

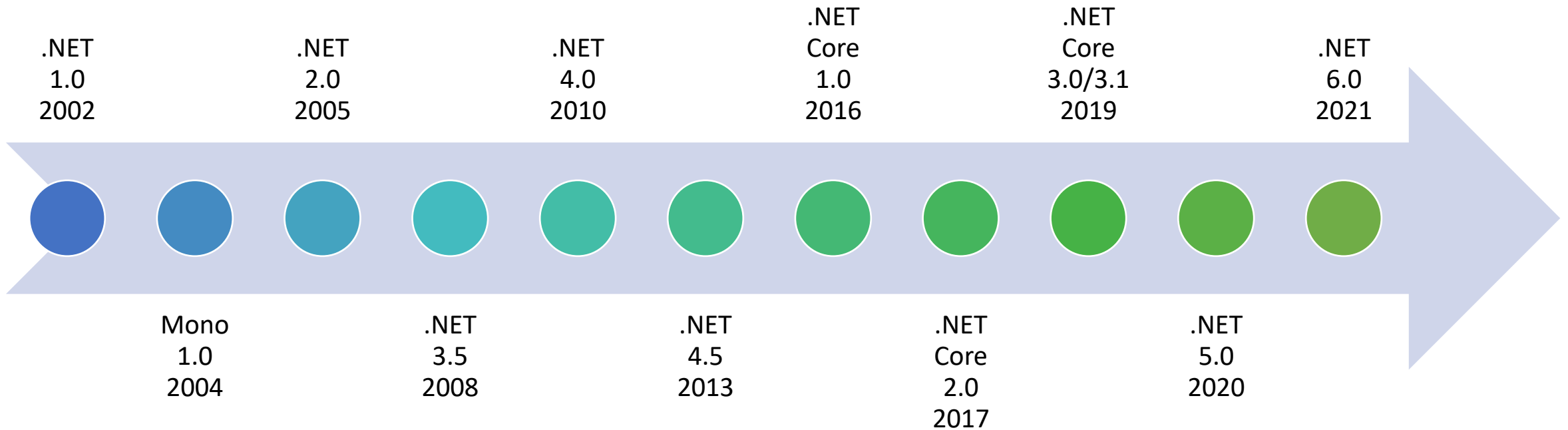
.NET Platform and .NET Core



Shailendra Chauhan

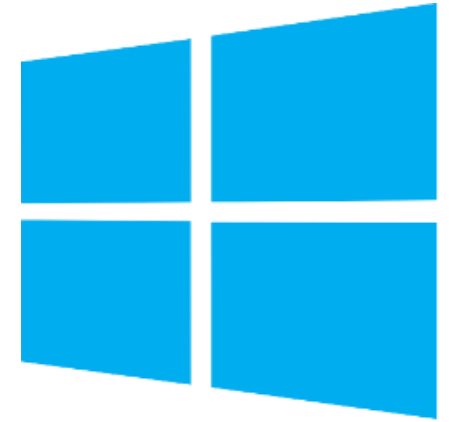
Microsoft MVP, Technical Consultant & Corporate Trainer

History of .NET Platform



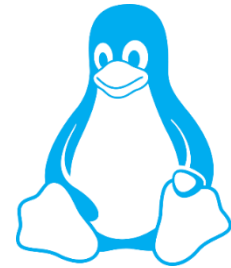
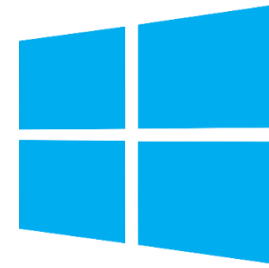
.NET Framework

- A development platform for building web applications, services and mobile applications.
- Contains common language runtime (CLR) and the .NET Framework class library that support an extensive range of technologies.
- Runs on Windows OS only.
- The most recent official release of .NET is 4.8.



