



System Center Licensing

Microsoft Corporation
Published: November 1, 2007
Updated: November 1, 2007

Executive Summary

Customers increasingly require a comprehensive suite of management tools that provide seamless support for physical and virtual environments. Microsoft® is dedicated to providing complete management solutions that span across Microsoft platforms and applications. We recognize that customers' management needs across physical and virtual environments are changing, and new licensing models are required to effectively address them. We have updated the licensing for the new generation of System Center products to better address virtualization and dynamic IT environments.

Effective November 1, 2007, System Center products will be licensed per operating system environment (OSE) for management of servers; each managed instance of a physical or virtual server operating system environment (OSE) will require a Management License. For management of non-server (client) OSEs, customers can choose between user or OSE management licenses for System Center Configuration Manager and Systems Center Operations Manager.

Customers with significant investments in server virtualization will get the most value out of the new System Center Server Management Suite Enterprise. The Suite allows for management of an unlimited number of OSEs on a single physical host server, and includes System Center Virtual Machine Manager as well as Enterprise Server Management Licenses for three other System Center products: System Center Configuration Manager, System Center Operations Manager and System Center Data Protection Manager. In addition, Microsoft is offering a license grant to existing customers with Software Assurance to help them extend existing investments to cover virtualized server environments.

Licensing for System Center Essentials 2007 is discussed in-depth in a separate whitepaper.

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Overview of Licensing Changes

Prior to November 1, 2007, most Microsoft® System Center products – including Microsoft Systems Management Server 2003 (SMS 2003), Microsoft System Center Operations Manager 2007 (Operations Manager 2007), Microsoft System Center Data Protection Manager 2006 (Data Protection Manager 2006), and the System Center Standard Server Management License (Standard SML) – were licensed per physical device. In other words, a single management license enabled a device to be managed regardless of the number of OSEs running on it.

There were two exceptions:

- System Center Essentials 2007 (Essentials 2007) required a management license for each OSE you wished to manage on a device
- The Client Management Licenses (MLs) for SMS 2003 and Operations Manager 2007 available in Microsoft Core CAL (Core CAL) and Microsoft Enterprise CAL (Enterprise CAL) Suites, respectively, permitted all OSEs on a client device to be managed by physical device or user.

Effective November 1, 2007, System Center licensing is changing. The new licensing model delivers greater value by offering end-to-end management of physical and virtual environments. However, customers with active Microsoft Volume Licensing (VL) agreements will be able to continue using products available prior to November 1, 2007 under the per device licensing model until they renew their agreements. Any new versions or new products introduced on or after November 1 – including Configuration Manager 2007 and Data Protection Manager 2007 – will require OSE Management Licenses. For non-server (client) devices, an alternative user ML will be available for Configuration Manager and Operations Manager.

The following changes will affect how you license System Center products:

- 1. Transition from device licensing to OSE licensing for standalone Server MLs.** System Center standalone products that were available with a device license for server management prior to November 1, 2007 will be licensed by OSE. Each host OSE or guest OSE on a server will require an ML.
- 2. Transition from device MLs to OSE MLs or user MLs for standalone Client OSEs.** System Center standalone products that were available with a device ML for client management prior to November 1, 2007 will be licensed by OSE or by user. Customers have the option to choose either licensing model based on the best fit for their organization.
- 3. Continued availability of Core CAL and Enterprise CAL by device or user.** Customers will be able to continue licensing the Core CAL and Enterprise CAL suites by device or user. Configuration Manager and Operations Manager Client MLs acquired through one of the CAL suites will align with the CAL licensing model.
- 4. Introduction of the System Center Server Management Suite Enterprise.** This new server management offering includes the following:
 - a. System Center Configuration Manager Enterprise Server ML
 - b. System Center Operations Manager Enterprise Server ML
 - c. System Center Data Protection Manager Enterprise Server ML
 - d. System Center Virtual Machine Manager

It permits advanced workload management capability for enterprise applications like Exchange Server 2007 or SQL Server™ 2005, and importantly, it eliminates the need to license by OSE. You need only assign one Server Management Suite Enterprise license per

physical server, regardless of the number of OSEs running on it.

- 5. License grant to existing customers with active Software Assurance as of November 1, 2007.** Customers who own server MLs with active Software Assurance that was acquired prior to November 1, 2007 for Operations Manager 2007, Systems Management Server 2003 or Data Protection Manager 2006 will receive 1 additional Server ML for every 10 that they already own. This is designed to help customers who have already invested in server virtualization and may require additional Server MLs.

