Licensing Changes for Windows Enterprise Edition

Enterprise Agreement customers will not be materially affected by changes to Windows Enterprise licensing, but a small number of Select Plus, Select, and Open customers might

By Rob Horwitz

n Mar. 1, 2014, the way customers license the use of Windows Enterprise edition changes. Windows Enterprise offers all the features of Windows Pro and adds security, management, and additional capabilities mainly of interest to large organizations. Rather than being a benefit of Software Assurance (SA) on a Windows Pro license, Enterprise edition will be licensed on its own through a new Windows Enterprise Upgrade license. Enterprise Agreement (EA) customers will need to accommodate some superficial changes and will not be materially affected, but a small number of Select Plus, Select, and Open customers might be.

Old Rules

Under the old rules, Windows Enter-

prise edition can't be purchased directly from Microsoft or a PC hardware manufacturer. Instead, the only way to acquire rights to install and use Windows Enterprise edition as a PC's physical OS is to attach SA to a device's existing Windows Pro edition license. A term of SA typically lasts between two and three years, and along with myriad other benefits, SA attached to a perpetual Windows Pro license provides a customer with perpetual rights to use Windows Enterprise on the licensed device. Customers maintain this right if they subsequently let SA coverage lapse, even if they have not yet installed Windows Enterprise on the device. However, if SA is not maintained, a customer does not have rights to any subsequent versions of Windows Enterprise edition released after SA expiration. Such a customer also loses the ability to reassign Windows Enterprise to a replacement device should the customer later want or need to swap out one of the original PCs in place at the time of SA expiration.

There are two primary ways to attach SA to a Windows Pro OS license. The first is to purchase a Windows Pro SA-only stock keeping unit (SKU) through Select Plus, Select, or Open volume license (VL) programs within 90 days of purchasing a PC shipped with a Windows Pro edition license. The second is to purchase a Windows Pro Upgrade license with SA as a single SKU ("L&SA"). As a prerequisite, the Windows Pro Upgrade requires the device to already have a "qualifying OS," defined as any version of a business-related edi-

Windows SKU Changes

The Windows-related stock keeping units (SKUs) customers will need to purchase will change in some circumstances. The accompanying table lists five common scenarios, along with a comparison of the old and new SKUs that customers need to acquire. The SKU changes become effective Mar. 1, 2014.

"L-only" represents a SKU that consists of a license by itself, while "L&SA" is a bundle of a license and a two- to three-year term of Software Assurance (SA) coverage. A Virtual Desktop Access (VDA) subscription, listed in one of the rows, provides almost all of the same use rights and other benefits as SA coverage for a Windows OS license.

The (new) Windows Enterprise Upgrade L&SA SKU is priced the same as the old Windows Pro Upgrade L&SA SKU. Consequently, costs will not change in many scenarios.

Licensing Scenario	Applicable <u>Old</u> SKU(s) (pre-Mar. 1, 2014)	Applicable <u>New</u> SKU(s) (post-Mar. 1, 2014)	Notes
Upgrade a PC to the latest version of Windows Pro	Windows Pro Upgrade L-only	Windows Pro Upgrade L-only	Same SKU, same price
Upgrade a PC to the latest version of Windows Enterprise	- Windows Pro Upgrade L&SA or - Windows Pro SA-only*	- Windows Enterprise Upgrade L-only or - Windows Enterprise Upgrade L&SA	
Add special SA benefits such as Virtual Desktop Infrastructure (VDI) use rights	- Windows Pro Upgrade L&SA or - Windows Pro SA-only* or - VDA subscription	- Windows Enterprise Upgrade L&SA or - VDA subscription	Price for VDA subscription remains unchanged
Cover PCs under new Enterprise Agreement (EA) and account for increased numbers of PCs at annual True-Ups	Windows Pro Upgrade L&SA	Windows Enterprise Upgrade L&SA	Price remains unchanged
Renew a Windows PC's SA coverage term; EA renewal	Windows Pro SA-only	Windows Enterprise SA-only	Windows Pro SA and Windows Enterprise SA are priced the same

 $^{{}^*\}text{ Must be acquired within 90 days of PC purchase through Select Plus, Select, or an Open volume licensing program.}\\$

tion of the Windows client OS or a copy of Apple OS X (for the Mac). For EA enrollments (sometimes called Desktop EAs) that cover the Windows client OS, this Windows Pro Upgrade L&SA SKU is what is purchased at annual True-Ups to cover increases in the number of deployed PCs.

