



Selected IBM System x , BladeCenter , and PureFlex System server models now shipping with Microsoft Windows Server 2012 Operating System and CALs

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At a glance

Selected IBM® System x® , BladeCenter® , and PureFlex™ System server models can now be shipped with the Microsoft™ Windows™ Server 2012 Operating System Datacenter, Standard, Storage Server, Foundation, and Essentials editions.

For ordering, contact your IBM representative, an IBM Business Partner, or IBM Americas Call Centers at 800-IBM-CALL (Reference: SE001).

Overview

Selected IBM System x , BladeCenter , and PureFlex System server models can now be shipped with the Microsoft Windows Server 2012 Operating System Datacenter, Standard, Storage Server, Foundation, and Essentials editions.

The Windows Server 2012 product line has been streamlined and simplified, making it easier for clients to choose the edition that is right for their needs. The Windows Server 2012 Product family will now include Windows Server 2012 Essentials (formerly branded as Small Business Server Essentials) and is ideal for a cloud-connected first server. Windows Server Enterprise, Windows Server Web, and Windows Storage Server Enterprise editions will not be offered as Windows Server 2012 editions.

Windows Server 2012 Datacenter and Standard Editions have a consistent licensing model (Per processor based + CALs) and each license grants rights to run on up to two processors.

- Differentiation between Datacenter and Standard editions is based on virtualization (there are no technical controls in software; the Virtual Machine (VM) usage rights are governed by the end user license terms).
- Windows Server 2012 Standard edition (2 CPU) includes two VMs per license and Windows Server Datacenter edition (2 CPU) includes unlimited VMs. The Datacenter and Standard edition code base and features are identical.

Windows Server 2012 Standard and Datacenter editions continue to require Windows Server CALs (Client Access Licenses) for every user or device accessing a server. There are two types of Windows Server 2012 CALs, device-based and user-based, known as Windows Device CALs or Windows User CALs.

- Clients can choose to acquire a Windows CAL either for every device (used by any user) accessing their servers, or for every named user accessing their servers (from any device).

The option to choose between the two types of Windows CALs offers clients the flexibility to use the licensing that best suits the needs of their organization. For example:

- Windows Device CALs might make most economic and administrative sense for an organization with multiple users for one device, such as shift workers.
- Whereas, Windows User CALs might make most sense for an organization with many roaming employees that need access to the corporate network from unknown devices or employees who access the network through multiple devices.
- Some additional or advanced functionality continues to require the purchase of an additive CAL. These are CALs that are required in addition to the Windows Server CAL to access functionality, such as Remote Desktop Services or Active Directory Rights Management Services.

Windows Storage Server 2012 Standard edition has a per-processor-based licensing model (similar to Windows Server 2012 Standard and Datacenter editions), with each license granting the rights to run on up to two processors; however CALs are not required and unlimited external connections are allowed.

Windows Server 2012 Essentials edition and Windows Server 2012 Foundation licensing remain unchanged and have the following licensing model:

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

IBM OEM licenses are available for the following Windows Server 2012 operating system editions at a competitive price:

- Microsoft Windows Server 2012 Datacenter edition: For highly virtualized private cloud environments.
- Microsoft Windows Server 2012 Standard edition: For nonvirtualized or lightly virtualized environments.
- Microsoft Windows Storage Server 2012 Standard edition: For Stand-alone NAS (Network Attached Storage), Highly Available NAS, and NAS Gateways.
- Microsoft Windows Server 2012 Essentials edition: For small businesses with up to 25 users running on servers with up to two processors.
- Microsoft Windows Server 2012 Foundation edition: For small businesses with up to 15 users running on single processor servers.
- Microsoft Windows Server 2012 Client Access License (5 Device)
- Microsoft Windows Server 2012 Client Access License (5 User)
- Windows Server 2012 Remote Desktop Services Client Access License (5 Device)
- Windows Server 2012 Remote Desktop Services Client Access License (5 User)

Orders for the Windows Server 2012 Client Access License and Windows Server 2012 Remote Desktop Services Client Access License are accepted independently or in conjunction with a valid hardware order.

