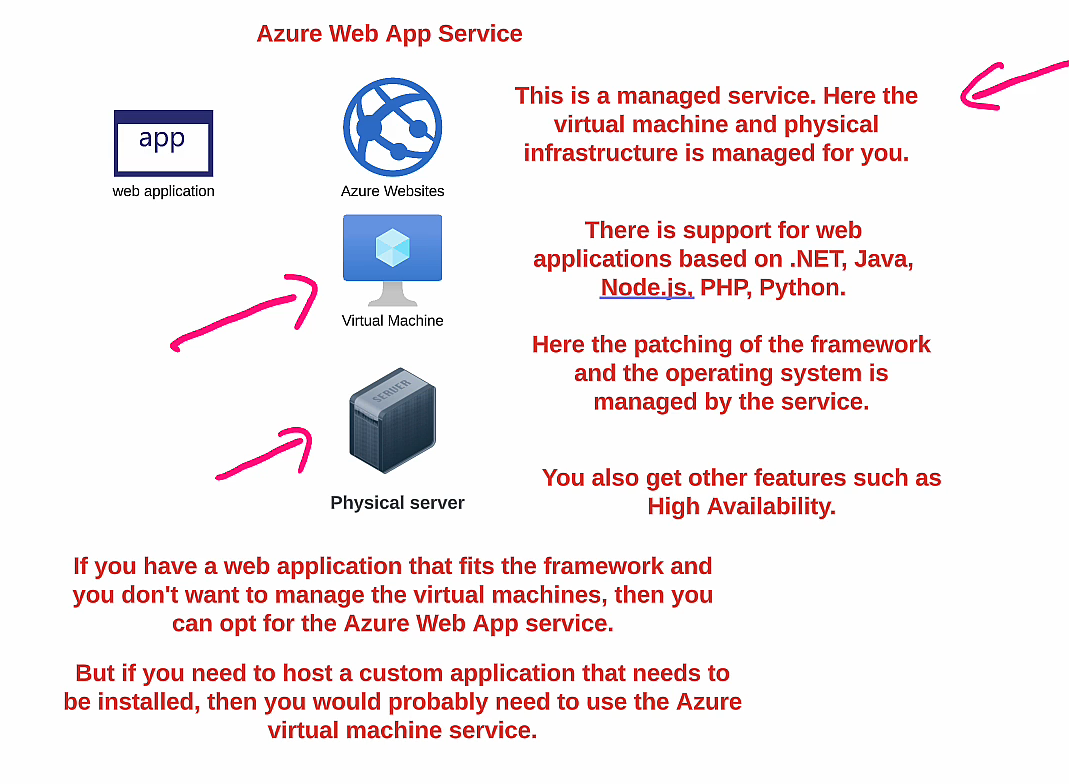
Azure Web App Service



High availability in App service contain

* **Redundancy:**

Having backup systems or components that can take over if the primary fails.

* **Failover:**

The automatic switching from a failed primary component to a backup.

* **Load Balancing:**

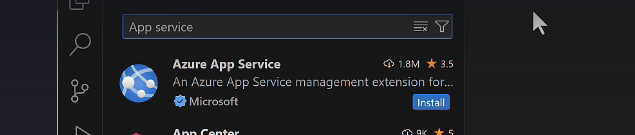
Distributing traffic across multiple resources to prevent overload on any single component.

* **Availability Zones:**

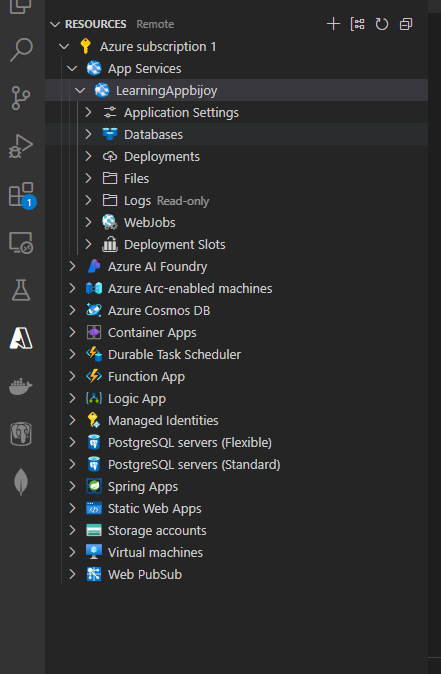
Physically separated locations within an Azure region that provide redundancy.

Connect .net application to Azure web app

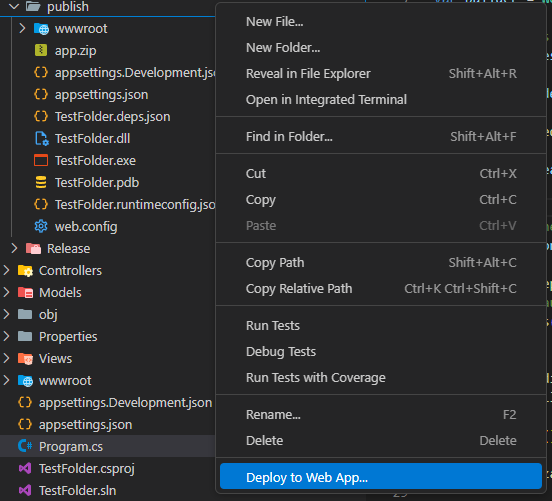
1. Install App service extension by Microsoft



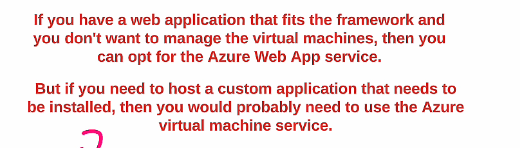
1. Sign on to azure account in VS code

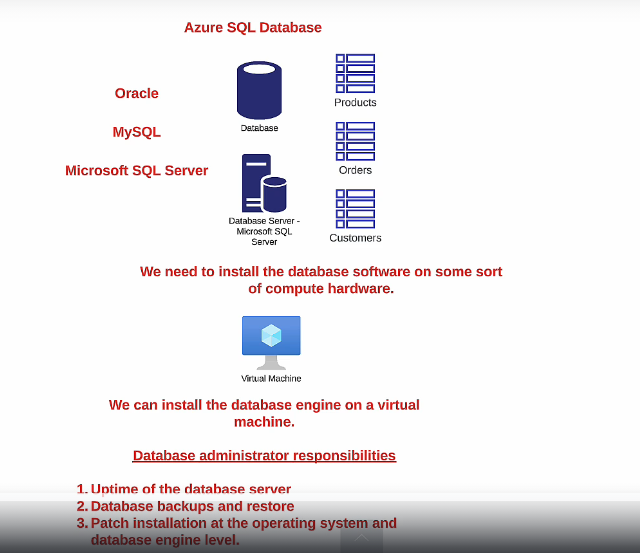


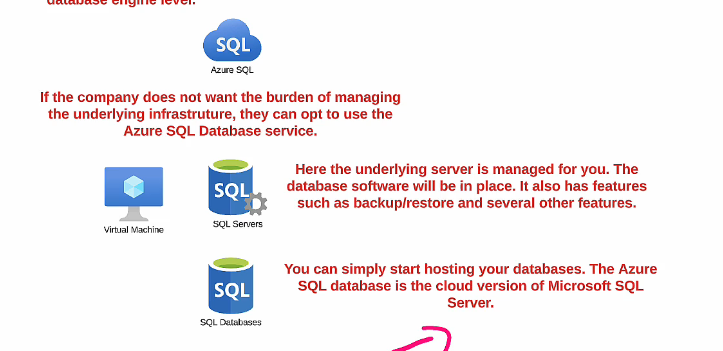
1. In VS code click on project folder where code is published and click “Deploy to Web App”



