

Windows Server 2012 R2 Licensing Datasheet



Product overview

Windows Server 2012 R2 captures Microsoft's experience of delivering global-scale cloud services to provide an enterprise-class server and cloud platform. It lets you optimize performance for your most important workloads and helps to protect against service outages with robust recovery options. It reduces complexity and cost with comprehensive automation plus storage and networking virtualization solutions based on industry-standard hardware. It lets you build, run, and scale applications that can move between your datacenter and the cloud, and allows you to provide your users with flexible remote access from virtually anywhere and any device while helping to protect corporate information.

Edition overview

The Windows Server 2012 R2 product is streamlined and simple, making it easy for customers to choose the edition that is right for their needs.

- **Datacenter edition** for highly-virtualized private cloud environments.
- **Standard edition** for non-virtualized or lightly virtualized environments.
- **Essentials edition** for small businesses with up to 25 users running on servers with up to two processors.
- **Foundation edition** for small businesses with up to 15 users running on single processor servers.

To learn more about feature differences by product edition, click here.

Edition	Feature comparison	Licensing model	Server Pricing*
Datacenter	Unlimited virtual OSE All features	Processor + CAL**	\$6,155
Standard	Two virtual OSE All features	Processor + CAL**	\$882
Essentials	2 processor One OSE Limited features	Server 25 user limit	\$501
Foundation	1 processor Limited features	Server 15 user limit	OEM Only

OSE: Operating System Environment

*Open No Level (NL) ERP. 2 procs (For specific pricing, contact your Microsoft reseller. Microsoft does not determine pricing or payment terms for licenses acquired through resellers.)

**Client Access Licenses (CALs) are required for every user or device accessing a server. See the <u>Product Use Rights</u> for details.

Licensing overview

The packaging and licensing structure for Windows Server 2012 R2 editions remain unchanged.

Datacenter and Standard editions are:

- **Differentiated only by virtualization rights** two virtual instances for Standard edition and unlimited virtual instances for Datacenter edition.
- A consistent processor-based licensing model that covers up to two physical processors on a server.

Essentials and Foundation editions are:

- **Server-based licensing model** Foundation is for single processor servers and Essentials is for either one or two processor servers.
- CALs not required for access Foundation comes with 15 user accounts and Essentials comes with 25 user accounts.

Client Access License (CAL)

Windows Server Standard and Datacenter editions will continue to require Windows Server CALs for every user or device accessing a server. (See the Product Use Rights for exceptions and the Multiplexing — Client Access License (CAL)
Requirements white paper for indirect-access licensing information.)

Some additional or advanced functionality will continue to require the purchase of an additive CAL. These are CALs that you need in addition to the Windows Server CAL to access functionality, such as Remote Desktop Services or Active Directory Rights Management Services. (To learn more about these CALs, see the <u>Base and Additive Client Access License</u> white paper.)

Note: Windows Server 2012 CALs are used to access Windows Server 2012 and Windows Server 2012 R2.

Determining the number of licenses for Datacenter and Standard editions

Each license covers up to two physical processors on a single server. The minimum number of licenses required for each server is determined by the number of physical processors. For Standard edition you can add more virtual instances by assigning additional licenses to the server (two incremental virtual instances are added per license).

Licensing examples	Datacenter licenses required	Standard licenses required
One 1-processor, non- virtualized server	1	1
One 4-processor, non- virtualized server	2	2
One 2-processor server with three virtual OSEs	1	2
One 2-processor server with 12 virtual OSEs	1	6

SA Entitlement

If you have active Software Assurance coverage on your current Windows Server licenses at the time of the Windows Server 2012 R2 General Availability, you will receive the following transitional license grants to Windows Server 2012 R2.

Currentlicense	Conversion ratio	New license(s)
Datacenter	1:1	Datacenter
Standard	1:1	Standard
Essentials	1:1	Essentials

Planning for Windows Server 2012 R2

If you are planning to deploy Windows Server 2012 R2, remember:

- Select the edition of Windows Server 2012 R2 based on your virtualization needs and edition features:
 - Datacenter edition for highly-virtualized private clouds.
 - Standard edition for lightly or non-virtualized environments.
 - Essentials edition for small businesses with up to 25 users, running on servers with up to two processors.
 - Foundation edition for small businesses with up to 15 users buying single processor servers from OEMs.

