



Licensing Quick Reference Guide

Version 1.1
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Introduction

Overview

This Quick Reference Guide is for people who need to understand the basics of how Microsoft® SQL Server® 2008 R2 is licensed and sold. This guide does not supersede or replace any of the legal documentation covering SQL Server use rights. Specific product license terms are defined in the product's Software License Terms (in the case of Microsoft Volume Licensing, the Microsoft Volume Licensing agreement under which it was acquired, and/or the Microsoft Volume Licensing Product Use Rights [PUR]). It is not a legal use rights document. Program specifications and business rules are subject to change.

What's New in this Version

Initially published April 28, 2010, this guide is intended to be used as a supplement to the more detailed SQL Server Licensing Guide (last published June 17, 2009) and summarizes the key product and licensing changes introduced with the general availability of SQL Server 2008 R2.

This updated version includes licensing details for the new SQL Server 2008 R2 Parallel Data Warehouse edition, including frequently asked questions and a new resources section for more detailed SQL Server licensing information.

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What is Sold and Who Sells It

New SQL Server 2008 R2 Parallel Data Warehouse Edition

The new SQL Server 2008 R2 Parallel Data Warehouse is a highly scalable data warehouse appliance that delivers performance at low cost through massively parallel processing (MPP).

SQL Server Parallel Data Warehouse appliances are pre-tuned and pre-configured to enable distributed query processing for the highest levels of performance, and are being offered under the new Microsoft Critical Advantage Program (MCAP) to provide appliance customers with an end-to-end suite of pre-tested hardware and software configurations, services and support.

The table below provides a summary of the editions of SQL Server 2008 R2 and the sales channels through which they are available.

Edition	Channel								Independent Hardware Vendor (IHV) Partners
	Enterprise Agreement (EA)	Enrollment for Application Platform (EAP)	Select License/ Select Plus	Open Programs	Retail Full Packaged Product (FPP)	OEM	Services Provider License Agreement (SPLA)	ISV Royalty (ISVR)	
SQL Server Parallel Data Warehouse (New premium edition for appliances only)	•	•	•						*
SQL Server 2008 R2 Datacenter (Premium edition)	•	•	•	•	•		•	•	
SQL Server 2008 R2 Enterprise (Now available for appliances)	•	•	•	•	•		•	•	*
SQL Server 2008 R2 Standard	•	•	•	•	•	•	•	•	
SQL Server 2008 R2 Workgroup	•		•	•	•	•	•	•	
SQL Server 2008 R2 Web	•		•	•			•		
SQL Server 2008 R2 Developer			•	•	•				
SQL Server Parallel Data Warehouse for Developers			•						*

* The new Parallel Data Warehouse and other specialized SQL Server appliance offerings are available through partnerships with independent hardware vendor (IHV) partners.

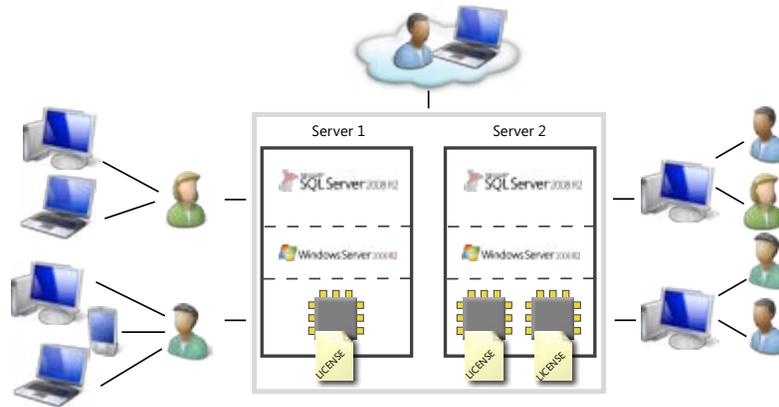
For more information, visit <http://www.microsoft.com/sqlserver/en/us/editions.aspx>.

How it is Sold: Licensing Models for SQL Server 2008 R2

SQL Server 2008 R2 editions are licensed through Microsoft Volume Licensing using either the Per Processor software licensing model or the Server/Client Access License (CAL) software licensing model. With the exception of SQL Server 2008 R2 Datacenter, Web, and Parallel Data Warehouse editions (which are only licensed using the Per Processor model), you may choose which model to use based on which one best fits your specific scenario. SQL Server 2008 R2 Developer and Parallel Data Warehouse for Developers are restricted to development and test use and are licensed on a Per User basis.

Per Processor Licensing

Microsoft offers a Per Processor licensing model to help alleviate complexity. When licensing SQL Server software under the Per Processor model, you do not need to purchase additional CALs; it includes access for an unlimited number of users or devices to connect from either inside or outside the firewall. Per Processor Licenses for SQL Server 2008 R2 are available for Datacenter, Enterprise, Standard, Workgroup, Web, and Parallel Data Warehouse editions.



