

.NET - Any Platform

8.0 2023	Vector512 AVX-512	TimeProvider ITimer	FrozenDictionary FrozenSet
	Utf8SpanFormattable Utf8SpanParsable	Simplified output paths	Codegen struct promotion
7.0 2022	Generic Math		Cross-Platform Vector64/128/256
	On Stack Replacement	Native AOT	
	MAUI		
6.0 2021	Improved FileStream	Crossgen2 (AOT)	
	Dynamic PGO	Hot reload	
5.0 2020	Single file apps	App trimming	
	Unified platform	ARM64 for Windows	

C# 12.0 2023	Primary constructors, Collection expressions, Inline arrays, Optional parameters in lambda expressions, ref readonly parameters, Alias any type, Experimental attribute, Interceptors
C# 11.0 2022	File-scoped types, Generic math support, Auto-default structs, Pattern match Span<char> on a constant string, Extended nameof scope, Numeric IntPtr, UTF-8 string literals, Required members, ref fields and scoped ref, Raw string literals, Improved method group conversion to delegate, Warning wave 7, Generic attributes, Newlines in string interpolation expressions, List patterns
C# 10.0 2021	Record structs, Improvements of structure types, Interpolated string handlers, global using directives, File-scoped namespace declaration, Extended property patterns, Improvements on lambda expressions, Allow const interpolated strings, Record types can seal ToString(), Improved definite assignment, Allow both assignment and declaration in the same deconstruction, Allow AsyncMethodBuilder attribute on methods, CallerArgumentExpression attribute, Enhanced #line pragma
C# 9.0 2020	Records, Init only setters, Top-level statements, Native sized integers, Function pointers, Suppress emitting localsinit flag, Target-typed new expressions, static anonymous functions, Target-typed conditional expressions, Covariant return types, Extension GetEnumerator support for foreach loops, Lambda discard parameters, Attributes on local functions, Support for code generators, Module initializers, New features for partial methods

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.NET Core - Cross-platform

	Readonly members, Default interface methods, Switch expressions, Property patterns, Tuple patterns, Positional patterns, Using declarations, Static local functions, Disposable ref structs, Nullable reference types, Asynchronous streams, Indices and ranges, Null-coalescing assignment, Unmanaged constructed types, Stackalloc in nested expressions, Enhancement of interpolated verbatim strings	C# 8.0 2019
	Reassign ref local variables, Initializers on stackalloc arrays, Access fixed fields without pinning, unmanaged generic type constraints	C# 7.3 2018
	Declare readonly struct types, Add the in modifier on parameters, Use the ref readonly modifier on method returns, Declare ref struct types, Use additional generic constraints, Non-trailing named arguments, Named arguments can be followed by positional arguments, Leading underscores in numeric literals, private protected access modifier, Conditional ref expressions, Result of a conditional expression (?) can be a reference	C# 7.2 2017
	async Main method, default literal expressions, Inferred tuple element names, Pattern matching on generic type parameters,	C# 7.1 2017

3.1 2019	Support for C++/CLI	Windows Forms Controls Removal		
3.0 2019	Windows Desktop apps (WinForms, WPF)	Hardware intrinsics	Range Index	Blazor
2.2 2018	Runtime diagnostics improvements		ARM32 for Windows	
2.1 2018	Span<T>	Tiered JIT	SocketsHttpHandler	
2.0 2017	RyuJIT x86	ARM32	.NET Standard 2.0	
1.1 2016	Kestrel Web Server	Azure support	>Linux distros	
1.0 2016	Unsafe	ASP.NET Core	Entity Framework Core	

.NET Core - Cross-platform

.NET Framework - Windows

4.8 2019	RyuJIT from .NET Core 2.1	ZLib 1.2.11	ARM64
4.7 2017	Improved High DPI	ASP.NET Object Cache	
4.6 2015	High DPI	HTTP/2	RyuJIT 64-bit
4.5 2012	Task-Based Async Model	UWP	
4.0 2010	Task Parallel Library	Parallel LINQ	
3.5 2007	LINQ	Expression Trees	Entity Framework
3.0 2006	WPF	WCF	WF CardSpace
2.0 2005	Generics	ClickOnce	64-bit
	Debugger edit and continue		
1.1 2003	.NET Compact Framework	IPv6	
1.0 2002	WinForms	ASP.NET	ADO.NET
	Base Class Library		

C# 7.0 2017	Out variables, Tuples and deconstruction, Pattern matching, Local functions, Expanded expression bodied members, Ref locals and returns, Discards, Binary Literals and Digit Separators, Throw expressions
C# 6.0 2015 Roslyn	Static imports, Exception filters, Auto-property initializers, Expression bodied members, Null propagator, String interpolation, nameof operator, Index initializers, Await in catch/finally blocks, Default values for getter-only properties
C# 5.0 2012	Asynchronous members Caller info attributes
C# 4.0 2010	Dynamic binding, Named/optional arguments, Generic covariant and contravariant, Embedded interop types
C# 3.0 2007	Auto-implemented properties, Anonymous types, Query expressions, Lambda expressions, Expression trees, Extension methods, Implicitly typed local variables, Partial methods, Object and collection initializers
C# 2.0 2005	Generics, Partial types, Anonymous methods, Nullable value types, Iterators, Covariance and contravariance, Getter/setter separate accessibility, Method group conversions (delegates), Static classes, Delegate inference
C# 1.2 2003	foreach loop calls Dispose on IEnumerable
C# 1.0 2002	Classes, Structs, Interfaces, Events, Properties, Delegates, Operators and expressions, Statements, Attributes

.NET Framework - Windows

CoreCLR

CLR 4.0

CLR 2.0

CLR 1.1

CLR 1.0