We don’t need to worry about security, OS patching etc if we use Web app

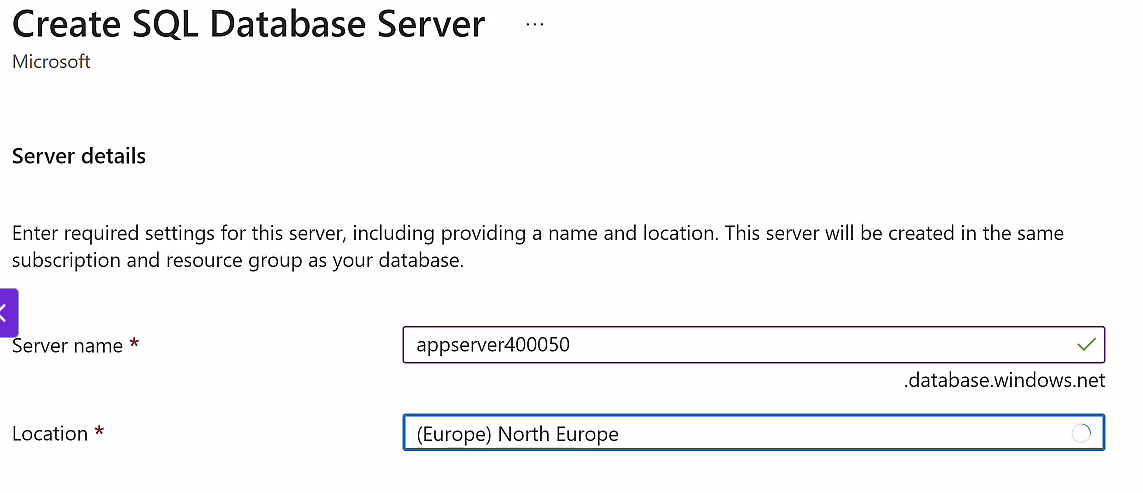


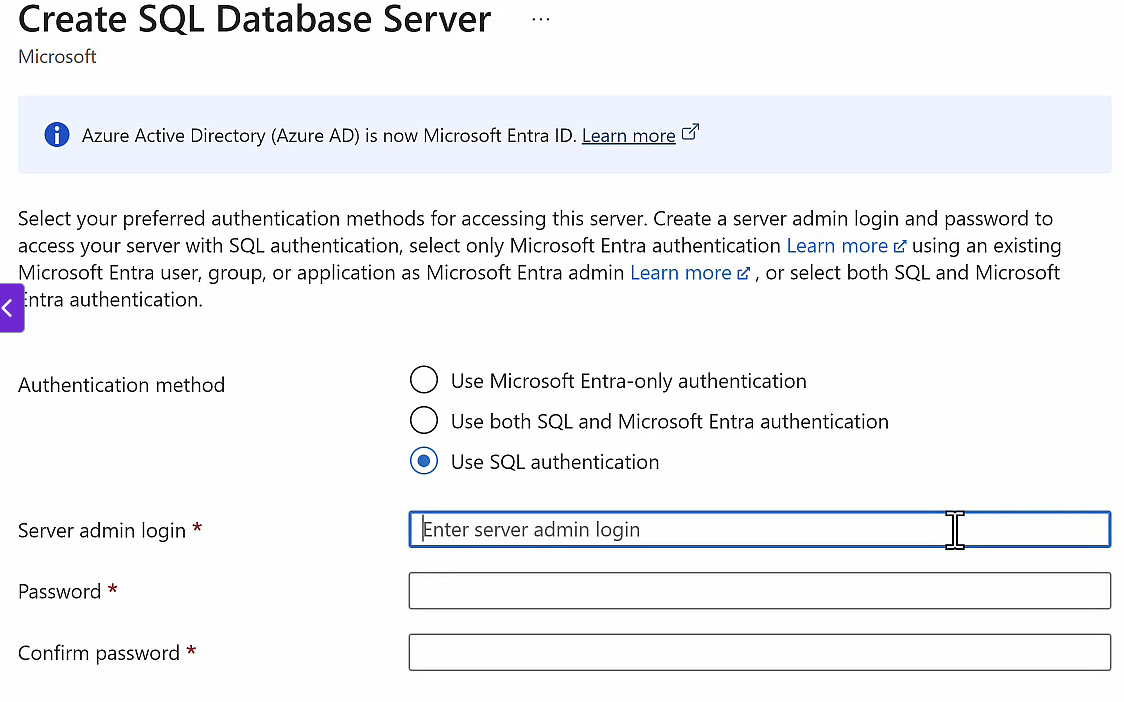




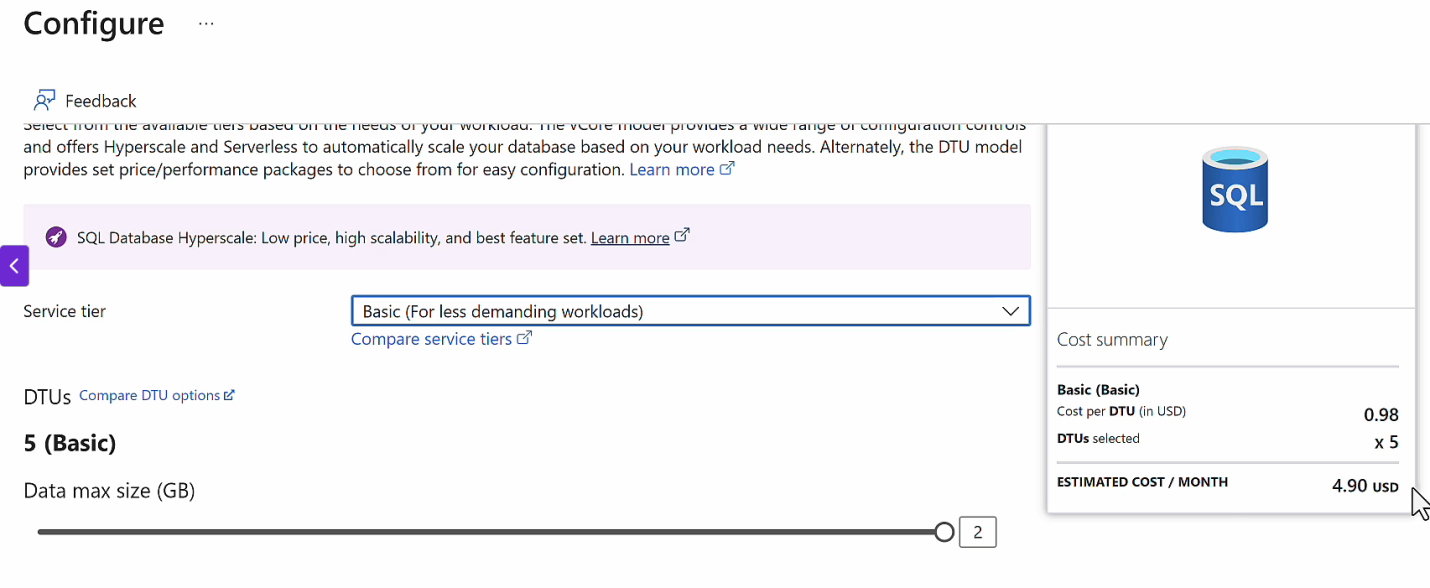
Create Azure SQL Database

