

# C# 8 – What's new

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# .NET Core 3.0 (Preview 2)

- C# 8
- Default executables
- Build copies dependencies
- Windows desktop (WPF)
- MSIX Deployment for Windows Desktop
- Fast built-in JSON support
- Assembly Unloadability
- Compliant with .NET Standard 2.1

# .NET Core 3.0 (Preview 2) (cont.)

- Windows Native Interop
- TLS 1.3 & OpenSSL 1.1.1 on Linux
- SerialPort for Linux
- ARM64 Linux support (scenario IoT)
- GPIO Support for Raspberry Pi
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# .NET Core 3.0 (Preview 2) - Platforms

- 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+



# .NET Core 3.0 (Preview 2) – Chip support

- x64 on Windows, macOS, and Linux
- x86 on Windows
- ARM32 on Windows and Linux
- ARM64 on Linux

# The history of C# - Version 1.0 (2002)

- Molto simile a Java
- Molto “semplice” senza i vari costrutti async/await, Linq, generics, etc...
- A breve diventerà maggiorenne :D (Rilasciato a gennaio 2002)

# The history of C# - Version 2.0 (2005)

- Generics
- Partial types
- Anonymous methods
- Nullable types
- Iterators
- Covariance and contravariance

# The history of C# - Version 3.0 (2007)

- Auto-implemented properties
- Anonymous types
- Query expressions [LINQ!!!]
- Lambda expressions
- Expression trees
- Extension methods
- Implicitly typed local variables
- Object and collection initializers



# The history of C# - Version 4.0 (2010)

- Dynamic binding
- Named/optional arguments
- Generic covariant and contravariant
- Embedded interop types

# The history of C# - Version 5.0 (2012)

- Asynchronous members (async/await)
- Caller info attributes

# The history of C# - Version 6.0 (2015)

- Static imports
- Exception filters
- Auto-property initializers
- Expression bodied members
- Null propagator
- String interpolation
- nameof operator
- Index initializers
- Roslyn (Open Source [github/roslyn](https://github.com/roslyn))

# The history of C# - Version 7.0 (2017)

- Out variables
- Tuples and deconstruction
- Pattern matching
- Local functions
- Expanded expression bodied members
- Discards
- Binary Literals and Digit Separators
- Throw expressions

# The present of C# - Version 8.0 (preview 2)

- Supportato solo da Visual Studio 2019
- Supportato solo da .NET Core 3.0. [.NET Standard 2.1]
- La prossima versione di .NET Framework 4.8 non supporterà questa versione di C#

# The present of C# - Version 8.0 (preview 2)

- Indices and Ranges
- Asynchronous Streams
- Improved Pattern Matching
- Using statements
- Nullable Reference Types



# Demo C# 8

Visual Studio 2019 launch



# Demo WPF .NET Core 3.0