

# Licensing Microsoft SQL Server 2008 R2

## Product Licensing



Microsoft® SQL Server® 2008 R2 provides:

- ▶ Enhanced user BI within a managed environment
- ▶ Best platform for virtualization and consolidation
- ▶ Integration of the datacenter and the cloud



SQL Server is well known as a data warehouse, but because it includes analysis and reporting tools, it is also at the heart of the Microsoft BI solution.

In addition, SQL Server is a technical requirement for many products, including:

- ▶ Microsoft® SharePoint® Server
- ▶ Microsoft® Lync™ Server
- ▶ Microsoft® BizTalk® Server
- ▶ Microsoft® System Center Operations Manager
- ▶ Microsoft® System Center Configuration Manager

### LICENSING OVERVIEW

There are different ways of licensing SQL Server, depending on an organization's requirements:

#### 1. Server License and CALs

Purchase a SQL Server license for each server, and then purchase Client Access Licenses (CALs) for either users or devices:

*A Device CAL is assigned to the device and allows multiple users to use that device*



*A User CAL is assigned to the user and allows that user to use multiple devices*

For both types of CAL, the users or devices are licensed to access ANY SQL Server on the network. The SQL CALs can also be used against any SQL Server regardless of platform – 32 bit, 64 bit and IA64. User CALs can also be purchased for external users, and note that even if a user accesses SQL indirectly through another server, a CAL is still required.

Clients accessing a server with SQL Server 2008 R2 must have SQL Server 2008 R2 CALs.

#### 2. Per Processor Licensing

The alternative method of licensing SQL Server is to buy a license for each processor used by SQL in the physical servers. These server licenses entitle ALL internal and external devices and users to connect to the SQL Servers and so there is no requirement for CALs.



### LICENSING FOR POWERPIVOT

- ▶ PowerPivot for Excel is available as a web download (Add-in) for Excel 2010 users
- ▶ PowerPivot for SharePoint requires a SQL Server 2008 R2 Enterprise license (Server/CAL or per Processor) and SharePoint Server 2010 Standard and Enterprise CALs



### CLIENT / SERVER v PER PROCESSOR

| Number of processors | Microsoft SQL Server 2008 R2 Workgroup | Microsoft SQL Server 2008 R2 Standard | Microsoft SQL Server 2008 R2 Enterprise |
|----------------------|--|---------------------------------------|---|
| 1                    | 25                                     | 30                                    | 95                                      |
| 2                    | 50                                     | 70                                    | 240                                     |
| 4                    | 100                                    | 140                                   | 540                                     |

Approximate number of users when per processor licensing is cheaper

### SQL SERVER 2008 R2 EDITIONS – USE AND LICENSING



|         |  |   |   |  |
|---------|--|---|---|--|
| Core    | <b>Microsoft SQL Server 2008 R2 Standard</b><br>• Departmental<br>• Small / medium scale                   | <b>Microsoft SQL Server 2008 R2 Enterprise</b><br>• Business Critical<br>• Large scale  | <b>Microsoft SQL Server 2008 R2 Datacenter</b><br>• Business Critical<br>• Highest scale<br><i>New for R2</i> |  |
|         | <b>Microsoft SQL Server 2008 R2 Web</b><br>• Websites<br>• Web applications                                | <b>Microsoft SQL Server 2008 R2 Parallel Data Warehouse</b><br>• Data warehouse scalability from tens to hundreds of terabytes<br><i>New for R2</i> |   |  |
| Breadth | <b>Microsoft SQL Server 2008 R2 Developer</b><br>• Developing and testing<br>• Free with MSDN subscription | <b>Microsoft SQL Server 2008 R2 Compact</b><br>• Client embedded<br>FREE  | <b>Microsoft SQL Server 2008 R2 Express</b><br>• Entry level<br>• Learning<br>FREE                            | <b>Microsoft SQL Server 2008 R2 Workgroup</b><br>• Branch or small scale |

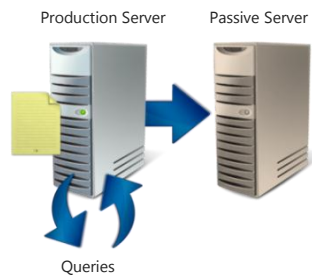
#### Core SKU differentiating features:

|                                 | Standard                      | Enterprise   | Datacenter                   |
|---------------------------------|-------------------------------|--|------------------------------|
| <b>No. of CPUs</b>              | 4                             | Up to 8  | > 8                          |
| <b>Memory</b>                   | 64 GB                         | 2 TB   | OS max                       |
| <b>Complex Event Processing</b> | Basic StreamInsight           | Basic StreamInsight                                | Advanced StreamInsight       |
| <b>Compression</b>              | Backup compression            | Data compression                                   | Data compression             |
| <b>Virtualization support</b>   | 1 virtual machine per license | 4 virtual machines per license                     | Unlimited virtual machines   |
| <b>Multi-Server Management</b>  | Can be a managed instance     | Management of up to 25 instances                   | Management of > 25 instances |
| <b>Scale of BI</b>              | Team BI only                  | Enterprise scale                                   | Very large scale             |
| <b>Advanced BI</b>              | *                             | PowerPivot for SharePoint and Master Data Services |                              |

Entries marked in blue indicate new limits in SQL Server 2008 R2 when compared to SQL Server 2008.

