

BDAMD SOFTWARE INSTALLATION TUTORIAL

Paulo Oliveira

DEI-ISEP

Microsoft SQL Server 2022

- Developer Edition

- Available at:

<https://www.microsoft.com/en-us/sql-server/sql-server-downloads>

Top downloads

SQL containers

Community

SQL tools and drivers

Get starte

Developer tools



SQL Server 2022 on-premises

Get the performance and security of SQL Server 2022—a scalable, hybrid data platform—now Azure-enabled.

[Download now](#)

SQL Server on Azure

Run SQL Server on Azure SQL with built-in security and manageability.

[Learn more](#)

SQL Server 2022 Developer

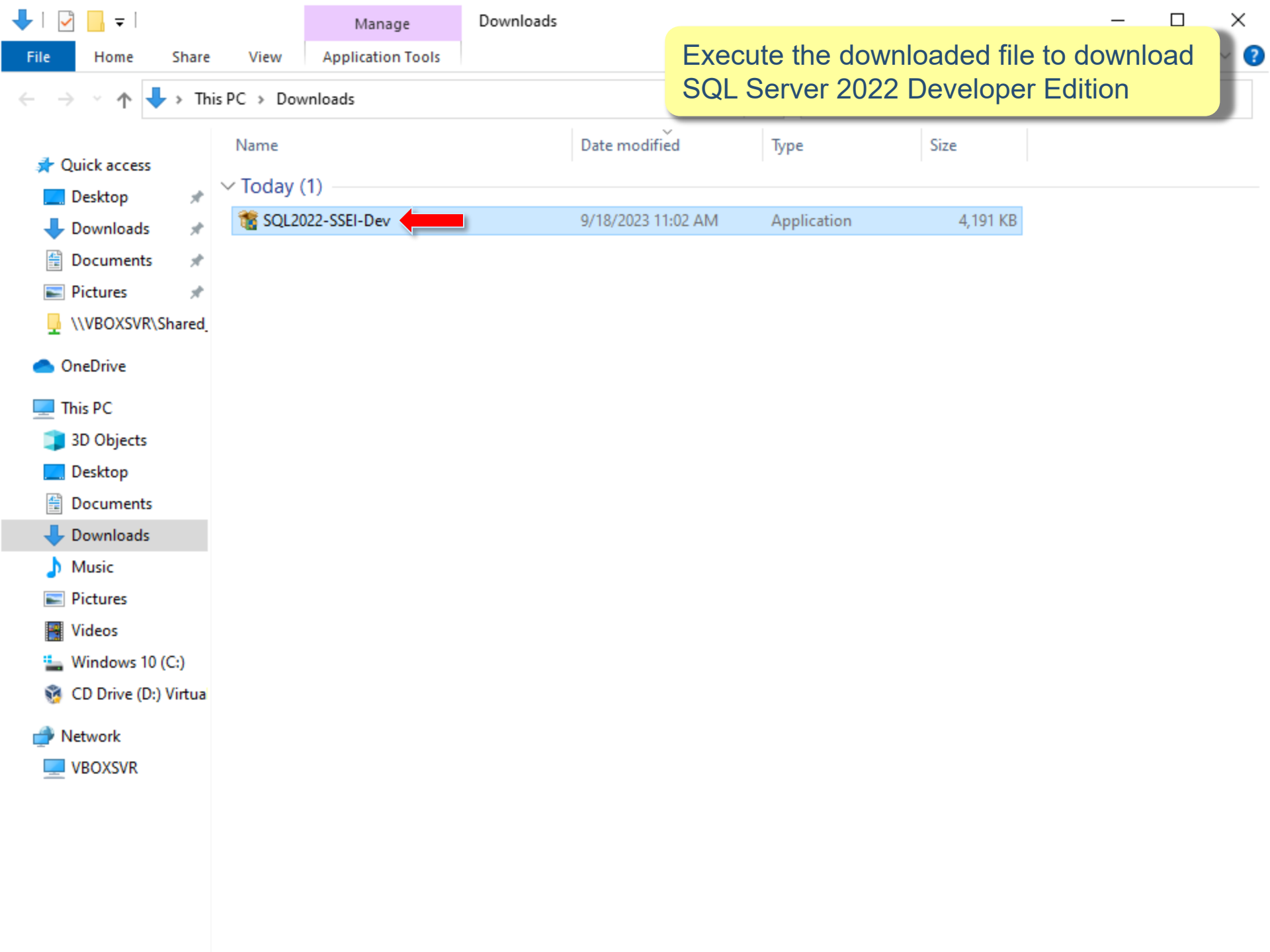
Get the full-featured free edition, licensed for use as a development and test database in a non-production environment.

[Download now](#)

SQL Server 2022 Express

Get the free edition, ideal for development and production for desktop, web, and small server applications.

[Download now](#)



Execute the downloaded file to download SQL Server 2022 Developer Edition

This PC > Downloads

Name	Date modified	Type	Size
Today (1)			
SQL2022-SSEI-Dev	9/18/2023 11:02 AM	Application	4,191 KB

- Quick access
 - Desktop
 - Downloads
 - Documents
 - Pictures
 - \\VBOXSVR\Shared
- OneDrive
- This PC
 - 3D Objects
 - Desktop
 - Documents
 - Downloads
 - Music
 - Pictures
 - Videos
 - Windows 10 (C:)
 - CD Drive (D:) Virtua
- Network
 - VBOXSVR

SQL Server 2022

Developer Edition

Select the Custom
Installation type

Select an installation type:

Basic

Select Basic installation type to install the SQL Server Database Engine feature with default configuration.

Custom

Select Custom installation type to step through the SQL Server installation wizard and choose what you want to install. This installation type is detailed and takes longer than running the Basic install.

Download Media

Download SQL Server setup files now and install them later on a machine of your choice.

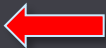
SQL Server 2022 Developer Edition

Select the download folder
and then click on Install

Specify SQL Server media download target location

MEDIA LOCATION *:

C:\SQL2022



Browse

MINIMUM FREE SPACE

8494 MB

DOWNLOAD SIZE

1188 MB

Close

< Previous

Install



Planning

Installation

Maintenance

Tools

Resources

Advanced

Options

[New SQL Server standalone installation or add features to an existing installation](#)

Launch a wizard to install SQL Server 2022 in a non-clustered environment or to add features to an existing SQL Server 2022 instance.

[Install SQL Server Reporting Services](#)

Launch a download page that provides a link to install SSRS.

[Install SQL Server Management Tools](#)

Launch a download page that provides a link to install SQL Server Management Studio, SQL Server command-line utilities (SQLCMD and BCP), SQL Server PowerShell provider, SQL Server Profiler and Database Tuning Advisor. An internet connection is required to install these tools.

[Install SQL Server Data Tools](#)

Launch a download page that provides a link to install SQL Server Data Tools (SSDT). SSDT provides Visual Studio integration including project system support for Microsoft Azure SQL Database, the SQL Server Database Engine, Reporting Services, Analysis Services and Integration Services. An internet connection is required to install SSDT.

[New SQL Server failover cluster installation](#)

Launch a wizard to install a single-node SQL Server 2022 failover cluster. This action is only available in the clustered environment.

[Add node to a SQL Server failover cluster](#)

Launch a wizard to add a node to an existing SQL Server 2022 failover cluster. This action is only available in the clustered environment.

[Upgrade from a previous version of SQL Server](#)

Launch a wizard to upgrade a previous version of SQL Server to SQL Server 2022.

[Click here to first view Upgrade Documentation](#)

After SQL Server Installation Center starts, select the *Installation* menu and then *New SQL Server stand-alone installation*

Edition

Select the edition of SQL Server 2022 you want to install.

Edition

License Terms

Global Rules

Microsoft Update

Product Updates

Install Setup Files

Install Rules

Azure Extension for SQL Server

Feature Selection

Feature Rules

Feature Configuration Rules

Ready to Install

Installation Progress

Complete

Select an edition of SQL Server to install. You can choose to either use a SQL Server license that you have already purchased by entering the product key or choose pay-as-you-go billing through Microsoft Azure. You can also specify a free edition of SQL Server: Developer, Evaluation, or Express. Evaluation has the largest set of SQL Server features, as documented in SQL Server Books Online, and is activated with a 180-day expiration. Developer edition does not have an expiration, has the same set of features found in Evaluation, but is licensed for non-production database application development only. To upgrade from one installed edition to another, run the Edition Upgrade Wizard.

☒ Specify a free edition:

Developer

☐ Use pay-as-you-go billing through Microsoft Azure:

Warning: To enable this option, you must have an active Azure subscription that you will be required to provide along with a resource group, Azure region, and tenant ID later in setup. For more information, see <https://aka.ms/ArcEnabledSqlPAYG>.

Standard

☐ Enter the product key:

- - - -

☐ I have a SQL Server license with Software Assurance or SQL Software Subscription

☐ I have a SQL Server license only

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Next >

Cancel

License Terms

To install SQL Server 2022, you must accept the Microsoft Software License Terms.

Edition

License Terms

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Azure Extension for SQL Server

Feature Selection

Feature Rules

Feature Configuration Rules

Ready to Install

Installation Progress

Complete

SQL Server 2022 Developer Edition

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DATA COLLECTION. The software may collect information about you and your use of the software and send that to Microsoft. Microsoft may use this information to provide services and improve Microsoft's products and services. Your opt-out rights, if any, are described in the product documentation. Some features in the software may enable collection of data from users of your applications that access or use the software. If you use these features to enable data collection in your applications, you must comply with applicable law, including getting any required user consent, and maintain a prominent privacy policy that accurately informs users about how you use, collect, and share their data. You can learn more about Microsoft's data collection and use in the product documentation and the Microsoft Privacy Statement at <https://go.microsoft.com/fwlink/?LinkId=521839>. You agree to comply with all applicable provisions of the Microsoft Privacy Statement including the SQL Server privacy supplement: <http://go.microsoft.com/fwlink/?linkid=868444>

MICROSOFT SOFTWARE LICENSE TERMS

MICROSOFT SQL SERVER



Copy



Print

☒ I accept the license terms and [Privacy Statement](#)

SQL Server transmits information about your installation experience as well as other usage and performance data. Azure Arc connection also transmits the configuration data to allow you to manage and protect your SQL Server instance using Azure Portal and services. To learn more about data processing and privacy controls, and to turn off the collection of certain information, see the [documentation](#).

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Microsoft Update

Use Microsoft Update to check for important updates

Edition

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Microsoft Update

Product Updates

Install Setup Files

Install Rules

Azure Extension for SQL Server

Feature Selection

Feature Rules

Feature Configuration Rules

Ready to Install

Installation Progress

Complete

Microsoft Update offers security and other important updates for Windows and other Microsoft software, including SQL Server 2022. Updates are delivered using Automatic Updates, or you can visit the Microsoft Update website.

☒ Use Microsoft Update to check for updates (recommended)



[Microsoft Update FAQ](#)

[Microsoft Privacy Statement](#)

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Cancel

Install Rules

Setup rules identify potential problems that might occur while running Setup. Failures must be corrected before Setup can continue.

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Install Rules
Azure Extension for SQL Server
Feature Selection
Feature Rules
Feature Configuration Rules
Ready to Install
Installation Progress
Complete

Operation completed. Passed: 4. Failed 0. Warning 1. Skipped 0.

Hide details <<

Re-run

[View detailed report](#)

Result	Rule	Status
✓	Machine Learning Server shared feature support	Passed
✓	Consistency validation for SQL Server registry keys	Passed
✓	Computer domain controller	Passed
⚠	Windows Firewall	Warning
✓	Microsoft .NET Framework 4.7.2, or newer, is required	Passed

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Cancel

Azure Extension for SQL Server

Azure Extension for SQL Server is required to enable Microsoft Defender for Cloud, Purview, and Azure Active Directory

Unselect the *Azure Extension for SQL Server* option.

Edition

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Install Setup Files

Install Rules

Azure Extension for SQL Serv...

Feature Selection

Feature Rules

Feature Configuration Rules

Ready to Install

Installation Progress

Complete

☐ Azure Extension for SQL Server

☐ Use Azure Login

☒ Use Service Principal

Azure Service Principal ID*

Azure Service Principal Secret*

Azure Subscription ID*

Azure Resource Group*

Azure Region*

Azure Tenant ID*

Proxy Server URL (optional)

To install Azure extension for SQL Server, provide your Azure account or a service principal to authenticate the SQL Server instance to Azure. You also need to provide the Subscription ID, Resource Group, Region, and Tenant ID where this instance will be registered. For more information for each parameter, visit <https://aka.ms/arc-sql-server>.

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Cancel


Feature Selection

Select the Developer features to install.

