

Create an App Service plan

1. To start creating an App Service Plan, browse to <https://ms.portal.azure.com/#create/Microsoft.AppServicePlanCreate>.

[Home](#) > [Create a resource](#) > [Marketplace](#) >

Create App Service Plan ...



Basics Tags Review + create

App Service plans give you the flexibility to allocate specific apps to a given set of resources and further optimize your Azure resource utilization. This way, if you want to save money on your testing environment you can share a plan across multiple apps. [Learn more](#)

Project Details

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

Subscription * ⓘ

Resource Group * ⓘ

[Create new](#)

App Service Plan details

Name *

Operating System *

☒ Linux ☐ Windows

Region *

Pricing Tier

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

Pricing plan

[Explore pricing plans](#)

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](#)

Zone redundancy

- ☐ **Enabled:** Your App Service plan and the apps in it will be zone redundant. The minimum App Service plan instance count will be three.
- ☒ **Disabled:** Your App Service Plan and the apps in it will not be zone redundant. The minimum App Service plan instance count will be one.

[Review + create](#)

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[Next : Tags >](#)

2. Configure the Project Details section before configuring the App Service plan.
3. In the App Service Plan details section, name the App Service Plan, then select the Operating System and Region. Region determines where your App Service plan is created.
4. When creating a plan, you can select the pricing tier of the new plan. In Pricing Tier, select a Pricing plan or select Explore pricing plans to view additional details.
5. In the Zone redundancy section, select whether the App Service Plan zone redundancy should be enabled or disabled.
6. Select Review + create to create the App Service Plan.

Create an app Service

1. Select Create a resource > Web + Mobile > Web App.
2. Select a subscription.
3. Enter a name for a new resource group, or select Use existing and select one from the dropdown list.
4. Enter a name for the app. If you already selected an App Service plan in an App Service Environment, the domain name for the app reflects the domain name of the App Service Environment.
5. For Publish, Runtime stack, and Operating System, make your selections as appropriate.
6. For Region, select a pre-existing App Service Environment v3. If you want to create a new App Service Environment, select a region.

Home > Create a resource >

Create Web App

Instance Details

Need a database? [Try the new Web + Database](#)

Name *

Publish *

Runtime stack *

Operating System

Region *

App Service Plan

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

Linux Plan (Central US) ⓘ Select App Service Plan

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

7. Select an existing App Service plan, or create a new one. If you're creating a new plan, select the size that you want for your App Service plan. The only SKU you can select for your app is an Isolated v2 pricing SKU. Making a new App Service plan will normally take less than 20 minutes.

Home > New >

Create Web App

Name *

Publish *

Runtime stack *

Operating System *

Region *

App Service Plan

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

Windows Plan (asev3-west) ⓘ

Sku and size *

Spec Picker

Dev / Test
For less demanding workloads

Production
For most production workloads

Isolated
Advanced networking and scale

Recommended pricing tiers

| SKU | 195 minimum ACU/vCPU | 195 minimum ACU/vCPU | 195 minimum ACU/vCPU |
|------|------------------------|----------------------|------------------------|
| I1V2 | 8 GB memory 2 vCPU | I2V2 | 16 GB memory 4 vCPU |
| I3V2 | 32 GB memory 8 vCPU | | |

Included features
Every app hosted on this App Service plan will have access to these features:

- Single tenant system**
Take more control over the resources being used by your app.
- Isolated network**
Runs within your own virtual network.
- Private app access**
Using an App Service Environment with Internal Load Balancing (ILB).

Included hardware
Every instance of your App Service plan will include the following hardware configuration:

- Azure Compute Units (ACU)**
Dedicated compute resources used to run applications deployed in the App Service Plan. [Learn more](#)
- Memory**
Memory per instance available to run applications deployed and running in the App Service plan.
- Storage**
1 TB disk storage shared by all apps deployed in the App Service plan.

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

8. If you chose to create a new App Service Environment as part of creating your new App Service plan, fill out the name and virtual IP type.
9. Select Next: Monitoring. If you want to enable Application Insights with your app, you can do it here during the creation flow.
10. Select Next: Tags, and add any tags you want to the app.
11. Select Review + create. Make sure that the information is correct, and then select Create.

