

Licensing Microsoft SQL Server 2014

Volume Licensing

OVERVIEW

SQL Server 2014 delivers mission critical performance across all workloads with in-memory built-in, faster insights from any data with familiar tools, and a platform for hybrid cloud enabling organizations to easily build, deploy, and manage solutions that span on-premises and cloud.

The principal editions of SQL Server 2014 are:

- ▶ Enterprise Edition
- ▶ Business Intelligence (BI) Edition
- ▶ Standard Edition

Enterprise Edition includes all product features available in SQL Server 2014, and the Business Intelligence (BI) Edition includes premium BI features in addition to Standard Edition database features.

Principal	Microsoft SQL Server 2014 Standard Basic database, reporting and analytics capabilities	Microsoft SQL Server 2014 Business Intelligence Premium corporate and self-service BI	Microsoft SQL Server 2014 Enterprise Mission critical applications and large scale data warehousing
	Microsoft SQL Server 2014 Web Highly scalable data platform for public web sites	Available through SPLA only	Appliances
	Microsoft SQL Server 2014 Developer Developing and testing	Microsoft SQL Server 2014 Express Entry level / learning	FREE*

*Free with MSDN subscription or \$50

SQL SERVER 2014 LICENSING MODELS

- ▶ Enterprise Edition: *Core licensing only*
- ▶ Business Intelligence (BI) Edition: *Server/CAL licensing*
- ▶ Standard Edition: *Core or Server/CAL licensing*

Core Licensing Examples

1. An Intel server with 4 x 8 core processors requires **32** Core licenses:

$$(8 \times 4) \times \text{Core Factor of } 1 = 32$$

2. An Intel server with 2 x 2 core processors requires **8** Core licenses:

$$(2 \times 2) \times \text{Core Factor of } 2 = 8$$

3. An AMD server with 2 x 6 core processors requires **9** Core licenses:

$$(2 \times 6) \times \text{Core Factor of } 0.75 = 9$$

4. An AMD server with 1 x 6 core processor requires **5** Core licenses:

$$(1 \times 6) \times \text{Core Factor of } 0.75 = 4.5 \rightarrow 5$$

Core Licensing

Standard and Enterprise Editions are available through the Core licensing model. Rules for calculating required licenses:

1. Count the number of cores in the server
2. Multiply by the Core Factor:

Processor type	Core Factor
All processors not listed below	1
AMD 31XX, 32XX, 33XX, 41XX, 42XX, 43XX, 61XX, 62XX, 63XX Series Processors with 6 or more cores	0.75
Single Core Processors	4
Dual Core Processors	2

Note: Core licenses are sold in multiples of 2. No CALs are required.

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.

DOWN-EDITION RIGHTS

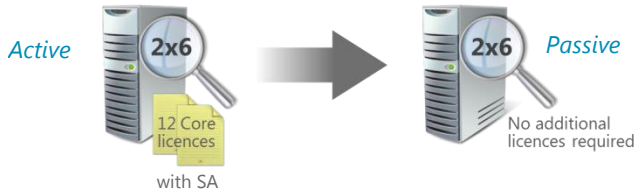
Customers licensed for:	Can choose to deploy:	
	Software Edition	Software Version
SQL Server 2014 Standard Server	Standard Workgroup Small Business	2014 or earlier 2008 R2 or earlier 2008 R2 or earlier
SQL Server 2014 Standard Core	Standard Workgroup Small Business	2014 or earlier 2008 R2 or earlier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

STEP-UPS

- ▶ SA benefit
 - Lower edition license must be covered with SA
- ▶ Available Step-ups
 - Standard Server to BI Server
 - Standard Cores to Enterprise Cores
- ▶ Cannot step-up between licensing models

FAILOVER LICENSING

Beginning with SQL Server 2014, 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.



Licensing active and passive secondary SQL Server 2014 databases with a Core Factor of 1

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 a 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 2014 IN VIRTUAL ENVIRONMENTS

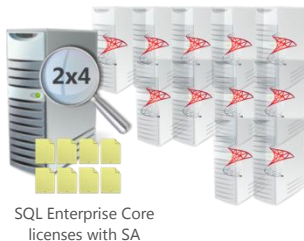
▶ Server/CAL Editions

Assign a SQL Server 2014 Server license to each virtual machine running SQL Server 2014



▶ Core Editions

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



▶ SQL 2014 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

BUSINESS INTELLIGENCE SERVER ACCESS

Similar to other SQL Server products offered under the Server + CAL licensing model, Business Intelligence (BI) Edition generally requires a SQL Server CAL for each user or device accessing the server software. New with SQL Server 2014, use terms for BI Edition server software now allow batch processing of data without requiring CALs for those data sources supplying the data.



'Batch Processing' is defined as an activity that allows a group of tasks occurring at different times to be processed together at the same time.

LICENSE MOBILITY

All SQL Server 2014 licenses purchased with Software Assurance receive two License Mobility rights.

- **License Mobility within 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 2014 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