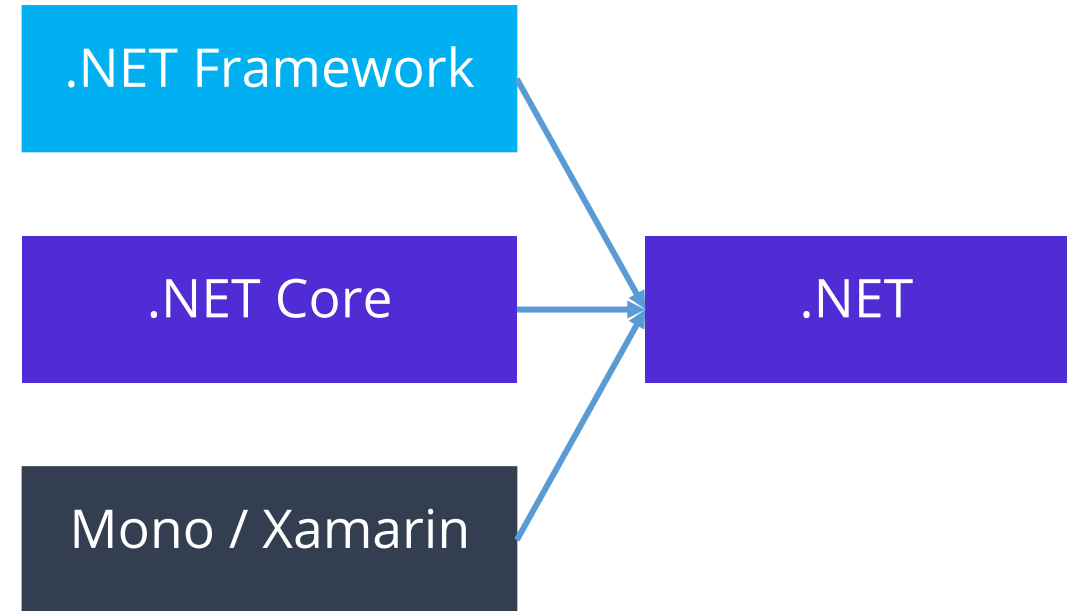
.NET Core

- Modular and smaller implementation of .NET
- Cross-platform and Open Source
- Containers Support
- Microservices Architecture Support
- Optimized for high performance and scalability
- Cross-platform development tools – VS Code, Dot Net CLI



.NET 5: One .NET vision

- Single SDK, one BCL, unified toolchain
- Cross-platform native UI
- Cross-platform web UI
- Cloud native investments
- Continue improvements in speed, size, diagnostics, Azure services



.NET 5.0 - A Unified Platform

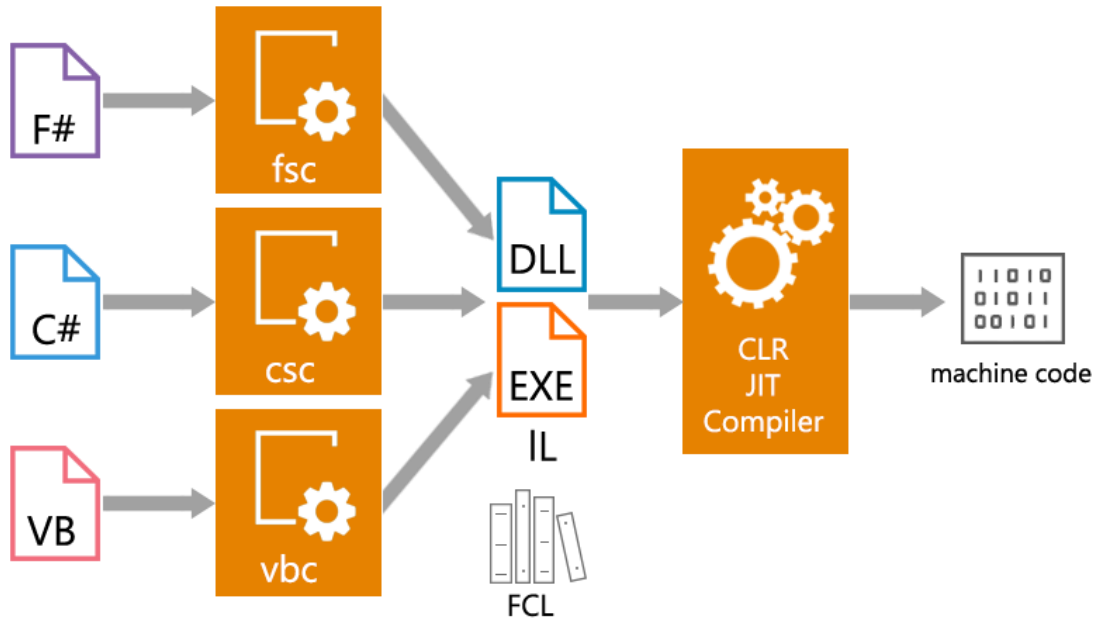


November 2020

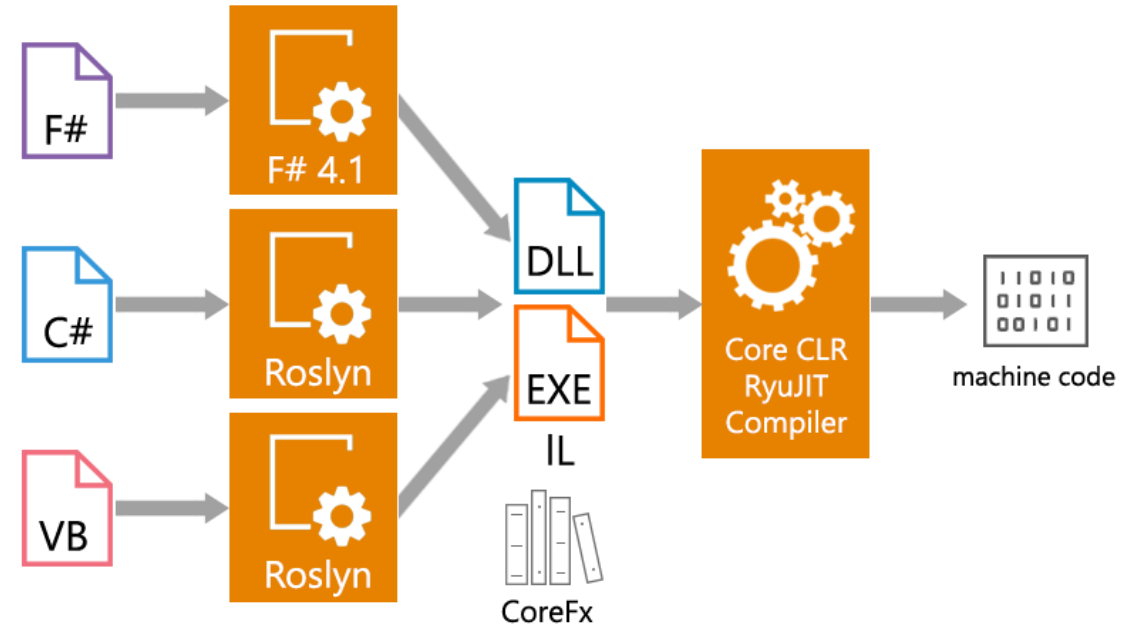
What .NET 5 does not Support?