Key prerequisites

- Must be ordered with or for usage on System x hardware
- Supported on System x and BladeCenter servers
- The media kit contains Dual-Layer DVD optical media. It is recommended that a dual-layer capable DVD drive be configured with the server.

Windows Server 2012 Simplified Editions

The Windows Server 2012 product line has been streamlined and simplified, making it easier for clients to choose the edition that is right for their needs. The Windows Server 2012 Product family now includes Windows Server 2012 Essentials (formerly branded as Small Business Server Essentials) and is ideal for a cloud-connected first server. Windows Server Enterprise, Windows Server Web, and Windows Storage Server Enterprise editions will not be offered as Windows Server 2012 editions.

Windows Server 2012 Datacenter edition with unlimited virtualization rights provides the benefits of cloud-level scale with predictable, lower costs. Windows Server 2012 Standard edition now offers all of the same enterprise-class features as Datacenter and is differentiated only by virtualization rights.

Clients can choose from five editions of Windows Server 2012, based on the size of their organization and requirements for virtualization and cloud computing.

- Microsoft Windows Server 2012 Datacenter edition
 - Ideal for highly virtualized private cloud environments.
 - Full Windows Server functionality with unlimited virtual instances.
 - Processor + CAL Licensing model.
- Microsoft Windows Server 2012 Standard edition
 - Ideal for low-density or nonvirtualized environments.
 - Full Windows Server functionality with two virtual instances.
 - Processor + CAL Licensing model.
- Microsoft Windows Storage Server 2012 Standard edition
 - Stand-alone NAS (Network Attached Storage).
 - Highly Available NAS.
 - NAS Gateways.
- Microsoft Windows Server 2012 Essentials edition
 - Ideal for small business environments.
 - Simpler interface, preconfigured connectivity to cloud-based services; no virtualization rights.
 - Server Licensing model (25-user account limit).
- Microsoft Windows Server 2012 Foundation edition
 - Ideal for economical general purpose server.
 - General purpose server functionality with no virtualization rights.
 - Server Licensing model (15-user account limit).
 - Only available from Microsoft OEMs like IBM .

Windows Server 2012 features increased scalability and performance

Windows Server 2012 has increased scalability and performance over Windows Server 2008 R2. The following information consists of the Windows Server 2012 Maximum System resource numbers:

- Host
 - Logical processors on hardware: 320
 - Physical memory: 4 TB
 - Virtual processors per host: 2,040
- Virtual machine
 - Virtual processors per VM: 64
 - Memory per virtual machine: 1 TB

- Active virtual machines: 1,024
- Cluster
 - Nodes: 64
 - Virtual machines: 4,000

Windows Server 2012 business value features

Server Manager: Simplified, single-UI management of multiple servers

The expanded capabilities of Server Manager in Windows Server 2012 can help facilitate multiserver tasks such as remote role and feature deployment to both physical and virtual servers and custom server group creation.

IT professionals can provision servers and offline virtual hard disks from their desktops without requiring physical access to the system or Remote Desktop Protocol connections to each server. Administrators can manage groups of servers collectively from within a single, integrated console, which enables them to respond to business-critical problems with greater speed and agility.

Capabilities provided by the new Server Manager include:

- Multiserver experience
- Efficient deployment of workloads to remote servers and offline virtual hard disks
- Installing roles and features on a remote server or offline virtual hard disk
- Streamlined server configuration and deployment
- Batch deployment
- Integration with other management tools

Storage Spaces: New virtualized storage by turning commodity hardware into virtual storage

Storage Spaces is a storage virtualization technology which succeeds Logical Disk Manager and allows the organization of physical disks into logical volumes similar to Logical Volume Manager (Linux[™]), RAID1 or RAID5, but on a higher level.

A storage space will behave like a physical disk to the user, with thin provisioning of available disk space. The spaces are organized within a storage pool, for example, a collection of physical disks, which can span multiple disks of different sizes and different interfaces (USB, SATA, SAS). The process of adding new disks or replacing failed or older disks is fully automatic, but can be controlled with PowerShell commands. The same storage pool can host multiple storage spaces. Storage spaces have built-in resiliency from disk failures, which is achieved by either mirroring or striping with parity across the physical disks. Each storage pool on the ReFS filesystem is limited to 4 PB (4096 TB), but there are no limits on the total number of storage pools or the number of storage spaces within a pool.