- Renewing Software Assurance is the best way to protect investments while gaining access to new versions, technical assistance and Deployment Planning Services.
- The Microsoft Core Infrastructure Suite (CIS) will continue to offer the best value for private cloud and datacenter management pricing.
- Core CAL and Enterprise CAL Suites will continue to be the most cost effective way to purchase Windows Server CALs to access workloads running on Windows Server 2012 R2 Standard and Datacenter editions.
- Find out how flexible payments can help you get the IT you need and stay on budget. Visit www.microsoft.com/financing for program details or to learn more contact your Microsoft Solution Partner directly or call 1-800-936-3500 in the United States and Canada.



Appendix

Edition comparison by running instances

Running instances can exist either in a physical operating system environment (POSE) or a virtual operating system environment (VOSE).

Edition	Running instances in POSE	Running instances in VOSE
Datacenter	1	Unlimited
Standard	1 ¹	2
Essentials	1 ¹	1 ²
Foundation	1	0

1When a customer is running all allowed virtual instances, the physical instance may only be used to manage and service the virtual instances. For information about licensing in virtual environments, see the Microsoft Volume Licensing Brief: Licensing Microsoft Server Products in Virtual Environments white paper.

2Essentials is the only edition that can run in the VOSE

Edition comparison by server roles

Here is a summary of key server roles by edition.

Server role	Datacenter Standard	Essentials	Foundation
AD Certificate Services	•	■ 1	O ¹
AD Domain Services	•	1 2	•3
AD Federation Services	•	•	•

Server role	Datacenter Standard	Essentials	Foundation
AD Lightweight Directory Services	•	•	•
AD RMS ⁴	•	•	•
Application Server	•	•	•
DHCP Server	•	•	•
DNS Server	•		•
Fax Server	•	•	•
File Services	•	5	O 5
Hyper-V	•	•	0
Network Policy & Access Services	•		0
Print & Doc Services	•	•	•
Remote Access	•	6	O 6
Remote Desktop Services ⁷	•	■ 8	O 9
UDDI Services	•	•	•
Web Server (IIS)	•		•
Windows Deploy Services	•	•	•
Windows Server Essentials Experience	•		0
Windows Server Update Services (WSUS)	•	•	0

- O Partial/Limited
- Automatically Installed/Configured
- O Not Available

AD = Active Directory

RMS = Rights Management Service

DNS = Domain Name System

¹Limited to creating Certificate Authorities—there are no other Active Directory Certificate Services features (Network Device Enrollment Services, Online Responder Service). See ADCS role documentation on TechNet for more information.

 $^2\mbox{Must}$ be root of ADDS forest and domain and have all FSMO roles.

³If ADDS role is installed, must be root of forest and domain and have all FSMO roles.

⁴Requires an additive AD RMS CAL for access.

⁵The data de-duplication feature is not available.

 $^6 \text{Limited}$ to 50 RRAS connections, 10 IAS connections; DirectAccess and VPN are supported.

 7 Requires an additive RDS CAL for access, with the exception of using the Remote Web Access feature of the Essentials edition.

⁸Only the RD Gateway role service is installed and configured, other RDS role services including RD Session Host are not supported.

⁹Limited to 50 Remote Desktop Services connections.

Channels

The availability of each edition will vary by channel.

Edition	Volume Licensing	OEM	Retail	SPLA
Datacenter	•	•	0	•
Standard	•	•	•	•
Essentials	•	•	•	•
Foundation	0	•	0	0

Frequently Asked Licensing Questions (FAQs)

O: How is Windows Server 2012 R2 licensed?

A: Windows Server 2012 R2 will continue to have same licensing model as Windows Server 2012 with two editions available in volume licensing, Standard Edition and Datacenter Edition. Editions are differentiated by virtualization rights only (two OSEs for Standard; unlimited OSEs for Datacenter). A single license covers up to two physical processors.

• Client Access Licenses (CALs) are required for each user or device accessed. The Windows Server 2012 related CALs provide entitlement to access and use 2012 R2 functionality

Q: What is the difference between Windows Server 2012 R2 Standard edition and Windows Server 2012 R2 Datacenter edition?