- WebForms
- ASMX Services
- WCF Services
- WWF
- LINQ to SQL

.NET Compilation



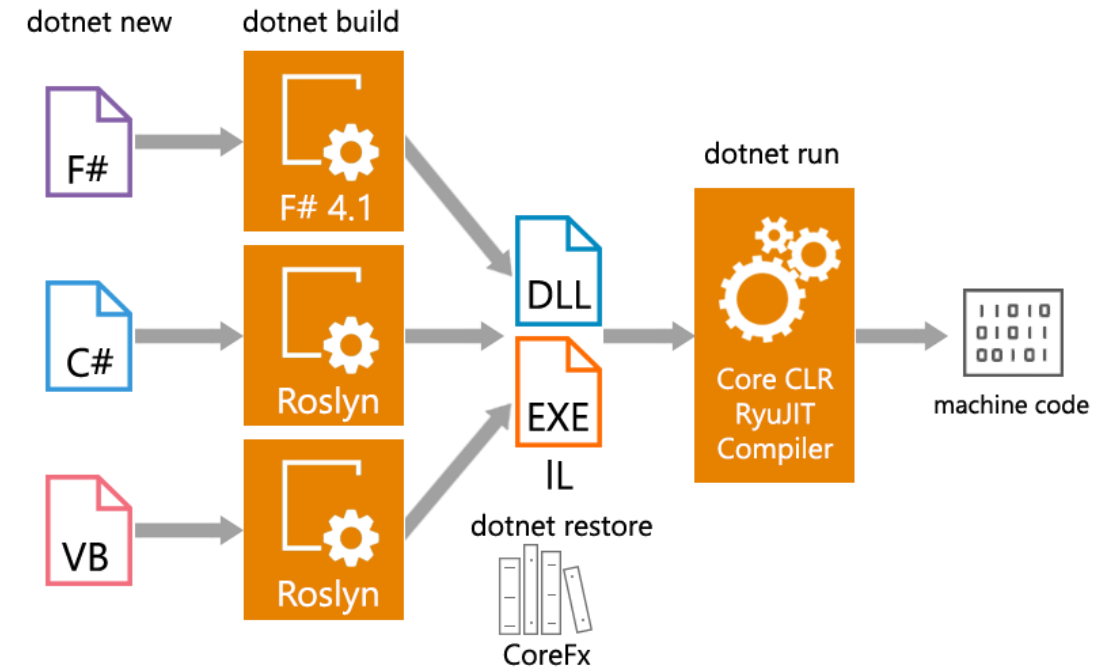
.NET 4.x Compilation



.NETCore/.NET 5 Compilation

.NET CLI

- A toolchain for building, developing and publishing .NET Core/ .NET5 based Apps
- Support various commands
- Supports Installation of Packages
- Cross-platform supports



Demo:

Getting Started with .NET CLI

.NET CLI Application Templates

dotnet new -l

Templates	Short Name	Language	Tags
Console Application	console	[C#], F#, VB	Common/Console
Class library	classlib	[C#], F#, VB	Common/Library
Unit Test Project	mstest	[C#], F#, VB	Test/MSTest
xUnit Test Project	xunit	[C#], F#, VB	Test/xUnit
ASP.NET Core Empty	web	[C#], F#	Web/Empty
ASP.NET Core Web App (Model-View-Controller)	mvc	[C#], F#	Web/MVC
ASP.NET Core Web App	razor	[C#]	Web/MVC/Razor Pages
ASP.NET Core with Angular	angular	[C#]	Web/MVC/SPA
ASP.NET Core with React.js	react	[C#]	Web/MVC/SPA
ASP.NET Core with React.js and Redux	reactredux	[C#]	Web/MVC/SPA
ASP.NET Core Web API	webapi	[C#], F#	Web/WebAPI
global.json file	globaljson		Config
Nuget Config	nugetconfig		Config
Web Config	webconfig		Config
Solution File	sln		Solution
Razor Page	page		Web/ASP.NET
MVC ViewImports	viewimports		Web/ASP.NET
MVC ViewStart	viewstart		Web/ASP.NET

<https://docs.microsoft.com/en-us/dotnet/core/tools/>