Publishing Application to Azure Web App

Azure Web App is a Platform-as-a-Service (PaaS) offering from Microsoft Azure that allows developers to easily host, build, deploy, and scale web applications and APIs. It abstracts away the complexities of managing the underlying infrastructure, enabling developers to focus entirely on application development and deployment.

Azure Web App is ideal for businesses or developers who want a **reliable**, **scalable**, **and secure platform** to host their web applications without the overhead of managing infrastructure. It's a robust solution for modern cloud-native applications.

Use Cases of Azure Web App

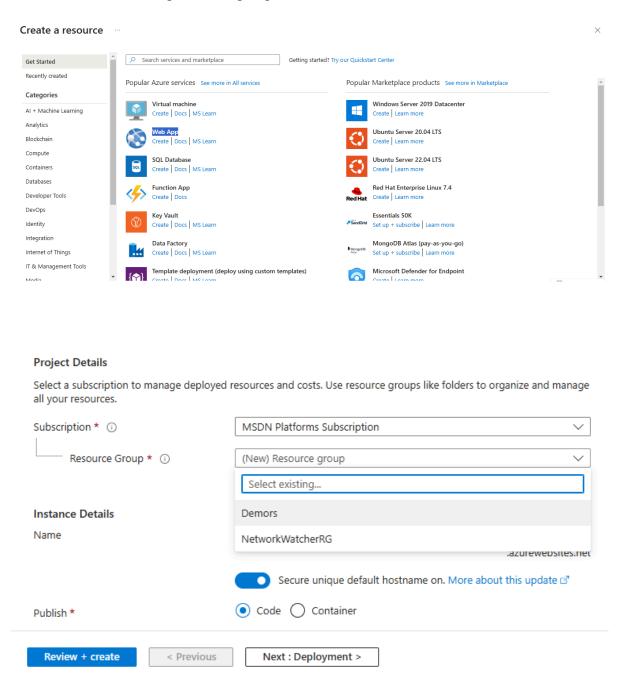
- 1. Hosting dynamic websites and web applications, such as corporate websites, blogs, or e-commerce platforms.
- **2.** Deploying RESTful APIs for mobile and web applications, or as part of a microservices architecture.
- 3. Running user-facing dashboards, internal portals, or collaboration platforms.
- **4.** Hosting server-side rendered applications using frameworks like Next.js, Nuxt.js, or ASP.NET.
- 5. Deploying Software-as-a-Service (SaaS) applications with multi-tenant support.
- **6.** Serving static websites and Jamstack applications with integrations to headless CMS.
- 7. Supporting continuous deployment for staging, testing, and production environments.
- **8.** Running event-driven applications like real-time chat or notification systems.
- 9. Deploying multi-region applications for low-latency global access.
- **10.** Managing scalable workloads to handle fluctuating traffic, such as seasonal e-commerce or promotional campaigns.

The end goal of this lab is to successfully publish a .NET application onto an Azure Web App, a platform-as-a-service offering. By creating and configuring a Web App resource in Azure, choosing the appropriate runtime stack (.NET 6), and generating a new publish profile in Visual Studio, the application is seamlessly deployed to the Web App. Once published, the application is accessible via the Web App's default domain, showcasing its functionality. This process eliminates the need to manage underlying infrastructure, providing a scalable, managed hosting solution while demonstrating Azure's ease of use for application deployment.

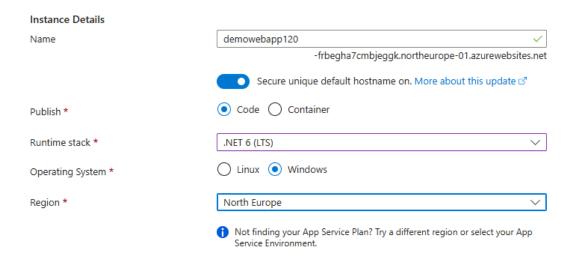
To begin with the lab

1. First we need to create a webapp. To create one navigate to the Azure portal under "Popular Azure Services" and select the **Web App** option.

2. Select an existing resource group.



3. Provide a globally unique name for your web app. Choose **.NET6** to align with the project's framework and then select region.(eg. North Europe).



4. Choose your pricing accordingly. Default is **Standard S1**, but the **Free F1** plan limits compute to 60 minutes/day. So select **Basic P1** to ensure the application runs without time limitations.

Pricing plans

App Service plan pricing tier determines the location, features, cost and compute resources associated with your app. Learn more 2



5. Disable **Application Insights** during setup (can be enabled later for diagnostics) insights and then move to review page and create your webapp.



