Licensing Windows desktop operating system for use with virtual machines

This brief applies to all Microsoft Volume Licensing programs.

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Summary

This licensing brief is an overview of the Microsoft Volume Licensing use rights for the Windows 10 operating system when running within virtual machines.

The licensing covered in this brief is described in the context of Software Assurance for the Windows desktop operating system (Windows Software Assurance) and the Windows Virtual Desktop Access (VDA) subscription license under Microsoft Volume Licensing. For use rights provided with Windows preinstalled by the original equipment manufacturer (OEM) or purchased through other channels, review the license terms that accompany those products. You can find the Software License Terms for products purchased through these channels at www.microsoft.com/en-us/legal/IntellectualProperty/UseTerms/Default.aspx.

What's new

This brief replaces a previous version published December 2014. It has been updated to reflect Windows 10 licensing.

Details

Windows Software Assurance provides the greatest flexibility for how you use Windows. It includes access to unique products and license rights not available through other licensing programs. Windows Software Assurance enables flexible work styles by providing access to Windows instances in a variety of ways across devices.

You can separately license users or devices that do not have or are not eligible for Software Assurance for Windows (such as thin clients) with a Windows VDA subscription to gain access to these benefits.

Licensing Windows for use with virtual machines

This brief provides an overview of the Windows virtualization rights available to Microsoft Volume Licensing customers. The information here applies only to licensing the Windows desktop operating system for virtualization scenarios. It does not address other licenses that may be required for specific scenarios, such as Microsoft Office licenses and Client Access Licenses (CALs).

For Windows desktop operating system software licenses acquired through the OEM channel, the Windows use rights are outlined in the Software License Terms that accompany the software. These license terms provide use rights to run Windows **locally** on the licensed device in a virtual operating system environment (OSE). However, they do not provide use rights for accessing Windows running **remotely** in a virtual OSE from the licensed device and are limited in other ways when compared to virtualization use rights provided with Software Assurance for Windows and Windows VDA subscription licenses acquired through Microsoft Volume Licensing. For example, OEM licenses do not permit remote access to a Windows virtual machine running in a data center.

How to get Windows VDA Rights

Windows VDA Rights allow for a licensed device or user to access virtual Windows desktops either remotely and/or locally, depending on how the device or user is licensed. You can license devices or users for Windows VDA rights in the following ways:

- License devices with Windows Software Assurance or Windows VDA subscription on a *per device* basis.
- License users with Windows Software Assurance or Windows VDA subscription on a *per user* basis.

Licensing users for Windows Software Assurance or Windows VDA Subscription on a per user basis
You have the choice to license your users—instead of devices—for Windows Software Assurance or Windows VDA subscription. You can do this by acquiring full Windows Software Assurance per User or Windows VDA per User licenses. If the primary user's primary work device is already covered for Windows Software Assurance or Windows VDA subscription on a per device basis, you can acquire the Windows Software Assurance per User Add-on, which gives you all of the benefits of Windows Software Assurance per User or Windows VDA per User at a price that recognizes your existing investment.

Here's an overview of the requirements for each per user option:

	Windows Software Assurance per User	Windows VDA per User	Windows Software Assurance per User Add-on	
			When added to Windows Software Assurance per Device	When added to Windows VDA per Device
Licensing requirements	Primary user's primary work device must be licensed for Windows 7/8/8.1/10 Pro or Enterprise	No device requirements; may be assigned to any user	Primary user's primary work device must already be covered by Windows Software Assurance	Primary user's primary work device must already be covered by Windows VDA

For more information about Windows Software Assurance and Windows VDA subscription options, refer to the Volume Licensing Reference Guide for Windows.

Comparing Windows VDA rights

Some differences exist between the Windows VDA Rights granted depending on whether you are licensed for Windows Software Assurance or Windows VDA subscription and whether you are licensed on a per device or per user basis.

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The following table provides an overview of the Windows VDA Rights by license type.

