

STANDARD OPERATING PROCEDURE

Standard Operating Procedure	Date		09 th August 2025
SOP Title	SQL Server Management studio (SSMS) v20.2.1 Installation		
SOP Number	SNIPPYGUY_SOP_SSMS_INSTALLATION(v20.2.1)_1.0		
SOP Location			
Department	MSSQL Database Administration (DBA)		
Company Name	Snippyguy (www.snippyguy.com)		
SOP Prepared By (Author)	Sayan Dey		
SOP Creation Date	09 th August 2025		
SOP Reviewed By			
SOP Review Date		Next Review Date	
SOP Effective From	09 th August 2025	Last Update Date	09 th August 2025
SOP Signed Off By		Signed Off Date	

CHANGE HISTORY

SOP Number	Effective Date	Significant Changes	Previous SOP Number
SNIPPYGUY_SOP_SSMS_INSTALLATION(v20.2.1)_1.0	09 th August 2025	Initial Creation	

SOP Number	Author	Reviewer
SNIPPYGUY_SOP_SSMS_INSTALLATION(v20.2.1)_1.0	Sayan Dey	

Introduction

This Standard Operating Procedure (SOP) outlines the step-by-step process for installing Microsoft SQL Server Management Studio (SSMS) **version 20.2.1** to ensure consistent, secure, and reliable deployment across all supported systems.

The current general availability (GA) release of SQL Server Management Studio (SSMS) in the version 20 series is 20.2.1. This version is built on a Visual Studio-based solution and includes features such as 64-bit support, enhanced query performance, and improved integration with Azure Data services. It is the recommended release for use with **SQL Server 2022** and earlier.

As of August 2025, version 20.2.1 was noted as the most recent in the version 20 series, and updates are delivered through the standalone installer provided by Microsoft.

The SSMS v20.2.1 installer is not a bootstrap file; instead, you will receive the entire installation package in a single .exe file. **While internet connectivity is required to download the installer, internet is not required during the installation process.**

SOP Purpose

The purpose of this Standard Operating Procedure (SOP) is to provide a clear and standardized process for installing Microsoft SQL Server Management Studio (SSMS) **version 20.2.1**. This ensures that all installations are performed consistently, securely, and in compliance with organizational IT standards. The SOP is intended to guide IT personnel, database administrators, and support teams in performing the installation with minimal errors and ensuring compatibility with enterprise SQL Server environments.

Scope

This SOP provides guidelines to install Microsoft SQL Server Management Studio (SSMS) **version 20.2.1** on Windows-based systems across the organization. It applies to all IT personnel, database administrators, and support staff responsible for managing or accessing SQL Server environments. The procedure covers the download, installation, and initial launch of SSMS, ensuring uniformity and compliance with organizational standards.

This SOP does not apply to:

- Installation on non-Windows operating systems (e.g., Linux or macOS).
- Installation of older or beta versions of SSMS.
- SQL Server engine installation or configuration.
- *Troubleshooting post-installation issues or advanced SSMS configurations.*

Potential Problems

This procedure addresses the following potential problems that may arise during or due to improper installation of Microsoft SQL Server Management Studio (SSMS) version 20.2.1:

- **Incorrect Installation Steps** – Without a standardized guide, users may miss essential steps, leading to incomplete or faulty installations.
- **Version Mismatch** – Installing an outdated or incorrect version can result in compatibility issues with SQL Server instances or unsupported features.
- **Installation on Unsupported Platforms** – Attempting installation on non-Windows systems or unsupported configurations may lead to failure or instability.
- **Security Vulnerabilities** – Downloading SSMS from unofficial sources increases the risk of introducing malware or compromised software into the environment.
- **Permission and Access Errors** – Failure to run the installer with appropriate privileges may result in access restrictions or functionality limitations post-installation.
- **Lack of Documentation for Troubleshooting** – Inconsistent or undocumented installation processes make it difficult to resolve issues or audit system changes.
- **User Delays and Downtime** – Uncoordinated or failed installations can delay database access for users, impacting productivity and service availability.

Definitions

Sr. No.	Term	Definition
1	SQL Server	A relational database management system (RDBMS) developed by Microsoft for storing, managing, and retrieving data as requested by other software applications.
2	SSMS	A Microsoft-provided integrated environment used to manage SQL Server infrastructure, including configuration, query execution, and database administration tasks.
3	Installer	The executable file used to initiate the installation process of the SSMS application on a system.
4	Windows Authentication	A method of connecting to SQL Server using the current user's Windows credentials, eliminating the need for separate login credentials.
5	System Requirements	The minimum hardware and software specifications required for successful installation and optimal performance of SSMS.
6	Administrator Privileges	Elevated system permissions required to install or modify software and system settings.
7	Official Source	Microsoft's verified website or distribution channel from which software is downloaded to ensure authenticity and security.