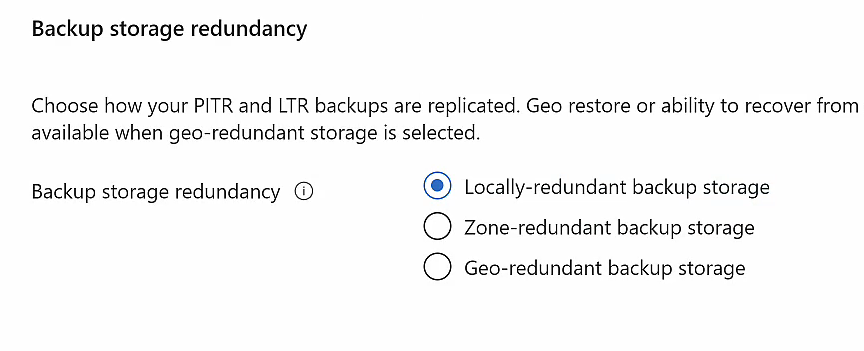
Search for SQL Database



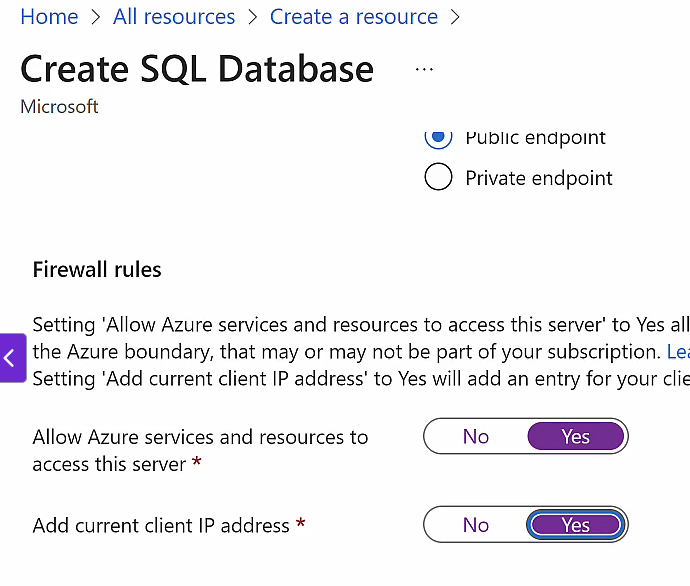


Click Configure and select DTU and then Basic



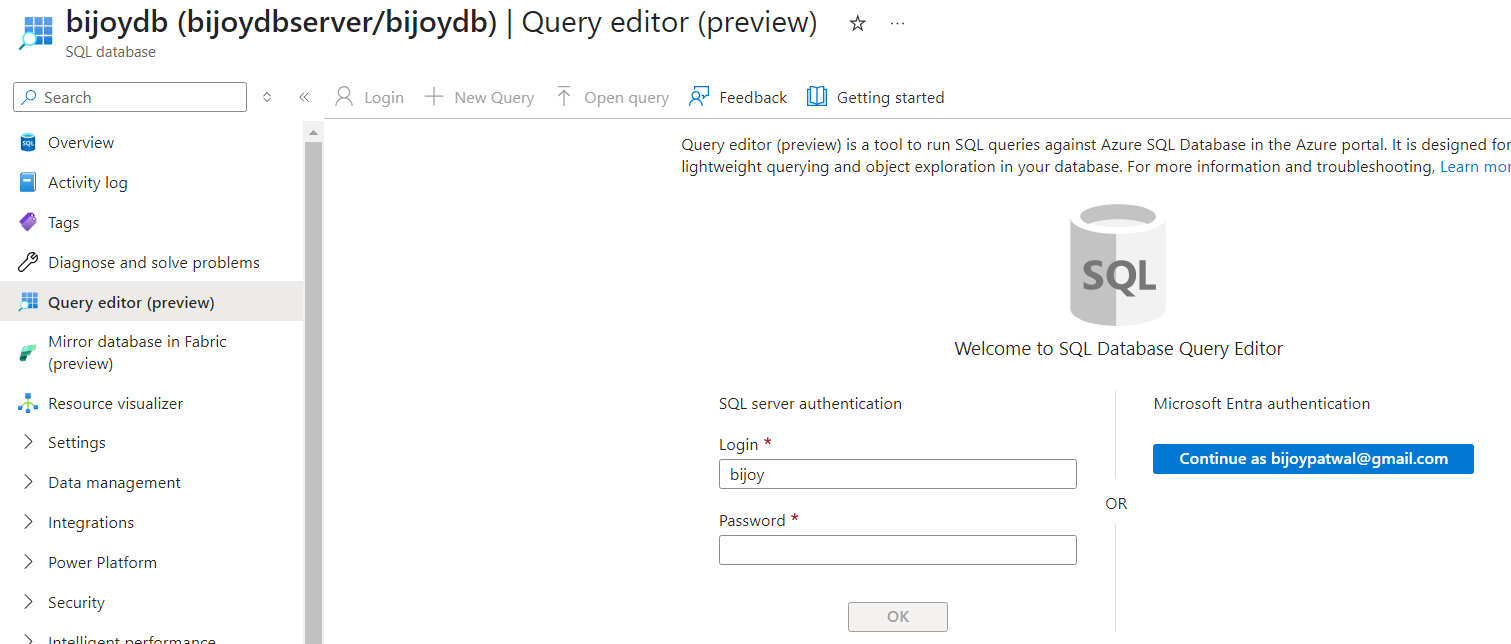


In Networking select following



Click next and create.

