## Overview

Microsoft® Windows Server® 2008, with built-in Web and virtualization technologies, enables you to increase the reliability and flexibility of your server infrastructure. New virtualization tools, Web resources, and security enhancements help you save time, reduce costs, and provide a platform for a dynamic and optimized datacenter. Powerful new tools like Internet Information Services 7.0 (IIS 7.0), Windows Server Manager, and Windows PowerShell™ allow you to have more control over your servers and streamline Web, configuration, and management tasks. Advanced security and reliability enhancements like Network Access Protection and the Read-Only Domain Controller harden the operating system and protect your server environment to ensure you have a solid foundation on which to build your business.

Web & Applications

Windows Server 2008, with its service-oriented architecture, gives you the ability to deliver rich Web-based experiences efficiently and effectively, with improved administration and diagnostics, development and application tools, and lower infrastructure costs.

The release of Internet Information Services 7.0 (IIS 7.0) as part of Windows Server 2008 offers improved administration and diagnostics, better development and application tools and lower infrastructure costs. It is also a completely modular, extensible Web server with expanded application hosting, while retaining excellent compatibility and solving key customer challenges.

As an applications platform, Windows Server 2008 and IIS 7.0 provide architecture to deliver highly-available, secure, and scalable Web-based applications and services.IIS 7.0 provides a unified platform for Web hosting and publishing and provides application support for the .NET 3.0 Framework, classic ASP, ASP.NET, and PHP with FastCGI support. The integrated pipeline architecture in IIS 7.0 also allows .NET Framework applications to be integrated with ASP and PHP applications. This combination makes it possible for organizations to develop and host their applications on one platform.

Microsoft Windows Media® Services is an industrial-strength platform for streaming live or on-demand audio and video content over the Internet or an intranet. Windows Media Services provide a fast-streaming experience and dynamic programming for on-demand and personalized content delivery, on a platform that offers ease of administration, customization, and scalability.

## Virtualization

With its built-in server virtualization technology, Windows Server 2008 enables organizations to reduce costs, increase hardware utilization, optimize their infrastructure, and improve server availability. Server Virtualization with Hyper-V™ uses a 64-bit hypervisor-based platform for increased reliability and scalability. Hyper-V helps organizations optimize their hardware resources through server consolidation. Hyper-V also leverages components of the Windows Server 2008 platform like failover clustering to provide high availability and Network Access Protection (NAP) to quarantine noncompliant virtual machines.

Another component of the Microsoft virtualization solution is Presentation Virtualization, which is the ability to detach the application presentation layer, or the user interface, from the host operating system. Terminal Services RemoteApp accelerates and extends application deployments to any device, improving remote worker efficiency, while helping keep critical intellectual property secure and radically simplifying regulatory compliance. Terminal Services Gateway securely connects internal applications and data to users outside the firewall. It securely delivers critical applications and data to mobile employees.

## Security

Windows Server 2008 is the most secure Windows Server ever, protecting networks with a hardened security platform. It provides secure policy-based access and helps reduce network downtime by enforcing compliance with customized health policies. It uses improved data protection to ensure that sensitive informationis not compromised. This hardened operating system enables businesses to host the most mission-critical applications and workloads

Windows Server 2008 enhances system and network security with a hardened, secure platform. Server operating system enhancements include Windows Service Hardening, Improvements to Windows Firewall, the new Read Only Domain Controller (RODC), and the enhanced and improved TCP/IP stack help ensure that the file system and registry is safeguarded from abnormal activities.

Windows Server 2008 enables secure policy-based access to the network. Features such as Network Access Protection, Secure Wireless, Server and Domain Isolation, and Active Directory® Federation Services (AD FS) provide highly extensible, secure identity solutions that operates across multiple devices and ensures access is restricted based on policy enforcement and compliance.

Windows Server 2008 improves information protection to secure sensitive data from being captured and misused. Features such as Rights Management Services (RMS), Windows BitLocker™ and AuditPol provide provides centralized monitoring and auditing of critical information transfer and ensures persistent protection of sensitive data.

Solid Foundation for Business Workloads  
Windows Server 2008 gives organizations the most flexible and robust set of tools to manage and control their IT infrastructure. With new technologies and features such as the Server Core installation option, Windows PowerShell™, Power Management features, and enhanced management, networking, and clustering technologies, Windows Server 2008, coupled with Windows Vista® SP1, provides the most robust, versatile, and reliable Windows platform for all of your workload and application requirements, from the server to the desktop.