Storage Spaces technology:

- Automatically restores data redundancy if a disk fails
- Provides ability to thin-provision storage
- Enable Storage Spaces management through the use of PowerShell

Storage Live Migration: More VHDs with minimal downtime risk and cost

Hyper-V live migration moves running virtual machines from one physical server to another with no impact on virtual machine availability to users. By pre-copying the memory of the migrating virtual machine to the destination server, live migration minimizes the transfer time of the virtual machine. A live migration is deterministic, which means that the administrator, or script, that initiates the live migration determines which computer is used as the destination for the live migration. The

guest operating system of the migrating virtual machine is not aware that the migration is happening, so no special configuration for the guest operating system is needed.

Expanded device support: More choice across a variety of devices

Access to a centralized desktop is enabled from the following types of devices: PCs, laptops, mobile tablets, (RemoteFX-based) and thin clients (support for additional client devices is provided by Microsoft partners such as Citrix).

Simplified DirectAccess is designed for easy deployment and use of remote access capabilities.

DirectAccess allows remote users to securely access enterprise shares, websites, and applications without connecting to a virtual private network (VPN). DirectAccess establishes bidirectional connectivity with a user's enterprise network every time a user's DirectAccess-enabled portable computer connects to the Internet, even before the user logs on. Users never have to think about connecting to the enterprise network and IT administrators can manage remote computers outside the office, even when the computers are not connected to the VPN.

Load balance failover (LBFO): Higher throughput and reliability through failover

2.8.2.1.6 BranchCache: Simplified deployment and performance.

Simplifies the deployment by removing the need for having a certificate on the hosted cache. It improves performance by reducing the average block size of the cache, and allows the administrator to configure a set of servers to work together to act like a single hosted cache. In addition, BranchCache can be managed and configured using known tools such as WMI and PowerShell; this allows third-party management solutions to extend the solution using standardized tools.

Powershell templates: Simplified, consistent scripting and configuration

Windows PowerShell 3.0 provides a comprehensive platform to help manage server roles and automate management tasks. Sessions to remote servers are resilient and can withstand various types of interruptions. In addition, Windows PowerShell is designed to be easier to learn with improved cmdlet discovery and simplified, consistent syntax across all cmdlets.

Capabilities provided by Windows PowerShell 3.0 include:

- Robust session connectivity
- Disconnected sessions
- Job scheduling
- New Windows PowerShell ISE features
- Windows PowerShell workflows
- Syntax simplification
- Script sharing
- Windows PowerShell Web Access
- Updatable help
- RunAs capability
- Default parameter values
- New cmdlets

Network virtualization: Flexibility to place VMs on-premise or hosted

Provides the flexibility to place any VM on any node irrespective of their IP address and allows multiple VMs to have their own IP address. This makes the transition

to hosters' private clouds easier for clients with existing on-premise VMs/physical servers.

Windows NIC teaming: Improved network availability, performance, and load balancing

Network adapter teaming, also known as load balancing and failover (LBFO), allows multiple network adapters on a computer to be placed into a team for the following purposes:

- Bandwidth aggregation
- Traffic failover to prevent connectivity loss in the event of a network component failure

De-duplication

Reduce storage capacity requirements by only storing unique data blocks.

De-duplication is an in-box feature that delivers capacity optimization, scale and performance, reliability, and data integrity at no additional cost.

Client Access Licensing Modes

After you have selected a license type-Windows Device CAL or Windows User CAL, you have the option to use the server software in two different modes: Per User/Per Device mode or Per Server mode. Both modes are available for either type of license.

Per User/Per Device mode is defined as follows:

- A separate Windows CAL (of either type) is required for each user or device that accesses or uses the server software on any of your servers.
- The number of Windows CALs required equals the number of users or devices accessing the server software.
- If you choose this licensing mode, your choice is permanent. You can, however, reassign a Windows CAL from one device to another device or from one user to another user, provided the reassignment is made either (a) permanently away from the one device or user or (b) temporarily to accommodate the use of the Windows CAL either by a loaner device, while a permanent device is out of service, or by a temporary worker, while a regular employee is absent.