Notes:

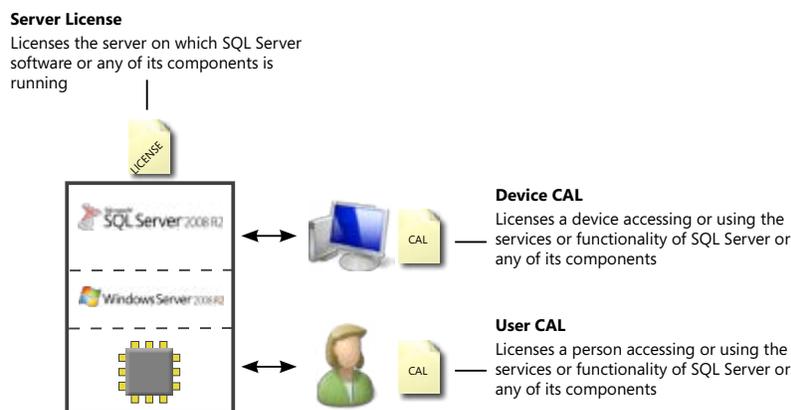
- A Per Processor License is required for each processor installed on each operating system environment (OSE) running SQL Server or any of its components (for example, Analysis Services).
- For SQL Server running in physical operating system environments (POSEs), you must license all physical processors.
- Per Processor License costs are the same regardless of number of cores in the processor.

The Per Processor model is appropriate when:

- You cannot or do not want to count users/devices
- The number of users/devices is high enough that the Per Processor model is more cost-effective than the Server/CAL model
- SQL Server is being used for external-facing Web sites or applications

Server/CAL Licensing

When licensing SQL Server software under the Server/CAL model, you purchase a Server License for the server and a Client Access License (CAL) for each device (Device CAL) and/or user (User CAL) accessing or using the services or functionality of SQL Server or any of its components (e.g. Reporting Services). A CAL is not software; it is a legal document granting access.



Notes:

- SQL Server 2008 R2 CALs (or SQL Server 2008 CALs with SA) are required.

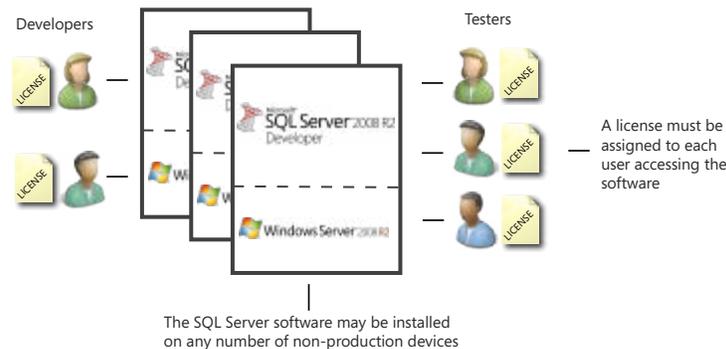
- A given user or device only needs one SQL Server CAL to access any number of SQL Server instances in the organization.
- SQL Server CALs can also be used against any SQL Server regardless of the platform (32 bit, 64 bit, and IA64) or edition (Workgroups, Standard, and Enterprise).
- Use of hardware and/or software that reduces the number of devices or users that directly access or use the software (multiplexing/pooling) does not reduce the number of CALs required.
- Separate partitions or blades are considered to be separate servers for licensing purposes.

The Server/CAL model is appropriate when:

- You can count your users/devices
- The number of users/devices is low enough that the cost is lower than using the Per Processor model
- You plan to scale out your use of SQL Server by adding new servers over time. (Once you have purchased the necessary CALs, you only need additional Server Licenses for new servers.)
- Users are accessing many SQL Server databases

Developer Tools (Per User) Licensing

SQL Server 2008 R2 Developer and Parallel Data Warehouse for Developers editions are licensed using the Developer Tools model, which is a “per user” model. One license is required for each person that accesses or uses the software. As long as only licensed users have access to the software, you can install as many copies of the software on as many devices as you like. This is significant, because it allows the developers and testers to run the software on multiple devices (such as for testing purposes) without having to license each device.



Notes:

- Before you use the software under a license, you must assign that license to one user. That user is the “licensed user” for that particular license. You may assign other licenses to other users.
- You may install the software and permit your licensed users to use copies to design, develop, test and demonstrate your programs. You may not use the software in a production environment.
- For SQL Server 2008 R2 Developer, in addition to the licensed user, any person that has access to your internal network may install and use copies of the software to demonstrate use of your programs with the software.
- You may reassign a license, but not on a short-term basis (i.e., not within 90 days of the last assignment). If you reassign a license, the user to which you reassign the license becomes the new licensed user for that license.

Licensing SQL Server 2008 R2 for Appliances

SQL Server Parallel Data Warehouse

Parallel Data Warehouse appliances are being sold through preferred hardware partners, who will pre-install and configure

the software prior to delivery. Each SQL Server Parallel Data Warehouse (PDW) appliance consists of a control rack, plus a minimum of one data rack. Additional data racks can be added for a maximum configuration of up to 40 total compute nodes per appliance.