The following table summarizes the licensing model for management licenses by product:

LICENSING MODEL BY PRODUCT FOR MANAGEMENT LICENSES	System Center Product Management Licenses				
	Operations Manager 2007	Configuration Manager 2007	Data Protection Manager 2007	Virtual Machine Manager 2007	Essentials 2007
Client Management					
Standalone	Per OSE or Per User	Per OSE or Per User	N/A	N/A	Per OSE
Suite (EnterpriseCAL/Core CAL)	Per Device or Per User	Per Device or Per User	N/A	N/A	N/A
Server Management					
Standalone	Per OSE	Per OSE	Per OSE	N/A	Per OSE
Server Mgmt Suite Enterprise	Per OSE (Unlimited)	Per OSE (Unlimited)	Per OSE (Unlimited)	Per OSE (Unlimited)	N/A
Server Mgmt Suite Standard	Per OSE	Per OSE	Per OSE	N/A	N/A

Understanding System Center Licensing

In order to fully understand System Center licensing, as well as when and what type of management licenses are required, customers should familiarize themselves with:

1. The definition of “manage” and when MLs are required
2. How an OSE is defined
3. Basic vs. advanced workloads

Definition of “Manage”

The definition of “manage” included in the Product Use Rights (PUR) defines when a Management License (ML) is needed. To “manage” an operating system environment (OSE) means to solicit or receive data about, configure, or give instructions to the hardware or software associated with the OSE, other than to discover the presence of a device.

Definition of an “OSE”

An operating system environment, or “OSE”, is 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. A physical OSE is configured to run directly on a physical hardware system. A virtual OSE is configured to run on a virtual (or otherwise emulated) hardware system. A physical hardware system can have either or both of the following:

- One physical OSE
- One or more virtual OSEs

The customer must assign at least as many Server or Client Management Licenses (ML) to the physical server as the number of physical and virtual OSEs that they want to manage on that

server. Alternatively, the System Center Server Management Suite Enterprise is a single license that a customer can assign to the physical server, providing the rights to manage an unlimited number of OSEs on that server.

How to Determine if an OSE Requires a Management License

If an operating system environment (OSE) is managed, an ML must be assigned to the device that the OSE is running on, with the following exceptions:

- Any OSEs licensed to run instances of the management server software
- Any OSEs in which no instances of software are running
- Any devices functioning only as network infrastructure devices (OSI layer 3 or below)
- Only for the time and purpose of being converted by System Center Virtual Machine Manager from a physical OSE to a virtual OSE

Understanding Workloads and System Center Licensing

System Center products are designed to manage workloads, including the operating system, file system, network services, security services and enterprise applications. Client MLs have only one edition, intended to manage any workloads running in a client OSE. Server MLs come in two editions for most products:

1. Standard (e.g. Configuration Manager 2007 Standard Server ML), intended for managing basic workloads, including the operating system, as well as storage (e.g. file/print) and networking.
2. Enterprise (e.g. Configuration Manager 2007 Enterprise Server ML), intended for managing advanced workloads like security or applications like Microsoft Exchange Server.

Customers can determine which MLs are required based on three criteria:

1. Is it a client or server OSE being managed? If it is a server OSE, a Server ML is required. Otherwise, while a client ML is most likely to be used, you may use either a client or server ML.
2. For server management, what products are being used? For server MLs, all products except System Center Essentials 2007 and Virtual Machine Manager 2007 have two editions of the Server ML. At this time, Virtual Machine Manager 2007 is only available as a component of the Server Management Suite Enterprise.
3. What workloads need to be managed? Configuration Manager 2007, Operations Manager 2007 and Data Protection Manager 2007 have two server ML editions. The workload being managed determines which edition is required. A Standard Server ML is sufficient for management of basic workloads including the operating system, storage (file/print), and networking. An Enterprise Server ML is required for any other workloads, and enables management of any server workload or application.

The following table outlines what workloads each Server ML edition can manage:

Product	Standard Server ML	Enterprise Server ML
Operations Manager 2007	<ul style="list-style-type: none"> • Management of basic workloads 	<ul style="list-style-type: none"> • Management of any workloads and applications
Configuration Manager 2007	<ul style="list-style-type: none"> • Desired configuration management (DCM) for basic workloads • "Legacy" functionality (inventory, software distribution, patch management) for any workloads 	<ul style="list-style-type: none"> • DCM for any workloads and applications • Proactive management of systems for configuration settings that follow an industry-leading framework for managing information in changing regulatory and business environments • "Legacy" functionality (inventory, software distribution, patch management) for any workloads
Data Protection Manager 2007	<ul style="list-style-type: none"> • Management of basic workloads 	<ul style="list-style-type: none"> • Management of any workloads and applications • System Recover Tool • Host-based virtual server backup • DPM to DPM replication

Understanding Client Management Licenses

For Operations Manager 2007 and Configuration Manager 2007, there are two types of Client MLs - OSE and user. The choice of Client ML type should be based on whether the customer has more users or more managed OSEs. If the customer has more users, they should license by OSE. For example, customers that have shift workers sharing PCs may have more users than OSEs. If the customer has more managed OSEs, they should license by user. For example, customers that have more than one device per employee (laptops and desktops) or are using virtualization for a significant number of PCs may have more managed OSEs than users.

