Installing SQL Express 2022

Last Modified on 03/28/2025 4:38 pm CDT

SQL Express 2022 is not compatible with Windows 7, Windows Server 2008R2, or Windows Server 2012. It is only compatible with Windows 10, Windows Server 2016, and later operating systems.

Note: The installation and setup process is lengthy and quite detailed. If assistance is needed at any time during the process, please contact a member of the IS Support team.

1. Download SQL Express 2022 by going to https://www.microsoft.com/en-us/download/details.aspx?

id=104781. Select Download.

Note: To download the Standard edition, the product must be licensed from Microsoft.

English

Microsoft[®] SQL Server[®] 2022 Express

Microsoft® SQL Server® 2022 Express is a powerful and reliable free data management system that delivers a rich and reliable data store for lightweight Web Sites and desktop applications.

Important! Selecting a language below will dynamically change the complete page content to that language.

V

Download

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∠.	JEIE		ustom.	



Select language

3. After initial setup, the following screen displays. Select Install.

^{sql server 2022} Express Edition		© – ×
Specify SQL Server media downloa	ad target location	
MEDIA LOCATION *: CASOL2022	Browse	MINIMUM FREE SPACE 6604 MB DOWNLOAD SIZE 278 MB
	Close <	Previous Install

4. Select the New SQL Server stand-alone installation option.

髋 SQL Server Installation Center	>
Planning Installation	New SQL Server stand-alone 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.
Maintenance Tools Resources	Install SQL Server Reporting Services Launch a download page that provides a link to install SQL Server Reporting Services. An internet connection is required to install SSRS.
Options	 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.
	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
Microsoft SQL Server 2022	

5. Check the box to accept the license terms and select **Next**.



6. Ignore the Windows Firewall warning as those rules will be entered in later. Select Next.

🚼 SQL Server 2022 Setup				-		×
Install Rules						
Setup rules identify potential can continue.	problems tha	t might occur while running Setup. Failures must be corrected	before Setup			
.icense Terms Slobal Rules Vicrosoft Update Product Updates nstall Setup Files	Operation Hide de <u>View deta</u>	a completed. Passed: 4. Failed 0. Warning 1. Skipped 0.			Re-I	run
Install Kules Azure Extension for SQL Server Feature Selection Feature Rules Instance Configuration Enver Configuration Database Engine Configuration Feature Configuration Rules Installation Progress Complete	Result	Rule Machine Learning Server shared feature support Consistency validation for SQL Server registry keys Computer domain controller Windows Firewall Microsoft .NET Framework 4.7.2, or newer, is required	Status Passed Passed Warning Passed			
		< Back	Next >		Cance	1

7. Uncheck Azure Extension for SQL Server.

Azure Extension for S	QL Server					
Azure Extension for SQL Serve	er is required to enable Microsoft Defen	der for Cloud, Purvi	ew, and Azure Ac	tive Directory.		
License Terms	Azure Extension for SQL Server	To install Azure e	xtension for SQL	Server, provide yo	ur Azur	e
Global Rules		account or a serv instance to Azure	vice principal to au . You also need to	o provide the Sub	L Serve	n ID
Microsoft Update		Resource Group,	Region, and Tena	int ID where this in	nstance	will b
Product Updates		registered. For m	ore information for	or each parameter	, visit	
Install Setup Files		https://aka.ms/a	rc-sql-server.			
Install Rules	O Use Azure Login					
Azure Extension for SQL Serv	Use Service Principal					
Feature Selection	Azure Service Principal ID*					
Feature Rules	Azore berrice i melpario					
Instance Configuration	Azure Service Principal Secret*					
Server Configuration						
Database Engine Configuration						
Feature Configuration Rules						
Installation Progress	Azure Subscription ID*					
Complete	Azure Resource Group*					
	Amura Passian*				_	_
	Azure Region"					
	Azure Tenant ID*					
	Drever Server LIPL (entional)					
	Proxy Server One (optional)					
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Select the Database	Engine Services optior	and then s	< Back	Next >	C	Cancel
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9. On the *Instance Configuration* window, choose the *Named instance* option and enter a name for the SQL instance. In this example, it is *Agvance*. Select **Next**.

