift-and-shift ready.
Resource type
Single instance
Create
Show details


File Edit View Git Project Build
SQL Server Object Explorer
SQL Server
(localdb)\MSSQLLocalDB (SQL
Projects - HealthcareSolution

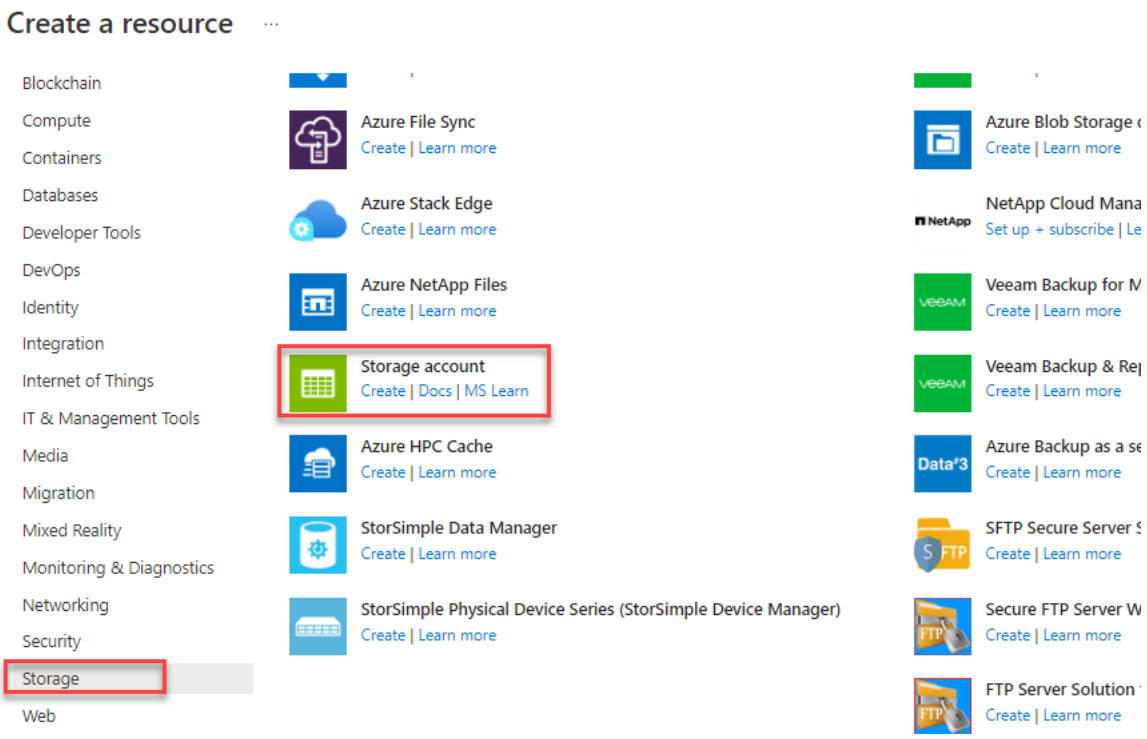

Connect
History
Browse
Type here to filter the list
Local
Network
Azure
Server Name:
Authentication:
Windows Authentication
User Name:
LAPTOP-V30808O2\didou
Password:
Remember Password
Database Name:
Advanced...
Connect
Cancel

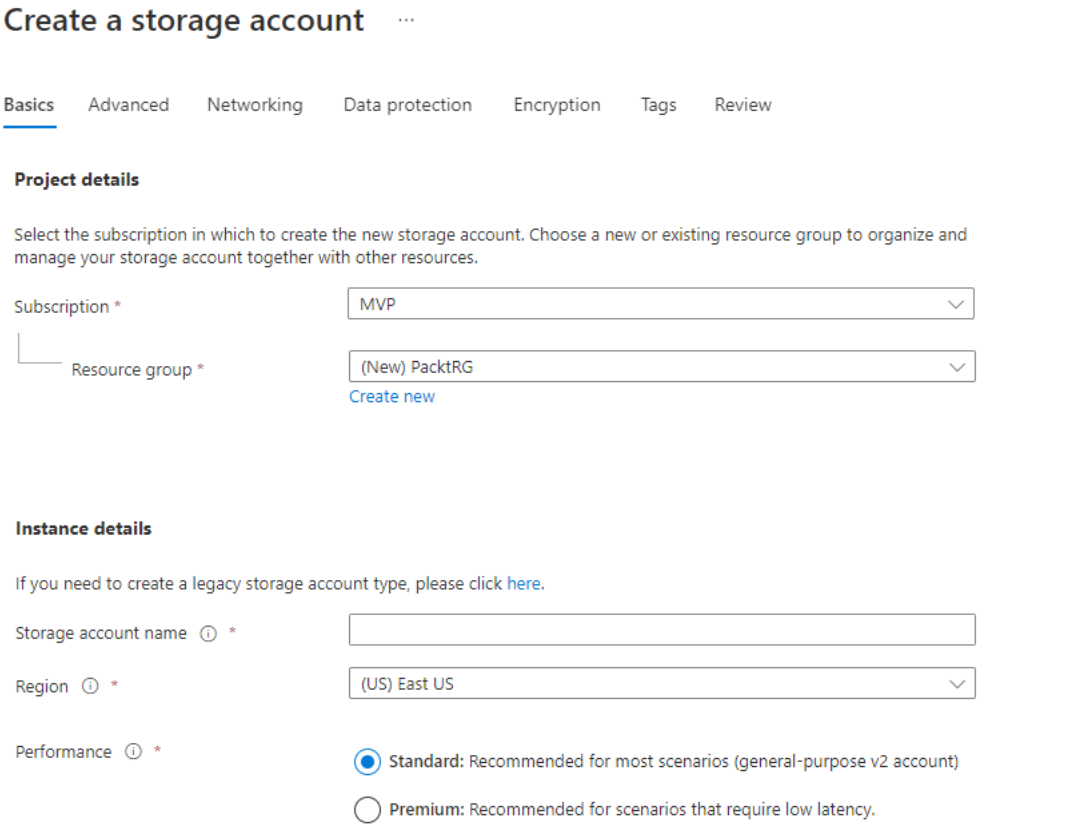

Security
Networking
Microsoft Defender for Cloud
Transparent data encryption
Identity
Auditing
Intelligent Performance
Automatic tuning
Recommendations
Firewall rules
Allow certain public internet IP addresses to access your resource. Learn more
Add your client IPv4 address (70.51.21.111)
Add a firewall rule
Rule name
Start IPv4 address
End IPv4 address
ClientIPAddress_2022-11-7_9-14-9
70.51.21.111
70.51.21.111

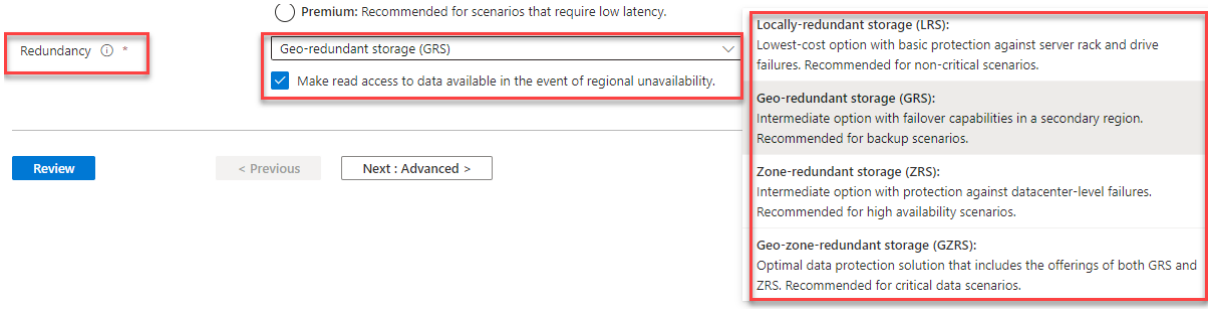

File
Edit
View
Git
Project
Build
Debug
Test
Analyze
Tools
Debug
Any CPU
SQL Server Object Explorer
SQL Server
(localdb)\MSSQLLocalDB (SQL Server 13.0.4001 - LAPTOP-V30808O2\didou)
healthcareDBServer.database.windows.net (SQL Server 12.0.2000 - rebai)
Databases
System Databases
healthcareDB
Tables
Views
Synonyms
Programmability
External Resources
Service Broker
Storage
Security
Security

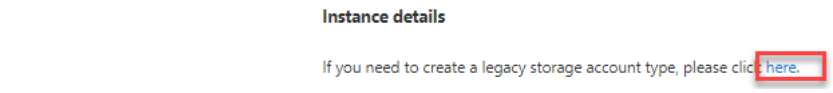

appsettings.json
Schema: https://json.schemastore.org/appsettings.json
{
"ConnectionStrings": {
"DefaultConnection": "Here the connection string to add"
},
"Logging": {
"LogLevel": {
"Default": "Information",
"Microsoft.AspNetCore": "Warning"
}
},
"AllowedHosts": "*"
}

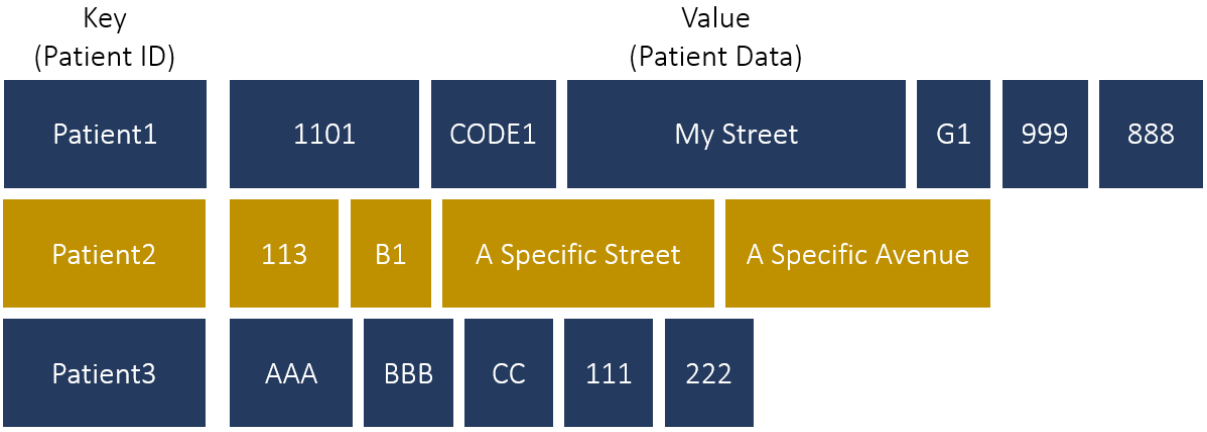
Chapter 8: Working with Azure Storage

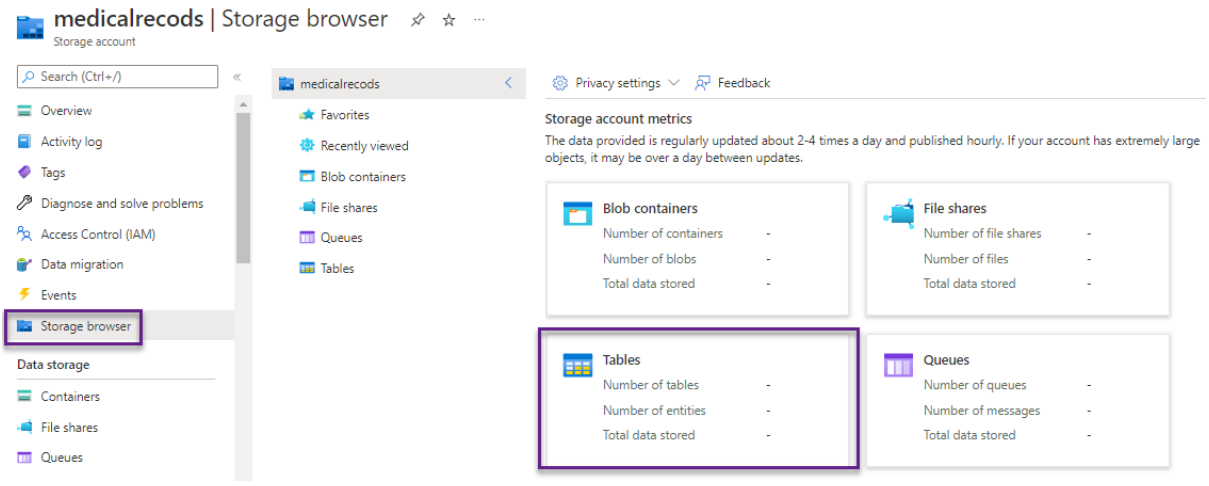


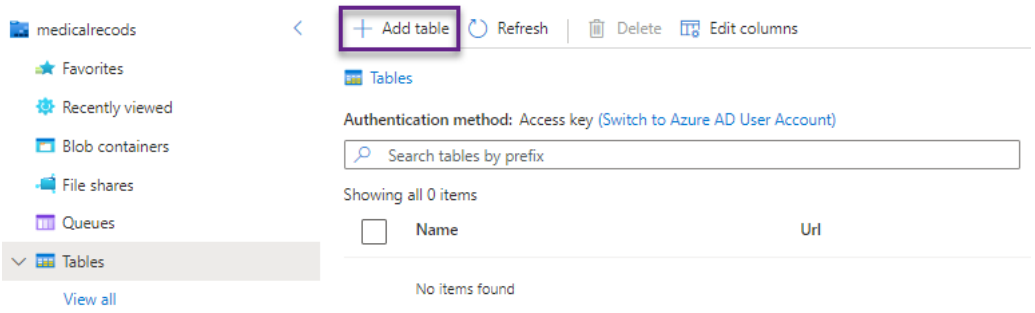


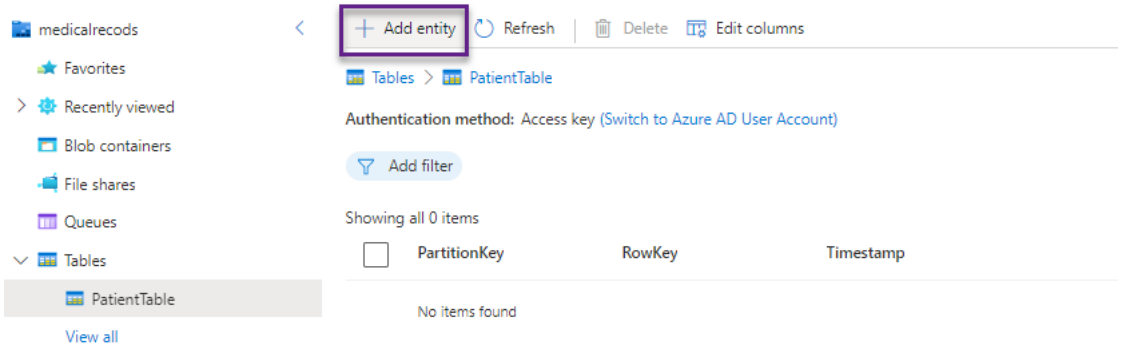

Premium: Recommended for scenarios that require low latency.
Redundancy
Geo-redundant storage (GRS)
Make read access to data available in the event of regional unavailability.
Review
< Previous
Next : Advanced >
Locally-redundant storage (LRS):
Lowest-cost option with basic protection against server rack and drive failures. Recommended for non-critical scenarios.
Geo-redundant storage (GRS):
Intermediate option with failover capabilities in a secondary region. Recommended for backup scenarios.
Zone-redundant storage (ZRS):
Intermediate option with protection against datacenter-level failures. Recommended for high availability scenarios.
Geo-zone-redundant storage (GZRS):
Optimal data protection solution that includes the offerings of both GRS and ZRS. Recommended for critical data scenarios.

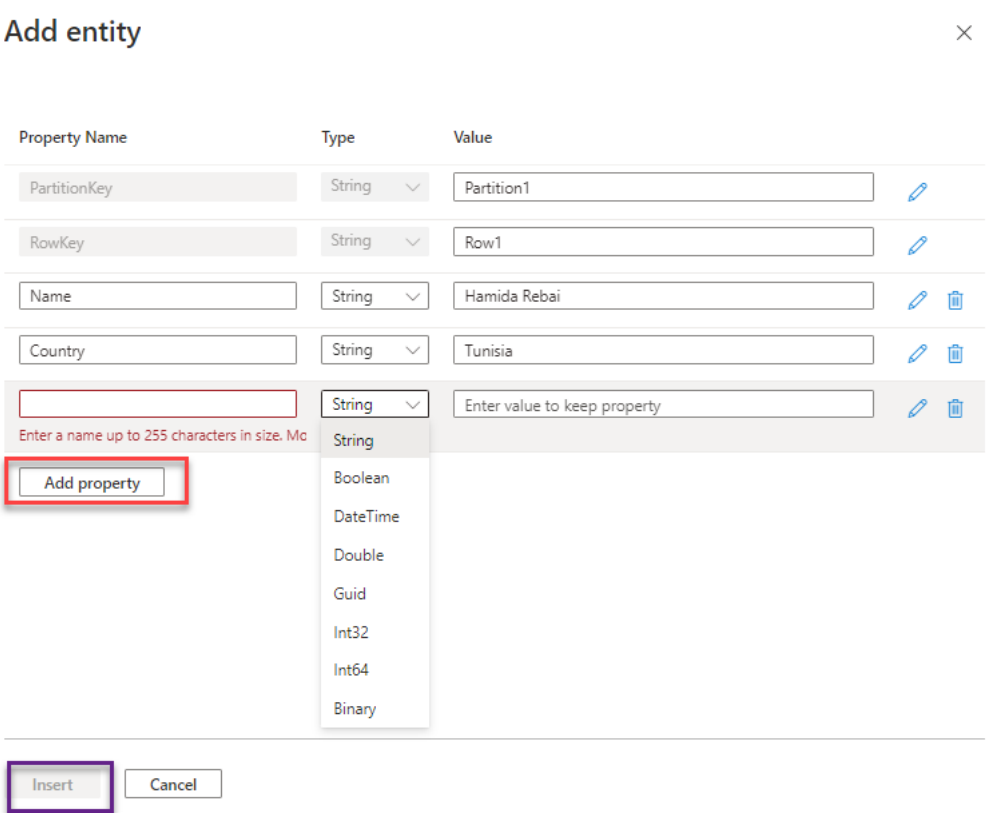

Instance details
If you need to create a legacy storage account type, please click here.

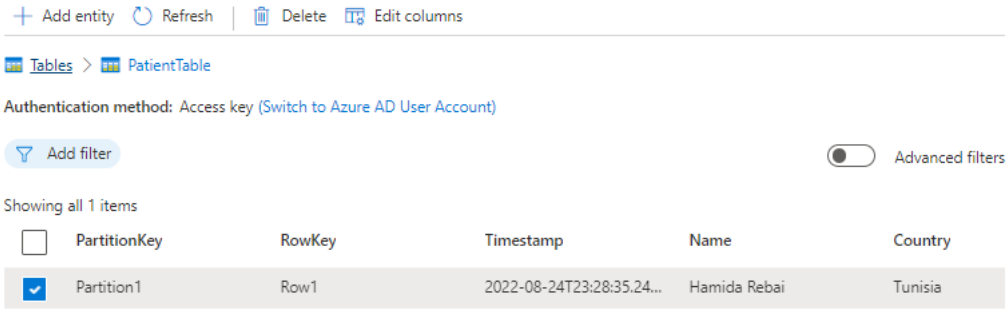

Key
(Patient ID)
Value
(Patient Data)
Patient1
1101
CODE1
My Street
G1
999
888
Patient2
113
B1
A Specific Street
A Specific Avenue
Patient3
AAA
BBB
CC
111
222

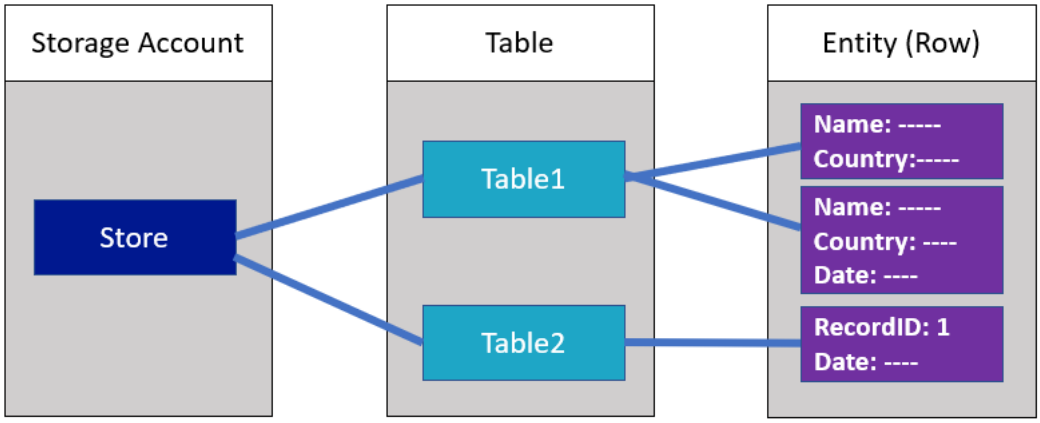

medicalrecods | Storage browser
Storage account
Search (Ctrl+/)
Overview
Activity log
Tags
Diagnose and solve problems
Access Control (IAM)
Data migration
Events
Storage browser
Data storage
Containers
File shares
Queues
medicalrecods
Favorites
Recently viewed
Blob containers
File shares
Queues
Tables
Privacy settings
Feedback
Storage account metrics
The data provided is regularly updated about 2-4 times a day and published hourly. If your account has extremely large objects, it may be over a day between updates.
Blob containers
Number of containers -
Number of blobs -
Total data stored -
File shares
Number of file shares -
Number of files -
Total data stored -
Tables
Number of tables -
Number of entities -
Total data stored -
Queues
Number of queues -
Number of messages -
Total data stored -

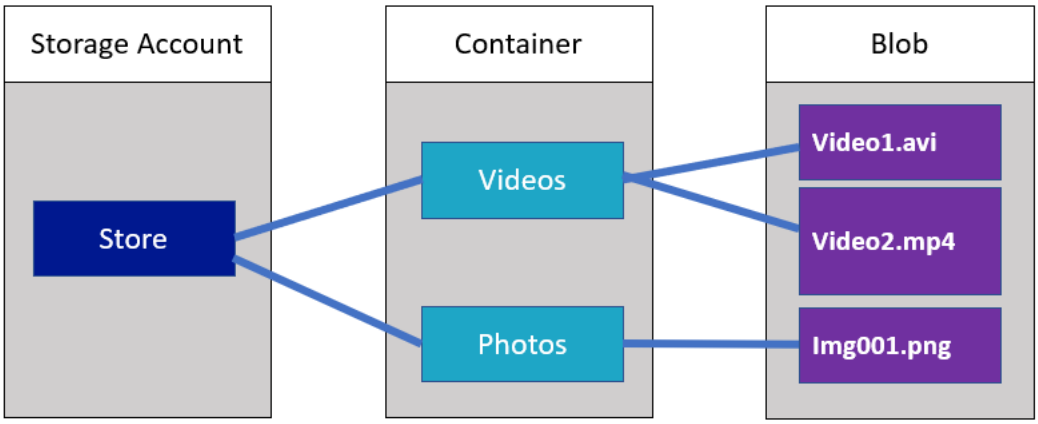

medicalrecods
Favorites
Recently viewed
Blob containers
File shares
Queues
Tables
View all
Add table
Refresh
Delete
Edit columns
Tables
Authentication method: Access key (Switch to Azure AD User Account)
Search tables by prefix
Showing all 0 items
Name
Url
No items found

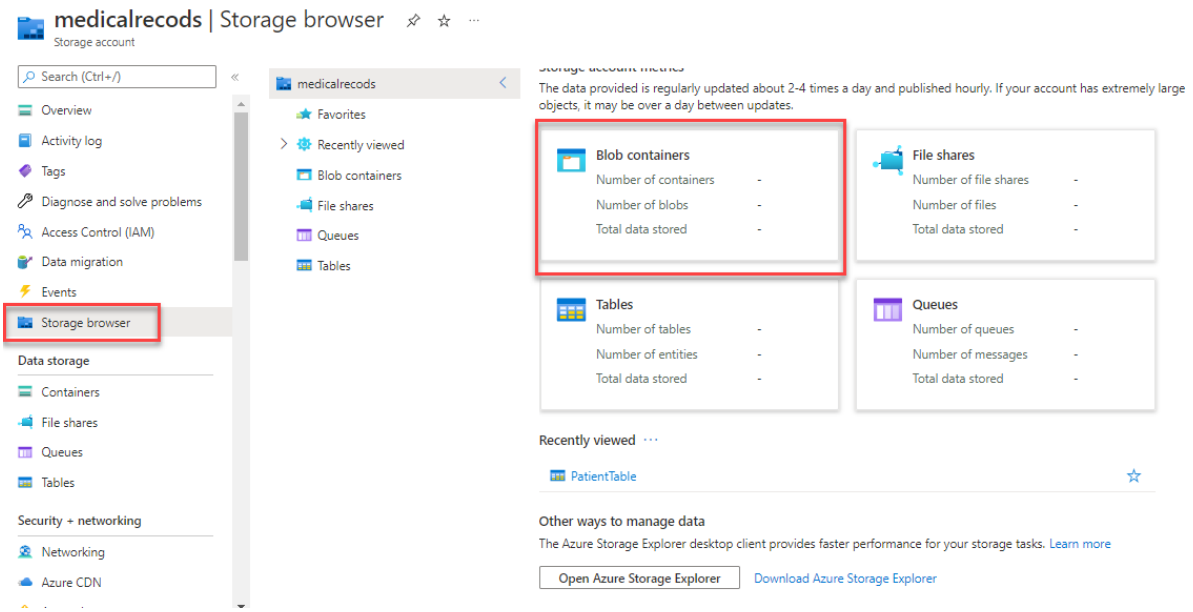

medicalrecods
Favorites
Recently viewed
Blob containers
File shares
Queues
Tables
PatientTable
View all
Add entity
Refresh
Delete
Edit columns
Tables > PatientTable
Authentication method: Access key (Switch to Azure AD User Account)
Add filter
Showing all 0 items
PartitionKey
RowKey
Timestamp
No items found