Minimum required features are:

- Database Engine Services
- Analysis Services
- Integration Services

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Analysis Services Configuration
Feature Configuration Rules
Ready to Install
Installation Progress
Complete

 Looking for Reporting Services? [Download it from the web](#)

Features:

Instance Features

- ☒ Database Engine Services
- ☐ SQL Server Replication
- ☐ Machine Learning Services and Language Extensions
- ☐ Full-Text and Semantic Extractions for Search
- ☐ Data Quality Services
- ☐ PolyBase Query Service for External Data

Shared Features

- ☐ Data Quality Client
- ☒ Integration Services
- ☐ Scale Out Master
- ☐ Scale Out Worker
- ☐ Master Data Services

Redistributable Features

Feature description:

Includes the designer, runtime, and utilities that enable Integration Services to move, integrate, and transform data between data stores.

Prerequisites for selected features:

Already installed:

- Windows PowerShell 3.0 or higher
- Microsoft Visual C++ 2017 Redistributable
- Microsoft Visual Studio Tools for Applications 2019

Disk Space Requirements

Drive C: 1718 MB required, 11317 MB available

Select All

Unselect All

Instance root directory:

C:\Program Files\Microsoft SQL Server\

Shared feature directory:

C:\Program Files\Microsoft SQL Server\

Shared feature directory (x86):

C:\Program Files (x86)\Microsoft SQL Server\

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Cancel

Instance Configuration

Specify the name and instance ID for the instance of SQL Server. Instance ID becomes part of the

Installation can be performed on the default instance (recommended) or on a named instance

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Analysis Services Configuration
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Complete

☒ Default instance

☐ Named instance: *

MSSQLSERVER

Instance ID:

MSSQLSERVER

SQL Server directory: C:\Program Files\Microsoft SQL Server\MSSQL16.MSSQLSERVER

Analysis Services directory: C:\Program Files\Microsoft SQL Server\MSAS16.MSSQLSERVER

Installed instances:

Instance Name	Instance ID	Features	Edition	Version

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Cancel

Server Configuration

Specify the service accounts and collation configuration.

- Edition
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- Feature Selection
- Feature Rules
- Instance Configuration
- Server Configuration**
- Database Engine Configuration
- Analysis Services Configuration
- Feature Configuration Rules
- Ready to Install
- Installation Progress
- Complete

Service Accounts Collation

Microsoft recommends that you use a separate account for each SQL Server service.

Service	Account Name	Password	Startup Type
SQL Server Agent	NT Service\SQLSERVERAGENT		Manual ▼
SQL Server Database Engine	NT Service\MSSQLSERVER		Automatic ▼
SQL Server Analysis Services	NT Service\MSSQLServerOLAPServ...		Automatic ▼
SQL Server Integration Services 16.0	NT Service\MsDtsServer160		Automatic ▼
SQL Server Browser	NT AUTHORITY\LOCAL SERVICE		Disabled ▼

☐ Grant Perform Volume Maintenance Tasks privilege to SQL Server Database Engine Service

This privilege enables instant file initialization by avoiding zeroing of data pages. This may lead to information disclosure by allowing deleted content to be accessed.

[Click here for details](#)

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Cancel

Database Engine Configuration

Specify Database Engine authentication security mode, administrators, and Filestream settings.

Windows authentication or mixed mode authentication (recommended) can be selected. If mixed mode is selected an administration password must be defined for the system administrator (sa login)

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- Instance Configuration
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- Database Engine Configuration**
- Analysis Services Configuration
- Feature Configuration Rules
- Ready to Install
- Installation Progress
- Complete

Server Configuration

Data Directories

TempDB

MaxDOP

Memory

FILESTREAM

Specify the authentication mode and administrators for the Database Engine.

Authentication Mode

☐ Windows authentication mode

☒ Mixed Mode (SQL Server authentication and Windows authentication)

Specify the password for the SQL Server system administrator (sa) account.

Enter password:

.....

Confirm password:

.....

Specify SQL Server administrators

AzureAD\PauloOliveira

SQL Server administrators have unrestricted access to the Database Engine.

Add Current User

Add...

Remove

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Cancel

Analysis Services Configuration

Specify Analysis Services server modes, administrators, and data directories.

Select the Tabular Mode for the Analysis Services Server Configuration

- Edition
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- Server Configuration
- Database Engine Configuration
- Analysis Services Configuration**
- Feature Configuration Rules
- Ready to Install
- Installation Progress
- Complete

Server Configuration

Data Directories

Server Mode:

☐ Multidimensional Mode

☒ Tabular Mode

Specify which users have administrative permissions for Analysis Services.

AzureAD\PauloOliveira

Analysis Services administrators have unrestricted access to Analysis Services.

Add Current User

Add...

Remove

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Next >

Cancel

Ready to Install

Verify the SQL Server 2022 features to be installed.

Check if all the selected features are listed

- Edition
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- Azure Extension for SQL Server
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- Database Engine Configuration
- Analysis Services Configuration
- Feature Configuration Rules
- Ready to Install**
- Installation Progress
- Complete

Ready to install SQL Server 2022:

Summary

Edition: Developer

Action: Install

Prerequisites

Already installed:

- Windows PowerShell 3.0 or higher
- Microsoft Visual C++ 2017 Redistributable
- Microsoft Visual Studio Tools for Applications 2019

General Configuration

Features

- Database Engine Services
- Analysis Services
- Integration Services

Instance configuration

- Instance Name: MSSQLSERVER
- Instance ID: MSSQLSERVER
- Instance IDs
 - SQL Database Engine: MSSQL16.MSSQLSERVER
 - Analysis Services: MSAS16.MSSQLSERVER
- Instance Directory: C:\Program Files\Microsoft SQL Server\

Shared component root directory

- Shared feature directory: C:\Program Files\Microsoft SQL Server\
- Shared feature (WOW64) directory: C:\Program Files (x86)\Microsoft SQL Server\

Product Update

- Update Enabled: True

Configuration file path:

C:\Program Files\Microsoft SQL Server\160\Setup Bootstrap\Log\20230918_111302\ConfigurationFile.ini

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Install

Cancel

Ready to Install

Verify the SQL Server 2022 features to be installed.

Edition

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Install Rules

Azure Extension for SQL Server

Feature Selection

Feature Rules

Instance Configuration

Server Configuration

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Ready to Install

Installation Progress

Complete

Ready to install SQL Server 2022:

...

- User database directory: C:\Program Files\Microsoft SQL Server\MSSQL16.MSSQLSERVER\MSSQL\Data
- User database log directory: C:\Program Files\Microsoft SQL Server\MSSQL16.MSSQLSERVER\MSSQL\Data
- Backup directory: C:\Program Files\Microsoft SQL Server\MSSQL16.MSSQLSERVER\MSSQL\Backup
- TempDB
 - Number of data files: 2
 - Initial size of data file: 8 MB
 - Autogrowth of data file: 64 MB
 - Initial size of log file: 8 MB
 - Autogrowth of log file: 64 MB
- TempDB data directories:
 - C:\Program Files\Microsoft SQL Server\MSSQL16.MSSQLSERVER\MSSQL\Data
 - TempDB log directory: C:\Program Files\Microsoft SQL Server\MSSQL16.MSSQLSERVER\MSSQL\Data
- Memory
 - Max Server Memory: 2147483647 MB
 - Min Server Memory: 0 MB
- Max degree of parallelism: 2
- Collation: SQL_Latin1_General_CP1_CI_AS
- Security Mode: SQL Server authentication and Windows authentication
- Administrators:
 - AzureAD\PauloOliveira
- Shared features
 - Integration Services
 - Service Configuration
 - Account: NT Service\MsDtsServer160
 - Startup Type: Automatic

...

Configuration file path:

C:\Program Files\Microsoft SQL Server\160\Setup Bootstrap\Log\20230918_111302\ConfigurationFile.ini

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Install

Cancel

Complete

Your SQL Server 2022 installation completed successfully with product updates.


Check if everything was installed successfully

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Ready to Install
Installation Progress
Complete

Information about the Setup operation or possible next steps:

Feature	Status
✓ Database Engine Services	Succeeded
✓ Analysis Services	Succeeded
✓ SQL Browser	Succeeded
✓ SQL Writer	Succeeded
✓ Integration Services	Succeeded
✓ Setup Support Files	Succeeded

Details:

Install successful. 

Summary log file has been saved to the following location:

C:\Program Files\Microsoft SQL Server\160\Setup Bootstrap\Log\20230918_111302\Summary_DESKTOP-ACEDDKF_20230918_111302.txt

Close 

Visual Studio 2022

- Available at:

<https://visualstudio.microsoft.com/free-developer-offers/>

- Visual Studio 2022 components to install:
 - ◆ *Data storage and processing* toolset with the *SQL Server Data Tools* option
 - ◆ *SQL Server Integration Services Projects* extension
 - ◆ *Microsoft Analysis Services Projects* extension



Download the Visual
Studio Community edition



Visual Studio Community |

The best comprehensive IDE for .NET and C++ developers on Windows. Fully packed with a sweet array of tools and features to elevate and enhance every stage of software development.

Learn more →

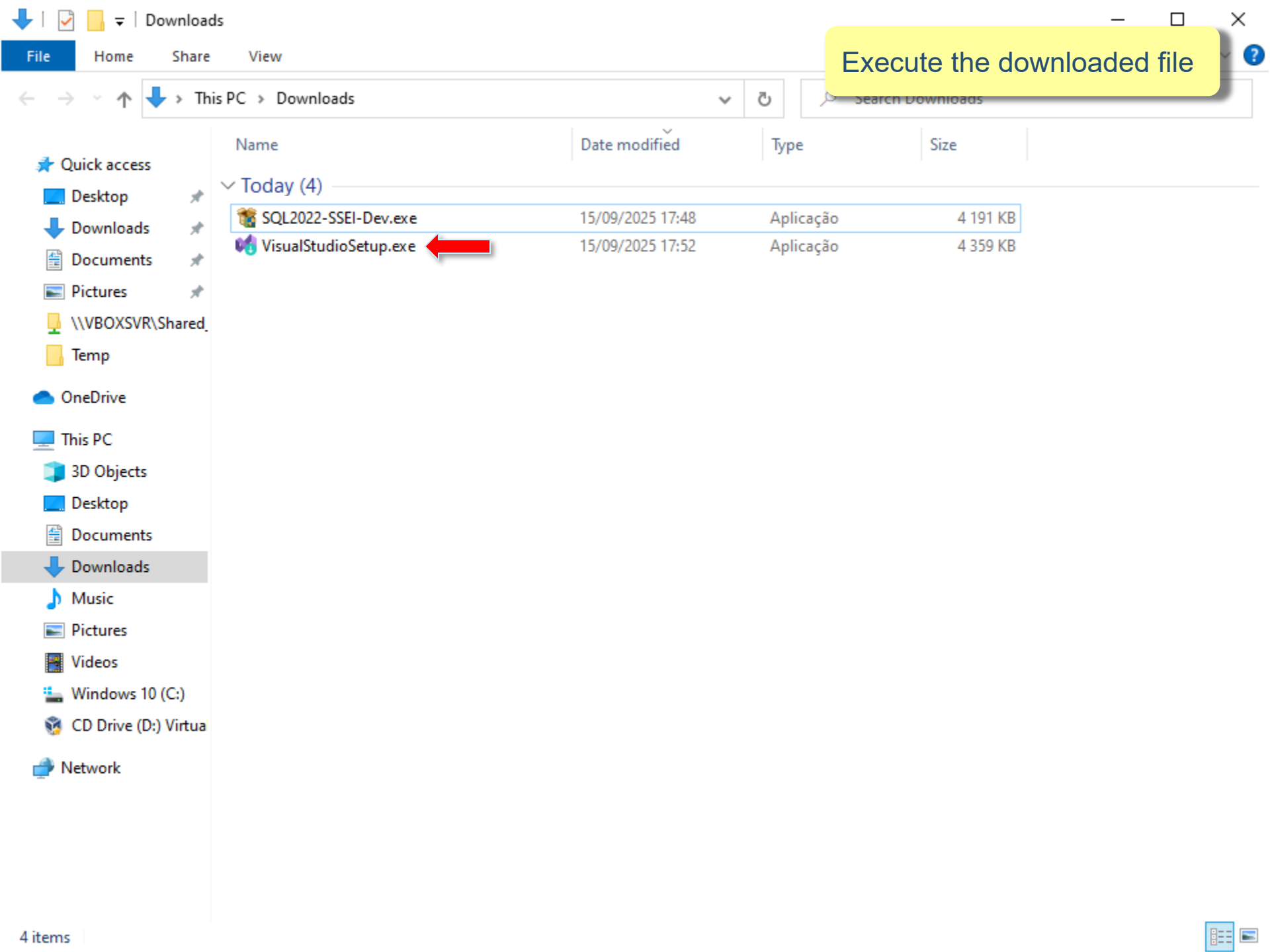
Free download



Visual Studio Code |

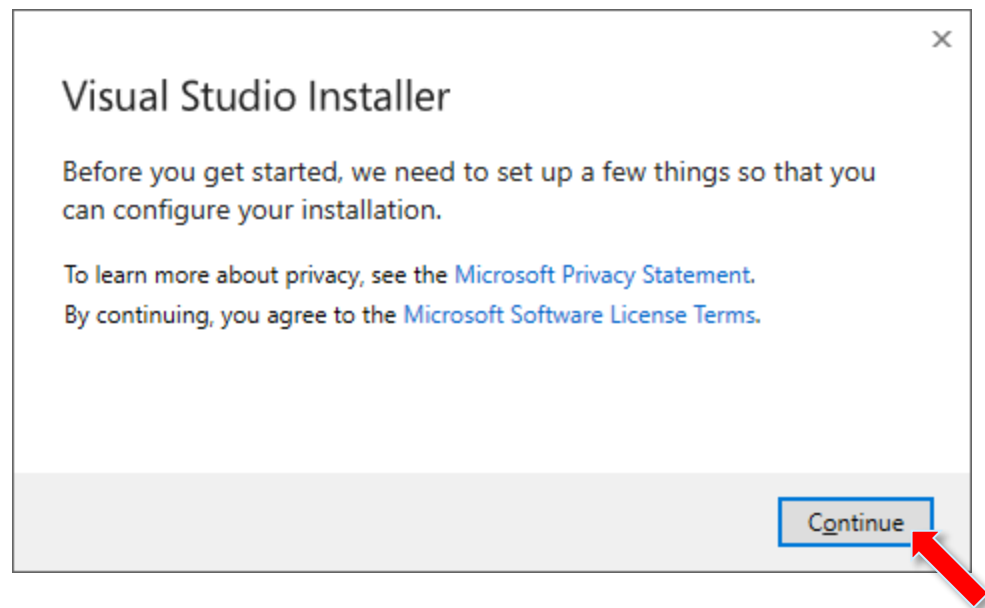
A standalone source code editor that runs on Windows, macOS, and Linux. The top pick for JavaScript and web developers, with extensions to support just about any programming language.

