



New Technology and Services to Enhance the Business Value of Your IT Network

Progent's IT Connection Newsletter

Progent

Highlights

- Windows Server 2008 R2 has world-class features at down-to-earth prices.
- Exchange Server 2010 delivers fault tolerance, inexpensive storage, and improved productivity for local and remote workers
- New options for Internet access offer reliability, speed, and affordability
- SharePoint 2010 offers secure and easy access to critical information plus advanced collaboration
- Virtualized servers and desktops now make sense for businesses of almost any size
- Firewall hardware and software keeps evolving: is your firewall extinct?
- Updating your Cisco IOS software can be a little tricky. Progent can help make sure it's done right.

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Windows Server 2008 R2: The Best Server OS Keeps Getting Better

WINDOWS NEWS

Windows Server 2008 R2 with SP 1 adds major improvements to the initial release of Windows Server 2008 in key areas that include server and desktop virtualization, branch office connectivity, web hosting and application development, availability, fault tolerance, management automation, and integration with Windows 7 clients. Offered only in 64-bit versions, Windows Server 2008 R2 delivers advanced levels



of performance, scalability, security and fault tolerance that accelerate return on investment by lowering equipment and operating costs and increasing the output of local, remote, and mobile workers.

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Exchange 2010 Cuts the Cost of Keeping Everybody in Touch All the Time

MESSAGING NEWS



Exchange 2010 is designed to save you money on messaging infrastructure and services so you get a fast return on your investment while benefiting from high availability, solid security, and advanced collaboration.

Exchange 2010 is loaded with powerful features such as Database Availability Groups for improved fault tolerance and faster recovery from disasters, Transport Protection Rules to help you safeguard sensitive data, automated archiving and retention for compliance with government and industry regulations, synchronization support for most smartphones including

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New Internet Connections and Service Plans Offer More for Less

INTERNET ACCESS

Internet access technologies and service plans are changing fast, making it ever more difficult for IT managers to keep up. As a result, many companies still use legacy Internet connections even though faster, more reliable, and less expensive options are readily available.

Besides the direct impact outdated ISP service plans have on your bottom line, other factors can make them even more



costly. Slow bandwidth, high latency, poor Quality of Service, and marginal availability can result in lost productivity,

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Windows Server 2008 R2 Gets a Major Overhaul

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Progent is a Microsoft Partner with the top-level Gold certification in the Server Platform competency. Progent's network engineers can provide cost-effective remote consulting, technical support, and training services to help you plan, implement, and manage Windows Server 2008 R2 in order to add substantial business value to your information system.

Major Editions of Windows 2008 Server R2

Microsoft offers Windows Server 2008 R2 in versions for businesses of any size. Important editions of Windows Server 2008 R2 include:

Windows Server 2008 R2 Foundation:

This entry-level edition is aimed at small businesses that need an affordable, dependable, and secure application server. The Foundation edition supports 8 GB of RAM, one CPU, and 50 Remote Service Gateways but does not include Hyper-V, DirectAccess for remote access without a VPN connection, or Failover Clustering.

Windows Server 2008 R2 Standard: The Standard edition is for small and mid-size businesses and has a rich feature set that includes Hyper-V and advanced remote access technology but does not support Failover Clustering. This edition supports 32 GB of RAM, 4 CPUs, one virtual machine in addition to a host, and 250 Remote Service Gateways.

Windows Server 2008 R2 Enterprise: The Enterprise edition is designed for businesses who need to minimize downtime for mission-critical applications. High-availability technologies provided in this edition and not in the Standard edition include Failover Clustering, fault-tolerant memory synchronization, and Hot Add Memory. The Enterprise edition supports 2 TB of RAM, 8 CPUs, 4 virtual machines in addition to the host, and unlimited Remote Service Gateways.

Windows Server 2008 R2 Datacenter: This premiere edition of Windows Server 2008 R2 is for organizations requiring the highest levels of availability and scalability. This edition supports 2 TB of RAM, up to 64 CPUs, plus unlimited virtual machine licensing and Remote Service Gateways. Additional fault-tolerant technologies include Hot Replace Memory and Hot Add/Replace Processors.