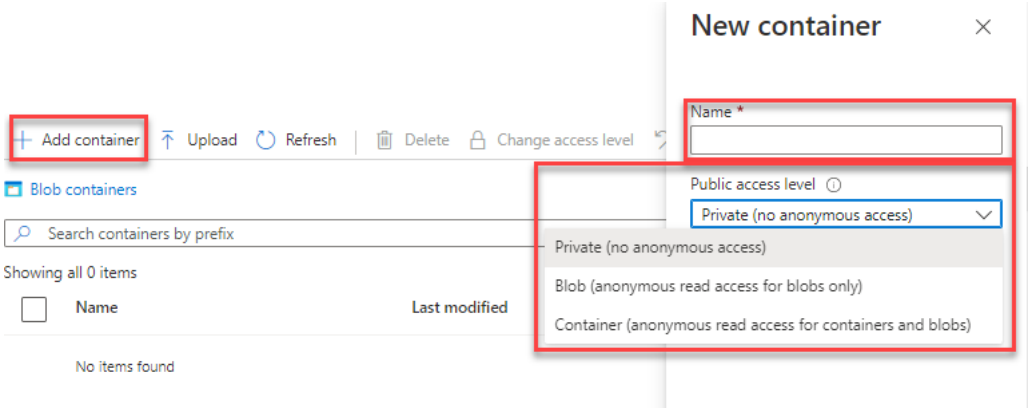

Add entity
Property Name
Type
Value
PartitionKey
String
Partition1
RowKey
String
Row1
Name
String
Hamida Rebai
Country
String
Tunisia
String
Enter value to keep property
Enter a name up to 255 characters in size. Mo
String
Boolean
DateTime
Double
Guid
Int32
Int64
Binary
Add property
Insert
Cancel

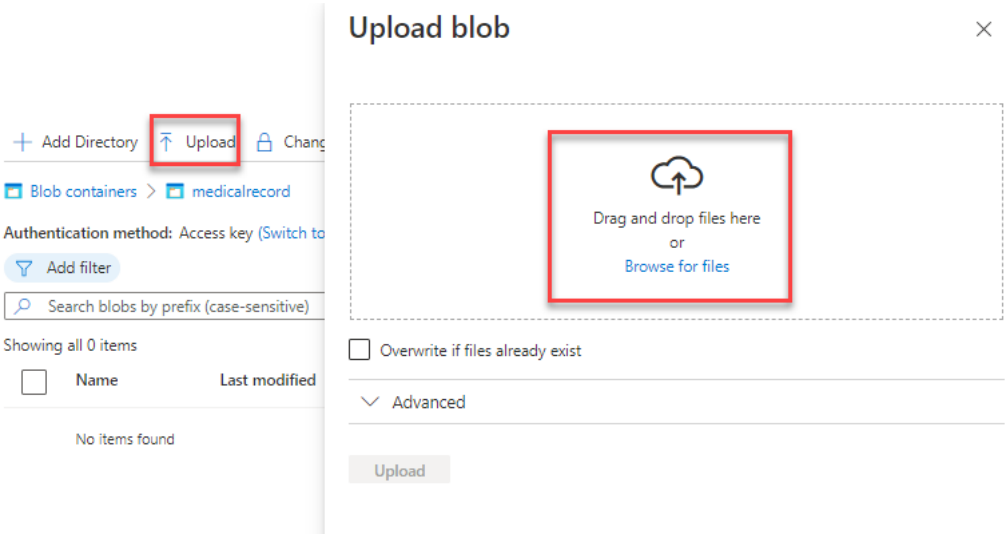

Add entity
Refresh
Delete
Edit columns
Tables
PatientTable
Authentication method: Access key (Switch to Azure AD User Account)
Add filter
Advanced filters
Showing all 1 items
PartitionKey
RowKey
Timestamp
Name
Country
Partition1
Row1
2022-08-24T23:28:35.24...
Hamida Rebai
Tunisia

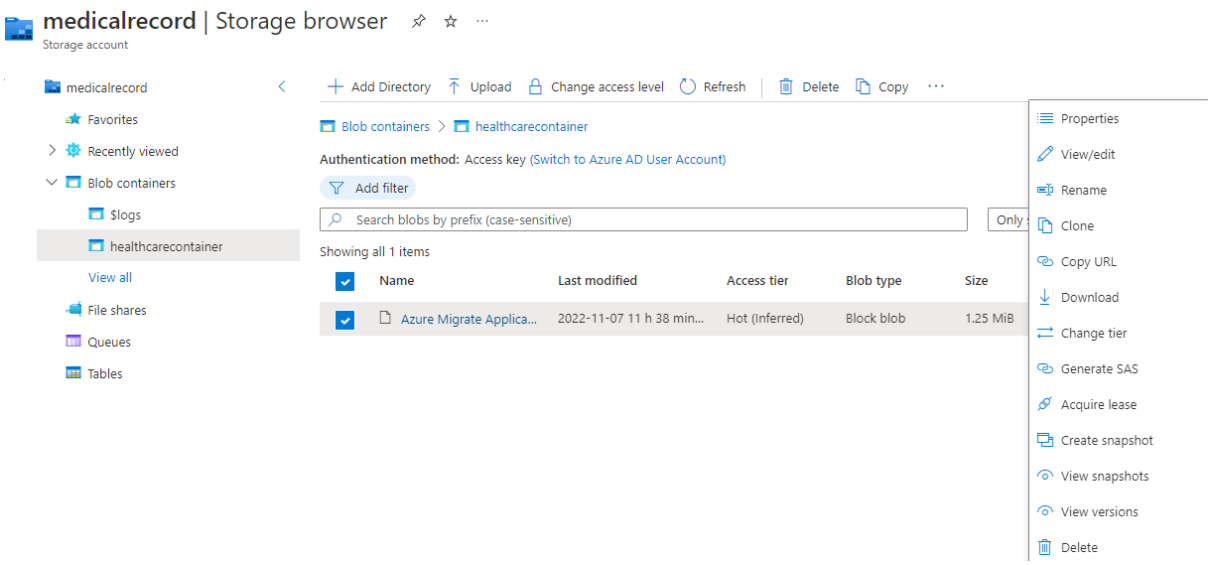

Storage Account
Table
Entity (Row)
Store
Table1
Table2
Name: -----
Country:-----
Name: -----
Country: ----
Date: ----
RecordID: 1
Date: ----

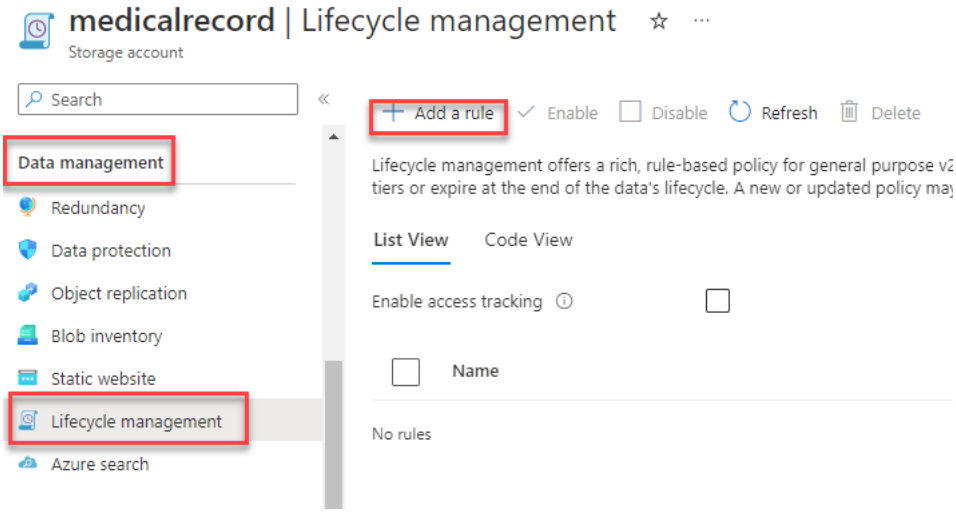

Storage Account
Container
Blob
Store
Videos
Photos
Video1.avi
Video2.mp4
Img001.png


medicalrecods | Storage browser
Storage account
Search (Ctrl+/)
Overview
Activity log
Tags
Diagnose and solve problems
Access Control (IAM)
Data migration
Events
Storage browser
Data storage
Containers
File shares
Queues
Tables
Security + networking
Networking
Azure CDN
medicalrecods
Favorites
Recently viewed
Blob containers
File shares
Queues
Tables
The data provided is regularly updated about 2-4 times a day and published hourly. If your account has extremely large objects, it may be over a day between updates.
Blob containers
Number of containers -
Number of blobs -
Total data stored -
File shares
Number of file shares -
Number of files -
Total data stored -
Tables
Number of tables -
Number of entities -
Total data stored -
Queues
Number of queues -
Number of messages -
Total data stored -
Recently viewed
PatientTable
Other ways to manage data
The Azure Storage Explorer desktop client provides faster performance for your storage tasks. Learn more
Open Azure Storage Explorer
Download Azure Storage Explorer


Add container
Upload
Refresh
Delete
Change access level
Blob containers
Search containers by prefix
Showing all 0 items
Name
Last modified
No items found
New container
Name *
Public access level
Private (no anonymous access)
Private (no anonymous access)
Blob (anonymous read access for blobs only)
Container (anonymous read access for containers and blobs)


Add Directory
Upload
Blob containers
medicalrecord
Authentication method: Access key (Switch to
Add filter
Search blobs by prefix (case-sensitive)
Showing all 0 items
Name
Last modified
No items found
Upload blob
Drag and drop files here
or
Browse for files
Overwrite if files already exist
Advanced
Upload


medicalrecord | Storage browser
Storage account
medicalrecord
Favorites
Recently viewed
Blob containers
$logs
healthcarecontainer
View all
File shares
Queues
Tables
Add Directory
Upload
Change access level
Refresh
Delete
Copy
Blob containers
healthcarecontainer
Authentication method: Access key (Switch to Azure AD User Account)
Add filter
Search blobs by prefix (case-sensitive)
Showing all 1 items
Name
Last modified
Access tier
Blob type
Size
Azure Migrate Applica...
2022-11-07 11 h 38 min...
Hot (Inferred)
Block blob
1.25 MiB
Properties
View/edit
Rename
Clone
Copy URL
Download
Change tier
Generate SAS
Acquire lease
Create snapshot
View snapshots
View versions
Delete


medicalrecord | Lifecycle management
Storage account
Search
Data management
Redundancy
Data protection
Object replication
Blob inventory
Static website
Lifecycle management
Azure search
Add a rule
Enable
Disable
Refresh
Delete
Lifecycle management offers a rich, rule-based policy for general purpose v2
tiers or expire at the end of the data's lifecycle. A new or updated policy may
List View
Code View
Enable access tracking
Name
No rules

Hot
Cool
Archive
Delete
LOG
0 days
90 days
180 days
2,555 days

Add a rule ···

A rule is made up of one or more conditions and actions that apply to the entire storage account. Optionally, specify that rules will apply to particular blobs by limiting with filters.

Rule name *

RuleTest

Rule scope *

- (•) Apply rule to all blobs in your storage account
- ( ) Limit blobs with filters

Blob type *

- [x] Block blobs
- [ ] Append blobs

Blob subtype *

- [x] Base blobs
- [ ] Snapshots
- [ ] Versions

Add a rule ···

✓ Details | 2 Base blobs

Lifecycle management uses your rules to automatically move blobs to cooler tiers or to delete them. If you create multiple rules, the associated actions must be implemented in tier order (from hot to cool storage, then archive, then deletion).

If

Base blobs were *

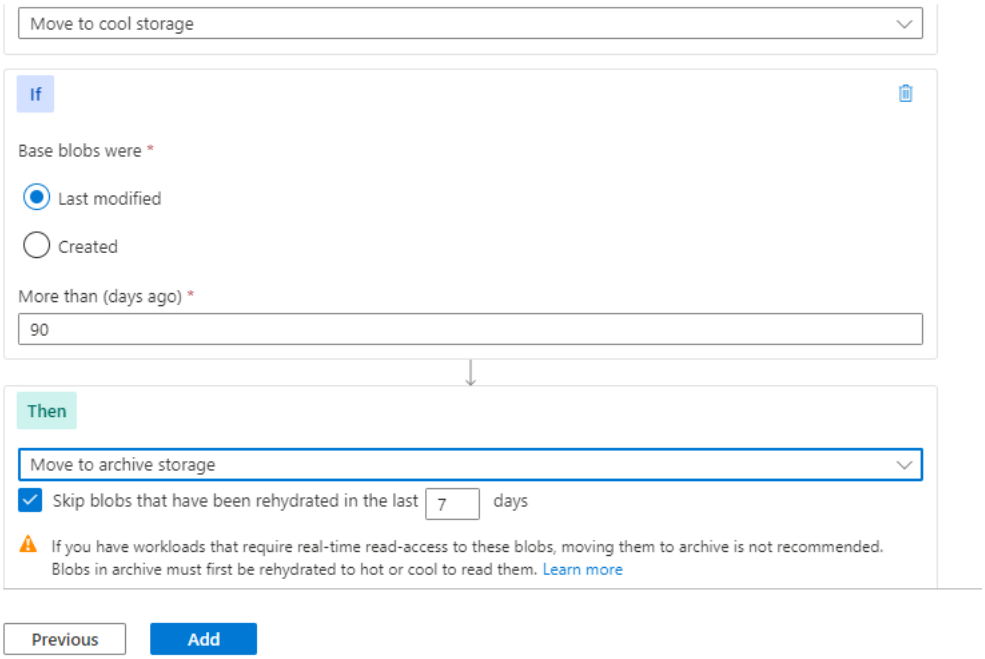
- (•) Last modified
- ( ) Created

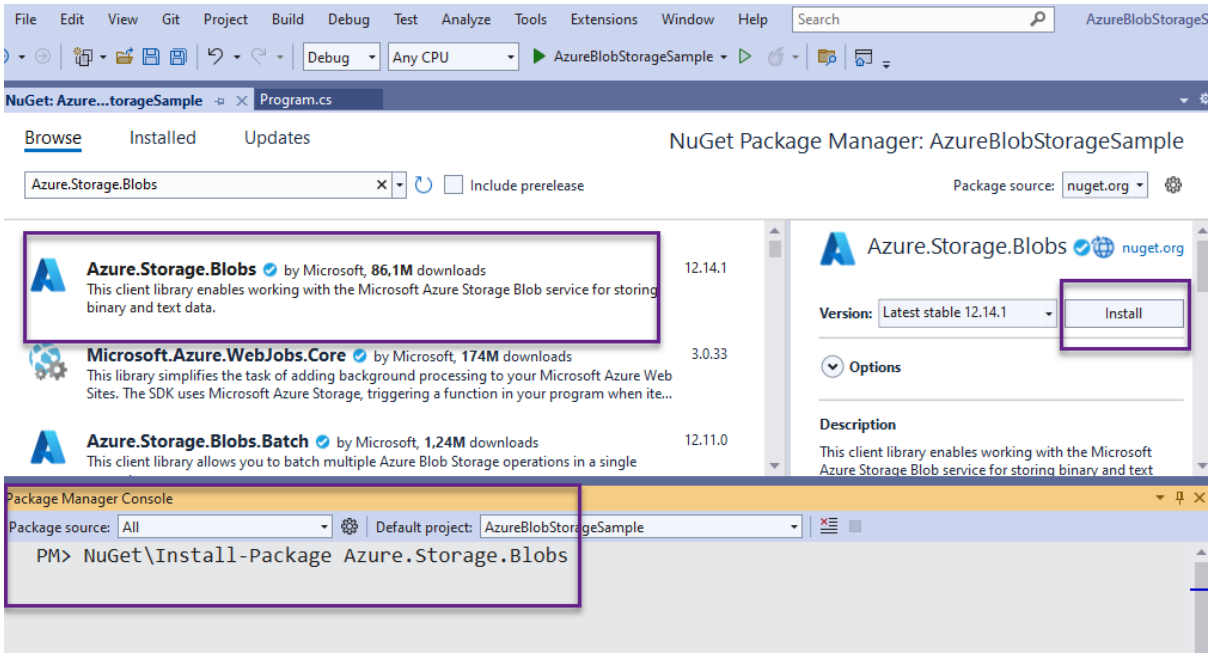
More than (days ago) *

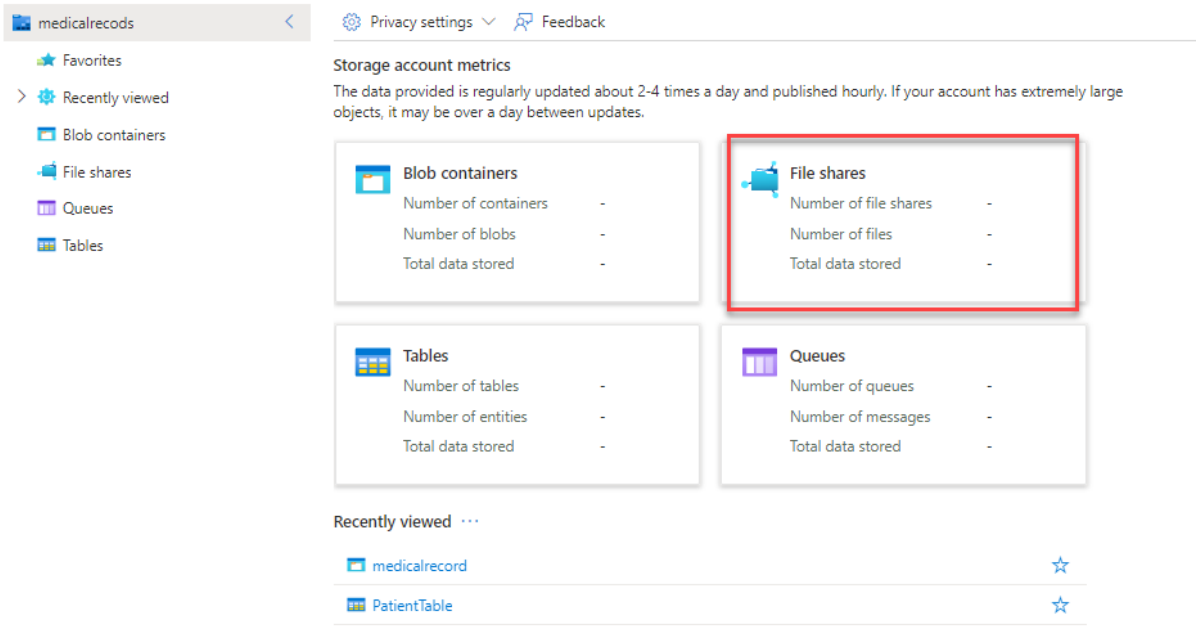
60

Then

Move to cool storage


Move to cool storage
If
Base blobs were *
Last modified
Created
More than (days ago) *
90
Then
Move to archive storage
Skip blobs that have been rehydrated in the last 7 days
If you have workloads that require real-time read-access to these blobs, moving them to archive is not recommended. Blobs in archive must first be rehydrated to hot or cool to read them. Learn more
Previous
Add


File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help
Search
AzureBlobStorageS
Debug
Any CPU
AzureBlobStorageSample
NuGet: Azure...torageSample
Program.cs
Browse
Installed
Updates
NuGet Package Manager: AzureBlobStorageSample
Azure.Storage.Blobs
Include prerelease
Package source: nuget.org
Azure.Storage.Blobs by Microsoft, 86,1M downloads
This client library enables working with the Microsoft Azure Storage Blob service for storing binary and text data.
12.14.1
Microsoft.Azure.WebJobs.Core by Microsoft, 174M downloads
This library simplifies the task of adding background processing to your Microsoft Azure Web Sites. The SDK uses Microsoft Azure Storage, triggering a function in your program when ite...
3.0.33
Azure.Storage.Blobs.Batch by Microsoft, 1,24M downloads
This client library allows you to batch multiple Azure Blob Storage operations in a single
12.11.0
Azure.Storage.Blobs nuget.org
Version: Latest stable 12.14.1
Install
Options
Description
This client library enables working with the Microsoft Azure Storage Blob service for storing binary and text
Package Manager Console
Package source: All
Default project: AzureBlobStorageSample
PM> NuGet\Install-Package Azure.Storage.Blobs


medicalrecods
Favorites
Recently viewed
Blob containers
File shares
Queues
Tables
Privacy settings
Feedback
Storage account metrics
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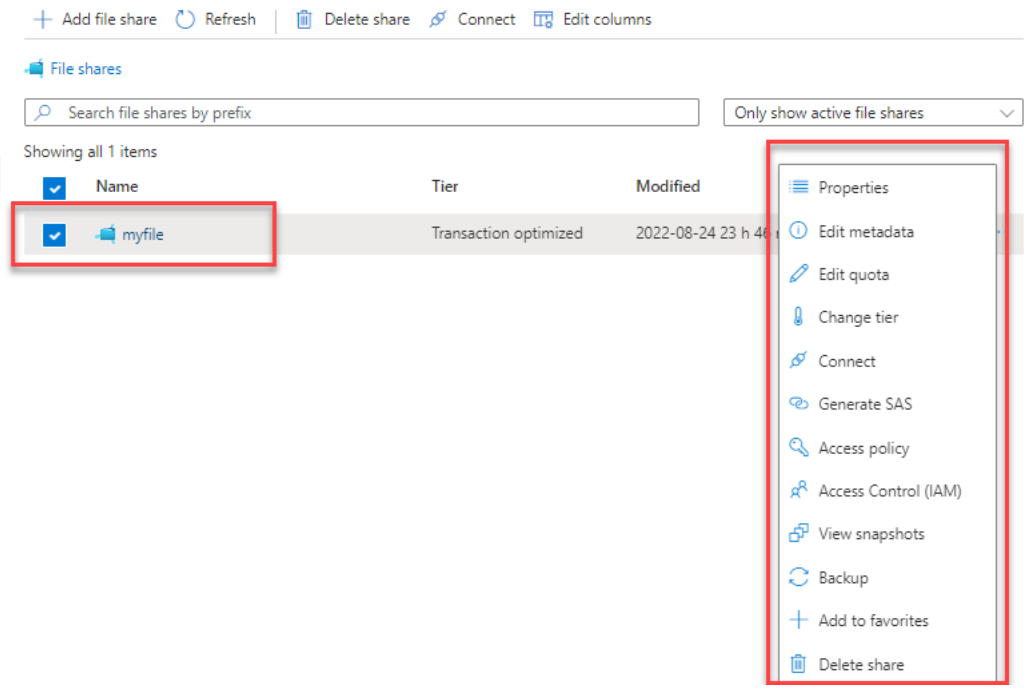
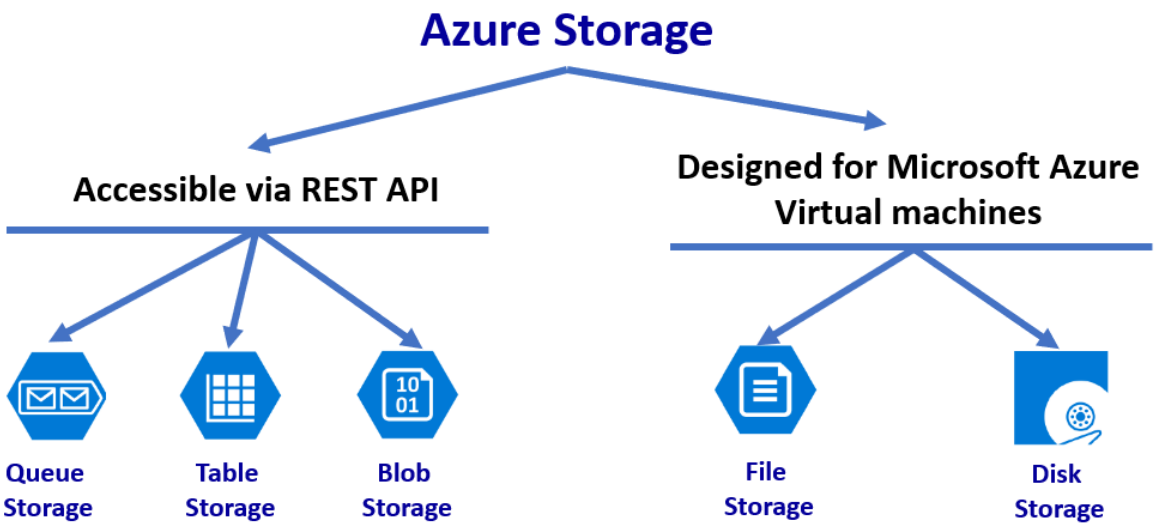
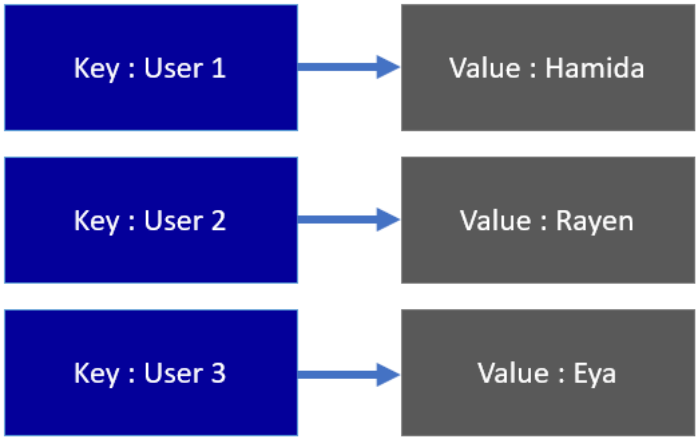
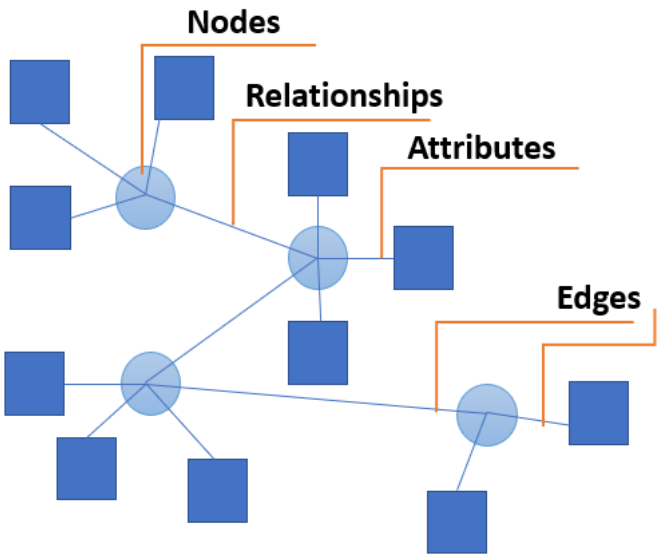
Blob containers
Number of containers -
Number of blobs -
Total data stored -
File shares
Number of file shares -
Number of files -
Total data stored -
Tables
Number of tables -
Number of entities -
Total data stored -
Queues
Number of queues -
Number of messages -
Total data stored -
Recently viewed
medicalrecord
PatientTable

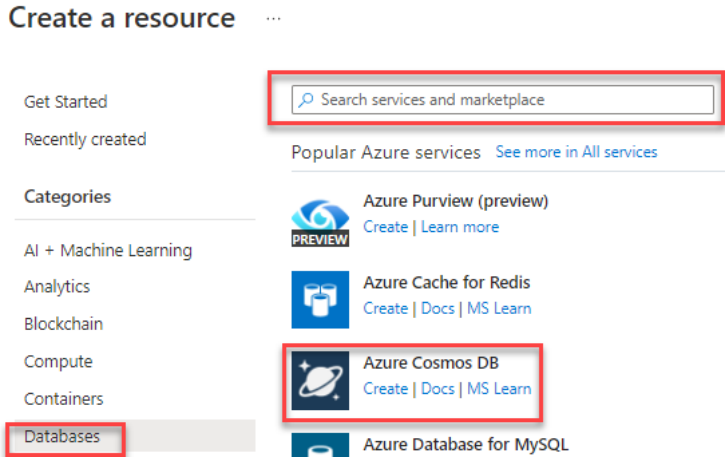

Add file share
Refresh
Delete share
Connect
Edit columns
File shares
Search file shares by prefix
Only show active file shares
Showing all 1 items
Name
Tier
Modified
myfile
Transaction optimized
Properties
Edit metadata
Edit quota
Change tier
Connect
Generate SAS
Access policy
Access Control (IAM)
View snapshots
Backup
Add to favorites
Delete share


Azure Storage
Accessible via REST API
Designed for Microsoft Azure Virtual machines
10
01
Queue Storage
Table Storage
Blob Storage
File Storage
Disk Storage

Chapter 9: Working with Azure Cosmos DB to Manage Database Services







Select API option

Which API best suits your workload?

