Brief

Application Server License Mobility November 2008

Government, Academic, and Open License/Select License/Enterprise Agreement-based Volume Licensing Programs

# Timing and Applicability

The following is effective September 1, 2008, and applies to Microsoft product versions that are available as of September 1, 2008, and any new versions after that date.

# Overview

To help you take advantage of virtualization technologies, Microsoft is updating its software licensing policies for server applications. In 2005, Microsoft introduced licensing changes that permitted greater mobility of software. This latest set of changes complement those 2005 enhancements, by allowing greater mobility of licenses across servers within data centers and server farms. With the changes, both licenses and software can move more freely across servers in a server farm, potentially reducing the number of licenses needed to support your workloads. Effectively, the changes mean instead of counting instances or processors and licensing **by server**, you are able to count instances or processors and license **by server farm**.

This is accomplished by allowing customers to reassign licenses freely across servers within a server farm. The changes apply to software licenses for certain server applications and all external connector (EC) licenses. In these cases, the limitation on short-term (90 days or less) license reassignment is waived. This change **does not apply** to software licenses for the Windows Server® operating system, Client Access Licenses (CALs), User Subscription Licenses (USLs), Device Subscription Licenses (DSLs), Add-on Subscription Licenses (Add-on SLs), or Management Licenses (MLs). This change applies only to licenses acquired under a Volume Licensing program. It does not apply to licenses acquired through other retail sources.

**What’s New in this Brief**

* This brief updates the August 2008 version. Changes are:
	+ Text clarifications throughout to be consistent with the January 2009 Microsoft Product Use Rights (PUR) language regarding license mobility
	+ An additional question in the FAQ section

**Details**

In the past, Microsoft server software and EC licenses have had to be assigned to a specific server for at least 90 days before they could be reassigned to another server. Therefore, for example, if you wanted to move running instances of software from one server to another more frequently, you needed to assign licenses to both servers. With Microsoft’s new terms for certain products, Microsoft waives the 90-day reassignment rule, allowing you to reassign licenses from one server to another within a server farm as frequently as you need to. This allows you to freely move both licenses and running instances within a server farm from one server to another. In the example above, so long as you are not running the software on both servers at one time, you can do this without having to assign licenses to both servers at the same time.

**Server Farm Definition:** A server farm consists of up to two data centers each physically located in the following areas:

* In a time zone that is within four hours of the local time zone of the other (Coordinated Universal Time [UTC] and not DST), and/or
* Within the European Union (EU) and/or European Free Trade Association (EFTA)

Each data center may be part of only one server farm. You may reassign a data center from one server farm to another, but not on a short-term basis (that is, not within 90 days of the last assignment).

**Waiving the 90-day reassignment rule for eligible servers licensed under the Per Processor licensing model:**

Today, with licensing for Per Processor products like Microsoft® SQL Server® 2008 Enterprise and Microsoft BizTalk® Server 2006 R2 Enterprise Edition, you can run unlimited software instances in physical operating system environments (OSEs), virtual OSEs, or both on your individual servers by counting all of each server’s physical processors and assigning it that number of licenses. With the new rules, as an alternative to simply counting all of a server’s physical processors and assigning that number of licenses, you may count the number of the server’s physical processors that support OSEs in which server software instances are running at any one time, and assign that number of licenses. This applies both to physical processors being used by physical OSEs in which instances are running and to physical processors supporting virtual OSEs in which instances are running. The waiver of the short-term reassignment rule then allows you to move the licenses as your workloads fluctuate or move across servers, and different physical processors support OSEs in which instances of the software are running on different servers.

With the licensing changes, you effectively count the greatest number of physical processors at any time supporting OSEs in which instances are running across your server farm, and assign that number of licenses. Without the limitation on license reassignment, you may reassign licenses within your server farm as frequently as needed as long as each server that is running instances of the server software has at least one processor license for each supporting physical processor. You may move licenses freely from server to server as workloads fluctuate and move, and different physical processors are used. The software may run in any number of physical and virtual OSEs within a server farm as long as the number of physical processors supporting OSEs in which instances of the software are running at any one time does not exceed the number of licenses assigned to servers in the server farm.