Per User/Per Device mode tends to be the most economical designation for Windows CALs in distributed computing environments where multiple servers within an organization provide services across most devices or users.

Note: Per User/Per Device mode replaces Per Seat mode, used in previous licensing models.

Per Server mode is defined as follows:

- A separate Windows CAL (of either type) is required for each user or device that accesses or uses the server software on any of your servers.
- The number of Windows CALs required equals the maximum number of users or devices that may simultaneously access or use the server software installed on a particular server.
- The Windows CALs you acquire are designated for use exclusively with a particular server.
- If you choose this licensing mode, you have a one-time right to switch to the other licensing mode-Per User/Per Device mode. Your Windows CALs (of either type) would then be used in Per User/Per Device mode instead.

Per Server mode tends to be the most economical designation for Windows CALs in computing environments where a small number of servers have limited access requirements.

Additional information

All offers are subject to availability. IBM reserves the right to alter product offerings and specifications at any time without notice. IBM is not responsible for photographic or typographic errors.

Product positioning

Distributor and Reseller benefits

- Competitive pricing: Take advantage of a great price to lower your product acquisition costs and increase margins.
- Convenience and flexibility: Enjoy convenience in ordering and stock flexibility.
- Add-on sales: Sell Software Assurance within 90-days and get more opportunities to sell value-added services.

Client benefits

- Price advantage: Buying the System x , BladeCenter , and PureFlex System server and Windows operating system together with the ROK offers better pricing than buying them separately.
- Convenient deployment: Ordering the ROK through a System x , BladeCenter , and PureFlex System server Reseller is the fastest and easiest way to deploy server software.
- Easy ordering: Ordering Microsoft Windows Server 2008 ROK together with the System x , BladeCenter , and PureFlex System server offers a simple, one-stop shopping convenience.

Windows Server 2012: Benefits of upgrading

Windows Server 2012 benefits of upgrading that impact the day to day IT operations of a company:

- Simplified management: By upgrading to Windows Server 2012, clients can experience an integrated, highly available, and easy-to-manage multiserver platform with increased efficiency and ubiquitous automation.
- Affordable storage: Clients can reduce storage costs by using SMB-based file storage instead of SAN storage. For pooled virtual machine deployment, storage requirements can be lowered for a set of users by using a combination of SMB and local DAS.
- Continuous availability: Windows Server 2012 provides a cost-effective, high IT service uptime designed to protect against a wide range of failure scenarios and help both prevent downtime and speed recovery when needed.

Windows Server 2012: Advantages of virtualizing of infrastructure

- Manage multiple servers across cloud and on-premise: Windows Server 2012 is a scalable and elastic server platform that gives you the flexibility to build and deploy applications and websites on your own servers, in the cloud and in a hybrid environment using a consistent set of tools and frameworks.
- Affordable storage for VMs: Cost efficiency is provided by leveraging commodity storage, networking and server infrastructure, as well as increased power efficiency for superior acquisition and operating economics of the platform.
- Access almost anywhere, any device: Enabling seamless, on-demand access to a virtualized work environment can be enabled from virtually anywhere, including branch locations and public connectivity services, while maintaining enhanced data security and compliance.

Program number

Program number	V.R.M	Program name
5731-w12	1.0.0	windows Server 2012
5731-A12	1.0.0	windows Server 2012 Additional License
5731-C2L	1.0.0	windows Server 2012 Client Access License

Product identification number

Program PID number	Maintenance 1 year PID number	Maintenance 3 year PID number
5731-w12	N/A	N/A
5731-A12	N/A	N/A
5731-C2L	N/A	N/A

Business Partner information

If you are a Direct Reseller - System Reseller acquiring products from IBM , you may link directly to Business Partner information for this announcement. A PartnerWorld® ID and password are required (use IBM ID).

<https://www.ibm.com/partnerworld/mem/sla.jsp?num=212-316>

Offering Information

Product information is available via the Offering Information website

<http://www.ibm.com/common/ssi>

Publications

No hardcopy publications from IBM are shipped with this program.