Roles & Responsibilities

Roles	Responsibilities
IT Support Staff / System Administrator/ Windows Team	<ul style="list-style-type: none"> • Verify system prerequisites (Windows version, .NET Framework, disk space, permissions). • Download the approved SSMS installer from Microsoft's official site or internal repository. • Validate installer integrity (checksum/signature). • Execute the SSMS installation (GUI or silent mode) with administrative privileges.

	<ul style="list-style-type: none"> Monitor installation logs and troubleshoot errors if they occur. <p>Perform cleanup of temporary installation files.</p>
Database Administrator (DBA)	<ul style="list-style-type: none"> Verify system requirements and prerequisites Install SSMS using administrator privileges Confirm successful installation and initial launch Validate SSMS functionality post-installation Test connectivity to SQL Server instances Ensure compatibility with existing database systems Confirm the business requirement for SSMS installation (new setup, upgrade, or reinstallation). Provide technical guidance on SSMS version compatibility with SQL Server instances. Backup and restore SSMS configurations if upgrading from an older version. Perform post-installation validation by connecting to SQL Server instances. <p>Report any installation-related issues to IT support or vendor as needed.</p>
Security / Compliance Team	<ul style="list-style-type: none"> Review and approve installation as per IT policies Confirm installer is from a trusted source <p>Ensure compliance with security standards</p>
Change Manager / IT Compliance Officer (if applicable)	<ul style="list-style-type: none"> Approve change requests for SSMS installation in line with ITIL/change management process. Ensure installation activity complies with organizational policies, license agreements, and audit requirements. Maintain records of installation in CMDB/asset management systems.
End User (Developer, Analyst, DBA using SSMS)	<ul style="list-style-type: none"> Request SSMS installation via service request/change request. Confirm successful installation by launching SSMS and validating required features. Report any post-installation issues (connectivity, missing plugins, UI errors) to DBA/IT Support.

SSMS Version Details

SSMS Major Version	20
Release Number	20.2.1
Build Number	20.2.37.0
Release Date	8 th April 2025

Procedure

Step 1: Pre-requisite Checks

SSMS 20.2 can connect to all supported versions of SQL Server, from SQL Server 2008 up to SQL Server 2019. It provides the most significant support for working with the latest cloud features in Azure SQL Database, Azure Synapse Analytics, and Microsoft Fabric.

- OS: Windows 10 or later, Windows Server 2016 or later 64-bit operating systems Only,** Windows 11 minimum supported OS version or higher: Home, Pro, Pro Education, Pro for

Workstations, Enterprise, and Education, Windows 10 minimum supported OS version or higher: Home, Professional, Education, and Enterprise, Windows Server 2025: Standard and Datacentre, Windows Server 2022: Standard and Datacentre, Windows Server 2019: Standard and Datacentre, Windows Server 2016: Standard and Datacentre.

- **Processor:** x64 processor; Quad-core or better recommended.
- **Memory:** Minimum of 4 GB of RAM. Many factors affect resources used; recommend 16-GB RAM for typical professional solutions.
- **Disk Space:** Hard disk space: Minimum of 4 GB up to 50 GB of available space, depending on features installed; typical installations require 20 to 50 GB of free space. We recommend installing Windows and SSMS on a solid-state drive (SSD) to increase performance.
- **Video Card:** Video card that supports a minimum display resolution of WXGA (1366 by 768); SSMS works best at a resolution of 1920 by 1080 or higher.
- **.NET Framework:** .NET Framework 4.7.2 or above is required to install SQL Server Management Studio 21. SQL Server Management Studio 21 requires .NET Framework 4.8 to run. If .NET Framework 4.8 isn't already installed, it's installed during setup.
- **Language:** SQL Server Management Studio 21 is available in English, Chinese (Simplified), Chinese (Traditional), Czech, French, German, Italian, Japanese, Korean, Polish, Portuguese (Brazil), Russian, Spanish, and Turkish. You can select the language of SSMS during installation. The Visual Studio Installer is available in the same 14 languages, and matches the language of Windows, if available.
- Make sure that the user who performs the initial installation has **administrator** permissions on the machine.
- **Apply the latest Windows updates.** These updates ensure that your computer has both the latest security updates and the required system components for SSMS.
- **Restart.** Restarting ensures that any pending installs or updates don't hinder your SSMS install.
- Free up space. Remove unneeded files and applications from your system drive by, for example, running the Disk Cleanup application.
- **While internet connectivity is required to download the installer, internet is not required during the installation process.**

Step 2: Download the SSMS Installer

- Visit the official Microsoft SSMS download page: <https://learn.microsoft.com/en-us/ssms/release-notes-20>
- Click "Download SSMS 20.2.1" to download the latest version of the installer (SSMS-Setup-ENU.exe).