To use SQL db Go to Resource 🡺 query editor and login



Run following queries for testing

CREATE TABLE Course

(

CourseID int,

CourseName varchar(1000),

Rating numeric(2,1)

);

INSERT INTO Course(CourseID,CourseName,Rating) VALUES(1, 'Docker and Kubernetes',4.5);

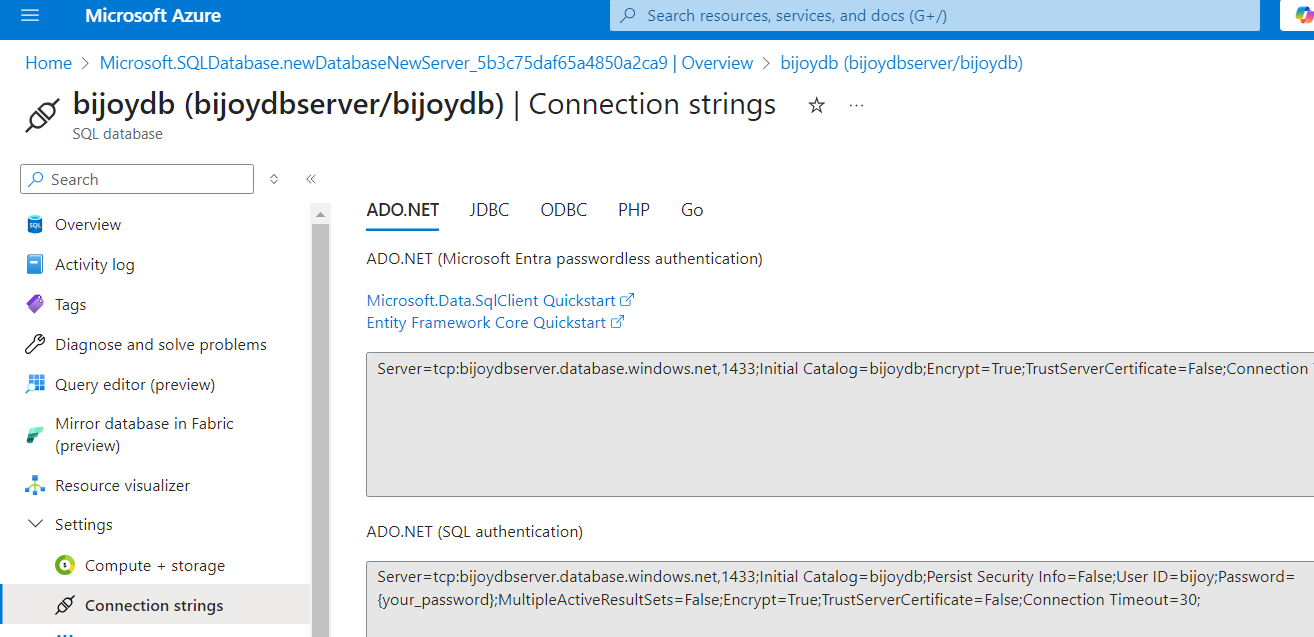
INSERT INTO Course(CourseID,CourseName,Rating) VALUES(2,'AZ-204 Azure Developer',4.6);

INSERT INTO Course(CourseID,CourseName,Rating) VALUES(3,'AZ-104 Administrator',4.7);

SELECT \* FROM Course;

Connecting with Azure SQL DB

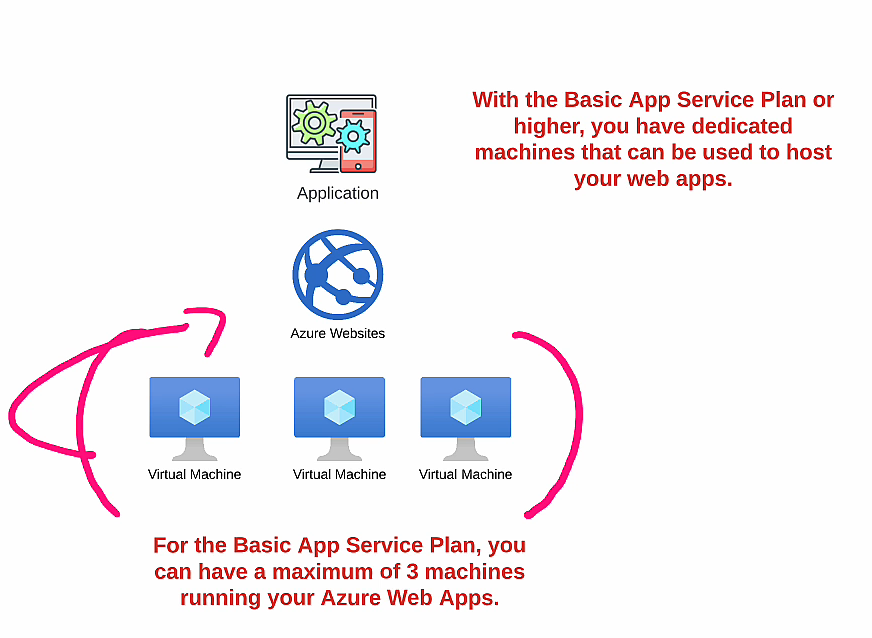
Copy Connection string from “Connection Strings ” section and copy in your application

