

nietras © 2025 v0.5											
.NET - Any Platform	10.0 2025	AVX10.2	File based apps dotnet run app.cs	System.Numerics.Tensors stable and enhanced	CoreCLR	C# 14.0 2025	Extension members, Null-conditional assignment, nameof supports unbound generic types, More implicit conversions for Span<T> and ReadOnlySpan<T>, Modifiers on simple lambda parameters, field backed properties, partial events and constructors, user-defined compound assignment operators				
		One shot tool execution dotnet tool exec	Stack allocation for small arrays	String CompareOptions .NumericOrdering		C# 13.0 2024	params collections, New lock type and semantics, New escape sequence - \e, Method group natural type improvements, Implicit indexer access in object initializers, Enable ref locals and unsafe contexts in iterators and async methods, Enable ref struct types to implement interfaces, Allow ref struct types as arguments for type parameters in generics, Partial properties and indexers are now allowed in partial types, Overload resolution priority				
	9.0 2024	ARM64 SVE (128-bit)	Dictionary<>/HashSet<> .AlternateLookup	ReadOnlySpan<T> params overloads							
		Terminal logger enabled by default	object stack allocation for boxes	BinaryFormatter In-box Throws		C# 12.0 2023	Primary constructors, Collection expressions, Inline arrays, Optional parameters in lambda expressions, ref readonly parameters, Alias any type, Experimental attribute, Interceptors				
	8.0 2023	Vector512 AVX-512	TimeProvider ITimer	FrozenDictionary FrozenSet							
		Utf8SpanFormattable Utf8SpanParsable	Simplified output paths	Codegen struct promotion		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				
	7.0 2022	Generic Math		Cross-Platform Vector64/128/256							
On Stack Replacement		Native AOT		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					
6.0 2021	Improved FileStream		Crossgen2 (AOT)								
	Dynamic PGO		Hot reload			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				
5.0 2020	Single file apps		App trimming								
	Unified platform		ARM64 for Windows								
.NET Core - Cross-platform	Readonly members, Default interface methods, Switch expressions, Property patterns, Tuple patterns, Positional patterns, Using declarations, Static local functions, Disposable <code>ref</code> 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	3.1 2019	Support for C++/CLI	Windows Forms Controls Removal		
	Reassign <code>ref</code> local variables, Initializers on stackalloc arrays, Access fixed fields without pinning, <code>unmanaged</code> generic type constraints					C# 7.3 2018	3.0 2019	Windows Desktop apps (WinForms, WPF)	Hardware intrinsics	Range Index	Blazor
	Declare <code>readonly</code> struct types, Add the <code>in</code> modifier on parameters, Use the <code>ref readonly</code> modifier on method returns, Declare <code>ref</code> struct types, Use additional generic constraints, Non-trailing named arguments, Named arguments can be followed by positional arguments, Leading underscores in numeric literals, <code>private protected</code> access modifier, Conditional <code>ref</code> expressions, Result of a conditional expression (<code>?:</code>) can be a reference					C# 7.2 2017	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	
.NET Framework - Windows	async Main method, default literal expressions, Inferred tuple element names, Pattern matching on generic type parameters,				C# 7.1 2017	1.0 2016	Unsafe	ASP.NET Core	Entity Framework Core		
	RyuJIT from .NET Core 2.1	ZLib 1.2.11	ARM64	4.8 2019	CLR 4.0	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				
	Improved High DPI	ASP.NET Object Cache		4.7 2017		C# 6.0 2015	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				
	High DPI	HTTP/2	RyuJIT 64-bit	4.6 2015		Roslyn					
	Task-Based Async Model	UWP		4.5 2012	CLR 2.0	C# 5.0 2012	Asynchronous members Caller info attributes				
	Task Parallel Library	Parallel LINQ		4.0 2010		C# 4.0 2010	Dynamic binding, Named/optional arguments, Generic covariant and contravariant, Embedded interop types				
	LINQ	Expression Trees	Entity Framework	3.5 2007		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				
	WPF	WCF	WF	CardSpace	3.0 2006	CLR 1.1	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			
	Generics	ClickOnce	64-bit	2.0 2005	C# 1.2 2003		foreach loop calls Dispose on IEnumerator				
	Debugger edit and continue										
	.NET Compact Framework		IPv6		1.1 2003	CLR 1.0	C# 1.0 2002	Classes, Structs, Interfaces, Events, Properties, Delegates, Operators and expressions, Statements, Attributes			
	WinForms	ASP.NET	ADO.NET		1.0 2002						
Base Class Library											