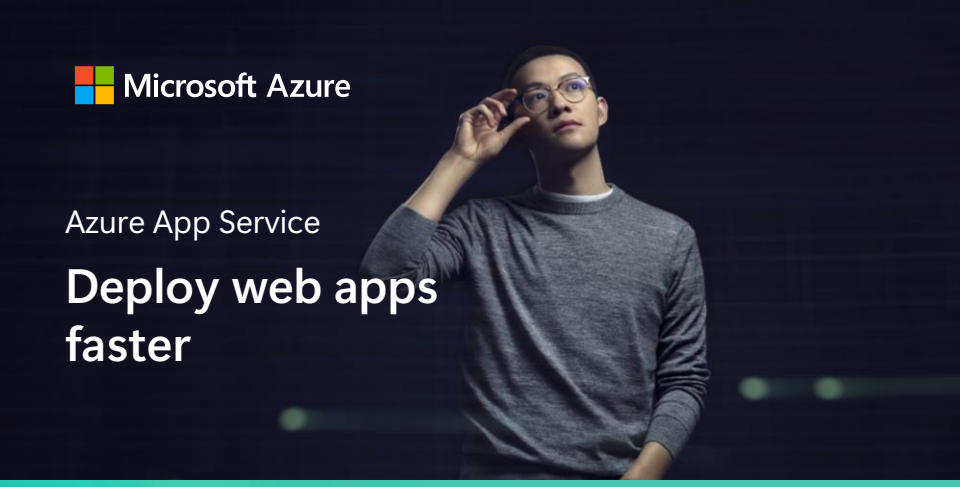
Microsoft Azure



Azure App Service

Deploy web apps faster

Azure App Service is an HTTP-based service that can host web applications, REST APIs, and mobile back ends. It lets you quickly and easily create enterprise-ready web and mobile apps for any platform or device and deploy them on a scalable and reliable cloud infrastructure.

Work with .NET, .NET Core, Node.js, Java, Python on Windows or Linux—or deploy in containers. It's a fully managed platform as a service (PaaS) with built-in infrastructure maintenance, security patching, and scaling.

Top 5 reasons developers choose Azure App Service

1 Get global scale with high availability

Scale up or out — automatically or manually. Host your apps anywhere in Microsoft's global datacenter infrastructure. Service level agreement (SLA) details 99.95% high availability commitment.

2 Increase security and compliance

App Service is ISO, SOC, and PCI compliant, supports IP address restrictions and managed service entities, prevents subdomain takeovers, and offers native integration with Microsoft Defender for Cloud

3 Simplify authentication

Authenticate users with built-in authentication component. Let users authenticate with a Microsoft Entra ID, Google, Facebook, Twitter, or Microsoft account.

4 Zero-downtime deployments

Use deployment slots when deploying a new production build—deploy to a staging environment, validate your changes, and do smoke tests. Then just swap your staging and production slots. The swap operation warms up the necessary worker instances to match your production scale, thus eliminating downtime.

5 Use the languages and frameworks you want

Get first-class support for the latest versions of ASP.NET, ASP.NET Core, Java, Ruby, Node.js, PHP, or Python. You can also run PowerShell and other scripts or executables as background services.

Read about even more features like the managed production environment, connecting to SaaS platforms, and DevOps optimization.

Key benefits

Azure App Service can help organizations of any size to quickly build web apps and APIs in the cloud. With Azure App Service you can...

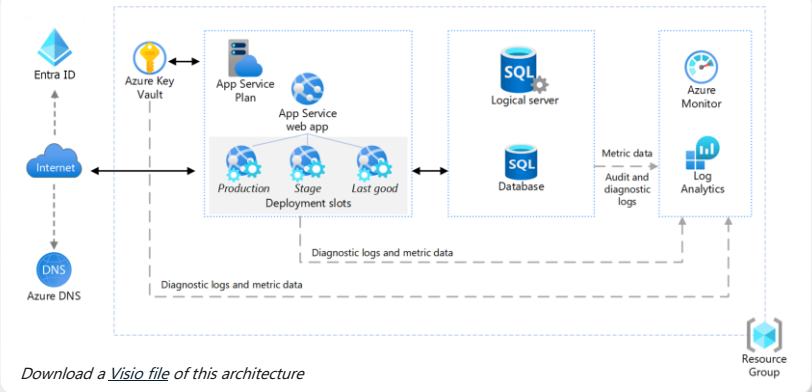
- Bring your code or container using the framework language of your choice.
- Increase developer productivity with tight integration of Visual Studio Code and Visual Studio.
- Simplify operations with automatic platform maintenance and security patching, and streamline CI/CD with Git, GitHub, GitHub Actions, Atlassian Bitbucket, Azure DevOps, Docker Hub, and Azure Container Registry.
- Reduce downtime and accelerate innovation by using easily swappable non-production deployment slots for staging experimental app updates.

228% ROI

Azure PaaS delivered a 228 percent ROI over 3 years, with a 15-month payback period[1]

Fundamental components of a basic web application architecture

Start here and customize to your own needs



Download a Visio file of this architecture

Azure App Service is a fully managed platform for creating and deploying cloud applications. It lets you define a set of compute resources for a web app to run, deploy web apps, and configure deployment slots.

Deployment slots let you stage a deployment and then swap it with the production deployment. That way, you avoid deploying directly into production. See release engineering and deployment for specific recommendations.

IP address: The App Service app has a public IP address and a domain name. The domain name is a subdomain of azurewebsites.net, such as contoso.azurewebsites.net.