Add a Staging Slot







1. In the Azure portal, navigate to your app's management page.
2. In the left pane, select Deployment slots > Add Slot.
Note: If the app isn't already in the Standard, Premium, or Isolated tier, select Upgrade and go to the Scale tab of your app before continuing.
3. In the Add a slot dialog box, give the slot a name, and select whether to clone an app configuration from another deployment slot. Select Add to continue.

The screenshot shows the Azure portal interface for 'my-demo-app'. The left sidebar contains navigation links: Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, Microsoft Defender for Cloud, Events (preview), Deployment (with 'Deployment slots' highlighted), Deployment Center, and Settings (Configuration, Authentication, Application Insights, Identity, Backups, Custom domains). The main pane displays 'Deployment Slots' with a table showing one slot: 'my-demo-app' in 'PRODUCTION' status, 'Running'. The 'Add Slot' button is highlighted in the top bar. An 'Add a slot' dialog box is open on the right, with 'staging' entered in the 'Name' field and 'Do not clone settings' selected in the 'Clone settings from:' dropdown. The dialog also shows the URL 'my-demo-app-staging.azurewebsites.net' and 'Add'/'Close' buttons at the bottom.

| NAME | STATUS |
|-------------|--------------------|
| my-demo-app | PRODUCTION Running |

You can clone a configuration from any existing slot. Settings that can be cloned include app settings, connection strings, language framework versions, web sockets, HTTP version, and platform bitness.

- After the slot is added, select Close to close the dialog box. The new slot is now shown on the Deployment slots page. By default, Traffic % is set to 0 for the new slot, with all customer traffic routed to the production slot.
- Select the new deployment slot to open that slot's resource page.

 Save  Discard  Add Slot  Swap  Logs  Refresh



Deployment Slots

Deployment slots are live apps with their own hostnames. App content and configurations elements can be swapped between two deployment slots, including the production slot.

| NAME | | STATUS | APP SERVICE PLAN | TRAFFIC % |
|---------------------|------------|---------|------------------|-----------|
| my-demo-app | PRODUCTION | Running | myAppServicePlan | 100 |
| my-demo-app-staging | | Running | myAppServicePlan | 0 |

The staging slot has a management page just like any other App Service app. You can change the slot's configuration. To remind you that you're viewing the deployment slot, the app name is shown as <app-name>/<slot-name>, and the app type is App Service (Slot). You can also see the slot as a separate app in your resource group, with the same designations.

- Select the app URL on the slot's resource page. The deployment slot has its own host name and is also a live app. To limit public access to the deployment slot, see Azure App Service IP restrictions.

Create autoscale setting

- Open the Autoscale pane in Azure Monitor and select a resource that you want to scale. The following steps use an App Service plan associated with a web app. You can create your first ASP.NET web app in Azure in 5 minutes.
- The current instance count is 1. Select Custom autoscale.
- Enter a Name and Resource group or use the default.

4. Select Scale based on a metric.
5. Select Add a rule. to open a context pane on the right side.

Microsoft Azure

Search resources, services, and docs (G+)

pdavis@contoso.com

Home > Microsoft.Web-ASP-Portal-12345678-8e4a | Overview > AppServPlan-001

AppServPlan-001 | Scale out (App Service plan)

App Service plan | Directory: Microsoft

Search

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Overview

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Tags

Diagnose and solve problems

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Settings

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Networking

File system storage

Networking

Networking

Scale up (App Service plan)

Scale out (App Service plan)

Properties

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Monitoring

Alerts

Metrics

Logs

Diagnostic settings

Automation

Tasks (preview)

Export template

Help

Configure 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

Custom autoscale

Autoscale setting name * AppServPlan-001-Autoscale-356

Resource group Azmon-001

Instance count 1

Default* Auto created default 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 * 1 Maximum * 1 Default * 1

Schedule

This scale condition is executed when none of the other scale condition(s) match

+ Add a scale condition

6. The default rule scales your resource by one instance if the CPU percentage is greater than 70 percent. Keep the default values and select Add.
7. You've now created your first scale-out rule. Best practice is to have at least one scale in rule. To add another rule, select Add a rule.
8. Set Operator to Less than.
9. Set Metric threshold to trigger scale action to 20.
10. Set Operation to Decrease count by.
11. Select Add.