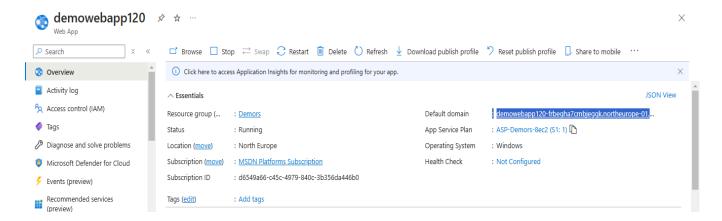
The following features are optional and billed separately. Microsoft recommends enabling them to ensure the most robust protections and capabilities to monitor and secure your web applications.

Application Insights

Azure Monitor application insights is an Application Performance Management (APM) service for developers and DevOps professionals. Enable it below to automatically monitor your application. It will detect performance anomalies, and includes powerful analytics tools to help you diagnose issues and to understand what users actually do with your app. Your bill is based on amount of data used by Application Insights and your data retention settings. Learn more



- 6. Review and finalize the configuration, then click **Create**.
- 7. Once your webapp is deployed successfully, Access the default domain name in a new tab provided to see a default sample page confirming deployment success.



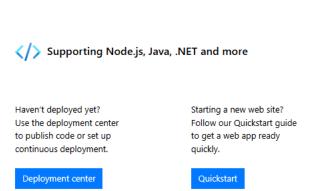
8. You will land to the newly created webapp.



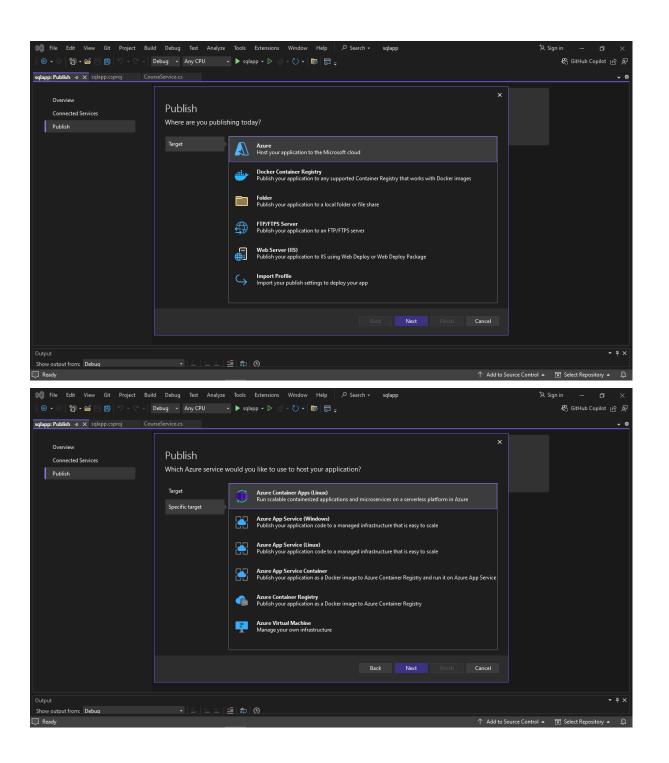
Your web app is running and waiting for your content

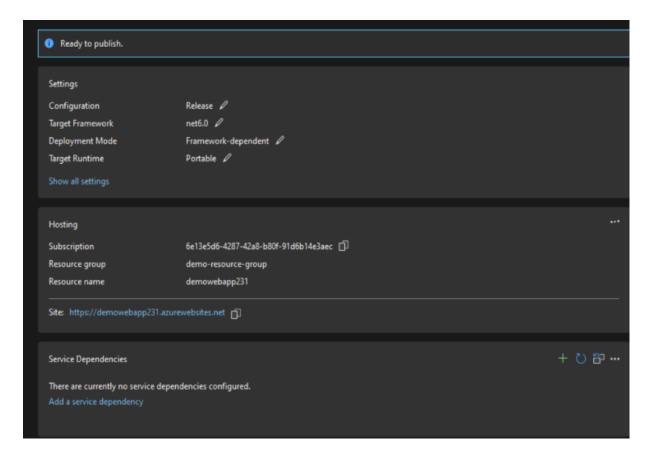
Your web app is live, but we don't have your content yet. If you've already deployed, it could take up to 5 minutes for your content to show up, so come back soon.





9. In the Publish section, create a new profile Select **Azure** as the destination. Choose **Azure App Service (Windows)**. Select the subscription, resource group, and newly created web app. Click **Finish** to generate the publish profile.





10. Refresh the web app's domain in a browser to see the deployed application running live.