Learn more →



Execute the downloaded file

Name	Date modified	Type	Size
Today (4)			
SQL2022-SSEI-Dev.exe	15/09/2025 17:48	Aplicação	4 191 KB
VisualStudioSetup.exe	15/09/2025 17:52	Aplicação	4 359 KB



Select the *Data storage and processing* toolset with the *SQL Server Data Tools* option

Installing — Visual Studio Community 2022 — 17.11.3

Workloads Individual components Language packs Installation locations

Create 2D and 3D games with Unity, a powerful cross-platform development environment.

Use the full power of C++ to build professional games powered by DirectX, Unreal, or Cocos2d.

Other Toolsets (5)



Data storage and processing

Connect, develop, and test data solutions with SQL Server, Azure Data Lake, or Hadoop.



Data science and analytical applications

Languages and tooling for creating data science applications, including Python and F#.



Visual Studio extension development

Create add-ons and extensions for Visual Studio, including new commands, code analyzers and tool windows.



Office/SharePoint development

Create Office and SharePoint add-ins, SharePoint solutions, and VSTO add-ins using C#, VB, and JavaScript.



Linux and embedded development with C++

Create and debug applications running in a Linux environment or on an embedded device.



Installation details

Visual Studio core editor

Data storage and processing

Optional



SQL Server Data Tools



Azure Data Lake and Stream Analytics Tools



.NET Framework 4.7.2 development tools



GitHub Copilot



F# desktop language support

Location

C:\Program Files\Microsoft Visual Studio\2022\Community [Change...](#)

[Remove out-of-support components](#)

By continuing, you agree to the [license](#) for the Visual Studio edition you selected. We also offer the ability to download other software with Visual Studio. This software is licensed separately, as set out in the [3rd Party Notices](#) or in its accompanying license. By continuing, you also agree to those licenses.

Total space required 4.49 GB

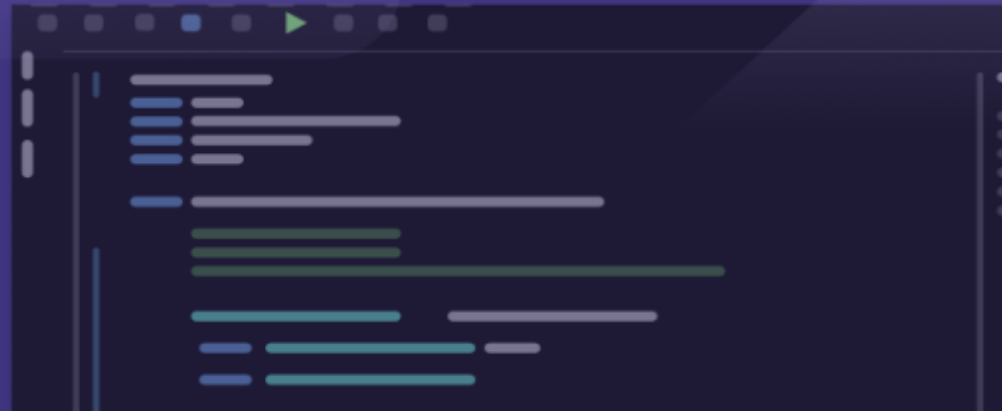
Install while downloading


Install


Start Visual Studio and sign in using your ISEP account credentials

Sign in to Visual Studio

Use a Microsoft account to sync your settings, collaborate in real time, and access Azure services. Use a GitHub account to manage repositories and use services like GitHub Copilot.



 Sign in with Microsoft

 Sign in with GitHub

Create an account

[Skip and add accounts later.](#)

Visual Studio 2022

Open recent

Older



Teste.sln

C:\Users\PauloOliveira\source\repos\Teste

11/10/2022 5:23 PM

When *Visual Studio 2022* starts,
select *Continue without code*

Get started



Clone a repository

Get code from an online repository like GitHub or Azure DevOps



Open a project or solution

Open a local Visual Studio project or .sln file



Open a local folder

Navigate and edit code within any folder

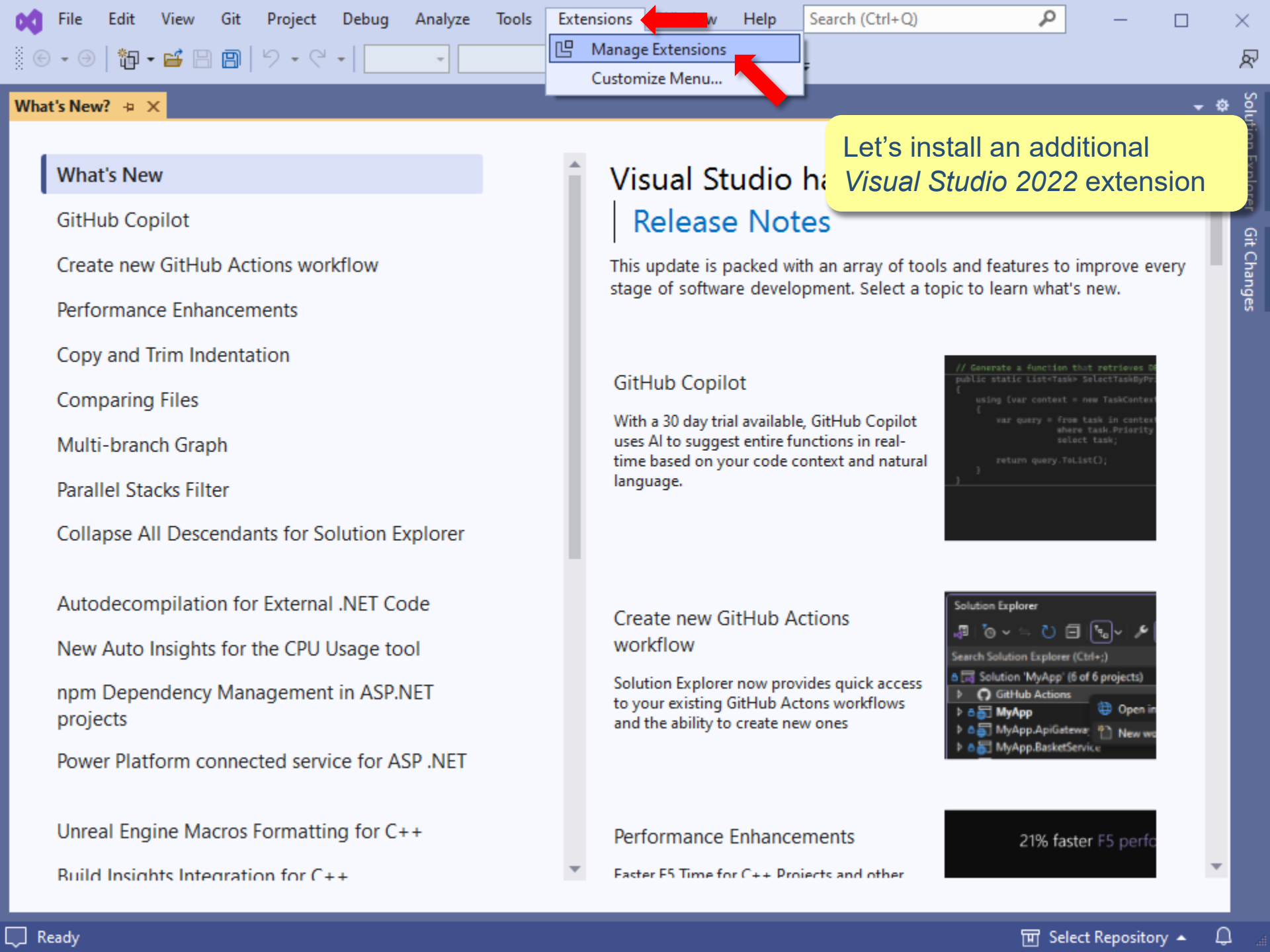


Create a new project

Choose a project template with code scaffolding to get started

[Continue without code](#) →





Extensions

Manage Extensions

Customize Menu...

Let's install an additional
Visual Studio 2022 extension

What's New

GitHub Copilot

Create new GitHub Actions workflow

Performance Enhancements

Copy and Trim Indentation

Comparing Files

Multi-branch Graph

Parallel Stacks Filter

Collapse All Descendants for Solution Explorer

Autodecompilation for External .NET Code

New Auto Insights for the CPU Usage tool

npm Dependency Management in ASP.NET projects

Power Platform connected service for ASP .NET

Unreal Engine Macros Formatting for C++

Build Insights Integration for C++

Visual Studio 2022 Release Notes

This update is packed with an array of tools and features to improve every stage of software development. Select a topic to learn what's new.

GitHub Copilot

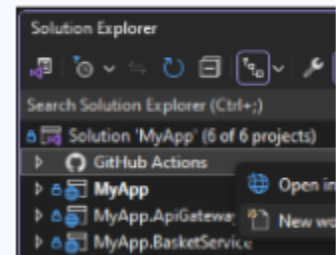
With a 30 day trial available, GitHub Copilot uses AI to suggest entire functions in real-time based on your code context and natural language.

```
// Generate a function that retrieves all tasks by priority
public static List<Task> SelectTaskByPriority
{
    using (var context = new TaskContext())
    {
        var query = from task in context.Tasks
                    where task.Priority == priority
                    select task;

        return query.ToList();
    }
}
```

Create new GitHub Actions workflow

Solution Explorer now provides quick access to your existing GitHub Actions workflows and the ability to create new ones



Performance Enhancements

Faster F5 Time for C++ Projects and other

21% faster F5 performance

integr

**SQL Server Integration Services Projects 20...** ↓ 627 131

This project may be used for building high performance data integration and workflow solutions, including extrac...

Microsoft

Install

**Npgsql PostgreSQL Integration** ↓ 181 359

Allows you to connect to PostgreSQL from within Visual Studio via Server Explorer, create EF6 model from existing...

RojanskyS

Install

**GLSL language integration (for VS2022)** ↓ 76 291

VSIX Project that provides GLSL language integration. Includes syntax highlighting (file extensions: glsl, frag, ver...

Daniel Scherzer

Install

**NVIDIA Nsight Integration (64-bit)** ↓ 46 375

NVIDIA Nsight Developer Tools Integration for Visual Studio (64-bit).

NVIDIA

Install

**SSIS Integration Toolkit for Microsoft Share...** ↓ 25 062

Enables you to connect, read and write to/from Microsoft SharePoint Lists and Document Libraries via web services,...

KingswaySoft

Trial

Install

**SSIS Integration Universal Bundle** ↓ 8 048

Devart SSIS Integration Universal Bundle allows you to integrate database, data warehouse and cloud data via SQ...

Devart Software

Trial

Install

In the search box, input *integr* to find the *SQL Server Integration Services Projects 2022* extension and install it

**SQL Server Integration Services Projects 2022**

Microsoft



www.microsoft.com



627 131



Install

View In Browser

This project may be used for building high performance data integration and workflow solutions including extraction, transformation, and loading (ETL) operations for data warehousing.

