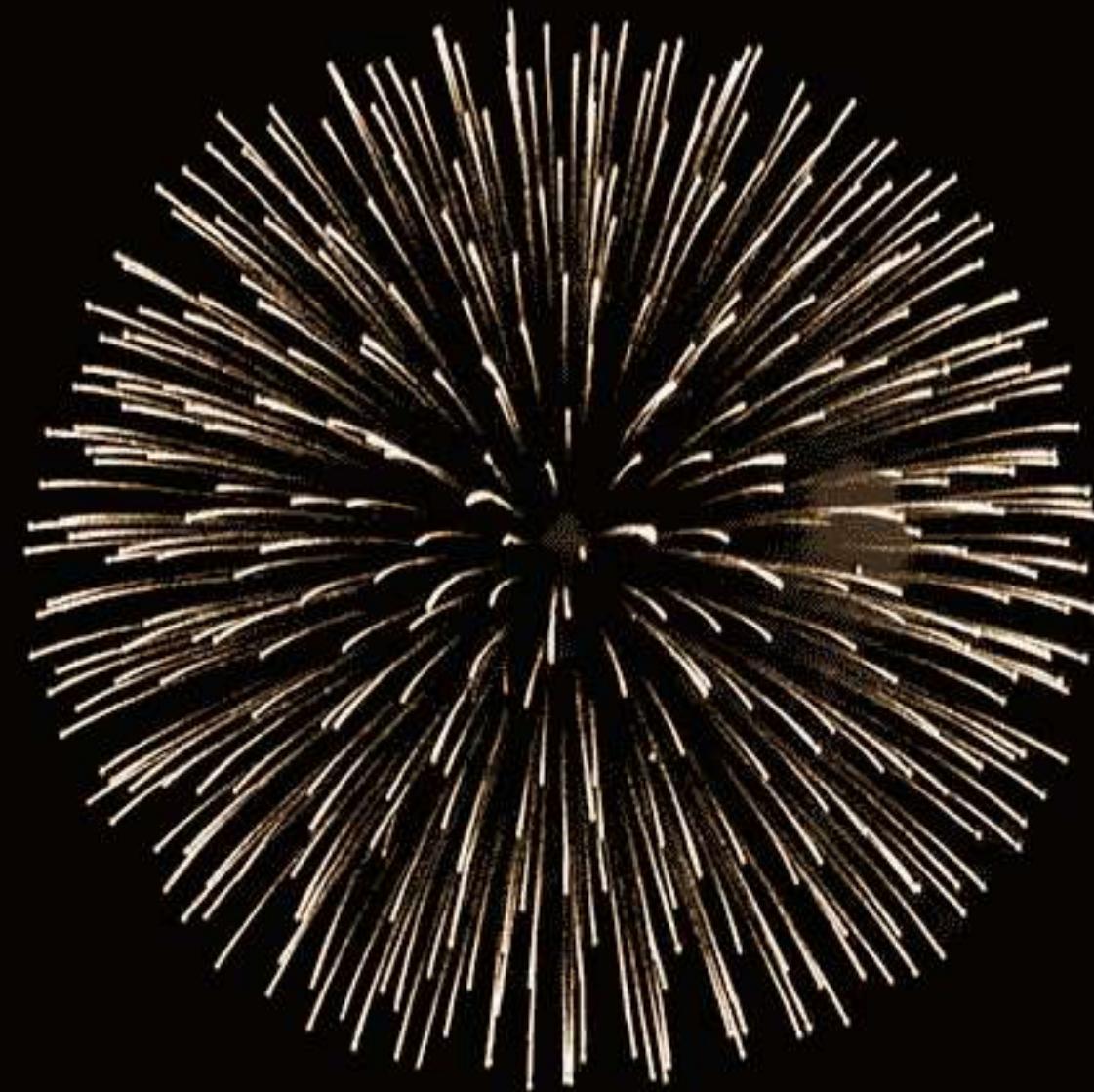


# .NET roce 2019 a dál

@cincura\_net

