

LICENSING BRIEF

REDUCING SQL SERVER COSTS WITH OVER-LICENSING AND HYPER-INSTANCING

By taking advantage of some lesser-known SQL Server licensing options, customers can significantly reduce their costs. Eliminating the requirement to pay for Software Assurance on SQL Server to ensure adequate virtual machine density and License Mobility, and maintaining multiple SQL Server instances in fewer operating system environments can cut costs 50% or more.

*By Paul DeGroot
Senior Consultant, Software Licensing Advisors*

TABLE OF CONTENTS

Contents

Important Microsoft Licensing Rules for SQL Server Virtualization	3
General License Assignment Rules	5
License Assignment for SQL Server	6
License Mobility Rules	8
License Mobility Without SA	10
Other Cost Scenarios	14
SA Benefits Lost	15
References	17
Universal License Terms in Product Use Rights Relevant to SQL Server	17
General License Terms for SQL When Licensed Through the Server / CAL Licensing Model	20
Product-Specific License Terms for SQL When Licensed Through the Server / CAL Licensing Model	21
General License Terms for SQL When Licensed Through the Per Core Licensing Model	23
Product-Specific License Terms for SQL When Licensed Through the Server Core Licensing Model	24
Windows Server Datacenter Rights Associated with VMs and License Mobility	26
Software Assurance Benefits Related to SQL Server	28
SQL-Relevant Rules in the Enterprise Agreement	31
Transferring and assigning Licenses.	31
Software Licensing Advisors	33

Important Microsoft Licensing Rules for SQL Server Virtualization

Prepared by Paul DeGroot
Senior Consultant
Software Licensing Advisors
Last updated, Feb. 2015

ABOUT THIS DOCUMENT

This document summarizes research from Software Licensing Advisors on published and public Microsoft documentation regarding Licensing Mobility, SQL Server 2012 (and later) licensing rules, and general rules outlined in Microsoft licensing documents.

Quotations in this document are taken from various documents that are part of the customer's contract with Microsoft, including Product Use Rights, the Product list, and standard Microsoft contracts. The language in your contract may be different, depending on the age of the contract and modifications that might have made to the contract.

It is not necessary to read, in full, the reference material at the end of this document (included with digital copies only). Clicking on any shaded citation will take the reader to the original language. The reference material is provided to offer the reader additional context for the citation.

Our interpretations do not always conform with the advice that Microsoft account teams, white papers, and other communications give to customers. This document is designed to present, to the best of our knowledge, the rules that customers are bound by contract to follow. Customers can then decide, when communications from Microsoft appear to diverge from our interpretations, how they should proceed.

Among other things, they can elect to use this information to

- negotiate contract language acknowledging that a specific interpretation of the language will apply to their contract, or

SOFTWARE LICENSING ADVISORS LICENSING BRIEF

- design their operations and architectures around these interpretations of the rules, in the belief that Microsoft will not have sufficient grounds to pursue legal action in an audit or similar action against the customer, or
- follow Microsoft's advice, if they believe Software Licensing Advisors has not correctly interpreted the language that describes these rules, has not made an argument strong enough to survive legal scrutiny, or if they want to avoid arguments with Microsoft over these rules.

This document is NOT advice to pursue any particular path, but is intended only to inform customers, so that they can take any course of action they deem advisable with greater knowledge of what the applicable contract language says. Software Licensing Advisors does not provide legal advice and is not responsible for any consequences that might result from your pursuing any actions as a result of what you read here.

Our experience so far, when Microsoft has audited customers who used these strategies to license SQL Server, is that auditors have accepted them as compliant.

SUMMARY

This document summarizes Software Licensing Advisors' understanding of rules for licensing SQL Server, with references to relevant language in the original contract documents and applicable licensing documents, such as Microsoft Product Use Rights and the Product List.

Our focus is first to explain the basics of license assignment for Microsoft products, and second to understand how various licensing options affect License Mobility for SQL Server. Microsoft's general advice is that Software Assurance is now required to move SQL Server virtual machines (VMs) from one physical host to another more frequently than Microsoft's 90-day limit on license reassignment permits.

It is our assertion that Software Assurance is not *automatically* a requirement for moving SQL workloads in less than 90 days from the previous move. Many customers may be able to configure dynamic clusters with SQL Server that offer frequent reassignment of SQL Server workloads to different hosts without requiring Software Assurance, which increases licensing costs by 25% a year. These costs range from tens of thousands of dollars each year for smaller customers to millions of dollars each year for large customers.

Our assertion is that License Mobility concerns the assignment and re-assignment of **licenses**, not VMs. Certain licensing approaches may reduce or eliminate license re-assignment among hosts, even though the customer may move VMs among different hosts.

General License Assignment Rules

By default, Microsoft assigns licenses to either users or physical devices. This language is found in the Enterprise Agreement (Section 5, “Transferring and assigning Licenses.”)

Internal assignment of Licenses and Software Assurance. Licenses and Software Assurance must be assigned to a single user or device within the Enterprise.

The Definitions section of Microsoft Product Use Rights further confirms that a license is only to a “physical hardware system.” To state the implication here, licenses are not assigned to VMs.

Licensed Device

The same section of the PUR specifies that a server is a hardware device.

Server

LICENSE REASSIGNMENT

By general rule, Microsoft licenses cannot be reassigned from one device to another more frequently than every 90 days. The Universal License Terms in the Product Use Rights document say

Except as permitted below, you may not reassign licenses on a short-term basis (within 90 days of the last assignment), nor may you reassign licenses for Windows desktop operating system

As this paragraph says, reassignment is permitted in some cases. One of those cases describes a license reassignment rule called “License Mobility.”

License Mobility within Server Farms and Server Re-partitioning.

License Assignment for SQL Server

The rules outlined so far about license assignment need to be applied to many different licensing models. SQL Server licensing is governed by two distinct licensing models in Microsoft Product Use Rights.

- Servers: Server / CAL (Server License + CAL + Optional External Connector)
- Servers: Per Core (Core License)

Each model has different rules regarding license assignment and mobility. In this document we focus only on the more complex per-core licensing model.

LICENSE ASSIGNMENT FOR THE PER CORE MODEL

Microsoft Product Use Rights describes various licensing models, including the Per Core model. The General Licensing Rules section for the Per Core model outlines rules that apply to all products licensed per core.

Each core license is assigned to a server:

You must assign each license to a single Server.

Note that this language must be read carefully to avoid confusion between core license *assignment* and core license *purchases*. As the licensing model's name suggests, licenses are "per core." A core license has a one-to-one relationship with a physical core. However, SQL Server licenses are purchased as a bundle of two core licenses. We might sometimes say that "a license covers two cores," but that is not technically accurate. The Microsoft SKU or part number includes two core licenses, each of which covers only one core.

LICENSING VMS WITH THE CORE MODEL

The number of licenses that must be assigned to the server depends on whether SQL Server is running on the physical hardware or in a VM. Adding another level of complexity, virtual machines can be licensed for only the virtual CPUs they use, or by licensing a physical core instead.