Microsoft Web Server 2008 R2: This edition offers an affordable, dedicated platform for web applications and services. The Web edition does not include Hyper-V, Failover Clustering, or Remote Service Gateways. This web-facing server supports 32 GB of RAM and 4 CPUs and can be virtualized as a guest.

Server Core installation options are supported for all these editions of Windows Server 2008 R2 except Foundation. Server Core installations allow you to select only the server roles you need to run your applications. These minimal configurations reduce physical resource requirements, simplify management tasks by eliminating unnecessary components, and enhance security by shrinking the operating system's attack surface.

Headline features of Windows Server 2008 R2 include Live Migration for Hyper-V virtual servers, Clustered Shared Volumes (CSV) for high-availability clustering, BranchCache for improving remote office connectivity, DirectAccess for simplifying remote access for Windows 7 clients, Internet Information Services 7.5 for advanced web services, and enhanced PowerShell capability for automating remote server management.

Progent's Support for Windows Server 2008 R2

Progent offers affordable remote consulting and support services to help you plan, deploy, and manage Windows Server 2008 R2. Progent can help you evaluate the business value of upgrading from earlier versions of Windows Server and can follow industry best practices to ensure a smooth migration to this powerful platform.

Progent's Hyper-V virtualization consultants can help you set up a secure virtualized server environment that cuts data center costs, is easy to manage, and offers a high level of availability and recoverability. Progent's infrastructure experts can show you how to set up fast, safe, and reliable connections between your data center and branch offices, telecommuters, and mobile workers. Progent's business continuity engineers can help you to design, test, and document proven disaster recovery procedures and can show you economical ways to maximize network uptime despite natural catastrophes.

Progent's security engineers can help you define and implement appropriate Windows Server 2008 R2 Group Policy for managing options like registry-based policy and security settings, administration scripts, Remote Installation Server, and folder redirection. Progent can also perform remote security scans to help assess your network's vulnerability to external and internal attacks in order to validate security compliance and protect your information resources.

Find Out More About Progent's Server Support

For information about Progent's consulting services for Windows Server 2008 R2, call **800-993-9400** or email windows-server-help@progent.com

Exchange Server 2010 Promises a Fast Payback

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Windows Phones, BlackBerries, Androids, and iPhones, and a new unified communications architecture that manages not only email but voice mail, Voice over IP and video telephony, instant messaging, faxing, and presence awareness.

How Exchange Server 2010 Can Save You Money

Now that Microsoft has terminated support for Exchange 2003, it's a good time to evaluate the business case for moving to Exchange Server 2010. Exchange Server 2010 can lower storage costs by 70%, cut administrative overhead by 20-30%, and reduce voice mail expenses by 40-50%. On top of those cost savings, Exchange 2010 promotes better business results by delivering 99.99% availability and by offering a wealth of productivity-enhancing features such as shared calendars, speech-to-text voice mail previews, call screening, multi-mailbox search, automatic voice mail attendant, and self-service administration for end users.

Exchange's new Database Availability Groups (DAGs) support fault-tolerant clustering and continuous backup. A DAG is a set of mailbox servers that can automatically replicate databases, recover quickly from various server and storage breakdowns, and allow IT managers to move mailboxes to different servers without disrupting Exchange operation.

Exchange 2010 allows you to implement a redundant server configuration with only two servers. Exchange 2007 requires four servers for full redundancy. Exchange 2010 also has built-in support for site failover between geographically separated datacenters.

Exchange 2010 has added support for consumer-class Serial ATA (SATA) disk drives, which are included in most personal computers shipping today. By supporting storage area networks, direct attached SAS drives, and ultra-affordable SATA disks, Exchange 2010 protects your IT investments while cutting the cost of expanding your storage capacity.

Exchange 2010's enhanced support for voice mail makes it possible to replace outdated PBX equipment and voice mail services with Microsoft's software-driven

alternative. This can save up to 40% off your PBX costs and improve productivity by making it easier to retrieve and manage your voice messages. Major new features include Speech-to-Text Preview, custom attendants to greet callers and help them navigate the system, and rule-based call response and routing based on Caller ID or other contact data. Exchange 2010 can also send text alerts telling users that new voice mail is available.