Each control rack includes a control node with two (2) CPUs, with each CPU requiring a SQL Server 2008 R2 Parallel Data Warehouse Per Processor License. Data rack compute nodes also include two (2) CPUs per node and like control nodes, each compute node in the configuration will similarly require two (2) SQL Server 2008 R2 Parallel Data Warehouse Per Processor Licenses.

OEM software licenses for Windows Server 2008 are included with the appliance hardware, but customers must acquire licenses through a Microsoft Volume Licensing program for the SQL Server 2008 R2 Parallel Data Warehouse and required Windows HPC Server Pack 2008 R2 Enterprise software components.

Notes:

- SQL Server 2008 R2 Parallel Data Warehouse is licensed under the Per Processor model only.
- Each data rack contains 8-10 compute nodes, depending on IHV, and all compute nodes in the appliance must be licensed.
- All Parallel Data Warehouse licenses must be covered by Software Assurance.
- Parallel Data Warehouse appliances used for development, test and/or demonstration purposes only can be licensed under the Per User model with the SQL Server 2008 R2 Parallel Data Warehouse for Developers edition.

i For more information on licensing SQL Server Parallel Data Warehouse appliances, visit <http://www.microsoft.com/sqlserver/en/us/editions/data-warehouse.aspx>

Other SQL Server Editions

In addition to the new Parallel Data Warehouse edition — which is only available as an appliance-based offering — Microsoft is also partnering with leading hardware vendors to offer additional appliance-based solutions optimized for other editions, such as SQL Server 2008 R2 Enterprise.

As with Parallel Data Warehouse appliances above, all Microsoft software will be pre-installed and configured prior to customer delivery. OEM software licenses for Windows Server 2008 are included with the appliance hardware, but the SQL Server 2008 R2 software components, as well as any additional Microsoft software products needed to support the appliance solution, will need to be licensed separately.

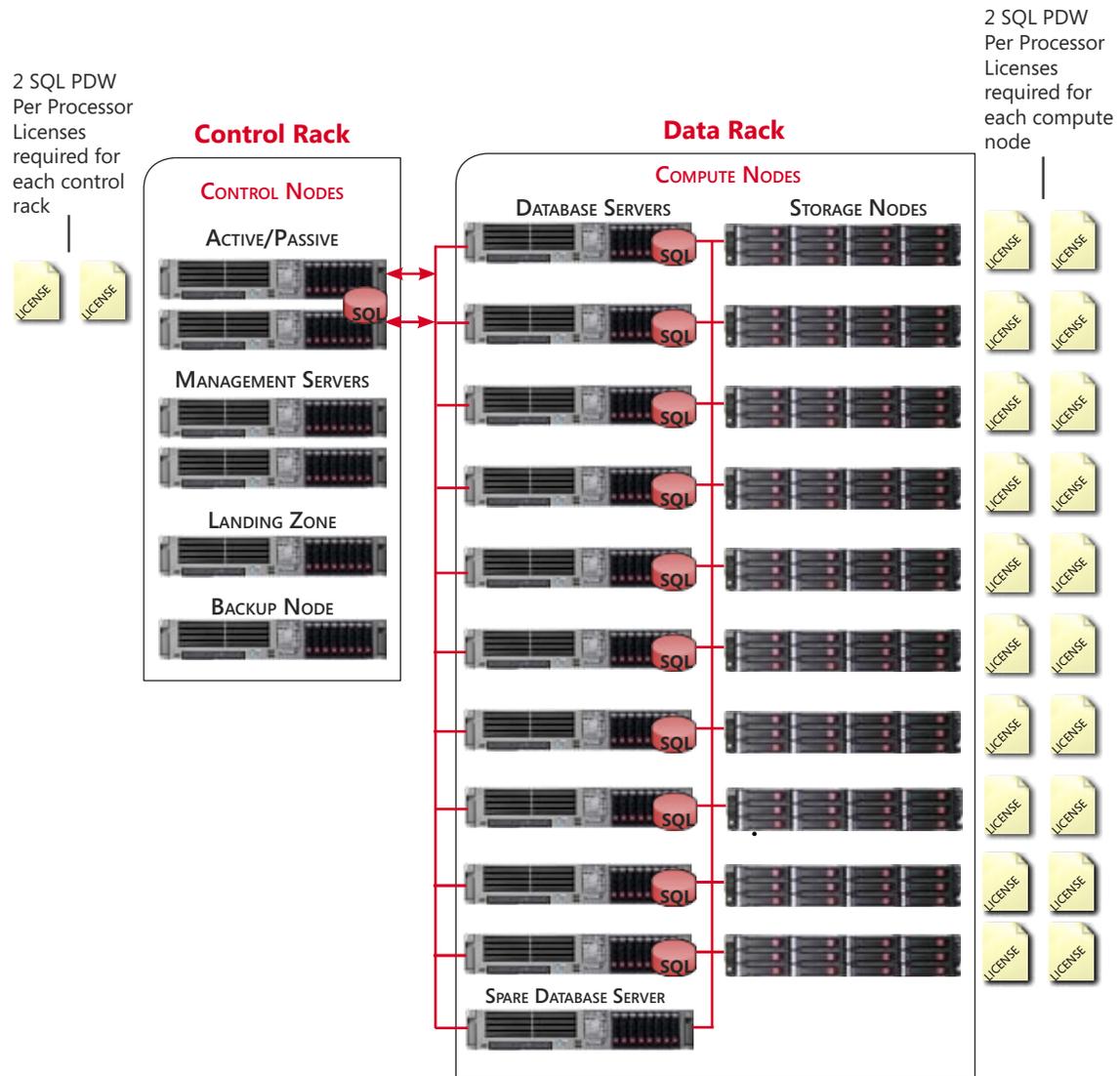
Notes:

- When licensed for use on special-purpose appliance systems, SQL Server software can be licensed under the Server/CAL or Per Processor licensing models, as applicable for each SQL Server edition.
- Standard SQL Server 2008 R2 product use terms for the specific edition deployed will generally apply, including the ability to reassign existing SQL Server licenses for use with appliance systems.

i For more information on the complete portfolio of available appliance offerings for SQL Server, visit <http://www.microsoft.com/sqlserver/en/us/solutions-technologies/appliances.aspx>

PDW APPLIANCE CONTROL RACK + 10-NODE DATA RACK

This example shows the minimum configuration for a 10-node data rack and the SQL Server 2008 R2 Parallel Data Warehouse licenses required.



This configuration would require 22 SQL Server 2008 R2 Parallel Data Warehouse Per Processor Licenses.

Licensing SQL Server 2008 R2 for Virtualization Scenarios

Licensing for Virtualization Under the Per Processor Model

The number of operating system environments (OSEs) in which you may run instances of SQL Server 2008 R2 under the Per Processor model depends upon the edition you license and whether or not you license all of the physical processors with a Per Processor License.

Licensing All Physical Processors

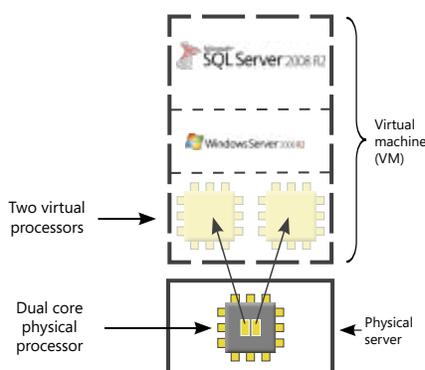
If you license all of the physical processors on the server (one license per physical processor), you may run unlimited instances of the SQL Server software in the following number of OSEs (either physical or virtual):

Edition	# of OSEs in Which You May Run SQL Server
SQL Server 2008 R2 Datacenter	Unlimited
SQL Server 2008 R2 Enterprise	Up to 4 per license

In the case of SQL Server 2008 R2 Standard, SQL Server 2008 R2 Workgroup, and SQL Server 2008 R2 Web, if you license all of the physical processors you may run the software in the physical OSE only. In order to run the software in virtual OSEs, you will need to license each virtual processor individually as described below.

Licensing a Portion of the Physical Processors

If you choose not to license all of the physical processors, you will need to know the number of virtual processors supporting each virtual OSE (data point A) and the number of cores per physical processor/socket (data point B). Typically, each virtual processor is the equivalent of one core:



With those numbers, you can refer to the table or formula below to determine how many Per Processor Licenses you need for each virtual OSE.

		# of Cores per Physical Processor/Socket				
		1	2	4	6	8
# of Virtual Processors supporting the virtual OSE	4	4	2	1	1	1
	3	3	2	1	1	1
	2	2	1	1	1	1
	1	1	1	1	1	1
		# of Per Processor Licenses Required for the virtual OSE				

Note: Use this table only as a reference for basic virtualization scenarios.

Note: For any virtual OSE, you can calculate the number of Per Processor Licenses required for the SQL Server edition that you are licensing by dividing data point A (number of virtual processors supporting the virtual OSE) by data point B (# of cores [if hyperthreading is turned off] or threads [if hyperthreading is turned on] per physical processor). If the result is not a whole number, round up to the next whole number.

$$\begin{array}{c} \text{A} \\ \square \end{array} \div \begin{array}{c} \text{B} \\ \square \end{array} = \begin{array}{c} \square \\ \leftarrow \text{\# of Per Processor Licenses required} \end{array}$$

Round fractions up to the next whole number

of virtual processors supporting the virtual OSE

of cores (hyperthreading off) or threads (if hyperthreading on) per physical processor

Licensing Virtual Machines Under the Server/CAL Model

Standard and Workgroup Editions

Each Server License for SQL Server 2008 R2 Standard or Workgroup permits you to run the software in one (1) OSE (physical or virtual). Additional OSEs require one (1) Server License each.

Enterprise Edition

Each Server License for SQL Server 2008 R2 Enterprise permits you to run the software in up to four (4) OSEs (physical and/or virtual).