SOFTWARE LICENSING ADVISORS LICENSING BRIEF

You may license by Physical Cores on a Server or by individual Virtual OSE.

Running SQL on the physical machine requires licensing all of the cores, so a server with 20 cores will require 20 core licenses.

Core licensing costs can be substantially reduced in situations where a physical host has many cores if SQL is run in a VM and SQL licensing is done per individual VM, as permitted above.

This approach allows customers to license fewer than all the physical cores on the server. The customer can run a single VM with four virtual CPUs on a server with 20 cores without having to purchase SQL licenses for all 20 cores.

However, licensing individual SQL VMS is inefficient if the customer runs many SQL VMs on the server. For example, the server would require a minimum of 20 SQL core licenses for just five VMs if SQL is licensed per individual VM, and 20 VMs would require a minimum of 80 core licenses.

That alternative is “licensing by Physical Cores.” In this case, all the cores must be licensed.

The number of licenses required equals the number of Physical Cores on the Licensed Server multiplied by the applicable Core Factor located at <http://go.microsoft.com/fwlink/?>

Once the proper number of core licenses have been applied to the server, each core license permits running SQL Server in one VM. Unlike individual licensing per VM, the number of virtual CPUs is ignored. Only one core license is required for each VM, regardless of how many virtual CPUs a VM has.

For enterprise and parallel data warehouse editions, you may use any number of Running Instances of the server software on the Licensed Server in a number of Physical and/or Virtual

Additional VMs (beyond the number of physical cores) can be licensed with additional core licenses.

SOFTWARE LICENSING ADVISORS LICENSING BRIEF

Licensed this way, a server with 20 cores always requires at least 20 core licenses, but once that has been achieved, the customer can put 20 SQL VMs on it.

Although this option is available only for the Enterprise Edition, it can bring the cost per VM down substantially. The following table compares SQL Standard and Enterprise core licensing of VMs with these two models. Prices are Select A net pricing per core (not per license bundle).

Edition	Price per core	Cores/ VM	Host cores	2 VMs	10 VMs	20 VMs
Standard	\$1,466.10	4	20	\$11,729	\$58,644	\$117,288
Enterprise	\$5,621.76	4	20	\$44,974	\$281,088	\$449,741
Enterprise	\$5,621.76	1	20	\$112,435	\$112,435	\$112,435

The point at which Enterprise edition becomes less costly, in this case, is 20 SQL Server VMs. Licensing individual VMs with SQL Enterprise is less costly for up to four VMs on a 20-core server. At five individually licensed VMs the SQL Enterprise cost is the same.

License Mobility Rules

Before 2012, License Mobility rights were offered for most server products released in 2008 or later. In 2012, Microsoft added a new requirement. Servers released in year and later also require Software Assurance in order to move VMs from one physical server to another less than 90 days from the previous move. This may be necessary in a data center where VMs are constantly moved for load balancing purposes or where server activity and requirements may change substantially over the course of a day. The “Additional Licensing Requirements and/or Use Rights” for the core-licensing model says

““

LICENSING MOBILITY FOR INDIVIDUALLY LICENSED VMS

Examining how this works in practice depends on how the VMs are licensed. First, let's look at individual VM licensing, where a minimum of four core licenses must be assigned to each VM. According to Microsoft, these licensed require SA coverage in order to be moved more frequently than every 90 days.

SOFTWARE LICENSING ADVISORS LICENSING BRIEF

It would be incorrect to say that the licenses are embedded in the VM and move with the VM. As we have seen, Microsoft is adamant that licenses can be assigned only to a physical server. Thus, two events occur simultaneously when a SQL VM with individual licensing is moved.

- The VM moves from its current assignment (the source host) to a different physical target host.
- The licenses required for the VM on the source host are reassigned to the target host.

Note that the target computer does not require SQL licenses before the VM is moved to it or after it is moved to a new target. The licenses move in parallel with the VM.

LICENSING MOBILITY FOR SQL ENTERPRISE VMS LICENSED PER PHYSICAL CORE

License Mobility within Server Farms is conceptually different for VM movement when we license SQL VMs via licenses assigned to cores on the physical host.

By default, we are dealing with fixed number of VMs: “a number of Physical and/or Virtual OSEs equal to the number of licenses assigned to it” as quoted above. This can include the minimum number, equal to the number of physical cores, plus any additional licenses that have also been assigned.

However, when SQL Server is licensed on a per-core basis and all cores must be licensed, the licenses are inherently difficult to move without creating non-compliance.

For example, assuming that all hosts in a server farm have 20 physical cores, taking a VM that is licensed by one of those cores and moving it to an unlicensed physical server, will make both servers non-compliant. The source host would now have 19 licenses, when Microsoft requires that all 20 cores be licensed, and the target host has only one license, failing to meet the four-core minimum.

Thus, we have a problem if the total VM count in a server farm approaches the number of physical cores in all the SQL-licensed cores in the farm. If all hosts have 20 physical cores and the number of VMs averages 19 per host, one or more hosts may end up with more VMs than it has licenses for. In a four-host cluster, the failure of one 20-core host could force the movement of 19 VMs to the three remaining servers, leaving them with an average of more than 25 VMs each, well past their 20-VM limit.

Microsoft's preferred solution is to add Software Assurance to all SQL core licenses.

SOFTWARE LICENSING ADVISORS LICENSING BRIEF

Independently of the rules for license mobility, the Software Assurance rights section of the PUR provides customers with the right to run any number of SQL Server instances regardless of the number of cores on the server:

For each server to which you have assigned the required number of licenses as provided in the “Physical Cores of a Server” section, you may run on the licensed server any number of

(This language is identical for SQL 2012 and 2014.)

This eliminates the risk of non-compliance, particularly where tools provide dynamic management of VMs and can move them without user intervention (VMware's vMotion or Hyper-V's Dynamic Optimization). They could migrate more VMs to a host than it has cores, thus exceeding the number of VMs for which the host is licensed.

License Mobility Without SA

However, Software assurance is costly (25% per year of the license price) and it cannot be purchased for existing licenses that do not already have it. They must be re-purchased, and Software Assurance must be purchased at that time. In addition, the shift from processors to cores and Microsoft's generous conversion provisions exposes customers to dramatically higher SQL Server licensing costs. Customers get four core licenses per processor or the number of cores actually in use, whichever is greater. Since the cost of SA on four cores is equivalent to the cost of SA on one processor, SA on a 12-core processor will be triple what they have paid in the past.

Is there any way to permit dynamic provisioning of VMs, enabling them to move from one physical host as required, without paying for SA? Yes.

The solution is overlicensing the hosts for SQL Server to such an extent that the risk of putting more SQL VMs on a host than it is licensed for is eliminated, for all practical purposes.

In fact, our experience is that many SQL users who have used dynamic provision of VMs in the past, before SA was added as a requirement, can continue to do so without renewing SA on SQL Server cores and without changing their server configuration.