For example, as displayed in Figure 1, assume you run three instances of SQL Server 2008 Enterprise in three separate virtual OSEs (each with two virtual processors) at the same time. Assume these instances run on a server farm made up of 20 servers, each with four physical processors. If just three unique physical processors support the OSEs in which the three instances are running, then, based on the licensing changes, you need only three SQL Server 2008 Enterprise processor licenses. So you may run those three instances anywhere in your server farm. If, however, two physical processors support each of the OSEs in which the instances are running, for a total of six unique physical processors in this scenario, you would need six SQL Server 2008 Enterprise processor licenses. Without the licensing changes, you would need 80 processor licenses to support moving the instances freely in the server farm.

**Figure 1: Running Three Instances of SQL Server 2008 Enterprise**



**Eligible Per Processor Server Licenses:**

* BizTalk Server 2006 R2 Enterprise Edition
* Microsoft Commerce Server 2007 Enterprise Edition
* Microsoft Internet Security and Acceleration (ISA) Server 2006 Enterprise Edition
* SQL Server 2008 Enterprise (Per Processor)

**For Eligible Servers Licensed under the Management Servers, Online Services, Server/CAL, and Specialty Server Licensing Models (does not apply to CALs, USLs, DSLs, Add-on SLs, or MLs):**

For products licensed under these licensing models, the changes effectively allow you to run instances of the server software on any of the servers in your server farm, so long as the total number of running instances at any time does not exceed the total number of licenses assigned to the server farm. Since the 90-day reassignment rule is waived within a server farm, you may reassign a software license to any server in your server farm as frequently as you need to. As long as you have one software license for each instance of the server software that is running at any one time, you may move your running instances freely across the server farm.

For example, assume you run three instances of Microsoft Office SharePoint® Server (MOSS) server software in three separate virtual OSEs at the same time. You only need three MOSS software licenses and you may run those three running instances anywhere in your server farm.

The licensing changes for SQL Server Enterprise provide a different benefit. The instances you are permitted to run in your server farm are unlimited in number and may move freely across your servers, so long as at any one time those instances are run on a number of servers **no greater than** the number of licenses assigned to the server farm.

**Eligible Server Licenses:**

* Microsoft Connected Services Framework Server 3.0
* Connected Services Framework SBE Server Billing 3.0
* Connected Services Framework SBE Server Order Handling 3.0
* Microsoft Customer Care Framework 2008
* Microsoft Duet for Microsoft Office and SAP
* Microsoft Dynamics® CRM 4.0 Enterprise Server
* Microsoft Dynamics CRM 4.0 Professional Server
* Microsoft Exchange Server 2007 Enterprise Edition
* Exchange Server 2007 Standard Edition
* Microsoft ForefrontTM Client Security (Management Console)
* Forefront Client Security with SQL Server 2005 Technology (Management Console)
* Forefront Server Security Management Console
* Microsoft Identity Lifecycle Manager 2007
* Microsoft Office Communications Server 2007 Enterprise Edition
* Office Communications Server 2007 Standard Edition
* Microsoft Office Forms Server 2007
* Office Forms Server 2007 for Internet sites
* Microsoft Office Groove® Server 2007
* Microsoft Office PerformancePoint® Server 2007
* Microsoft Office Project Portfolio Server
* Microsoft Office Project Server 2007
* Microsoft Office SharePoint Server 2007
* Office SharePoint Server 2007 for Internet sites
* Microsoft Search Server 2008
* SQL Server 2008 Enterprise (Server/CAL)
* Microsoft System Center Configuration Manager 2007
* System Center Configuration Manager 2007 with SQL Server 2005 Technology
* Microsoft System Center Data Protection Manager 2007
* Microsoft System Center Essentials 2007
* System Center Essentials 2007 with SQL Server 2005 Technology
* Microsoft System Center Mobile Device Manager 2008
* System Center Mobile Device Manager 2008 with SQL Server 2005 Technology
* Microsoft System Center Operations Manager 2007
* System Center Operations Manager 2007 with SQL Server 2005 Technology
* Microsoft System Center Virtual Machine Manager 2007
* Microsoft Visual Studio® Team System 2008 Team Foundation Server with SQL Server 2005 Technology
* Visual Studio Team System 2008 Test Load Agent

