


FREE GUIDE



.NET 6: Microsoft's fastest framework ever





Microsoft's .NET developer platforms are some of the most popular software frameworks on the market today. There's a reason for that: **reliability**.

Airtight security, versatile integration and simple deployment and maintenance is backed by the assurance of the Microsoft name.



What is .NET?

.NET is an open source developer platform used for building multiple application types, including web, mobile, desktop, games and the Internet of Things. Essentially .NET is a series of programs that translate programming languages - the most popular being C# - into software, and provide utilities to enable additional functionalities within these softwares.

Driving the shift to a new .NET

Since its initial release in 2002, several offshoots of .NET have come out, the two best-known being .NET Framework and .NET Core. These various versions kicking around have resulted in a messy situation for developers trying to ensure their .NET code could run on all platforms.

Additionally, since .NET's inception, major changes in the way we use devices, and particularly the way users now move across devices, mean previous versions are unable to cater to users' needs. .NET's predecessor platforms lack the cross-platform versatility that will soon be a prerequisite for contemporary websites. Simply put, the software is aging, and the applications running through previous .NET versions will soon be outdated.



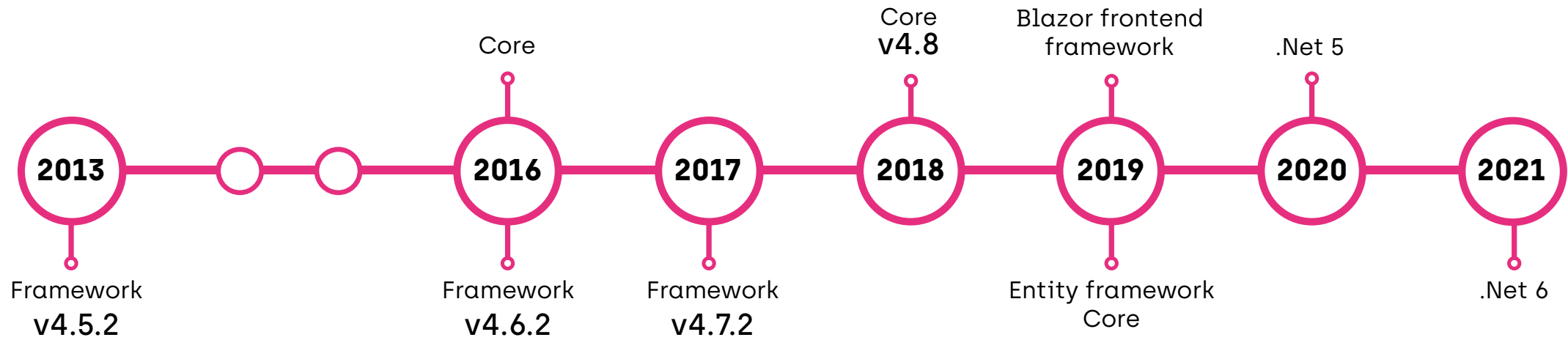
The evolution of .NET

In 2020, Microsoft announced it would no longer be releasing .NET Framework versions, and announced .NET 5 as the sole .NET platform. While .NET 5 was essentially an extension of the .NET Core family, it was bolstered with the breadth of .NET Framework. 2021's .NET 6 release is the continuation of this unified platform.

.NET 6 offers a number of key advantages. The platform is cloud-optimised for a quicker runtime, ensuring applications load at lightning speed. Its lighter weight allows for a smaller codebase, again boosting runtime but also slashing file sizes, helping companies cut hosting costs. And unlike .NET 5, Microsoft are providing long-term support for .NET 6, offering assurance against critical issues.

Developers using .NET can take advantage of C#'s new suite of capabilities to improve efficiency during build. Additionally its convergence of frameworks, runtimes and tools enables easier cross-platform development, allowing quicker and cheaper development and maintenance. The result is future-proofed software, quicker to run, quicker to work with and more economical to use long term.

.NET version releases





Why businesses are upgrading

Modernised technology

There are many benefits to moving to .NET 6. These include:

- Increased performance, reliability, and security
- Faster development
- Smaller codebase
- Backwards compatibility
- Cross-browser compatibility
- Cross-platform implementation
- Applications that support offline functionality
- Open-source architecture
- Smarter deployment and packages

These benefits allow for a faster and more reliable development cycle, resulting in robust and reliable applications that will be supported well into the future.

Optimised for Azure

Take advantage of Microsoft's global cloud infrastructure

Azure is optimised for running systems that use the Microsoft technology suite, including .NET 6. With Azure, developers can deploy applications to multiple locations for best-possible performance, and suitable geographic locations to reduce latency time. Azure solutions are resilient and highly available, with load balancing and backups across multiple data centres creating a 99.95% uptime SLA.