SOFTWARE LICENSING ADVISORS LICENSING BRIEF

Keeping in mind that License Mobility is all about re-assigning licenses, an organization that has sufficient spare capacity on its SQL hosts can move a VM without re-assigning a license. The VM is covered by one license on its source host and by a different license on the target host.

One of our customer runs approximately 90 SQL Server instances across 12 servers, each of which had two 6-core processors, or 12 cores per host. Licensed per VM, these SQL Server instances would require 360 core licenses. Licensed by physical cores, they require 144 core licenses. The customer is over-licensed by 60%.

On average, the customer is running 7.5 SQL instances per host, while each host is licensed for 12 VMs. Even if the customer lost two of its hosts simultaneously, it would push the average up to only nine VMs per host, still three short of average host capacity. The customer would need to lose 5 of its 12 hosts simultaneously before it was forced to exceed its license count on at least one server, assuming that it was unable to shut off any of the SQL servers in the cluster.

Keeping in mind that while many servers run dozens of VMs, it is not our experience that many servers run dozens of **SQL** VMs, and our concern in this instance is only for those. Note as well that the 90-day restriction is waived in the event of hardware failure:

Early Reassignment Due to Hardware Failure. You may reassign sooner than within 90 days of the last assignment if you retire the Licensed Device or server due to permanent hardware failure.

Finally, paying for SA in order to get “unlimited” SQL virtualization rights may sound attractive, but no server has unlimited capacity. Getting real, a high proportion of servers running critical SQL workloads are never provisioned with more SQL VMs than they have physical cores.

Overlicensing offers significant savings over SA. Since SA costs 25% of the license price per year, licensing all cores on a 20-core server with SA is the equivalent of purchasing another 15 licenses for that server over a three-year period.

Many customers do not need to purchase any additional core licenses, since by default their servers are already over-licensed, as demonstrated by our example above. Should they want to provide an additional buffer, it will be less costly to purchase more core licenses, each of which licenses another SQL VM. Note that overlicensing actually increases the number of

SOFTWARE LICENSING ADVISORS LICENSING BRIEF

perpetual licenses the customer owns. The latter is “rental” payments for licenses the customer has already purchased.

The following table estimates the cost of overlicensing cores by various percentages, rounded up to the nearest 2-core-license purchase. (As a result, some servers will be licensed at a higher percentage than indicated.)

Total Server Cores	SA, 3 yrs	Overlicensing, rounded up to nearest 2-core license			
		10.00%	30.00%	50.00%	100.00%
12	\$50,596	\$11,244	\$22,487	\$33,731	\$67,461
16	\$67,461	\$11,244	\$33,731	\$44,974	\$89,948
20	\$84,326	\$11,244	\$33,731	\$56,218	\$112,435
24	\$101,192	\$22,487	\$44,974	\$67,461	\$134,922
32	\$134,922	\$22,487	\$56,218	\$89,948	\$179,896
40	\$168,653	\$22,487	\$67,461	\$112,435	\$224,870

Finally, hardware may be a better investment than Software Assurance, for the purposes of creating a dynamic SQL cluster. Customers report that increasing server memory, a relatively inexpensive improvement, can have a dramatic impact on the frequency with which VMware automatically re-assigns VMs, thereby reducing the risk that servers will be inadvertently underlicensed.

THE WINDOWS DATACENTER SERVER EXAMPLE

Microsoft may argue that, in spite of the very clear License Mobility language indicating that license reassignment, but not VM reassignment, is restricted, Software Assurance is still required. The company does not require its licensing to be logical. It can simply insist that “spare” licenses don't count and can't be utilized when moving VMs from one host to another.

SOFTWARE LICENSING ADVISORS LICENSING BRIEF

That argument is significantly weakened by the fact that it already employs overlicensing logic for another product, Windows Server. Windows Server has no license mobility, but it runs any instance of SQL Server that does.

Windows Server 2012 R2 Datacenter

The license terms that apply to your use of this product are the Universal License Terms, the General License Terms for this Licensing Model, and the following:

Self-Hosting of Applications Allowed: **Yes** (See Appendix 2)

Additional Software: **Yes** (See Appendix 3)

See Applicable Notices: **Data Transfer, MPEG-4, VC-1** (See Appendix 1)

License Mobility Within Server Farms: **No** (Except for External Connector licenses, See General License Terms)

[\(Link to reference\)](#)

However, when a host server is licensed with Windows Server Datacenter, the OS can be used in an unlimited number of VMs on that host.

In an optimally licensed VM architecture, all hosts are licensed with Windows Server Datacenter. Although it does not have License Mobility, Microsoft explains that a surplus license is always available on any server licensed with this product and therefore any VM moved between hosts will have one license on its source host and a different license on the target host, which is exactly the scenario we have outlined for SQL Server.

While Microsoft may disagree with SLA's understanding of the licensing rules, we would invite them to review those rules and identify any point at which is customer who is moving VMs per our suggestion has reassigned a license at all, let alone within 90 days.

Other Cost Scenarios

Licensing SQL Server per core, without SA, and still having the flexibility to move VMs among host servers has other advantages.

COMPARING STANDARD WITH SA AND ENTERPRISE WITHOUT

If we revisit our comparison of SQL Server Standard and SQL Server Enterprise in VM scenarios, SQL Server Standard will always require SA for License Mobility, while SQL

SOFTWARE LICENSING ADVISORS LICENSING BRIEF

Enterprise may not. All prices for products with SA in the chart below include three years of SA payment.

Edition	Price per core	Cores/ VM	Host cores	2 VMs	10 VMs	20 VMs
Standard w/SA	\$2,565.68	4	20	\$20,525	\$102,627	\$205,254
Enterprise w/SA	\$9,838.08	4	20	\$78,705	\$491,904	\$787,046
Enterprise without SA	\$5,621.76	1	20	\$112,435	\$112,435	\$112,435

In this case, 11 SQL Server Standard VMs cost about the same as 20 SQL Server Enterprise VMs, and licensing SQL Server Enterprise by individual VM is more costly for as few as three VMs.

LICENSING IN AZURE

Another scenario that some customers might consider is moving their SQL Server licenses to Microsoft's Windows Azure platform. That will be very expensive, since SQL Server Enterprise, when moved to Azure, is licensed only by individual VM, with a minimum requirement of four core licenses per VM.

Product Licensing Model	Product or Product Type	License	Permitted Number of OSEs per License/Permitted Number of Cores per License
Per-Core	All eligible Products	Each Core license with active Software Assurance coverage	One virtual core (subject to the Product Use Rights including the requirement of a minimum of 4 cores per OSE)

[\(Link to original text here\)](#)

SA Benefits Lost

We must note that SA provides benefits other than additional SQL VM capacity.

SOFTWARE LICENSING ADVISORS LICENSING BRIEF

UPGRADE RIGHTS

The most important SA benefit is upgrade rights. However, the recent release of SQL Server 14, which most customers are unlikely to implement in quantity before 2016, means that customers are unlikely to deploy a future version of SQL Server before 2018 or 2019. It will be less expensive to purchase new SQL Server licenses at that time than to pay for Software Assurance for 4-5 years. That implies two three-year contracts, totaling six years of SA payments.