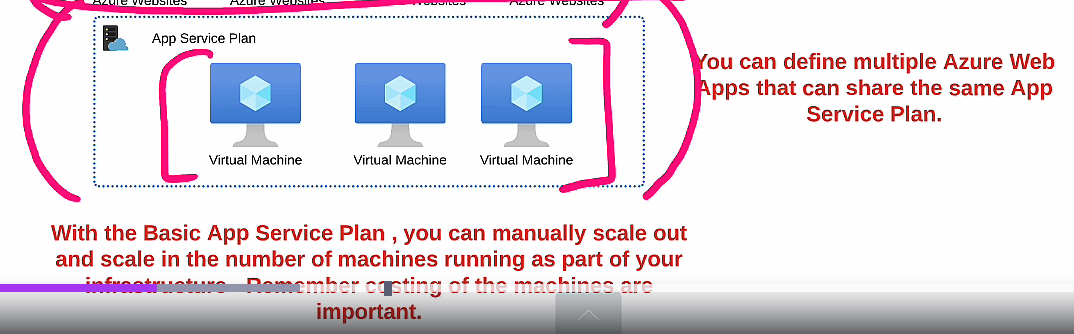


We can now publish app to Azure Web App

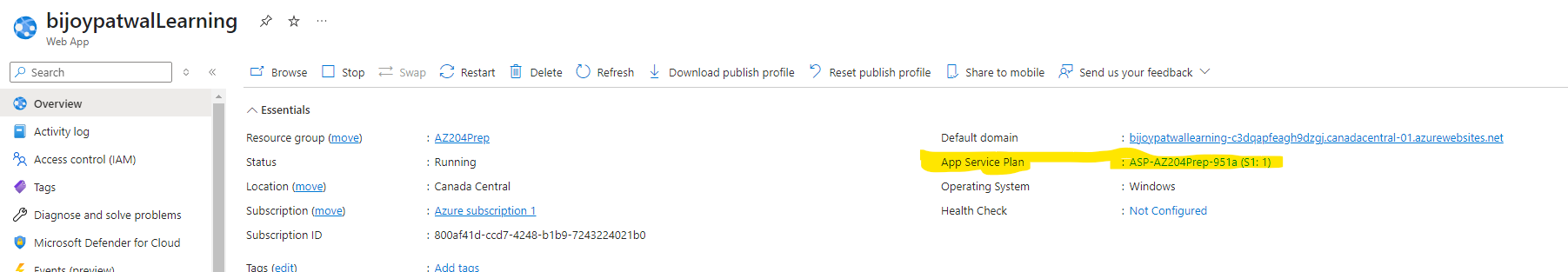
App Service Auto Scaling

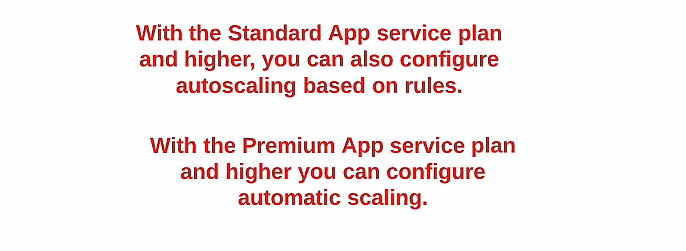
From Basic tier and above pricing, we get dedicated machines that are used to host web apps



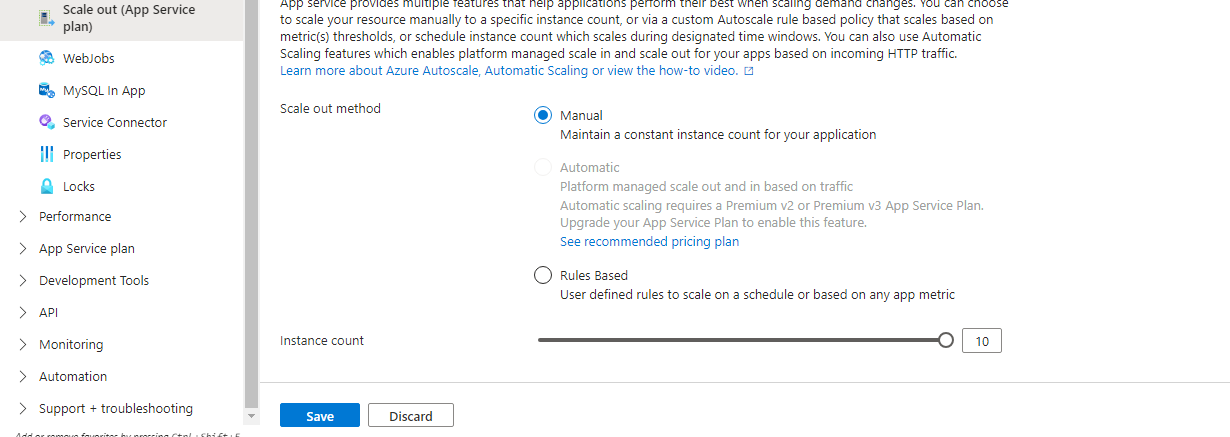


1. In overview Click “App service Plan”



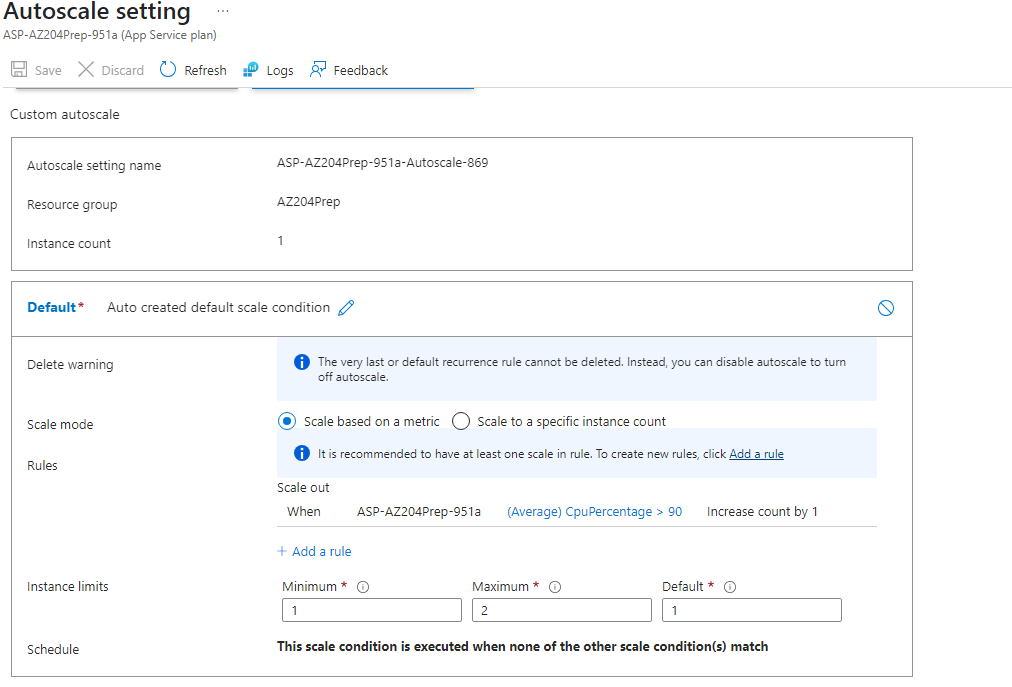
1. 