Scale rule



Subscription

AzMon (abcdef01-2345-6789-0abc-def012345678)

Metric source

Current resource (AppServPlan-001)

Resource type

App Service plans

Resource

AppServPlan-001

Criteria

Metric namespace *

Standard metrics

Metric name

CPU Percentage

1 minute time grain

Dimension Name

Operator

Dimension Values

Add

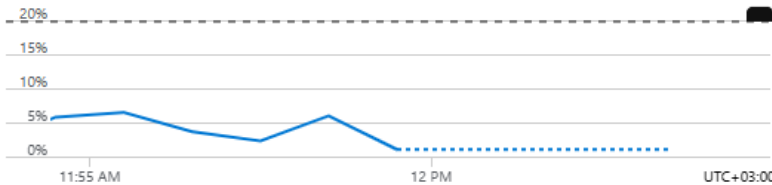
Instance

=

All values



If you select multiple values for a dimension, autoscale will aggregate the metric across the selected values, not evaluate the metric for each values individually.



CpuPercentage (Average)

4.26 %

☐ Enable metric divide by instance count ⓘ

Operator *

Less than

Metric threshold to trigger scale action * ⓘ

20

%

Duration (minutes) * ⓘ

10

Time grain (minutes) ⓘ

1

Time grain statistic * ⓘ

Average

Time aggregation * ⓘ

Average

Action

Operation *

Decrease count by

Cool down (minutes) * ⓘ

5

instance count *

1

Add

You now have a scale setting that scales out and scales in based on CPU usage, but you're still limited to a maximum of one instance.

12. Under Instance limits set Maximum to 3

13. Select Save.

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

Home > Microsoft.Web-ASP-Portal-12345678-8e4a | Overview > AppServPlan-001

AppServPlan-001 | Scale out (App Service plan) ☆ ...

App Service plan | Directory: Microsoft

Search

Save Discard Refresh Logs Feedback

Configure Run history JSON Notify Diagnostic settings

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Autoscale setting name * AppServPlan-001-Autoscale-356

Resource group Azmon-001

Instance count 1

Default * Auto created default scale condition

Delete warning

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Scale mode

Scale based on a metric ☒ Scale to a specific instance count ☐

Rules

Scale out

When AppServPlan-001 (Average) CpuPercentage > 70 Increase count by 1

Scale in

When AppServPlan-001 (Average) CpuPercentage < 20 Decrease count by 1

+ Add a rule

Instance limits

Minimum * 1 Maximum * 3 Default * 1

Schedule

This scale condition is executed when none of the other scale condition(s) match

+ Add a scale condition

You have successfully created your first scale setting to autoscale your web app based on CPU usage. When CPU usage is greater than 70%, an additional instance is added, up to a maximum of 3 instances. When CPU usage is below 20%, an instance is removed up to a minimum of 1 instance. By default there will be 1 instance.

Deploy a web app

Install

- The Azure Tools extension in vs code

- The latest [.NET 7.0 SDK](#).

Create an ASP.NET web app

1. Open a terminal window on your machine to a working directory. Create a new .NET web app using the `dotnet new webapp` command, and then change directories into the newly created app.