Customers who have SA on SQL Server Enterprise core licenses, but who drop it in a new agreement to avoid large increase in SA costs need to be aware of two other disadvantages of not having SA.

CORE EQUIVALENCY LICENSING

The first is that, while Microsoft grants all customers with SA on SQL Server Enterprise processor licenses the full number of cores in use, it places a special lock on core licenses for which SA is not renewed.

These licenses may not be separated, but instead are continued as a hybrid of processor and core licensing called “core-equivalent” licenses. Thus, if the customer does not renew SA on SQL Server running on a server with two processors of six cores each, it can only reassign those licenses as blocks of six cores. If, for example, the customer purchased a new server with four-core processors, it could move these core-equivalent licenses to the server, but only as six-core blocks. In effect the server will be licensed for 12 cores, even though only eight are required. The four surplus cores cannot be split from the block and used elsewhere.

This rule has no purpose other than to inconvenience customers who do not renew SA, requiring them to track these special blocks of SQL licenses and thereby increase costs and complicate compliance.

In practice, however, we doubt that this will prove a great barrier. Any existing servers on which SA is not continued will still be licensed for all of the cores they have today, and with modest effort, future reconfigurations can accommodate these blocks of cores without serious problems.

SOFTWARE LICENSING ADVISORS LICENSING BRIEF

FAILURE TO RECORD CORE LICENSE GRANTS

The second loss of SA benefits has a similar intention—to inconvenience customers who do not renew SA—but it is more pernicious and we expect it to cause grief both for Microsoft and its customers in the future.

Microsoft has implemented a policy of not recording license grants in excess of the default four core licenses per processor if SA is not renewed. Thus, even though a customer is legally entitled to eight core licenses if they have SA on SQL Server Enterprise per processor running on an eight-core processor, Microsoft's records will show only four core licenses. In a future audit situation, Microsoft may insist that the customer is underlicensed, since its own records do not show the other four cores.

Customers should be careful to retain inventory records that show actual core counts on all SQL Server instances. These records are required in order to gain the additional cores anyway, so this is a matter of keeping those records where they can be accessed easily in the future, if necessary.

We also recommend that customers provide copies of these records to their reseller and to their Microsoft account team. While Microsoft may choose to ignore them, the customers right to these licenses is real and customers will need these records in future true-up and audit scenarios to ensure that they do not repurchase licenses that they already own.

In audit environments, auditors will record these licenses as processor licenses, rather than core licenses. The customer's Effective Licensing Position may show that it has “SQL Server Enterprise 2014 processor licenses,” which is a reasonable solution. However, the customer must still keep track of the underlying core entitlements, since some of their processor licenses may cover only four cores, while others cover 12 or 16.

REFERENCES

Excerpts from Microsoft Contract Documents

Universal License Terms in Product Use Rights Relevant to SQL Server

Definitions

Core Factor means a numerical value associated with a specific physical processor for purposes of determining the number of licenses required to license all of the physical cores on a server.

External Users means users that are not either your or your affiliates' employees, or your or your affiliates' on-site contractors or on-site agents.

Hardware Thread means either a Physical Core or a hyper-thread in a Physical Processor.

Instance means an image of software that is created by executing the software's setup or install procedure or by duplicating an existing Instance.

Licensed Device means the single physical hardware system to which a license is assigned. For purposes of this definition, a hardware partition or blade is considered to be a separate device.

Licensed Server means the single Server to which a license is assigned. For purposes of this definition, a hardware partition or blade is considered to be a separate Server.

Operating System Environment (OSE) means all or part of an operating system Instance, or all or part of a virtual (or otherwise emulated) operating system Instance which enables separate machine identity (primary computer name or similar unique identifier) or separate administrative rights, and instances of applications, if any, configured to run on the operating system Instance or parts identified above. There are two types of OSEs, physical and virtual. A physical hardware system can have one Physical OSE and/or one or more Virtual OSEs.

Physical Core means a core in a Physical Processor.

Physical OSE means an OSE that is configured to run directly on a physical hardware system. The operating system Instance used to run hardware virtualization software (e.g. Microsoft Hyper-V Server or similar technologies) or to provide hardware virtualization services (e.g. Microsoft virtualization technology or similar technologies) is considered part of the Physical OSE.

Physical Processor means a processor in a physical hardware system.

Running Instance means an Instance of software that is loaded into memory and for which one or more instructions have been executed. (You "Run an Instance" of software by loading it into memory and executing one or more of its instructions.) Once running, an Instance is considered to be running (whether or not its instructions continue to execute) until it is removed from memory.

SOFTWARE LICENSING ADVISORS LICENSING BRIEF

Server means a physical hardware system capable of running server software.

Server Farm means a single data center or two data centers each physically located:

- 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).

Virtual Core means the unit of processing power in a virtual hardware system. A Virtual Core is the virtual representation of one or more hardware threads.

Virtual OSE means an OSE that is configured to run on a virtual hardware system.

Virtual Processor means a processor in a virtual hardware system. Solely for licensing purposes under the Server: Per Processor Licensing Model, a virtual processor is considered to have the same number of threads and cores as each physical processor on the underlying physical hardware system.

Source: January 2014 Product Use Rights

Rights to use other versions

For any permitted copy or instance, you may create, store, install, run or access in place of the version licensed, a copy or instance of a prior version, different permitted language version, or different available platform version (for example, 32 bit or 64 bit). You may use different versions of components only as permitted under the Product-Specific License Terms. If you use an earlier version under these downgrade rights, Microsoft is under no obligation to provide security updates or support for the product or service beyond the end of support date listed at <http://support.microsoft.com/lifecycle>.

No Commercial Hosting

You may not host the products for commercial hosting services.

Outsourcing Software Management

You may install and use permitted copies of the software on Servers and other devices that are under the day-to-day management and control of third parties, provided all such Servers and other devices are and remain fully dedicated to your use. You are responsible for all of the obligations under your volume licensing agreement regardless of the physical location of the hardware upon which the software is used.

License Reassignment

Most, but not all, licenses may be reassigned from one device or user to another. The general rules governing license reassignment are described below, along with some special rules for certain products and license types.

LIMITATIONS ON LICENSE REASSIGNMENT

Except as permitted below, you may not reassign licenses on a short-term basis (within 90 days of the last assignment), nor may you reassign licenses for Windows desktop operating system or Rental Rights, or Software Assurance separately from the underlying license to which the Software Assurance is attached.

CONDITION ON LICENSE REASSIGNMENT

When you reassign a license from one device or user to another, you must remove the software or block access from the former device or from the former user's device.