Server Manger integrates server role and feature addition, removal, and configuration into a single Microsoft Management Console (MMC). Features like Power Management reduce energy consumption and maintain server performance through processor power management features. High Performance Computing (HPC) increases scalability and performance of HPC workloads and improve management of clustered file systems.

The Windows PowerShell command-line shell and scripting language helps IT Professionals automate common tasks and more easily control system administration and accelerates automation, even in remote locations. PowerShell leverages existing investments by retaining compatibility with existing scripting solutions.

Server core is a new installation option for selected roles that includes only the necessary subsystems required for those roles. Server core can create a more reliable and secure server that requires less patching and servicing.

Windows Server 2008 includes a new implementation of the TCP/IP protocol stack known as the Next Generation TCP/IP stack. This stack meets the connectivity and performance needs of today’s varied networking environments and technologies through a complete redesign of the TCP/IP stack.

A failover cluster—formerly known as server clusters—is a group of independent computers that work together to increase the availability of applications and services. In Windows Server 2008, the improvements to failover clusters simplify clusters, making them easier to secure, and more stable.

# Benefit Summary

Windows Server 2008 will provide customers with:

* A rock-solid server foundation that is secure, manageable, responsive, interoperable, and compatible
* A platform that supports rapid development and delivery of smart and connected applications
* Agility, to increase operational efficiency and IT effectiveness
* Policy-based networking, improved remote management, and enhanced end-user collaboration
* An application platform that provides flexible solutions, connected systems, and rich user experiences
* A platform that provides a more secure and reliable IT infrastructure, to help organizations meet project objectives on time and within budget, allowing staff to focus on priorities important to the company

# Why Upgrade to Windows Server 2008?

Windows Server 2008 is a next-generation server operating system that helps IT maximize control over their infrastructure, while providing unprecedented availability and management that leads to a significantly more secure, reliable, and robust server environment. Windows Server 2008 builds on the success and strengths of the award-winning Windows Server® 2003 operating system, as well as on the innovations delivered in Service Pack 1 for Windows Server 2003 and Windows Server 2003 R2. However, Windows Server 2008 is far more than a refinement of preceding operating systems. Windows Server 2008 delivers exciting, valuable new functionality and powerful improvements to the core operating system to help organizations of all sizes to increase control and manageability, provide high availability, and have more flexibility for their changing business needs.

# New Features

Hyper-V features:

* Provides powerful virtualization and network management technology that enables businesses to take advantage of virtualization's benefits without buying third-party software
* Reduces IT costs, centralizes network management, increases network security and reliability, and provides scalability to help control hardware budgets
* Provides unprecedented ability to leverage host hardware allowing virtualization of very demanding workloads:
  + Up to four processor cores per virtual machine (VM)
  + Up to 32 GB of RAM per VM
* Utilizes a 64-bit hypervisor-based architecture that supports hardware-assisted virtualization, utilizing both Intel VT and AMD “Pacifica” technology
* Supports 32-bit and 64-bit VMs running side-by-side
* Supports Windows Server 2008, Windows Server 2003 R2 SP2, Windows Vista SP1, Windows® XP SP3, and SUSE Linux Enterprise Server 10 as operating systems on VMs. Compatible with a wide variety of other guest operating systems.
* Takes advantage of a new hardware-sharing architecture VMBus for VM to host interaction of disk, networking, input/output, and video hardware
* Utilizes a microkernelized architecture, providing a more secure platform for virtualization
* Makes high-performance synthetic devices available to VMs running supported guest operating systems without limitations created by emulation
* New storage features, such as pass-through disk access which allow VMs more access to data, and external programs and services more access to data stored on VMs
* Flexible, role-based security allows delegation of VMs
* Enables High availability scenarios where Hyper-V hosts or VMs running on Hyper-V hosts can be clustered
* New management tools and performance counters make the virtualized environment easier to manage and monitor
* Allows for backup of VMs while they are running
* Addresses these key Virtualization scenarios:
  + Consolidation
  + Automation of test and development environments
  + Business continuity and disaster recovery
  + Dynamic Datacenter

Internet Information Services (IIS) 7.0 enhancements:

* Is a major upgrade from IIS 6.0
* Provides a modular design and installation, resulting in enhanced security and reduced attack surface
* Allows flexible extensibility model for powerful customization
* Improves administration with the new IIS Manager graphical tool, and new appcmd.exe command-line tool
* Provides comprehensive diagnostic and troubleshooting tools that allow easy visibility and tracking of requests running on the Web server
* Allows delegated administration of Web sites
* The same web.config files are used by IIS 7.0 and the ASP.NET application framework, providing one configuration store for all Web platform configuration settings
* Utilizes a distributed configuration, which allows administrators to specify IIS configuration settings in files that are stored with the code and content
* Enables XCopy deployment of Web sites
* Provides programmatic access to configuration stores through WMI provide or Microsoft.Web.Administration
* Enables application and health management for Windows Communication Foundation (WCF) services
* FastCGI support enables organizations to host PHP applications on IIS 7.0

Server Core features:

* Allows administrators to install a minimal installation of Windows Server with specific functionality and without any unneeded features; available roles are:
  + Hyper-V
  + IIS 7.0
  + Dynamic Host Configuration Protocol (DHCP) server
  + Domain Name System (DNS) server
  + File server
  + Active Directory® Domain Service (AD DS)
  + Active Directory Lightweight Directory Services (AD LDS)
  + Windows Media® Services
  + Print Server
* Reduces software maintenance
* Decreases the attack surface of the server
* Reduces management
* Requires less disk space

Server Manager, the expanded Microsoft Management Console, enhancements:

* Built on the Service Modeling Language (SML) platform, which is used to model complex IT services and systems in software, including structure, constraints, configuration, and best practices
* Simplifies and centralizes server management through a single MMC console, allowing administrators to view and manage all of the tools that affect server productivity
* Enables easy addition or removal of server roles, such as Active Directory Domain Services or File Server, and features, such as Windows BitLocker drive encryption
* Allows multiple roles and features to be added in a single Server Manager sessions—role and role service dependencies are tracked, so required components are dynamically removed or added
* Provides Server Manager wizards to streamline common server management tasks
* Provides an Initial Configuration Tasks window that opens automatically after the operating system installation process is complete; this moves interactive elements of setup to post installation, eliminating the need for the administrator to interact with the installation of the operating system
* Provides robust remote administration over firewall-friendly ports

Read Only Domain Controller (RODC) features:

* Hosts a read-only replica of the database in Active Directory Domain Services (AD DS) for a given domain
* Designed to be installed in locations where physical security for the domain controller cannot be guaranteed, such as branch offices
* Allows local authentication for users in remote and branch office locations
* Provides local and Active Directory Integrated DNS and Global Catalog (GC) services
* Utilizes unidirectional replication saves bandwidth (hub sites don’t have to pull changes from the RODC)
* Prevents domain user account data from being compromised if the RODC physical security is compromised
* Provides configurable credential caching on the RODC
* Allows administrative permissions to be delegated to local users to manage the RODC without granting that user any additional permissions on the domain

Network Access Protection (NAP) features:

* Provides a set of client and server side components and services that prevents non-compliant computers from accessing and compromising an organization’s network
* Allows administrators to create health policies for clients, such as firewall-enabled virus software being installed and updated
* Validates clients meet compliance policies upon connection to the network and continuously while clients remain connected
* Enforces policies through DHCP, VPN, IPSec, 802.1x (clients evaluated on connection or use of services)
* Restricts or denies client network access for non-compliant computers
* Performs automatic remediation for noncompliant client computers
* Helps ensure the network and systems aren’t compromised by unpatched or infected noncompliant computers

Cryptography Next Generation (CNG) features:

* Allows customers to use their own cryptographic algorithms or implementations of standard cryptographic algorithms
* Performs basic cryptographic operations, such as creating hashes and encrypting and decrypting data, as well as creation, storage and retrieval of cryptographic keys
* Supports the current set of CryptoAPI 1.0 algorithms
* Provides support for elliptic curve cryptography (ECC) algorithms
* Allows the use of custom cryptography algorithms in cryptography-related applications

Windows Deployment Services (WDS) features:

* Replaces Remote Installation Services (RIS) from previous versions
* Provides a simplified, secure means of rapidly deploying Windows operating systems to computers by using network-based installation, without the need for an administrator to work directly on each computer, or to install Windows components from CD or DVD media.
* Uses a new image format (WIM) and deployment service (WDS) that simplifies image management, resulting in a faster, more reliable deployment for both clients and servers.