Technical information

Specified operating environment

Hardware requirements

Supported eServer™ xSeries®, System x , BladeCenter or PureFlex System servers.

For the most up-to-date information regarding compatibility, visit

<http://www-03.ibm.com/servers/eserver/serverproven/compat/us/>

Software requirements

The program's specifications and specified operating environment information may be found in documentation accompanying the program, if available, such as a readme file, or other information published by IBM , such as an announcement letter. Documentation and other program content may be supplied only in the English language.

Planning information

Packaging

This program, when downloaded from a website, contains the applicable IBM license agreement and License Information, if appropriate, and will be presented for acceptance at the time of installation of the program. For future reference, the license and License Information will be stored in a directory such as LICENSE.TXT.

Software Services

IBM Software Services has the breadth, depth, and reach to manage your services needs. You can leverage the deep technical skills of our lab-based, software services team and the business consulting, project management, and infrastructure expertise of our IBM Global Services team. Also, we extend our IBM Software Services reach through IBM Business Partners to provide an extensive portfolio of capabilities. Together, we provide the global reach, intellectual capital, industry insight, and technology leadership to support a wide range of critical business needs.

To learn more about IBM Software Services or to contact a Software Services sales specialist, visit

<http://www.ibm.com/software/sw-services/>

Ordering information

Charge metric

Program name	PID number	Charge metric
Windows Server 2012	5731-W12	Per 1 Processor Server Per 2 Processor Server
Windows Server 2012 Additional License	5731-A12	Per 2 Processor Server
Windows Server 2012 Client Access License	5731-C2L	Per User CAL Per Device CAL

Server

Server is a unit of measure by which the program can be licensed. A server is a physical computer that is comprised of processing units, memory, and input/output capabilities and that executes requested procedures, commands, or applications for one or more users or client devices. Where racks, blade enclosures, or other similar equipment is being employed, each separable physical device (for example, a blade or a rack-mounted device) that has the required components is considered itself a separate server. For the purpose of server-based licensing, licensee must obtain entitlements for each server that is made available to the program, regardless of the number of processor cores and partitions in the server or the number of copies of the program on the server.

Notes :

- Some programs may require licenses for the program **and** what is being managed. In that case, the following applies. In addition to the entitlements required for the program directly, licensee must obtain entitlements for this program sufficient to cover the servers managed by the program.
- Some programs may be licensed on a managed basis **only** . In that case, the following applies. Instead of the entitlements required for the program directly, licensee must obtain entitlements for this program sufficient to cover the servers managed by program.

Program delivery

Except where noted, configuration aids, either IBM Configurator for e-business or IBM Hardware Configurator, must be used for creation of valid software and hardware orders for the offerings in this announcement as well as other referenced and affiliated announcement offerings.

Billing for the operating systems will occur under the licensed program order number contained in this announcement.

The licenses below are available for stand-alone purchase. To order these programs, specify the type model number, order type description, one-time charge (OTC) feature number with quantity, and supply feature, or the single entity offering (SEO) number as indicated and listed in the tables below.

Feature description	OTC feature number	Lang feat number	Supply feat number	SEO number
5731-C2L windows Server 2012 Client Access License				
User CALS				
Per 1 User CAL	0663	N/A	5809	00Y6333
Per 5 User CALS	0661	N/A	5819	00Y6334
Per 10 User CALS	0658	N/A	5829	00Y6335
Per 50 User CALS	0657	N/A	5839	00Y6336
Device CALS				
Per 1 Device CALS	0668	N/A	5849	00Y6337
Per 5 Device CALS	0660	N/A	5859	00Y6338
Per 10 Device CALS	0667	N/A	5869	00Y6339
Per 50 Device CALS	0665	N/A	5879	00Y6340
Remote Desktop Services User CALS				
Per 1 User CAL	0662	N/A	5889	00Y6341
Per 5 User CALS	0659	N/A	5899	00Y6342
Remote Desktop Services Device CALS				
Per 1 Device CALS	0666	N/A	5957	00Y6343
Per 5 Device CALS	0664	N/A	5970	00Y6344

The following license offerings can be ordered in conjunction with a new system order on which the selected operating system has been announced as an offering. Shipment of materials when ordered with a new system will be included with the system unit.