SOFTWARE LICENSING ADVISORS LICENSING BRIEF

SPECIAL CONSIDERATIONS FOR CERTAIN PRODUCTS AND LICENSE TYPES

- **CALs, Management Licenses and User/Device Subscription Licenses.** You may reassign a CAL, Management License or user or device SL on a short-term basis, to cover a user's absence or the unavailability of a device that is out of service. Reassignment of these licenses for any other purpose or time frame must be permanent. This right does not apply to Windows Intune and Windows Intune Add-on User SLs or Windows Virtual Desktop Access (VDA) licenses.
- **Early Reassignment Due to Hardware Failure.** You may reassign sooner than within 90 days of the last assignment if you retire the Licensed Device or server due to permanent hardware failure. This right applies to: all server licenses (other than CALs and Management Licenses), Windows Intune and Windows Intune Add-on User SLs, Windows Virtual Desktop Access subscription licenses, Windows Companion Subscription Licenses, VDI suites, and Visual Studio Load Test Virtual User Pack 2010.
- **Reassignment of Software Assurance Related Rights.** Licenses that are granted or acquired in connection with Software Assurance coverage (e.g., Windows Thin PC, MDOP, User SLs for Software Assurance) generally must be reassigned as and when the qualifying license and Software Assurance are reassigned.
- **Subscription Licenses for the Windows desktop operating system.** You may reassign your Windows (VDA) subscription licenses and Windows Companion Subscription Licenses, subject to the general limitation against short-term reassignment.
- **Reassignment of Software Assurance for Windows and Windows Embedded operating systems.** You may reassign Software Assurance coverage for Windows and Windows Embedded operating systems to a replacement device, but not on a short-term basis, and only if that replacement device is licensed for a qualifying operating system as required in the Product List; provided, however, you must remove any related desktop operating system upgrades from the former device.
- **License Mobility within Server Farms and Server Re-partitioning.** You may reassign certain server licenses on a short-term basis under License Mobility within Server Farms rights and Server Repartitioning.

Products That Include SQL Server Technology

If your edition of the software includes a SQL Server database software product licensed under the Product-Specific license terms ("SQL Server Database") you may run, at any one time, one instance of SQL Server Database in one physical or virtual operating system environment on one server to support the software. You may also use that instance of SQL Server Database to support other products that include any version of SQL Server Database. You do not need SQL Server CALs for all such use.

You may not share that instance to support any product that is not licensed with SQL Server Database.

If your edition of the software includes SQL Server-branded components other than a SQL Server Database, such components are licensed to you under the terms of their respective licenses. Such licenses may be found:

- in the "legal", "licenses" or similarly named folder in the installation directory of the software, and may be contained in standalone license agreements or appended to the software's license agreement; or
- through the software's unified installer.

If you do not agree to a SQL Server-branded component's license terms, you may not use the component.

SQL Server Reporting Services Map Report Item

Power View and SQL Reporting Services Map Item both include use of Bing Maps, including geocodes, within Power View or SQL Reporting Services Map Item. Your use of Bing Maps is also governed by the Bing Maps End User Terms of Use available at: <http://go.microsoft.com/?linkid=9710837> and the Bing Maps Privacy Statement available at: <http://go.microsoft.com/fwlink/?LinkID=248686>.

Multiplexing

Hardware or software you use to pool connections, reroute information, reduce the number of devices or users that directly access or use the product, or reduce the number of operating system environments (or OSEs), devices or users the product directly manages, (sometimes referred to as “multiplexing” or “pooling”), does not reduce the number of licenses of any type that you need.

Creating and Storing Instances

You may create and store any number of instances of the software on any of your servers or storage media solely to exercise your right to run instances of the software under your server licenses or your Windows Enterprise license terms.

Source: January 2014 Product Use Rights

General License Terms for SQL When Licensed Through the Server / CAL Licensing Model

DEFINED TERMS IN THIS LICENSE MODEL (SEE UNIVERSAL LICENSE TERMS)

CAL, External Connector License, External User, Instance, Licensed Server, OSE, Physical OSE, Running Instance, Server, Server Farm and Virtual OSE

SERVER LICENSES

You have the rights below for each license you acquire.

1. You must assign each license to a single Server.
2. For each license, you may use one Running Instance of server software on the Licensed Server in either a Physical or Virtual OSE.
3. You may use the additional software listed in [Appendix 3](#) in conjunction with your use of server software.

ACCESS LICENSES

1. Except as described here and noted in the Product-specific license terms, all server software access requires CALs.
2. Requirements for External User access vary by product, as noted in the Product-specific license terms.
3. Depending on the product and the functionality being accessed, External User access is permitted under CALs, External Connector Licenses or the software license assigned to the Server.
4. You must assign each CAL to a user or device, as appropriate, and each External Connector License to a Licensed Server.
5. CALs and External Connector Licenses permit access to the corresponding version (including earlier versions used under downgrade rights) or earlier versions of server software.
6. CALs are not required for access by another Licensed Server or for up to 2 users or devices to administer the software.
7. Your CALs and External Connector Licenses permit access only to your Licensed Servers (not a third party's).

SOFTWARE LICENSING ADVISORS LICENSING BRIEF

Additional Licensing Requirements and/or Use Rights

LICENSE MOBILITY – ASSIGNING SERVER AND EXTERNAL CONNECTOR LICENSES AND USING SOFTWARE WITHIN AND ACROSS SERVER FARMS

For products designated as having License Mobility, you may reassign Server and External Connector Licenses to any of your Servers located within the same Server Farm as often as needed. Some products may require Software Assurance for these rights. You may reassign Server and External Connector Licenses from one server farm to another, but not on a short-term basis (i.e., not within 90 days of the last assignment).

Product-Specific License Terms for SQL When Licensed Through the Server / CAL Licensing Model

Business Intelligence Appliance 2012

The license terms that apply to your use of this product are the Universal License Terms, the General License Terms for this Licensing Model, and the following:

Self-Hosting of Applications Allowed: **No**

Additional Software: **No**

License Mobility Within Server Farms: **No**

External User Access: **CALs**

BASE CALs

You need:

- SQL Server 2008 R2 CAL

And:

- SharePoint Server 2010 Standard CAL and SharePoint Server 2010 Enterprise CAL, **or**
- Core CAL Suite¹ and SharePoint Server 2010 Enterprise CAL, **or**
- Enterprise CAL Suite, **or**
- Enterprise CAL Bridge for Windows Intune², **or**
- Office 365 Education A3-A4 User SL, **or**
- Office 365 Enterprise E3-E4 User SL, **or**
- Office 365 Enterprise E3-E4 without ProPlus User SL, **or**
- Office 365 Government G3-G4 User SL, **or**
- Office 365 Government G3-G4 without ProPlus User SL, **or**
- SharePoint Online Plan 2 User SL, **or**
- SharePoint Online Plan 2G User SL

¹ with active Software Assurance coverage on April 1, 2010, or later

² with active Software Assurance coverage on March 1, 2011, or later

SQL Server 2012 Business Intelligence

The license terms that apply to your use of this product are the Universal License Terms, the General License Terms for this Licensing Model, and the following:

Self-Hosting of Applications Allowed: **Yes** (See Appendix 2)

Additional Software: **Yes** (See Appendix 3)

License Mobility Within Server Farms: **Yes**

See Applicable Notices: **Automatic Updates** (See Appendix 1)

SOFTWARE LICENSING ADVISORS LICENSING BRIEF

Included Technologies: **Windows Software Components** (See [Universal License Terms](#))

External User Access: **CALs**

BASE CALs

You need:

- SQL Server 2012 CAL, **or**
- Power BI for Office 365 User SL, **or**
- Power BI for Office 365 A User SL

Additional Terms:

[RUNNING INSTANCES OF THE SERVER SOFTWARE](#)

For each server license, software may be Run in only one Physical or Virtual OSE at a time, but you may use any number of Running Instances of the server software in that OSE.