A: Both Standard and Datacenter editions provide the same set of features; the differentiator is the number of Virtual Operating System Environments (VOSE). A Standard edition license entitles up to two VOSEs on up to two processors (subject to the VOSE use rights outlined in the <u>Product Use Rights</u> document for Volume Licensing or <u>End User License Agreement</u> for other channels). A Datacenter edition license entitles unlimited number of VOSEs on up to two processors.

Q: Will the Windows Server 2012 R2 and System Center 2012 R2 licensing models continue to be aligned?

A: Yes. Both Windows Server 2012 R2 and System Center 2012 R2 have similar licensing structures. These include

- Two editions, Standard and Datacenter.
- Single licenses that cover up to two physical processors.
- Editions differentiated by virtualization rights only (two for Standard; unlimited for Datacenter).

(Client Access Licenses (CALs) will continue to be required for access to Windows Server 2012 R2 servers and management access licenses continue to be required for endpoints being managed by System Center)

Q: What are some of the features available in Windows Server 2012 R2 Datacenter and Standard editions?

A: There are a variety of new features in Windows Server 2012 R2 Datacenter and Standard editions. Here are just a few examples:

- Enterprise-class virtual machine density, performance and mobility with best-in-class performance and scale for Microsoft workloads
- High-performance file-based storage on cost-effective, industry-standard hardware with inbox storage virtualization and tiering
- Highly available, in-box hybrid networking for bridging physical and virtual networks in a multi-tenant environment and across premises
- Protection and recovery of assets for all your workloads with simple and affordable disaster recovery options
- Flexible remote access to corporate resources from virtually anywhere and any device while helping to protect corporate information

Q: How do I determine which Windows Server 2012 R2 edition is right for me?

A: Since there is feature parity between Windows Server 2012 R2 Standard and Datacenter editions, your decision will be based on your virtualization strategy as virtualization rights are the only differentiator between editions. If



your strategy calls for a highly virtualized environment, Datacenter edition will provide you with optimum flexibility since it allows for unlimited virtualization. This edition allows you the elasticity to add and move virtual OSE's across Datacenter licensed servers without need to track the virtual OSE count on that server. If you do not plan on a highly virtualized environment, Standard edition is the right product for your needs. If you purchase Standard edition today but find you need to expand the virtualization capacity of your licensed server, you can

- 1. Purchase additional Standard edition licenses and assign them to the same physical server giving you the rights to run additional instances of Windows Server. The server must have the appropriate number of licenses assigned to it to ensure coverage of all of the virtual OSE's that are running at any given time, or
- 2. Purchase a Software Assurance Step-up license to Datacenter edition, changing the license to a higher edition which allows unlimited virtual OSE's. The underlying license must have Software Assurance in order to utilize this benefit.

Q: If I have a Windows Server 2012 R2 Standard edition license, how can I increase my virtualization rights?

A: With the Windows Server 2012 R2 Standard edition licensing model, you can grow your virtualization environment by either buying a step-up license to Datacenter edition if you have Software Assurance, or by simply buying additional Standard edition licenses and assigning them to the same physical server. The server must have the appropriate number of licenses assigned to it to ensure coverage of all of the virtual OSE's that are running at any given time. For example, if you have a 2-processor server and want to run a total of 4 VOSEs, you can purchase two Standard edition licenses and assign them to the same server. Additional examples are shown in the table below.

# of Standard edition licenses on a single server	Total number of VOSEs
1	2
2	4
3	6
4	8

O: How do I calculate the number of licenses I need for a server?

A: The number of licenses you will need depends on the number of physical processors on the server and the number of server instances that you will be running. (This only applies for Standard edition because Datacenter edition allows for unlimited VOSEs.) The larger of these two numbers determines the number of total licenses required.

First determine the number of physical processor licenses

Each license covers up to two physical processors, so to determine the number of licenses needed to fully license a physical server, simply count the number of physical processors in the server, divide that number by two and that tells you the number of licenses that will be needed. (Note: number of cores on the physical processor are irrelevant).