### FAILOVER LICENSING

A passive server kept for failover services does not require a separate license as long as the passive server has the *same or fewer processors* than the active server. The license covers the passive server in the event of failure for up to 30 days.



### SQL SERVER INSTANCES

- ▶ In a virtual environment, running instances of SQL Server may be moved whenever required between licensed servers. There are no licensing requirements for storing non-running instances of SQL Server
- ▶ The licensing rights of the various editions of SQL Server 2008 R2 allow a different number of virtual machines to be run, within which unlimited instances of SQL Server may be run



### MIGRATING TO SQL SERVER 2008 R2

#### New Virtualization Rights:

- ▶ In R2, maximum virtualization rights are moved to Datacenter edition and Enterprise edition virtualization support is capped at 4 virtual machines
- ▶ Organizations with active Software Assurance (SA) on SQL Server Enterprise before general availability, retain unlimited virtualization rights
- ▶ If SA is maintained, these rights remain in effect until the release of the next version of SQL
- ▶ Organizations who buy SQL Server 2008 R2 Enterprise with Software Assurance receive unlimited virtualization rights
- ▶ If Software Assurance is maintained, these rights remain in effect until the release of the next version of SQL

#### Step Up Licenses:

- ▶ Organizations that already have SQL Server Enterprise with active Software Assurance at general availability are eligible for Step Up licenses
- ▶ Enterprise edition licenses may be Server or Per Processor licenses
- ▶ Organizations can step up to SQL Server 2008 R2 Datacenter edition and the price is the difference between SQL Server 2008 Enterprise and SQL Server 2008 R2 Datacenter editions

#### Down Edition Rights:

- ▶ New "down edition" rights are introduced for SQL Server 2008 R2
- ▶ Organizations that buy a higher edition of SQL Server can use a lower edition, but the Product Use Rights of the higher edition will prevail

Where SQL Server 2008 R2 is available for **multiple platforms** (32 bit, 64 bit and Itanium), organizations licensed for SQL Server 2008 may install and use the software on any platform

### MOVING SQL SERVER LICENSES

- ▶ A Standard, Enterprise or Datacenter Edition license can be reassigned to a server in a different server farm every 90 days
- ▶ A Standard Edition license can be reassigned to a different server in a server farm every 90 days
- ▶ Enterprise and Datacenter edition licenses can be assigned to a server farm for maximum mobility or reassigned to a different server in a server farm as often as required

### LICENSING SQL COMPONENTS

SQL Server includes services such as Microsoft® SQL Server® Reporting Services and Microsoft® SQL Server® Analysis Services which are key to the Microsoft Business Intelligence solution.

When a SQL Server runs with all of its components in one server, only one license is required.

However, if the database is running in one server, Analysis Services on a second, and Reporting Services on a third, then three licenses are required.



### SQL SERVER 2008 R2 CHANNEL AVAILABILITY

|                         | EA | EAP | Select | Open | FPP | OEM | SPLA | ISVR |
|-------------------------|----|-----|--------|------|-----|-----|------|------|
| Standard                | ✓  | ✓   | ✓      | ✓    | ✓   | ✓   | ✓    | ✓    |
| Enterprise              | ✓  | ✓   | ✓      | ✓    | ✓   |     | ✓    | ✓    |
| Datacenter              | ✓  | ✓   | ✓      | ✓    | ✓   |     | ✓    | ✓    |
| Web                     | ✓  |     | ✓      | ✓    |     |     | ✓    |      |
| Parallel Data Warehouse |    |     |        |      |     | ✓   |      |      |
| Workgroup               | ✓  |     | ✓      | ✓    | ✓   | ✓   | ✓    | ✓    |
| Developer               |    |     | ✓      | ✓    | ✓   |     |      |      |

### LICENSING SKUS WITH SQL SERVER TECHNOLOGY

- ▶ The included SQL Server technology must be used solely to support use of the primary software
- ▶ The license allows the running of one instance of the SQL technology in one physical or virtual operating system environment on one server
- ▶ Any number of SQL Server technology instances may be created and stored
- ▶ One passive fail-over instance may run on a separate server for temporary support
- ▶ No SQL CALs required

Further Microsoft Licensing handouts and exams:  
[GetLicensingReady.com](http://GetLicensingReady.com)