

ASP.NET documentation

Learn to use ASP.NET Core to create web apps and services that are fast, secure, cross-platform, and cloud-based. Browse tutorials, sample code, fundamentals, API reference and more.



GET STARTED

Create an ASP.NET Core app on any platform in 5 minutes



OVERVIEW

ASP.NET Core overview



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WHAT'S NEW

What's new in ASP.NET Core docs



GET STARTED

Create your first web UI



GET STARTED

Create your first web API



GET STARTED

Create your first real-time web app



OVERVIEW

ASP.NET 4.x Documentation

Develop ASP.NET Core apps

Choose interactive web apps, web API, MVC-patterned apps, real-time apps, and more

Interactive client-side Blazor apps

Develop with reusable UI





HTTP API apps








Develop HTTP services with ASP.NET Core

Page-focused web UI with Razor Pages







Develop page-focused web

components that can take advantage of WebAssembly for near-native performance

-  [Overview](#)
-  [Build your first Blazor app](#)
-  [Build your first Blazor app with reusable components](#)
-  [Blazor hosting models](#)








-  [Create a minimal web API with ASP.NET Core](#)
-  [Create a web API with ASP.NET Core Controllers](#)
-  [Generate web API help pages with Swagger / OpenAPI](#)
-  [Controller action return types](#)
-  [Format response data](#)
-  [Handle errors](#)
-  [Call an ASP.NET Core web API with JavaScript](#)

apps with a clean separation of concerns

-  [Create your first Razor Pages web app](#)
-  [Create a page-focused web UI that consumes a web API](#)
-  [Razor syntax](#)
-  [Filters](#)
-  [Routing](#)
-  [Accessible ASP.NET Core web apps](#)









Page-focused web UI with MVC

Develop web apps using the Model-View-Controller design pattern

-  [Overview](#)
-  [Create your first ASP.NET Core MVC app](#)
-  [Views](#)
-  [Partial views](#)
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-  [Routing to controller actions](#)
-  [Unit test](#)



Real-time web apps with SignalR

Add real-time functionality to your web app, enable server-side code to push content instantly

-  [Overview](#)
-  [Create your first SignalR app](#)
-  [SignalR with Blazor WebAssembly](#)
-  [SignalR with TypeScript](#)
-  [Samples](#)
-  [Hubs](#)
-  [SignalR client features](#)
-  [Host and scale](#)

Remote Procedure Call (RPC) apps - gRPC services

Develop contract-first, high-performance services with gRPC in ASP.NET Core

-  [Overview](#)
-  [Create a gRPC client and server](#)
-  [gRPC services concepts in C#](#)
-  [Samples](#)
-  [Compare gRPC services with HTTP APIs](#)
-  [Add a gRPC service to an ASP.NET Core app](#)
-  [Call gRPC services with the .NET client](#)
-  [Use gRPC in browser apps](#)

Data-driven web apps



Create data-driven web apps in ASP.NET Core









-  [SQL with ASP.NET Core](#)

Previous ASP.NET framework versions

Explore overviews, tutorials, fundamental concepts, architecture and API reference for previous




ASP.NET Core video tutorials

-  [ASP.NET Core 101 video series](#)
-  [Entity Framework Core](#)

-  [Data binding in ASP.NET Core Blazor](#)
-  [SQL Server Express and Razor Pages](#)
-  [Entity Framework Core with Razor Pages](#)
-  [Entity Framework Core with ASP.NET Core MVC](#)
-  [Azure Storage](#)
-  [Blob Storage](#)
-  [Azure Table Storage](#)
-  [Microsoft Graph scenarios for ASP.NET Core](#)

ASP.NET framework versions

-  [ASP.NET 4.x](#)

- 101 video series with .NET Core and ASP.NET Core
-  [Microservice architecture with ASP.NET Core](#)
 -  [Focus on Blazor video series](#)
 -  [.NET Channel](#)

Concepts and features

API reference for ASP.NET Core

[.NET API browser](#)

Host and deploy

[Overview](#)

[Deploy to Azure App Service](#)

[DevOps for ASP.NET Core Developers](#)

[Linux with Apache](#)

[Linux with Nginx](#)

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Security and identity

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[Authorization](#)

[Course: Secure an ASP.NET Core web app with the Identity framework](#)

[Data protection](#)

[Secrets management](#)

Globalization and localization

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[Portable object localization](#)

[Localization extensibility](#)

[Troubleshoot](#)

[Enforce HTTPS](#)[Host Docker with HTTPS](#)

Test, debug and troubleshoot

[Razor Pages unit tests](#)[Remote debugging](#)[Snapshot debugging](#)[Integration tests](#)[Load and stress testing](#)[Troubleshoot and debug](#)[Logging](#)[Load test Azure web apps by using Azure DevOps](#)

Azure and ASP.NET Core

[Deploy an ASP.NET Core web app](#)[ASP.NET Core and Docker](#)[Host a web application with Azure App Service](#)[App Service and Azure SQL Database](#)[Managed identity with ASP.NET Core and Azure SQL Database](#)[Web API with CORS in Azure App Service](#)[Capture Web Application Logs with App Service Diagnostics Logging](#)

Performance

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Advanced features

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Migration

[ASP.NET Core 5.0 to 6.0](#)[ASP.NET Core 5.0 code samples to 6.0 minimal hosting model](#)[ASP.NET Core 3.1 to 5.0](#)[ASP.NET Core 3.0 to 3.1](#)[ASP.NET Core 2.2 to 3.0](#)[ASP.NET Core 2.1 to 2.2](#)[ASP.NET Core 2.0 to 2.1](#)[ASP.NET Core 1.x to 2.0](#)[ASP.NET to ASP.NET Core](#)

Architecture

[Choose between traditional web apps and Single Page Apps \(SPAs\)](#)[Architectural principles](#)[Common web application architectures](#)[Common client-side web technologies](#)[Development process for Azure](#)

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