Customers who acquire Configuration Manager or Operations Manager Client MLs by acquiring Core CAL or Enterprise CAL will be able to follow the relevant CAL suite licensing terms (either by user or device). Note that licenses acquired through Core CAL or Enterprise CAL cannot be assigned to manage a server or server OSE.

The Management Server License

The servers where Operations Manager 2007, Configuration Manager 2007 and Data Protection Manager 2007 are running each require the respective management server license. The management server function provides a central point for collecting data about and issuing instructions to the managed systems. Depending on a customer's specific infrastructure requirements, the above products will each require one or more management server licenses.

The servers running the Management Server software do not require separate server MLs for the same product. For example, an Operations Manager server would not require a server ML to be monitored by Operations Manager, but would require a Configuration Manager server ML if it is managed by Configuration Manager.

Understanding the Transition to Per OSE

Although the licensing changes apply broadly to all System Center customers, exactly how and when it affects each customer will depend on a number of factors, including:

1. How widely the organization has deployed virtualization
2. What System Center products are currently deployed
3. Timing of Volume License (VL) renewals

Impact of Virtualization

Because the new licensing model requires a license for each managed OSE, customers who have deployed server virtualization widely in production environments are mostly likely to be affected in the near-term. Customers who have not deployed virtualization widely are less likely to be affected by the changes.

The following table compares the number of device and OSE licenses required based on a customer's usage of virtualization:

Physical Servers	Virtual Servers	Total OSEs	Per Device MLs Required (pre Nov. 1, 2007)	Per OSE MLs Required (after Nov. 1, 2007)	Licenses Received from Grant	Additional MLs Required
100	0	100	100	100	10	None
100	10	110	100	110	10	None
100	30	130	100	130	10	20
100	50	150	100	150	10	40
100	100	200	100	200	10	90
100	200	300	100	300	10	190

In many cases, customers will already have enough licenses to cover all or most of their OSEs. Customers who have undertaken physical server consolidation projects recently are likely to have extra MLs that they no longer needed after consolidation. If they are of the same version as the Management Server, they can be reassigned to license the management of OSEs on devices with more than one OSE.

Benefits of the System Center Server Management Suite Enterprise

As discussed above, the Server Management Suite Enterprise includes the Enterprise Server management licenses for three System Center products:

- Configuration Manager 2007
- Operations Manager 2007
- Data Protection Manager 2007

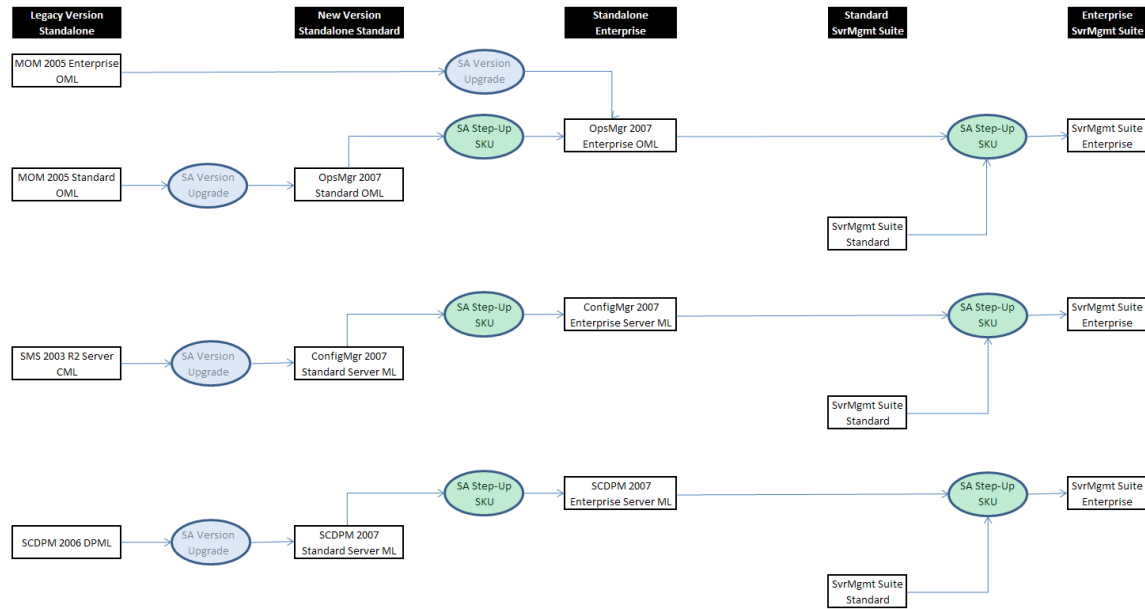
It also includes Virtual Machine Manager 2007, and the rights to use the included products to manage all OSEs on a single physical server.