With Azure, Microsoft offers a highly flexible 'pay for what you use' model. Subscribers are billed monthly with an itemised list of resources they have utilised. In most scenarios this is simpler and more economical for end-users compared to self-hosting.

"After moving one of our flagship accounts from TeamCity to Azure DevOps, our deployment cycle was cut from three hours to 15 minutes. Additionally the process has been transformed from a manual task list to almost fully automated, with only one manual step now required. For the client, this means massive time and cost savings, plus more reliable applications."

Harry Robertson, Lead .NET Engineer



"One of the best features of C# is its 'spellchecker' for variable names, which works just like Word Spell Check. Highlighting text errors in variables sounds like a small thing, but it can save devs hours of frustration."

Eddie Almond, .NET Engineer



Azure features tools to benefit all industries, with a library of resources designed to improve application capabilities and allow users to develop and scale new applications:

- Azure Functions provide on-demand functionalities that cut code creation and infrastructure maintenance.
- Artificial Intelligence and Machine Learning comprise a range of services developers can use to add AI and ML capabilities such as speech and image recognition into their applications, for a richer user experience.
- The IoT Hub assists developers in capturing, monitoring and analysing data coming from devices, to vastly broaden the potential of new applications.

Put simply, Azure is a global cloud enabling the vast potential of evolving future frameworks, designed to sync perfectly with the .NET 6 platform.

Create rich UI experiences through Blazor

Blazor is Microsoft's new front-end UI framework, designed for use from .NET 5 onwards. Blazor has already proven itself as a highly flexible framework with broad possibilities. This includes use as a unified application development platform, opening possibilities for .NET's use for build across all application types.

Blazor enables developers to create rich, interactive web experiences through C#, HTML and CSS. Powerful, versatile and rich in features, C# is the preferred language for many of our developers. Blazor allows developers to write entirely in C#, making dynamic components far easier to execute. With Blazor, C# developers can write in their native language to improve efficiency in build and help clients take advantage of their expertise.

Blazor also incorporates simple unit testing for the front-end, previously a complex and laborious operation. By streamlining unit testing Blazor is helping developers quickly create robust and error-free code. This efficient system allows for quicker deployment and results in more reliable websites, ultimately saving clients money on both build and support.



The Helastel offering

Helastel's specialist .NET team began coding applications with .NET 6 in November 2021 - the same month the platform was released. As such, we are among the most experienced .NET 6 development teams in the world. On the pathway to Microsoft Gold Partner Certification, and with 17 years' experience working with clients of all sizes, we are an established development company you can trust.

Helastel's .NET developer specialists are quick to pivot towards the most up-to-date technologies, to ensure a future-leaning skills base and best-possible project outcomes. The team puts onus on itself to keep progressing architecting solutions, continually modernising development styles and keeping our software creation on the cutting edge.

Meet the team

Helastel has 17 years' experience working closely with organisations across industries including healthcare, finance, public sector and education to solve challenges with digital.

We don't build technology, we build solutions for problems, and we value the personal as much as the technical.



Harry Robertson
Lead .NET Engineer

Harry is an experienced .NET Engineer with five years' experience with DevOps and Data Ops on the Azure cloud. He also has a wealth of experience in integrating external systems with other cloud providers and automating data extraction from on-premise systems where additional software development might be required.



Dennis Edwards
Senior .NET Engineer

Senior developer Dennis has 15 years' specialist experience on .NET, which he favours for its clean, consistent and well-structured development environment. An expert in back-end and middleware application layers, Dennis has most recently developed a REST API for a mobile app-based utilities maintenance application.



Eddie Almond

.NET Engineer

A skilled .NET software engineer, Eddie works through the full development life cycle and specialises in taking existing, legacy systems and bringing them up to scratch with modern ideas and technologies. Most recently he has been working on transforming Avonwood Development's central system for analysis and recording health and safety data.



George Jones

.NET Engineer

Physics graduate George has four years' .NET experience, and a particular interest in back-end systems for websites, customer portals and unit testing. He's a fan of the wide feature selection, good documentation and universality of the .NET frameworks. George has recently been working in .NET on unit test coverage and general bug fixing.



Omar Ebrahim

.NET Engineer

Omar brings seven years and a wide breadth of .NET experience to the team, spanning creating software to facilitate kidnap and extortion investigations, to authoring a .NET tutorials website. However, he considers API development and Razor web apps his .NET specialism. He chose .NET as his focus for its universality.

Contact us



Get a scalable, versatile and future-proofed framework with Helastel's in-house .NET 6 professionals

Let's talk to discuss how we can partner up and ensure your technology stack aligns with your company's long-term goals.

Contact us today on:

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