To order the programs listed below with a new system order, specify the type model number, order type description, one-time charge (OTC) feature, preinstall feature, or drop-in-the-box feature as indicated and listed in the tables below.

Note: A Hardware Installation Productivity Order (HIPO) must be placed if the operating system is part of a new system order. The feature numbers included on a HIPO order provide instructions and actions to the hardware and software Solution Provider and will be used to verify that the software orders for a given system unit solution exist and can be used for various logistical and business system measurements.

HIPO ordering information follows this section.

The license offerings related to 5731-W12 support the first two populated sockets of the server being configured. License offerings to support additional populated sockets are found in the table related to 5731-A12.

Type model number feature description	OTC billing feature number	Lang- uage feature number	Supply feature number	Pre- install feature number	Drop-in the-box feature number
5731-w12 Windows Server 2012 Standard					
Per 2 Processor Server English (factory installed)	0670	2924	5809	3522	3523

English (not preinstalled)	0670	2924	5809	N/A	3523
Datacenter					
Per 2 Processor Server					
English (factory installed)	0672	2924	5819	3522	3523
English (not preinstalled)	0672	2924	5819	N/A	3523
Foundation					
Per 1 Processor Server					
English (factory installed)	0671	2924	5829	3522	3523
English (not preinstalled)	0671	2924	5829	N/A	3523
Storage Server Standard					
Per 2 Processor Server					
English (factory installed)	0669	2924	5839	3522	3523
English (not preinstalled)	0669	2924	5839	N/A	3523

Type model number	OTC billing feature number	Language feature number	Supply feature number	Pre-install feature number	Drop-in the-box feature number
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5731-A12 Windows Server 2012 Additional License

Standard					
Per 2 Processor Server					
Multilingual	0649	2924	5809	N/A	N/A
Datacenter					
Per 2 Processor Server					
Multilingual	0648	2924	5819	N/A	N/A
Storage Server Standard					
Per 2 Processor Server					
Multilingual	0647	2924	5829	N/A	N/A

Serialization feature code: 3444

For order routing purposes, serialization feature code 3444 must be included on every operating system license program order.

Hardware Installation Productivity Order (HIPO): 5372-SWX

5372-SWX HIPO is mandatory for preinstall or shipments of program medium and publications associated with select operating system offerings in this announcement. The translation table below is for reference purposes. The operating system type model numbers, with offered OTC features numbers, are cross referenced to features that must be included on the 5372-SWX HIPO type model order for the purpose of completing valid (error-free) system solution orders.

5372-SWX									
Operating System Type model Number	O/S OTC feat Num	O/S P1 no feat	O/S DIB feat	HIPO O/S ID feat	HIPO Spec 1 ID feat	HIPO Spec Lang feat	HIPO Spec Proc feat	HIPO P1 no feat	HIPO Spec DIB feat
5731-w12 Windows Server 2012									
Standard									
Factory installed									
English	0670	3522	3523	7249	N/A	2924	N/A	9200	9205
Not preinstalled									
English	0670	N/A	3523	7249	N/A	2924	N/A	9206	9205
Datacenter									
Factory installed									
English	0672	3522	3523	7251	N/A	2924	N/A	9200	9205
Not preinstalled									
English	0672	N/A	3523	7251	N/A	2924	N/A	9206	9205
Foundation									
Factory installed									
English	0671	3522	3523	7253	N/A	2924	N/A	9200	9205
Not preinstalled									
English	0671	N/A	3523	7253	N/A	2924	N/A	9206	9205
Storage Server Standard									
Factory installed									
English	0669	3522	3523	7254	N/A	2924	N/A	9200	9205

Not preinstalled										
English	0669	N/A	3523	7254	N/A	2924	N/A	9206	9205	

5372-SWX

Operating System	O/S	O/S		HIPO	HIPO	HIPO	HIPO	HIPO	HIPO
Type model	OTC	P1	O/S	O/S	Spec	Spec	Spec	P1	Spec
Number	feat	no P1	DIB	ID	1 ID	Lang	Proc	no P1	DIB
	Num	feat	feat	feat	feat	feat	feat	feat	feat

5731-A12 Windows Server 2012 Additional License

Standard

Multilingual	0649	N/A	N/A	7250	N/A	2924	N/A	N/A	N/A
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Datacenter

Multilingual	0648	N/A	N/A	7252	N/A	2924	N/A	N/A	N/A
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Storage Server Standard

Multilingual	0647	N/A	N/A	7255	N/A	2924	N/A	N/A	N/A
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Customization options

Select the appropriate feature numbers to customize your order with delivery options desired. These features can be specified on the initial or MES orders.