Access rights to Windows Enterprise:	Per user		Per device	
	Software Assurance	VDA subscription	Software Assurance	VDA subscription
Local install	Any device licensed for Windows 7/8/8.1/10 Pro, Enterprise, or Education, and any Windows tablet with a diagonal screen size of 10.1 inches or less		The licensed device only	The licensed device only if licensed for Windows 7/8/8.1/10 Pro, Enterprise, or Education
Remote access via virtual desktop infrastructure (VDI) or Windows To Go	Any device		Non-corporate devices while away from the office (see Roaming Use Rights)	

The following table below provides details of the Windows VDA Rights by license type.

Access rights to Windows Enterprise	Windows Enterprise SA		Windows VDA	
	Per Device	Per User	Per Device	Per User
Any user of a Licensed Device, or any device used by a Licensed User; may remotely access up to four Instances of the Software Running in Virtual OSEs or one Instance of the Software Running in one Physical OSE on (a) device(s) dedicated to Customer's use.	✓	✓	✓	✓
Customer may run up to four Instances in Virtual OSEs and one Instance in the Physical OSE locally on the Licensed Device. For Windows VDA (Per Device), this local use right applies only if the Licensed Device is also licensed for Windows 10/8.1 Pro or Enterprise, or Windows 7 Professional or Enterprise. If all of the Instances permitted to run in Virtual OSEs locally are used, Customer may use the Instance in the Physical OSE only to host and manage the Virtual OSEs.	✓		✓	
Customer may run up to four Instances in Virtual OSEs and one Instance in the Physical OSE locally on devices licensed for Windows 10/8.1 Pro or Enterprise, or Windows 7 Professional or Enterprise. If all of the Instances permitted to run in Virtual OSEs locally are used, then Customer may use the Instance in the Physical OSE only to host and manage the Virtual OSEs.		✓		✓

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	Col 1	Col 2	Col 3	Col 4
Customer may install the Software on devices with integrated screens 10" diagonally or less.		✓		✓
Customer may create and store an instance of the software on up to two USB drives and use them on Licensed Devices.	✓		✓	
Customer may create and store an instance of the software on up to two USB drives and use them on any device.		✓		✓
Customer may run Windows 10 Pro or Enterprise, or any earlier versions of the Software, in place of any permitted Instance.	✓	✓	✓	✓

Roaming Use Rights

The single primary user of the device licensed with active Windows Software Assurance or Windows VDA subscription (work device) can do the following:

▶ At any one time, remotely access one or more of the permitted instances running on your servers (for example, in your data center) from a third-party device.

▶ At any one time, run one instance of the software in a virtual OSE on a qualifying third-party device.

When the primary user is on your or your affiliates' company premises, Roaming Use Rights are not applicable.

These Windows VDA Rights and the corresponding Roaming Use Rights are non-perpetual and are only active as long as the underlying Software Assurance for Windows, Windows VDA subscription, and/or Windows CSL is active.

Editions: Customers can use Windows 10 Pro, Windows 10 Enterprise, or a prior version for any permitted instance running in a virtual machine. Refer to your agreement and the Microsoft Volume Licensing Product Terms for full information on prior version rights for Windows.

Licensing Windows for use with virtual machines

Scenarios

The following business scenarios can help you understand how you can license the Windows desktop operating system in your environments.

Note: These examples are focused on scenarios for customers with Windows Software Assurance and/or Windows VDA subscription. They do not necessarily specify all licenses needed for the scenario. For example, Users or Devices also need to license for remotely accessing a VDI/Session desktop or application on Windows Server, if used, with the corresponding access licenses, i.e. Windows Server CALs and RDS CALs. Some scenarios may also require Microsoft Office Professional Plus licenses. For simplicity, those separate licensing requirements are not always included.

