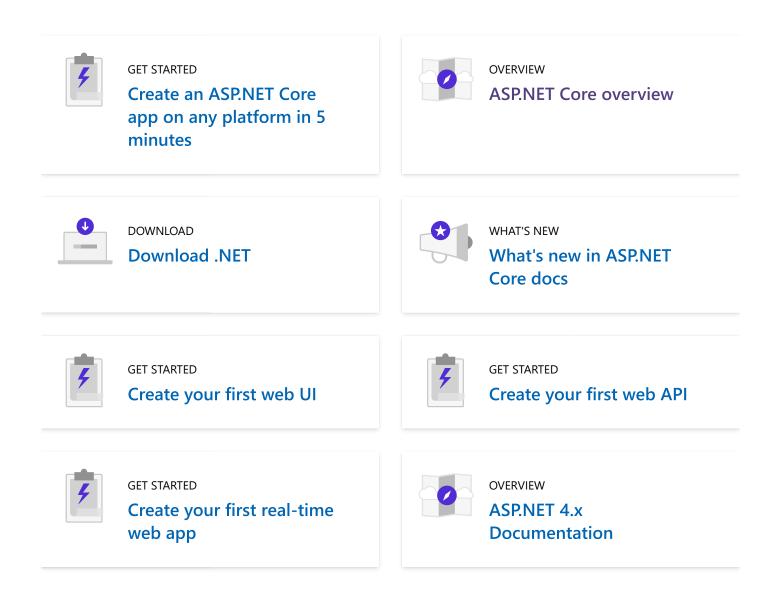
ASP.NET documentation

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.



Develop ASP.NET Core apps

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

Interactive clientside 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
- Controllers
- 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

Kestrel

IIS

Docker

Security and identity

Overview

Authentication

Authorization

Course: Secure an ASP.NET Core web app with the Identity framework

Data protection

Secrets management

Globalization and localization

Overview

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

Overview

Memory and garbage collection

Response caching

Response compression

Diagnostic tools

Load and stress testing

Advanced features

Model binding

Model validation

Write middleware

Request and response operations

URL rewriting

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

Contribute to ASP.NET Core docs. Read our contributor guide .