Note: Do not download SSMS from third-party websites to avoid malware or outdated versions.

Release notes

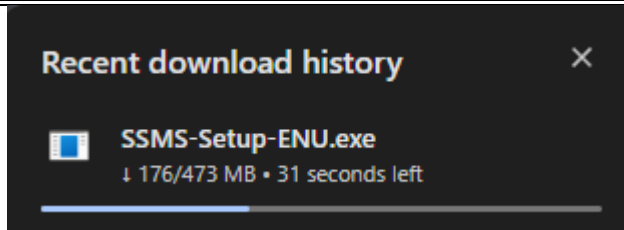
This section contains release notes for SSMS 19 and earlier versions. For release notes for different versions of SSMS, see:

- [Release notes for SQL Server Management Studio 21](#)
- [Release notes for SQL Server Management Studio 20](#)

20.2.1

 [Download SSMS 20.2.1](#)

- Release number: 20.2.1
- Build number: 20.2.37.0
- Release date: April 8, 2025

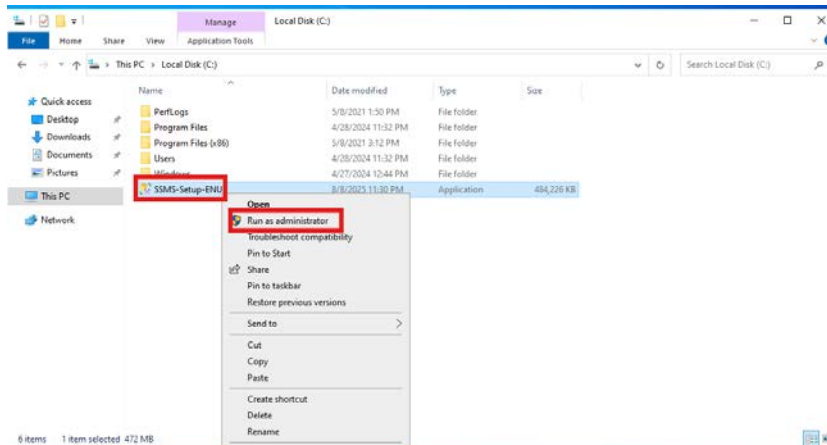


Installer is not a bootstrap file; instead, you will receive the entire installation package in a single .exe file.

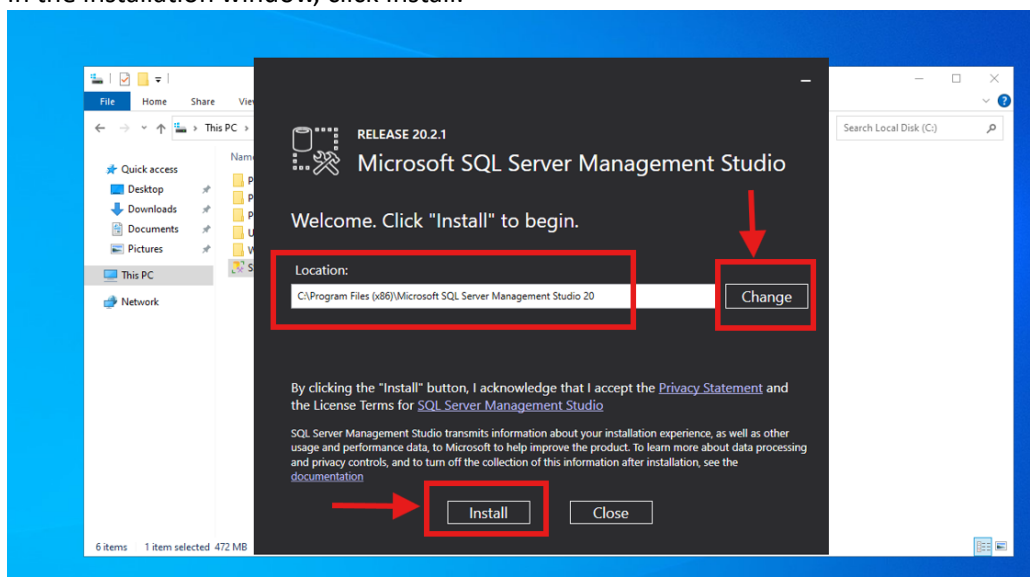
- Save the file in a secure location and copy it to the desired server or target location for installation. In my case I put it on C drive.