Expedite shipments

Feature	Description
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3445	Expedite
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Expedite shipments will be processed to receive 72-hour delivery from the time IBM Software Delivery and Fulfillment (SDF) receives the order.

Terms and conditions

The information provided in this announcement letter is for reference and convenience purposes only. The terms and conditions that govern any transaction with IBM are contained in the applicable contract documents such as the IBM International Program License Agreement, IBM International Passport Advantage® Agreement, and the IBM Agreement for Acquisition of Software Maintenance.

Licensing

Supplier's license terms apply.

Limited warranty

Not warranted by IBM . Warranty, if any, provided by supplier.

Volume orders

Not applicable

Educational allowance

Yes. 15% to qualified educational institutions.

Statement of good security practices

IT system security involves protecting systems and information through prevention, detection, and response to improper access from within and outside your enterprise. Improper access can result in information being altered destroyed or misappropriated or can result in misuse of your systems to attack others. Without a

comprehensive approach to security, no IT system or product should be considered completely secure and no single product or security measure can be completely effective in preventing improper access. IBM systems and products are designed to be part of a comprehensive security approach, which will necessarily involve additional operational procedures, and may require other systems, products, or services to be most effective. IBM does not warrant that systems and products are immune from the malicious or illegal conduct of any party.

Prices

For current prices, contact IBM at 888-Shop-IBM (746-7426) or visit

<http://www-03.ibm.com/systems/x/>

To locate the web price, search on the feature number in the Search field.

Type model number feature description	OTC Billing feature number
5731-w12 windows Server 2012 Standard	
Per 2 Processor Server Datacenter	0670
Per 2 Processor Server Foundation	0672
Per 1 Processor Server Storage Server	0671
Per 2 Processor Server	0669

Type model number feature description	OTC Billing feature number
5731-A12 windows Server 2012 Additional License Standard	
Per 2 Processor Server Datacenter	0649
Per 2 Processor Server Storage Server	0648
Per 2 Processor Server	0647

Type model number feature description	OTC Billing feature number
5731-C2L windows Server 2012 Client Access License User CALs	
Per 1 User CAL	0663
Per 5 User CALs	0661
Per 10 User CALs	0658
Per 50 User CALs	0657
Device CALs	
Per 1 Device CALs	0668
Per 5 Device CALs	0660
Per 10 Device CALs	0667
Per 50 Device CALs	0665
Remote Desktop Services User CALs	
Per 1 User CAL	0662
Per 5 User CALs	0659
Remote Desktop Services Device CALs	
Per 1 Device CALs	0666
Per 5 Device CALs	0664

IBM Global Financing

IBM Global Financing offers competitive financing to credit-qualified customers to assist them in acquiring IT solutions. Offerings include financing for IT acquisition, including hardware, software, and services, from both IBM and other manufacturers or vendors. Offerings (for all customer segments: small, medium, and large enterprise), rates, terms, and availability can vary by country. Contact your local IBM Global Financing organization or visit

<http://www.ibm.com/financing>

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Financing from IBM Global Financing helps you preserve cash and credit lines, enables more technology acquisition within current budget limits, permits accelerated implementation of economically attractive new technologies, offers payment and term flexibility, and can help match project costs to projected benefits. Financing is available worldwide for credit-qualified customers.

For more financing information, visit

<http://www.ibm.com/financing>

Order now

To order, contact the Americas Call Centers or your local IBM representative, or your IBM Business Partner.

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Corrections

(Corrected on October 4, 2012)

Hardware Installation Productivity Order (HIPO) ordering information revised.