How Progent Can Help with Exchange Server 2010

Progent's Microsoft Gold Certified Exchange experts can help you evaluate the costs, risks, and benefits of adopting Exchange 2010 and assist you to create and carry out an affordable plan for upgrading to Exchange 2010 from an earlier version of Exchange, from an ISP-hosted email solution, or from a hybrid multi-vendor email environment. Progent's email migration consultants can apply industry best practices to design and manage an upgrade that minimizes the disruption to your business, strengthens security, improves fault tolerance, increases performance and capacity, lowers the costs of buying equipment and running your data center, and enhances the business value of your information network.

Progent can show you how to configure Exchange 2010 and Active Directory to enforce your security policies, implement low-cost redundancy and failover clustering for non-stop operation, create a disaster recovery plan that utilizes the fast backup and restore capabilities of Exchange 2010, and integrate remote desktops, mobile computers, and smartphones to ensure that your off-site workforce can benefit from Exchange 2010's enhanced support for online access and mobility.

Contact Progent for Help with Exchange 2010

For information about Progent's consulting and support services for Exchange 2010, call **800-993-9400** or email exchange-help@progent.com



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Selecting the Right Internet Connection and ISP Plan

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low customer satisfaction, and over-worked network managers. All this reduces the business value of your information network.

Picking the Right ISP Connection



The Internet access options available to you depend on your location. The Gold Standard is optical

fiber, which offers the highest reliability and speed. If your office or data center is "on net" with a fiber provider (such as TW Telecom or Cogent Communications), you may be able to sign up for an unlimited-use 100 mbps fiber connection for as little as \$700 per month.

If you're "off net" you still might be able to access a 100 mbps connection via AT&T custom installed fiber, but your monthly fee could be triple what you would pay if you were on net. If optical fiber is either unavailable or too expensive, you may be able to get Business Class Cable Internet from Comcast, offering speeds up to 50mbps. Another alternative is to aggregate voice-grade copper-wire for a 10 mbps symmetrical connection. This offering is often called Metro Ethernet.



Even the legacy ADSL standard has been upgraded with ADSL2+ offering up

to 20 mbps speeds if you are located close to a central office. In some areas, line-of-site microwave or WiMax wireless connections can be your best option. In most cases, there are better choices available than sticking with DS3, bonded T1s, or other legacy connections.

An important consideration is whether your ISP has good sharing arrangements with other carriers world-wide, known as "peering." Cogent is an excellent choice for small businesses, having attained the position as the top peered network globally with very aggressive pricing. By connecting to a well peered tier 1 provider, you can make sure you have low latency connections almost everywhere. This is a great advantage when you run real-time applications such as Voice-over-IP telephony or video conferencing.

Progent's Internet connection experts can help you evaluate alternatives and select an ISP and a service plan that makes the most sense for your business.

Progent's ISP Selection Consulting Services



at&t

Progent is a pioneer in designing and maintaining virtual business networks that rely on reliable, fast, and economical Internet connections. Progent has

worked with all major carriers and has helped many smaller ISPs to optimize the performance, availability, and security of their commercial infrastructure.

Progent's consultants can provide valuable insight into how to cut through the hype and jargon to build a budget-friendly Internet connectivity solution that aligns with your business needs and allows you to adopt new IP technology quickly so you can stay competitive.



Progent can work with your ISP to coordinate deployment and can help you provision

your network infrastructure so you benefit fully from new services, manage the transition process to minimize or avoid business disruption, monitor the performance of your new connections, and troubleshoot access issues.

Consider Colocation

Colocation sites offer affordable hosting services in world-class facilities that feature power backup, physical security, fire suppression, and tight HVAC controls. These sites also offer access to multiple "on net" fiber providers, which makes it possible to have fast Internet connections with failover redundancy at very low prices.

If you are considering transferring your data center to a colocation site, Progent offers a full range of support services to make sure you take advantage of the latest Internet connectivity technologies and service plans.