New Rules

Effective Mar. 1, 2014, VL programs offer new Windows Enterprise Upgrade license-only (L-only), L&SA, and SA-only SKUs. While the existing Windows Pro Upgrade L-only SKU will continue to be sold (through Select Plus, Select, and Open programs) with the price unchanged, the associated L&SA SKU and SA-only SKU will be retired and replaced by Windows Enterprise SKU counterparts. All of the special use rights and benefits of Windows SA remain unchanged, except for Windows Enterprise use rights, which are now purchased separately. (For a summary of Windows-related VL SKUs customers need to purchase under the pre- and post-Mar. 1, 2014, packaging changes, see the chart "Windows SKU Changes" on page 23.)

New Windows Enterprise Upgrade

Licenses Introduced

The Enterprise Upgrade license, which entitles a customer to use the latest version of Windows Enterprise, carries the same "qualifying OS" prerequisite as the Windows Pro Upgrade and includes downedition rights to Windows Pro. (Down-edition rights, sometimes referred to as edition downgrade rights or cross-edition rights, allow a customer to install and run a different, generally lower-level, edition than the one purchased.)

The Enterprise Upgrade license can be purchased on its own (L-only) through Select Plus, Select, and Open VL programs. It can also be purchased in combination with SA ("L&SA") or as an SA-only SKU through any VL program. The L-only SKU provides the right to use a specific version of Enterprise edition (or earlier versions under downgrade rights), whereas the SKUs that include SA also provide the right to use the most recent version delivered during the SA coverage term.

As before, hardware manufacturers will be able to offer Windows Pro edition licenses with their PCs, but not Windows Enterprise. Rights to use Windows Enterprise edition can be acquired through Microsoft VL programs only.

Windows Pro Upgrade L&SA and SA-only SKUs Displaced

The new Windows Enterprise L&SA SKU is priced the same as the old Windows Pro L&SA SKU and essentially serves the same purpose—to allow customers to use the latest version of Windows Pro or Enterprise as well as to provide other SA-related benefits, such as virtual desktop infrastructure (VDI) use rights. (For a summary of features exclusive to Windows Enterprise edition and whether or not they require active SA coverage to use, see the sidebar "Features Unique to Windows Enterprise Edition" on this page.)

Similarly, the new Windows Enterprise SA-only SKU, priced the same as the old Windows Pro SA-only SKU, will now be used to renew existing Windows Pro SA and Windows Enterprise SA coverage. However, unlike the old Windows Pro SA-only SKU, the new Windows Enterprise SA-only SKU can be used only to renew a previous SA-coverage term and not to add SA to a recently purchased Windows Pro PC. The one exception is a short grace period: as long as a new Windows Pro PC is acquired prior to July 1, 2014, Select Plus, Select, and Open customers have 90 days to cover these systems by purchasing

Features Unique to Windows Enterprise Edition

Windows Enterprise edition is differentiated from Windows Pro by a small set of technical features, and use of some is contingent on maintaining active Software Assurance (SA) on the underlying Windows license.

Features That Do Not Require SA

Customers with rights to Windows Enterprise can use the following five technical features, all unique to Enterprise edition, regardless of whether or not they have active SA coverage for their Windows licenses.

AppLocker allows administrators to centrally control what software can run on client computers. It can be used to prevent installation of unauthorized applications or malicious software and to ensure consistent desktop configurations. (For more information, see the "Windows 7 Lockers Secure Data and Applications" chapter in the Apr. 2011 *Research Report*, "Evaluating Windows 7 and Windows Server 2008 R2 with SP1," and technet.microsoft.com/library/hh831440.aspx.)

BranchCache uses caching technology to provide users in a branch office with speedier access to files, Web pages, and other resources that reside elsewhere on the organization's network. (For more information, see the "Windows DirectAccess and BranchCache Updated" chapter in the Dec. 2012 Research Report, "Windows 8 in the Enterprise," and technet.microsoft.com/library/jj554515.aspx.)

