# Installation Guide for Microsoft SQL Server 2017/2019 Express

#### Summary

This article is a step by step guide for installing SQL 2017 Express.

## **Applies To**

This article applies to SQL Server 2017 and SQL Server 2019.

List of anti virus Exclusion for SQL Server:

For Microsoft SQL Server, review details on link below for exclusions list:

https://support.microsoft.com/en-us/help/309422/choosing-antivirus-software-for-computers-that-run-sql-

Steps to install SQL 2017/2019 Express

## Step 1:

Download **SQL Server Express Setup (2019)** from: <u>https://go.microsoft.com/fwlink/?linkid=866658</u>

OR

Download **SQL Server Express Setup (2017)** from <u>https://www.microsoft.com/en-us/download/details.aspx?id=55994</u>

Select **English** as Language and Express Core SQL Server Engine Only option (Default Option). Download and Save file to **c:\ drive.** 



## Step 2:

Once Download is completed, click Close. Copy downloaded installer "SQLEXPR\_x64\_ENU.exe" to c: drive. Open command prompt and point to c: drive.

Replace strong alpha numeric password in command below, copy/paste in command prompt and click enter to run installer.

```
SQLEXPR_x64_ENU.exe /QS /ACTION=Install /INSTANCENAME="MachPanelSQL"
/FEATURES="SQLENGINE" /SQLSVCACCOUNT="NT AUTHORITY\SYSTEM"
/SQLSYSADMINACCOUNTS="NT AUTHORITY\SYSTEM" /AGTSVCACCOUNT="NT
AUTHORITY\Network Service" /IACCEPTSQLSERVERLICENSETERMS
/IACCEPTROPENLICENSETERMS /SAPWD="STRONGPASSWORDHERE"
/SECURITYMODE=SQL /TCPENABLED=1 /NPENABLED=1
/SQLCOLLATION=SQL_Latin1_General_CP1_CI_AS /ADDCURRENTUSERASSQLADMIN=1
```

Please execute the installer as "Run as Administrator" and select the first option from the installer "New SQL Server Standalone Installation'.



**Step 3:** In the second step agree to the License terms and then click Next. Then check for the updates, if available then download the Updates and Install the setup files.



**Step 4:** On the next page "Microsoft Update" please check the highlighted option in order to use the recommended option regarding updates and click **Next**.

📸 SQL Server 2017 Setup		—		$\times$
<b>Microsoft Update</b> Use Microsoft Update to check	for important updates			
License Terms Global Rules <b>Microsoft Update</b> Product Updates Install Setup Files Install Rules Feature Selection Feature Rules Feature Configuration Rules Installation Progress Complete	Microsoft Update offers security and other important updates for software, including SQL Server 2017. Updates are delivered using / the Microsoft Update website. ☑ Use Microsoft Update to check for updates (recommended) Microsoft Update FAQ Microsoft Update Privacy Statement	Windows and other M Automatic Updates, o	dicrosoft r you can v	isit
	< Back	Next >	Cance	el 🛛

**Step 5:** In the fourth step the installation wizard will automatically install the Install Rules and upon completion please click on Next.

📸 SQL Server 2017 Setup			_		×
Install Rules					
Setup rules identify potential p can continue.	roblems that might occur while running Setup. Failures must	be corrected b	efore Setup		
License Terms Global Rules Microsoft Update Product Updates Install Setup Files	Operation completed. Passed: 3. Failed 0. Warning 1. Sk Hide details << <u>View detailed report</u>	kipped 0.		Re-	run
Feature Selection Feature Rules Instance Configuration Server Configuration Database Engine Configuration Consent to install Microsoft R Consent to install Python Feature Configuration Rules Installation Progress Complete	Rule         Fusion Active Template Library (ATL)         Consistency validation for SQL Server registry keys         Computer domain controller         Windows Firewall	St. Pa: Pa: Wa	atus ssed ssed aming		
		< Back	Next >	Cance	

**Step 6:** Next up here is the **Feature selection**. In this step please select the required features as highlighted which are required for MachPanel database. Features to be selected: Database Engine Services, Client tools connectivity & Client tools backward compatibility and then click **Next**.