In settings we can manually chane no. of VMs. Settings🡺Manual🡺Scale Out

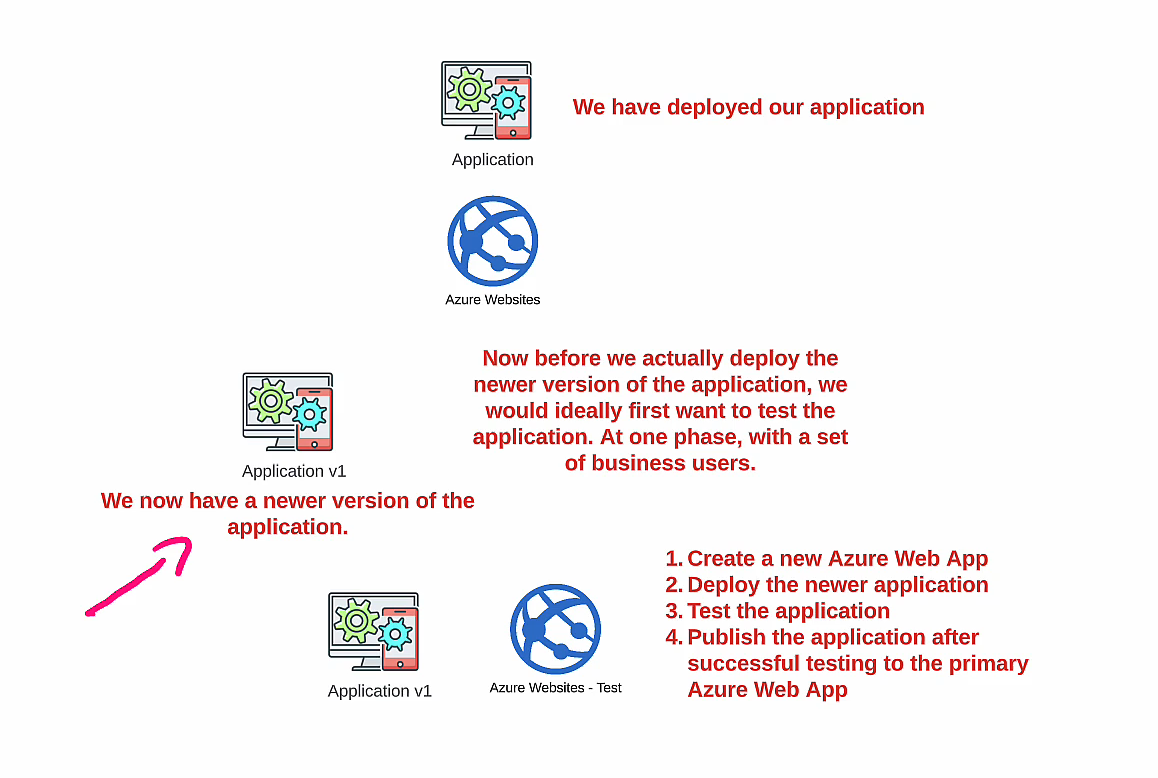


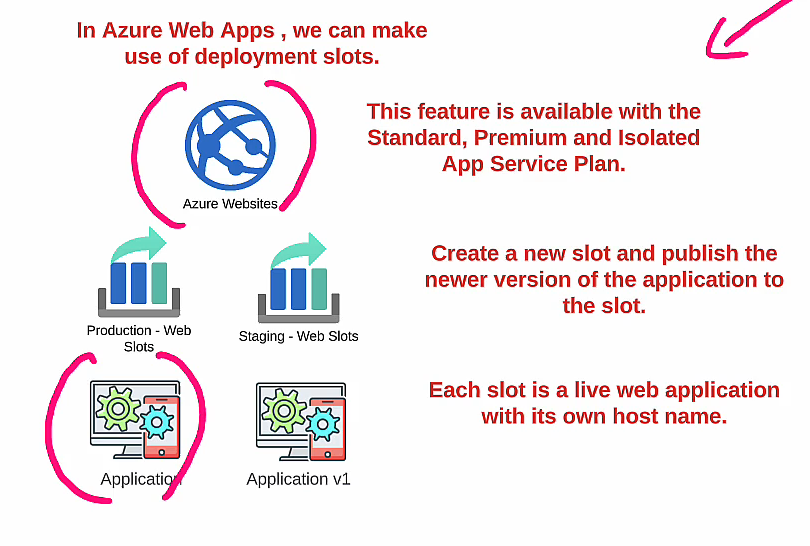
1. We can also scale based on rules, this will help us scale only when it is required and we don’t have to pay for more VM’s in App service