**For All External Connectors (ECs):**

For products for which EC licenses are available, the licensing changes allow you to freely move your EC licenses from server to server as the corresponding software licenses and the software to which they permit access move. Since the 90-day reassignment rule is waived within a server farm for EC licenses, you may reassign an EC license to any server in your server farm as frequently as you need to. In short, this allows your EC license to move to the server that external users access as the running instance that it supports moves. The number of servers in the server farm that external users without CALs access at any one time may not exceed the number of EC licenses assigned to servers in the server farm.

**Frequently Asked Questions**

1. **Scenario A: Four instances of SQL Server 2008 Enterprise (Per Processor) software running at the same time. Server farm consists of 20 servers.**

How many SQL Server 2008 Enterprise processor licenses do I need if I want to move the four running instances each in a separate OSE across all servers on my server farm?

 **Figure 2**

|  |
| --- |
| **Server Farm** |
| Servers | 20 |
| Physical Processors | 80 (4 per server) |
| SQL Server Running Instances | 4 |
| Virtual Processors to Support SQL Server Instances | 8 (2 per physical processor) |

Under the old rule:

A license is assigned to a physical server and the license cannot be reassigned within 90 days of the last assignment. If you want to move the four running instances across the 20 servers more frequently, all servers must be licensed for SQL Server. Therefore, you would need eighty (80) SQL Server 2008 Enterprise processor licenses (one for each physical processor) for this server farm.

Under the new rule:

Since the new rule is based on the number of physical processors that support OSEs in which instances of software are running, you may need as few as four (4) processor licenses, or as many as eight (8) licenses.

If only one physical processor supports each OSE in which SQL Server runs, you need one (1) processor license for each running instance, for a total of four (4) licenses.

However, if two physical processors support each OSE in which the SQL Server instance is running (each virtual processor uses a different physical processor), you need two (2) processor licenses for each running instance, for a total of eight (8) licenses. If you are unable to determine how many physical processors support the OSEs in which the software instances are running, you should use the approach explained in FAQ 8.

1. **Scenario B: Four instances of SQL Server 2008 Enterprise (Server/CAL) software running at the same time. Server farm consists of 20 servers.**

How many SQL Server 2008 Enterprise software licenses do I need if I want to move the four running instances across all servers on my server farm?

Under the old rule:

A license is assigned to a physical server and the license cannot be reassigned within 90 days of the last assignment. If you want to move the four running instances across the 20 servers more frequently, all servers must be licensed for SQL Server. Therefore, you would need twenty (20) SQL Server Enterprise server licenses for this server farm.

Under the new rule:

You would need at most four (4) SQL Server 2008 Enterprise software licenses to move the four SQL Server running instances to any server across the server farm as frequently as you need to.

However, if all four SQL Server instances run on a single physical server at all times, under SQL Server special multi-instancing use rights, you would need only one software license.

1. **Scenario C: Four instances of Exchange Server 2007 Standard (Server/CAL) software running at the same time. Server farm consists of 20 servers.**

How many Exchange Server 2007 Standard software licenses do I need if I want to move the four running instances across all servers on my server farm?