Azure Cosmos DB is a fully managed NoSQL database service for building scalable, high performance applications. Learn more

To start, select the API to create a new account. The API selection cannot be changed after account creation.

Core (SQL) - Recommended

Azure Cosmos DB's core, or native API for working with documents. Supports fast, flexible development with familiar SQL query language and client libraries for .NET, JavaScript, Python, and Java.

Create Learn more

Azure Cosmos DB API for MongoDB

Fully managed database service for apps written for MongoDB. Recommended if you have existing MongoDB workloads that you plan to migrate to Azure Cosmos DB.

Create Learn more

Cassandra

Fully managed Cassandra database service for apps written for Apache Cassandra. Recommended if you have existing Cassandra workloads that you plan to migrate to Azure Cosmos DB.

Create Learn more

Azure Table

Fully managed database service for apps written for Azure Table storage. Recommended if you have existing Azure Table storage workloads that you plan to migrate to Azure Cosmos DB, but do not want to re-write your application to use the SQL API.

Create Learn more

Gremlin (Graph)

Fully managed graph database service using the Gremlin query language, based on Apache TinkerPop project. Recommended for new workloads that need to store relationships between data.

Create Learn more

Create Azure Cosmos DB Account - Core (SQL)

Basics | Global Distribution | Networking | Backup Policy | Encryption | Tags | Review + create

Azure Cosmos DB is a fully managed NoSQL database service for building scalable, high performance applications. Try it for free, for 30 days w containers included. Learn more

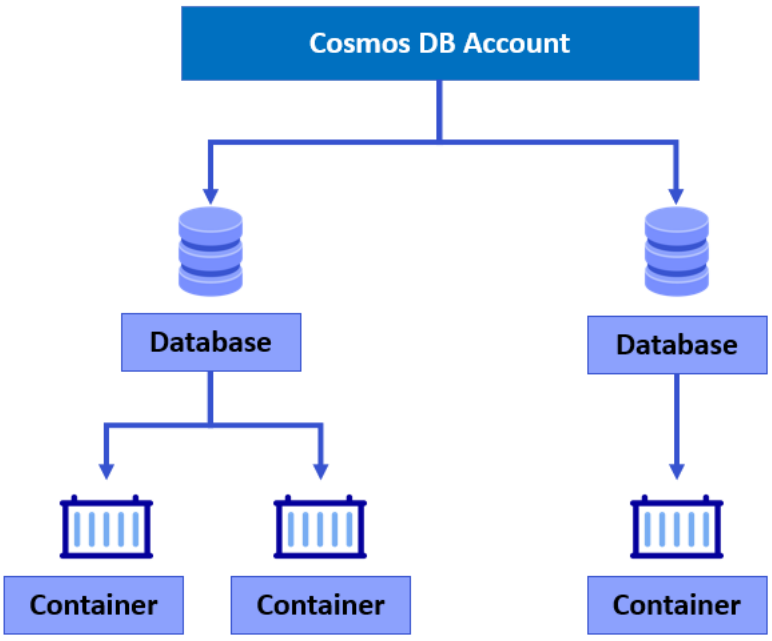
Project Details

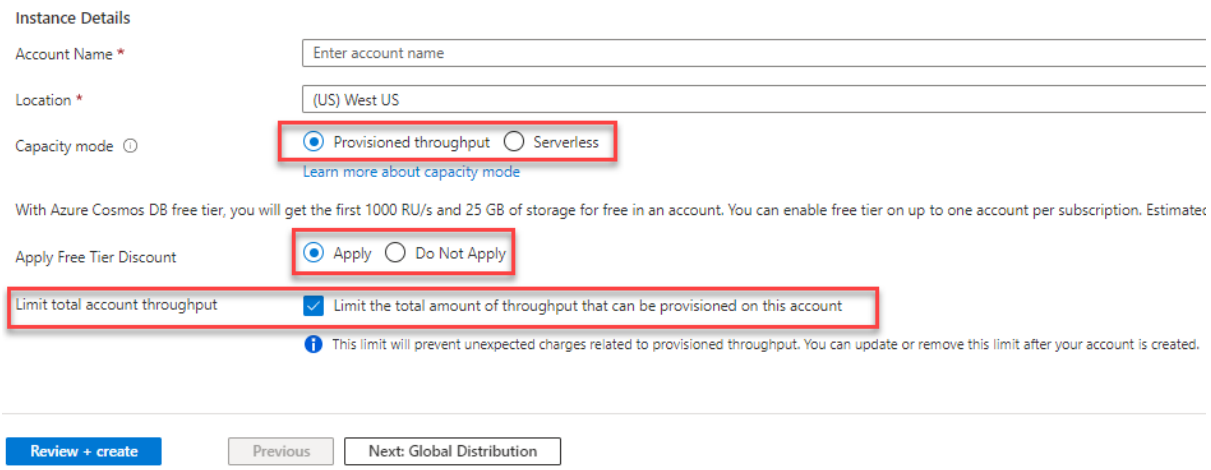
Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

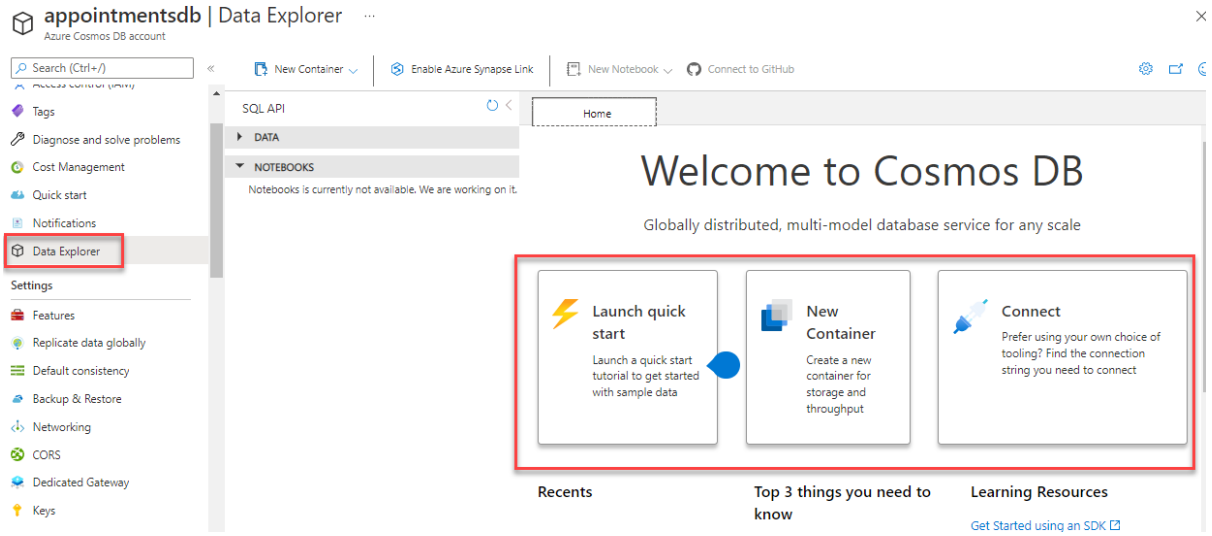
Subscription * MVP

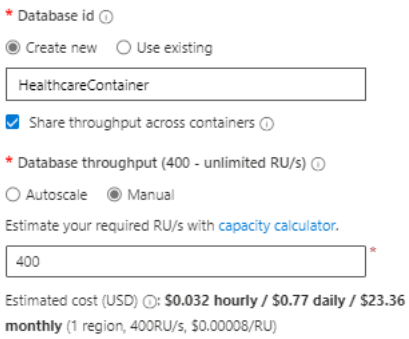
Resource Group *

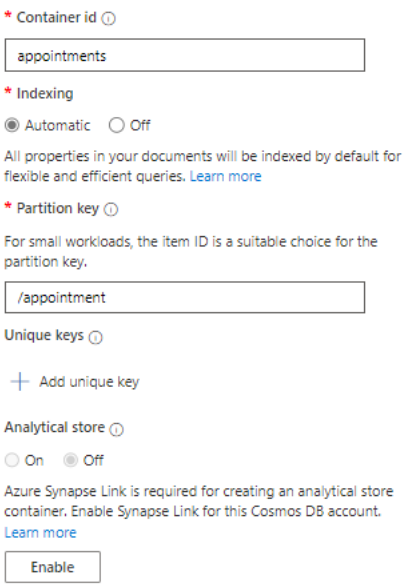
Create new

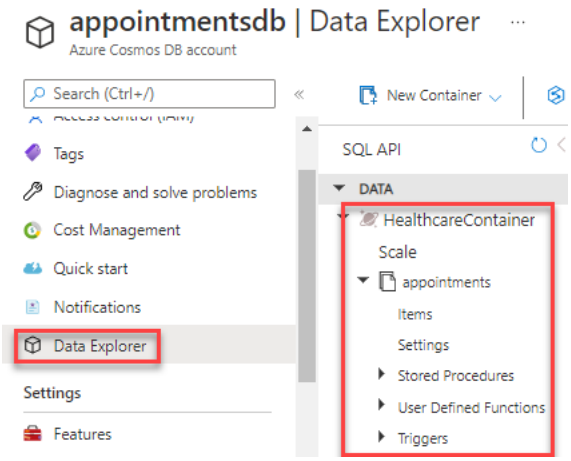


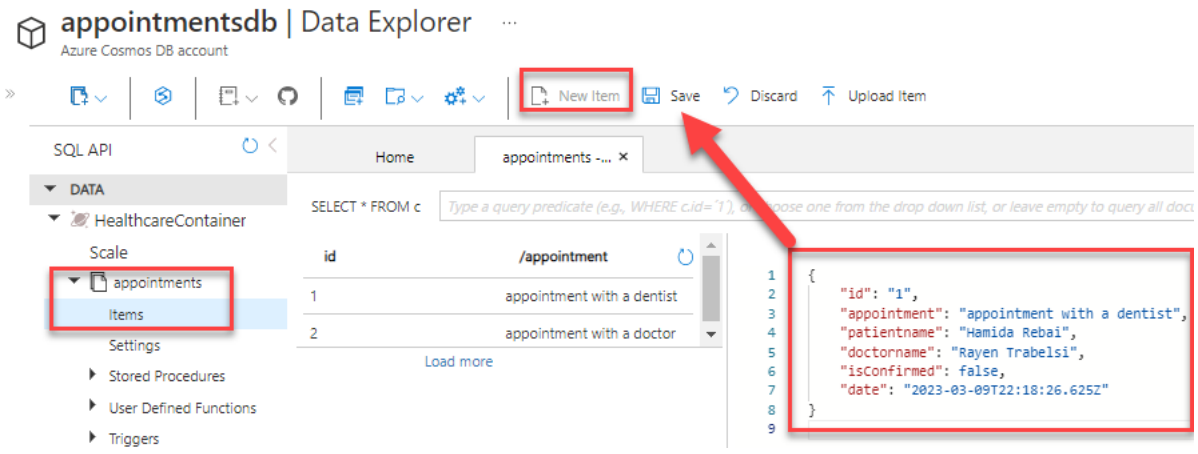

Instance Details
Account Name *
Enter account name
Location *
(US) West US
Capacity mode
Provisioned throughput
Serverless
Learn more about capacity mode
With Azure Cosmos DB free tier, you will get the first 1000 RU/s and 25 GB of storage for free in an account. You can enable free tier on up to one account per subscription. Estimatec
Apply Free Tier Discount
Apply
Do Not Apply
Limit total account throughput
Limit the total amount of throughput that can be provisioned on this account
This limit will prevent unexpected charges related to provisioned throughput. You can update or remove this limit after your account is created.
Review + create
Previous
Next: Global Distribution

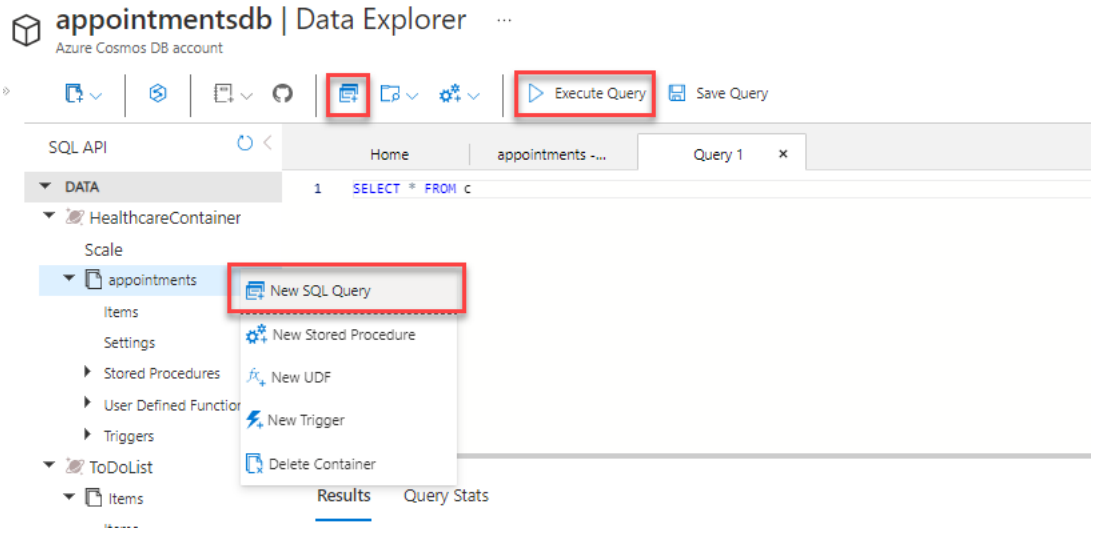

appointmentsdb | Data Explorer
Azure Cosmos DB account
Search (Ctrl+/)
New Container
Enable Azure Synapse Link
New Notebook
Connect to GitHub
Tags
Diagnose and solve problems
Cost Management
Quick start
Notifications
Data Explorer
Settings
Features
Replicate data globally
Default consistency
Backup & Restore
Networking
CORS
Dedicated Gateway
Keys
SQL API
Home
DATA
NOTEBOOKS
Notebooks is currently not available. We are working on it.
Welcome to Cosmos DB
Globally distributed, multi-model database service for any scale
Launch quick start
Launch a quick start tutorial to get started with sample data
New Container
Create a new container for storage and throughput
Connect
Prefer using your own choice of tooling? Find the connection string you need to connect
Recents
Top 3 things you need to know
Learning Resources
Get Started using an SDK

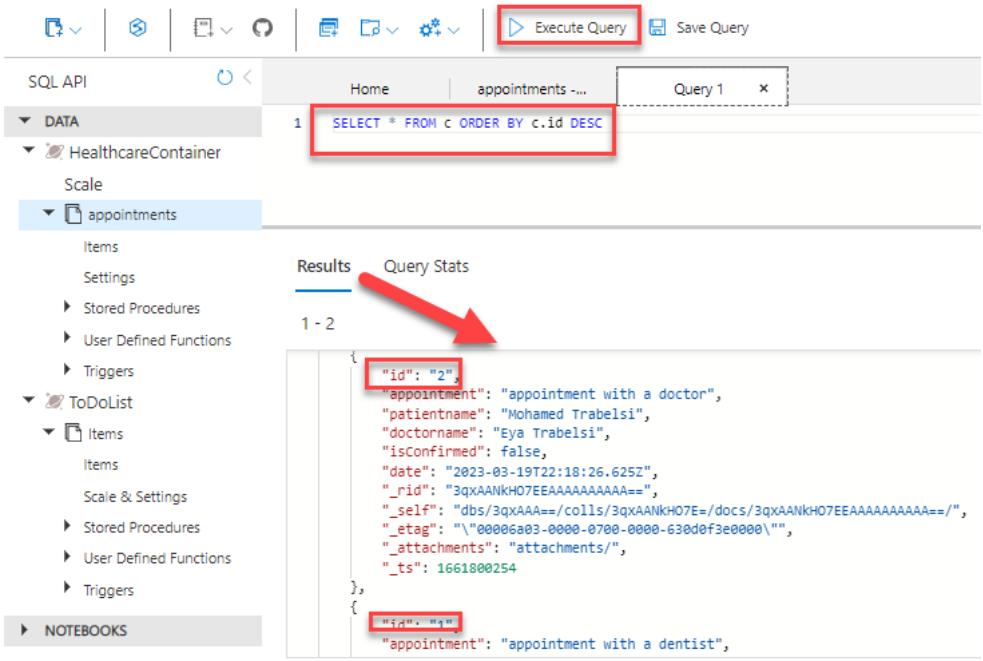

* Database id
Create new
Use existing
HealthcareContainer
Share throughput across containers
* Database throughput (400 - unlimited RU/s)
Autoscale
Manual
Estimate your required RU/s with capacity calculator.
400
Estimated cost (USD): $0.032 hourly / $0.77 daily / $23.36 monthly (1 region, 400RU/s, $0.00008/RU)


* Container id
appointments
* Indexing
Automatic
Off
All properties in your documents will be indexed by default for flexible and efficient queries. Learn more
* Partition key
For small workloads, the item ID is a suitable choice for the partition key.
/appointment
Unique keys
Add unique key
Analytical store
On
Off
Azure Synapse Link is required for creating an analytical store container. Enable Synapse Link for this Cosmos DB account.
Learn more
Enable


appointmentsdb | Data Explorer
Azure Cosmos DB account
Search (Ctrl+/)
New Container
Tags
Diagnose and solve problems
Cost Management
Quick start
Notifications
Data Explorer
Settings
Features
SQL API
DATA
HealthcareContainer
Scale
appointments
Items
Settings
Stored Procedures
User Defined Functions
Triggers


appointmentsdb | Data Explorer
Azure Cosmos DB account
New Item
Save
Discard
Upload Item
SQL API
DATA
HealthcareContainer
Scale
appointments
Items
Settings
Stored Procedures
User Defined Functions
Triggers
Home
appointments -...
SELECT * FROM c
id
/appointment
1
appointment with a dentist
2
appointment with a doctor
Load more
{
"id": "1",
"appointment": "appointment with a dentist",
"patientname": "Hamida Rebai",
"doctorname": "Rayen Trabelsi",
"isConfirmed": false,
"date": "2023-03-09T22:18:26.625Z"
}


appointmentsdb | Data Explorer
Azure Cosmos DB account
Execute Query
Save Query
SQL API
Home
appointments -...
Query 1
DATA
HealthcareContainer
Scale
appointments
Items
Settings
Stored Procedures
User Defined Functio
Triggers
ToDoList
Items
New SQL Query
New Stored Procedure
New UDF
New Trigger
Delete Container
1 SELECT * FROM c
Results
Query Stats


Execute Query
Save Query
SQL API
Home
appointments -...
Query 1
DATA
HealthcareContainer
Scale
appointments
Items
Settings
Stored Procedures
User Defined Functions
Triggers
ToDoList
Items
Items
Scale & Settings
Stored Procedures
User Defined Functions
Triggers
NOTEBOOKS
1 SELECT * FROM c ORDER BY c.id DESC
Results
Query Stats
1 - 2
{
"id": "2",
"appointment": "appointment with a doctor",
"patientname": "Mohamed Trabelsi",
"doctorname": "Eya Trabelsi",
"isConfirmed": false,
"date": "2023-03-19T22:18:26.625Z",
"_rid": "3qxAANkHO7EEAAAAAAAAAA==",
"_self": "dbs/3qxAAA==/colls/3qxAANkHO7E=/docs/3qxAANkHO7EEAAAAAAAAAA==/",
"_etag": "\"00006a03-0000-0700-0000-630d0f3e0000\"",
"_attachments": "attachments/",
"_ts": 1661800254
},
{
"id": "1",
"appointment": "appointment with a dentist",

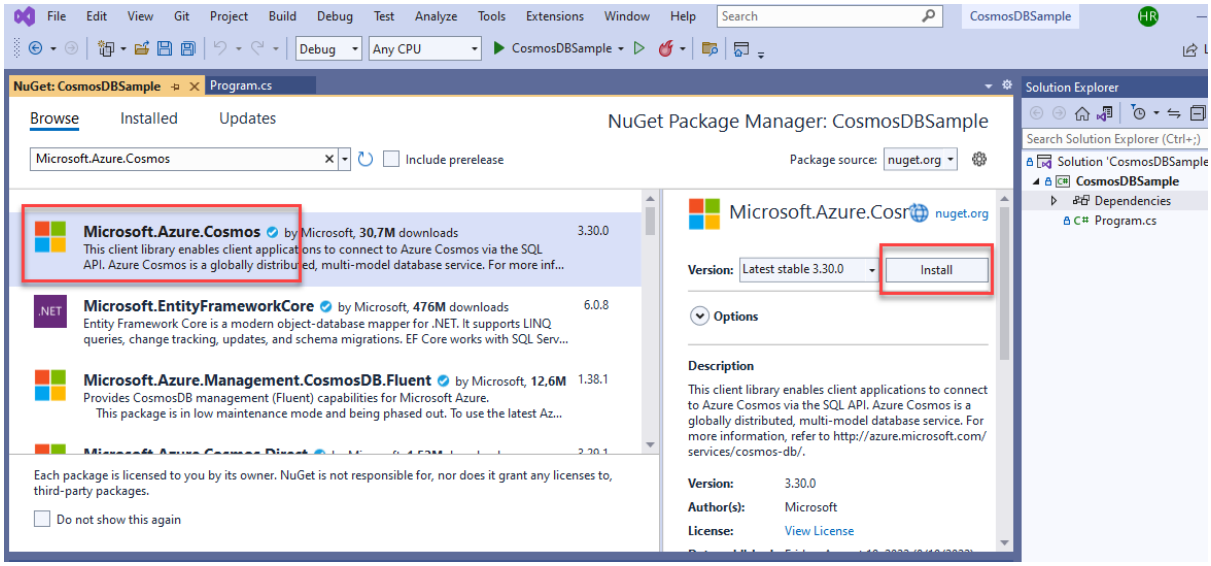
Home | appointments -... | Query 1 ×

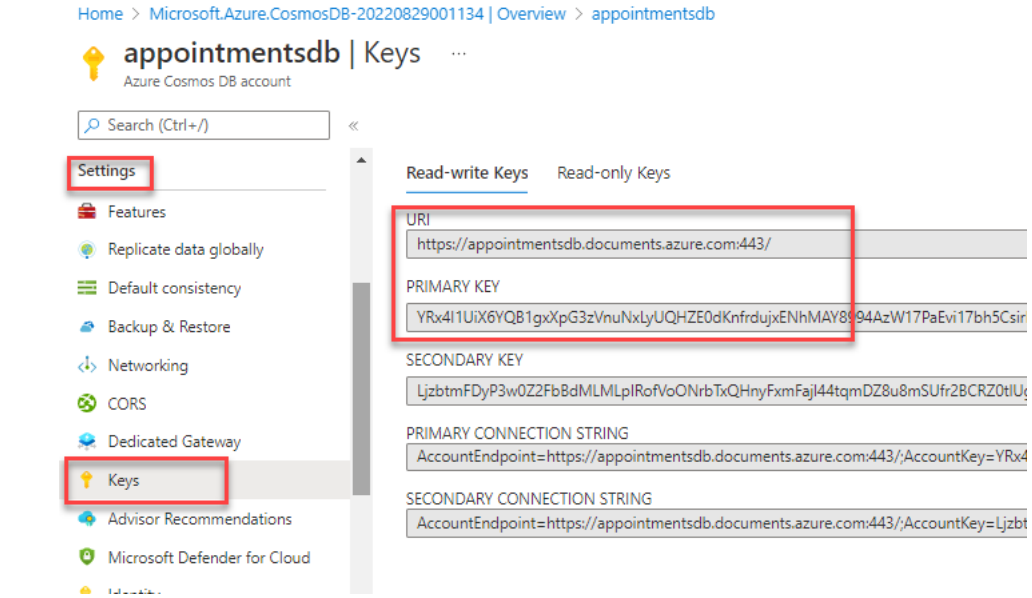
```
1   SELECT * FROM c ORDER BY c.id DESC
```