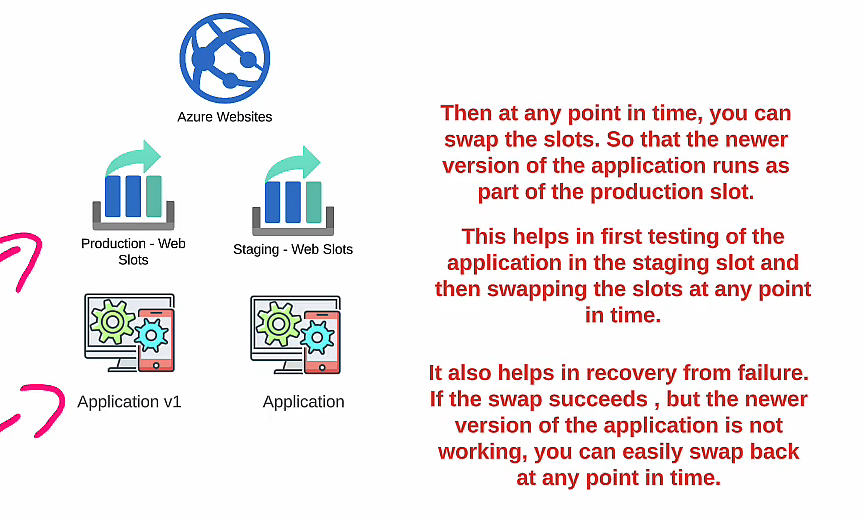
Settings🡺rule Based🡺Configure



Deployment Slots



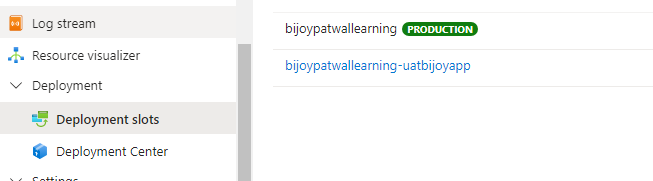




1. Add deployment slot

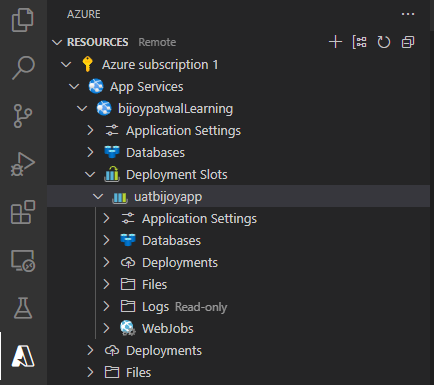
Deployment Slots 🡺 Add Slot

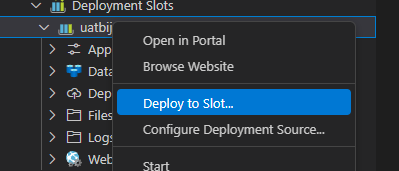




To Deploy to new Slot

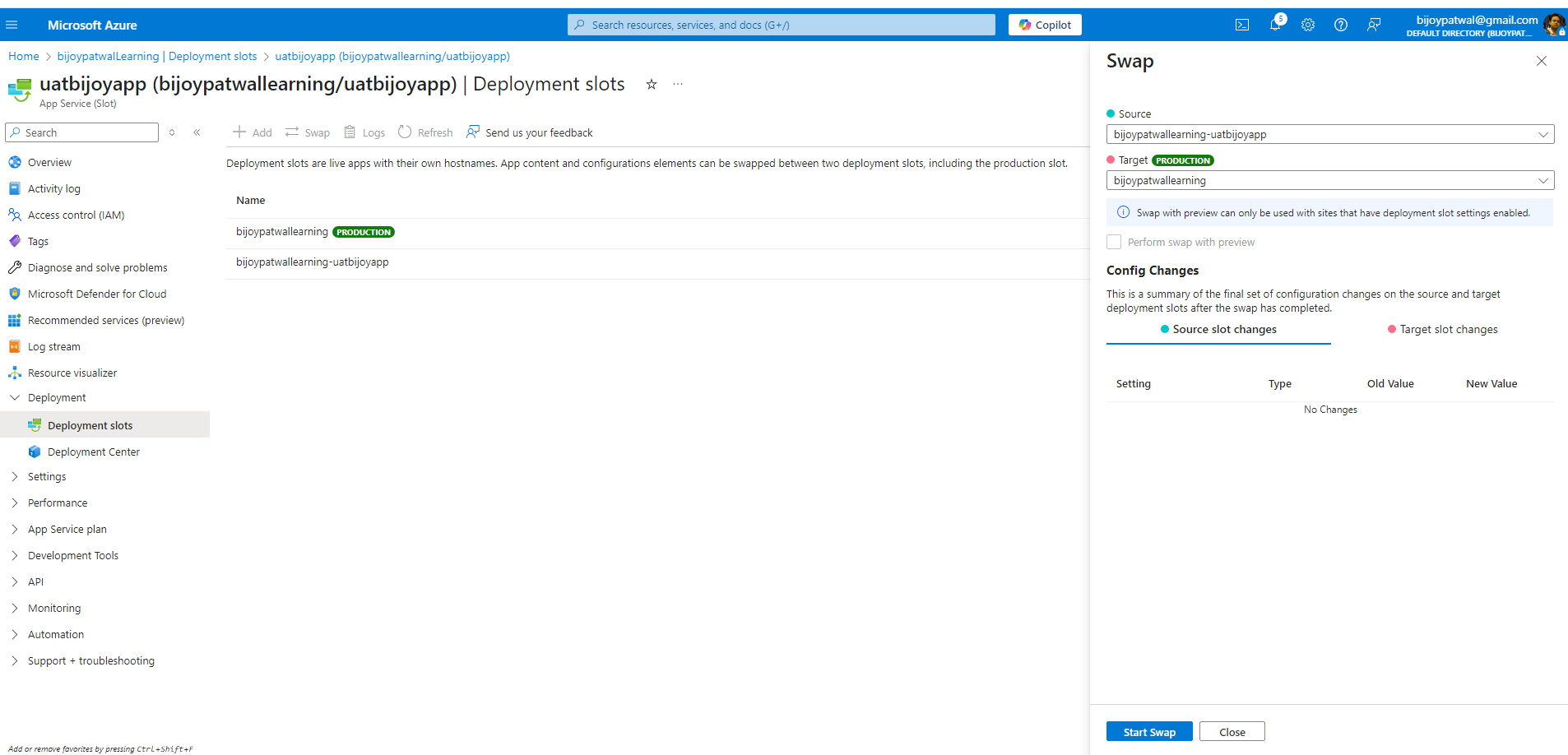
Go to New slot in VS Code Azure Window🡺right Click on slot 🡺 Deploy To slot



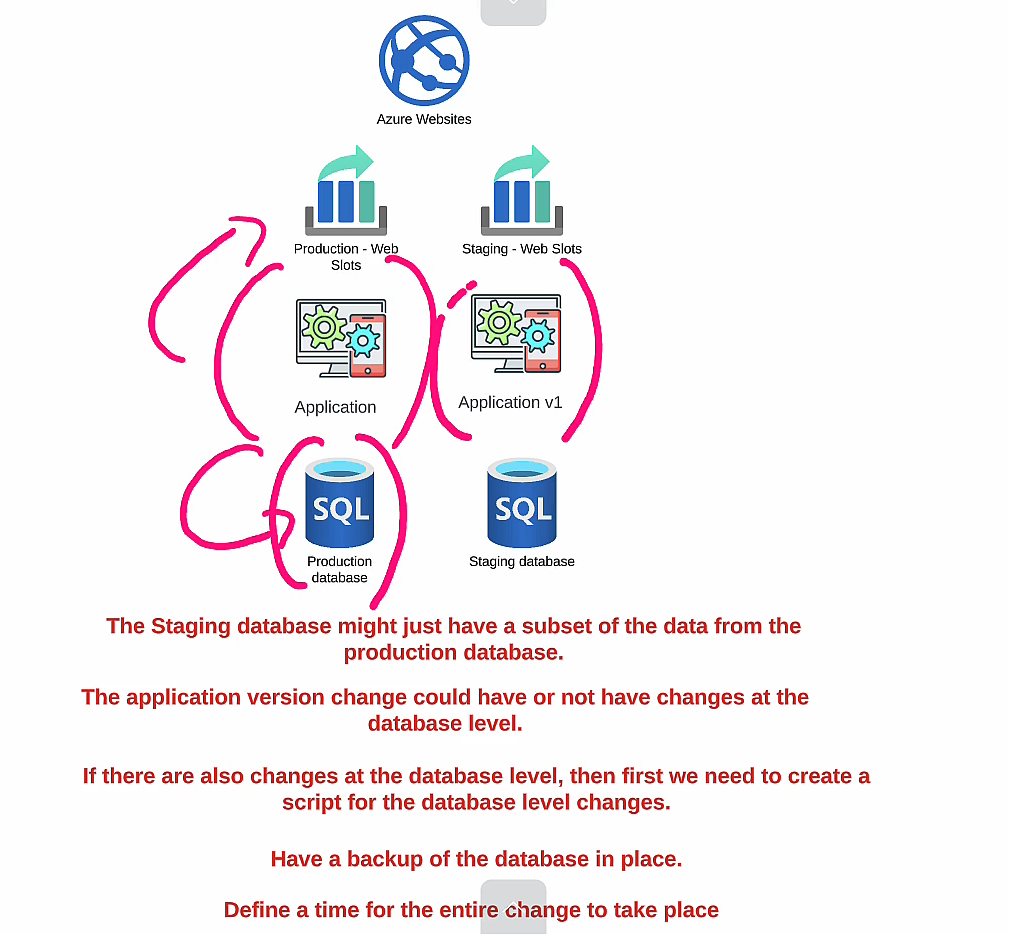


Click Yes in popups and app will be deployed. Go to slot URL and check if app is deployed