Scenario	Description	Licensing Solution
Virtual Desktop Infrastructure Desktops	The Windows desktop operating system runs within virtual machines in the data center on a hypervisor platform (such as Hyper-V technology). These virtual desktops are accessed from either PCs, thin clients, or other devices.	Because they are accessing the Windows desktop operating system running within virtual machines, the devices or users would need active Windows Software Assurance, Windows VDA subscription. Roaming Use Rights would also apply, depending on the scenario and user.
Remote Desktop Session Host/Terminal Services Session Virtualization "Desktops"	A Windows Server operating system (such as Windows Server 2012 R2) is shared across multiple users via Remote Desktop Session Host running applications like Microsoft Office Professional Plus 2013. Either PCs, thin clients, or other devices access these sessions.	Because the devices access a Windows Server operating system only, they do not need any additional licensing for the Windows desktop operating system. However, the devices/users need to be licensed for the session technology (such as Windows Server CALs and Remote Desktop Services [RDS] CALs). The devices accessing the sessions also need licenses for Office Professional Plus.
Mixed VDI and Session Desktops	Some users access VDI desktops and some access session-based desktops or applications. In some cases, a particular device may need to access both simultaneously (for example, a user logs into a VDI desktop and then accesses a remote application or desktop through a session).	Users need to license only the devices accessing the VDI desktops for the Windows desktop operating system through Software Assurance for Windows or Windows VDA subscription, Users/devices need to be licensed for accessing a session/VDI desktop or application on Windows Server with the corresponding access licenses (such as Windows Server CALs and RDS CALs).
Roaming VDI Users	A user is the primary user of a thin client at work that has been licensed for VDI. The user also needs the flexibility to access their VDI desktops from home or while traveling using their personal tablet device.	The thin-client device needs a Windows VDA subscription license—or the user need a Windows VDA per User license— to allow access to up to four concurrent Windows virtual machines running in a data center. Because the user is a primary user of a device licensed for Windows VDA subscription, Roaming Use Rights apply, and the user does not need any additional Windows VDA subscription licenses for the tablet (or any other non-company device used off-premises).

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Bring Your Own Companion Device (BYOCD)	The company provides employees with a primary work device covered by Software Assurance for Windows, or Windows VDA subscription and wants to allow employees to bring their own companion devices (such as tablets) to work and access a corporate VDI form those devices.	Because the primary work device is licensed for Software Assurance for Windows or Windows VDA subscription, the company can acquire a Windows Software Assurance per User Add-on for the user, which allows that user to access a corporate VDI at work from any device.
Bring Your Own Device (BYOD)	The company decides to let users bring their own devices to work and sets up VDI desktops for all users. Devices do not have a qualifying operating system (for example, they may be licensed for Windows 7 Home Premium). These users do not have access to any other devices.	The Windows VDA per User license would allow the user to access the VDI desktops from any device.
Company-owned Windows RT Companion Device	The company provides a set of employees with both a primary work device covered by Software Assurance for Windows, or Windows VDA subscription, as well as a Windows RT device from which the employee can access their corporate desktop through VDI.	Beyond the license for the primary device with Software Assurance for Windows or Windows VDA, no additional Windows licenses are required. The primary user of a device licensed for Software Assurance for Windows or a Windows VDA subscription can use a Windows RT companion device to access a corporate desktop through VDI without acquiring a separate Windows VDA subscription license.
Contractor PCs	Organization A contracts some work to organization B and allows organization B's employees to access organization A's VDI desktops through organization B's PCs. Devices have a qualifying operating system (such as Windows 10 Pro).	Organization A will need to license devices that organization B's employees use to access organization A's VDI desktops with either Windows Software Assurance or Windows VDA subscription license; or license the users with Windows Software Assurance or Windows VDA subscription on a per user basis.
Local Windows Virtual Machines	An organization has a group of developers who need to test an application across multiple Windows images running in local virtual machine on PCs running Windows 10 Pro.	The PC or the primary user of the PC needs active Windows Software Assurance, which permits running up to four virtual machines concurrently.