[DOWN-EDITION RIGHTS](#)

In place of any permitted Instance, you may use an Instance of the 2012 or any earlier version of Standard or any version of Workgroup or Small Business.

[FAIL-OVER RIGHTS](#)

For any OSE in which you use Running Instances of the server software, you may use up to the same number of passive fail-over Running Instances in a separate OSE on any Server for temporary support.

[LICENSE MOBILITY -- ASSIGNING SERVER LICENSES AND USING SOFTWARE WITHIN AND ACROSS SERVER FARMS](#)

You have the right to reassign server licenses as described in “License Mobility – Assigning Server and External Connector Licenses and Using Software within and across Server Farms” only for licenses with active Software Assurance.

SQL Server 2012 Enterprise

The license terms that apply to your use of this product are the Universal License Terms, the General License Terms for this Licensing Model, and the following:

Additional Terms:

SQL Server 2012 Enterprise is not available to new customers. Existing customers should refer to the April 2012 Product Use Rights for license terms.

SQL Server 2012 Standard

The license terms that apply to your use of this product are the Universal License Terms, the General License Terms for this Licensing Model, and the following:

Self-Hosting of Applications Allowed: **Yes** (See Appendix 2)

Additional Software: **Yes** (See [Appendix 3](#))

License Mobility Within Server Farms: **Yes**

See Applicable Notices: **Automatic Updates** (See [Appendix 1](#))

Included Technologies: **Windows Software Components** (See [Universal License Terms](#))

External User Access: **CALs**

BASE CALs

You need:

- SQL Server 2012 CAL, **or**

SOFTWARE LICENSING ADVISORS LICENSING BRIEF

- Power BI for Office 365 User SL, or
- Power BI for Office 365 A User SL

Additional Terms:

RUNNING INSTANCES OF THE SERVER SOFTWARE

For each server license, software may be run in only one Physical or Virtual OSE at a time, but each you may use any number of Running Instances of the server software in that OSE.

DOWN-EDITION RIGHTS

In place of any permitted Instance, you may use an Instance of any version of Workgroup or Small Business.

FAIL-OVER RIGHTS

For any OSE in which you use Running Instances of the server software, you may use up to the same number of passive fail-over Running Instances in a separate OSE on any Server for temporary support.

LICENSE MOBILITY -- ASSIGNING SERVER LICENSES AND USING SOFTWARE WITHIN AND ACROSS SERVER FARMS

You have the right to reassign server licenses as described in "License Mobility – Assigning Server and External Connector Licenses and Using Software within and across Server Farms" only for licenses with active Software Assurance.

General License Terms for SQL When Licensed Through the Per Core Licensing Model

GENERAL LICENSE TERMS

DEFINED TERMS IN THIS LICENSE MODEL (SEE UNIVERSAL LICENSE TERMS)

Core Factor, Hardware Thread, Instance, Licensed Server, OSE, Physical Core, Physical OSE, Physical Processor, Running Instances, Server, Server Farm, Virtual Core, and Virtual OSE

You have the rights below for each server you properly license.

Server Licenses

1. You must assign each license to a single Server.
2. You may license by Physical Cores on a Server or by individual Virtual OSE.
3. You may use additional software listed in [Appendix 3](#) in conjunction with your use of server software.

LICENSING BY PHYSICAL CORE ON A SERVER

1. The number of licenses required equals the number of Physical Cores on the Licensed Server multiplied by the applicable Core Factor located at <http://go.microsoft.com/fwlink/?LinkID=229882>.
2. You may use any number of Running Instances of the server software in the Physical OSE on the Licensed Server.
3. For enterprise and parallel data warehouse editions, you may use any number of Running Instances of the server software on the Licensed Server in a number of Physical and/or Virtual OSEs equal to the number of licenses assigned to it.

SOFTWARE LICENSING ADVISORS LICENSING BRIEF

4. For each additional enterprise edition license that you assign, you may use Running Instances of the server software in one additional OSE on the Licensed Server.

LICENSING BY INDIVIDUAL VIRTUAL OSE

1. The number of licenses required equals the number of Virtual Cores in each Virtual OSE in which you will Run the server software, subject to a minimum of four licenses per Virtual OSE.
2. If any Virtual Core is at any time mapped to more than one hardware thread, you need a license for each additional hardware thread.
3. You may use any number of Running Instances of the software in any Virtual OSE for which you have assigned the required number of licenses.

Additional Licensing Requirements and/or Use Rights

LICENSE MOBILITY -- ASSIGNING CORE LICENSES AND USING SOFTWARE WITHIN AND ACROSS SERVER FARMS

You may reassign licenses for which you have active Software Assurance coverage to any of your Servers located within the same Server Farm as often as needed. You may reassign licenses from one server farm to another, but not on a short-term basis (i.e., not within 90 days of the last assignment).

Product-Specific License Terms for SQL When Licensed Through the Server Core Licensing Model

SQL Server 2012 Enterprise

The license terms that apply to your use of this product are the Universal License Terms, the General License Terms for this Licensing Model, and the following:

Self-Hosting of Applications Allowed: **Yes** (See [Appendix 2](#))

Additional Software: **Yes** (See [Appendix 3](#))

License Mobility Within Server Farms: **Yes**

Included Technologies: **Windows Software Components** (See [Universal License Terms](#))

See Applicable Notices: **Automatic Updates** (See [Appendix 1](#))

Additional Terms:

DOWN-EDITION RIGHTS

In place of any permitted Instance, you may use an Instance of either the 2008 R2 version of Datacenter, the 2008 R2 or any earlier version of Enterprise, or the 2012 or any earlier version of Business Intelligence, Standard, Workgroup, or Small Business

FAIL-OVER SERVERS

For any OSE in which you use Running Instances of the server software, you may use up to the same number of passive fail-over Running Instances in a separate OSE on any Server for temporary support. However, if you license based on Physical Cores and the OSE in which you use the passive fail-over Running Instances is on a separate Server, the number of Physical Cores on the separate Server must not exceed the number of Physical Cores on the Licensed Server and the Core Factor for the Physical Processors in that Server must be the same or lower than the Core Factor for the Physical Processors in the Licensed Server. If you license by individual Virtual OSE, the number of Hardware Threads used in that separate OSE must not exceed the number of Hardware Threads used in the OSE in which the active Running Instances are used.

