




OVERVIEW

SQL Server 2017 delivers mission critical OLTP database capabilities and enterprise data warehousing with in-memory technology across workloads. Customers will gain transformative insights from in-database machine learning with Python and R, plus rich interactive reporting on any device for faster decision making. Developers can choose their language and platform while container support seamlessly facilitates DevOps scenarios.

SQL Server 2017 on Linux

SQL Server 2017 supports deployment on RedHat Enterprise Linux (RHEL), Ubuntu, and SUSE Linux Enterprise Server (SLES). The SQL Server 2017 licenses are platform agnostic, so customers can run the software on either Windows or Linux.

Principal	Standard Full featured capabilities for mid-tier applications and data marts 	Enterprise Ideal for applications requiring mission critical in-memory performance, security and high availability 
	Web Highly scalable data platform for public web sites Available through SPLA only 	Parallel Data Warehouse Highest performance data warehouse scenarios through Analytics Platform appliance 
Breadth	Developer Developing and testing FREE	Express Entry level / learning FREE

Notes on other editions

- ▶ A Parallel Data Warehouse appliance is licensed with Enterprise Core licenses
- ▶ Developer edition is functionally equivalent to Enterprise edition licensed for development, test and demonstration purposes only. It may be downloaded free of charge by members of the Dev Essentials program:

<https://www.visualstudio.com/products/visual-studio-dev-essentials-vs>

SQL SERVER 2017 LICENSING MODELS

Core Licensing

Rules for calculating required licenses:

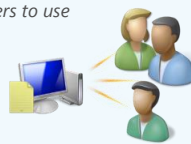
- Count the number of cores in the server
- Buy that number of Core licenses, as long as a minimum of 4 licenses are acquired per processor
- No CALs are required for internal or external users
- Core licenses are acquired in 2-packs



Server/CAL Licensing

Purchase a SQL Server license for each server, and then purchase Client Access Licenses (CALs) for either users or devices:

*A **Device CAL** is assigned to the device and allows multiple users to use that device*



*A **User CAL** is assigned to the user and allows that user to use multiple devices*

Enterprise edition licensed Server/CAL

- ▶ Limited to running in the physical environment on servers with 20 cores or less
- ▶ 4 virtual machines allowed per Server license with a maximum of 20 cores used across the VMs
- ▶ Only available for customers renewing SA on an eligible Server/CAL licensed edition

For both types of CAL, the users or devices are licensed to access ANY SQL Server on the network. The SQL CALs can also be used against any SQL Server regardless of platform or edition.

Note that even if a user accesses SQL indirectly through another server (for example when using a Line of Business application), a CAL is still required. This is often known as multiplexing.

External Users may be licensed with User or Device CALs or via Core licenses.

DOWN-EDITION RIGHTS

Customers licensed for:

	Can choose to deploy:	
	Software Edition	Software Version
SQL Server 2017 Standard	Standard	2017 or earlier
	Workgroup	2008 R2 or earlier
	Small Business	2008 R2 or earlier
SQL Server 2017 Enterprise	Standard	2017 or earlier
	Enterprise	2017 or earlier
	Business Intelligence	2014 or earlier
	Workgroup	2008 R2 or earlier
	Small Business	2008 R2 or earlier
	Datacenter	2008 R2 or earlier

LICENSING SQL COMPONENTS

SQL Server includes services such as Microsoft® SQL Server® Reporting Services and Microsoft® SQL Server® Analysis Services which are key to the Microsoft Business Intelligence solution.

When SQL Server runs with all of its components in one server, only one license is required.

However, if the database is running in one server, Analysis Services on a second, and Reporting Services on a third, then three licenses are required.



LICENSING SQL 2017 FOR VIRTUALIZATION AND CONTAINERS

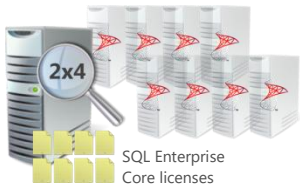
Server/CAL Editions

Assign a SQL Server 2017 Server license to each virtual machine or container running SQL Server 2017



Core Editions

License the virtual processors used by the virtual machines, with a minimum of 4 Core licenses per virtual machine or container



SQL Enterprise Core licenses with SA

SQL 2017 Enterprise Core Virtualization Rights

Licensing all the physical cores gives rights to run SQL Server in one virtual machine or container per Core license

Unlimited Virtualization

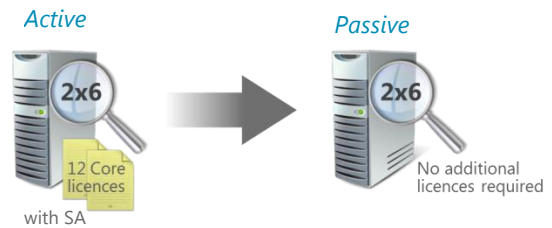
License all the physical cores with Enterprise Edition Core licenses with Software Assurance

PREMIUM ASSURANCE

- Premium Assurance is an Add-on purchase for customers with active Software Assurance that allows them to add six years of product support for SQL Server 2008 and newer versions
- It is available in the Enterprise Agreement, Enterprise Subscription Agreement, Server and Cloud Enrollment, and Enrollment for Education Solutions. Premium Assurance must be purchased for all SQL Server licenses with active SA in these agreements
- Premium Assurance must be purchased for a product before it goes out of Extended Support. For example, to receive support for SQL Server 2008 Premium Assurance must be purchased before June 30, 2019

FAIL-OVER LICENSING

Each active server licensed with SA coverage allows the installation of a single passive server used for fail-over support, as long as the passive server has the same or fewer cores than the active server.



If organizations have used SQL Server 2017 licenses with SA to license workloads in the cloud, then they may fail-over to another instance in the cloud. On-premises workloads may not fail-over to the cloud using this benefit.



LICENSE MOBILITY

All SQL Server 2017 licenses purchased with Software Assurance have License Mobility rights.

- **License Mobility across Server Farms** allows licenses to be moved between servers within a server farm as often as required, supporting a virtualized environment where virtual machines frequently move between physical servers
- **License Mobility through Software Assurance** allows an organization to license SQL Server 2017 in virtual machines on third party shared servers or Azure. Licenses are assigned to these virtual machines following the usual virtualization licensing rules (see left)

ADDITIONAL SQL 2017 SA BENEFITS

Step-up Licenses

- Step-up licenses may be purchased for Standard Core licenses with SA to move to Enterprise Core licenses

Power BI Report Server

- Enterprise Core licenses with SA include the rights to run Power BI Report Server on a licensed server to generate data visualizations

Machine Learning Server for Hadoop

- Each Enterprise Core license with SA allows the running of Machine Learning Server for Hadoop on up to five servers for advanced analytics

Further Microsoft Licensing handouts and exams: GetLicensingReady.com