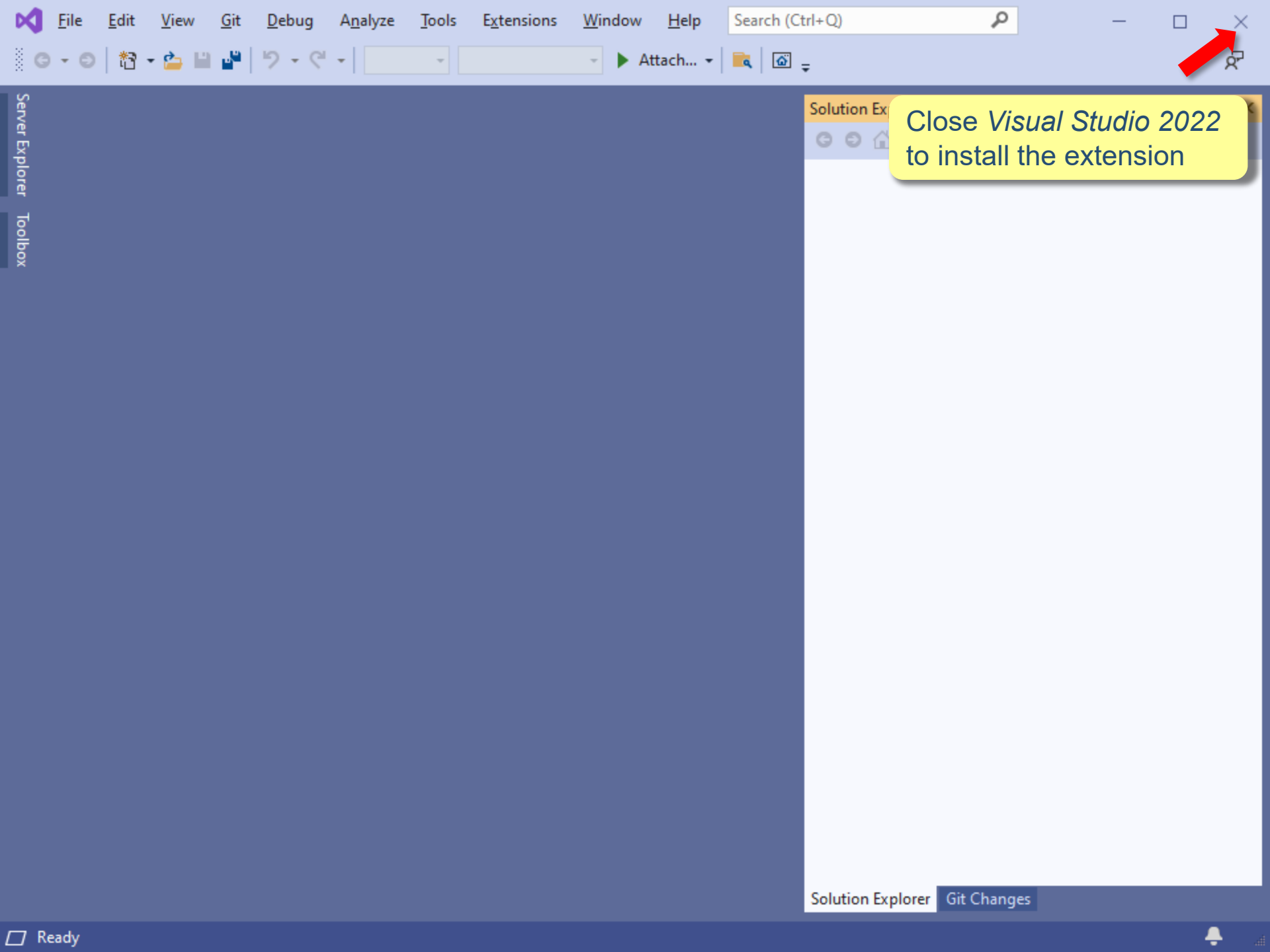
Visit <https://techcommunity.microsoft.com/t5/SQL-Server-Integration-Services/bg-p/SSIS> for the latest information, tips, news, and announcements about SSIS directly from the product team.

Common issues, known issue and Offline installation guide are moved to [SSIS in VS2022 troubleshooting guide](#).

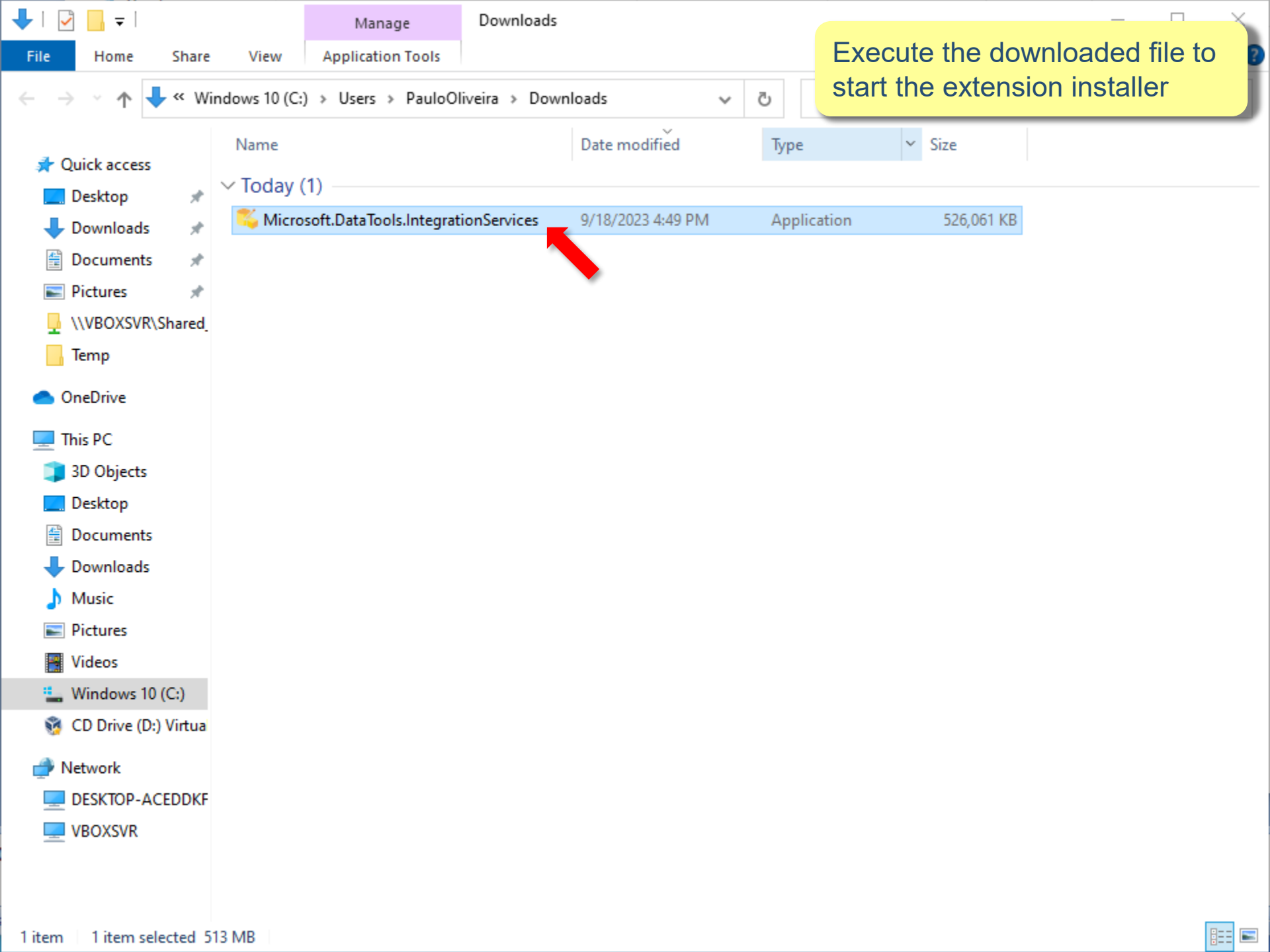
Release Notes

Version 1.6.2

- Release Date: June 23, 2025
- Build Version: 16.0.5685.2
- Tested against Visual Studio 2022 17.14
- Bug fixes:
 1. Fixed side-by-side issue with SSMS 21.2.5 and SSMS 21.3.6.
 2. Addressed NVD - CVE-2025-29803 related to Visual Studio Tools for Applications.
 3. Fixed the error 0x80040e51 that occurred when previewing data using the OLEDB provider for Oracle database.
- Known issues:
 1. In the context menu (right mouse button) on objects in the project (e.g., the package) in Visual Studio, many of the entries appear many times.
 2. DQS has side-by-side issue when targeting SQL Server Version is 2017 or 2019.



Close *Visual Studio 2022*
to install the extension



Execute the downloaded file to start the extension installer

Name	Date modified	Type	Size
Today (1)			
Microsoft.DataTools.IntegrationServices	9/18/2023 4:49 PM	Application	526,061 KB



VERSION 1.6.2

SQL Server Integration Services Projects

Welcome. Click "Next" to begin.

By clicking the "Next" button, I acknowledge that I accept the [License Terms](#) and [Privacy Statement](#).

This product will transmit information about your installation experience, as well as other usage and performance data, to Microsoft to help improve the product. To learn more about data processing and privacy controls, and to turn off the collection of this information after installation, see the [documentation](#).

Next

Close



VERSION 1.6.2

SQL Server Integration Services Projects

Install this product to the selected Visual Studio instance(s):

☒ Visual Studio Community 2022

Install

Close

Restart to finish the
installation if required



VERSION 1.6.2

SQL Server Integration Services Projects

Restart required in order to complete setup.

All specified components have been installed successfully.

The computer needs to be restarted before setup can continue.

Restart

Close

Visual Studio 2022

Open recent

Older



Teste.sln

C:\Users\PauloOliveira\source\repos\Teste

11/10/2022 5:23 PM

Start *Visual Studio 2022* and select *Continue without code*

Get started



Clone a repository

Get code from an online repository like GitHub or Azure DevOps



Open a project or solution

Open a local Visual Studio project or .sln file



Open a local folder

Navigate and edit code within any folder

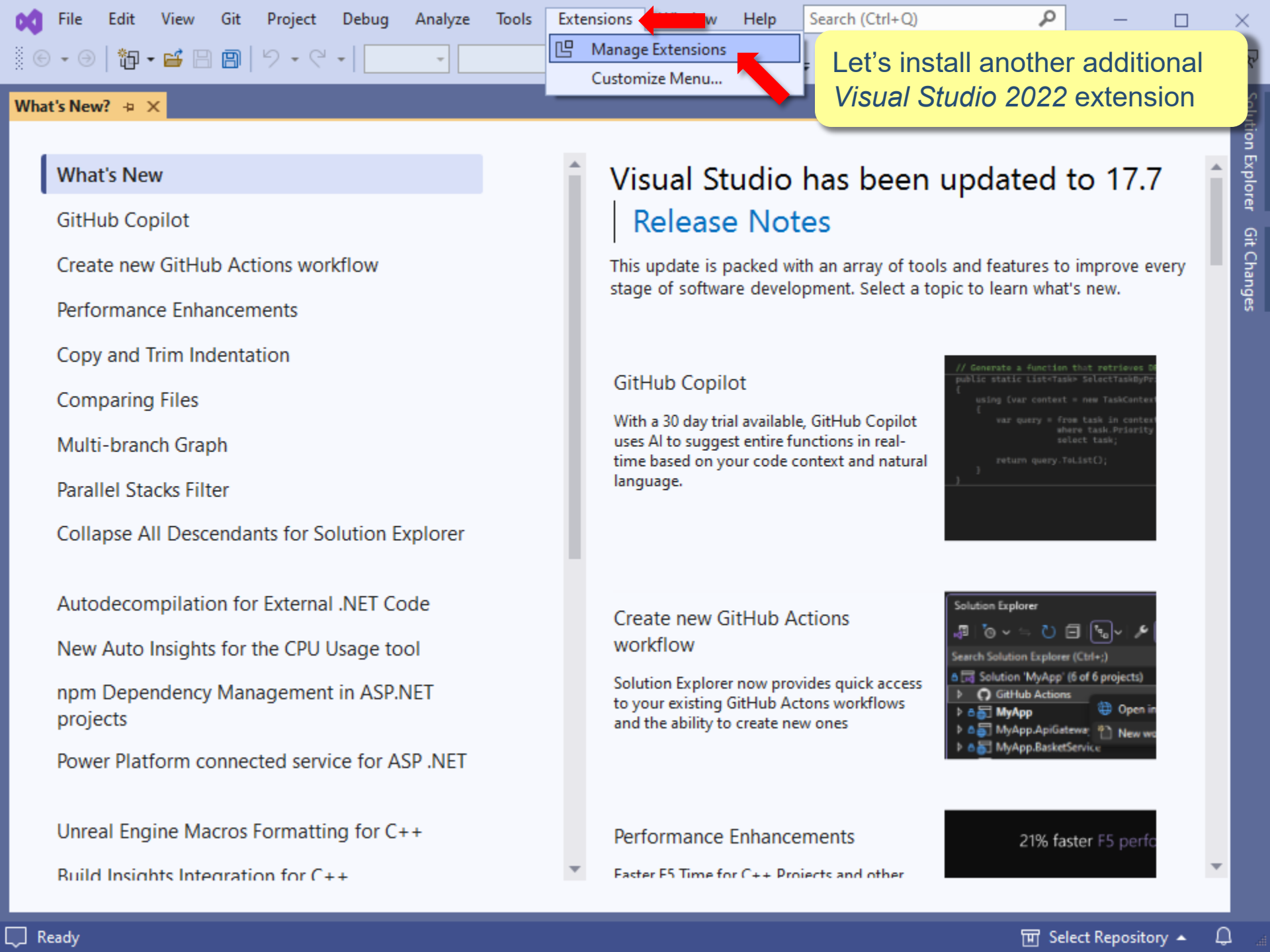


Create a new project

Choose a project template with code scaffolding to get started

[Continue without code](#) →





What's New

GitHub Copilot

Create new GitHub Actions workflow

Performance Enhancements

Copy and Trim Indentation

Comparing Files

Multi-branch Graph

Parallel Stacks Filter

Collapse All Descendants for Solution Explorer

Autodecompilation for External .NET Code

New Auto Insights for the CPU Usage tool

npm Dependency Management in ASP.NET projects

Power Platform connected service for ASP .NET

Unreal Engine Macros Formatting for C++

Build Insights Integration for C++

Visual Studio has been updated to 17.7

Release Notes

This update is packed with an array of tools and features to improve every stage of software development. Select a topic to learn what's new.