To put this in perspective, the cost of managing advanced workloads on a server with 3 OSEs (the host operating system and 2 guest virtual operating systems) using Operations Manager 2007 and Configuration Manager 2007 Enterprise Server MLs would cost \$3,840 (\$640 for each ML, including 2 years of Software Assurance).

Managing the same server with the Server Management Suite Enterprise would cost only \$1,290, and would provide backup and recovery capability for advanced application workloads using Data Protection Manager, as well as virtual OSE management using Virtual Machine Manager 2007.

Step-up Options to the Server Management Suite Enterprise

Customers with Software Assurance coverage on any standalone Server MLs and the System Center Standard SML are eligible to purchase SA step-up SKUs to migrate to the Server Management Suite Enterprise. The following chart illustrates how the step-up SKUs fit in:



Customers that already own an Operations Manager 2007 Enterprise Server ML with active Software Assurance can step-up to the Suite for only \$651. Customers that already own a Configuration Manager 2007 Standard Server ML (this includes all customers with active SA who own a Systems Management Server 2003 Server CML) can step-up to the Suite for \$1,057.

Customers with active Software Assurance coverage on any standalone Server MLs and the System Center Standard SML are eligible to purchase SA step-up SKUs to migrate to the Server Management Suite Enterprise. These step-up SKUs for Operations Manager 2007 were added to the October, 2007 price list, and the step-up SKUs for Configuration Manager 2007 and Data Protection Manager 2007 were added to the November, 2007 price list.

Timing of Volume License Agreement Renewal

Existing Microsoft customers with Volume Licensing agreements will be affected by the licensing change at different times, depending on when the agreement is renewed. The new licensing model is effective November 1, 2007 for any new VL agreements or renewals of existing VL agreements initiated after that date. Customers with existing VL agreements prior to November 1, 2007 may continue to purchase new Management Licenses under the old device licensing model for products introduced prior to November 1, 2007 until their agreement expires. Note that this applies to all existing VL agreements, whether or not the licenses are covered with Software Assurance. The following table outlines what licenses are available based on the

agreement renewal date:

License Types Available		
Product Version & License Type	VL Agreement Renewed Prior to Nov. 1, 2007	VL Agreement Renewed on or after Nov. 1, 2007
SMS 2003 Server ML (standalone)	Per Device	N/A
SMS 2003 Client ML (standalone)	Per Device	N/A
SMS 2003 Client ML (Core CAL)	Per Device, Per User	N/A
Configuration Manager 2007 Server ML (standalone)	Per OSE	Per OSE
Configuration Manager 2007 Client ML (standalone)	Per OSE, Per User	Per OSE, Per User
CAL Config Mgr 2007 Client ML (Core CAL)	Per Device, Per User	Per Device, Per User
Operations Manager 2007 Server ML (standalone)	Per Device, Per OSE	Per OSE
Operations Manager 2007 Client ML (standalone)	Per Device, Per User, Per OSE	Per OSE, Per User
Operations Mgr 2007 Client ML (Enterprise CAL)	Per Device, Per User	Per Device, Per User
Data Protection Manager 2006 Server ML (standalone)	Per Device	N/A
Data Protection Manager 2007 Server ML (standalone)	Per OSE	Per OSE
Standard Server Management License (SML)	Per Device	N/A
Server Management Suite Standard	Per OSE	Per OSE
Server Management Suite Enterprise	Unlimited OSEs	Unlimited OSEs

New versions of existing products available on or after November 1, 2007 – such as Configuration Manager 2007 – will be introduced under the new licensing model. This will apply regardless of when a customer upgrades to these new versions or renews their VL agreement.

When the customer renews their agreement, they must use the new licensing model. The customer will need MLs for all managed OSEs, even for OSEs running on devices that were licensed on a per device basis under their prior agreement. Customers with Software Assurance coverage on their licenses also have the option of purchasing “step-up” licenses to upgrade their licenses to the System Center Server Management Suite Enterprise if they want to manage an unlimited number of OSEs per physical server.