

IntelliTect

Essential C# 7.0 and Beyond

Mark Michaelis



IntelliTect.com

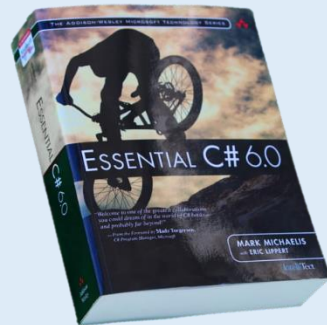
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IntelliTect

About Us

Mark Michaelis

Chief Technical Architect,
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Professional
Scrum Master II

Agenda

Before .NET Standard 2.0

Portability is relatively limited because .NET Core is relatively small

.NET Framework libraries (the vast number of libraries that exist today) are only available on Windows

.NET Standard provides a common platform

WINDOWS
DESKTOP

CLOUD MICRO-
SERVICES

WINDOWS
UWP

IOS,
ANDROID

GAMES/
3D

.NET STANDARD

INFRASTRUCTURE

COMPILERS

LANGUAGES

RUNTIME COMPONENTS



Visual Studio

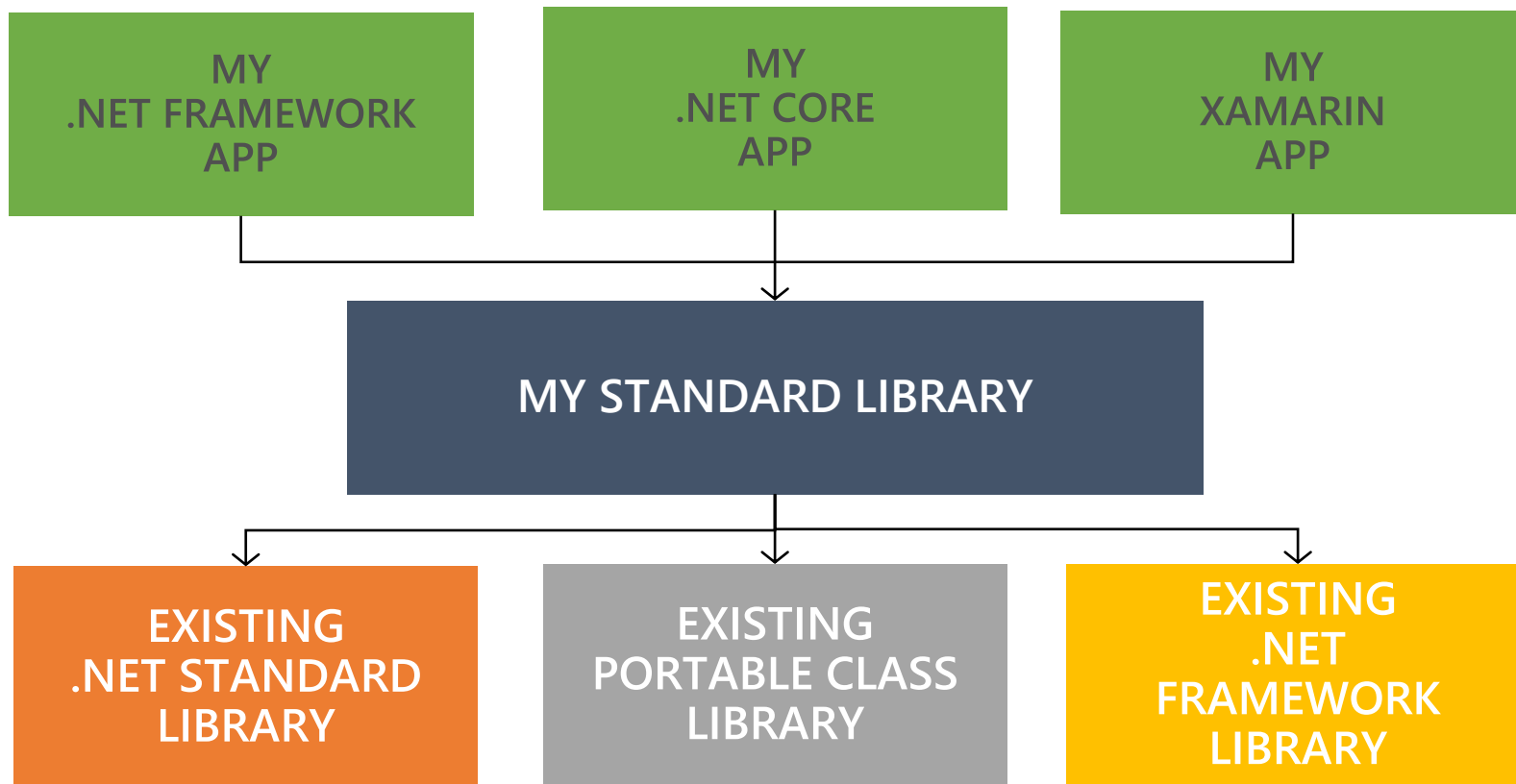


Visual Studio for Mac



Visual Studio Code

Any .NET Standard App Using Any .NET Standard Library



How .NET Standard 2.0 Works

.NET Standard is implemented in the NET Standard.Library nupkg which contains the netstandard.dll assembly.

Each platform has its own implementation of netstandard.dll

At runtime, .NET Standard uses type forwarding to enable applications to access .NET Framework and PCL assemblies.

At build time, applications that only use .NET Standard API only reference the netstandard.dll

.NET Standard Library Advantages

Provides a specification for any platform to implement

A consistent API across all frameworks

Enabling the reuse of code across frameworks

Dotnet.exe runs restore implicitly

Providing the ability to consume third-party libraries across frameworks

All .NET runtimes provided by Microsoft will implement the standard

.NET Core 2.0

netstandard.dll

Entity Framework
2.0

Build in automatic
diagnostics

Razor pages
supported

NETStandard.Library
2.0 to access the all
framework APIs.

ASP.NET Core 2.0

.NET Core 2.0

What won't work?

WPF

Xamarin
Forms

Direct
Operating
System API
access

.NET
Standard
2.0

Note .NET Standard 2.0

Summary

- Your existing code will likely just work – assuming it is .NET Standard compatible

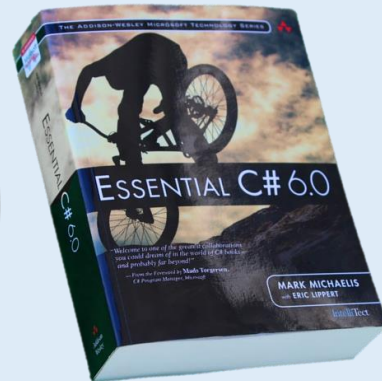
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