Step 3 - Initiate the installation

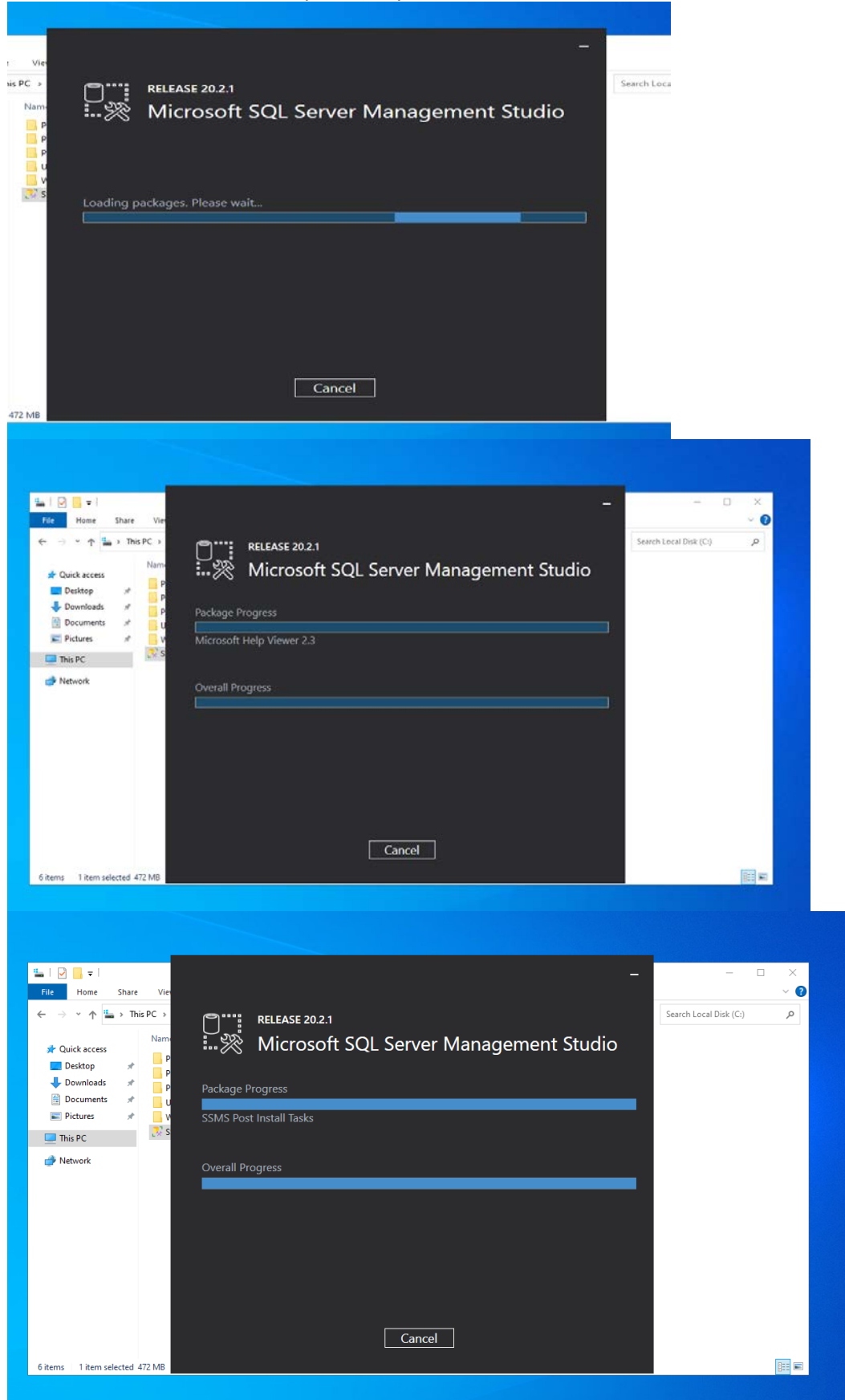
- You need administrator permissions.
- From the Downloads folder or the saved location (In my case I put it on C drive), double-click the SSMS-Setup-ENU.exe file to start the installation or right click on SSMS-Setup-ENU.exe then run as administrator