Under the old rule:

A license is assigned to a physical server and the license cannot be reassigned within 90 days of the last assignment. If you want to move the four running instances across the 20 servers more frequently, all servers must be licensed for Exchange Server. Therefore, you would need twenty (20) Exchange Server software licenses for this server farm.

Under the new rule:

You need four (4) Exchange Server software licenses to move the four Exchange Server running instances across the server farm as frequently as needed.

1. **When I assign a SQL Server 2008 Enterprise (Server/CAL) software license to a server, I may run any number of instances of the server software on that licensed server at any one time. With the new rule, does one SQL Server Enterprise (Server/CAL) license permit me to run as many instances of the server software on my server farm as I need to?**

No. With the new rule, you may reassign the SQL Server 2008 Enterprise software license as frequently as you need to, but the instances may only run on as many servers as you have allocated licenses for. You **may not** run instances on more than one server at one time under one SQL Server software license. In other words, if you want to move one of the running instances from the licensed server to an unlicensed server on your server farm, you need to reassign the SQL Server software license to that other server and move all of the running instances together to the new licensed server.

1. **According to this new rule, a server farm consists of up to two data centers. What is a data center?**

A data center houses servers and ancillary equipment typically used in a corporate computing environment. A data center can occupy a building or multiple buildings, typically connected by a Local Area Network (LAN).

1. **Can a server farm consist of three data centers?**

No. A server farm consists of up to two data centers. If you have three data centers, you have to define which two will constitute your server farm (in this example, "server farm A"). The licenses you assign to the servers in server farm A can be reassigned to other servers in server farm A as frequently as needed. Your third data center, the one that is not part of your server farm A, can form part of a separate "server farm B." The licenses you assign to the servers in your server farm B can be reassigned to other servers in server farm B as frequently as you need to. However, licenses cannot be reassigned from server farm A to server farm B within 90 days of the last assignment.

1. **Can I have a server farm spanning these time zones?**
* United States East Coast—United States West Coast: YES
* United States—European Union: NO
* Portugal—Finland (both European Union countries): YES
* India—Japan: YES
* European Union—India: NO (UTC time zones used as basis, not DST)
1. **What if I want to take advantage of the licensing changes, but I cannot tell how many physical processors my software instances use? How should I license?**

If you cannot determine the number of physical processors your running software instances use, you should:

* 1. For any concurrently running software instances in virtual OSEs, assign a license to the servers in the server farm for each virtual processor in those virtual OSEs. You should, however, disregard the statement in the product use rights that a virtual processor is considered to have the same number of threads and cores as each of the underlying physical processors.
	2. For any concurrently running software instances in physical OSEs, assign a license to the servers in the server farm for each physical processor that is being used.

Referring back to Figure 1 above, if you cannot determine the number of physical processors supporting your instances running in virtual OSEs, you should assign six SQL Server 2008 Enterprise processor licenses based on the number of virtual processors in the virtual OSEs.

1. **I assigned an Exchange Server 2007 EC license to a server for external user access to an instance of Exchange Server software running in a virtual OSE. Do I need to acquire a second EC license if I move the Exchange Server running instance to a different server within the same server farm?**

The 90-day reassignment rule no longer applies to EC licenses in a server farm. In this case, you may reassign the Exchange Server 2007 EC license to the new server where the instance will run, as long as no other Exchange Server instances require external user access running at the same time on the first server. If there are still Exchange Server 2007 instances that require external user access running on the first server, you need to assign an Exchange Server EC license to each server.

1. **Does the new license mobility rule apply to licenses acquired using the Microsoft original equipment manufacturer (OEM) or Full Packaged Product (FPP) channels?**

No. The new license mobility rule currently applies only to licenses acquired through the Microsoft Volume Licensing channel.

1. **Do my server software licenses need to have Software Assurance coverage so that I can take advantage of this new right and move these licenses more frequently than every 90 days in my server farm?**

No. Software Assurance coverage is not necessary for you to be able to move your server software licenses across your server farm more frequently than every 90 days.