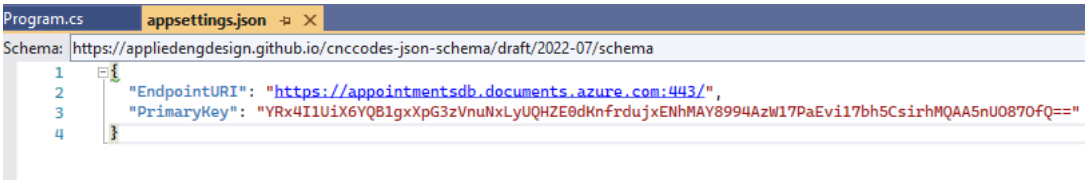
Results **Query Stats**

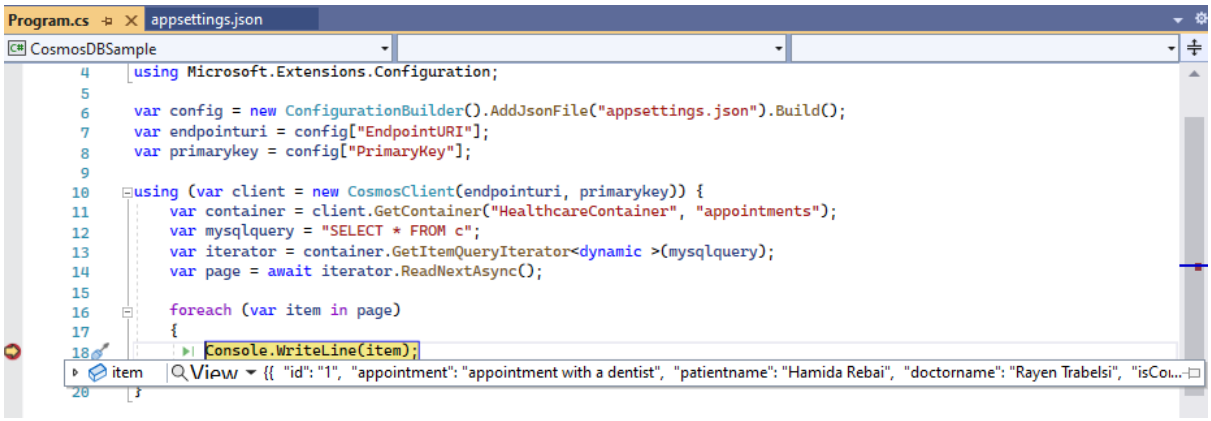
METRIC	VALUE
Request Charge	2.96 RUs
Showing Results	1 - 2
Retrieved document count	2
Retrieved document size	757 bytes

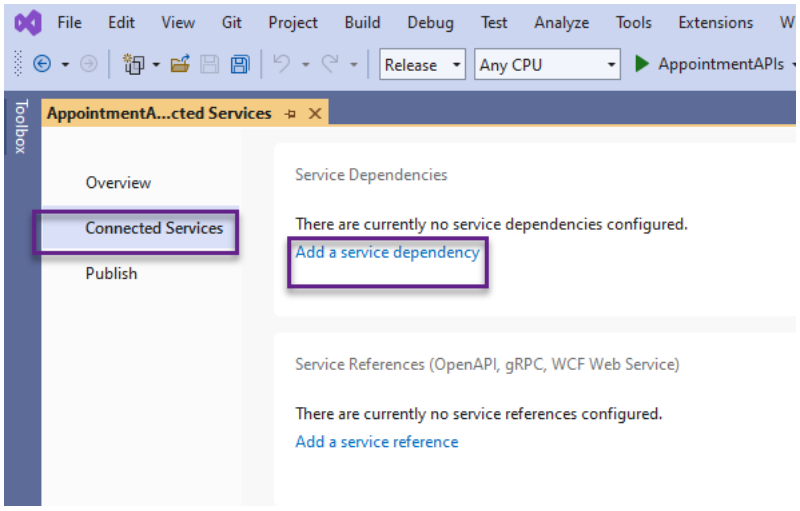
Per-partition query metrics (CSV)

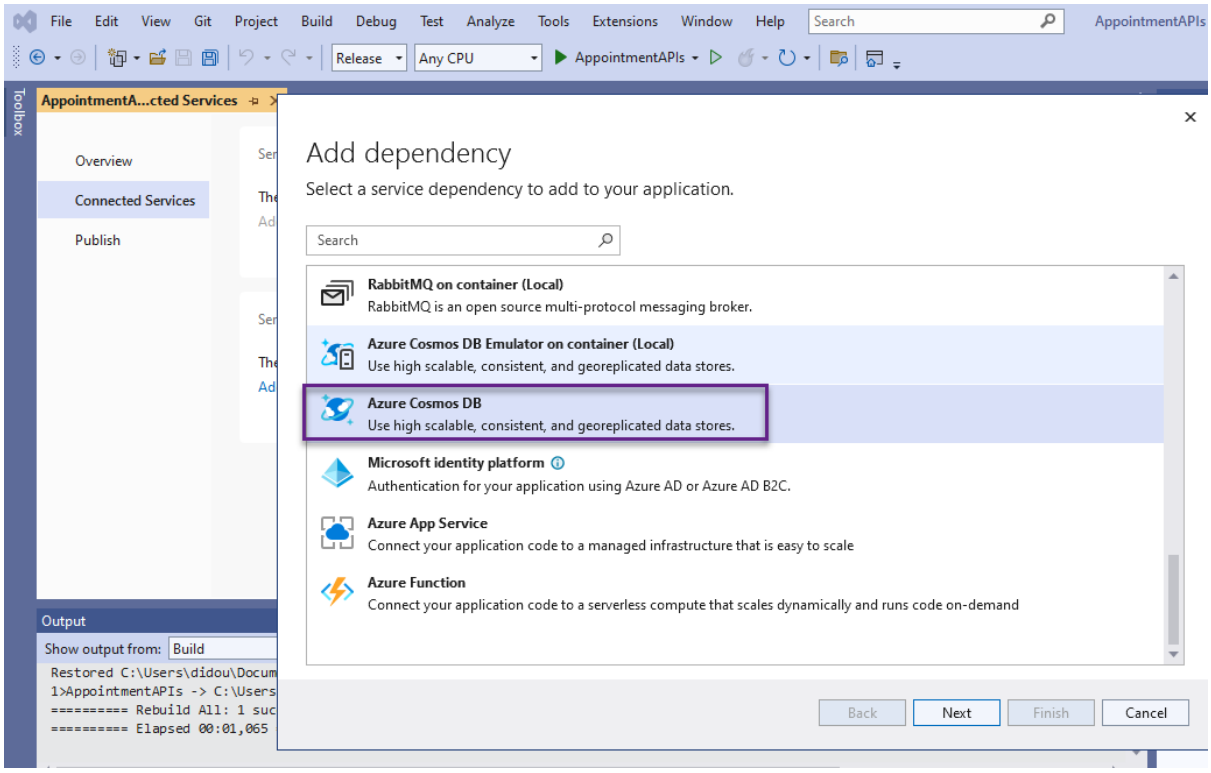


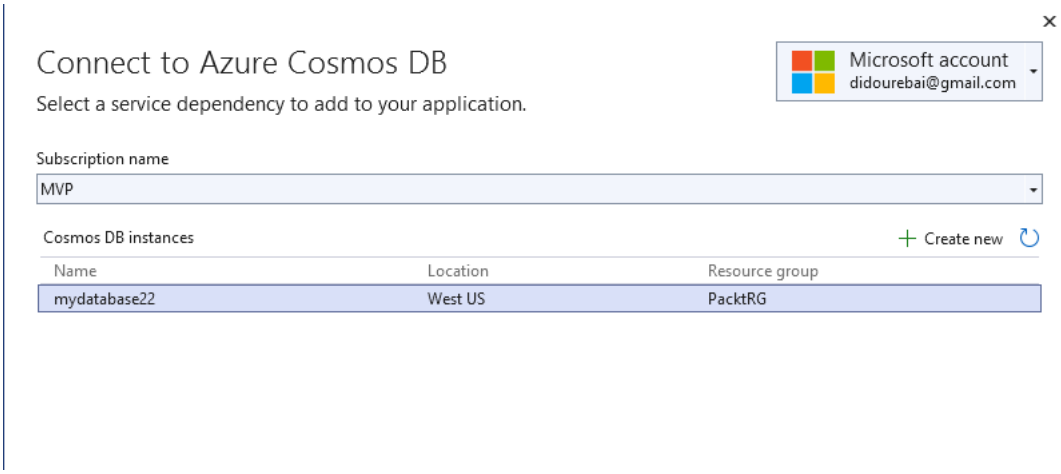

Home > Microsoft.Azure.CosmosDB-20220829001134 | Overview > appointmentsdb
appointmentsdb | Keys
Azure Cosmos DB account
Search (Ctrl+/)
Settings
Features
Replicate data globally
Default consistency
Backup & Restore
Networking
CORS
Dedicated Gateway
Keys
Advisor Recommendations
Microsoft Defender for Cloud
Read-write Keys
Read-only Keys
URI
https://appointmentsdb.documents.azure.com:443/
PRIMARY KEY
SECONDARY KEY
PRIMARY CONNECTION STRING
AccountEndpoint=https://appointmentsdb.documents.azure.com:443/;AccountKey=YRx4
SECONDARY CONNECTION STRING
AccountEndpoint=https://appointmentsdb.documents.azure.com:443/;AccountKey=Ljzbt

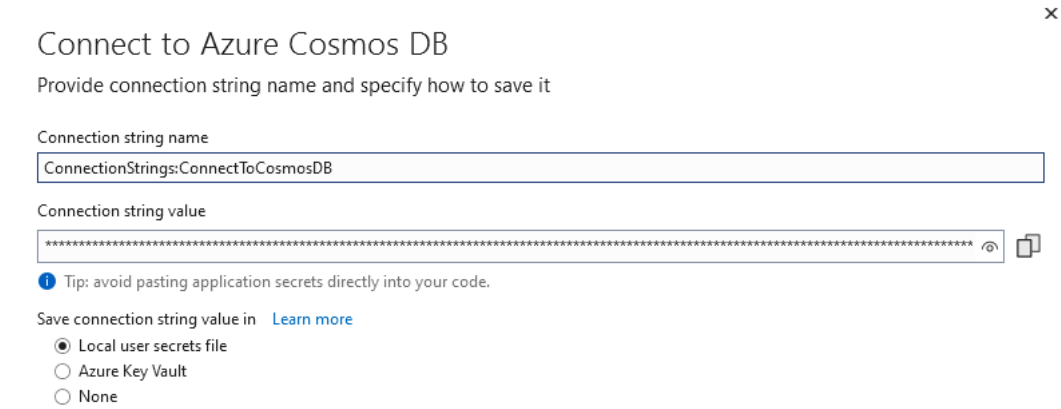

Program.cs
appsettings.json
Schema: https://appliedengdesign.github.io/cnccodes-json-schema/draft/2022-07/schema
{
"EndpointURI": "https://appointmentsdb.documents.azure.com:443/",
"PrimaryKey": "YRx4I1UiX6YQB1gxXpG3zVnuNxLyUQHZE0dKnfrdujxENhMAY8994AzW17PaEvi17bh5CsirhMQAA5nUO87OfQ=="
}

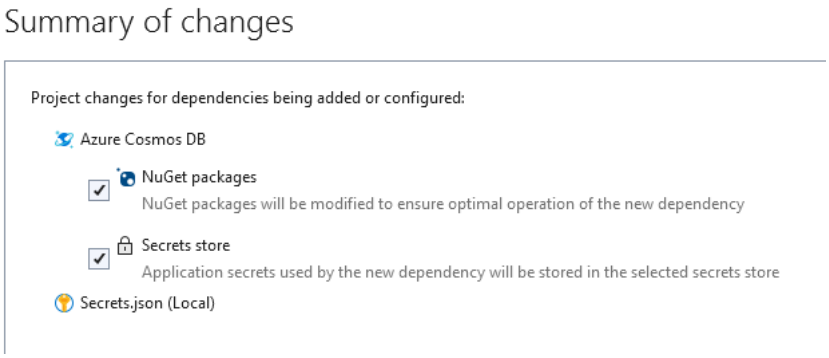

Program.cs
appsettings.json
CosmosDBSample
using Microsoft.Extensions.Configuration;
var config = new ConfigurationBuilder().AddJsonFile("appsettings.json").Build();
var endpointuri = config["EndpointURI"];
var primarykey = config["PrimaryKey"];
using (var client = new CosmosClient(endpointuri, primarykey)) {
var container = client.GetContainer("HealthcareContainer", "appointments");
var mysqlquery = "SELECT * FROM c";
var iterator = container.GetItemQueryIterator<dynamic >(mysqlquery);
var page = await iterator.ReadNextAsync();
foreach (var item in page)
{
Console.WriteLine(item);
item
View
{{ "id": "1", "appointment": "appointment with a dentist", "patientname": "Hamida Rebai", "doctorname": "Rayen Trabelsi",
}

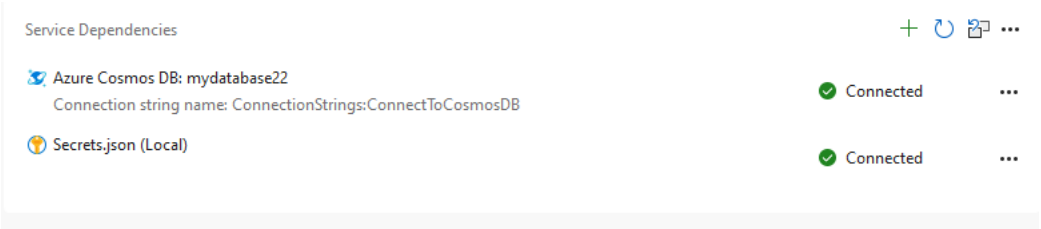

File Edit View Git Project Build Debug Test Analyze Tools Extensions W
Release
Any CPU
AppointmentAPIs
Toolbox
AppointmentA...cted Services
Overview
Connected Services
Publish
Service Dependencies
There are currently no service dependencies configured.
Add a service dependency
Service References (OpenAPI, gRPC, WCF Web Service)
There are currently no service references configured.
Add a service reference

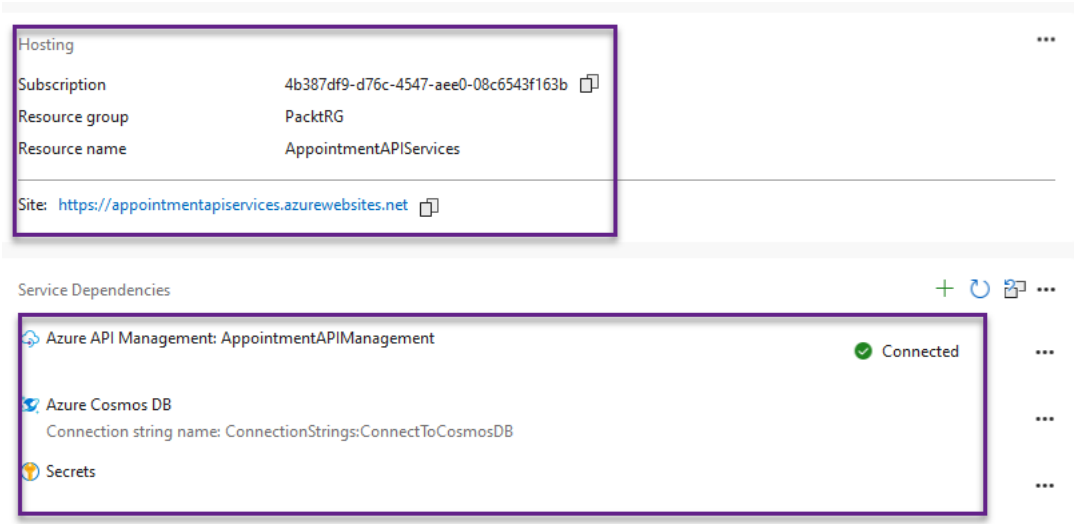

File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help
Search
AppointmentAPIs
Release
Any CPU
AppointmentAPIs
Toolbox
AppointmentA...cted Services
Overview
Connected Services
Publish
Add dependency
Select a service dependency to add to your application.
Search
RabbitMQ on container (Local)
RabbitMQ is an open source multi-protocol messaging broker.
Azure Cosmos DB Emulator on container (Local)
Use high scalable, consistent, and georeplicated data stores.
Azure Cosmos DB
Use high scalable, consistent, and georeplicated data stores.
Microsoft identity platform
Authentication for your application using Azure AD or Azure AD B2C.
Azure App Service
Connect your application code to a managed infrastructure that is easy to scale
Azure Function
Connect your application code to a serverless compute that scales dynamically and runs code on-demand
Output
Show output from: Build
Restored C:\Users\didou\Docum
1>AppointmentAPIs -> C:\Users
========== Rebuild All: 1 suc
========== Elapsed 00:01,065
Back
Next
Finish
Cancel


Connect to Azure Cosmos DB
Select a service dependency to add to your application.
Microsoft account
didourebai@gmail.com
Subscription name
MVP
Cosmos DB instances
Create new
Name
Location
Resource group
mydatabase22
West US
PacktRG

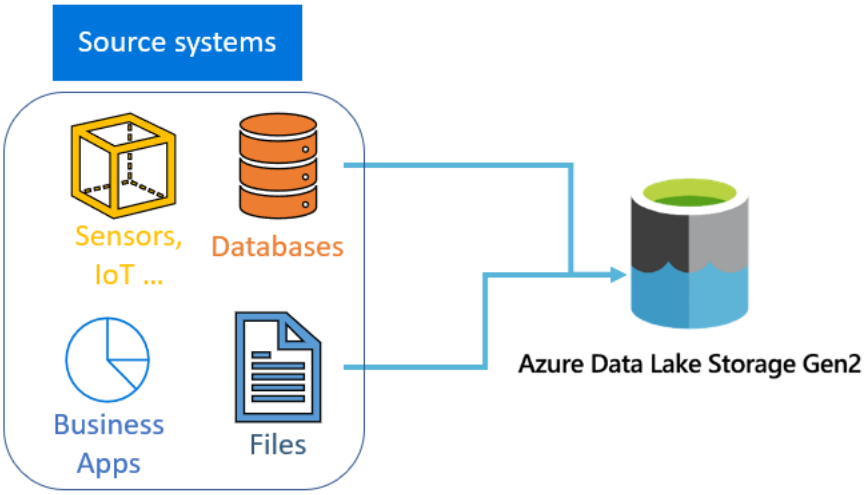

Connect to Azure Cosmos DB
Provide connection string name and specify how to save it
Connection string name
ConnectionStrings:ConnectToCosmosDB
Connection string value
Tip: avoid pasting application secrets directly into your code.
Save connection string value in
Learn more
Local user secrets file
Azure Key Vault
None

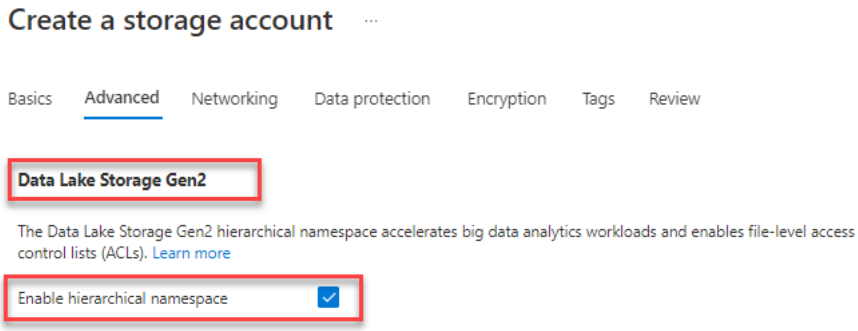

Summary of changes
Project changes for dependencies being added or configured:
Azure Cosmos DB
NuGet packages
NuGet packages will be modified to ensure optimal operation of the new dependency
Secrets store
Application secrets used by the new dependency will be stored in the selected secrets store
Secrets.json (Local)

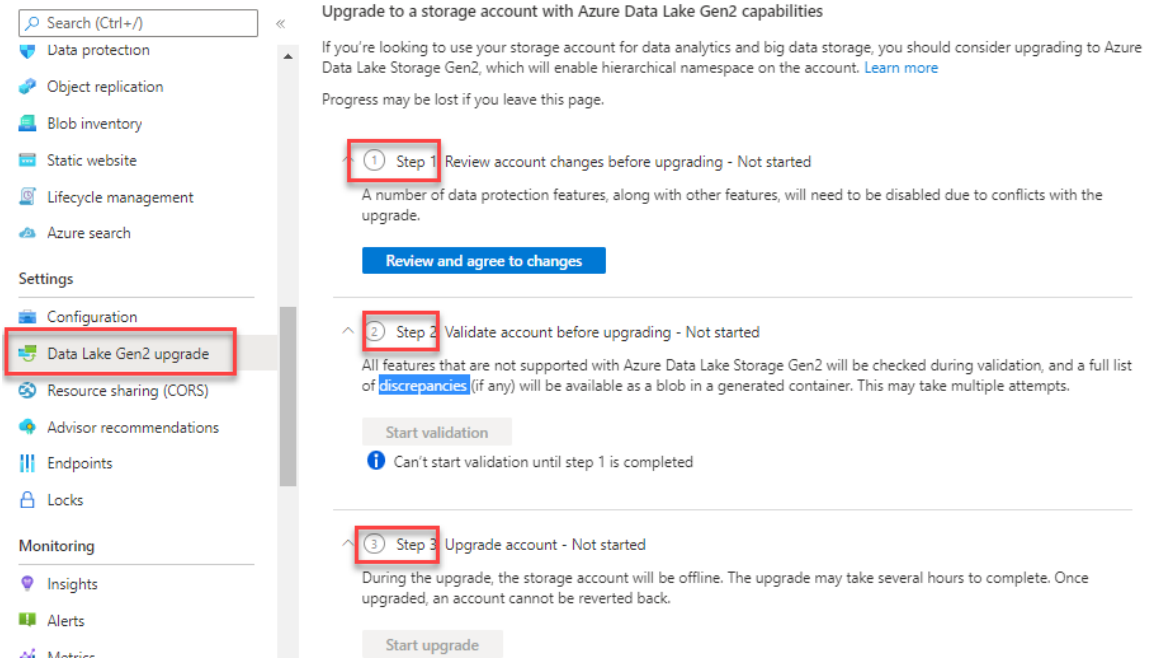

Service Dependencies
Azure Cosmos DB: mydatabase22
Connection string name: ConnectionStrings:ConnectToCosmosDB
Connected
Secrets.json (Local)
Connected


Hosting
Subscription
4b387df9-d76c-4547-aee0-08c6543f163b
Resource group
PacktRG
Resource name
AppointmentAPIServices
Site:
https://appointmentapiservices.azurewebsites.net
Service Dependencies
Azure API Management: AppointmentAPIManagement
Connected
Azure Cosmos DB
Connection string name: ConnectionStrings:ConnectToCosmosDB
Secrets