Here are some examples:



- 2-processor server: 2 physical processors / 2 (number of processors covered by a license) equals 1. You will need one license to cover a 2-processor server.
- 4-processor server: 4 physical processors / 2 (number of processors covered by a license) equals 2. You will need two licenses to cover a 4-processor server.
- 8-processor server: 8 physical processors / 2 (number of processors covered by a license) equals 4. You will need four licenses to cover an 8-processor server.

Secondly, determine the number of virtual instances running

You can either count the number of VOSEs that are running and determine number of Standard Edition licenses (1 license covers up to 2 VOSEs) or purchase Datacenter which enables unlimited VOSEs on the server.

Each Standard edition license provides you with the rights to run up to two VOSEs, so to determine the number of Windows Server Standard edition licenses you need, count the total number of total VOSEs that you will run on the server; divide that number by two, and round up to the nearest whole number.

Once the number of licenses needed to cover physical processors and/or VOSEs is determined, the higher of those two numbers represents the total number of licenses required. Please remember that the server must have the appropriate number of licenses assigned to it to ensure coverage of all of the virtual OSE's that are running at any given time

For example, if you are running 3 virtual machines (VOSEs) on a 2-processor server, you will require 2 licenses to cover the 3 virtual machine.

If you assign 2 Standard edition licenses to a single server, you will be able to run a total of 4 VOSEs on that server. If you add additional Standard edition licenses to that server the number of allowed VOSEs on that particular server will increase by two for a total of six VOSEs on that server.

Q: Can I use one Standard license to cover a 1-processor server?

A: Yes. The Standard edition license will allow you to license up to two physical processors on a single server; however it does not require that the server has two physical processors.

Q: Can I split my Windows Server 2012 R2 license across multiple servers?

A: No. Each license can only be assigned to a single physical server.

Q: Can I assign a Windows Server 2012 R2 license to a virtual machine?

A: No. A license is assigned to the physical server. Each license will cover up to two physical processors. After assigning the license(s) to a physical server, you now have the rights to use the VOSE on that server.

Q: Can I mix Datacenter and Standard licenses on the same server?

A: No. All of the processors on a given server must be licensed with the same version and edition. You can run different editions or older versions of Windows Server software as guests within VOSEs, but you are not allowed to assign multiple licenses of different versions or editions to the same physical server to license the processors on the server.

Q: Can I attach another license of a different version or edition of Windows Server to increase my virtualization rights?

A: Yes, you can assign additional Windows Server licenses to a server to increase your virtualization rights. However the newly assigned licenses will need to adhere to their associated licensing rules. For example, if you have an old Windows Server Enterprise edition (no longer available) license on a four processor server and want to attach Windows Server 2012 R2 Standard edition licenses to increase your virtualization rights, you will need to



ensure that all processors on that server are licensed with Windows Server 2012 R2 Standard edition license as well, which will require a total of two Windows Server 2012 R2 Standard licenses (as each license covers up to two processors).

Q: If I want to use the software from an earlier Windows Server version or edition, what are my options?

A: If you have Windows Server 2012 R2 Datacenter edition you will have the right to downgrade software bits to any prior version or lower edition. If you have Windows Server 2012 R2 Standard edition, you will have the right to downgrade the software to use any prior version of Enterprise, Standard or Essentials editions.

The ability to downgrade does not change the licensing or support terms in which you can use the product; the purchased product (Windows Server 2012 R2) rights apply. This means that the license will continue to cover two physical processors and the virtualization rights do not change. In addition, the Client Access License (CAL) corresponding to the purchased version will apply, as an exception; if you are running a previous version of one of the eligible downgrades you can use the corresponding CAL version if one exists.

Here are a few examples.

Purchased License	Downgraded version or edition	Bit rights that apply	Licensing rights that apply
Datacenter 2012 R2	Datacenter 2008	Datacenter 2008	Datacenter 2012 R2 ¹
Standard 2012 R2	Enterprise 2008 R2	Enterprise 2008 R2	Standard 2012 R2 ^{1,2}
Standard 2012 R2	Standard 2008	Standard 2008	Standard 2012 R2 ^{1,2}
Standard 2012 R2	Essentials 2012	Essentials 2012	Standard 2012 R2 ^{1,2}

¹ The license will cover up to two processors.