DirectAccess connects mobile users to a corporate network without them having to explicitly initiate a virtual private network connection. (For more information, see the "Windows DirectAccess and BranchCache Updated" chapter in

the Dec. 2012 Research Report, "Windows 8 in the Enterprise," and technet.microsoft.com/library/hh831416.)

The Start screen control enables IT to lock down and control the layout of the Start screen (part of the Modern UI) to deliver a consistent experience to users across their managed devices and to ensure they can easily find the organization's key applications. (For more information, see "Windows 8.1 Options Ease User Migration" on page 9 of the Dec. 2013 *Update* and blogs.technet. com/b/askpfeplat/archive/2013/10/17/exploring-windows-8-1-start-screen-and-start-button-options-and-configurations. aspx.)

Network File System (NFS) support allows clients to mount and access NFS shares exported from non-Windows based network-attached storage products, such as UNIX/Linux-based NFS servers and other storage vendor products. (For more information, see support.microsoft.com/kb/2769923.)

Features That Require SA

Customers with rights to Windows Enterprise require active SA on Windows (or a Virtual Desktop Access [VDA] subscription) to exploit the following three Enterprise edition-specific features.

Windows To Go

Windows To Go allows a user to roam to a Windows 7- or Windows 8-certified computer, insert a special USB drive, and boot an image of Windows Enterprise from the drive. Only Enterprise edition is capable of being booted in this manner; Windows Pro cannot be used for deployments of Windows To Go.

However, the right to boot PCs using Windows To Go is an exclusive benefit of SA. Specifically, Microsoft rules allow any

a Windows Enterprise SA-only SKU.

As under the old rules, Windows Enterprise use rights are bound to the existing PC if SA is allowed to expire. And as before, Windows Enterprise edition upgrade licenses can be reassigned to a replacement device while SA is active, as long as the replacement device has a "qualifying OS."

Other SA Benefits Remain Unchanged

The only change to SA benefits relates to use of Windows Enterprise edition. All the other SA benefits remain the same, including the right to do the following:

- Subscribe (for an additional fee) to Desktop Optimization Pack (MDOP), which contains App-V and other tools
- Run up to four Windows Pro or Enterprise virtual machines (VMs) on the licensed device
- Access Windows Pro or Enterprisebased VMs on a server under VDI
- Purchase Companion Subscription License (CSL) subscriptions to cover VDI access from unlicensed devices
- · Leverage Windows desktops as nodes for high-performance computing applica-
 - Access to Windows source code,

mainly for support and troubleshooting purposes.

Ramifications

The changes will have, at most, a nominal effect on most customers, but could have significant implications for a minority of Select Plus, Select, and Open customers. Since the changes offer, at best, modest benefit to Microsoft or its partners and customers at the cost of somewhat obscure SKU naming and internal process modifications, it is possible that the changes could be part of some longer-term plan yet to be revealed, such as greater Windows edition feature differentiation or a new user-based licensing option.

EA Customers

Pricing and order quantity calculations associated with EA starts, renewals, and True-Ups remain consistent, so EA customers are largely unaffected. But the specific SKUs a customer orders will eventually change, and at some point these changes will filter through to the license entitlement report provided by the Microsoft Volume License Service Center (VLSC) site.

Also, over time, the SKU changes could

conceivably mitigate one type of EA customer objection. Under the old rules, customers starting an EA for the first time or any EA customer submitting a True-Up order have to buy Windows Pro Upgrade L&SA SKUs. If the associated PCs already have a license for the latest version of Windows Pro-almost certainly the case for True-Ups—then the forced purchase of Upgrade licenses could appear as doublelicensing. Under the new rules, a Windows Enterprise Upgrade L&SA SKU is purchased under these circumstances. Since the PC is unlikely to already have an existing Windows Enterprise license, the double-licensing argument becomes less relevant.