From Instance features please select: Database Engine Services

SQL Server 2017 Setup			- 0	$\sim$	
Feature Selection Select the Express features to	Install.				
Global Rules	Looking for Reporting Servir	ces? Download it fro	am the web		
Microsoft Update	Features:		Feature description:		
Product Updates Install Setup Files Install Rules Feature Selection Feature Rules Instance Configuration	Instance Features  Instance Features  I Cal Server Replication I Cal Se	vices (In-Database)	Includes the software development kit containing resources for programmers.     Prerequisites for selected features:     Already Instelled:	0	
Database Engine Configuration	Shared Features		Disk Space Requirements		
Feature Configuration Rules Installation Progress	<		Drive Ci 1195 MB required, 74400 MB available		
Complete	Select All Unselect All				
	Instance root directory:	Ci\Program Files\Mi	crosoft SQL Server\	1.1.1	
	Shared feature directory:	Ci\Program Files\Mir	Microsoft SQL Server\		
	Shared feature directory (x86); C:\Program Files (x8		(x86)\Microsoft SQL Server\		

From **Shared features** please select: Client tools connectivity & Client tools backward compatibility and click **Next**.

髋 SQL Server 2017 Setup			- 🗆 ×
Feature Selection Select the Express features to in	istall.		
License Terms Global Rules Microsoft Update Product Updates Install Setup Files Install Rules Feature Selection Feature Rules Instance Configuration Server Configuration	Looking for Reporting Service Features:	ces? <u>Download it fra</u> c Extractions for Sea e for External Data ompatibility DK	Feature description:         Each shared feature is installed once within a defined scope and operates within that scope.         Prerequisites for selected features:         Already installed:         Windows PowerShell 3.0 or higher         Microsoft .NET Framework 4.6         Disk Space Requirements
Feature Configuration Rules Installation Progress Complete	Redistributable Features	C:\Program Files\M	icrosoft SQL Server
	Shared feature directory:	C:\Program Files (x8	Back     Next >     Cancel

**Step 7:** In the Instance Configuration please select the default instance option as shown below and click **Next**. If you have already created an instance then please use named instance option and provide the Instance Id as well otherwise default instance will work.

📸 SQL Server 2017 Setup					_		$\times$
Instance Configuration							
Specify the name and instance	ID for the instance of S	QL Server. Instance ID	becomes part of the	installation path.			
License Terms	Default instance						
Global Rules Microsoft Update	<ul> <li>Named instance:</li> </ul>	MSSQLSERVER					
Product Updates Install Setup Files Install Rules Feature Selection Feature Rules	Instance ID:	MSSQLSERVER					
	SQL Server directory:	C:\Program Files\Mid	rosoft SQL Server\M	SSQL14.MSSQLSERVE	R		
Instance Configuration Server Configuration	Installed instances:						
Database Engine Configuration	Instance Name	Instance ID	Features	Edition	Ve	rsion	
Feature Configuration Rules Installation Progress Complete							
			<	Back Next :	-	Cance	4

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**Step 8:** In this step you will review the account properties as there will be different accounts for different SQL server services. Please proceed with below highlighted setting in service accounts tab as we used Default instance so the properties of the accounts should be like:

髋 SQL Server 2017 Setup							_		Х
Server Configuration									
Specify the service accounts and	collation configurati	on.							
License Terms Global Rules	Service Accounts	Collation		unt for each (	01.5-				
Microsoft Update	Microsoft recom	menus that you t	ise a separate accou	incror each a	SQL SE	rver service.			_
Product Updates	Service		Account Name	e	Passv	vord	Startu	ір Туре	
Install Setup Files	SQL Server Data	base Engine	NT Service\MS	SQLSERVER			Auton	natic	$\sim$
Install Rules	SQL Server Brow	ser	NT AUTHORITY	Y\LOCAL			Disabl	ed	$\sim$
Feature Selection									
Feature Rules	Grant Perform	Volume Mainter	ance Task privilege	to SQL Serv	er Data	abase Engin	e Servio	e	
Instance Configuration	This privilege	enables instant f	le initialization by a	voiding zero	ing of	data pages.	This m	ay lead	
Server Configuration	to information	n disclosure by al	owing deleted cont	ent to be acc	essed.				
Database Engine Configuration	Click here for	details							
Feature Configuration Rules									
Installation Progress									
Complete									
				< Back		Next >		Cance	el

Under the **Collation** tab please make sure to select the **SQL\_Latin1\_General\_CP1\_CI\_AS** as shown below and click **Next**.