髋 SQL Server 2022 Setup						-		×
Instance Configuration Specify the name and instance	ID for the instance of SQ	L Server. Instance ID b	ecomes part of	the installatio	n path.			
License Terms Global Rules Microsoft Update	 Default instance Named instance: * 	AGVANCE						
Product Updates Install Setup Files Install Rules Azure Extension for SQL Server	Instance ID:	SQLEXPRESS						
Feature Selection Feature Rules Instance Configuration	SQL Server directory: Installed instances:	C:\Program Files\Mic	rosoft SQL Serve	er\MSSQL16.S	QLEXPRESS			_
Instance Configuration Server Configuration Database Engine Configuration Feature Configuration Rules Installation Progress Complete	Instance Name	Instance ID	Features	Editio	n	Vers	ion	
				< Back	Next >		Cancel	

- 10. On the Server Configuration window, make sure the Startup Type for the SQL Server Browser service is set to Automatic and select Next.
- 11. Choose the Mixed Mode (SQL Server authentication and Windows authentication) option and create a password.

Select Next.								
📸 SQL Server 2022 Setup							×	
Database Engine Confi	guration							
Specify Database Engine authe parallelism, Memory limits, and	ntication security mode, Filestream settings.	administrators, o	lata directories,	TempDB, Max degree	e of			
License Terms Global Rules Microsoft Update Product Updates Install Setup Files Install Rules	Server Configuration Specify the authen Authentication Mo O Windows auther	Data Directorie tication mode an ode ntication mode	s TempDB N	femory User Instanc	es FILESTREAN gine.	1	_	
Azure Extension for SQL Server	O Mixed Mode (SC	QL Server authent	ication and Wir	ndows authentication)]			
Feature Selection Feature Rules	Specify the password for the SQL Server system administrator (sa) account.							
Instance Configuration	Enter password:	•••••					_	
Server Configuration	Confirm password:	•••••					-	
Feature Configuration Rules Installation Progress Complete	Specify SQL Server	administrators -	Remove	SQL Server adminis access to the Datab	trators have unr	estricted		
				< Back	Next >	Canc	el	

12. Select the Install button and allow the install to finish. Select Close.

SQL Server 2022 Setup			-		×
Complete					
Your SQL Server 2022 installat	ion completed successfully with product u	pdates.			
License Terms	Information about the Setup operation	or possible next steps:			
Microsoft Undate	Feature	Status			
Des dust la datas	Database Engine Services	Succeeded			
Product Opdates	SQL Browser	Succeeded			
nstall Setup Files	SQL Writer	Succeeded			
nstall Rules	Setup Support Files	Succeeded			
Azure Extension for SQL Server					
eature Selection					
eature Rules					
nstance Configuration					
erver Configuration					
atabase Engine Configuration	Dataila				
eature Configuration Rules	Details:				
astallation Progress	Install successful.				
istallation Progress					
omplete					
	Summary las file has been stuad to the	fellouing leasting.			
	Summary log file has been saved to the	following location:			
	<u>C:\Program Files\Microsoft SQL Server</u>	160\Setup Bootstrap\Log\20250328_111	034\Summar	Υ	
				Class	

Installing Management Studio

1. Go to https://docs.microsoft.com/en-us/sql/ssms/download-sql-server-management-studio-ssms, and

download SQL Server Management Studio.



2. After the download completes, run the file and then choose Install.



3. As the installation progresses, there may be a prompt to reboot the machine to complete the installation.

	RELEASE 18.6 Microsoft SQL Server Management Studio
Restar	t required in order to complete setup.
All specifi	ed components have been installed successfully.
The comp	uter needs to be restarted before setup can continue.
	Restart Close

Configuring SQL Express 2022

1. Open SQL Server Management Studio and log in via SQL Server Authentication using the sa login. Enter the password created on Step 10 of the Installing SQL Express 2022 section.