Chapter 10: Big Data Storage Overview

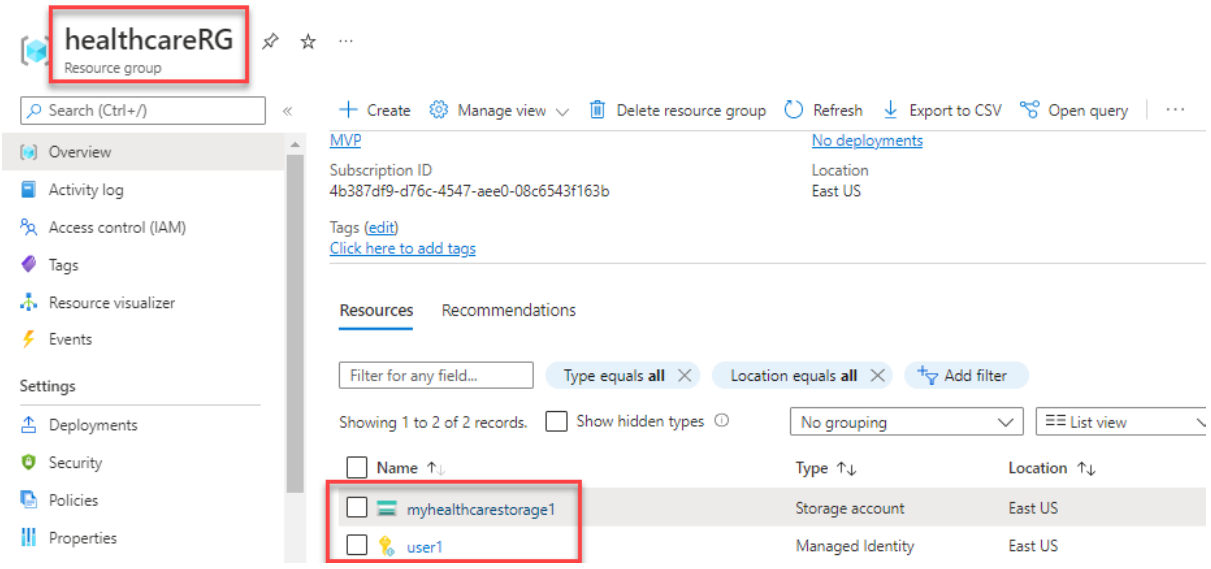


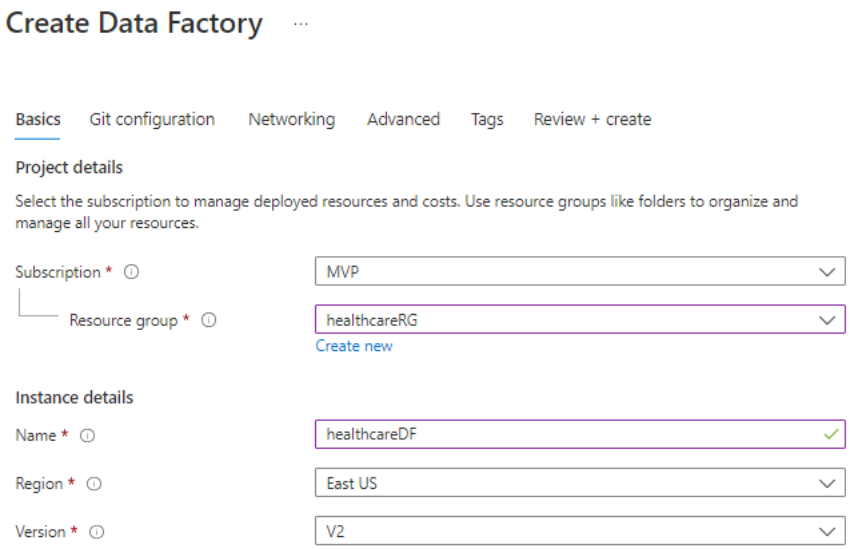


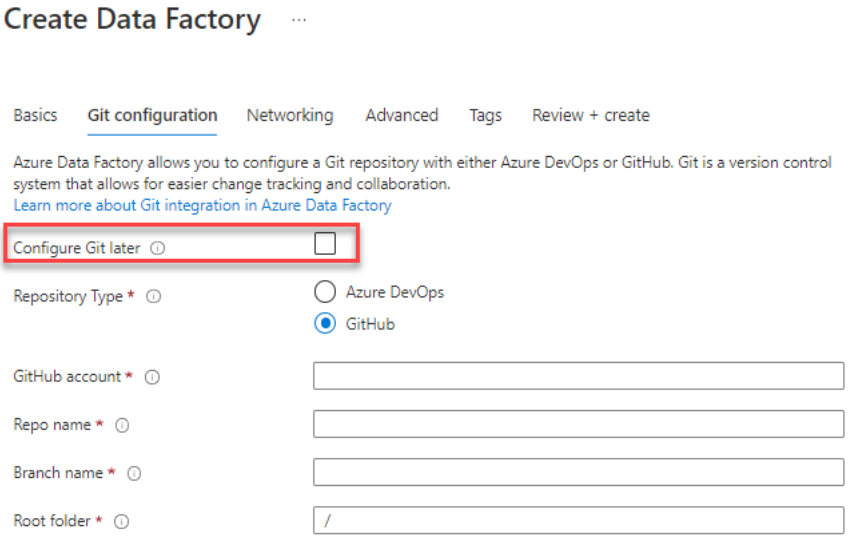


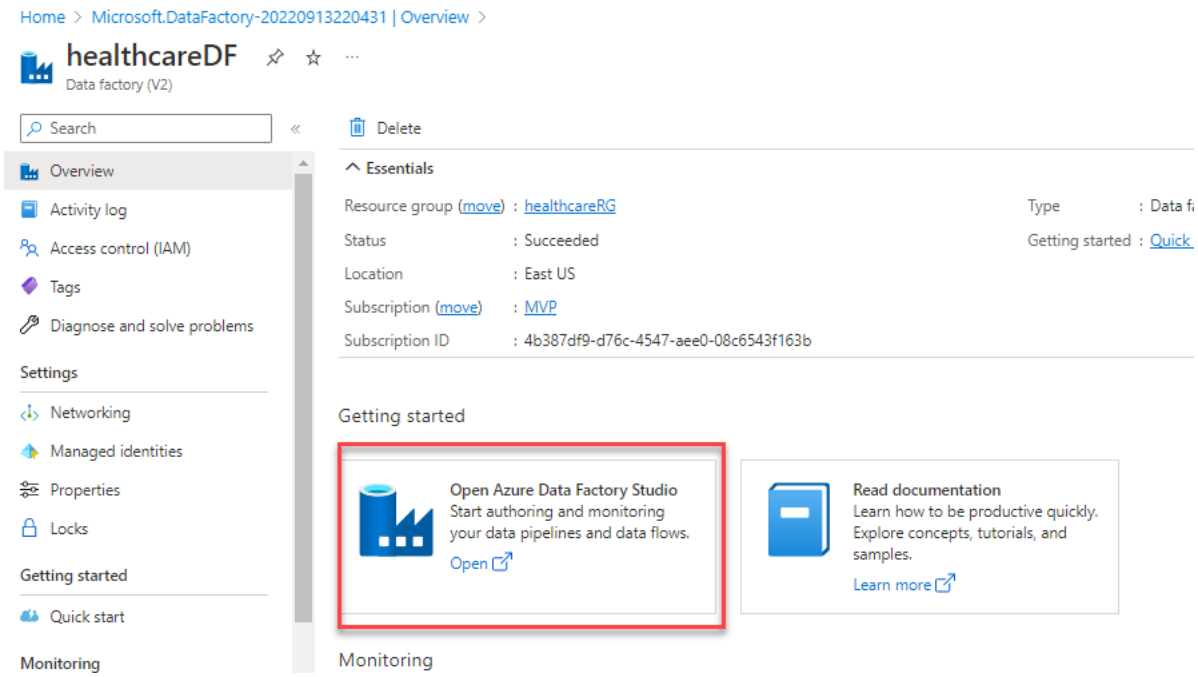
```
hamida@Azure:~$ az group create --name healthcareRG --location eastus
{
  "id": "/subscriptions/                                    b/resourceGroups/healthcareRG",
  "location": "eastus",
  "managedBy": null,
  "name": "healthcareRG",
  "properties": {
    "provisioningState": "Succeeded"
  },
  "tags": null,
  "type": "Microsoft.Resources/resourceGroups"
}
```

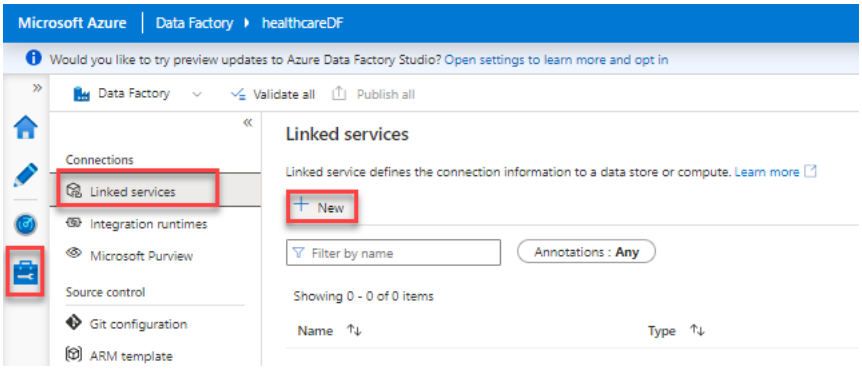
```
hamida@Azure:~$ az identity create -g healthcareRG -n user1
{
  "clientId": "40268d7a-7038-4037-97d3-5865ad988122",
  "id": "/subscriptions/                                        /
  "location": "eastus",
  "name": "user1",
  "principalId": "64bd7ba9-7afe-424c-b08b-fc36178d74a4",
  "resourceGroup": "healthcareRG",
  "tags": {},
  "tenantId": "1800b09f-2bb6-425c-b16c-3d7dde051282",
  "type": "Microsoft.ManagedIdentity/userAssignedIdentities"
}
```

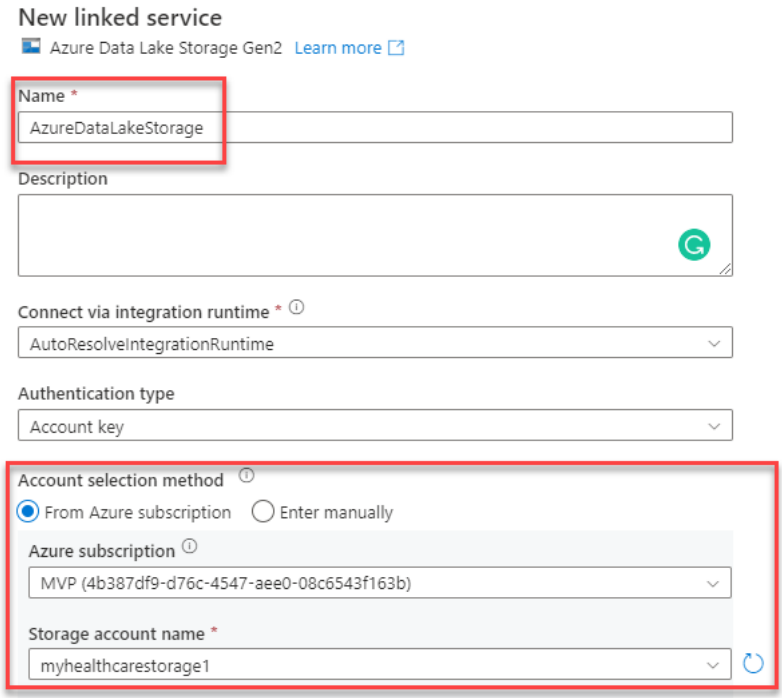


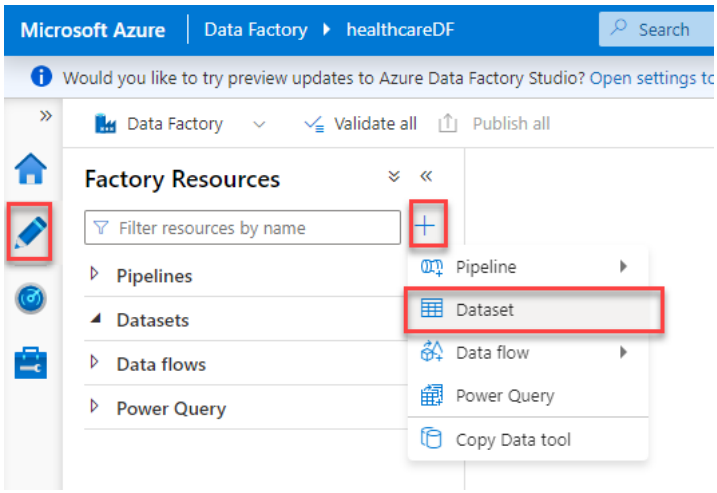

Create Data Factory
Basics
Git configuration
Networking
Advanced
Tags
Review + create
Project details
Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.
Subscription *
MVP
Resource group *
healthcareRG
Create new
Instance details
Name *
healthcareDF
Region *
East US
Version *
V2

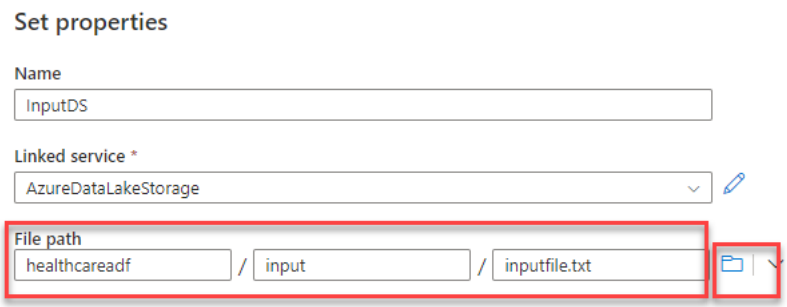

Create Data Factory
Basics
Git configuration
Networking
Advanced
Tags
Review + create
Azure Data Factory allows you to configure a Git repository with either Azure DevOps or GitHub. Git is a version control system that allows for easier change tracking and collaboration.
Learn more about Git integration in Azure Data Factory
Configure Git later
Repository Type *
Azure DevOps
GitHub
GitHub account *
Repo name *
Branch name *
Root folder *
/


Home > Microsoft.DataFactory-20220913220431 | Overview >
healthcareDF
Data factory (V2)
Search
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Settings
Networking
Managed identities
Properties
Locks
Getting started
Quick start
Monitoring
Delete
Essentials
Resource group (move) : healthcareRG
Status : Succeeded
Location : East US
Subscription (move) : MVP
Subscription ID : 4b387df9-d76c-4547-aee0-08c6543f163b
Type : Data fa
Getting started : Quick
Getting started
Open Azure Data Factory Studio
Start authoring and monitoring your data pipelines and data flows.
Open
Read documentation
Learn how to be productive quickly. Explore concepts, tutorials, and samples.
Learn more
Monitoring


Microsoft Azure | Data Factory ▸ healthcareDF
Would you like to try preview updates to Azure Data Factory Studio? Open settings to learn more and opt in
Data Factory
Validate all
Publish all
Connections
Linked services
Integration runtimes
Microsoft Purview
Source control
Git configuration
ARM template
Linked services
Linked service defines the connection information to a data store or compute. Learn more
New
Filter by name
Annotations : Any
Showing 0 - 0 of 0 items
Name
Type


New linked service
Azure Data Lake Storage Gen2 Learn more
Name *
AzureDataLakeStorage
Description
Connect via integration runtime *
AutoResolveIntegrationRuntime
Authentication type
Account key
Account selection method
From Azure subscription
Enter manually
Azure subscription
MVP (4b387df9-d76c-4547-aee0-08c6543f163b)
Storage account name *
myhealthcarestorage1


Microsoft Azure
Data Factory
healthcareDF
Search
Would you like to try preview updates to Azure Data Factory Studio? Open settings to
Data Factory
Validate all
Publish all
Factory Resources
Filter resources by name
Pipelines
Datasets
Data flows
Power Query
Pipeline
Dataset
Data flow
Power Query
Copy Data tool


Set properties
Name
InputDS
Linked service *
AzureDataLakeStorage
File path
healthcareadf
/
input
/
inputfile.txt