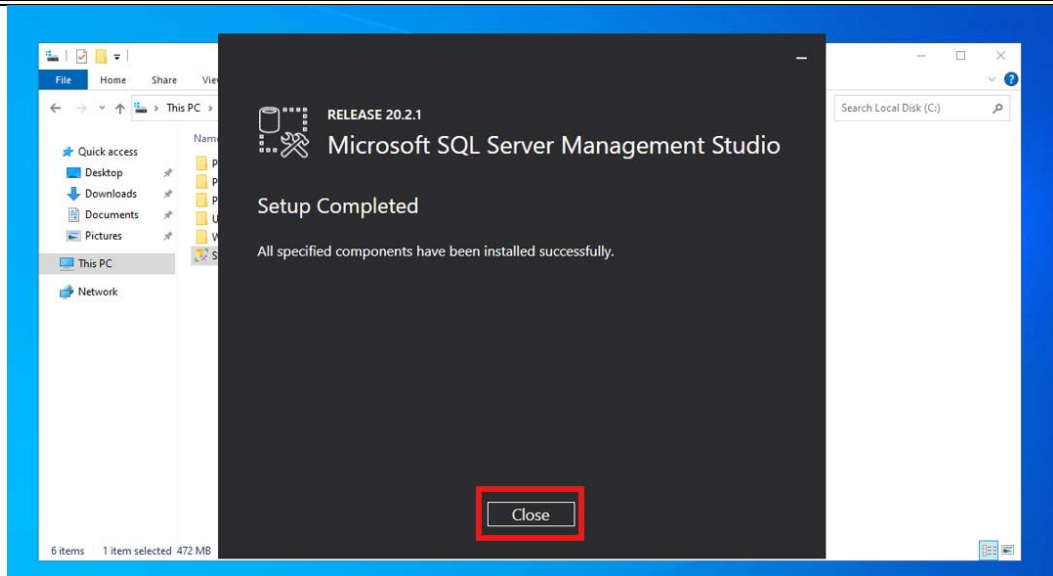
- If you receive a User Account Control notice (UAC), choose Yes. The dialog box asks you to acknowledge the Microsoft Privacy Statement and Microsoft Software License Terms. Choose Continue.
- In the installation window, click Change to select a desired installation location, or leave it as is to install in the default location.
- In the installation window, click Install.



- Wait for the installation to complete (may take 5–15 minutes).