Q: If I have Software Assurance in place at the time that Windows Server 2012 R2 is generally available, when will my grant be reflected in my licensing records?

A: Yes. You will see your grant in the Volume Licensing Service Center (VLSC) in addition to immediately being able to use the new product and own the perpetual rights (based on your underlying license) to the edition of Windows Server 2012 R2 that you are entitled to receive.

Q: If I have Datacenter edition with Software Assurance when Windows Server 2012 R2 is released, which edition will I be entitled to use?

A: If you have Software Assurance on Datacenter edition, you will be entitled to Windows Server 2012 R2 Datacenter edition. For every Windows Sever 2012 Datacenter licenses with Software Assurance, you will receive one Windows Server 2012 R2 Datacenter edition license.

Q: If I have Standard edition with Software Assurance when Windows Server 2012 R2 is released, which edition will I be entitled to receive?

A: If you have Software Assurance on Standard edition, you will be entitled to Windows Server 2012 R2 Standard edition. For every Windows Sever 2012 Standard licenses with Software Assurance, you will receive one Windows Server 2012 R2 Standard edition license.



² The license entitles up to two virtual machines.

Q: What are my Software Assurance migration rights by Microsoft purchase program?

A: Each Microsoft purchase program has different rules for your Software Assurance migration entitlement at the end of your enrollment. See the chart below.

Program	Software Assurance at time of release
Enterprise Agreement	You will receive perpetual rights to the current (Windows Server 2012 R2) edition. These rights are conditional on you and your Affiliates continued compliance with the terms of this agreement, including payment for the Products.
Enterprise Agreement Subscription	You will be able to use the Windows Server 2012 R2 edition of your license during your enrollment. At the end of your enrollment you will have the option to buy out the new Windows Server 2012 R2 product at the buy-out price on your customer price sheet or based on the price on your reseller's channel price sheet, or renew your enrollment at the new Windows Server 2012 R2 annual subscription price.
Enrollment for Education Solutions – School Enrollment	You will be able to use the Windows Server 2012 R2 edition of your license during your enrollment. At the end of your enrollment you will be able to choose to buy out the original Windows Server 2012 product or buy out the new Windows Server 2012 R2 product at the buy-out price on the published price list at the time your enrollment expires, provided, you have licensed Windows Server under one or more Enrollments (including extensions) for at least 36 full calendar months immediately preceding your enrollment expiration, or renew your enrollment at the new Windows Server 2012 R2 annual subscription price.
Open Value	You will receive rights to the current (Windows Server 2012 R2) edition. These rights are conditional on you and your Affiliates continued compliance with the terms of this agreement, including payment for the Products.
Open Value Subscription	You will be able to use the Windows Server 2012 R2 edition of your license during your enrollment. At the end of your enrollment you will be able to choose to buy out the original Windows Server 2012 product that was on your agreement at the original pricelist price, or renew your enrollment at the new Windows Server 2012 R2 annual subscription price.
Open Value Subscription – Education Solutions	You will be able to use the Windows Server 2012 R2 edition of your license during your enrollment. At the end of your enrollment you will be able to choose to buy out the original Windows Server 2012 product or buy out the new Windows Server 2012 R2 product at the buy-out price on the published price list at the time your agreement expires, provided, you have licensed Windows Server under one or more Agreements (including extensions) for at least 36 full calendar months immediately preceding your Agreement expiration or renew your Agreement at the new Windows Server 2012 R2 annual subscription price.
Select/Open	You will receive rights to the current (Windows Server 2012 R2) edition. These rights are conditional on you and your Affiliates continued compliance with the terms of this agreement, including payment for the Products.



Q: How much will Windows Server 2012 R2 Standard and Datacenter editions cost?

A: Pricing levels vary. For your specific pricing, contact your Microsoft reseller. Microsoft does not determine pricing or payment terms for licenses acquired through resellers.

Windows Server Edition	Volume Licensing Open No Level
	ERP
Datacenter	\$6,155
Standard	\$882

Q: Why is the price of Windows Server Datacenter 2012 R2 changing?