Set properties

Name

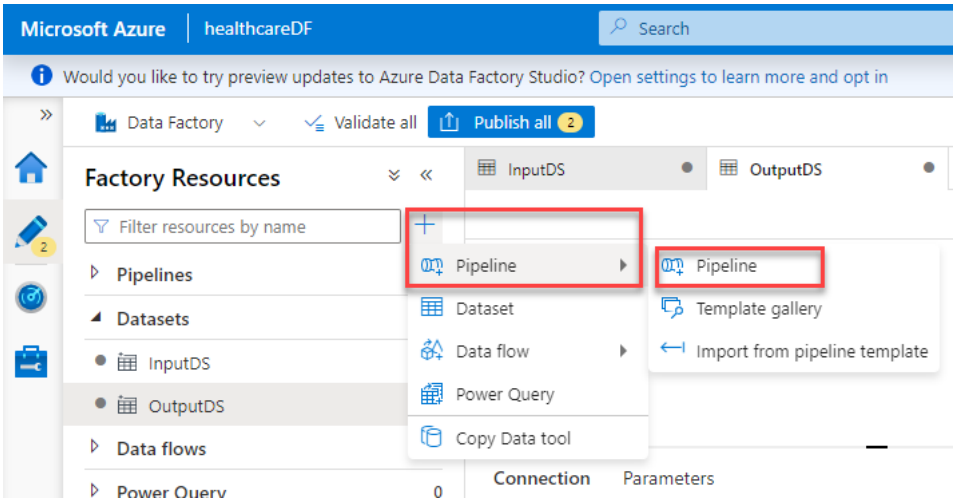
OutputDS

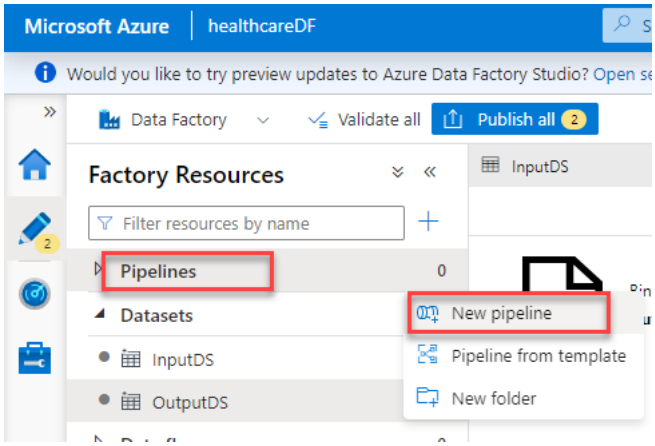
Linked service *

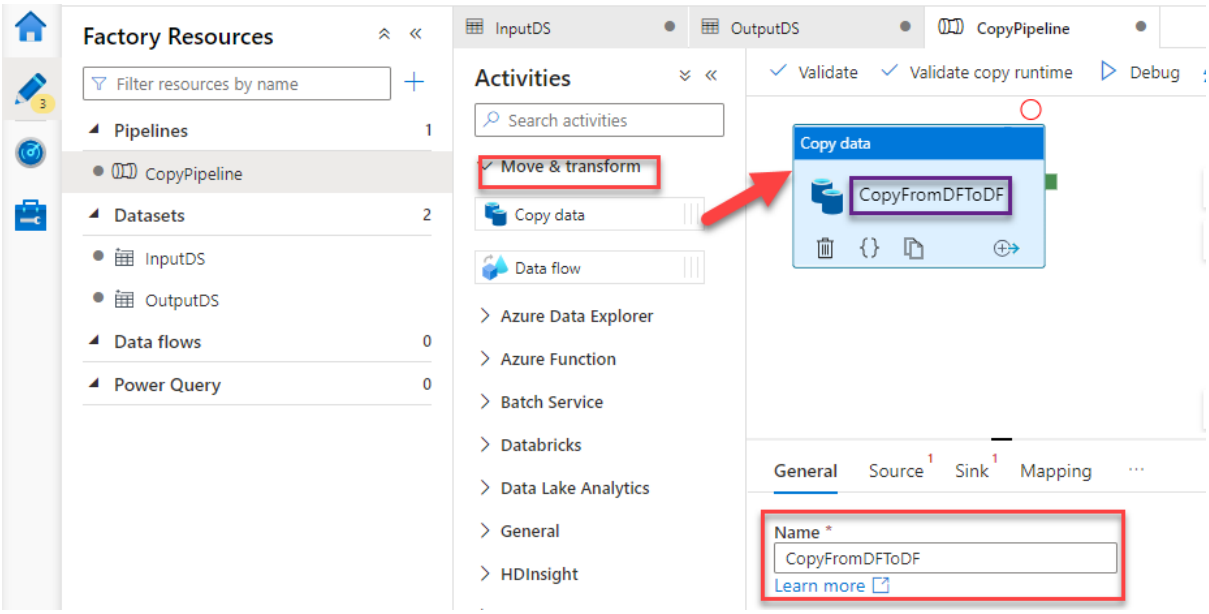
AzureDataLakeStorage

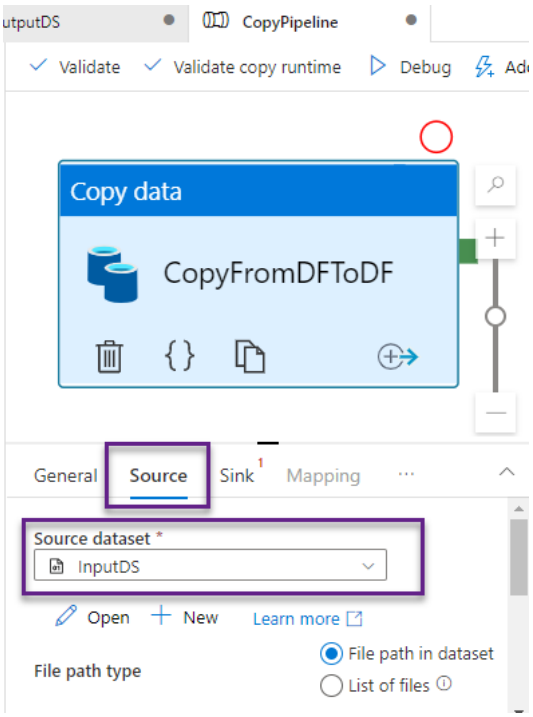
File path

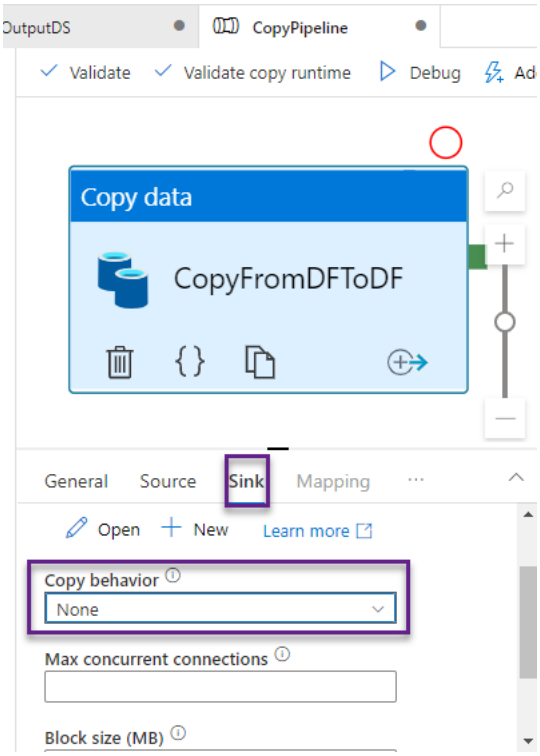
healthcareadf / output / File name

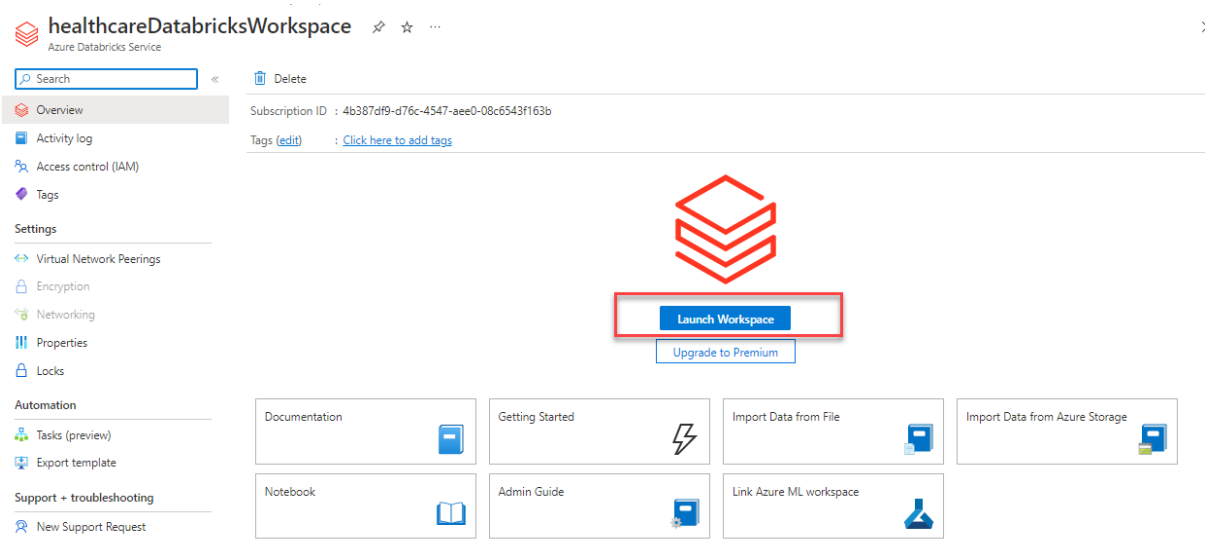


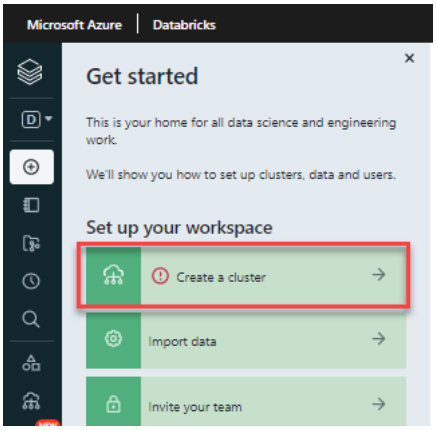


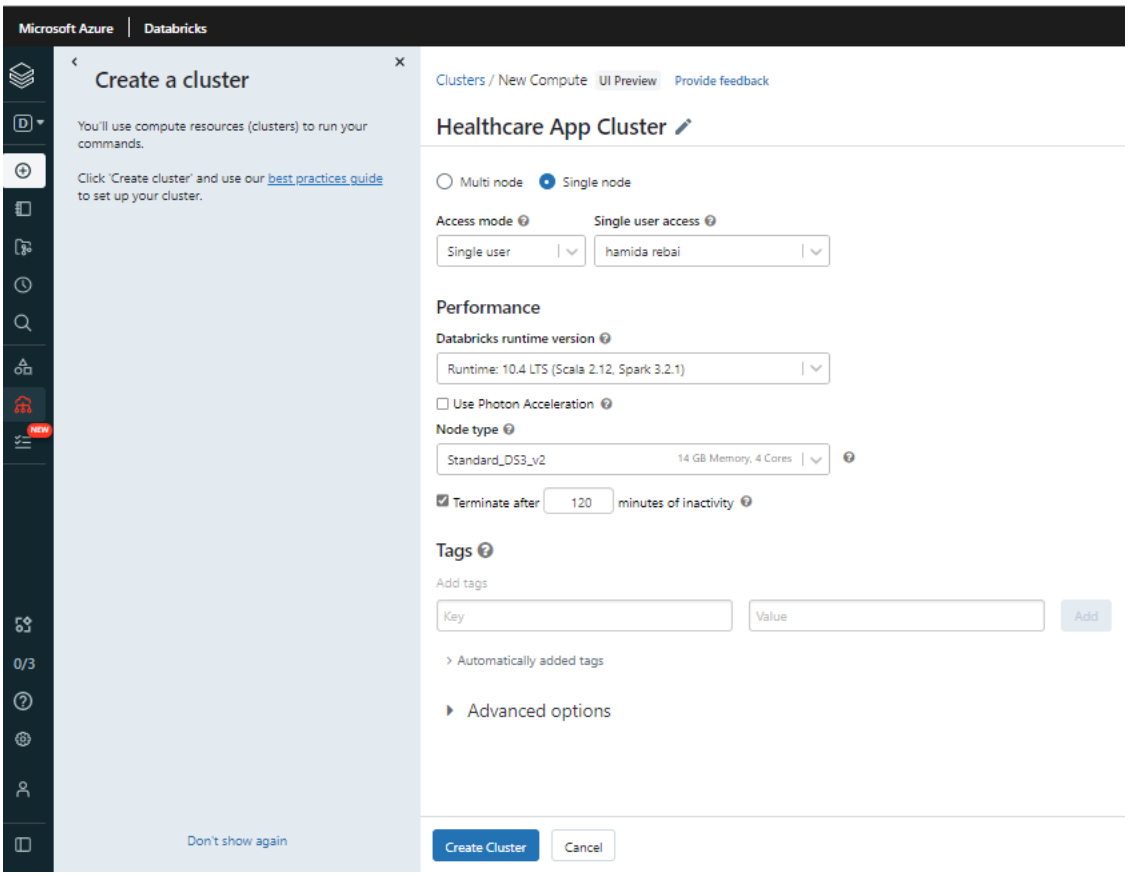

Factory Resources
Filter resources by name
Pipelines 1
CopyPipeline
Datasets 2
InputDS
OutputDS
Data flows 0
Power Query 0
InputDS
OutputDS
CopyPipeline
Activities
Search activities
Move & transform
Copy data
Data flow
Azure Data Explorer
Azure Function
Batch Service
Databricks
Data Lake Analytics
General
HDInsight
Validate
Validate copy runtime
Debug
Copy data
CopyFromDFToDF
General
Source 1
Sink 1
Mapping
Name *
CopyFromDFToDF
Learn more

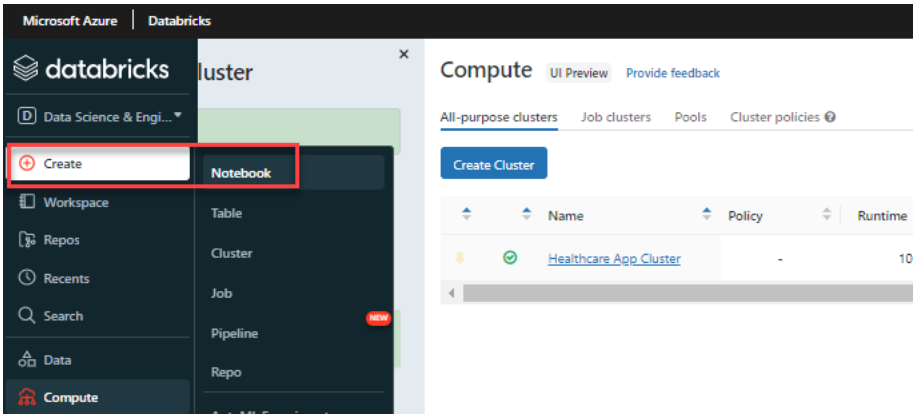

utputDS
CopyPipeline
Validate
Validate copy runtime
Debug
Copy data
CopyFromDFToDF
General
Source
Sink 1
Mapping
Source dataset *
InputDS
Open
New
Learn more
File path type
File path in dataset
List of files

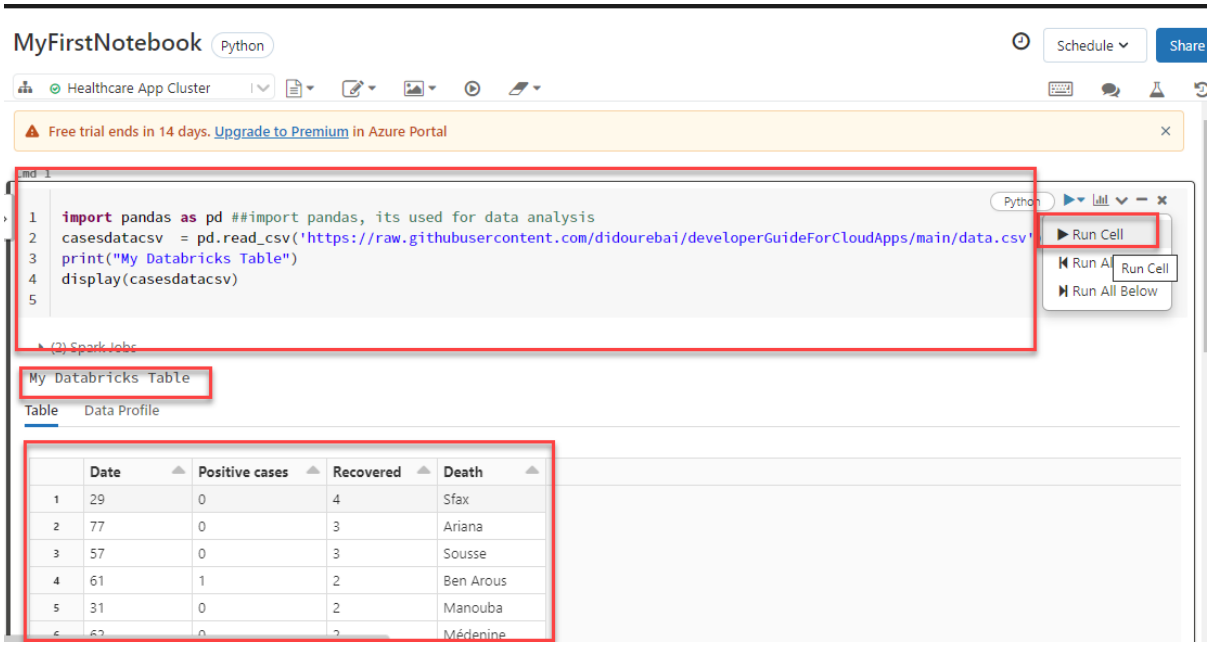

OutputDS
CopyPipeline
Validate
Validate copy runtime
Debug
Ad
Copy data
CopyFromDFToDF
General
Source
Sink
Mapping
Open
New
Learn more
Copy behavior
None
Max concurrent connections
Block size (MB)


healthcareDatabricksWorkspace
Azure Databricks Service
Search
Overview
Activity log
Access control (IAM)
Tags
Settings
Virtual Network Peerings
Encryption
Networking
Properties
Locks
Automation
Tasks (preview)
Export template
Support + troubleshooting
New Support Request
Delete
Subscription ID : 4b387df9-d76c-4547-aee0-08c6543f163b
Tags (edit) : Click here to add tags
Launch Workspace
Upgrade to Premium
Documentation
Getting Started
Import Data from File
Import Data from Azure Storage
Notebook
Admin Guide
Link Azure ML workspace

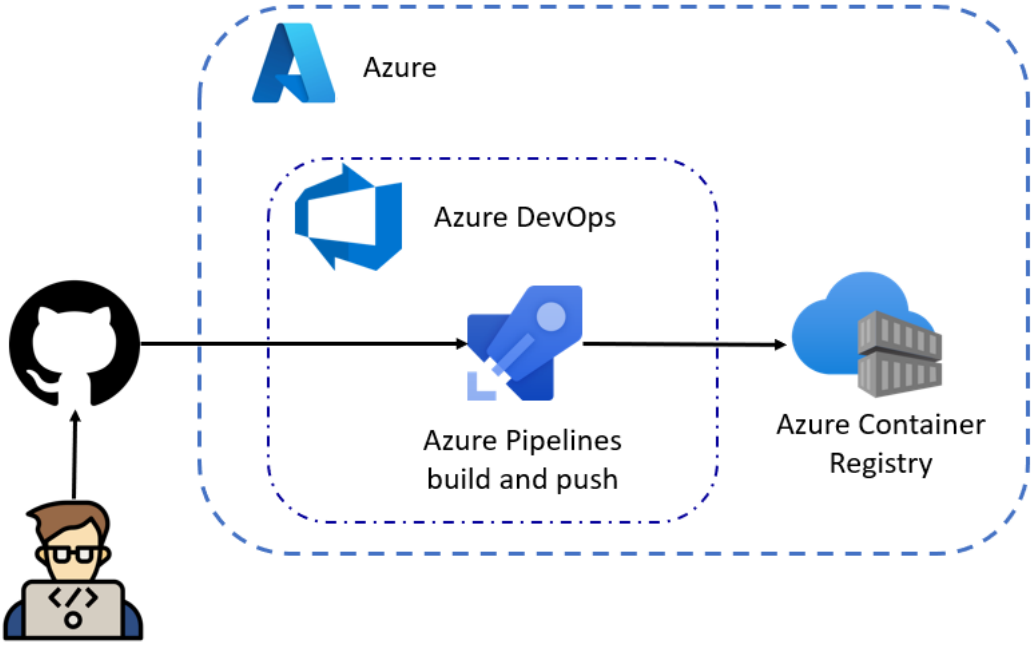

Microsoft Azure | Databricks
Get started
This is your home for all data science and engineering work.
We'll show you how to set up clusters, data and users.
Set up your workspace
Create a cluster
Import data
Invite your team

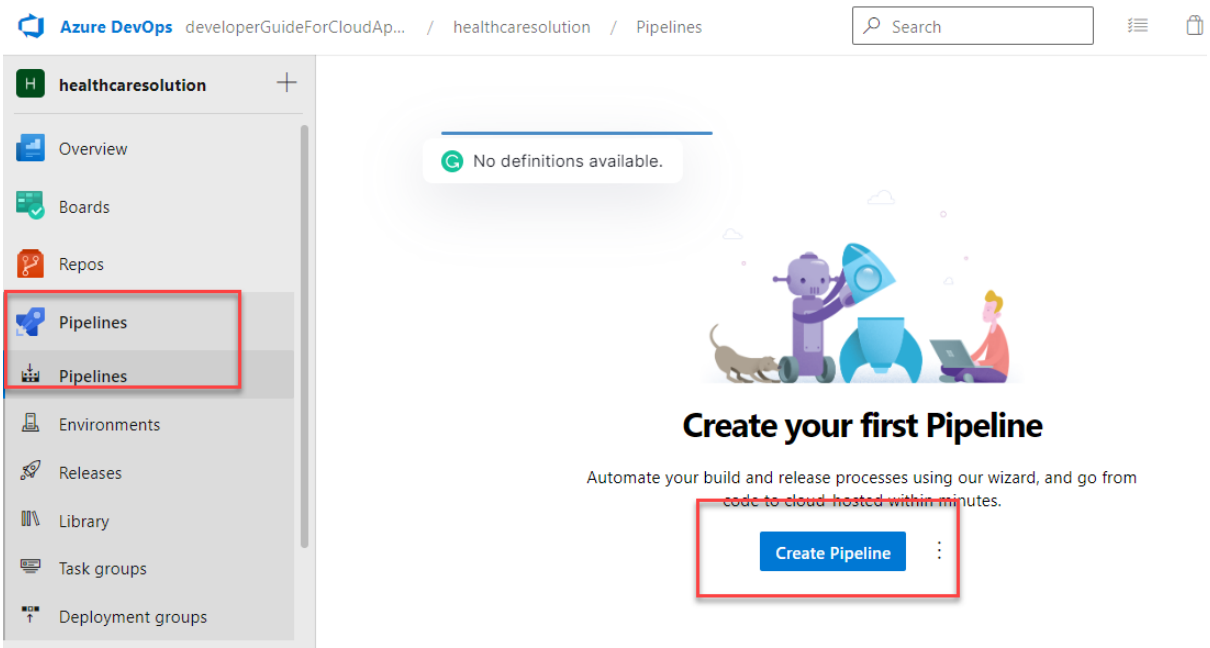

Microsoft Azure | Databricks
Create a cluster
You'll use compute resources (clusters) to run your commands.
Click 'Create cluster' and use our best practices guide to set up your cluster.
Don't show again
Clusters / New Compute UI Preview Provide feedback
Healthcare App Cluster
Multi node
Single node
Access mode
Single user access
Single user
hamida rebai
Performance
Databricks runtime version
Runtime: 10.4 LTS (Scala 2.12, Spark 3.2.1)
Use Photon Acceleration
Node type
Standard_DS3_v2
14 GB Memory, 4 Cores
Terminate after 120 minutes of inactivity
Tags
Add tags
Key
Value
Add
Automatically added tags
Advanced options
Create Cluster
Cancel

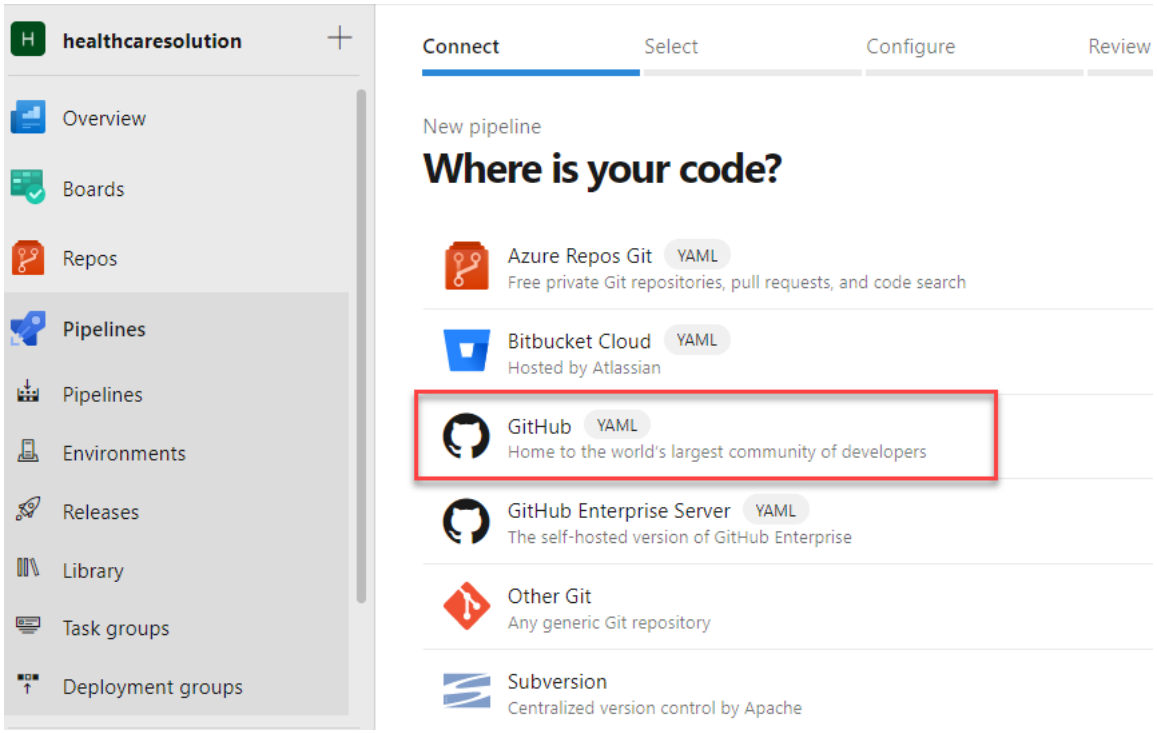

Microsoft Azure
Databricks
databricks
Data Science & Engi...
Create
Workspace
Repos
Recents
Search
Data
Compute
Notebook
Table
Cluster
Job
Pipeline
Repo
Compute
UI Preview
Provide feedback
All-purpose clusters
Job clusters
Pools
Cluster policies
Create Cluster
Name
Policy
Runtime
Healthcare App Cluster
10

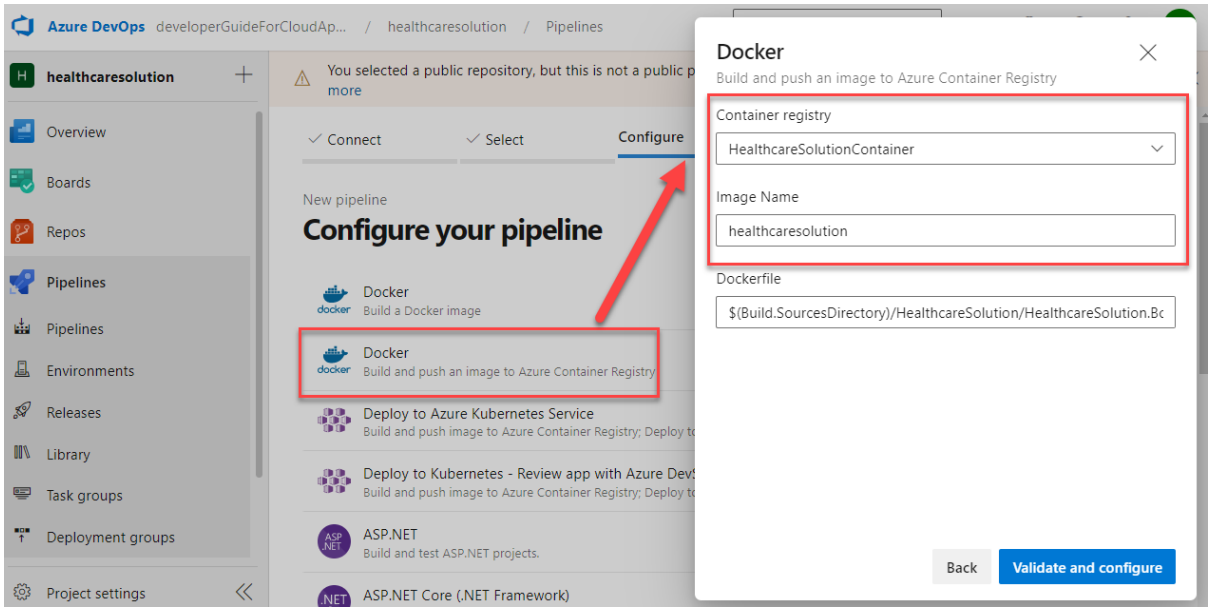

MyFirstNotebook
Python
Schedule
Share
Healthcare App Cluster
Free trial ends in 14 days. Upgrade to Premium in Azure Portal
import pandas as pd ##import pandas, its used for data analysis
casesdatacsv = pd.read_csv('https://raw.githubusercontent.com/didourebai/developerGuideForCloudApps/main/data.csv')
print("My Databricks Table")
display(casesdatacsv)
Run Cell
Run All Below
(2) Spark Jobs
My Databricks Table
Table
Data Profile
Date
Positive cases
Recovered
Death
1 29 0 4 Sfax
2 77 0 3 Ariana
3 57 0 3 Sousse
4 61 1 2 Ben Arous
5 31 0 2 Manouba

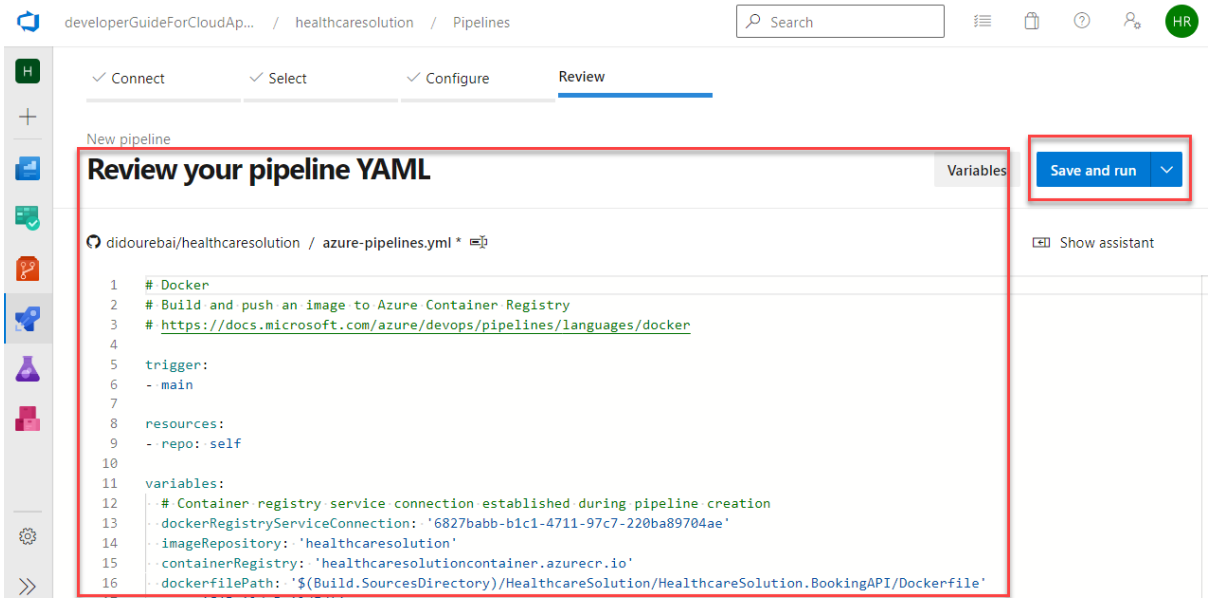
Chapter 11: Containers and Continuous Deployment on Azure