Group Policy Preferences features:

* Allows organizations to deploy managed settings that users may change, allowing organizations create configurations that are more compatible with their IT environment and that are specifically tailored to the organization and how its people use their computers
* Improves IT productivity by providing more than 20 new extensions
* Reduces the need for logon scripts
* Limits configuration errors through precision targeting and easy-to-use interfaces
* Minimizing image maintenance by deploying generic images and using Group Policy Preferences to update them
* Reducing overall image count by deploying generic images and using targeted Group Policy Preference settings for groups of users and computers

# Enhancements to Existing Features

Active Directory Domain Services (AD DS) enhancements:

* Provides an AD DS Installation Wizard that streamlines and simplifies AD DS installation and configuration
* Includes a new Find command in Active Directory Sites and Services snap-in that makes locating domain controllers across the enterprise easier
* Makes available new auditing options that allow administrators to track Directory Service changes, including modification, creation, restoration, and movement of objects, as well as previous and new attribute values
* Incorporates Restartable Active Directory, allowing administrators to stop and restart Active Directory domain services without restarting the domain controller, to perform offline AD DS operations more quickly
* Allows Group Policy settings to be viewed with the command-line tool Auditpol.exe

Active Directory Lightweight Directory Services (AD LDS) enhancements:

* Replaces functionality that was provided by Active Directory Application Mode (ADAM)
* Provides a robust, scalable directory service for directory enabled applications, for which integration with Active Directory is either not desirable or not necessary
* Use the same code base as Active Directory Domain Services
* Provides the following directory service features
  + Multimaster replication
  + Support for the Active Directory Service Interfaces (ADSI) application programming interface (API)
  + Application directory partitions
  + LDAP over Secure Sockets Layer (SSL)

Active Directory Rights Management Services (AD RMS) enhancements:

* Provides services to enable creating information-protection solutions that work with any AD RMS-enabled application to provide persistent usage policies for sensitive information
* Allows administration through a Microsoft Management Console (MMC)
* Integrates with Active Directory Federation Services (AD FS)
* Supports self-enrollment of AD RMS servers
* Provides delegation of responsibility by means of new AD RMS administrative roles
* Allows creation of rights-protected files and templates, and licensing of rights-protected information to trusted entities

Active Directory Federation Services enhancements:

* AD FS allows organizations to setup trust relationships between federation partners.
* The AD FS role only needs to be configured on one of the partners
* Allows administrators to designate trusted accounts that can then gain access to resources on partner networks to which they’ve been granted permissions
* Supports single sign on by allowing partners to log on once, using their local domain account
* Eliminates the need to have separate accounts for users in each domain, making access more secure and reducing the workload of IT staff
* Integrates with AD RMS - RMS permissions can be accessed and enforced over federated trusts

DNS Server enhancements:

* Provides name resolution for both IPV4 and IPv6 TCP/IP-based networks
* Enables background zone loading of zone data from AD DS during DNS service restarts, which allows the DNS server to respond to requests for other zone data more quickly
* Supports Read-only Domain Controllers (RODCs)
* DNS Server is available as a Server Core role
* Allows GlobalNames zones for static, global records with single-label names, a service which was traditionally be supplied by WINS; DNS will eventually phase out WINS
* Provides DNS clients with changes that facilitate the location of close domain controllers

Failover Clustering enhancements:

* New setup wizards eliminates potential setup and configuration errors
* Uses IPv6, which is fully integrated into failover clusters for node or heartbeat communication
* Uses Domain Name System (DNS) without legacy NetBIOS dependencies, eliminating the need for WINS and NetBIOS name-resolution broadcasts
* Allows associations between a network name resource and multiple associated IP addresses, so that the network name will be available if any of the IP addresses are available.
* Utilizes the more reliable Transmission Control Protocol (TCP) rather than the less reliable User Datagram Protocol (UDP) for cluster "heartbeats"
* Enhances security in failover clusters include:
  + A new security model—Cluster Service now runs in the context of the LocalSystem built-in account.
  + Auditing—Administrators can use auditing to capture information about who accessed a cluster and when it was accessed.
  + Encryption—Windows Server 2008 allows administrators set inter-node communication to be encrypted.
* Allows multi-site clusters, meaning that cluster nodes no longer need to be on the same IP subnet or configured with complicated VLANs

Network Load Balancing enhancements:

* Supports IPv6, in addition to other protocols, for all communication
* Supports for NDIS 6.0 while retaining backwards compatibility with earlier NDIS versions
* Provides WMI enhancements for IPv6 and multiple dedicated IP address support
* Improves denial of service attack and timer starvation protection; NLB can detect and notify applications when an attack is underway, or when a node is under excessive load
* Supports for multiple dedicated IP addresses per node, allowing multiple applications to be hosted on the same NLB cluster in scenarios where separate applications require their own dedicated IP address