Connect to Serve	/er X				
	SQL Server				
Server type:	Database Engine				
Server name:	Agvance ~				
Authentication:	SQL Server Authentication $\qquad \qquad \lor$				
Login:	sa 🗸 🗸				
Password:	•••••				
	Remember password				
	Connect Cancel Help Options >>				

2. After logging in, right-click on the SQL Server instance name, and select Facets.



3. From the Facet drop-down list, choose Surface Area Configuration.

😾 View Facets - TSFARM-	SQL	
🚺 Ready		
Select a page	🗐 Script 👻 🕜 H	elp
👂 General		
	Facet:	Server
	Description:	Server Server Audit
		Server Configuration Server Information
	Facet properties:	Server Installation Settings Server Performance
	8≣ 2↓ 📼	Server Protocol Settings Server Security
	AuditLevel	Server Selection
	BackupDirec	Surface Area Configuration

4. Set the XPCmdShellEnabled option to True and exit SQL Server Management Studio.

AdHocRemoteQueriesEnabled	False
CirintegrationEnabled	False
DatabaseMailEnabled	True
OleAutomationEnabled	False
RemoteDacEnabled	False
ServiceBrokerEndpointActive	False
SoapEndpointsEnabled	False
SqlMailEnabled	False
WebAssistantEnabled	Property value 'WebAssistantEnabled' is not available.
XPCmdShellEnabled	True
	True
	False

5. Open SQL Server Configuration Manager by navigating to

C:\Windows\SysWOW64\SQLServerManager15.msc.

6. In the left panel, select SQL Server Services. In the right panel, right-click the installed SQL Server instance, and



7. On the Log On tab, select the Built-in account option, and choose Local System from the drop-down list. Select

Apply. When the prompt to restart the service appears, select OK.

SQL Server (AGVANCE) Properties ? ×

AlwaysOn High Availabi	ity Startup Para	ameters A	dvanced
Log On	Service	FILESTR	EAM
og on as:			
Built-in account:			
Local System		•	
C This account:			
Account Name:	NT Service\MSSQL\$	AGVANCE	owse
Password:	****************		
Confirm password:	************		
Service status:	Running		
Start S	top Pause	Re	estart

8. In the right panel of the SQL Configuration Manager window, right-click SQL Server Browser, and choose

Properties.

Name	State	Start Mode	Log On As	Process ID
SQL Server (AGV	Running	Automatic	LocalSystem	4580
SQL Full-text Filte	Running	Manual	NT Service\MSSQL	6400
SQL Server Launc	Running	Automatic	NT Service\MSSQL	6908
SQL Server Agent	Stopped	Other (Boot, Syste	NT AUTHORITY\NE	0
🕉 SQL Server Browser	Running	Automatic	LocalSystem	4452

9. Similar to how the SQL Service is set up, select the *Built-in* account option on the *Log On* tab, and choose *Local System* from the drop-down menu. Click **Apply** and select **OK** when prompted.

Log on			
C Dui			
Lo	cal System	•	
C In	s account:		
Acc	ount Name:		Browse
Pas	sword:	*******	
Cor	nfirm password:	*********	_
Service	e status:	Running	
S	tart	Stop Pause	Restart

- 10. Select the SQL Server Network Configuration in the left panel of the SQL Server Configuration Manager window.
- 11. In the left panel, double-click the option for the installed SQL instance.
- 12. Right-click the TCP/IP option, and select Enable. When the prompt to restart the instance appears, select OK.

Right-click TCP/IP again, and select Properties.



13. Go to the *IP Addresses* tab and scroll to the bottom of the window. Remove any TCP Dynamic Ports that may be listed (this value will most likely be 0), and then enter a port number for the TCP Port option (choose any port number desired). Write this port number down, as it is needed later when creating a firewall rule. Select **Apply** and then **OK** when the warning to restart the SQL Service appears.

0
0
Yes
No
2001:0:9d38:6ab8:201f:21f6:52ef:
0
Yes
No
fe80::201f:21f6:52ef:be5e%6
0
1433

- Return to the SQL Server Services option in the left panel of the SQL Server Configuration Manager window.
 Restart both the SQL Server Service (with the installed instance name) and the SQL Server Browser. This can be done by right-clicking each service and choosing Restart.
- 15. Close the SQL Server Configuration Manager and open the machine's Windows Firewall with Advanced Security.
- 16. On the desktop, in the search box of the Taskbar, type in *"firewall"*. Select *Windows Firewall with Advanced Security*.





18. In the New Inbound Rule Wizard choose Custom and then select Next.

Steps: Program Protocol and Ports Scope Action Profile Name	What type of rule would you like to create? Program Rule that controls connections for a program. Port Rule that controls connections for a TCP or UDP port. Predefined: Rulo that controls connections for a Windows experience. C Custom C Custom	
	Custom rule.	