🐮 SQL Server 2017 Setup		- 0	$\times$
Server Configuration			
Specify the service accounts and	d collation configuration.		
License Terms Global Rules Microsoft Updates Product Updates Install Setup Files Install Rules Feature Selection Feature Configuration Instance Configuration Server Configuration Feature Cingunation Feature Sengine Configuration Feature Configuration Complete	Service Accounts         Collation           Database Engine:         SQL Latin1-General_CP1_CLAS           Satin1-General_CP1_CLAS         Latin1-General_CP1_CLAS           Latin1-General_CP1_CLAS         Data           Latin1-General_CP1_CLAS         Data           Latin1-General_CP1_CLAS         Data	Customize.	
	C Back Next >	Cancel	

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Step 9: The next step is the Database Engine Configuration. Under Server Configuration tab please select the Authentication Mode as Mixed mode which includes both SQL server authentication and Window authentication and provide the password for Server
Administrator (SA) account. It is recommended to provide a strong password and also save it in some safe place. There should be one SQL server administrators specified, you can add multiple by clicking on Add button.

髕 SQL Server 2017 Setup			_		×
Database Engine Config	juration				
Specify Database Engine authent	tication security mode,	administrators, data directories and TempDB settings.			
License Terms	Server Configuration	Data Directories TempDB User Instances FILESTREA	м		
Global Rules Microsoft Update	Specify the authent	ication mode and administrators for the Database Engine			
Product Updates	Authentication Mod	de			_
Install Setup Files	O Windows authen	tication mode			
Install Rules	Mixed Mode (SC)	L Server authentication and Windows authentication)			
Feature Selection	Specify the parave	rd for the SOL Senior system administrator (sa) account			
Feature Rules	opecity the passwo	To for the SQL Server system administrator (sa) account.			_
Server Configuration	Enter password:				
Database Engine Configuration	Confirm password:	•••••			
Feature Configuration Rules	Specify SQL Server a	administrators			_
Installation Progress	MACHSOL-01\mag	hsol-admin (machsol-admin)	SOL Server adm	ninistrato	
Complete			have unrestrict	ed access	
		1	to the Databas	e Engine.	
	Add Current User	Add Remove			
		< Back	Next >	Cancel	

**Step 10:** After the database configuration settings are configured the installation wizard will itself install feature configuration rules and then the installation will proceed and complete.

1 SQL Server 2017 Setup		- 0	X
Complete Your SQL Server 2017 installat	on completed successfully with product updates	**	
License Terms	Information about the Setup operation or po-	ssible next steps:	
Global Rules Microsoft Update	Feature	Status	^
Product Updates Install Setup Files Install Rules Feature Rules Instance Configuration Peatures Configuration Patalese Engine Configuration Feature Configuration Rules Installation Progress Complete	Database Engine Services     Stat Browser     Cleant Tool Connectivity     Cleant Tools Backwards Compatibility     Sol Client Connectivity.	Succeeded Succeeded Succeeded Succeeded Succeeded Succeeded	~
	Details: Install successful.		
	Summary log file has been saved to the follow C\Pregram Files\Microsoft SQL Server\140\S 01 20190505 090054.btt	ving location: ietup Bootstrap\Log\20190503_090654\Summary_Mac	hsol-
		CK	

## SQL Server Management Studio Installation:

After SQL server Installation we will have to install the SQL server management studio by running the exe file as an Administrator and click on Install.

To install SQL Server Management Studio Setup (18.4), use below link to download installer: <u>https://aka.ms/ssmsfullsetup</u>

	-
RELEASE 17.8.1 Microsoft SQL Server Management Studio	
Welcome. Click "Install" to begin.	
By clicking the "Install" button, I acknowledge that I accept the <u>License Terms</u> and <u>Privacy Statement</u> .	
SQL Server Management Studio transmits 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 processi and privacy controls, and to turn off the collection of this information after installation, see the <u>documentation</u> .	ng
Install Close	

The setup will complete on its own and do not require any input from client.





MachPanel Knowledgebase <u>https://kb.machsol.com/Knowledgebase/53483/Installation-Guide-for-Microsoft...</u>