Azure DNS is a hosting service for DNS domains, providing name resolution using Microsoft Azure infrastructure. By hosting your domains in Azure, you can manage your DNS records using the same credentials, APIs, tools, and billing as your other Azure services. For more information, see Configure a custom domain name in Azure App Service.

Microsoft Entra ID is a cloud-based identity and access management service that lets employees access cloud apps developed for your organization.

Azure Monitor is a solution for collecting, analyzing, and acting on logs and metrics across your environments.

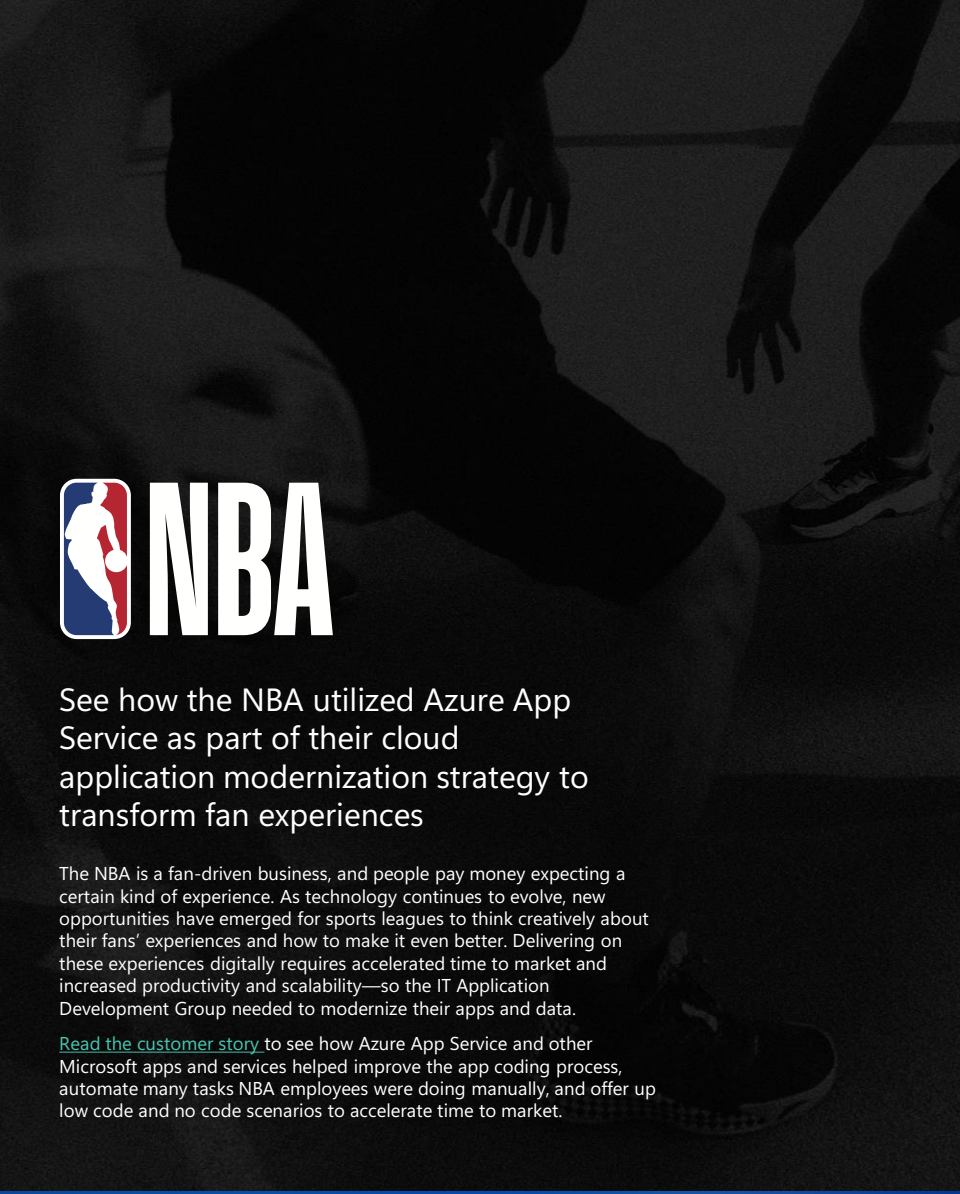
Azure SQL Database is a relational database-as-a-service in the cloud. SQL Database shares its code base with the Microsoft SQL Server database engine. Depending on your application requirements, you can also use Azure Database for MySQL or Azure Database for PostgreSQL.

Azure Key Vault supports secrets management, key management, and certificate management. It can store application secrets like database connection strings.

[1] Source: A Total Economic Impact™ of Microsoft Azure PaaS, a commissioned study conducted by Forrester Consulting on behalf of Microsoft, November 2022.

[2] Source: azure.com/appservice

Visit the Azure architecture center to dig deeper and find more scenarios



See how the NBA utilized Azure App Service as part of their cloud application modernization strategy to transform fan experiences

The NBA is a fan-driven business, and people pay money expecting a certain kind of experience. As technology continues to evolve, new opportunities have emerged for sports leagues to think creatively about their fans' experiences and how to make it even better. Delivering on these experiences digitally requires accelerated time to market and increased productivity and scalability—so the IT Application Development Group needed to modernize their apps and data.

Read the customer story to see how Azure App Service and other Microsoft apps and services helped improve the app coding process, automate many tasks NBA employees were doing manually, and offer up low code and no code scenarios to accelerate time to market.

Quick start

Ready to deploy an AI app to App Service? Follow these steps to build a chat app using Azure Open AI Service and Azure AI Search.

60B

Azure App Service handles more than 60 billion requests[2] per day

Get started now with an Azure free account

Build with Azure App Service today