A: Microsoft takes pricing and licensing decisions very seriously. All pricing decisions take into account changing product value, customer and partner feedback, and market conditions. Windows Server Datacenter edition is optimized for highly virtualized environments and includes unlimited virtualization rights. This provides flexibility to add and move virtual OSEs across licensed servers without need to track the virtual OSEs counts on your servers.

Over the past few releases, Windows Server has added in a tremendous amount of new features and enhancements, as well as significant performance and capacity improvements, to support highly-virtualized datacenter and cloud environments. A few of these examples include:

- High scale performance enhancements including support for:
 - o 320 logical processors on hardware
 - o 4TB physical memory
 - o 64 virtual processors per VM
 - o 1TB memory per VM
 - o 1,024 active VMs per host
- Live migration enhancements including cross-version live migration, live migration compression, and live migration with RDMA.
- The ability to grow or shrink VHDXs with no downtime.
- Hyper-V Replica enhancements including tertiary site support and sync intervals as low as 30 seconds.
- And much more

On servers that are not expected to be highly virtualized, Windows Server Standard is optimal, providing two instances per license, with an ability to assign multiple licenses to a single server to increase the allowed virtual OSE densities on that server. Keep in mind that servers licensed with Windows Server Standard will need to have the appropriate number of licenses assigned to that server to ensure coverage of all of the virtual OSEs that are running at any given time.

Q: Which Client Access Licenses (CALs) do I use to access Windows Server 2012 R2?

A: Your Windows Server 2012 Client Access License (CAL) are used to access Windows Server 2012 and Windows Server 2012 R2. You do not need to have Software Assurance on your Windows Server 2012 CAL in order to use it to access Windows Server 2012 R2. Windows Server 2012 R2 requires the same CAL version as Windows Server 2012.



Q: Do I still need a separate CAL to access Remote Desktop Services (RDS) and Active Directory Rights Management Service (ADRMS)?

A: Yes. The licensing requirements for Remote Desktop Services (RDS) and Active Directory Rights Management Service (ADRMS) have not changed with Windows Server 2012 R2. Customers are still required to purchase an ADRMS and/or RDS CAL in addition to a Windows Server CAL to access ADRMS and/or RDS functionality respectively. For example, to access RDS functionality in Windows Server 2012 R2, you need Windows Server 2012 CALs and Windows Server 2012 RDS CALs along with the server software.

Q: What is the price of running Windows Server 2012 R2 on Windows Azure under "preview" and "general availability"?

A: During Preview, VOSEs running Windows Server 2012 R2 will be charged at the same rate as those running Linux. During generally availability, VOSEs running Windows Server 2012 R2 will be charged the same rate as those running Windows Server 2012.

Q: Can I move Windows Server 2012 R2 licenses and images between Hyper-V and Azure?

A: Windows Server 2012 R2 licenses, just like Windows Server 2012 are not eligible for the License Mobility through Software Assurance benefit. You can continue to take advantage of the license mobility rights for other server applications; however Windows Server will continue to be purchased separately from the service provider or Azure.

Q: What are the System Center license requirements for managing Windows Server 2012 R2 instances running on Azure?

A: You can use the License Mobility through Software Assurance to assign your System Center 2012 R2 license to a Windows Server instance running on Azure.

Q: How do I license Windows Server 2012 R2 on Core Infrastructure Suite to run some instances on Azure?

A: You are not able to run your Core Infrastructure Suite (CIS) Windows Server license in Azure because Windows Server does not offer mobility right as a standalone license or as a component product within the Core Infrastructure Suite product purchased.

Q: What are my licensing options for the recovery server as part of disaster recovery planning? A: Windows Server license is required for your disaster recovery server if:

- You are running a failover cluster, all processors and running OSEs must be licensed, including OSEs that are expected to carry a production load only after the failure of another OSE.
- You have a recovery server running a Windows OSE, whether virtual or physical, that is typically on-line (i.e. not during one of the exception periods below), the OSE must be licensed, even if it is expected to carry a production load only after the failure of a production server.