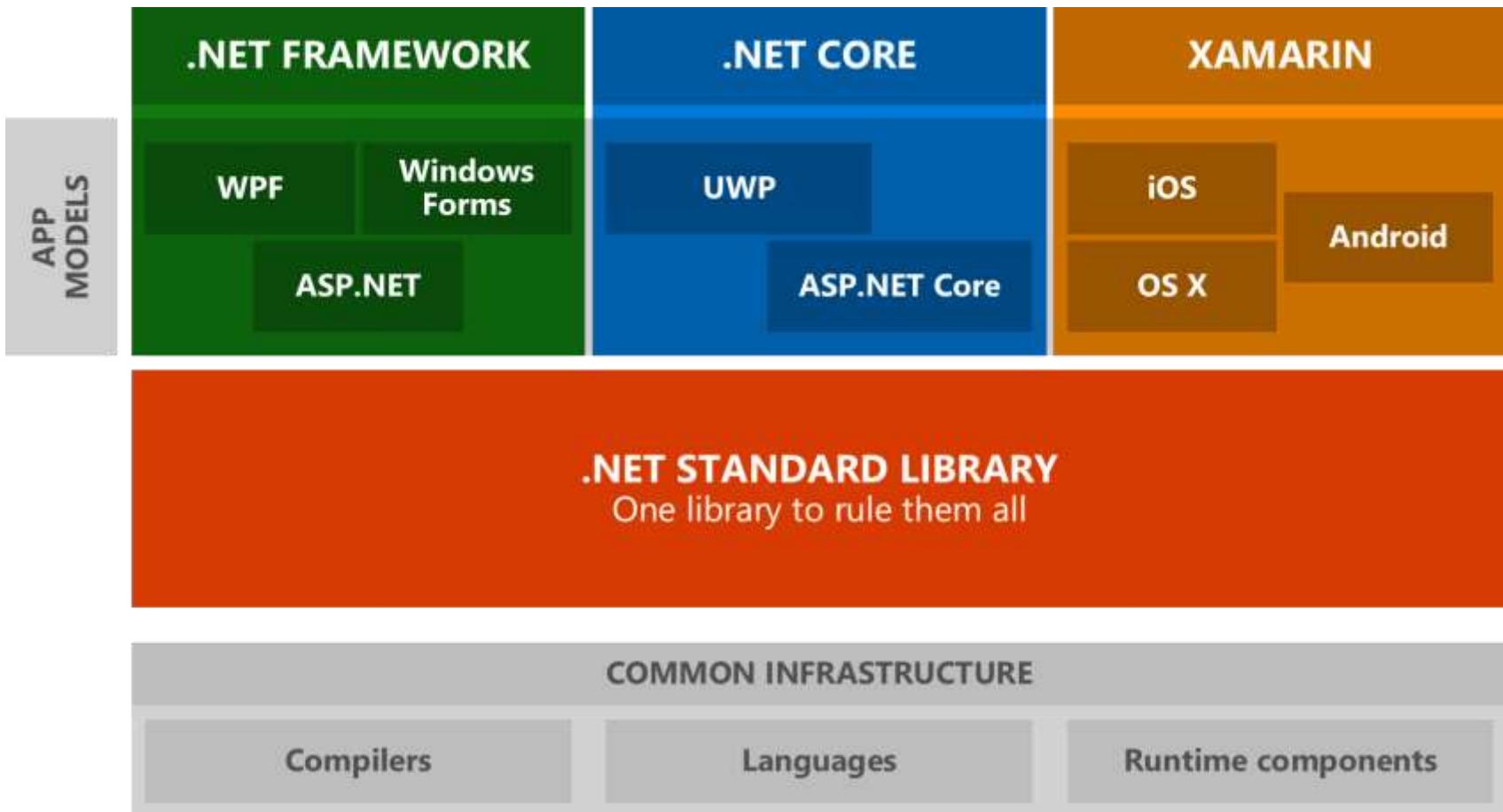
[www.tabsoverspaces.com](http://www.tabsoverspaces.com)