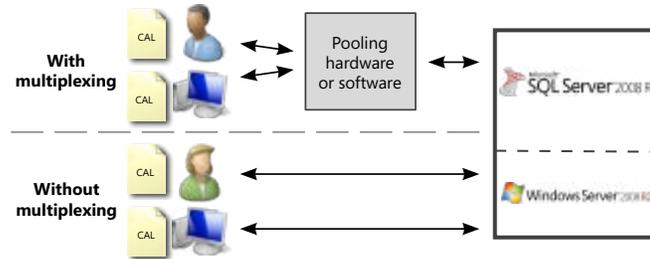
CAL Requirements

SQL Server 2008 R2 CALs are required for any user or device accessing the SQL Server functionality or data, regardless of whether SQL Server or any of its components are running in the physical or virtual OSE.

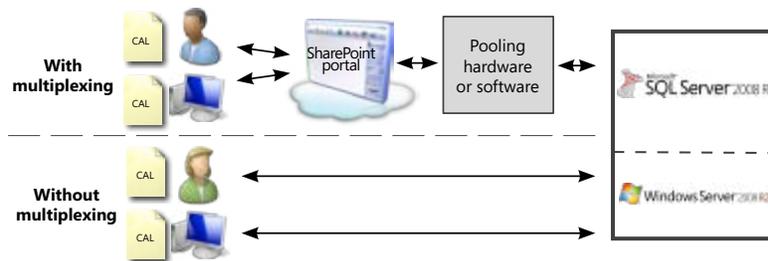
i For more information on licensing SQL Server for virtual environments, visit <http://www.microsoft.com/licensing/about-licensing/virtualization.aspx>

Multiplexing

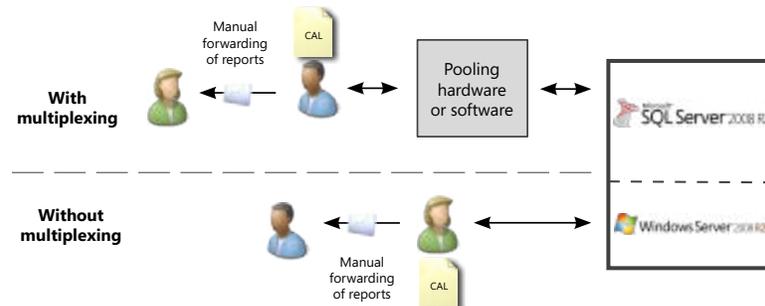
A SQL Server CAL and Windows Server CAL are required for each distinct device or user that is connected to the multiplexing or pooling software or hardware front end:



The number of tiers of hardware or software between the SQL Server and the user or devices that ultimately use its data, services, or functionality does not affect the number of CALs required:



Manual transfer of data from employee to employee does not require a CAL for the receiving employee. For example, if an employee sends a Microsoft Office Excel® version of a report to another employee, the receiving employee does not require a CAL (as long as the report does not access a server running SQL Server in some way):



i For more information on how multiplexing affects the licensing of SQL Server licensed under the server/CAL model, download the Volume Licensing Brief at <http://download.microsoft.com/download/8/7/3/8733d036-92b0-4cb8-8912-3b6ab966b8b2/multiplexing.doc>

Reassigning Licenses and Moving Running Instances

You may move running instances of SQL Server 2008 R2 Enterprise or Datacenter as needed across servers within a server farm, including appliance devices where applicable. (There is no 90 day minimum period before reassignment.)

Server Farm Definition

A server farm may consist of up to two data centers located:

- In time zones that are within four hours of one another, and/or
- Within the European Union (EU) and/or European Free Trade Association (EFTA)

Note: A given data center may only be part of one server farm.

Moving Running Instances of SQL Server 2008 R2 Enterprise Under Server/CAL Model

You may move licensed instances as needed across the server farm as long as the number of servers on which you are running instances of the software does not exceed the number of licenses assigned to the server farm.

Moving Running Instances Under Per Processor Model

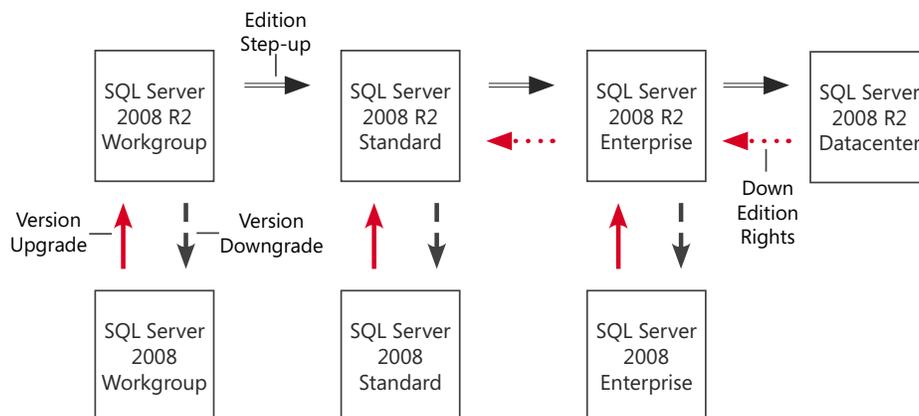
- **SQL Server 2008 R2 Datacenter:** You may run unlimited instances of the software in an unlimited number of OSEs within the server farm, and move those instances as needed, as long as the number of physical processors supporting or used by the OSEs in which the software is running at any one time does not exceed the number of licenses assigned to the server farm.
- **SQL Server 2008 R2 Enterprise:** You may run unlimited instances of the software in up to four (4) OSEs per license within the server farm, and move those instances freely, as long as the number of physical processors supporting or used by the OSEs in which the software is running at any one time does not exceed the number of licenses assigned to the server farm.