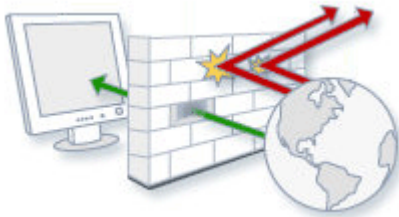
Progent's colocation support experts address key issues such as security and compliance, high availability, VPN configuration, traffic engineering, network monitoring, management automation, disaster recovery planning, and server virtualization. Progent can help you transition from your current environment to a colocation site with minimal disruption of your network operations.

Ask About Progent's Internet Access Consulting

To find out more about Progent's Internet connectivity consulting services, call Progent at **800-993-9400** or send email to Progent at **information@progent.com**

Is It Time to Rethink Your Firewall Solution?

SECURITY NEWS



Firewalls range from software-only solutions like the ones included with Windows 7 and Windows Server 2008 to advanced hardware products

that combine firewall, VPN, and routing in one device. In all cases, the purpose of the firewall is to enforce your security policies by preventing undesirable traffic from passing between your network and the outside world. Firewalls can block malicious software, unauthorized web sites, invalid data packets, or untrusted programs, depending on the firewall's configuration and capability.

Because of their central role, improperly configured or malfunctioning firewalls can have a big impact on network speed and availability. This makes it important to have access to Firewall expertise. The security experts at Progent have earned certifications from the industry's leading firewall vendors including Microsoft, Cisco, Juniper/NetScreen, Check Point, and SonicWALL.



The Strategic Use of Firewalls

The new generation of firewall appliances can be set up to enforce thousands of security policies and allow you to segment your network into multiple security zones, each with its own unique set of rules to enhance your security and ensure regulatory compliance. For small businesses and branch offices, these advanced security appliances can be one-box solutions that provide edge protection, VPN, and high-speed routing for converged IP voice, video, and data.

When properly configured and managed, today's latest crop of firewalls can add significant business value to your information network by cutting both hardware and administration costs, improving network availability, and protecting sensitive data.

Network Security Services Available from Progent

Progent's engineers have been awarded the security industry's top certifications including CISM, CISSP-ISSAP, CISA, and GIAC. These experts can provide a broad range of services to help businesses of any size to build and validate a strong security profile.

Security services available from Progent include:

- Security compliance assessment and remediation
- 24x7 security monitoring with real-time alerts
- Security policy definition and automated enforcement
- Business continuity planning
- **E-Mail Guard** managed services for email filtering
- Post-attack recovery services

Because Cisco has stopped offering the PIX firewall product line, many businesses are worried about relying on a critical infrastructure component that may no longer be supported. ASA 5500 firewalls have the advantage of being current products and also offer both technical and economic benefits in comparison to PIX devices. These benefits include higher throughput, optional SSL VPN support, and a modular architecture that allows you to self-install new security services when and if you need them.

Progent's Cisco experts can help you to determine the business case for migrating from PIX to ASA 5500 firewalls, create a migration plan for a seamless upgrade, deploy and configure ASA 5500 Series devices, and set up remote monitoring and management. Progent also offers remote consulting and troubleshooting services.

Find Out More About Progent's Firewall Support

To find out more about Progent's firewall and security consulting services, call Progent at **800-993-9400** or send email to Progent at security-help@progent.com

Updating Cisco IOS Software

Cisco IOS is the control software used in virtually all Cisco routers and in the latest Cisco switches. Cisco often updates IOS to fix bugs, improve security, or add functionality. Ignoring IOS updates can impact network stability and security and cause you to miss out on new features that could streamline management or improve performance. But upgrading Cisco IOS and other Cisco software can be tricky, depending on your Cisco equipment and your network environment. For example, there may be limitations of local Flash or RAM that cause new software to misbehave or run out of resources. Occasionally, an updated device is unable to boot.

Progent's Cisco-certified CCIE network engineers have the experience to anticipate or fix problems you may encounter and help you carry out successful upgrades quickly and with minimal disruption of network availability. Progent's experts are accessible online to provide fast and affordable help.