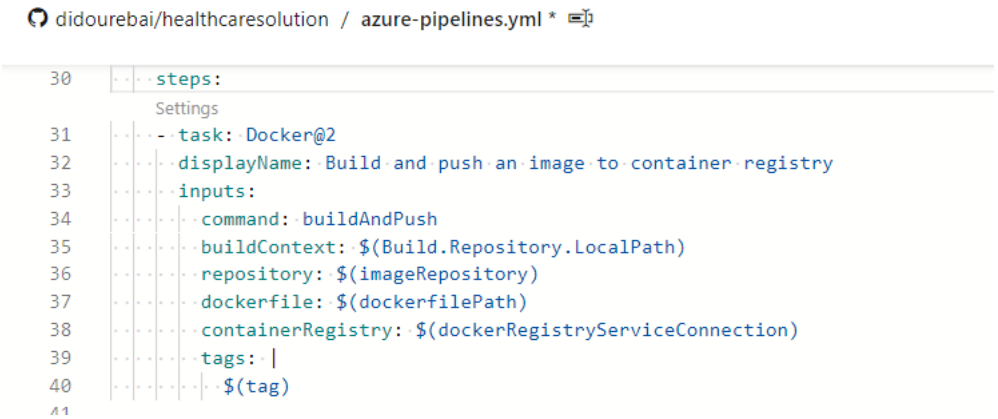


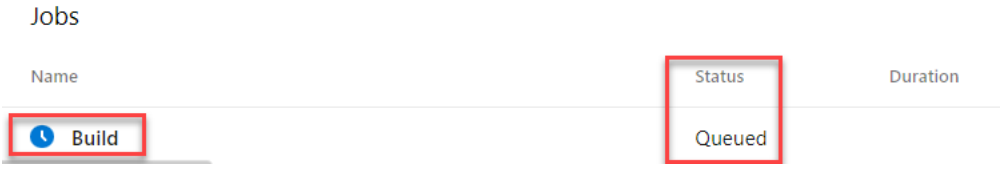


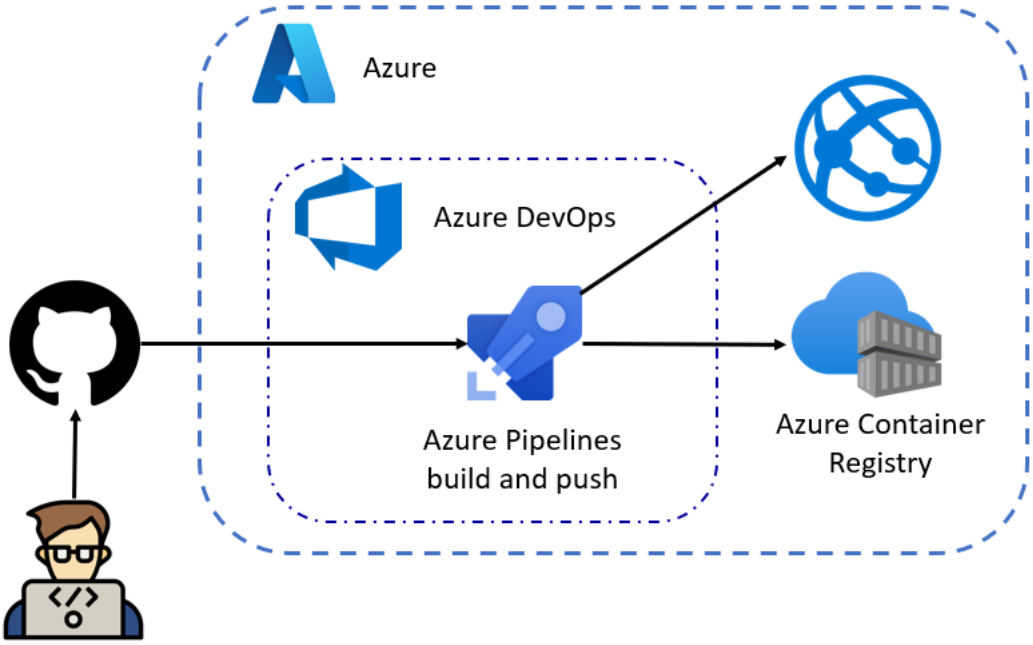

healthcaresolution
Overview
Boards
Repos
Pipelines
Pipelines
Environments
Releases
Library
Task groups
Deployment groups
Connect
Select
Configure
Review
New pipeline
Where is your code?
Azure Repos Git YAML
Free private Git repositories, pull requests, and code search
Bitbucket Cloud YAML
Hosted by Atlassian
GitHub YAML
Home to the world's largest community of developers
GitHub Enterprise Server YAML
The self-hosted version of GitHub Enterprise
Other Git
Any generic Git repository
Subversion
Centralized version control by Apache

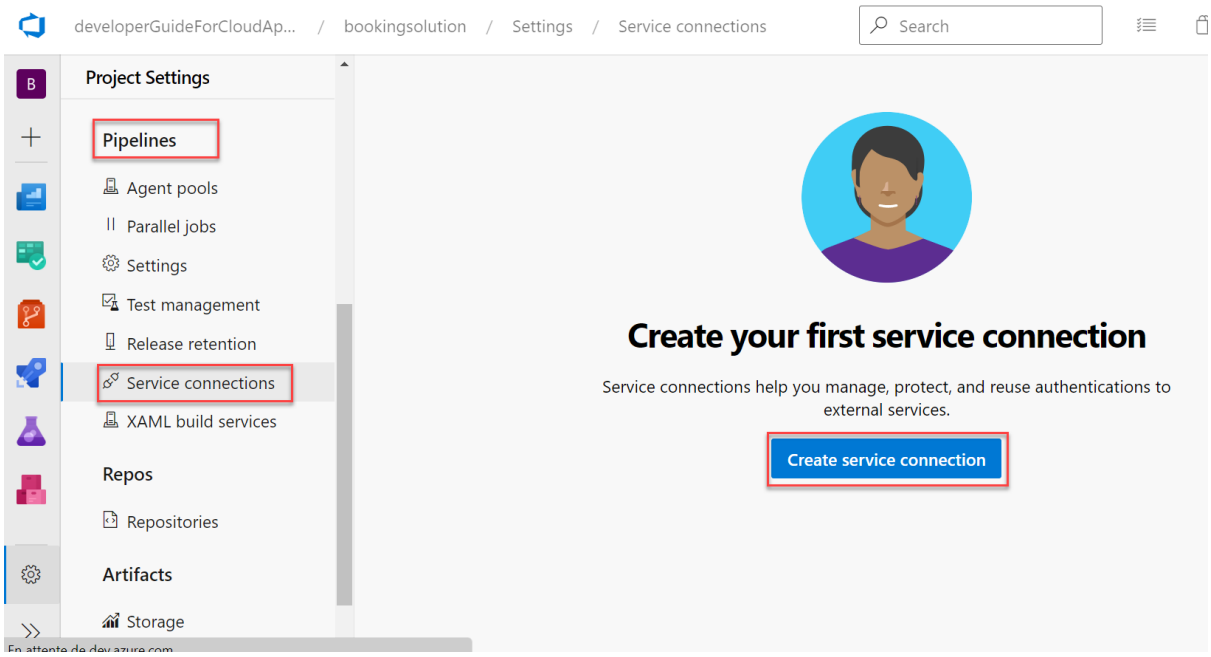

Azure DevOps
developerGuideForCloudAp...
healthcaresolution
Pipelines
Overview
Boards
Repos
Pipelines
Pipelines
Environments
Releases
Library
Task groups
Deployment groups
Project settings
Connect
Select
Configure
New pipeline
Configure your pipeline
Docker
Build a Docker image
Docker
Build and push an image to Azure Container Registry
Deploy to Azure Kubernetes Service
ASP.NET
Build and test ASP.NET projects.
ASP.NET Core (.NET Framework)
Docker
Build and push an image to Azure Container Registry
Container registry
HealthcareSolutionContainer
Image Name
healthcaresolution
Dockerfile
$(Build.SourcesDirectory)/HealthcareSolution/HealthcareSolution.Bc
Back
Validate and configure

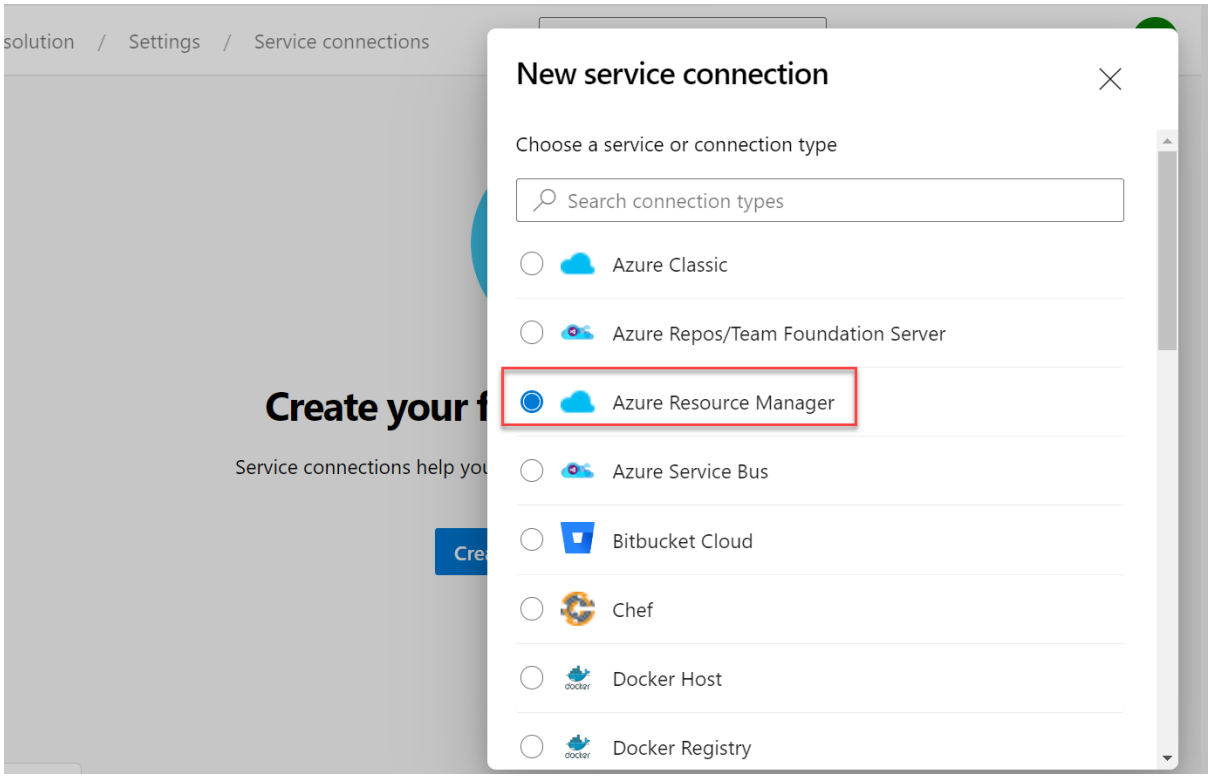

developerGuideForCloudAp... / healthcaresolution / Pipelines
Search
HR
Connect
Select
Configure
Review
New pipeline
Review your pipeline YAML
Variables
Save and run
didourebai/healthcaresolution / azure-pipelines.yml *
Show assistant
1 # Docker
2 # Build and push an image to Azure Container Registry
3 # https://docs.microsoft.com/azure/devops/pipelines/languages/docker
4
5 trigger:
6 - main
7
8 resources:
9 - repo: self
10
11 variables:
12 # Container registry service connection established during pipeline creation
13 dockerRegistryServiceConnection: '6827babb-b1c1-4711-97c7-220ba89704ae'
14 imageRepository: 'healthcaresolution'
15 containerRegistry: 'healthcaresolutioncontainer.azurecr.io'
16 dockerfilePath: '$(Build.SourcesDirectory)/HealthcareSolution/HealthcareSolution.BookingAPI/Dockerfile'

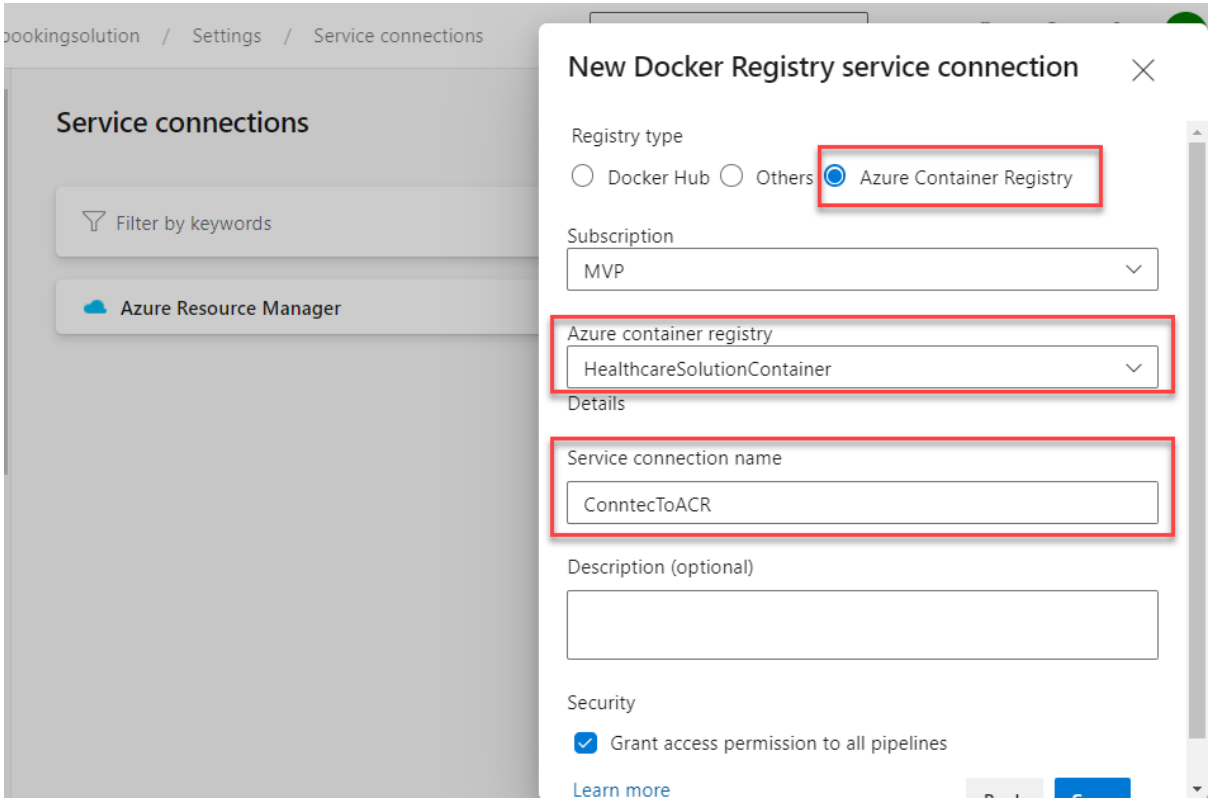

didourebai/healthcaresolution / azure-pipelines.yml *
30 steps:
Settings
31 - task: Docker@2
32 displayName: Build and push an image to container registry
33 inputs:
34 command: buildAndPush
35 buildContext: $(Build.Repository.LocalPath)
36 repository: $(imageRepository)
37 dockerfile: $(dockerfilePath)
38 containerRegistry: $(dockerRegistryServiceConnection)
39 tags:
40 $(tag)


Jobs
Name
Status
Duration
Build
Queued


Azure
Azure DevOps
Azure Pipelines
build and push
Azure Container
Registry

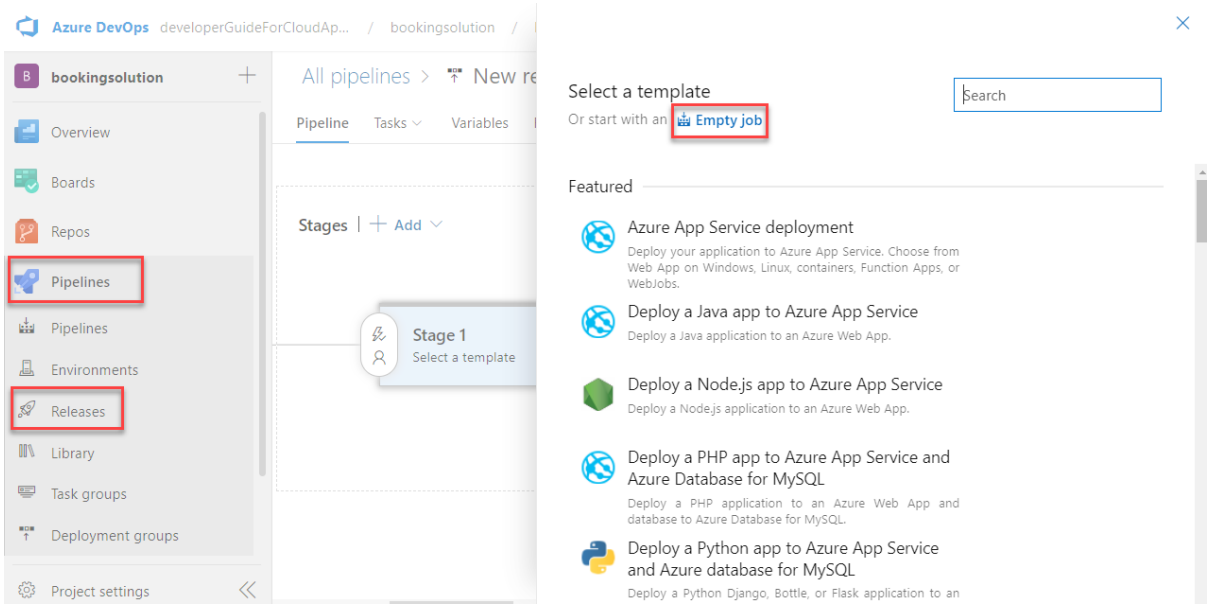

developerGuideForCloudAp...
bookingsolution
Settings
Service connections
Search
Project Settings
Pipelines
Agent pools
Parallel jobs
Settings
Test management
Release retention
Service connections
XAML build services
Repos
Repositories
Artifacts
Storage
Create your first service connection
Service connections help you manage, protect, and reuse authentications to external services.
Create service connection

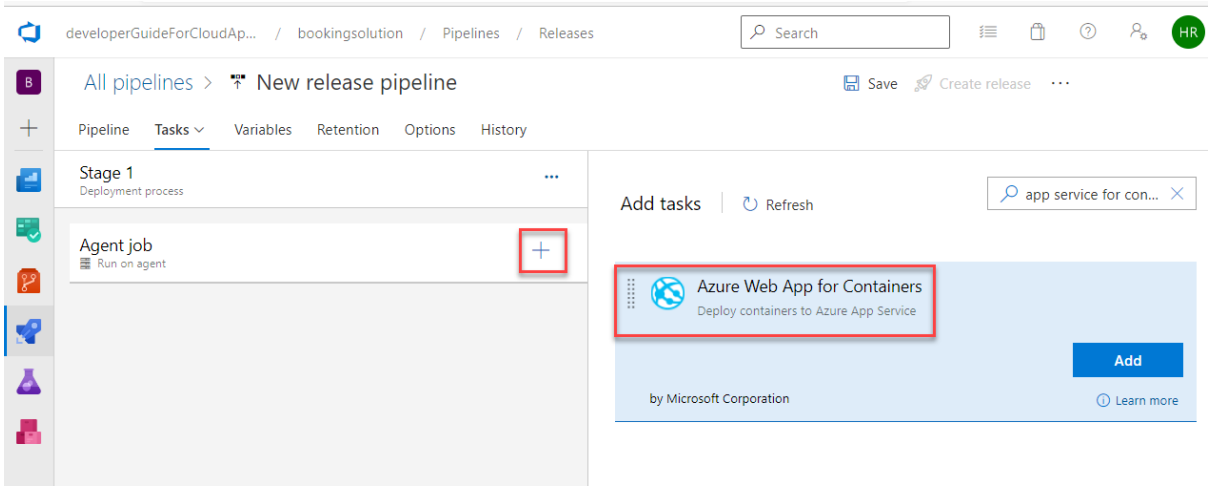

solution / Settings / Service connections
New service connection
Choose a service or connection type
Search connection types
Azure Classic
Azure Repos/Team Foundation Server
Azure Resource Manager
Azure Service Bus
Bitbucket Cloud
Chef
Docker Host
Docker Registry
Create your f
Service connections help you

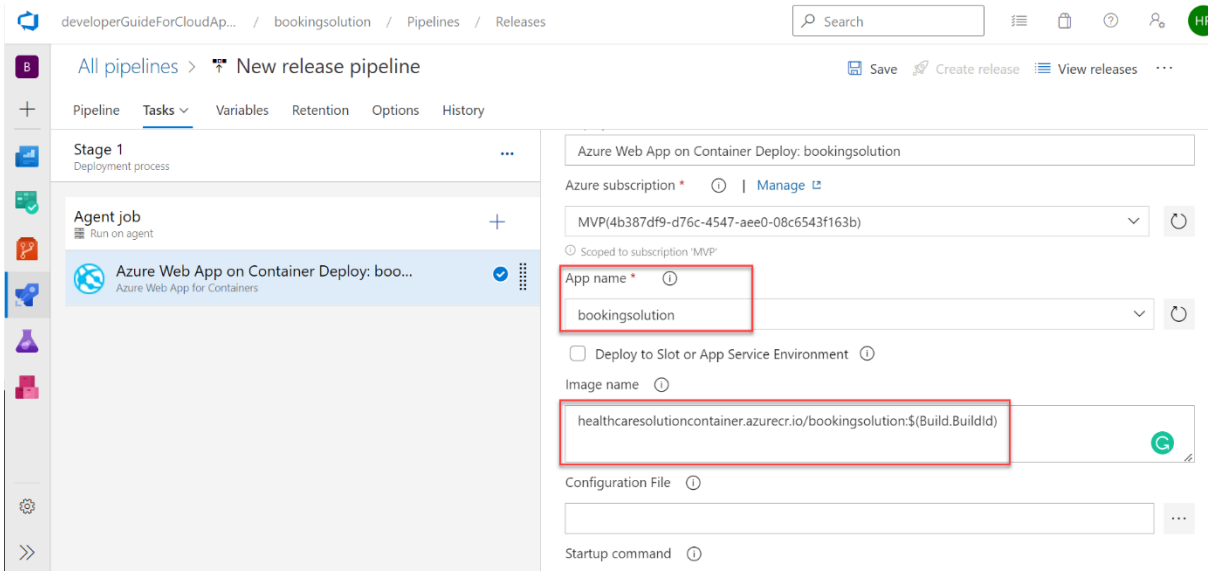

bookingsolution / Settings / Service connections
Service connections
Filter by keywords
Azure Resource Manager
New Docker Registry service connection
Registry type
Docker Hub
Others
Azure Container Registry
Subscription
MVP
Azure container registry
HealthcareSolutionContainer
Details
Service connection name
ConntecToACR
Description (optional)
Security
Grant access permission to all pipelines
Learn more

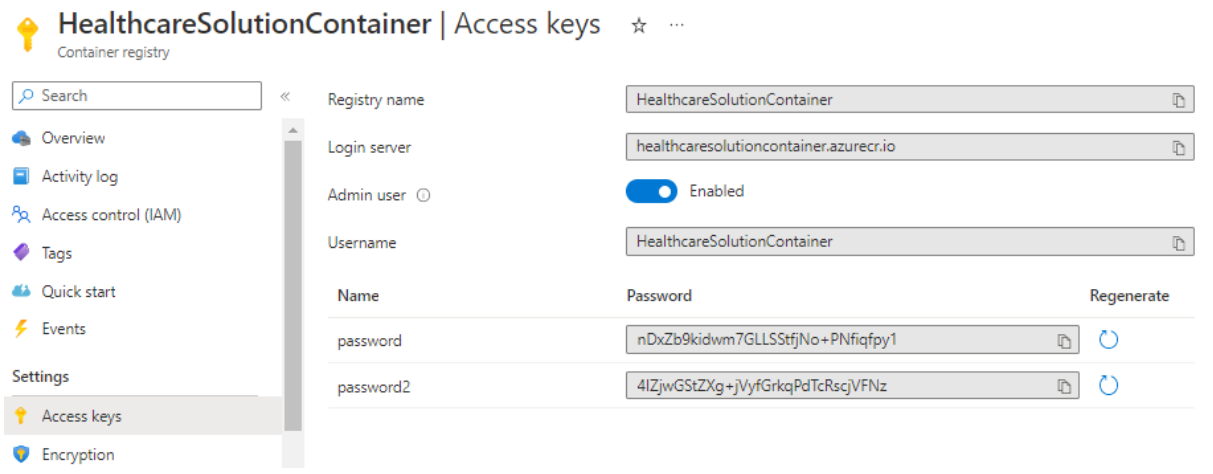
Settings

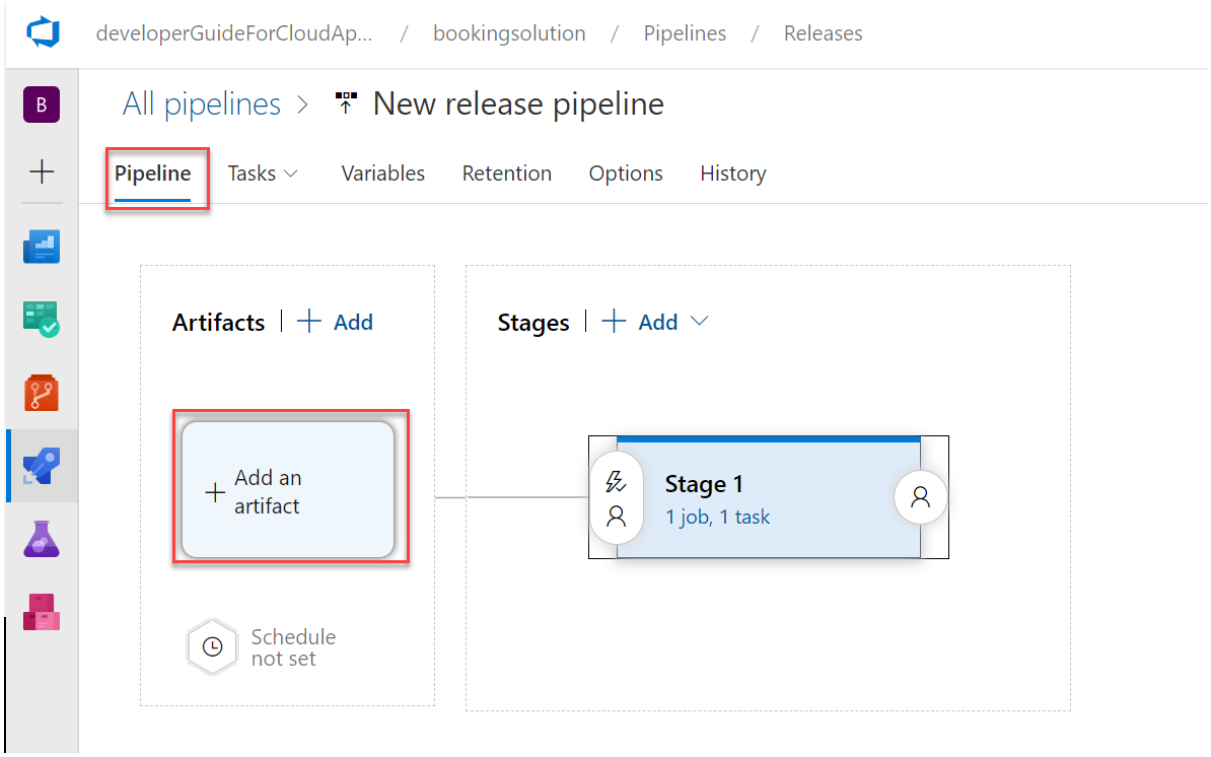
```
- task: Docker@2
  displayName: Build and push an image to container registry
  inputs:
    command: buildAndPush
    repository: $(imageRepository)
    dockerfile: $(dockerfilePath)
    containerRegistry: $(dockerRegistryServiceConnection)
    buildContext: '.'
    tags: |
      $(tag)
```