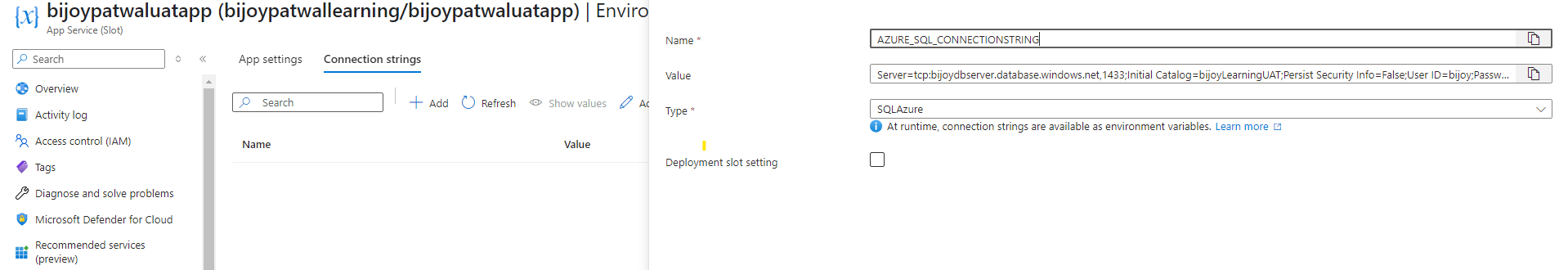
To Swap slots go to Deployment Slots 🡺swap and click “SWAP”



Deployment slot with databases



If we have Prod and Staging Db we need to add connection string to deployment slot also.



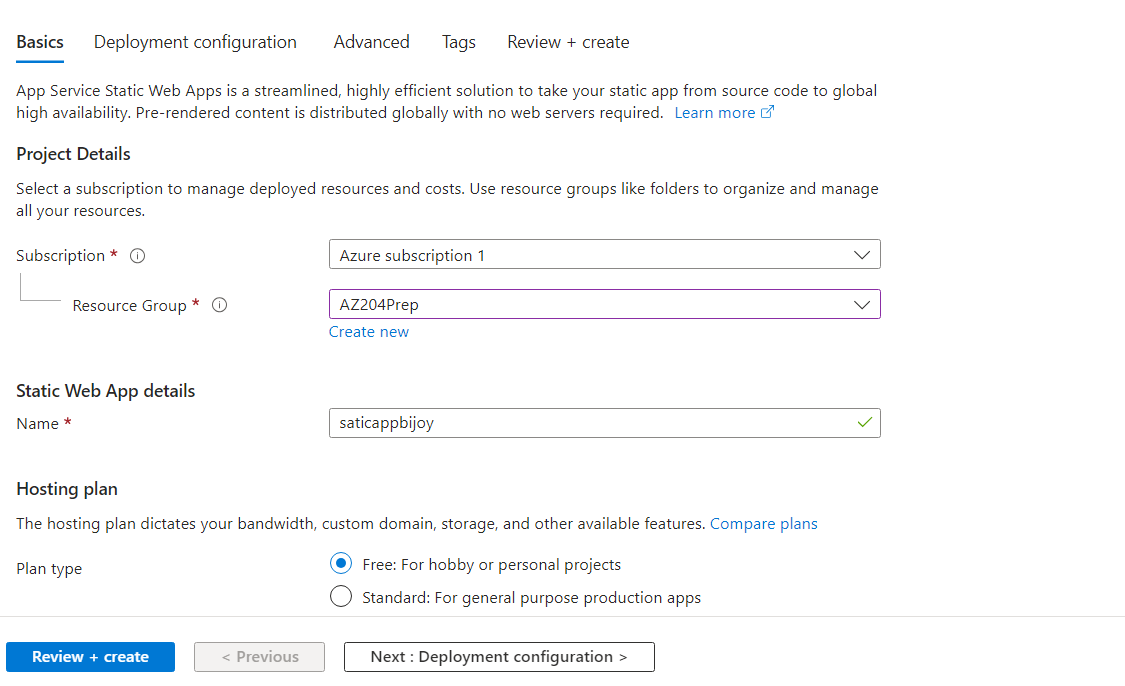
CI/CD in Azure Web app

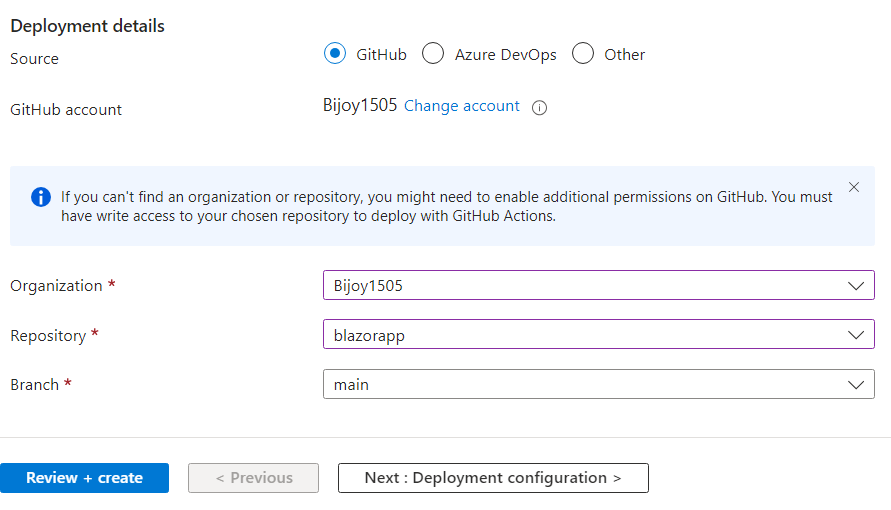
Deployment centre🡺 Select source control🡺 select branch🡺 push changes to branch

Azure Static Web Apps

Fork repository- <https://github.com/login?return_to=/staticwebdev/blazor-starter/generate>

1. Go to the [Azure portal](https://portal.azure.com/).
2. Select **Create a Resource**.
3. Search for **Static Web Apps**.
4. Select **Static Web App**.
5. Select **Create**.
6. On the Basics tab, enter the following values.





Click next and create static app. After deployment completes click on below link to see CI/CD Pipeline