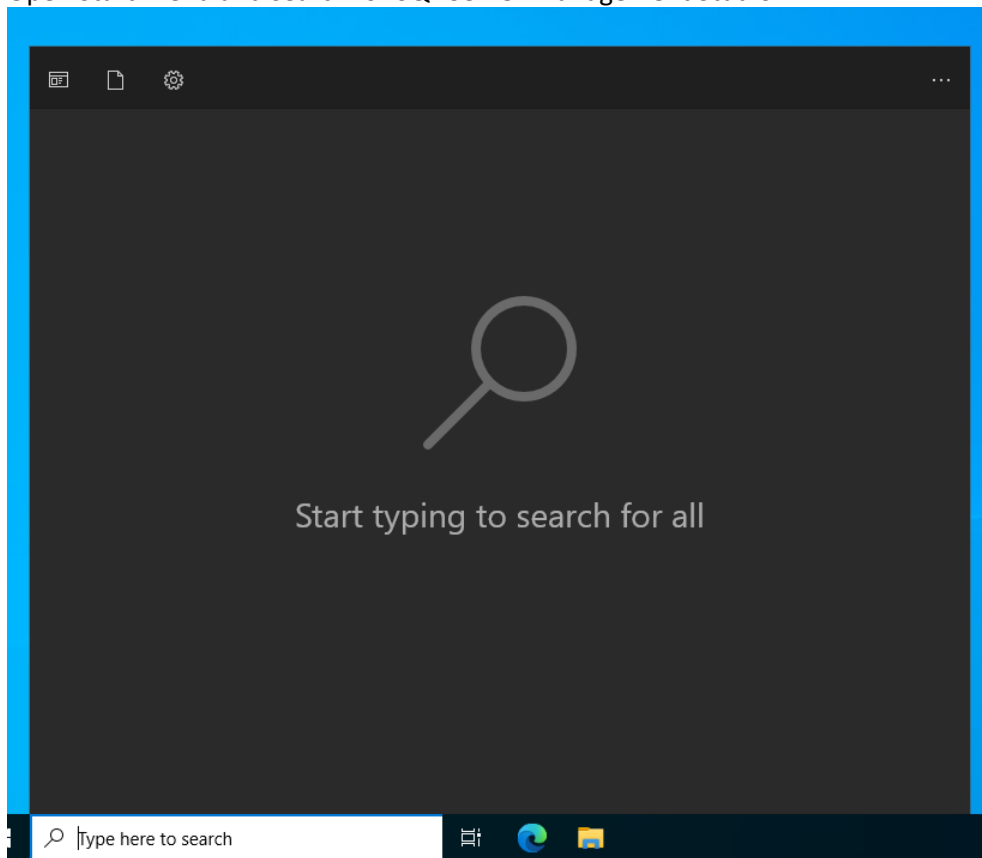


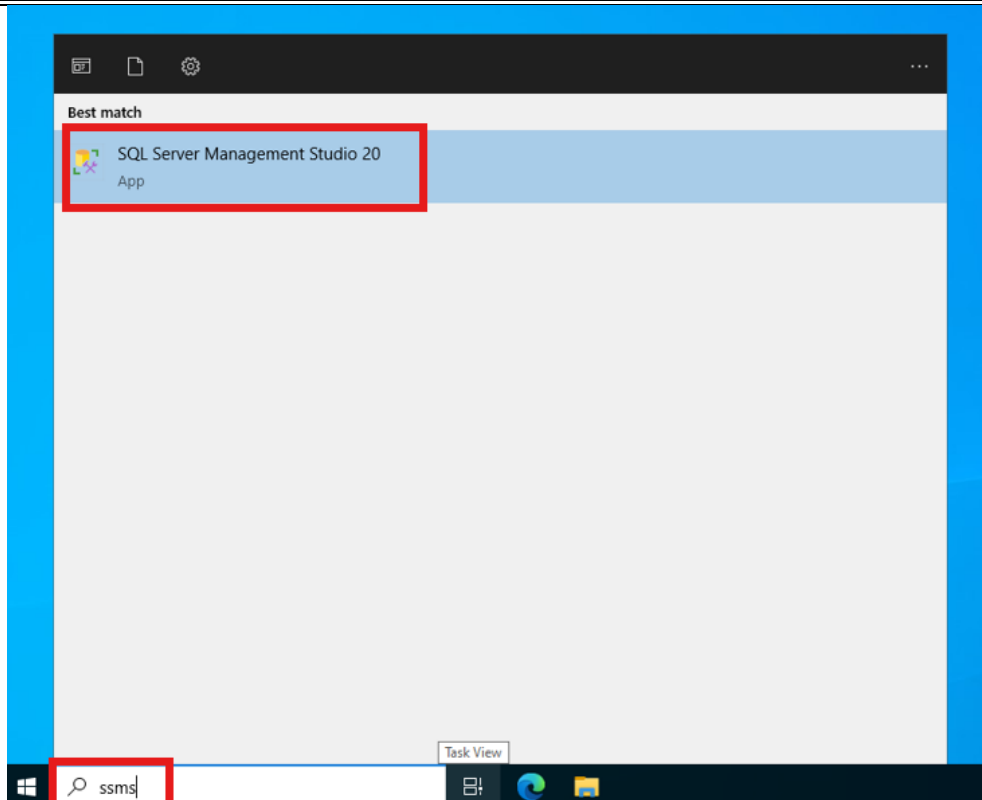
- Click Close when finished.



Step 4: Verify Installation

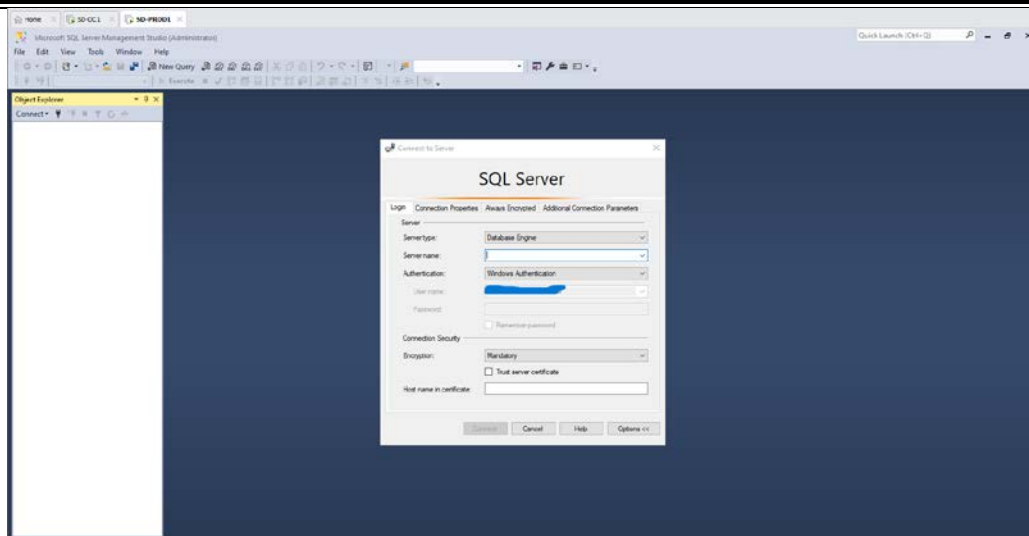
- Open Start Menu and search for SQL Server Management Studio.