Windows Server Backup enhancements:

* Incorporates a new, faster backup technology
* Simplifies restoration
* Simplifies operating system recovery
* Improves scheduling
* Supports DVD media

Windows Reliability and Performance Monitor enhancements:

* Combines the functionality of several previous stand-alone tools, including Performance Logs and Alerts, Server Performance Advisor, and the System Monitor into the Windows Reliability and Performance Monitor MMC snap-in
* Allows the use of Data Collector Sets to group data collectors into reusable elements for use with different performance monitoring scenarios
* Provides wizards and templates to save time performing common performance monitoring tasks
* Provides the Resource View, which presents real-time graphical overview of CPU, disk, network, and memory usage
* Calculates a System Stability Index that reflects whether unexpected problems reduced the reliability of the system, and provides details to help troubleshoot the root cause of the problem in the Reliability Monitor
* Provides unified property configuration for all data collection, including scheduling, and the ability to save collector sets as templates
* Improves reporting by allowing administrators to easily duplicate reports and assess how changes to a server have affected performance or review the report's recommendations

TCP/IP Stack enhancements:

* Window Auto-Tuning and Compound TCP makes better use of available network bandwidth
* Provides better connectivity in high-loss environments, making connections more consistent and reliable
* Neighbor Unreachability Detection for IPv4, which provides better detection and recovery when network nodes become unavailable
* Changes in Dead Gateway Detection, which allow computers to determine of a previously dead gateway has come back online which can result in faster throughput
* Changes to PMTU Black Hole Router Detection, which can help prevent connections from termination
* Network Diagnostics Framework support provides an extensible architecture that helps users recover from and troubleshoot problems with network connections
* Windows Filtering Platform is a new architecture that provides APIs, so the Independent Software Vendors (ISVs) can filter at several layers in the TPC/IP protocol stack and throughout the operating system, allowing them to create firewalls, antivirus software, diagnostic software, and other types of applications and services
* Explicit Congestion Notification that can address issues on congested routers, and provide better, more overall throughput

Windows Firewall with Advanced Security enhancements:

* Supports filtering for both incoming and outgoing traffic, which helps to prevent an infected computer from compromising the network
* Integrates firewall and IPSec management in a single new MMC Console, preventing overlapping policies, and allowing for local and remote firewall configuration (remote configuration is not possible in the current Windows Firewall without a remote desktop connection)
* Provides many new ways to configure firewall exceptions, however, exceptions can be configured for:
  + IP protocol number
  + Source and destination
  + All or multiple ports
  + Specific types of interfaces
  + ICMP and ICMPv6 (ping) traffic by Type and Code
  + Restricting firewall rules to either users, groups, or computers
  + Services

Presentation Virtualization with TS RemoteApp features:

* Provides access to the remote application that launches and runs in its own resizable window on the client computer’s desktop
* Reduces administrative effort by only having one central application on the server to maintain, instead of having to maintain individual installations on multiple desktops throughout the organization
* Improves the user experience, providing smoother integration of the remote application with the client computer desktop
* Allows any program that can run in a Terminal Services session or in a Remote Desktop session can run as a Remote Program

Terminal Services enhancements:

* Provides Remote Desktop Connection 6.0 or later
* Provides Remote Desktop Connection display improvements, including:
  + Custom display resolutions, and 16:9 displays
  + Monitor spanning
  + Desktop experience
  + Desktop composition
  + Font smoothing
  + Display data prioritization for input devices
* Redirection for Windows Portable Devices, specifically media players based on the Media Transfer Protocol (MTP), and digital cameras based on the Picture Transfer Protocol (PTP)
* Redirection of Windows Embedded for Point of Service devices, such as full function point-of-sale workstations, network bootable “thin client” point-of-sale terminals, customer-facing information kiosks, and self-checkout systems
* Provides Single Sign-On (SSO) for Terminal Services sessions
* Distributes sessions in a TS Farm with the TS Session Broker
* Enables TS Easy Print to reliably print from a TS RemoteApp or full desktop session to a local or network printer installed on the client computer
* Incorporates Licensing Improvements
  + Terminal Services Per-Device client access license permits one device (used by any user) to conduct Windows sessions on any of an organization’s servers
  + Terminal Services Per-User client access license permits one user (using any device) to conduct Windows sessions on any of an organization’s servers