i For more information on SQL Server license mobility, download the Volume Licensing Brief at http://download.microsoft.com/download/6/9/5/695BA00D-C790-4C90-813A-F10539D97991/Application_Server_License_Mobility_VL_Brief_Nov_2008.docx

Upgrades, Downgrades, and Step-ups

	What it Means	How to Get It
Version Upgrade	Move from previous version (e.g. SQL Server 2008) to current version (e.g. SQL Server 2008 R2)	If your existing SQL Server License is covered by Software Assurance (SA), you are automatically licensed to upgrade to the corresponding SQL Server 2008 R2 edition. If your existing SQL Server License is not covered by SA, you must purchase a new full license for the SQL Server 2008 R2 edition you want.
Version Downgrade*	Deploy SQL Server 2008, 2005, or 2000 in place of currently-licensed version (per terms of Retail Software License Terms/PUR)	Downgrade Rights granted for: All licenses acquired through Microsoft Volume Licensing OEM and FPP (retail) versions of SQL Server Enterprise, Standard, and Workgroup
Down Edition Rights* (New with SQL Server 2008 R2)	Deploy lower edition in place of currently-licensed edition (per terms of Retail Software License Terms/PUR)	If you are licensed for Datacenter edition, you may deploy Enterprise or Standard edition in its place. If you are licensed for Enterprise edition, you may deploy Standard edition in its place.
Edition Step-Up	Move from lower edition (e.g. Standard) to higher edition (e.g. Enterprise)	Lower edition must be covered by Software Assurance (SA) You acquire the SA Step-Up SKU offered through certain Volume Licensing programs Step-ups available from Workgroup to Standard, Standard to Enterprise, and Enterprise to Datacenter

*When utilizing version downgrade or down edition rights, the product use rights for the originally licensed version and edition still apply. Downgrade and/or down edition rights may not apply when licensing SQL Server for appliances.



Licensing SQL Server Components

Any server running a component of SQL Server (such as DLTP, Analysis Services, Reporting Services, or Integration Services) must be licensed for SQL Server.



Processor, Virtualization, and Memory Support Limits

Depending upon the edition of SQL Server, certain limits may apply to how the product may be deployed. Below is an overview of the primary limits.

PROCESSOR, MEMORY, AND DATABASE SIZE LIMITS BY SQL SERVER 2008 R2 EDITION

	Datacenter	Enterprise	Standard	Web	Workgroup	Express
# of Processors ¹	OS Maximum	8	4	4	2	1
Maximum Memory Utilized	OS Maximum	2 TB	64 GB	64 GB	4 GB	1 GB
Maximum DB Size	524 PB	524 PB	524 PB	524 PB	524 PB	10 GB
Maximum OSEs Supported	Unlimited	4	1	1	1	1

Notes:

- With the introduction of SQL Server 2008 R2, the processor, virtualization and memory limits for the SQL Server Standard and Enterprise editions have been recalibrated from the previous 2008 version offerings.
- The following is considered a single processor for purposes of this table:
 - A single-core, hyper-threaded processor with two logical CPUs per socket
 - A dual-core processor with two logical CPUs
 - A quad-core processor with four logical CPUs

i For a detailed comparison of the key capability differences between SQL Server editions, visit <http://www.microsoft.com/sqlserver/en/us/product-info/compare.aspx>

License Grant for Customers with SQL Server Enterprise Licenses with Software Assurance

If you have active Software Assurance coverage for SQL Server Enterprise, Microsoft is granting you the following additional use rights until the release of the SQL Server version that follows SQL Server 2008 R2:

If licensed under Server/CAL model for SQL Server Enterprise with Software Assurance	If licensed for all physical processors under Per Processor model for SQL Server Enterprise with Software Assurance
You may run any number of instances of the SQL Server 2008 R2 Enterprise software in one physical OSE and any number of virtual OSEs on the licensed server	You may run any number of instances of the SQL Server 2008 R2 Enterprise software in one physical OSE and any number of virtual OSEs on the licensed server

Note: Details on product use rights and migration paths for the release of the SQL Server version that follows SQL Server 2008 R2 will be made available closer to the release date of that version.

