TypeScript

Download Docs Handbook Community Tools

En Es

**Search Docs** 

# **Download TypeScript**

TypeScript can be installed through three installation routes depending on how you intend to use it: an npm module, a NuGet package or a Visual Studio Extension.

If you are using Node.js, you want the npm version. If you are using MSBuild in your project, you want the NuGet package or Visual Studio extension.

### TypeScript in Your Project

Having TypeScript set up on a per-project basis lets you have many projects with many different versions of TypeScript, this keeps each project working consistently.

via npm

TypeScript is available as a <u>package on the npm registry</u> available as "typescript".

You will need a copy of <u>Node.js</u> as an environment to run the package. Then you use a dependency manager like <u>npm</u>, <u>yarn</u>

with Visual Studio

For most project types, you can got Type Carint as a neckage in Nuget for your MSBuild project Esta página está disponible en Español app.

Adelante

No preguntar de nuevo

#### TypeScript: How to set up TypeScript

or pnpm to download TypeScript into your project.

npm install typescript --save-dev



All of these dependency managers support lockfiles, ensuring that everyone on your team is using the same version of the language. You can then run the TypeScript compiler using one of the following commands:

npx tsc



When using Nuget, you can <u>install TypeScript through Visual</u> Studio using:

- The Manage NuGet Packages window (which you can get to by right-clicking on a project node)
- The Nuget Package Manager Console (found in Tools > NuGet Package Manager > Package Manager Console) and then running:

Install-Package Microsoft.TypeScript.MSBuild

For project types which don't support Nuget, you can use the <a href="TypeScript Visual Studio extension">TypeScript Visual Studio extension</a>. You can install the <a href="extension">extension</a> wing Extensions > Manage Extensions in Visual Studio.

The examples below are for more advanced use cases.

## Globally Installing TypeScript

It can be handy to have TypeScript available across all projects, often to test one-off ideas. Long-term project-wide installation over a global install so that they can benefit from reproducible builds across

Esta página está disponible en Español

### via npm

You can use npm to install TypeScript globally, this means that you can use the tsc command anywhere in your terminal.

To do this, run npm install -g typescript. This will install the latest version (currently 5.6).

### via Visual Studio Marketplace

You can install TypeScript as a Visual Studio extension, which will allow you to use TypeScript across many MSBuild projects in Visual Studio.

The latest version is available in the Visual Studio Marketplace.

## Working with TypeScript-compatible transpilers

There are other tools which convert TypeScript files to JavaScript files. You might use these tools for speed or consistency with your existing build tooling.

Each of these projects handle the file conversion, but do not handle the type-checking aspects of the TypeScript compiler. So it's likely that you will still need to keep the above TypeScript dependency around, and you will want to enable **isolatedModules**.

#### Babel

<u>Babel</u> is a very popular JavaScript transpiler which supports TypeScript

#### **SWC**

<u>swc</u> is a fast transpiler created in Rust which supports many of Babel's features including TypeScript.

#### Sucrase

Sucrase for usin support files via the plugin <u>@babel/plugin-transform-typescript</u>.

### Next Steps

Get Started	Handbook	Tools	Tutorials
JS to TS	<u>Everyday Types</u>	<u>Playground</u>	<u>ASP.NET</u>
New to Programming	<u>Creating Types from Types</u>	TSConfig Reference	Migrating from JS
OOP to JS	<u>Object Types</u>	Dalassa Natas	Working with the DOM
Functional to JS	Variable Declarations	Release Notes	React & Webpack
<u>Installation</u>	More on Functions	What's new in 5.6	

Customize Site Colours: System Code Font: Cascadia

### **Popular Documentation Pages**

Everyday Types
All of the common types in TypeScript

Creating Types from Types

Techniques to make more elegant types

More on Functions

How to provide types to functions in JavaScript

More on Objects
How to provide a ty
shape to JavaScript
objects

Esta página está disponible en Español

Narrowing				
How TypeScript infers				
types based on runtime				
behavior				

Variable Declarations How to create and type JavaScript variables TypeScript in 5 minutes
An overview of building
a TypeScript web app

TSConfig Options
All the configuration
options for a project

#### Classes

How to provide types to JavaScript ES6 classes

	Using TypeScript		Community	
Made with ♥ in Redmond, Boston, SF & Dublin	Get Started	Download	Get Help	Blog
	Community	Playground	GitHub Repo	Community Chat
© 2012-2024 Microsoft PrivacyTerms of Use	TSConfig Ref	Why TypeScript	@TypeScript	Mastodon
	Design	⊙ Code Samples	Stack Overflow	Web Repo

Esta página está disponible en Español