19. Select Customize.

Steps:	
Rule Type	Does this rule apply to all programs or a specific program?
Program	
Protocol and Ports	All programs
Scope	Rule applies to all connections on the computer that match other rule properties.
Action	○ T ¹ :
Profile	O This program path:
Name	Example: c:\path\program.exe %ProgramFiles%\browser\browser.exe
	Services Specify which services this rule applies to.

20. Choose Apply to this service and scroll down the list of services to select the SQL Server. Choose OK.

Apply to all programs and services		
Apply to this service:		
Name	Short Name	^
Sophos System Protection Service	sophossps	
Sophos Web Control Service	Sophos Web Control Ser	
Sophos Web Filter	swi_filter	
Sophos Web Intelligence Service	swi_service	
Spot Verifier	SVSVC	
SQL Full-text Filter Daemon Launcher (AGVANCE2017)	MSSQLFDLauncher\$AG	
SQL Server (AGVANCE2017)	MSSQL\$AGVANCE2017	
SQL Server Agent (AGVANCE2017)	SQLAgent\$AGVANCE20	
SQL Server Browser	SQLBrowser	~

21. Select Next.

Specify the full program path an	d executable name of the progra	am that this rule matches.		
Steps:				
Rule Type	Does this rule apply to	all programs or a specific p	program?	
Program				
Protocol and Ports	All programs			
Scope	Rule applies to all	connections on the comp	uter that match other rul	e properties.
Action	O This program c	ath:		
Profile				Browse
Name	Example: c	::\path\program.exe %ProgramFiles%\browser\b	rowser.exe	
	Services			Customize
Select Next .	rd		< Back	Next > Cane
Select Next. Protocol and Ports Specify the protocols and ports	rd to which this rule applies.		< Back	Next > Cano
Select Next. Protocol and Ports Specify the protocols and ports Steps:	rd to which this rule applies.		< Back	Next > Cane
Select Next. Mew Inbound Rule Wiza Protocol and Ports Specify the protocols and ports Steps: Rule Type Program	rd to which this rule applies. To which ports and pr	otocols does this rule appl	< Back	Next > Cane
Select Next. Mew Inbound Rule Wiza Protocol and Ports Specify the protocols and ports Steps: Rule Type Program Protocol and Ports	rd to which this rule applies. To which ports and pr Protocol type:	otocols does this rule apply Any	< Back y?	Next > Cane
Select Next. Mew Inbound Rule Wiza Protocol and Ports Specify the protocols and ports Steps: Rule Type Program Protocol and Ports Scope	rd to which this rule applies. To which ports and pr Protocol type: Protocol number:	otocols does this rule apply	< Back y?	Next > Canc
Select Next. New Inbound Rule Wiza Protocol and Ports Specify the protocols and ports Steps: Rule Type Program Protocol and Ports Scope Action Defin	rd to which this rule applies. To which ports and pr Protocol type: Protocol number:	Any	< Back y?	Next > Cano
Select Next. New Inbound Rule Wiza Protocol and Ports Specify the protocols and ports Steps: Rule Type Program Protocol and Ports Scope Action Profile News	rd to which this rule applies. To which ports and pr Protocol type: Protocol number: Local port:	Any Any All Ports	< Back	Next > Cane
Select Next. Protocol and Ports Specify the protocols and ports Steps: Rule Type Program Protocol and Ports Scope Action Profile Name	rd to which this rule applies. To which ports and pr Protocol type: Protocol number: Local port:	Any Any All Ports	< Back	Next > Cano
Select Next. New Inbound Rule Wiza Protocol and Ports Specify the protocols and ports Steps: Rule Type Program Protocol and Ports Scope Action Profile Name	rd to which this rule applies. To which ports and pr Protocol type: Protocol number: Local port: Bemote port:	Any Any All Ports Example: 80, 443, 50 All Ports	< Back y? v 00-5010	Next > Can
Select Next. New Inbound Rule Wiza Protocol and Ports Specify the protocols and ports Steps: Rule Type Program Protocol and Ports Scope Action Profile Name	rd to which this rule applies. To which ports and pr Protocol type: Protocol number: Local port: Remote port:	Any Any O All Ports Example: 80, 443, 50 All Ports	< Back	Next > Can
Select Next. New Inbound Rule Wiza Protocol and Ports Specify the protocols and ports Steps: Rule Type Program Protocol and Ports Scope Action Profile Name	rd to which this rule applies. To which ports and pr Protocol type: Protocol number: Local port: Remote port:	Any Any OI All Ports Example: 80, 443, 50 All Ports Example: 80, 443, 50	<back< td=""><td>Next > Cana</td></back<>	Next > Cana