Additional Resources

For more information about licensing SQL Server 2008 R2, including what is new with version 2008 R2, please visit these websites:

- For detailed SQL Server product licensing information including new version features, edition comparisons, benchmarks, competitive comparisons and more, visit: <http://www.microsoft.com/sqlserver/en/us/default.aspx>
- For SQL Server Product Use Rights and other information on general Volume Licensing topics, visit: <http://www.microsoft.com/licensing/about-licensing/product-licensing.aspx>
- For a list of dependent licenses required for SQL Server under the terms of Volume Licensing programs, download the Software Dependency Guide at: http://download.microsoft.com/download/1/5/C/15CCF7C4-403D-4893-988B-58FD7B8BC87D/Software_Dependency_Guide.docx
- Volume Licensing Briefs provide in-depth knowledge of key licensing topics, including Application Server License Mobility, Product Downgrade Rights, Step-Up Licensing, Multiplexing and more. To view the complete list of available licensing briefs, visit: <http://www.microsoft.com/licensing/about-licensing/volume-licensing-briefs.aspx>
- To download a current copy of this SQL Server 2008 R2 Licensing Quick Reference Guide and get more information on how to acquire SQL Server software licenses, visit: <http://www.microsoft.com/sqlserver/en/us/get-sql-server/how-to-buy.aspx>

Frequently Asked Questions

If I have licensed SQL Server under the Server/CAL model, will I be able to use the SQL Server 2008 CAL with the SQL Server 2008 R2 Server?

Since SQL Server 2008 R2 is a major release, SQL Server 2008 CAL cannot access SQL Server 2008 R2 servers (unless the CAL is covered by Software Assurance).

Why is SQL Server 2008 R2 Datacenter only licensed using the Per Processor model?

SQL Server 2008 R2 Datacenter is a premium edition providing the highest level of scalable solutions for Tier 1 deployments. Tier 1 deployments are hardware-intensive workloads and generally run on large servers in the data center. The predominant licensing model in the industry for these deployments is Per Processor.

If I have SQL Server 2008 with Software Assurance, at what point do my product use rights change to align with SQL Server 2008 R2?

Under current terms, use of SQL Server 2008 remains subject to the Microsoft Volume Licensing Product Use Rights (PUR) that were in effect at the time SQL Server 2008 licenses were obtained. Resetting of use rights commitments will vary by program and/or agreement version so please refer to the PUR and your current program agreements for specific details.

What is the scenario for grandfathering unlimited virtualization rights for SQL Server 2008 Enterprise?

SQL Server 2008 Enterprise licenses with Software Assurance acquired prior to the release of SQL Server 2008 R2 will be granted the right to run in unlimited VMs. This right remains in effect as long as Software Assurance coverage remains active and until the SQL Server version that follows SQL Server 2008 R2 is generally available. If you acquire new licenses (on a new or existing contract), you will also be granted similar rights to run unlimited VMs if you acquire Software Assurance.

I acquired SQL Server 2008 R2 Enterprise License with Software Assurance and want to create unlimited VMs using SQL Server 2008 R2 Standard. Can I do this?

Yes. The new down edition rights announced with SQL Server 2008 R2 allow you to deploy the Standard edition in place of Enterprise edition, and as long as you remain active on your Enterprise Software Assurance, the right to run in unlimited VMs will continue until the next version of SQL Server after SQL Server 2008 R2 is generally available.

I acquired two Datacenter licenses and installed those on a server with four processors. Can I create unlimited VMs?

You need to license all physical processors in order to run instances of SQL Server 2008 R2 Datacenter in an unlimited number of virtual OSEs. In this case, you will need four Datacenter licenses.

What are the licensing requirements for PowerPivot?

PowerPivot for Microsoft Excel® 2010 is available for download as a free data-analysis add-in. To enable sharing and collaboration on PowerPivot for Excel applications and models with Microsoft SharePoint® 2010, you must install SQL Server 2008 R2 as part of a SharePoint farm. The server component in this scenario is PowerPivot for SharePoint and is available as a SharePoint Enterprise edition feature that requires both SharePoint Standard and SharePoint Enterprise CALs, in addition to a SharePoint 2010 server license.

Support for the PowerPivot IT operation dashboard is a premium feature offered with the SQL Server 2008 R2 Enterprise and Data Center editions only and the standard SQL Server licensing terms and policies apply.

Can I have a standalone PowerPivot for Excel installation without SQL Server 2008 R2?

Yes. The PowerPivot client component is a standalone Excel 2010 add-in that can query any data source, including SQL Server.

What is SQL Server 2008 R2 Parallel Data Warehouse?

The SQL Server 2008 R2 Parallel Data Warehouse is a highly scalable data warehouse appliance that delivers performance at low cost through massively parallel processing (MPP). SQL Server 2008 R2 Parallel Data Warehouse is the integration of DATAlegro's MPP Data Warehouse software and methodology with the SQL Server platform and provides scalability to 100s of terabytes of data at low cost.

What is the Microsoft Critical Advantage Program (MCAP)?