GitHub Copilot

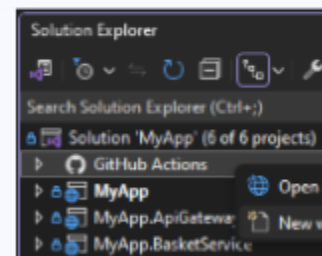
With a 30 day trial available, GitHub Copilot uses AI to suggest entire functions in real-time based on your code context and natural language.

```
// Generate a function that retrieves all tasks by priority
public static List<Task> SelectTaskByPriority
{
    using (var context = new TaskContext())
    {
        var query = from task in context.Tasks
                    where task.Priority == Priority.High
                    select task;

        return query.ToList();
    }
}
```

Create new GitHub Actions workflow

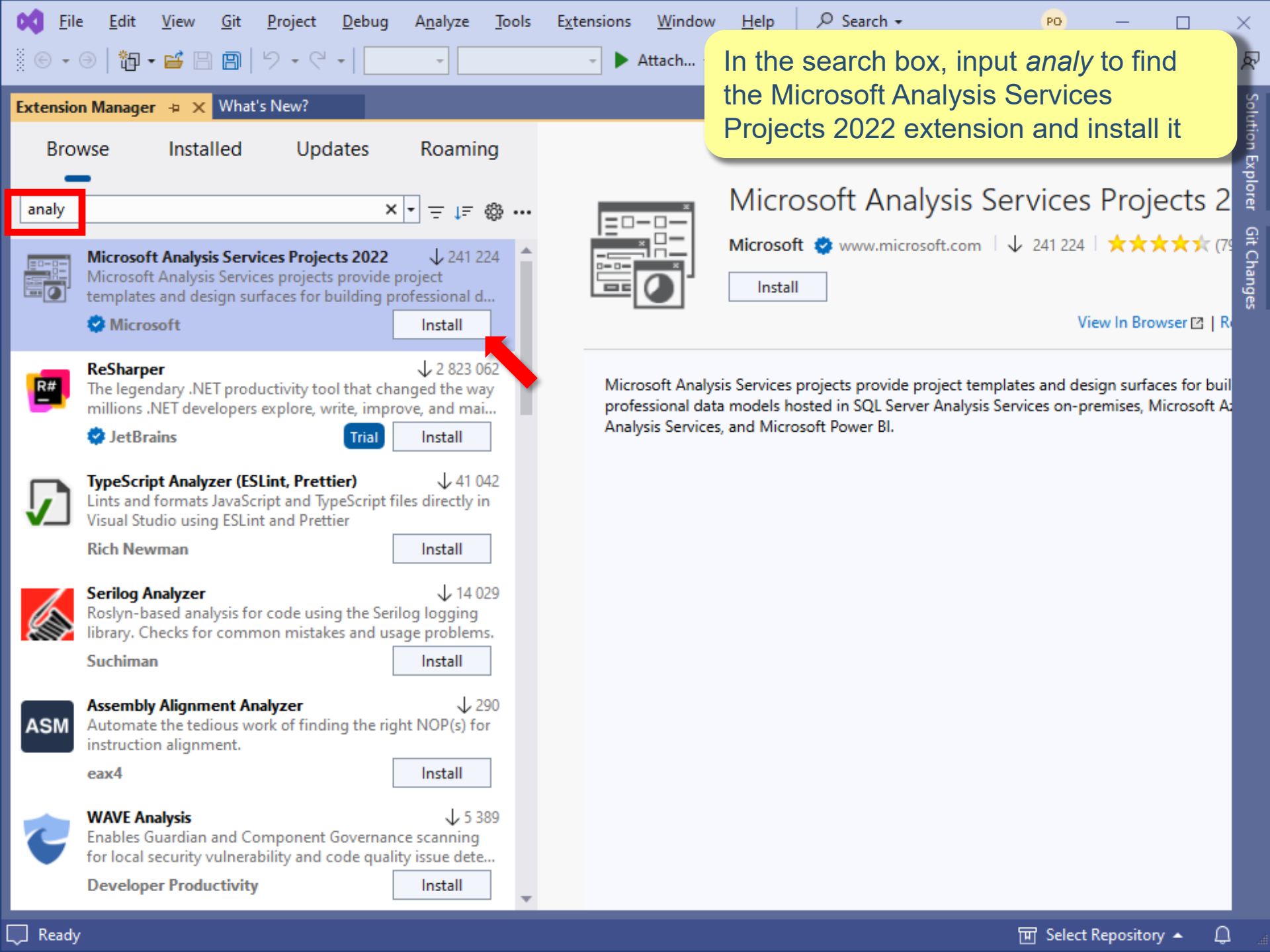
Solution Explorer now provides quick access to your existing GitHub Actions workflows and the ability to create new ones



Performance Enhancements

Faster F5 Time for C++ Projects and other

21% faster F5 performance



In the search box, input *analy* to find the Microsoft Analysis Services Projects 2022 extension and install it

analy

Microsoft Analysis Services Projects 2022

↓ 241 224

Microsoft Analysis Services projects provide project templates and design surfaces for building professional d...

Microsoft

Install

ReSharper

↓ 2 823 062

The legendary .NET productivity tool that changed the way millions .NET developers explore, write, improve, and mai...

JetBrains

Trial

Install

TypeScript Analyzer (ESLint, Prettier)

↓ 41 042

Lints and formats JavaScript and TypeScript files directly in Visual Studio using ESLint and Prettier

Rich Newman

Install

Serilog Analyzer

↓ 14 029

Roslyn-based analysis for code using the Serilog logging library. Checks for common mistakes and usage problems.

Suchiman

Install

Assembly Alignment Analyzer

↓ 290

Automate the tedious work of finding the right NOP(s) for instruction alignment.

eax4

Install

WAVE Analysis

↓ 5 389

Enables Guardian and Component Governance scanning for local security vulnerability and code quality issue dete...

Developer Productivity

Install

Microsoft Analysis Services Projects 2022

Microsoft



www.microsoft.com



241 224

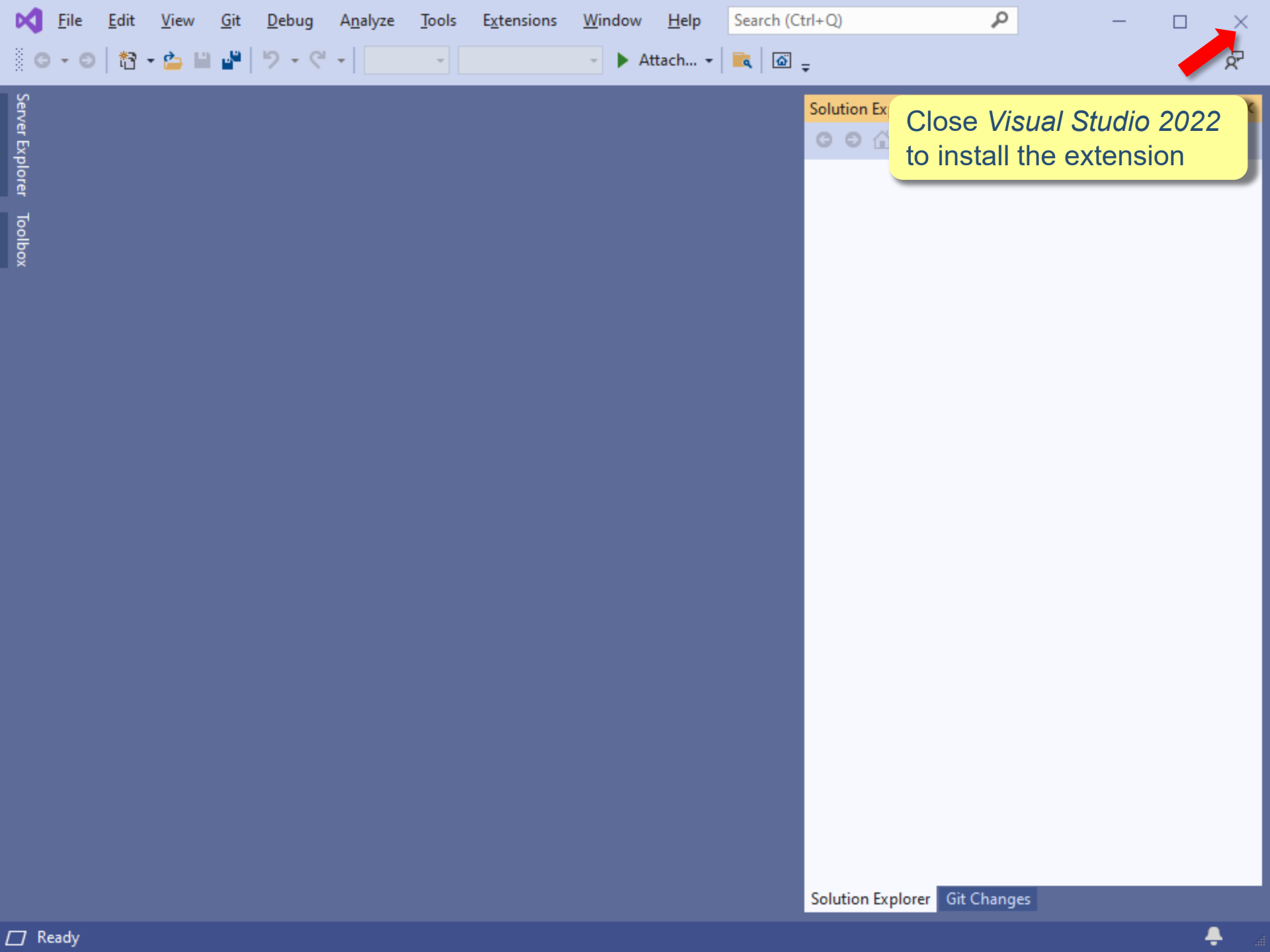


(79)

Install

[View In Browser](#)

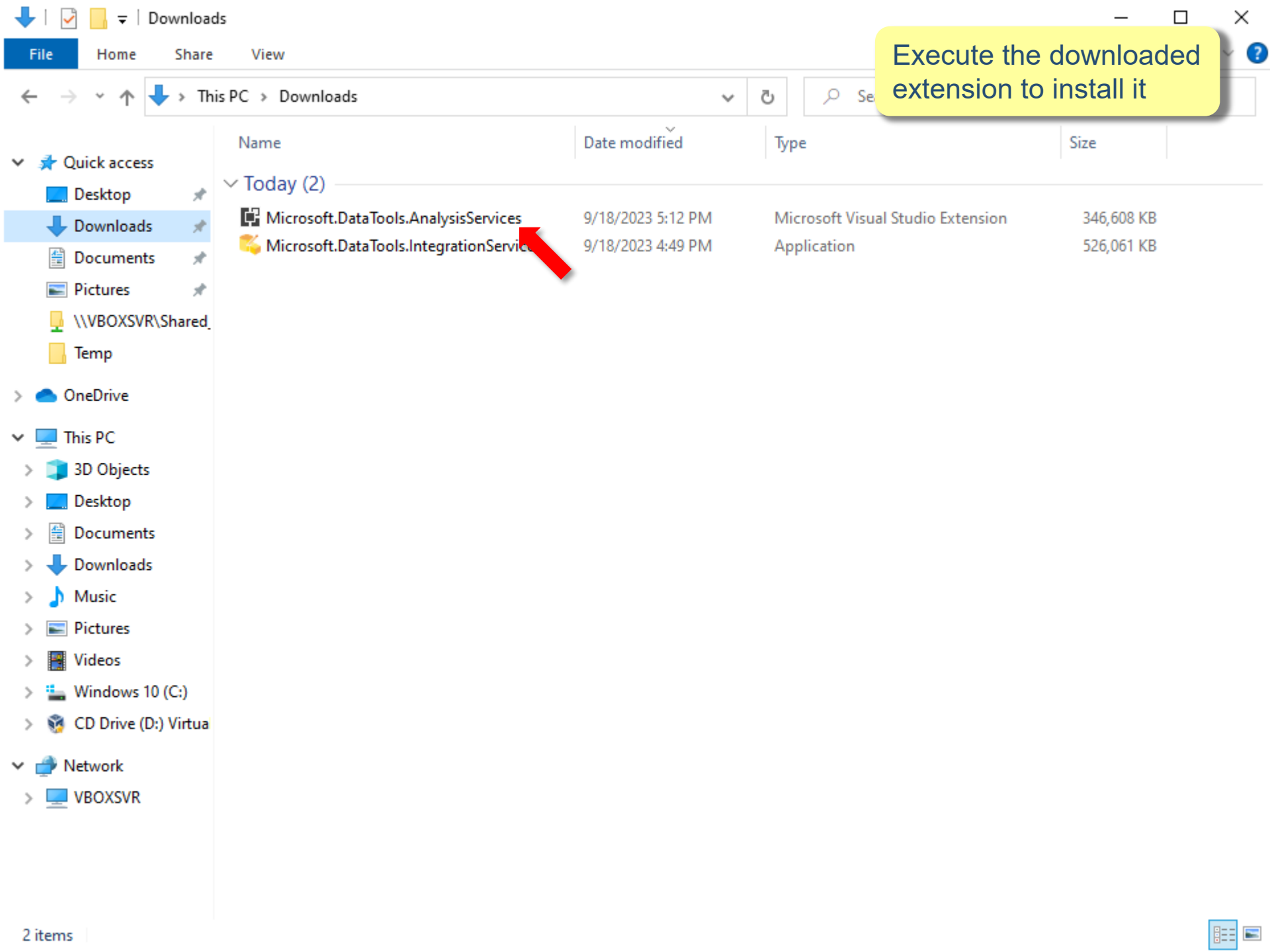
Microsoft Analysis Services projects provide project templates and design surfaces for building professional data models hosted in SQL Server Analysis Services on-premises, Microsoft Azure Analysis Services, and Microsoft Power BI.