SOFTWARE LICENSING ADVISORS LICENSING BRIEF

[Table of Contents](#) / [Universal Terms](#)

SQL Server 2012 Parallel Data Warehouse

The license terms that apply to your use of this product are the Universal License Terms, the General License Terms for this Licensing Model, and the following:

Self-Hosting of Applications Allowed: **Yes** (See [Appendix 2](#))

Additional Software: **Yes** (See [Appendix 3](#))

License Mobility Within Server Farms: **No**

Included Technologies: **Windows Software Components** (See [Universal License Terms](#))

Additional Terms:

THIRD PARTY SOFTWARE

Additional legal notices and license terms applicable to portions of the software are set forth in the ThirdPartyNotices file accompanying the software. In addition to any terms and conditions of any third party license identified in the ThirdPartyNotices file, the disclaimer of warranty and limitation on and exclusion of damages provisions of your Volume Licensing agreement shall apply to all of the software.

FAIL-OVER SERVERS

The Parallel Data Warehouse (PDW) Appliance is a single unit made up of two or more compute nodes (Licensed Servers) all controlled by a single PDW control VM (Virtual OSE). Technology is built in to the appliance which allows the software to fail-over to another compute node on the appliance. You do not need additional licenses for the software running in fail-over OSEs as executed by the PDW Appliance technology.

[Table of Contents](#) / [Universal Terms](#)

SQL Server 2012 Standard

The license terms that apply to your use of this product are the Universal License Terms, the General License Terms for this Licensing Model, and the following:

Self-Hosting of Applications Allowed: **Yes** (See [Appendix 2](#))

Additional Software: **Yes** (See [Appendix 3](#))

License Mobility Within Server Farms: **Yes**

Included Technologies: **Windows Software Components** (See [Universal License Terms](#))

See Applicable Notices: **Automatic Updates** (See [Appendix 1](#))

Additional Terms:

DOWN-EDITION RIGHTS

In place of any permitted instance, you may use an instance of either the 2008 R2 or earlier version of Standard, or any version of Workgroup or Small Business.

FAIL-OVER SERVERS

For any OSE in which you use Running Instances of the server software, you may use up to the same number of passive fail-over Running Instances in a separate OSE on any Server for temporary support. However, if you have licensed the server software based on Physical Cores and the OSE in which you use the passive fail-over Running Instances is on a separate Server, the number of Physical Cores on the separate Server must not exceed the number of Physical Cores on the Licensed Server and the Core Factor for the Physical Processors in that Server must be the same or lower than the Core Factor for the Physical Processors in the Licensed Server. If you license the server software by individual Virtual OSE, the number of Hardware Threads used in

that separate OSE must not exceed the number of Hardware Threads used in the OSE in which the active Running Instances are used.

Windows Server Datacenter Rights Associated with VMs and License Mobility

GENERAL LICENSE TERMS FOR THE PROCESSOR/CAL MODEL

SERVER LICENSES

You have the rights below for each server you properly license.

1. You must assign each license to a single Server.
2. One license is required for every two Physical Processors on the Server.
3. For Standard licenses, you may use one Running Instance of server software in the Physical OSE and, for each license assigned, one Running Instance in up to two Virtual OSEs on the Licensed Server.
4. For Standard licenses, if all permitted Virtual OSE Instances are used, you may use the Instance in the Physical OSE only to host and manage the Virtual OSEs.
5. For Datacenter licenses, the number of Virtual OSEs is unlimited, and use in the Physical OSE is not limited to hosting and management.
6. Provided that, prior to repartitioning, each hardware partition is fully licensed, and, subsequent to repartitioning, the total number of licenses and Physical Processors remains the same, license reassignment is permitted anytime (i) Physical Processors are reallocated from one licensed hardware partition to another, (ii) two or more partitions are created from one licensed hardware partition, or (iii) one partition is created from two or more licensed hardware partitions.
7. You may use additional software listed in Appendix 3 in conjunction with your use of server software.
8. As a one-time alternative to assigning base CALs per user or per device, a number of base CALs may be dedicated to an Instance of the server software on a single Server (per server

SOFTWARE LICENSING ADVISORS LICENSING BRIEF

mode) to permit up to the same number of users or devices to concurrently access that Instance.

PRODUCT SPECIFIC TERMS FOR WINDOWS SERVER DATACENTER

Windows Server 2012 R2 Datacenter

The license terms that apply to your use of this product are the Universal License Terms, the General License Terms for this Licensing Model, and the following:

Self-Hosting of Applications Allowed: **Yes** (See Appendix 2)

Additional Software: **Yes** (See Appendix 3)

See Applicable Notices: **Data Transfer, MPEG-4, VC-1** (See Appendix 1)

License Mobility Within Server Farms: **No** (Except for External Connector licenses, See General License Terms)

Source: April 2004 Product Use Rights

Software Assurance Benefits Related to SQL Server

Servers -- License Mobility through Software Assurance

License Mobility through Software Assurance lets you move certain on-premise licenses covered by Software Assurance to third party shared servers subject to the terms below. See [Universal License Terms, Definitions](#) for meanings of "CALs," "manage," "OSEs," "server farm," and "virtual OSEs."

Applicable Products:

All Products that are currently eligible for "License Mobility within Server Farms" and covered by Software Assurance are eligible for License Mobility through Software Assurance. In addition, the following Products are also eligible for License Mobility through Software Assurance:

- SQL Server Standard -- Per Processor and Server/CAL (processor and server licenses only)
- System Center -- all Server Management Licenses (MLs), including SMSE and SMSD

Permitted Use:

With License Mobility through Software Assurance, you may:

- Move your licensed software from your servers to a third party's shared servers;
- Access your licensed software running on a third party's shared servers under the appropriate access licenses (the CALs and External Connector licenses identified in the license terms for the individual Products subject to the requirement that you maintain Software Assurance coverage on those licenses as described below, and the User and Device SLs identified in the license terms for the individual Products);
- Run your software in virtual OSEs on the third party's shared servers; and/or
- Manage your OSEs that you use on your servers from using software that you run on a third party's shared servers.

Use of Licensed Software with Microsoft Online Services:

Furthermore, solely in support of your joint use of (i) licensed software on a third party's shared servers and (ii) a separately licensed Microsoft Online Service, and despite anything to the contrary in "Use of Software with the Online Service" in the Online Services section of these Product Use Rights, your right to use software provided with that related Microsoft Online Service is deemed to extend to that third party's shared servers. Except as expressly provided here, your right to run such software on a third party's shared servers remains subject to the license terms for the Online Service, and expires upon the earlier of (i) the expiration of the corresponding Online Service subscription or (ii) your right to use licensed software on a third party's shared servers.