# .NET Standard 2.1

- Co je .NET Standard?
- <https://github.com/dotnet/standard/milestone/3>
- NS2.0:  
<https://blogs.msdn.microsoft.com/dotnet/2017/08/14/announcing-net-standard-2-0/>
- NS2.1:  
<https://blogs.msdn.microsoft.com/dotnet/2018/11/05/announcing-net-standard-2-1/>



# .NET Standard 2.1

- Span<T>
- API se Span<T>
- Reflection Emit, LCG
  - RuntimeFeature.IsDynamicCodeSupported, RuntimeFeature.IsDynamicCodeCompiled
- SIMD
  - <https://blogs.msdn.microsoft.com/dotnet/2014/04/07/the-jit-finally-proposed-jit-and-simd-are-getting-married/>
- ValueTask, ValueTask<T>
- DbProviderFactories
- Drobnosti
  - <https://www.tabsoverspaces.com/233725-easier-gethashcode-implementation-in-net-core-2-1>
  - <https://www.tabsoverspaces.com/233755-unixepoch-field-in-datetime-and-datetimeoffset-in-net-standard-2-1-and-net-core-2-1>

# .NET Standard 2.1

- Ne pro .NET Framework 4.8
- .NET Core 3.0, Xamarin, Mono, Unity

# .NET Core 2.2, ASP.NET Core 2.2, EF Core 2.2

- <https://blogs.msdn.microsoft.com/dotnet/2018/12/04/announcing-net-core-2-2/>
- <https://blogs.msdn.microsoft.com/webdev/2018/12/04/asp-net-core-2-2-available-today/>
- <https://blogs.msdn.microsoft.com/dotnet/2018/12/04/announcing-entity-framework-core-2-2/>

# .NET Core 3.0

- Podpora pro WinForms, WPF
  - WinForms, WPF, WinUI open-source
- Podpora pro EF6
- UWP controls ve WinFormech, WPF
- Exe by default pro aplikace
  - A při buildu se kopírují dependencies
- Lokální dotnet tools
  - dotnet tool restore + dotnet tool run <name>
- System.Text.Json.Utf8JsonReader, System.Buffers.SequenceReader
- API pro sériový port dostupné na Linuxu
- System.Device.GPIO
  - GPIO, PWM, SPI, I<sup>2</sup>C
- TLS 1.3 a OpenSSL 1.1.1 na Linuxu
- AES-GCM a AES-CCM
- Vylepšení Span<T>, Memory<T>, stringy (např. pro Dictionary< TKey, TValue >)
- Brotli, Unsafe.Unbox, CancellationToken.Unregister, StringBuilder.GetChunks, IPEndPoint parsování, ...
- Tiered Compilation bude defaultně zapnutá
- MetadataLoadContext
- ARM64

# .NET Core 3.0

- Windows Client: 7, 8.1, 10 (1607+)
- Windows Server: 2012 R2 SP1+
- macOS: 10.12+
- RHEL: 6+
- Fedora: 26+
- Ubuntu: 16.04+
- Debian: 9+
- SLES: 12+
- openSUSE: 42.3+
- Alpine: 3.8+
  
- x64: Windows, macOS, Linux
- x86: Windows
- ARM32: Windows, Linux
- ARM64: Linux

# .NET vNext

- .NET Core 3.0 září
- .NET Core 3.1 listopad
  - LTS
- .NET 5 listopad 2020
- .NET 6.0, .NET 7.0, .NET 8.0

# .NET vNext

.NET – A unified platform



# .NET Framework 4.8

- Moderní browser a moderní media controls
- Podpora pro touch a UWP Controls
- High-DPI podpora

# VS 2019

- IntelliCode
- LiveShare
- UI/UX
- Background perf.
- Productivity
- ...

# C# 8.0 – features

- Indices and ranges
- Pattern matching
  - Recursive patterns
  - Property patterns, tuple patterns, positional patterns
  - Switch expression
- Nullable reference types
- Async streams
- Readonly struct members
- Default interface members
- Using declarations
- Static local functions
- Disposable ref structs

# C# 8.0 – availability

- Async streams, indexers, ranges needs .NET Standard 2.1
  -  .NET FW 4.8
- Default interface members needs runtime support
  -  .NET FW 4.8