Close *Visual Studio 2022*
to install the extension

Solution Explorer Git Changes

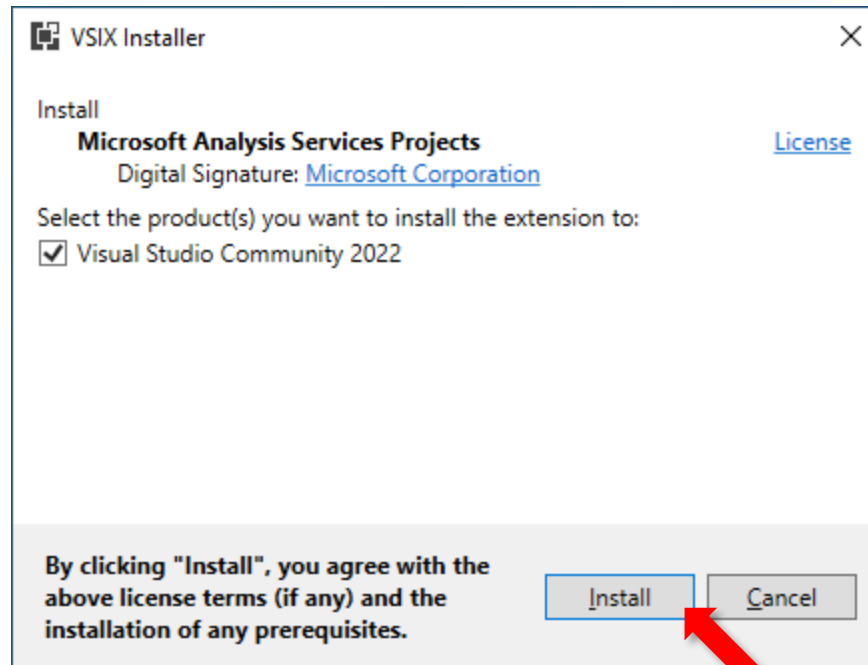
Ready



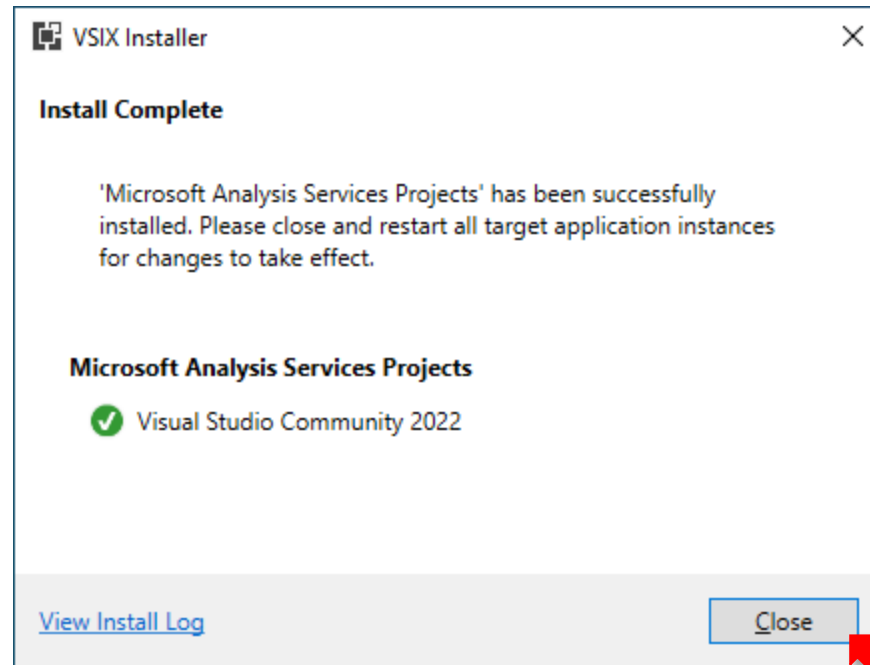
Execute the downloaded extension to install it

Name	Date modified	Type	Size
Today (2)			
Microsoft.DataTools.AnalysisServices	9/18/2023 5:12 PM	Microsoft Visual Studio Extension	346,608 KB
Microsoft.DataTools.IntegrationServices	9/18/2023 4:49 PM	Application	526,061 KB

Select the option to modify *Visual Studio 2022* with the *Analysis Services Projects* extension



Close the extension installer



Visual Studio 2022

Open recent

▲ Older



Teste.sln

C:\Users\PauloOliveira\source\repos\Teste

11/10/2022 5:23 PM

Open *Visual Studio 2022* and select the option *Create a new project*

Get started



Clone a repository

Get code from an online repository like GitHub or Azure DevOps



Open a project or solution

Open a local Visual Studio project or .sln file



Open a local folder

Navigate and edit code within any folder



Create a new project

Choose a project template with code scaffolding to get started

[Continue without code](#) →

Create a new project

Recent project templates

A list of your recently accessed templates will be displayed here.

All languages

The templates for *Analysis Services Multidimensional* and *Integration Services Project* should now be available.



Analysis Services Multidimensional Project

An Analysis Services project for creating multidimensional models.

New



Import from Server (Multidimensional)

Creates a multidimensional project by extracting the metadata from an existing multidimensional on an Analysis Services server.

New



Integration Services Project (Azure-Enabled)

This project may be used for building high performance data integration and workflow solutions that can also be run/debugged on SSIS Platform-as-a-Service (PaaS) in Azure Data Factory.

New



Integration Services Project

This project may be used for building high performance data integration and workflow solutions that can be run on SSIS catalog, including extraction, transformation, and loading (ETL) operations for data warehousing.

New



Integration Services Import Project Wizard

A wizard that assists you in creating a new Integration Services (SSIS) project that is based on an existing one. Import from a project deployment file (.ispac extension) or from an Integration Services catalog on an instance of SQL Server.

New



Analysis Services Tabular Project

An Analysis Services project for creating tabular models.

New



Import from Server (Tabular)

New

Next

SQL Server Management Studio

- Available at:

<https://learn.microsoft.com/en-us/sql/ssms/download-sql-server-management-studio-ssms?view=sql-server-ver16>

Download SQL Server Management Studio installation file

Filter by title

Microsoft SQL documentation >

SQL Server Management Studio documentation

> Overview

Installation and support

Release notes

Release notes SSMS 22 Preview

Known issues

Known issues SSMS 22 Preview

Product roadmap

System requirements

Installation

Download and install

Download and install SSMS 22

Preview

Select installation location

Install with command-line

Download PDF

Key information

SSMS 21 is installed with the Visual Studio Installer

How to install SSMS

Use the Visual Studio Installer to update SSMS 21

Offline or enterprise deployment

Database Engine compatibility

Action required

The **Download SSMS 21** link downloads a stub installer (`vs_SSMS.exe`) that opens **Visual Studio Installer** to install SSMS. There's no standalone MSI.

[Download SSMS 21](#), run `vs_SSMS.exe`, pick any optional workloads/components, then select **Install**.

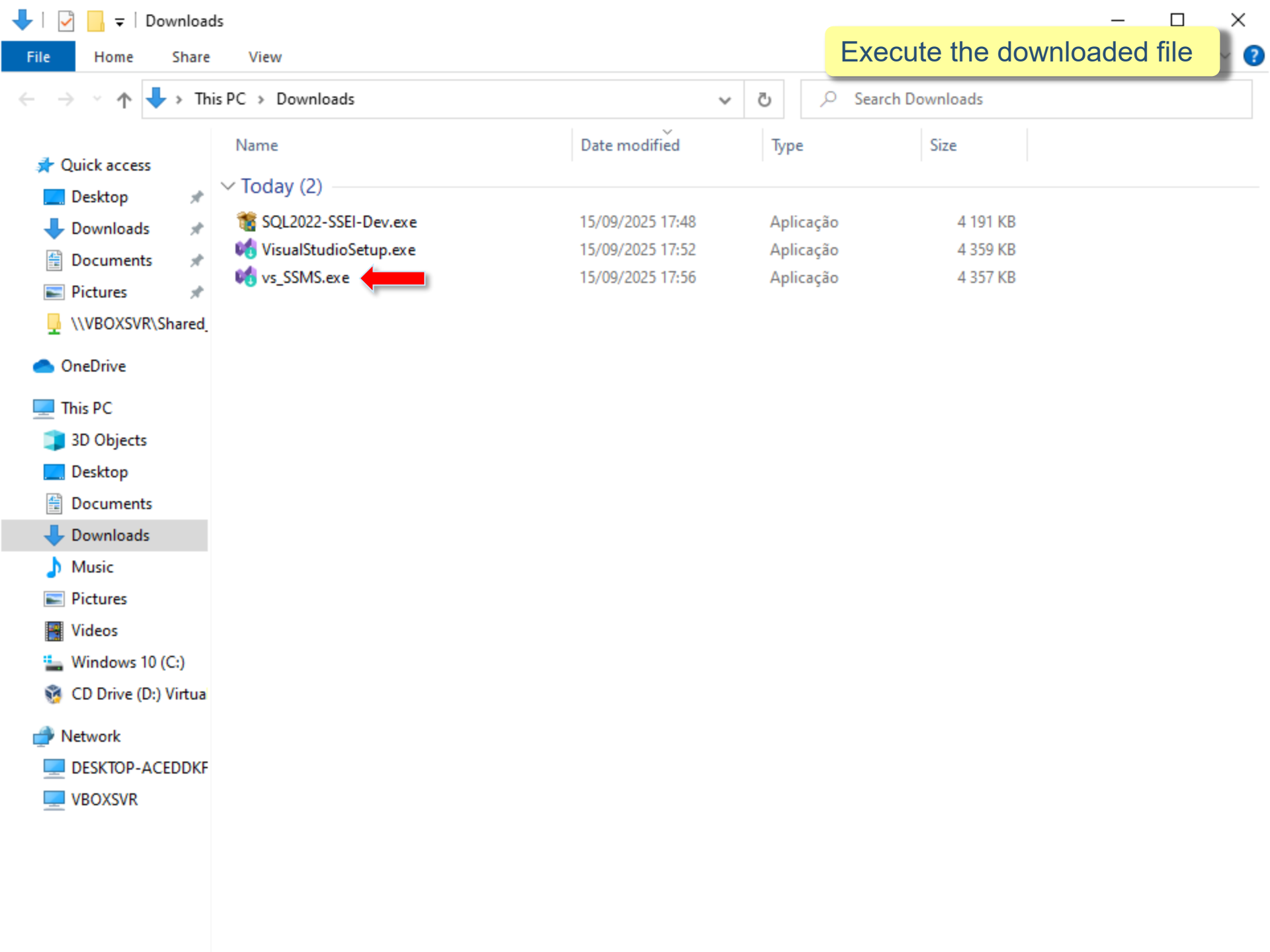
To update SSMS 21, follow the instructions in [Update SQL Server Management Studio](#).

To create an offline layout for disconnected or managed installs, see [Create an offline installation of SQL Server Management Studio](#).

SSMS 21 works with SQL Server 2014 (12.x) and later versions. If you need to manage older versions, see the [Release history](#). SSMS 21 also works with Azure SQL Database, Azure SQL Managed Instance, Azure Synapse Analytics, and SQL database in Microsoft Fabric.