Requirements:

To use License Mobility through Software Assurance, you must:

- Maintain Software Assurance coverage for licenses under which you run software on shared third party servers;
- Maintain Software Assurance coverage for all CALs and External Connector licenses under which you access your licensed software running on shared third party servers;
- Maintain Software Assurance coverage for all Server Management Licenses under which you manage OSEs running in shared third party servers and under which you run software on shared third party servers to manage OSEs running on your servers;

SOFTWARE LICENSING ADVISORS LICENSING BRIEF

- Run your licensed software and manage your OSEs on third party shared servers solely for your use and benefit;
- Deploy your licenses only with Windows Azure Platform Services or qualified License Mobility through Software Assurance Partners. A list of qualified License Mobility through Software Assurance Partners is available at <http://www.microsoft.com/licensing/software-assurance/license-mobility.aspx>; and
- Complete and submit the License Mobility Validation form with each License Mobility through Software Assurance Partner who will run your licensed software on their shared servers. The License Mobility Validation form will be made available to you by the qualified License Mobility through Software Assurance Partner.

Your rights to run licensed software and manage OSEs on shared third party servers expires with the expiration of the Software Assurance coverage on those licenses.

You may move your licensed software from a third party's shared servers back to your servers or to another third party's shared servers, but not on a short term basis (not within 90 days of the last assignment). You may also move instances run or OSEs managed under a particular license from a third party's shared servers in one server farm to its shared servers in another server farm, but not on a short-term basis (not within 90 days of the last assignment). OSEs managed under the same license must be in the same server farm.

Use of software deployed by third parties on shared servers on your behalf remains subject to the terms and conditions of your volume license agreement. You agree that you will be responsible for third parties' actions with regard to software deployed and managed on your behalf.

The license terms applicable to the Product together with the License Mobility through Software Assurance terms govern its use. The License Mobility through Software Assurance terms supersede any conflicting license terms for a Product when License Mobility through Software Assurance is used. Generally, your rights to use the software on third party shared servers are the same as the use rights when you run the software on your servers. However, some Products, as outlined below, have different use rights for shared third party servers under License Mobility through Software Assurance:

PRODUCT LICENSING MODEL	PRODUCT OR PRODUCT TYPE	LICENSE	PERMITTED NUMBER OF OSEs PER LICENSE/PERMITTED NUMBER OF CORES PER LICENSE
Server/CAL	External Connector Licenses	Each External Connector license with active Software Assurance coverage	1 OSE per license
Server/CAL	SQL Server Enterprise	Each Server license with active Software Assurance coverage	1 OSE per license
Per-Processor	All eligible Products	Each Processor license with active Software Assurance coverage	1 OSE with up to 4 virtual processors per license
Per-Core	All eligible Products	Each Core license with active Software Assurance coverage	One virtual core (subject to the Product Use Rights including the requirement of a minimum of 4 cores per OSE)
Management Servers	System Center Server Management Licenses	Each Server Management license with active Software Assurance coverage	1 Managed OSE per license

SOFTWARE LICENSING ADVISORS LICENSING BRIEF

PRODUCT LICENSING MODEL	PRODUCT OR PRODUCT TYPE	LICENSE	PERMITTED NUMBER OF OSES PER LICENSE/PERMITTED NUMBER OF CORES PER LICENSE
	(versions prior to System Center 2012)	Assurance coverage	
Management Servers	System Center Server Management Suites	Each SMSE or SMSD license with active Software Assurance coverage	4 Managed OSEs per License
Management Servers	System Center 2012 R2 Standard	Each System Center 2012 R2 Standard Server Management license with active Software Assurance coverage	2 Managed OSEs per license
Management Servers	System Center 2012 R2 Datacenter	Each System Center 2012 R2 Datacenter Server Management license with active Software Assurance coverage	8 Managed OSEs per license
Management Servers	Visual Studio Deployment 2013 Standard	Each Visual Studio Deployment 2013 Standard Server Management license with active Software Assurance coverage	2 Managed OSEs per license
Management Servers	Visual Studio Deployment 2013 Datacenter	Each Visual Studio Deployment 2013 Datacenter Server Management license with active Software Assurance coverage	8 Managed OSEs per license
Specialty Servers	HPC Pack Enterprise	Each Server license with active Software Assurance coverage	1 OSE per license

Source: January 2014 Product Use Rights

SQL Server 2012 Enterprise and Biz Talk Server 2013 Enterprise -- Unlimited Virtualization

The license terms for SQL Server 2012 Enterprise and Biz Talk Server 2013 Enterprise in the Servers – Per Core section of the Product Use Rights, as supplemented below, provide your license terms for the software under core licenses with active Software Assurance coverage. In the case of any conflict between the applicable terms in the Servers – Per Core section and the license terms below, the license terms below govern.

For each server to which you have assigned the required number of licenses as provided in the “Physical Cores of a Server” section, you may run on the licensed server any number of instances of the server software in any

SOFTWARE LICENSING ADVISORS LICENSING BRIEF

number of physical and/or virtual OSEs, provided you have active Software Assurance coverage for those licenses.

Source: January 2014 Product Use Rights

SQL Server 2014 Enterprise and Biz Talk Server 2013 Enterprise -- Unlimited Virtualization

The license terms for SQL Server 2014 Enterprise and Biz Talk Server 2013 Enterprise in the Servers – Per Core section of the Product Use Rights, as supplemented below, provide your license terms for the software under core licenses with active Software Assurance coverage. In the case of any conflict between the applicable terms in the Servers – Per Core section and the license terms below, the license terms below govern.

For each server to which you have assigned the required number of licenses as provided in the “Physical Cores of a Server” section, you may run on the licensed server any number of instances of the server software in any number of physical and/or virtual OSEs, provided you have active Software Assurance coverage for those licenses.

Source: July 2014 Product Use Rights, Software Assurance Appendix

Source: January 2014 Product Use Rights

SQL-Relevant Rules in the Enterprise Agreement

Transferring and assigning Licenses.

- **License transfers.** License transfers are not permitted, except that Customer may transfer fully-paid perpetual Licenses to:
 - ▶ an Affiliate, or
 - ▶ a third party solely in connection with the transfer of hardware or employees to whom the Licenses have been assigned as part of (1) a divestiture of an Affiliate or a division of an Affiliate or (2) a merger involving Customer or an Affiliate.
- **Notification of License Transfer.** Customer must notify Microsoft of a License transfer by completing a license transfer form, which can be obtained from <http://www.microsoft.com/licensing/contracts>, and sending the completed form to Microsoft before the License transfer. No License transfer will be valid unless Customer provides to the transferee, and the transferee accepts in writing, the applicable Product Use Rights, use restrictions, limitations of liability (including exclusions and warranty

SOFTWARE LICENSING ADVISORS LICENSING BRIEF

provisions), and the transfer restrictions described in this section. Any license transfer not made in compliance with this section will be void.

- **Internal assignment of Licenses and Software Assurance.** Licenses and Software Assurance must be assigned to a single user or device within the Enterprise. Licenses and Software Assurance may be reassigned within the Enterprise as described in the Product Use Rights.

Source: EA2013Agr(NA,EMEA,Asia)ExIND,JPN,PRC(ENG)(Oct2013)(CR).doc

SOFTWARE LICENSING ADVISORS LICENSING BRIEF

Address:

915 L Street, Suite C103
Sacramento, CA 95814

Software Licensing Advisors

Phone:

866-825-3787

Fax:

415-869-2807

Email:

info@msftadvisors.com