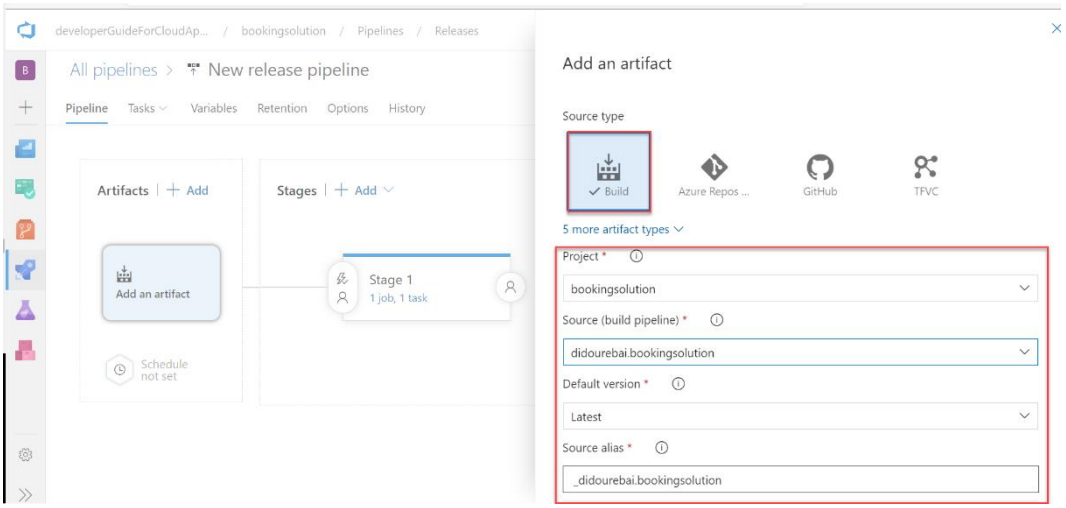


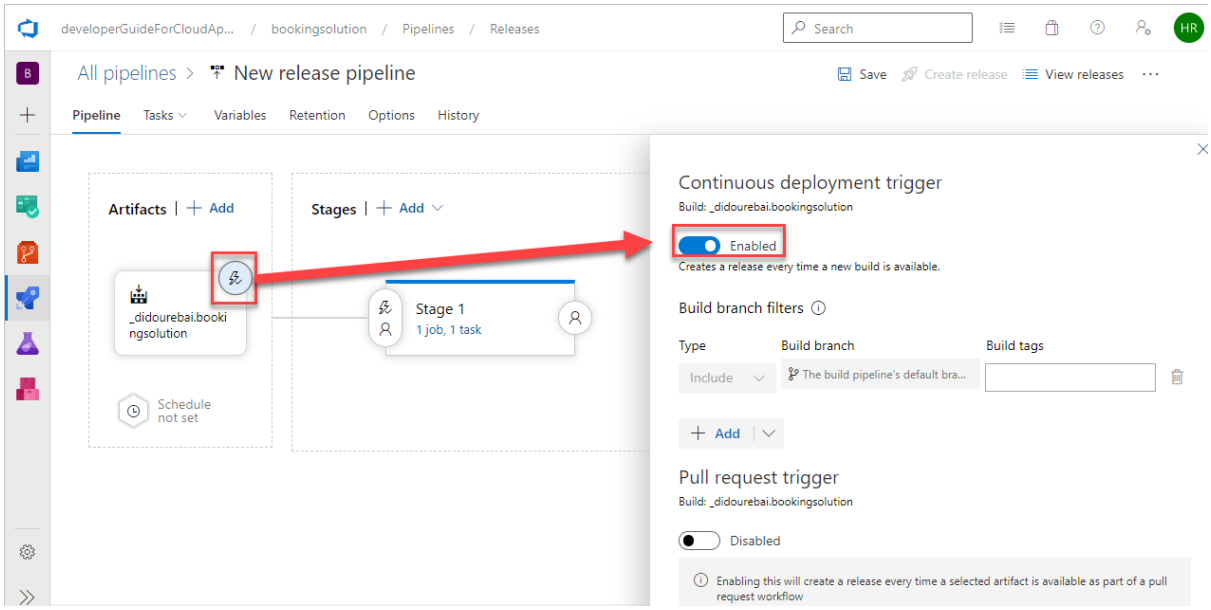


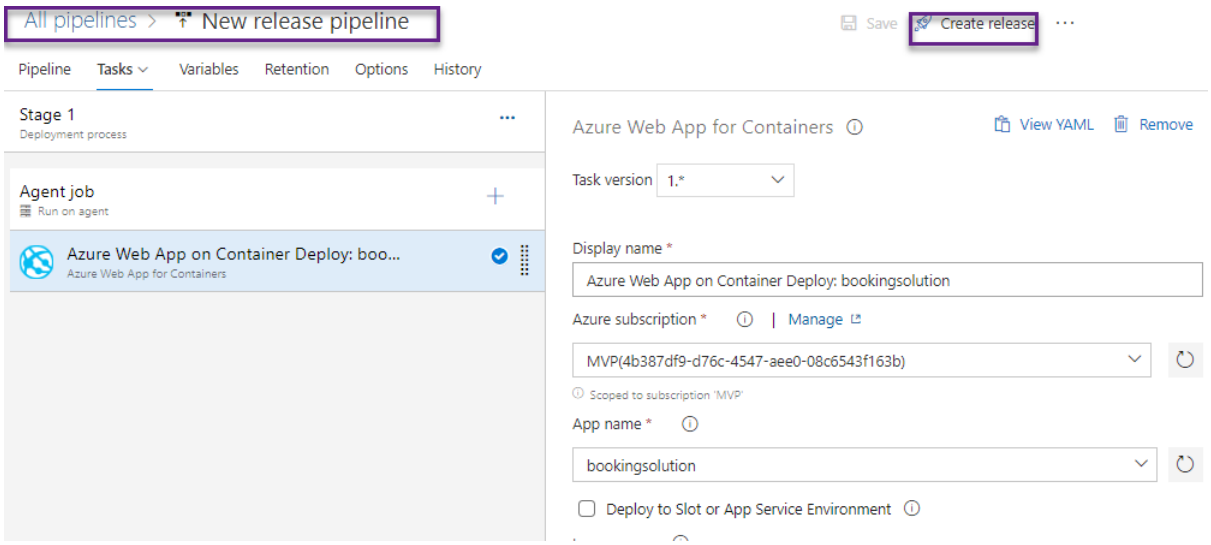

developerGuideForCloudAp... / bookingsolution / Pipelines / Releases
Search
All pipelines > New release pipeline
Save
Create release
View releases
Pipeline
Tasks
Variables
Retention
Options
History
Stage 1
Deployment process
Agent job
Run on agent
Azure Web App on Container Deploy: boo...
Azure Web App for Containers
Azure Web App on Container Deploy: bookingsolution
Azure subscription *
Manage
MVP(4b387df9-d76c-4547-aee0-08c6543f163b)
Scoped to subscription 'MVP'
App name *
bookingsolution
Deploy to Slot or App Service Environment
Image name
healthcaresolutioncontainer.azurecr.io/bookingsolution:$(Build.BuildId)
Configuration File
Startup command

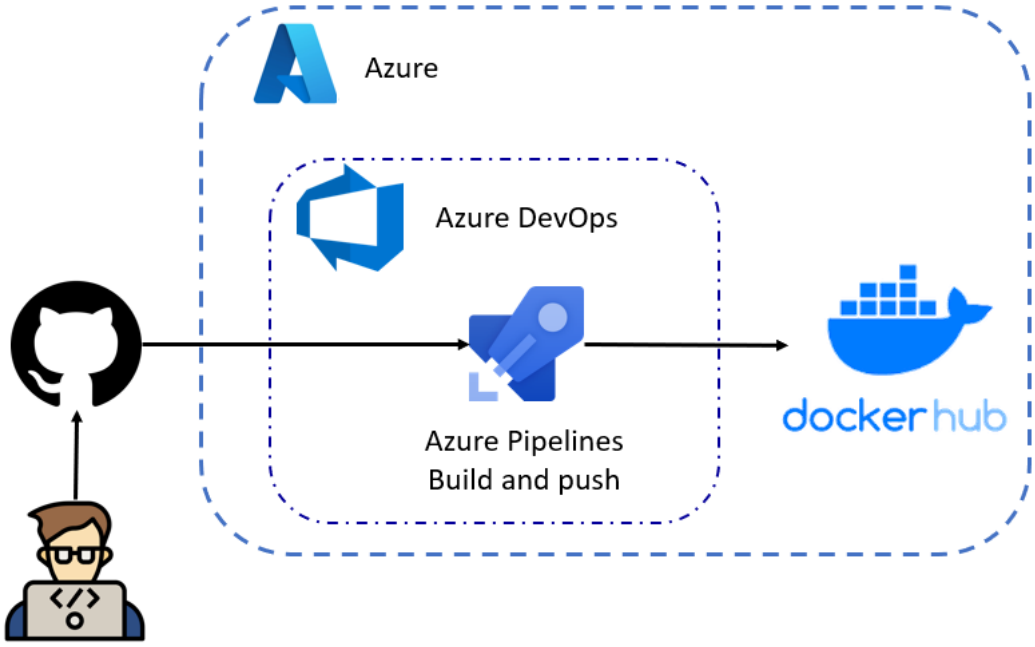

HealthcareSolutionContainer | Access keys
Container registry
Search
Overview
Activity log
Access control (IAM)
Tags
Quick start
Events
Settings
Access keys
Encryption
Registry name
HealthcareSolutionContainer
Login server
healthcaresolutioncontainer.azurecr.io
Admin user
Enabled
Username
HealthcareSolutionContainer
Name
Password
Regenerate
password
nDxZb9kidwm7GLLSStfjNo+PNfiqfpy1
password2
4IZjwGStZXg+jVyfGrkqPdTcRscjVFNz

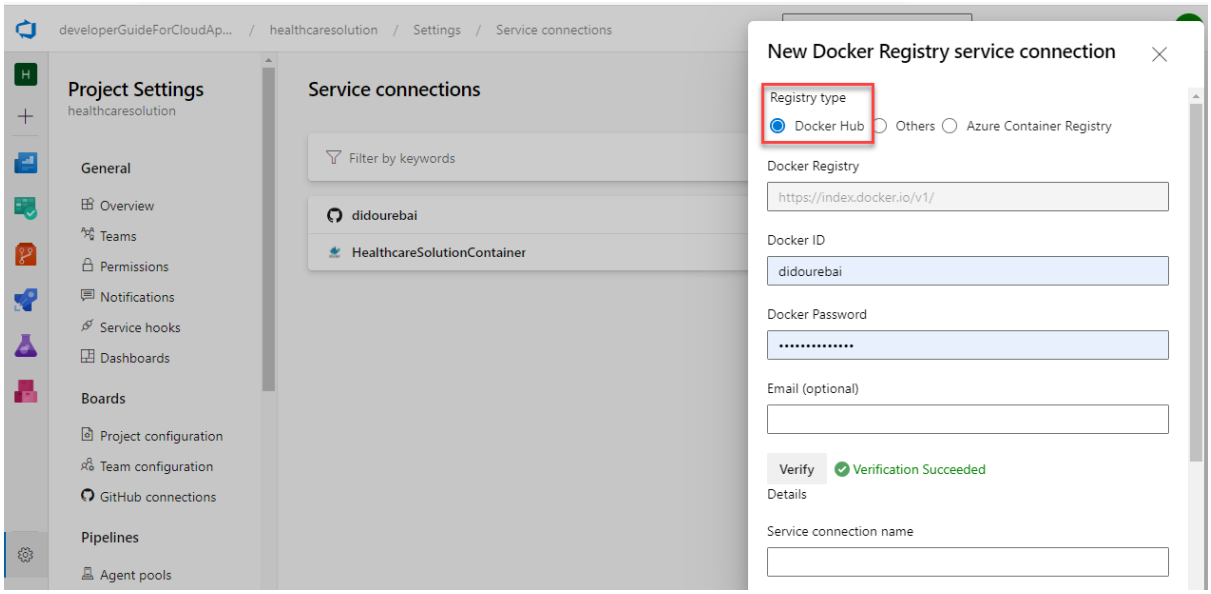

developerGuideForCloudAp... / bookingsolution / Pipelines / Releases
All pipelines > New release pipeline
Pipeline
Tasks
Variables
Retention
Options
History
Artifacts | + Add
Add an artifact
Schedule not set
Stages | + Add
Stage 1
1 job, 1 task

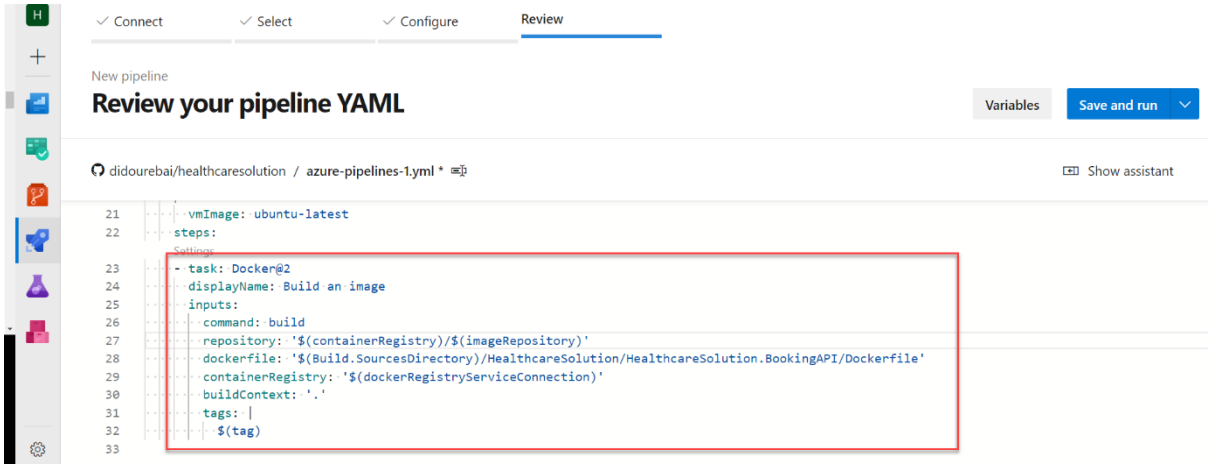

developerGuideForCloudAp... / bookingsolution / Pipelines / Releases
All pipelines > New release pipeline
Pipeline
Tasks
Variables
Retention
Options
History
Artifacts | + Add
Add an artifact
Schedule not set
Stages | + Add
Stage 1
1 job, 1 task
Add an artifact
Source type
Build
Azure Repos ...
GitHub
TFVC
5 more artifact types
Project *
bookingsolution
Source (build pipeline) *
didourebai.bookingsolution
Default version *
Latest
Source alias *
_didourebai.bookingsolution

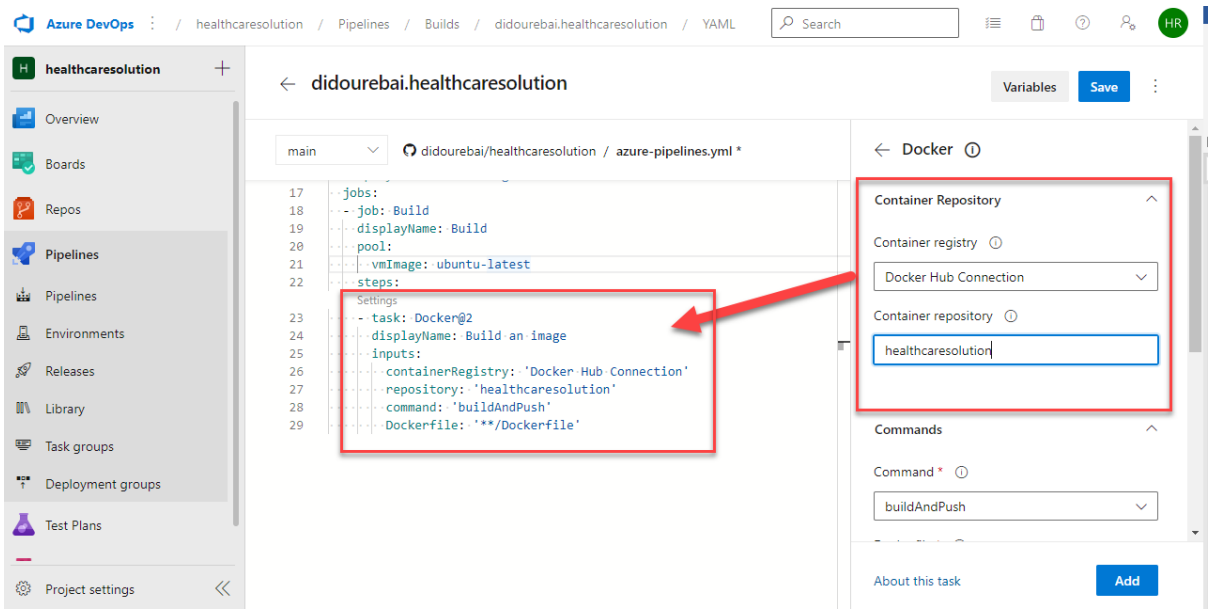

developerGuideForCloudAp... / bookingsolution / Pipelines / Releases
Search
HR
All pipelines > New release pipeline
Save
Create release
View releases
Pipeline
Tasks
Variables
Retention
Options
History
Artifacts | Add
Stages | Add
_didourebai.bookingsolution
Schedule not set
Stage 1
1 job, 1 task
Continuous deployment trigger
Build: _didourebai.bookingsolution
Enabled
Creates a release every time a new build is available.
Build branch filters
Type
Build branch
Build tags
Include
The build pipeline's default bra...
Add
Pull request trigger
Build: _didourebai.bookingsolution
Disabled
Enabling this will create a release every time a selected artifact is available as part of a pull request workflow

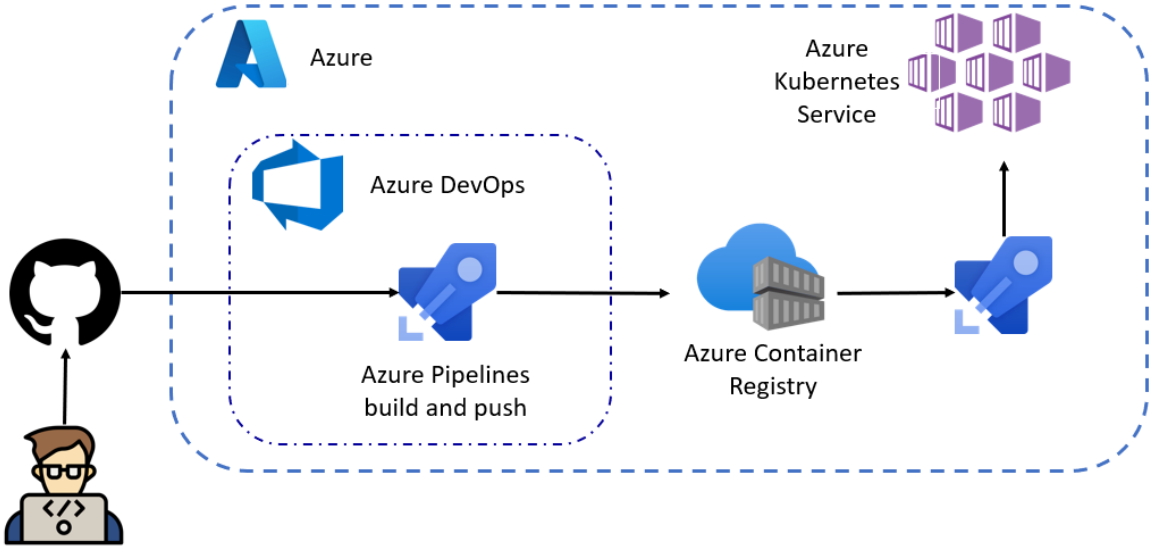

All pipelines > New release pipeline
Save
Create release
Pipeline
Tasks
Variables
Retention
Options
History
Stage 1
Deployment process
Agent job
Run on agent
Azure Web App on Container Deploy: boo...
Azure Web App for Containers
Azure Web App for Containers
View YAML
Remove
Task version 1.*
Display name *
Azure Web App on Container Deploy: bookingsolution
Azure subscription *
Manage
MVP(4b387df9-d76c-4547-aee0-08c6543f163b)
Scoped to subscription 'MVP'
App name *
bookingsolution
Deploy to Slot or App Service Environment

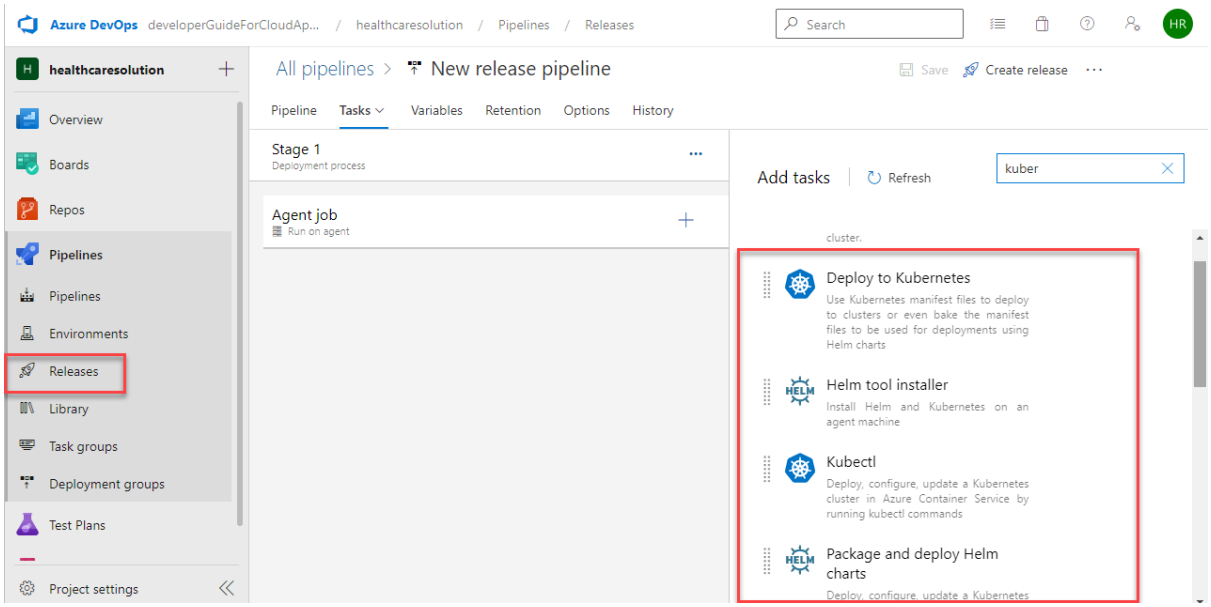

Azure
Azure DevOps
Azure Pipelines
Build and push
dockerhub


developerGuideForCloudAp... / healthcaresolution / Settings / Service connections
Project Settings
healthcaresolution
General
Overview
Teams
Permissions
Notifications
Service hooks
Dashboards
Boards
Project configuration
Team configuration
GitHub connections
Pipelines
Agent pools
Service connections
Filter by keywords
didourebai
HealthcareSolutionContainer
New Docker Registry service connection
Registry type
Docker Hub
Others
Azure Container Registry
Docker Registry
https://index.docker.io/v1/
Docker ID
didourebai
Docker Password
Email (optional)
Verify
Verification Succeeded
Details
Service connection name


Connect
Select
Configure
Review
New pipeline
Review your pipeline YAML
Variables
Save and run
didourebai/healthcaresolution / azure-pipelines-1.yml *
Show assistant
vmImage: ubuntu-latest
steps:
- task: Docker@2
displayName: Build an image
inputs:
command: build
repository: '$(containerRegistry)/$(imageRepository)'
dockerfile: '$(Build.SourcesDirectory)/HealthcareSolution/HealthcareSolution.BookingAPI/Dockerfile'
containerRegistry: '$(dockerRegistryServiceConnection)'
buildContext: '.'
tags:
$(tag)


Azure DevOps
healthcaresolution
Pipelines
Search
didourebai.healthcaresolution
Variables
Save
Overview
Boards
Repos
Pipelines
Environments
Releases
Library
Task groups
Deployment groups
Test Plans
Project settings
main
didourebai/healthcaresolution / azure-pipelines.yml *
jobs:
- job: Build
displayName: Build
pool:
vmImage: ubuntu-latest
steps:
- task: Docker@2
displayName: Build an image
inputs:
containerRegistry: 'Docker Hub Connection'
repository: 'healthcaresolution'
command: 'buildAndPush'
Dockerfile: '**/Dockerfile'
Docker
Container Repository
Container registry
Docker Hub Connection
Container repository
healthcaresolution
Commands
Command *
buildAndPush
About this task
Add


Azure
Azure Kubernetes Service
Azure DevOps
Azure Pipelines build and push
Azure Container Registry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cluster.
Deploy to Kubernetes
Use Kubernetes manifest files to deploy to clusters or even bake the manifest files to be used for deployments using Helm charts
Helm tool installer
Install Helm and Kubernetes on an agent machine
Kubectl
Deploy, configure, update a Kubernetes cluster in Azure Container Service by running kubectl commands
Package and deploy Helm charts
Deploy, configure, update a Kubernetes