



FREE eBook

LEARNING .net-core

Free unaffiliated eBook created from
Stack Overflow contributors.

#.net-core

Table of Contents

About.....	1
Chapter 1: Getting started with .net-core.....	2
Remarks.....	2
Composition.....	2
Versions.....	2
.NET Core.....	2
Examples.....	3
Installation or Setup.....	3
Building a Hello World Sample Application.....	3
Installation from a binary archive.....	4
Chapter 2: .NET Core command line interface.....	6
Examples.....	6
Create .NET Core "Hello World" console project.....	6
Publish and run a .NET Core project.....	6
Scaffolding other project types.....	6
C# Templates.....	7
F# Templates.....	7
Scaffolding projects in other languages.....	7
Creating a NuGet package.....	7
Running automated tests.....	7
Chapter 3: .NET Core with Docker.....	9
Remarks.....	9
Examples.....	9
Dockerfile sample.....	9
Chapter 4: Building libraries with .NET Core.....	10
Examples.....	10
Targeting .NET Standard.....	10
Targeting both .NET Standard and .NET Framework 4.x.....	10
Producing a NuGet package for a library.....	10
Platform-specific dependencies.....	10

Adding a project reference to a library.....	11
Chapter 5: Components and Versioning in .NET Core.....	12
Introduction.....	12
Remarks.....	12
Components.....	12
Components in .NET Core installations.....	12
Examples.....	13
Identifying Versions.....	13
Selecting Versions.....	14
Chapter 6: Getting started with appsetting.json.....	15
Remarks.....	15
Examples.....	15
Simple configuration.....	15
Using configuration object for settings.....	15
Chapter 7: Installing .NET Core on Linux.....	17
Examples.....	17
Generic installation for Linux distributions.....	17
Chapter 8: The global.json.....	18
Remarks.....	18
Examples.....	18
Schema.....	18
Chapter 9: Understanding System.Runtime vs. mscorlib.....	19
Remarks.....	19
Examples.....	19
Popular Error: Misleading NuGet the wrong way.....	19
Popular Error: Add a NuGet package which was not made for netstandard / netcoreapp (System.....	20
Popular Error: Misunderstanding the outcome.....	20
Popular Error: Accidently adding a mscorlib library as a dependencies to a netstandard/net.....	21
Credits.....	23

About

You can share this PDF with anyone you feel could benefit from it, downloaded the latest version from: [-net-core](#)

It is an unofficial and free .net-core ebook created for educational purposes. All the content is extracted from [Stack Overflow Documentation](#), which is written by many hardworking individuals at Stack Overflow. It is neither affiliated with Stack Overflow nor official .net-core.

The content is released under Creative Commons BY-SA, and the list of contributors to each chapter are provided in the credits section at the end of this book. Images may be copyright of their respective owners unless otherwise specified. All trademarks and registered trademarks are the property of their respective company owners.

Use the content presented in this book at your own risk; it is not guaranteed to be correct nor accurate, please send your feedback and corrections to info@zzzprojects.com

Chapter 1: Getting started with .net-core

Remarks

.NET Core is a general purpose development platform maintained by Microsoft and the .NET community on GitHub.

The following characteristics best define .NET Core:

- Flexible deployment: Can be included in your app or installed side-by-side user- or machine-wide.
- Cross-platform: Runs on Windows, macOS and Linux; can be ported to other OSes. The supported Operating Systems (OS), CPUs and application scenarios will grow over time, provided by Microsoft, other companies, and individuals. .NET can also be used in device, cloud, and embedded/IoT scenarios.
- Command-line tools: All product scenarios can be exercised at the command-line.
- Compatible: .NET Core is compatible with .NET Framework, Xamarin and Mono, via the .NET Standard Library.
- Open source: The .NET Core platform is open source, using MIT and Apache 2 licenses. Documentation is licensed under CC-BY. .NET Core is a .NET Foundation project.
- Supported by Microsoft: .NET Core is supported by Microsoft, per .NET Core Support

Composition

.NET Core is composed of the following parts:

- **A .NET runtime** which provides a type system, assembly loading, a garbage collector, native interop, and other basic services.
- **A set of framework libraries** which provide primitive data types, app composition types, and fundamental utilities.
- **A set of SDK tools and language compilers** that enable the base developer experience, available in the .NET Core SDK.
- **The 'dotnet' app host** which launches .NET Core apps. The app host selects and hosts the runtime, provides an assembly loading policy, and launches the app. The same host is also used to launch SDK tools in a similar fashion.

(Source: [official documentation](#).)

Versions

.NET Core

[Click here to download full PDF material](#)