SharePoint 2010 for Business Collaboration

TECHNOLOGY FOCUS



SharePoint 2010 Features and Benefits

SharePoint 2010, Microsoft's comprehensive platform for business collaboration, is designed to facilitate the creation and maintenance of web sites for a variety of group activities like sharing information, co-authoring documents, distributing reports, and providing advanced business analytics by integrating both local and remote databases and visualization resources. SharePoint 2010's focus on teamwork through information sharing can have a significant positive impact on your business culture and your bottom line.

SharePoint 2010 includes a wealth of new or enhanced features that make this release a better platform for business collaboration and reporting than prior versions of SharePoint. The enhancements cover six capability areas by which Microsoft categorizes the functionality of SharePoint 2010: *Sites*, *Communities*, *Content*, *Search*, *Insights*, and *Composites*.

The **Sites** capability area refers to SharePoint 2010's support for the creation of web sites that facilitate sharing, managing, and publishing documents, projects, and other types of information within groups that include colleagues, partners, vendors, and customers.

Communities covers both the tools that allow users to collaborate and the management resources available to manage these tools.

Content means Enterprise Content Management (ECM) tools that let you define document types, enforce compliance standards, automatically sort content, and set retention policies.

The **Search** capability area refers to intranet search, people search, and various tools to design and deploy specialized search-based applications.

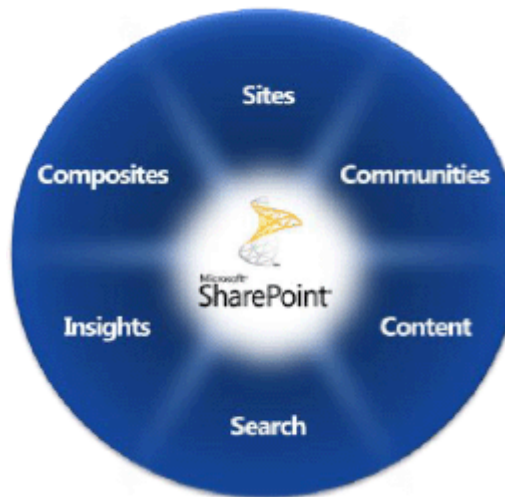
Insights covers the ability to generate in-depth reports that allow actionable information to surface in the form of scorecards, dashboards, and charts built using data extracted from a wide selection of sources.

The **Composites** capability area refers to the ability for managers and end-users to create powerful custom sites and pages without having to write code.

How Progent Can Help You with SharePoint 2010

SharePoint 2010's extraordinary reach can impact every aspect of your information network. To design, deploy, and support a SharePoint solution that delivers the full benefits of this powerful platform requires a support team with exceptional breadth and depth of technical skills and business savvy. To build and maintain an in-house support staff with all the appropriate expertise is beyond the budget of most small businesses and would not in any case make good business sense.

Progent's team of 80+ IT engineers has the experience to oversee successful SharePoint 2010 installations and the resources to provide ongoing support as needed, saving you the expense and stress of recruiting and maintaining a permanent in-house IT support group and avoiding costs associated with false starts or with poorly architected solutions.



Progent's Microsoft Gold-certified consultants can help you assess the business benefits of implementing SharePoint 2010 either to upgrade an earlier release of SharePoint or as a first-time installation. If you are migrating from a prior version of SharePoint, Progent can help you plan, test, and execute a smooth upgrade. Progent can also help you design and carry out a migration to the latest versions of software that integrates tightly with SharePoint such as SQL Server, Office, and Microsoft Project.

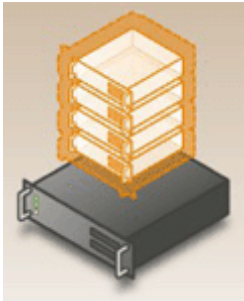
If you are installing SharePoint for the first time, Progent can help you inventory your information assets and help make sure that all relevant data sources are coordinated within your SharePoint environment. Progent can also help you convert diverse libraries of collaboration and management reporting tools into a unified, easy-to-maintain solution based on SharePoint technology.