Terminal Services Gateway (TS Gateway) enhancements:

* Enables remote users to connect securely to terminal servers and remote workstations across firewalls and network address translators (NATs)
* Provides a more secure model, allowing users to access only selected servers and workstations instead of the entire corporate network through a VPN
* Leverages the security and availability of the HTTPS protocol to deliver Terminal Services with no client configuration
* Provides a comprehensive security configuration model that enables administrators to control access to specific resources on the network
* Transmits all RDP traffic that typically would have been sent over port 3389 to port 443, using HTTPS

Terminal Services Web Access enhancements:

* Enables administrators to make Terminal Services RemoteApp programs available to users from a Web browser, without requiring the user to install any software
* Enables users to access Remote Programs or entire desktops from a Web site over the Internet or from an intranet
* Includes a customizable Web Part, which can be incorporated into a customized Web page or a Microsoft Windows SharePoint® Services site
* Provides customization for the list of available programs through Group Policy integration

Terminal Services Licensing enhancements:

* Provides centralized administration for TS CALs and the corresponding tokens
* Enables license accountability, tracking, and reporting for both Per-Device and Per-User licensing mode
* Simplifies support for various communication channels and purchase programs
* Minimizes the impact on network and servers

Terminal Services and Windows System Resource Manager provides the following enhancements:

* Allows control of how CPU and memory resources are allocated to applications, services, and processes on the computer
* Improves system performance
* Reduces the chance that applications, services, or processes will take CPU or memory resources away from one another
* Creates a more consistent and predictable experience for users of applications and services

Public Key Infrastructure (PKI) enhancements:

* Provides PKIView tool for managing and monitoring the validity or accessibility of authority information access (AIA) locations, and certificate revocation list (CRL) distribution points (CDP) in the enterprise
* Enhances Certificate Web enrollment
* Provides Network Device Enrollment Service (NDES) through Microsoft Simple Certificate Protocol (MSCEP), which allows network devices such as switches and routers to authenticate
* Provides for distribution through Group Policy of all of the following types of certificates:
  + Trusted root CA certificates
  + Enterprise trust certificates
  + Intermediate CA certificates
  + Trusted publisher certificates
  + Untrusted certificates
  + Trusted people (peer trust certificates)
* Provides Online Certificate Status Protocol (OCSP) support as an option for certificate validation and revocation
* Allows Certificate management using Group Policy

Windows Media Services enhancements:

* The built-in WMS Cache/Proxy plug-in can be used to configure a Windows Media server either as a cache/proxy server or as a reverse proxy server to other WMS servers
* Advanced Fast Start allows Windows Media Player to begin playing content as soon as its buffer receives a minimum amount of data - reducing wait times for streams
* Play While Archiving allows archiving of broadcast content so it can be rebroadcast or used for on-demand requests.
* Improved fast-forward and rewind functionality for video content helps stabilize network bandwidth availability.
* Broadcast publishing points can be configured to start content streams after a power failure so that viewers experience less disruption when viewing streaming content.
* Absolute Playlist Time wallclock automates broadcast schedules by assigning real-world clock values in Coordinated Universal Time (UTC) to attributes in server-side playlists.
* Offers support for pulling content from alternate encoders or other content sources if the primary encoder fails or is stopped.

# Windows Server 2008 Prerequisites

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Operating System | Minimum CPU speed | Multi-processor support | Disk space for setup | Memory | Virtual Image Use Rights |
| Windows Server 2008 Standard Edition | 1 GHz | Up to 4 | 10 GB | 512 MB | 1 |
| Windows Server 2008 Enterprise Edition | 1 GHz | Up to 8 | 10 GB | 512 MB | 4 |
| Windows Server 2008 Datacenter Edition | 1 GHz | Up to 32 for x86-based computers  Up to 64 for x64 and Itanium-based computers | 10 GB | 512 MB | Unlimited |
| Windows Server 2008 Web Edition | 1 GHz | Up to 4 | 10 GB | 512 MB | NA |
| Windows Server 2008 Itanium IA-64 Edition | 1 GHz | Up to 64 | 10 GB | 512 MB | NA |

For more information about Windows Server 2008, visit: **http://www.microsoft.com/windowsserver/longhorn.** For the latest developer news and more information on Microsoft’s broad range of resources for developers, including support programs, events, training, and the MSDN Library Online, visit MSDN Online at **http://msdn.microsoft.com/.**

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