Select Plus, Select, and Open Customers

The group most seriously affected, which Microsoft says constitutes a small number of customers, are Select Plus, Select, and Open customers who took advantage of the ability to purchase Windows Pro SA-only SKUs within 90 days of new PC purchase. This SA-only option will be phased out this year and these customers will have to purchase the much more expensive Windows Enterprise Upgrade L&SA SKU instead. The other option in

device that has Windows SA (or a VDA subscription) to be booted using Windows To Go. Also, the single primary user of the Windows SA-licensed (or VDA licensed) device has the right to boot Windows To Go on unlicensed devices.

Microsoft defines a single primary user as the user who uses the licensed device more than 50% of the time in any 90-day period. Whenever the primary user is off the organization's premises (such as at home or in a hotel), the user has the right to use a Windows To Go USB drive to boot any "qualified thirdparty device," defined as a device not "controlled" by the user's employer (with "controlled" generally understood to be a proxy for device ownership or management).

(For more information, see "Licensing the Windows To Go Feature of Windows 8" on page 16 of the Sept. 2012 Update.)

VDI Performance and Usability Enhancements

In a virtual desktop infrastructure (VDI) deployment, Windows client OS-based virtual machines (VM) are hosted on centralized servers, with at least one VM for each active user. Each user accesses a VM remotely, with user input and display output traversing the network between VMs in the data center and client devices.

Because certain RemoteFX-branded features are specific to Windows Enterprise edition, it is advantageous to deploy Windows Enterprise inside the VMs rather than Windows Pro. The most important feature is support of RemoteFX's virtual graphics processing unit (vGPU), which enables a better user experience for VDI users running graphic-intensive applications, such as those who use the DirectX 3D graphics API. Another is RemoteFX USB redirection, which allows the VDI user to make

use of USB devices connected to the client device, such as a scanner or Webcam.

Since the right to run Windows Pro or Enterprise edition inside VMs on VDI server hosts is an exclusive benefit of SA (and a VDA subscription), as a practical matter, active SA (or VDA) is a prerequisite for exploiting these Enterprise-specific RemoteFX features.

(For more information, see "Changes to VDI in Windows Server 2012 R2" on page 3 in the Nov. 2013 *Update*.)

Sideloading

Sideloading refers to the process of installing WinRT multitouch applications (sometimes called Modern or Windows Store applications) on Windows 8 (or Windows RT) without going through the Microsoft-hosted Windows Store. Applications appropriate for sideloading include line-of-business applications internally developed by enterprises and applications acquired from third parties for enterprise use, such as expense reporting applications. A sideloading capability, built-into Windows 8 Enterprise, can be turned on via Group Policy for domain-joined PCs.

While use of sideloading is a benefit of SA on Windows (and VDA), SA is not the only way to acquire sideloading rights. Sideloading rights can be acquired on a perpetual, rather than subscription, basis through the one-time purchase of special device-based licenses, sold in packs of 10

(For more information, see the "Deploying Windows Store Applications" chapter in the Dec. 2012 Research Report, "Windows 8 in the Enterprise.")

some scenarios is to purchase a Virtual Desktop Access (VDA) subscription, which over six years is about 20% more expensive than a Windows Enterprise Upgrade L&SA SKU and subsequent SA renewal.

For other Select Plus, Select, and Open customers, the effects are minor. In addition to continuing to offer a Windows Pro Upgrade L-only SKU at the same price as before, these programs will also offer a more expensive Windows Enterprise Upgrade L-only SKU. Curiously, this new L-only SKU will be priced at a very modest discount compared to the Windows Enterprise Upgrade L&SA SKU, detracting from

the license-only option's appeal. While a new Windows Enterprise Upgrade L&SA and SA-only SKUs replace their Windows Pro Upgrade counterparts, pricing remains the same, so the only implication is that Select Plus, Select, and Open customers will have to become accustomed to purchasing different SKUs than before.

Resources

Windows Enterprise Upgrade licensing changes will be documented in the Mar. 2014 Product List posted at www.micro soft.com/licensing/about-licensing/product-licensing.aspx#tab=2.

VDI access rights, one of the main benefits of SA for the Windows client OS, are described in "Licensing Windows for VDI" on this page.

A Volume Licensing Guide for Windows 8.1 and Windows RT 8.1, available via a link on www.microsoft.com/licensing/aboutlicens ing/windows8-1.aspx, is currently dated Oct. 2013 but should eventually be updated to include the Windows Enterprise packaging changes.



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