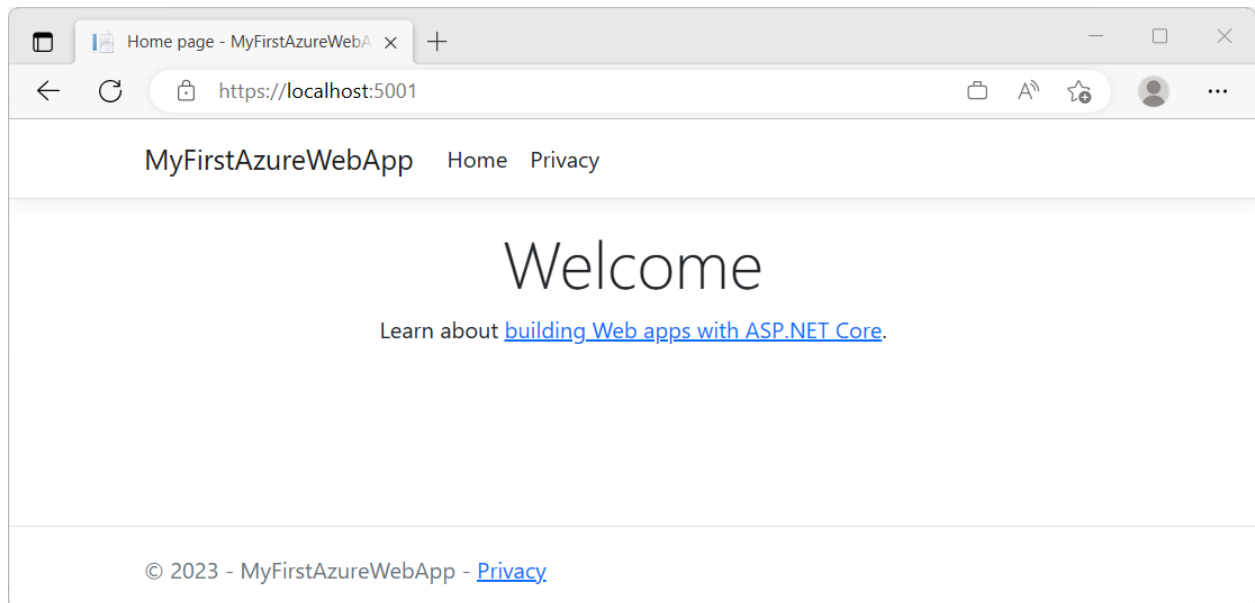
```
dotnet new webapp -n MyFirstAzureWebApp --framework net7.0
cd MyFirstAzureWebApp
```

2. From the same terminal session, run the application locally using the `dotnet run` command.

```
dotnet run --urls=https://localhost:5001/
```

3. Open a web browser, and navigate to the app at <https://localhost:5001>.

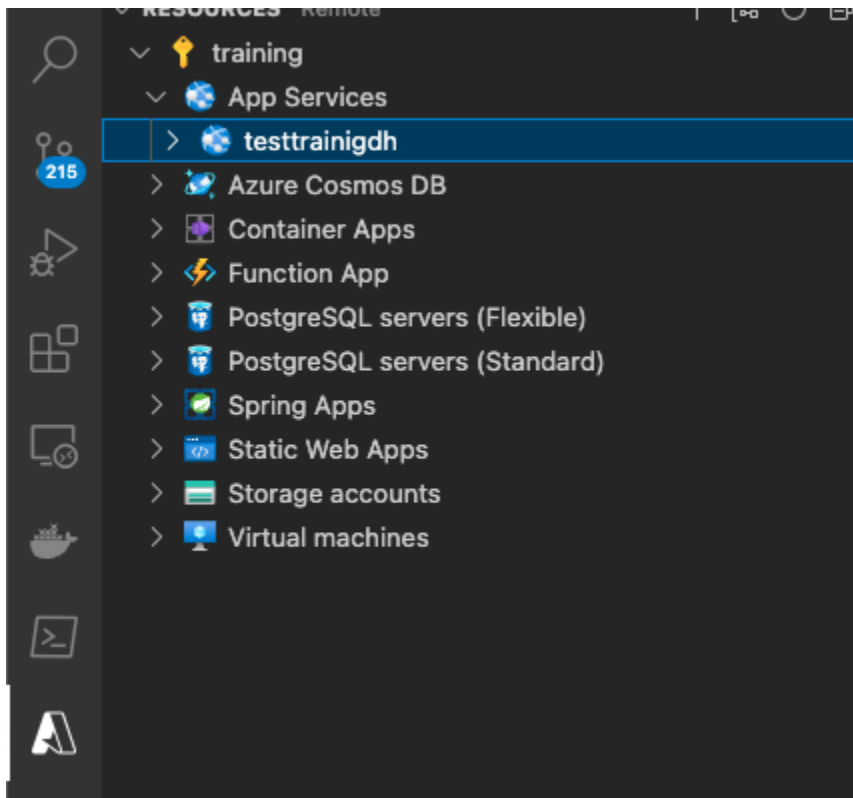
You see the template ASP.NET Core 7.0 web app displayed in the page.