Learn More About Progent's SharePoint Consulting

For more information about Progent's SharePoint 2010 consulting services, call **800-993-9400** or email Progent at sharepoint-server-help@progent.com

Virtualization is for Everybody

TECHNOLOGY FOCUS



Virtualization allows you to run many Virtual Machines (VMs) on a single physical computer, reducing the number of servers you need to run your workloads. Virtual server solutions from Microsoft, VMware, and Citrix are designed to make economic sense for networks of any size. Unfortunately, many small companies are intimidated by virtual technology and unaware of its many benefits.

In addition to the obvious advantage of cutting hardware costs by 50% or more, virtualization offers improved availability, streamlined management, better security, optimized performance for critical applications, faster recovery from unplanned downtime, lower energy costs, shortened development cycles, more thorough testing of new applications, plus faster software deployment and hardware provisioning.

Licenses for the entry-level virtual server software from Microsoft, VMware, and Citrix are free. The net result is that businesses can save 50-70% on overall IT costs through virtualization, a return on investment unmatched by any other technology initiative. When used properly, virtualization is one of the best ways to add business value to your information network.

Windows Hyper-V



Windows Hyper-V

Hyper-V is a role of Windows Server 2008 R2 that provides the

tools to deploy and manage virtual servers. Hyper-V's hypervisor-based architecture, which requires an x64 host with hardware-assisted virtualization, offers better speed, capacity, and security than Microsoft's previous virtualization platform. Hyper-V supports enterprise-class features such as symmetric multiprocessing, live migration, dynamic storage, expanded memory, and host clustering. An entry-level edition with a single-role version of Windows, called Hyper-V Server 2008 R2, is available as a free download.

Hyper-V works along with Microsoft System Center Data Protection Manager (DPM) to provide a comprehensive backup and recovery solution, and Hyper-V's integration with System Center Virtual Machine Manager unifies the administration of a virtualized environment. Hyper-V Management Console and Windows PowerShell provide advanced tools for remote and automated management.

VMware vSphere



VMware is the leading source of virtualization software and offers for free an entry-level product, vSphere Hypervisor, to provide a fast start for companies new to virtual server technology. VMware offers an easy, affordable upgrade path to vSphere Essentials to add improved management and security features or to the powerful vSphere Essentials Plus, which offers high availability and live migration.

Unlike Hyper-V, which runs in conjunction with Windows Server 2008, all editions of vSphere install on bare metal as purpose-built, low-overhead hypervisors that require only about 100 Mb of disk space. This improves security by exposing a small attack surface. Advanced versions of vSphere and its predecessor, VMware ESX, have been adopted by the world's largest enterprises.

Citrix XenServer



The entry-level version of XenServer from Citrix has advanced features that include live migration, central management of multiple servers, and unlimited servers, VMs, and memory. XenServer has a bare-metal hypervisor, like vSphere, but it also has an open architecture (proven by use in the world's largest virtual technology deployment, Amazon's Elastic Cloud). Like Hyper-V and unlike vSphere, XenServer utilizes paravirtualization to achieve near-native performance, allowing it to support more VMs per physical server.

Progent's Hyper-V, vSphere, and XenServer Support

Progent's certified Microsoft and VMware engineers can help you assess the potential benefits of virtualization and select a product that meets your business needs, perform pilot installations to test virtual servers with your production applications, organize your network and server architecture for optimal performance with virtual technology, help you migrate from an older virtualization platform, follow industry best practices for rolling out virtual servers, and train your IT staff to monitor and manage Windows Hyper-V, VMware, or Citrix solutions.

If you plan to deploy Hyper-V, Progent's Microsoft Gold-certified consultants can help you configure, manage, and troubleshoot all aspects of Windows Server 2008.

Contact Progent for Virtualization Help

For virtualization help, call Progent at **800-993-9400** or email **server-management-help@progent.com**

PROGENT

560 S Winchester Blvd, 5th Floor
San Jose, CA 95128

Phone: 800-993-9400

Fax: 800-325-5300

Email: information@progent.com

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*Helping small businesses build
and maintain IT networks based on
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