For more information, see [SQL Server Management Studio 21 Frequently Asked Questions \(FAQ\)](#).

Find out what's new in this version in the [release notes](#).



Execute the downloaded file

This PC > Downloads

Search Downloads

Name

Date modified

Type

Size

Today (2)

SQL2022-SSEI-Dev.exe

15/09/2025 17:48

Aplicação

4 191 KB

VisualStudioSetup.exe

15/09/2025 17:52

Aplicação

4 359 KB

vs_SSMS.exe

15/09/2025 17:56

Aplicação

4 357 KB

Select the highlighted components to install

Instalando — SQL Server Management Studio 21 — 21.5.14

Cargas de trabalho Componentes individuais Pacotes de idiomas Locais de instalação

SSMS (4)



Assistência de IA

Assistentes da plataforma IA para ajudar você a escrever consultas e gerenciar seus bancos de dados com mais ef...



Business Intelligence

Capacite sua empresa de ponta a ponta, transformando dados em insights, análises em ações e relatórios em res...



Híbrido e Migração

Avalie a preparação para atualização do banco de dados e mova seus dados com facilidade.



Ferramentas de codificação

Ferramentas para ajustar quando e onde você trabalha, melhorando a colaboração.



Detalhes da instalação

▼ **Componentes Principais do SSMS**

Os Componentes Principais do SQL Server Management Studio.

▼ **Business Intelligence**

▼ Opcional

- ☒ Serviços de Análise do SQL Server (SSAS)
- ☒ SQL Server Integration Services (SSIS) (Pre...
- ☐ Serviços de Relatórios do SQL Server (SSRS)

▼ **Híbrido e Migração**

▼ Incluído

- ✓ Migration

Localização

C:\Program Files\Microsoft SQL Server Management Studio 21\Release [Alterar...](#)

[Remove componentes sem suporte](#)

Ao continuar, você concorda com a [licença](#) da edição do produto que você selecionou. Também oferecemos a capacidade de baixar outros softwares. Esse software é licenciado separadamente, conforme os [Avisos de terceiros](#) ou na licença que o acompanha. Ao continuar, você também concorda com essas licenças.

Espaço total necessário 2,64 GB

Instalar durante o download ▼

Instalar

Visual Studio Installer

Instalado Disponível

Todas as instalações estão atualizadas.



Visual Studio Community 2022

17.14.14

IDE avançado, gratuito para estudantes, colaboradores de software livre e indivíduos

[Notas sobre a versão](#)

Modificar

Iniciar

Mais ▼



SQL Server Management Studio 21

21.5.14

Um ambiente integrado para gerenciar qualquer infraestrutura SQL, desde o SQL Server até o Azure SQL.

[Notas sobre a versão](#)

Modificar

Iniciar

Mais ▼

SQL Server Management Studio
is now installed so you close the
Visual Studio Installer window.

Notícias do Desenvolvedor

[Democratizing Performance: The Copilot Profiler Agent in Action on Real Code](#)

We're excited to announce the Copilot Profiler Ag...

11 de setembro de 2025

[Visual Studio 2026 Insiders is here!](#)

Visual Studio 2026 Insiders is here and it marks o...

9 de setembro de 2025

[Make Sense of Your Output Window with Copilot](#)

Ever found yourself staring at the Output Windo...

4 de setembro de 2025

[Ver mais notícias do desenvolvedor Microsoft...](#)

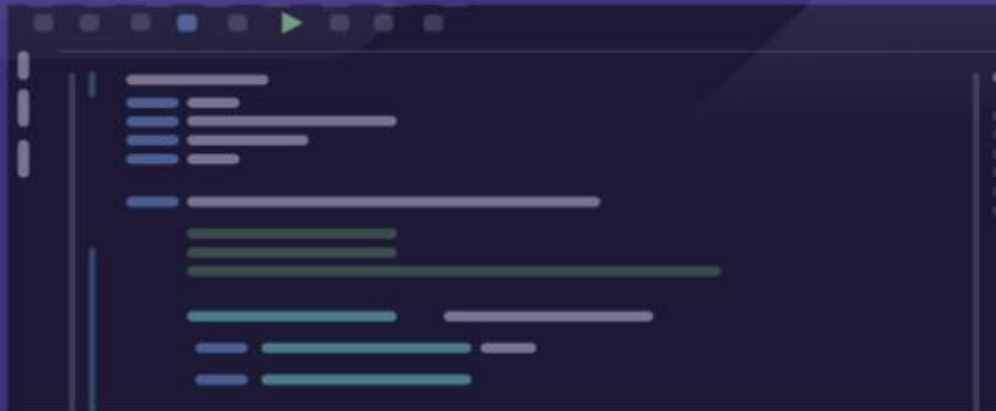
Precisa de ajuda? Confira o [Microsoft Developer Community](#) ou entre em contato conosco por meio do [Suporte do Visual Studio](#).

Versão do instalador 3.14.2086.54749

Start SQL Server Management Studio and sign in using your ISEP account credentials

Entre em SQL Server Management Studio

Use uma conta Microsoft para sincronizar suas configurações e acessar os serviços do Azure. Use uma conta do GitHub para gerenciar repositórios.



 Entrar com a conta da Microsoft

 Entrar com o GitHub

Criar uma conta

[Ignorar e adicionar contas mais tarde.](#)

Execute Microsoft SQL Server Management Studio and connect to the SQL Server Instance using the old or new graphical interface.

The 'Connect to Server' dialog box is shown with the 'Login' tab selected. The 'Server' section has 'Database Engine' selected for 'Server type', 'DESKTOP-ACEDDKF' for 'Server name', and 'Windows Authentication' for 'Authentication'. The 'User name' is 'AzureAD\PauloOliveira'. The 'Connection Security' section has 'Mandatory' selected for 'Encryption', and the 'Trust server certificate' checkbox is checked. A red arrow points to the 'Connect' button at the bottom.

SQL Server

Login Connection Properties Always Encrypted Additional Connection Parameters

Server

Server type: Database Engine

Server name: DESKTOP-ACEDDKF

Authentication: Windows Authentication

User name: AzureAD\PauloOliveira

Password:

☐ Remember password

Connection Security

Encryption: Mandatory

☒ Trust server certificate

Host name in certificate:

Connect Cancel Help Options <<

OR

The 'Connect (Preview)' dialog box is shown with the 'History' tab selected. The 'Recent Connections' list shows 'ORION, <default> (AzureAD\PauloOliveira)'. The 'Connection Properties' tab is selected, showing 'Server Name' as 'ORION', 'Authentication' as 'Windows Authentication', 'User Name' as 'AzureAD\PauloOliveira', and 'Encryption' as 'Mandatory'. The 'Trust Server Certificate' checkbox is checked. A red arrow points to the 'Connect' button at the bottom.

Connect (Preview)

History Browse

Recent Connections

ORION, <default> (AzureAD\PauloOliveira)

Connection Properties Connection String

Server Name: ORION

Authentication: Windows Authentication

User Name: AzureAD\PauloOliveira

Password:

☐ Remember Password

Database Name: <default>

Encrypt: Mandatory

☒ Trust Server Certificate

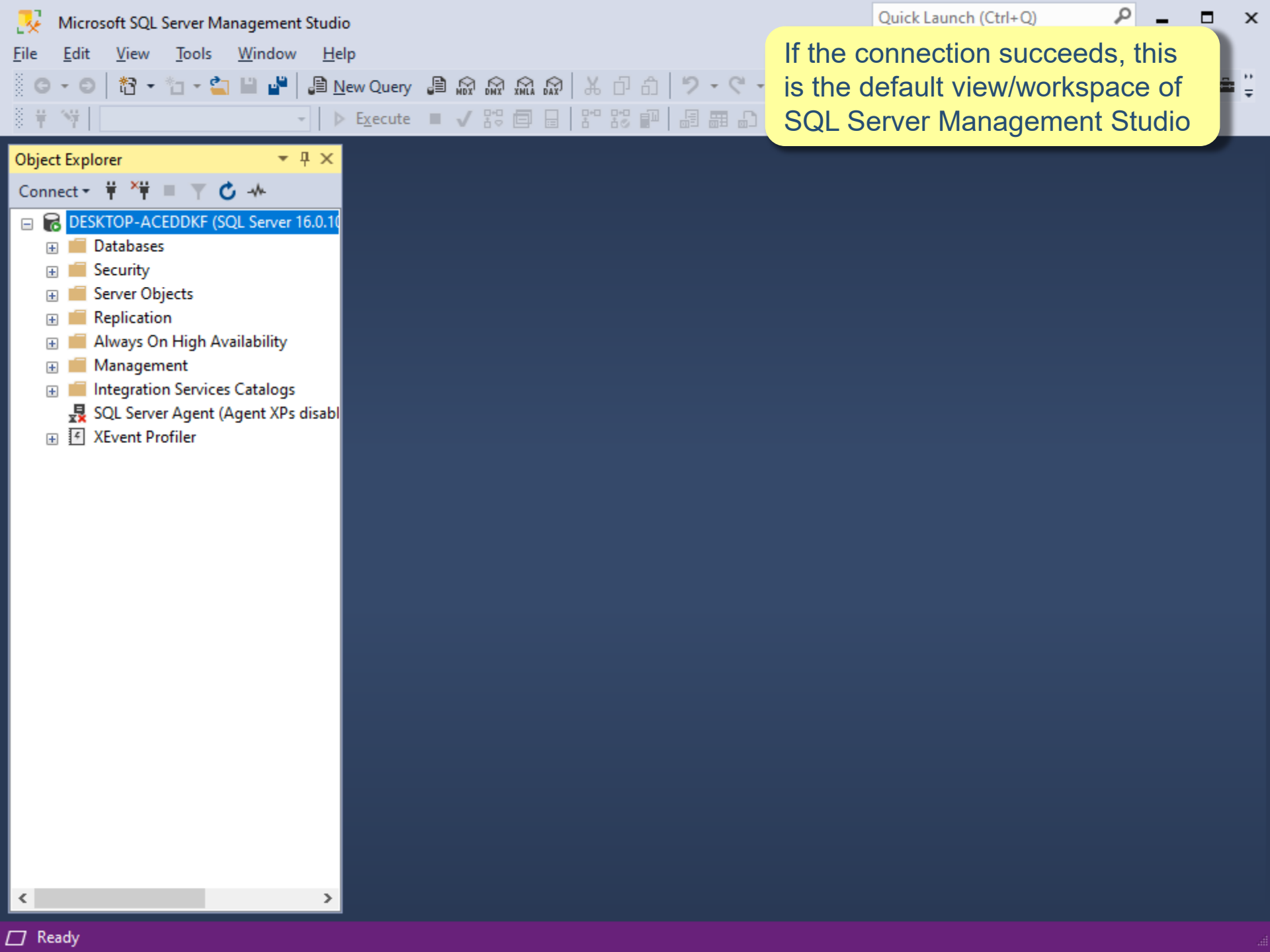
Advanced...

Custom Properties

Name:

Color: <default> Custom...

Connect Cancel Help



If the connection succeeds, this is the default view/workspace of SQL Server Management Studio

AdventureWorks DW Sample DB

- Available at:

<https://learn.microsoft.com/en-us/sql/samples/adventureworks-install-configure?view=sql-server-ver16&tabs=ssms>

Download AdventureWorksDW2022.bak file

Version

SQL Server 2022

Filter by title

✓ Azure Data CLI azcli

✓ Database samples

Overview

AdventureWorks

> Wide World Importers

All GitHub Samples >> ↗

> Errors & events

> Event classes

> Native interfaces

> SQL PowerShell

> System catalog views

> System compatibility views

> System dynamic management views

> System functions

> System information schema views

> System stored procedures

Download PDF

- [SQL Server](#) or [Azure](#)
- [SQL Server Management Studio](#)