If you do not expect to run the disaster recovery server or OSE, licensing the primary server with Software Assurance may be sufficient as it provides the benefit of Disaster Recovery Rights. The Disaster Recovery Software Assurance benefit allows the disaster recovery server or OSE to run only during the following exception periods:

- For brief periods of disaster recovery testing within one week every 90 days
- During a disaster, while the production server being recovered is down
- Around the time of a disaster, for a brief period, to assist in the transfer between the primary production server and the disaster recovery server



In order to use the software under Disaster Recovery Rights, you must comply with the following terms:

- The OSE on the disaster recovery server must not be running at any other times except as above.
- The OSE on the disaster recovery server may not be in the same cluster as the production server.
- Windows Server license is not required for the disaster recovery server if the following conditions are met:
 - The Hyper-V role within Windows Server is used to replicate virtual OSEs from the production server at a primary site to a disaster recovery server.
 - o The disaster recovery server may be used only to
 - run hardware virtualization software, such as Hyper-V,
 - provide hardware virtualization services,
 - run software agents to manage the hardware virtualization software,
 - serve as a destination for replication,
 - receive replicated virtual OSEs, test failover, and await failover of the virtual OSEs.
 - run disaster recovery workloads as described above.
 - o The disaster recovery server may not be used as a production server.
- Use of the software in the OSE on the disaster recovery server should comply with the license terms for the software.
- Once the disaster recovery process is complete and the production server is recovered, the OSE on the disaster recovery server must not be running at any other times except those times allowed here.
- Maintain Software Assurance coverage for all CALs, External Connector licenses and Server Management Licenses under which you access your licensed software running on the disaster recovery server and manage the OSEs in which that software runs.
- Your right to run the backup instances ends when your Software Assurance coverage ends.

In the event of a permanent hardware failure on the primary server and if there is no licensing on the secondary server, the primary server license can be assigned to a recovery server even within 90 days since the last reassignment. However, once the license is assigned to the recovery server, the license cannot be reassigned to another replacement server for 90 days. Please refer to the Product Use Rights document for more details on the "Early Reassignment Due to Hardware Failure" rule.

WS 2012 R2 - Essentials and Foundation editions

Q: Are there any changes to the licensing model for Windows Server 2012 R2 Essentials?

A: Windows Server 2012 R2 Essentials will continue to have a license that covers a single server with up to two physical processors. Is does not require CALs, but is limited to 25 user accounts.

With previous versions of the Windows Server Essentials edition, it was necessary to obtain a hypervisor separately in order to run as a virtual machine—options included the free Microsoft Hyper-V Server or using Windows Server Standard edition to run Hyper-V. With Windows Server 2012 R2 Essentials, the product licensing terms have been expanded to enable you to run one operating system instance on the physical server for Hyper-V, plus a second Operating System Environment on that server in order to run Essentials as a virtual machine. Installation wizards have also been created to simplify the process of deploying as a virtual machine by automating the steps necessary to set up and configure the host server environment. This makes it easier than ever before to take advantage of Hyper-V and its features, such as Live Migration and Hyper-V Replica.

Q: What are some of the features that are now available in Windows Server 2012 R2 Essentials?

A: Windows Server 2012 R2 Essentials incorporates best-of-breed capabilities to deliver a server environment well suited for the vast majority of small businesses, enabling customers to:

Protect your data



- Provide secure remote access
- Integrate cloud services

Customers can use Windows Server 2012 R2 Essentials as a platform to run critical line-of-business applications and other on-premises workloads. It can also provide an integrated management experience when running cloud-based applications and services, such as email, collaboration, online backup, and more.

Q: What are the different editions available with Windows Server 2012 R2 Essentials?

A: There is only one edition—Windows Server 2012 R2 Essentials. It is a flexible offering that provides a platform for running on-premises or cloud-based workloads.

O: How much will Windows Server Essentials cost?

A: For your specific pricing, contact your Microsoft reseller. Actual prices may vary. Microsoft does not determine pricing or payment terms for licenses acquired through resellers.

Edition	Volume Licensing Open No Level Estimated Retail Price	
Essentials	\$501	
Foundation	OEM only	

Q: Are there any licensing changes happening to the Foundation edition as part of Windows Server 2012?

A: There are no changes to the Foundation edition licensing or pricing model. To see the full list of features and licensing, go to the <u>Foundation Server 2012 website</u>.