Microsoft's Critical Advantage Program combines industry-leading technologies with enterprise class service and support to deliver an elastic, failure resistant, scalable and secure platform for mission critical applications. The key components of this program include appliances to support tier 1 workloads, such as the Microsoft SQL Server 2008 R2 Parallel Data Warehouse, along with enhanced services and support offerings.

What is an appliance?

A server appliance is a computer system consisting of hardware and software, which is pre-configured and pre-tested by the manufacturer to perform a specified workload and delivered to the customer as a single unit. Server appliances are designed to be easy to operate, be useable in minutes, and provide strong reliability and security for the workloads they run (e.g., data warehouse, business intelligence, email, transaction processing).

How is SQL Server licensed for appliances?

SQL Server licensing requirements will depend on the licensing model deployed, the actual hardware architecture of the appliance (the number of CPUs for example) and/or the specific workload for which the appliance is optimized, such as data warehousing appliances optimized for the SQL Server 2008 R2 Parallel Data Warehouse edition, or self-service business intelligence appliances that are optimized for PowerPivot and the SQL Server 2008 R2 and SharePoint 2010 Enterprise editions.

While appliances are pre-installed and configured with Microsoft software prior to customer delivery, actual licenses for the SQL Server products included as part of an appliance offering must be acquired separately under a Microsoft Volume

License agreement, and additional terms and conditions may apply.

How can customers buy SQL Server 2008 R2 Parallel Data Warehouse?

Parallel Data Warehouse appliances are being sold through preferred hardware partners, who will preinstall and configure the software prior to delivery. Customers must purchase licenses for the required SQL Server 2008 R2 Parallel Data Warehouse and HPC Pack 2008 R2 Enterprise software and required support components under a Microsoft Volume Licensing agreement, through a Microsoft Enterprise Software Advisor or Large Account Reseller.

What are the SQL Server 2008 R2 Parallel Data Warehouse software license requirements?

Each production-use Parallel Data Warehouse appliance consists of a control rack, plus a minimum of one data rack with 8-10 compute nodes, depending on hardware vendor. Additional data racks can be added, for a maximum configuration of up to 40 total compute nodes per appliance.

Each compute node requires two SQL Server 2008 R2 Parallel Data Warehouse processor licenses, and each control rack additionally requires two SQL Server 2008 R2 Parallel Data Warehouse processor licenses, for a total of 82 Parallel Data Warehouse processor licenses needed for a fully configured appliance. Applicable HPC Pack 2008 R2 Enterprise server licenses are also required.

Can I re-assign my current Microsoft server licenses for use with an appliance offering?

Yes. As long as it is not within 90 days of any prior server assignment, available HPC Pack 2008 R2 Enterprise server licenses may be reassigned to a SQL Server Parallel Data Warehouse appliance as needed.

Likewise, existing SQL Server 2008 R2 Enterprise and/or SharePoint 2010 licenses can similarly be re-assigned to appliance offerings that are optimized for these products. Usage is subject to the agreement terms under which these reassigned licenses were initially acquired.

What are the support and maintenance requirements for Parallel Data Warehouse?

All appliances offered under the MCAP program, including Parallel Data Warehouse, are licensed with Software Assurance plus Premier support (SA+Premier) as an add-on to a Premier Standard or higher service agreement. Customers are encouraged to upgrade their Premier coverage to Premier Mission Critical, providing for the highest level of support with additional benefits that include rapid response and escalation of Severity 1/A incidents and a dedicated Microsoft Support Engineer.

Can Parallel Data Warehouse be added to an existing Enterprise Agreement (EA), including the Enrollment for Application Platform (EAP)?

Yes. SQL Server 2008 R2 Parallel Data Warehouse software is offered as an Additional Product that can be included on a new or existing EA or EAP agreement. Parallel Data Warehouse software can also be purchased through the Select program, or by subscription under an Enterprise Subscription Agreement.

How is SQL Server 2008 R2 Parallel Data Warehouse being licensed for non-production use?

Single-rack appliances designed for non-production use will be available from all hardware partners. While limited in size to only two total compute nodes, Parallel Data Warehouse Development/Test appliances include the full software functionality of a production appliance, but are licensed for development, test and demonstration use only.

Each user accessing a Parallel Data Warehouse Development/Test appliance must be assigned a SQL Server 2008 R2 Parallel Data Warehouse for Developers license, which can be used to access one or more Development/Test appliances. Similar to appliances for production use, server licenses for Windows Server 2008 and HPC Pack 2008 R2 are additionally required.

Can SQL Server 2008 R2 Parallel Data Warehouse for Developer licenses be used against full data rack appliance configurations, typically purchased for production use?

As long as the appliance is only used for development, test and/or demonstration purposes – and each user accessing the appliance is licensed accordingly – there is no restriction to licensing this way.

Can a Parallel Data Warehouse Development/Test appliance be licensed for production use?

No, Parallel Data Warehouse Development/Test appliances are only supported for development, test and/or demonstration purposes.