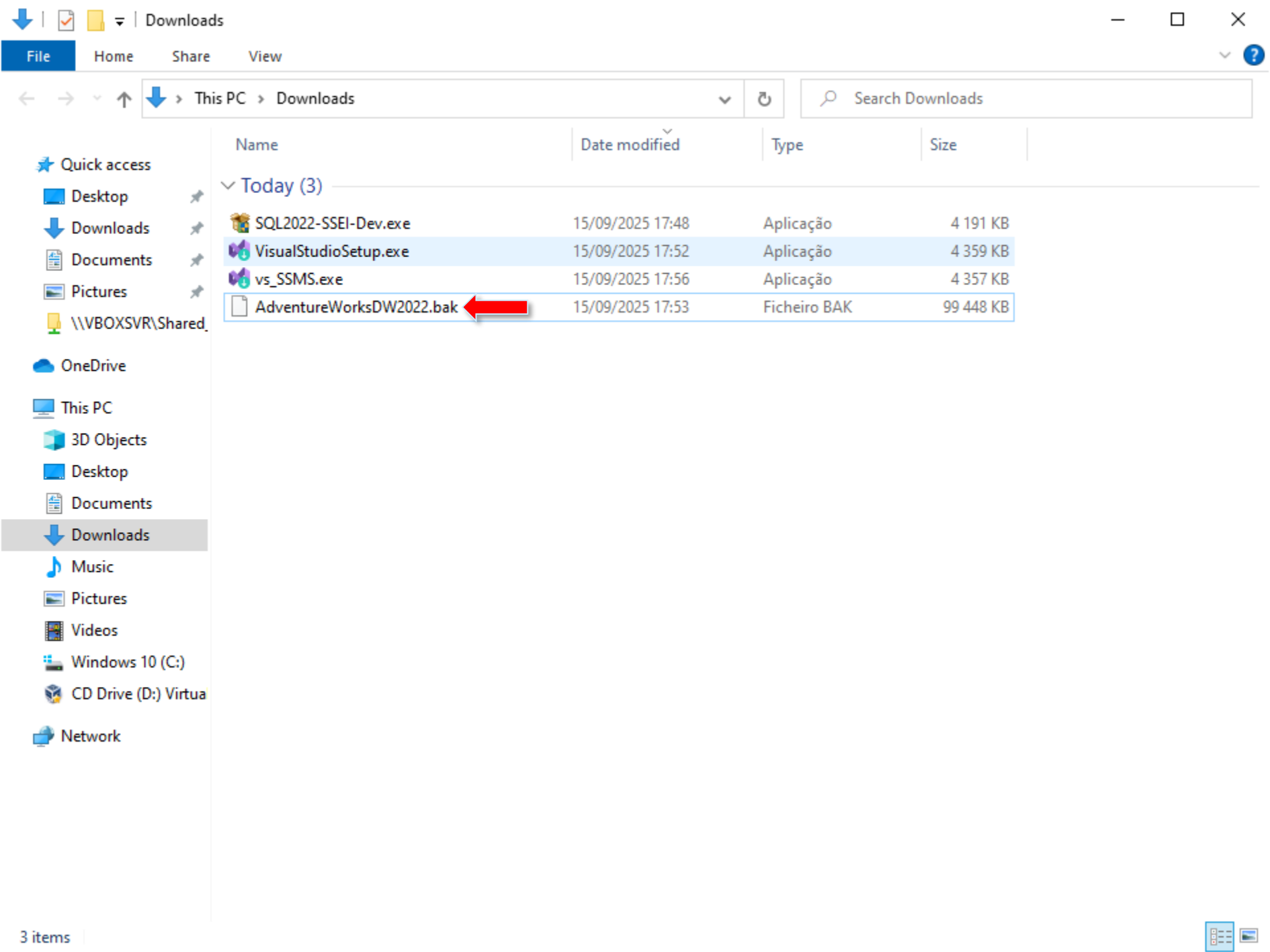
Download backup files

Use these links to download the appropriate sample database for your scenario.

- **OLTP** data is for most typical online transaction processing workloads.
- **Data Warehouse (DW)** data is for data warehousing workloads.
- **Lightweight (LT)** data is a lightweight and pared down version of the **OLTP** sample.

If you're not sure what you need, start with the OLTP version that matches your SQL Server version.

OLTP	Data Warehouse	Lightweight
AdventureWorks2022.bak	AdventureWorksDW2022.bak	AdventureWorksLT2022.bak
AdventureWorks2019.bak	AdventureWorksDW2019.bak	AdventureWorksLT2019.bak
AdventureWorks2017.bak	AdventureWorksDW2017.bak	AdventureWorksLT2017.bak
AdventureWorks2016.bak	AdventureWorksDW2016.bak	AdventureWorksLT2016.bak
AdventureWorks2016_EXT.bak	AdventureWorksDW2016_EXT.bak	N/A
AdventureWorks2014.bak	AdventureWorksDW2014.bak	AdventureWorksLT2014.bak
AdventureWorks2013.bak	AdventureWorksDW2013.bak	AdventureWorksLT2013.bak
AdventureWorks2012.bak	AdventureWorksDW2012.bak	AdventureWorksLT2012.bak
AdventureWorks2008.bak	AdventureWorksDW2008.bak	AdventureWorksLT2008.bak



File

Home

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< > < > > This PC > Downloads

Search Downloads

Quick access

Desktop

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Documents

Pictures

\\VBOXSVR\Shared

OneDrive

This PC

3D Objects

Desktop

Documents

Downloads

Music

Pictures

Videos

Windows 10 (C:)

CD Drive (D:) Virtua

Network

Name

Date modified

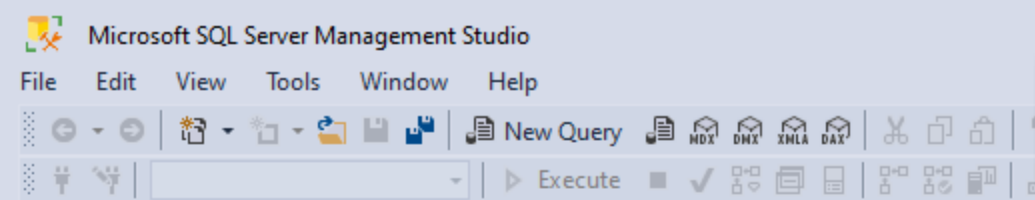
Type

Size

Today (3)

SQL2022-SSEI-Dev.exe	15/09/2025 17:48	Aplicação	4 191 KB
VisualStudioSetup.exe	15/09/2025 17:52	Aplicação	4 359 KB
vs_SSMS.exe	15/09/2025 17:56	Aplicação	4 357 KB
AdventureWorksDW2022.bak	15/09/2025 17:53	Ficheiro BAK	99 448 KB

3 items



In SQL Server Management Studio, right click *Databases* to access the contextual menu, and select “Restore Database”

Restore Database -

No backupset selected to be restored.

Select a page

- General
- Files
- Options

Script Help

Source

☐ Database:

☒ Device:

Database:

Destination

Database:

Restore to:

Timeline...

Restore plan

Backup sets to restore:

Restore	Name	Component	Type	Server	Database	Position	First LSN	Last LSN	Checkpoint LSN	Full LSN
---------	------	-----------	------	--------	----------	----------	-----------	----------	----------------	----------

Connection

ORION [ORION\Paulo]

[View connection properties](#)

Progress



Ready

Verify Backup Media

OK

Cancel

Help

Ready

Restore Database -

No backupset selected to be restored.

Select a page

- General
- Files
- Options

Script Help

Source

☐ Database:

☒ Device:

Select backup devices

Specify the backup media and its location for your restore operation.

Backup media type:

File

Backup media:

Add

Remove

Contents

OK

Cancel

Help

Connection

ORION [ORION\Paulo]

[View connection properties](#)

Progress



Ready

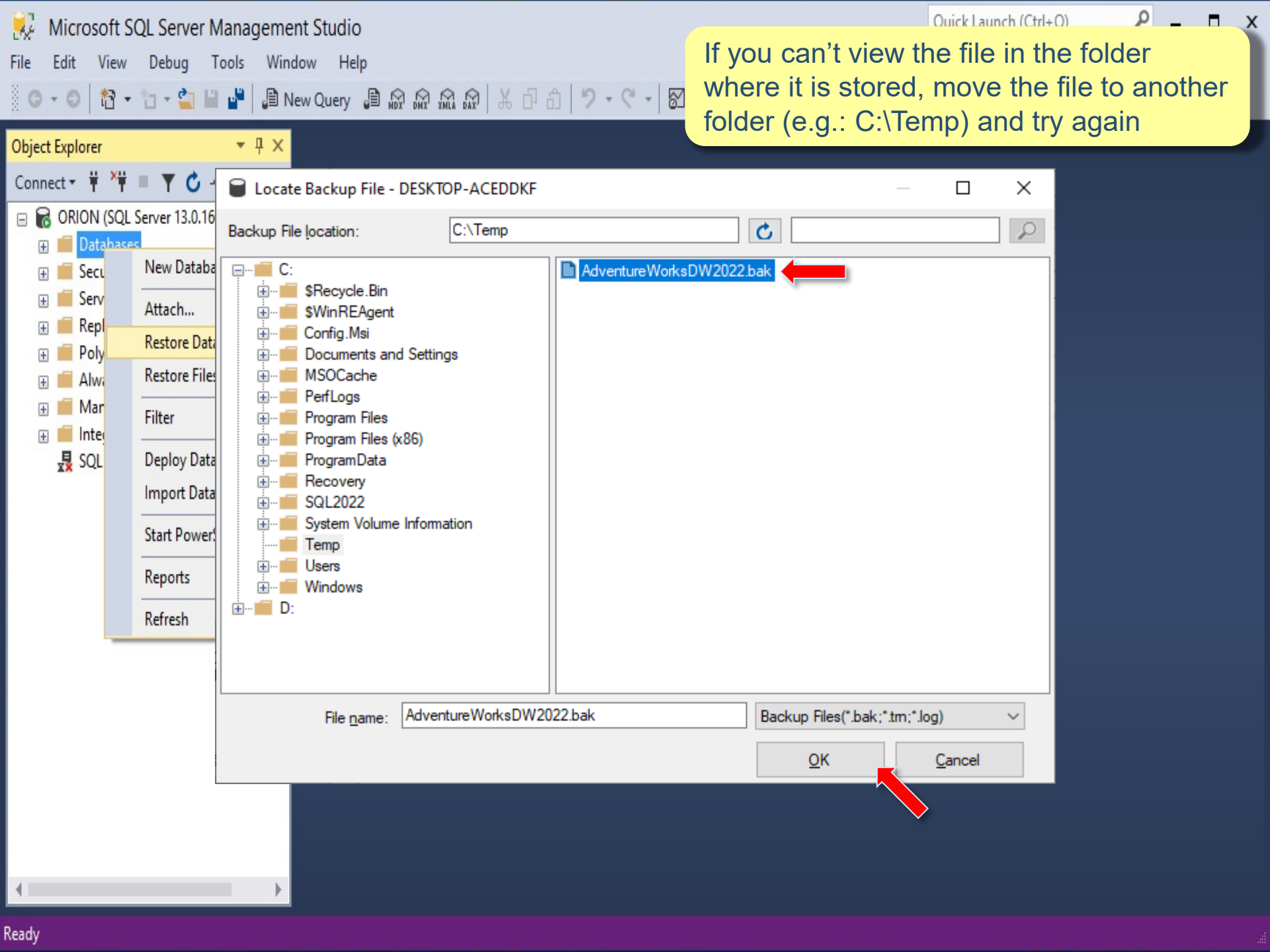
Verify Backup Media

OK

Cancel

Help

Ready



If you can't view the file in the folder where it is stored, move the file to another folder (e.g.: C:\Temp) and try again

No backupset selected to be restored.

Select a page

- General
- Files
- Options

Script | ? Help

Source

☐ Database:

☒ Device:

Database:

Select backup devices

Specify the backup media and its location for your restore operation.

Backup media type:

File

Backup media:

C:\Temp\AdventureWorksDW2022.bak

Add

Remove

Contents

OK

Cancel

Help

Connection

ORION [ORION\Paulo]

[View connection properties](#)

Progress

Ready

Verify Backup Media

OK

Cancel

Help

Ready

Select a page

- General
- Files
- Options

Script ? Help

Source

☐ Database:
☒ Device: C:\Temp\AdventureWorksDW2022.bak ...
 Database: AdventureWorksDW2022

Destination

Database: AdventureWorksDW2022
 Restore to: The last backup taken (Tuesday, May 23, 2023 11:56:40 AM) Timeline...

Restore plan

Backup sets to restore:

Restore	Name	Component	Type	Server	Database
<input checked="" type="checkbox"/>	AdventureWorksDW2022-Full Database Backup	Database	Full (Copy Only)	DESKTOP-E20ERUT	AdventureWorksDW2022

Connection

DESKTOP-ACEDDKF
[AzureAD\PauloOliveira]

[View connection properties](#)

Progress

Done

[Verify Backup Media](#)

OK Cancel Help

Select a page

- General
- Files
- Options

Script Help

Source

☐ Database:
☒ Device: C:\Temp\AdventureWorksDW2022.bak
 Database: AdventureWorksDW2022

Destination

Database: AdventureWorksDW2022
 Restore to: The last backup taken (Tuesday, May 23, 2023 11:56:40 AM)

Restore plan

Backup sets to restore:

Restore	Type	Server	Database
<input checked="" type="checkbox"/>	Full (Copy Only)	DESKTOP-E20ERUT	AdventureWorksDW2022

Microsoft SQL Server Management Studio

Database 'AdventureWorksDW2022' restored successfully.

OK

Connection

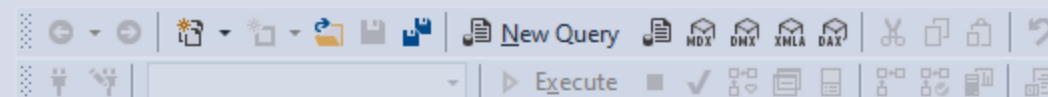
DESKTOP-ACEDDKF
[AzureAD\PauloOliveira]

[View connection properties](#)

Progress

Done

Verify Backup Media



AdventureWorksDW appears in the list of existing databases – all the software needed is now properly installed.

