Licensing Microsoft SQL Server 2016

Volume Licensing

OVERVIEW

SQL Server 2016 is a secure, scalable database platform that has everything built in, from advanced analytics to unparalleled in-memory performance.

The principal editions of SQL Server 2016 are:
▶ Enterprise Edition
▶ Standard Edition

Notes on other editions

- A Parallel Data Warehouse appliance is licensed with Enterprise Core licenses
- Developer edition is functionally equivalent to Enterprise edition and may be downloaded free of charge by members of the Dev Essentials program: https://www.visualstudio.com/products/visual-studio-dev-essentials-vs

Principal

Standard
Basic database, reporting and analytics capabilities

OR

Enterprise
Mission critical applications. enterprise-scale data warehousing, mobile BI, advanced analytics

Specialized

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

SQL SERVER 2016 LICENSING MODELS

▶ Enterprise Edition:
Core licensing only

▶ Standard Edition:
Core or Server/CAL licensing

OR

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

Core Licensing

Standard and Enterprise Editions are available through the Core licensing model. 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
- Core licenses are sold in multiples of 2
- No CALs are required for internal or external users

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*

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.

Microsoft

DOWN-EDITION RIGHTS

Customers licensed for:	Can choose to deploy:	
	Software Edition	**Software Version**
SQL Server 2016 Standard	Standard	2016 or earlier
	Workgroup	2008 R2 or earlier
	Small Business	2008 R2 or earlier
SQL Server 2016 Enterprise	Standard	2016 or earlier
	Enterprise	2016 or earlier
	Business Intelligence	2014 or earlier
	Workgroup	2008 R2 or earlier
	Small Business	2008 R2 or earlier
	Datacenter	2008 R2 or earlier

SOFTWARE ASSURANCE UPGRADE RIGHTS

Existing Licenses with SA on June 1, 2016	Upgrade Rights
SQL Server 2014 Standard Core	SQL Server 2016 Standard Core
SQL Server 2014 Enterprise Core	SQL Server 2016 Enterprise Core
SQL Server 2014 Standard Server	SQL Server 2016 Standard Server
SQL Server 2014 Business Intelligence Server	SQL Server 2016 Enterprise Server
SQL Server 2014 Enterprise Server	SQL Server 2016 Enterprise Server

STEP-UPS

▸ SA benefit: Lower edition license must be covered with SA

▸ Available Step-ups: Standard Core to Enterprise Core

▸ Cannot step-up between licensing models
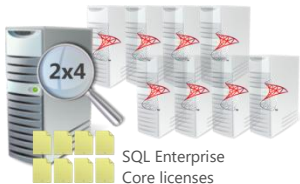
LICENSING SQL 2016 IN VIRTUAL ENVIRONMENTS

▸ **Server/CAL Editions**
Assign a SQL Server 2016 Server license to each virtual machine running SQL Server 2016

▸ **Core Editions**
License the virtual processors used by the virtual machines, with a minimum of 4 Core licenses per virtual machine

SQL Enterprise Core licenses

SQL Enterprise Core licenses with SA

1x4
SQL Standard Server licenses

2x4
SQL Standard or Enterprise Core licenses

▸ **SQL 2016 Enterprise Core Virtualization Rights**
Licensing all the physical cores gives rights to a virtual machine 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.

Active
2x6
12 Core licences
with SA

Passive
2x6
No additional licences required

If organizations have used SQL Server 2016 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.

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.

LICENSE MOBILITY

All SQL Server 2016 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 2016 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)

Further Microsoft Licensing handouts and exams: GetLicensingReady.com

■■ Microsoft