Publish your web app

1. Click on azure extension
2. Log in with your account

3. Select training subscription
4. Find your app service



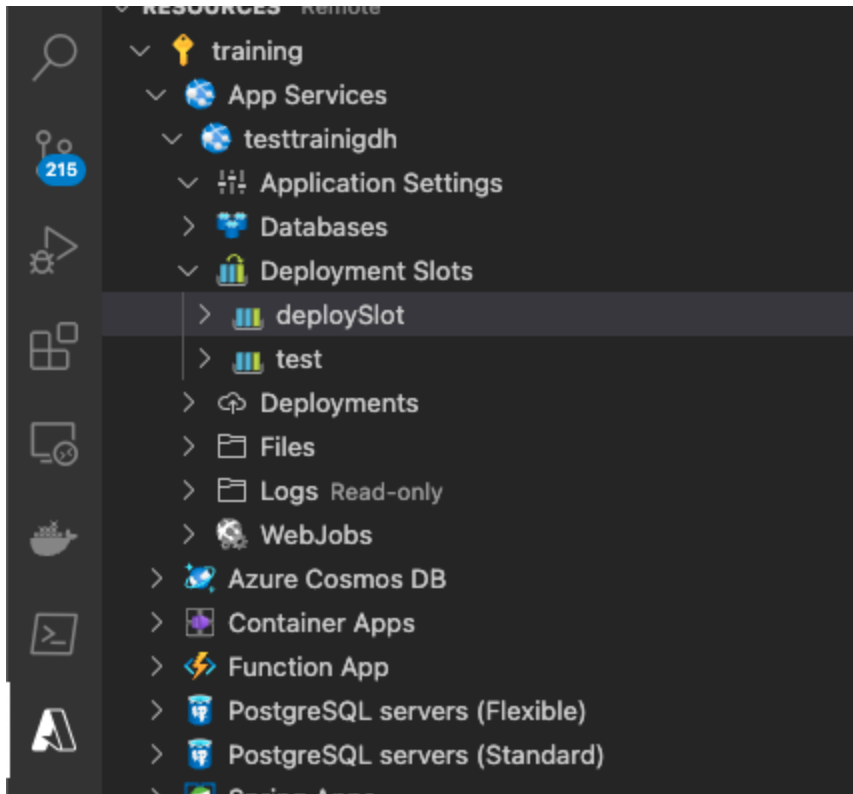
5. Right click on the app service icon
6. Click on deploy to the web app
7. Open your app

Publish your web app to a slot

1. Open Index.cshtml.
2. Replace the first <div> element with the following code:

```
<div class="jumbotron">
  <h1>.NET ❤️ Azure</h1>
  <p class="lead">Example .NET app to Azure App Service.</p>
</div>
```

3. Save your changes.
4. In Visual Studio Code
5. Expand on the app service icon
6. Select a deploy slot
7. Right click on the slot and select deploy to slot



8. Open your slot app

Configure incoming traffic to the web app

1. Open the portal
2. Open your web app
3. Select deployment slots
4. Modify the traffic percentage and save

[Save](#)
[Discard](#)
[Add Slot](#)
[Swap](#)
[Logs](#)
[Refresh](#)



Deployment Slots

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| NAME | STATUS | APP SERVICE PLAN | TRAFFIC % |
|---------------------------------|---------|------------------|-----------|
| testtrainigdh PRODUCTION | Running | f2wedsf23we | 50 |
| testtrainigdh-test | Running | f2wedsf23we | 0 |
| testtrainigdh-deploySlot | Running | f2wedsf23we | 50 |

Note: If the deployment fails set the following variables to the app service slot:

- ENABLE_ORYX_BUILD : false
- SCM_DO_BUILD_DURING_DEPLOYMENT : false