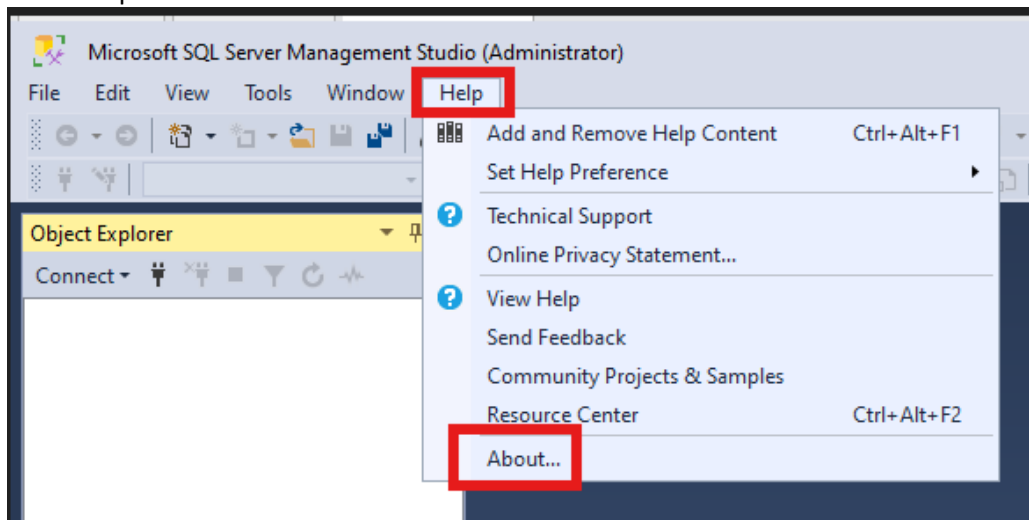


- Launch SSMS.

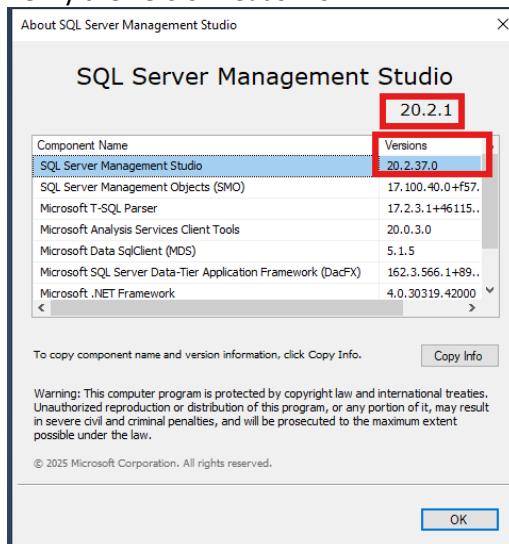




- Go to Help > About.



- Verify the version reads: 20.2.x.x.



Step 5: Post-Installation (Optional)

- Pin SSMS to the taskbar for quick access.
- Configure default settings (fonts, colors, database connection defaults).
- Test connection to a SQL Server instance to confirm functionality.

Troubleshooting

Installer fails to start: Re-download the installer and ensure admin privileges.

SSMS does not launch after install: Reboot the system and check Windows Event Viewer for errors.

.NET Framework error: Update to the latest .NET Framework version from Microsoft.

SSMS version mismatch: Verify installer file version before installing.

