

# Co čekat ve světě .NETu v roce 2019

@cincura\_net

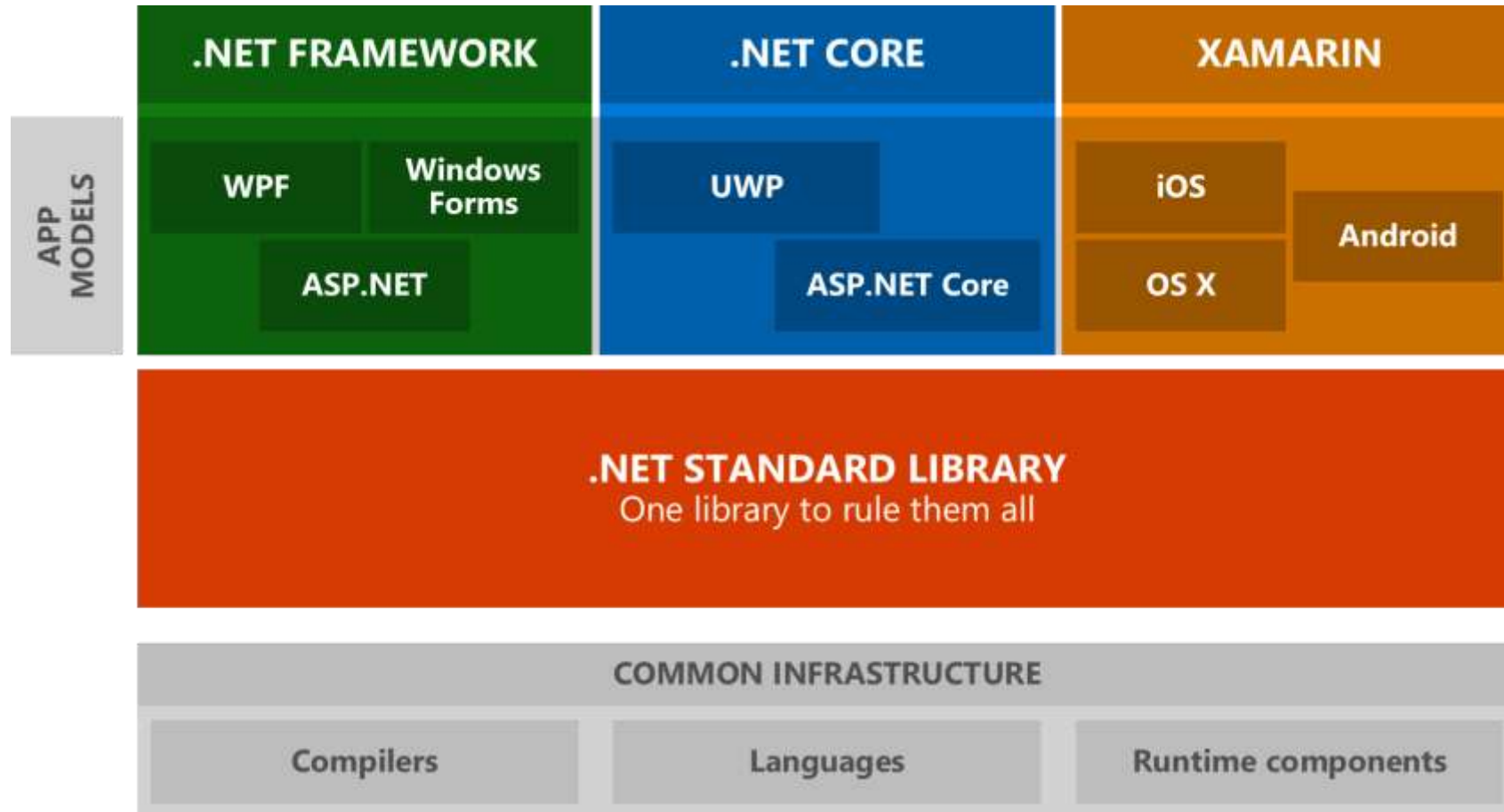
[www.tabsoverspaces.com](http://www.tabsoverspaces.com)





# .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 Framework 4.8

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

# C# 8

- Nullable reference types
- Async streams
- Ranges and indices
- Default implementations of interface members
- Recursive patterns
- Switch expressions
- Target-typed new-expressions

# C# 8

- Async streams, indexers, ranges → .NET Standard 2.1
  - NS2.1 není na .NET FW 4.8
- Default interface members potřebuje podporu runtime
  - Nebude v .NET Runtime 4.8/.NET FW 4.8
- <https://blogs.msdn.microsoft.com/dotnet/2018/11/12/building-c-8-0/>

# EF Core 3.0

- Vylepšení překladač LINQu
  - CosmosDB
  - C# 8 podpora
  - Reverse engineering pohledů na Query Types
  - Property bag entities
- 
- EF 6.3 na .NET Core 3

# VS 2019

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

# .NET Foundation

- 7 míst (ze 3)
- Kdokoli může “kandidovat”
- .NET Foundation Corporate Sponsor Program
  - Red Hat, JetBrains, Google, Unity, Microsoft, Samsung + Pivotal, Progress Telerik, Insight.