# Licensing Microsoft SQL Server 2017

## Volume Licensing

#### **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.



#### Notes on other editions

- ► A Parallel Data Warehouse appliance is licensed with Enterprise Core licenses
- ➤ SQL Server 2017 Developer is a full-featured free edition, licensed for use as a development and test database in a non-production environment. Developers may download it here: <a href="https://www.microsoft.com/en-us/sql-server/sql-server-downloads">https://www.microsoft.com/en-us/sql-server-downloads</a>

#### SOL 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





#### 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:

SQL Server 2017 Standard

**SQL Server 2017 Enterprise** 

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

2008 R2 or earlier

2008 R2 or earlier

#### 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.

Small Business Datacenter



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.

#### 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



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





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

#### 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.







## AZURE HYBRID BENEFIT FOR SQL SERVER

Customers with active Software Assurance on SQL Server 2017 Standard or Enterprise Core licenses are eligible to allocate licenses to Azure to pay reduced rates for Azure SQL Database and Azure SQL Server Integration Services, in the ratios shown in the table below:

	Standard	Enterprise
Azure SQL Database – General Purpose	1 Core license = 1 vCore	1 Core license = 4 vCores
Azure SQL Server Integration Services	1 Core license = 1 vCore	1 Core license =1 vCore

#### 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: <u>GetLicensingReady.com</u>