Process Steps

Sr No.	Task	Owner
1	Raise/approve change request (if required)	Change Manager
2	Take snapshot backup (optional)	Windows Team
3	Pre-requisite checks	Windows team / DBA Team
4	Download Installer from official website	Windows team / DBA Team
5	Copy the installer to the respective location/server	Windows team / DBA Team
6	Backup existing SSMS configurations (if upgrading)	DBA Team
7	Provide administrative access (if required)	Windows team
8	Start Installation	DBA Team
9	Monitor installation process	DBA Team
10	Post check after Installation/ Verify successful installation	DBA Team
11	Validate connectivity to SQL Server instances	DBA Team
12	Clean up installation files	Windows team / DBA Team
13	Update documentation & CMDB/asset records	Change Manager
14	Verify Installer & process	Infosec Team

Security advisories 20.2.1

Feature	Details
Security	Addressed vulnerability CVE-2025-29803 for Visual Studio Tools for Applications 2019. If you have already installed SSMS 20.2 or an earlier version installed on your machine, you are not exposed to this vulnerability. Installing SSMS 20.2.1 does not update existing VSTA files if you have SSMS 20.2 or earlier versions installed. If security or vulnerability tracking applications state that your system is still at risk after updating to SSMS 20.2.1 from an earlier 20.x release, you can install the latest Microsoft Visual Studio Tools for Applications 2019 to update VSTA.

Known issues 20.2.1

Feature	Details	Workaround
Analysis Services	When you connect to Analysis Services with Microsoft Entra MFA, if you add a new role or open properties for a role, the message "the identity of the user being added to the role is not fetched properly" appears.	This error is benign and can be ignored. The error is addressed within the Azure infrastructure, and no updates to SSMS are required.
Analysis Services	After adding a new role, or when opening properties for an existing role, you can't use Search by name or email address to add a user.	A user can be added with the Manual Entry option.
Database Designer	Selecting the Design option for a view referencing a table using spatial data causes SSMS to crash.	Use T-SQL to make changes to the view.

Database Mirroring	If you launch the Database Mirroring Monitor from the mirrored node, the primary node isn't listed.	Register the mirrored node from Database Mirroring Monitoring, or use SSMS 18.12.1 to monitor from the mirrored node.
General SSMS	Import settings from SSMS 17 option not available.	Settings can be imported from SSMS 18.
Linked servers	Creating a linked server to Azure SQL Database with SQL Server selected as Server type connects to the master database.	To create a linked server to Azure SQL Database, select Other data source for the Server type , and select Microsoft OLE DB Provider for SQL Server or Microsoft OLE DB Driver for SQL Server as the Provider . Enter the logical server name in the Data source field and the database name in the Catalog field.
Maintenance Plan	Selecting "Contents" after adding a backup file within the Destination pane of the Backup Database Task, causes the dialog to disappear.	Use SSMS 20.1 or SSMS 19.3 to access the Contents dialog.
PolyBase	PolyBase node isn't visible in Object Explorer when you connect to SQL Server 2022 (16.x).	Use SSMS 18.12.1.
Profiler	The Profiler menu isn't localized.	No current alternative.
Replication	If Azure SQL Managed Instance is the publisher and SSMS is running on a machine that isn't in the same virtual network as the publisher, you aren't able to insert a tracer token via Replication Monitor.	To insert tracer tokens, use Replication Monitor in SSMS on a machine that is in the same virtual network as the Azure SQL Managed Instance publisher.
Stretch Database	Removed Stretch Database Wizard.	Use T-SQL to configure Stretch Database or use SSMS 18.9.1 or earlier to use the Stretch Database Wizard.

See [Known issues using Strict Encryption in 20.0](#) for known issues using SSMS 20.x and Strict Encryption. You can reference the [SSMS Developer Community](#) site for other known issues and to provide feedback to the product team.

Previous SSMS releases

SSMS version	Build number	Release date
20.2	20.2.30.0	July 9, 2024
20.1	20.1.10.0	April 9, 2024
20.0	20.0.70.0	March 19, 2024

FORMS/TEMPLATES TO BE USED

Internal References

External References

Release Note: <https://learn.microsoft.com/en-us/ssms/release-notes-20>
 Support Policy: <https://learn.microsoft.com/en-us/ssms/support-policy>
 Installation Link: <https://learn.microsoft.com/en-us/ssms/release-notes-20>

About Snippyguy

Snippyguy is a purpose-led transformation partner to many of the world's largest businesses. For more than years, it has been collaborating with clients and communities to build a greater future through innovation and collective knowledge. Snippyguy offers an integrated portfolio of cognitive powered business, technology, and engineering services and solutions. The company's consultants in various countries help empower individuals, enterprises, and societies to build on vision and innovation.

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