< <u>B</u>ack

<u>N</u>ext >

Cancel

23. Select Next again.

W New Inbound Rule Wiza	rd	>
Scope		
Specify the local and remote IP	addresses to which this rule applies.	
Steps:		
Rule Type		
Program	Which local IP addresses does this rule apply to?	
Protocol and Ports	Any IP address	
Scope	○ <u>T</u> hese IP addresses:	
Action		<u>A</u> dd
Profile		Edit
Name		
		Hemove
	Customize the interface types to which this rule applies:	Customize
	Which remote IP addresses does this rule apply to?	
	Any IP address	
	◯ These IP addresses:	
		A <u>d</u> d
		Edįt

24. Select Allow the connection then choose Next.



25. Select Next.

Mew Inbound Rule Wizard

Profile

Specify the profiles for which this rule applies.

Steps:	
Rule Type	When does this rule apply?
Program	
Protocol and Ports	Domain
Scope	Applies when a computer is connected to its corporate domain.
Action	✓ Private
Profile	Applies when a computer is connected to a private network location, such as a home or work place.
Name	Public
	< <u>B</u> ack Cancel

Х

26. Name the rule. For example, the *Name* below is *SQL Server Service*. Select **Finish**.

🔗 New Inbound Rule Wizard		×
Name		
Specify the name and description	of this rule.	
Steps:		
Rule Type		
Program		
Protocol and Ports		
Scope	Name:	
Action	SQL Server Service	
Profile	Description (optional):	
Name		
	< Back Fit	hish Cancel

- 27. Repeat Steps 17-26 of this section, but this time, create the rule for the SQL Server Browser Service. Choose the SQL Server Browser in Step 20.
- 28. Choose to create another rule and select the Port option. Select Next.



29. Enter the port number configured for the SQL instance (1433 in this example). Select Next.

Protocol and Ports Specify the protocols and ports to which this rule applies. Steps: Does this rule apply to TCP or UDP? Protocol and Ports ICP Action UDP Profile Does this rule apply to all local ports or specific local ports? All local ports: All local ports: Example: 60; 443; 5000-5010
Specify the protocols and ports to which this rule applies. Steps: Does this rule apply to TCP or UDP? Protocol and Ports ICP Action UDP Profile Does this rule apply to all local ports or specific local ports? All local ports Ital Specific local ports: Ital Example: 00, 443, 5000-5010 Example: 00, 443, 5000-5010
Steps: Does this rule apply to TCP or UDP? Protocol and Ports ICP Action UDP Profile Oues this rule apply to all local ports or specific local ports? Name Does this rule apply to all local ports or specific local ports? All local ports: 1433 Example: 00, 443, 5000-5010

30. Select the Allow the connection option and select Next.

🔗 New Inbound Rule Wiza	rd	×		
Action				
Specify the action to be taken w	when a connection matches the conditions specified in the rule.			
Steps:				
Rule Type	What action should be taken when a connection matches the specified conditions?			
Protocol and Ports	Allow the connection			
Action	This includes connections that are protected with IPsec as well as those are not.			
Profile	Allow the connection if it is secure			
• Name	This includes only connections that have been authenticated by using IPsec. Connections will be secured using the settings in IPsec properties and rules in the Connection Security Rule node. Customize Block the connection			
	< <u>B</u> ack Next > Cancel			

31. Select Next.

Profile			
Specify the profiles for which th	is rule applies.		
Steps:			
Rule Type	When does this rule apply?		
Protocol and Ports			
Action	Domain		
Profile	Applies when a computer is connected to its corporate domain.		
Name	✓ Private		
	Applies when a computer is connected to a private network location, such as a home or work place.		
	Public		
	Applies when a computer is connected to a public network location.		

32. Enter a *Name* for the SQL port rule and select **Finish**.

🔗 New Inbound Rule Wizard	d	×
Name		
Specify the name and description	n of this rule.	
Steps:		
Rule Type		
Protocol and Ports		
Action		
Profile	Name:	
Name	SQL Port 1433	
	Description (optional):	
	_	
	< <u>B</u> ack	<u>Finish</u> Cancel

SQL Express 2022 should now be installed and configured.