



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

Progent's IT Connection Newsletter

Progent

Highlights

- Windows Server 2012 redefines the datacenter by adding cloud support
- Progent offers DBA and development services for top database systems that include MS SQL Server, Oracle, MySQL, and Microsoft Access
- Progent's Wireless Site Survey offers a low-cost way to design an efficient and secure WiFi network
- SQL Server 2012 raises the bar for enterprise-class availability
- Penetration Testing gives an objective assessment of your vulnerability to cyber attack
- Windows 8 offers much more than just touch screen support
- Do You Need a Tested Business Continuity Plan? Call Progent!

Microsoft
GOLD CERTIFIED
Partner

CISCO SYSTEMS
Registered Partner

Windows Server 2012: Bigger, Faster, Safer, and Cloud Ready

WINDOWS NEWS

Windows Server 2012 includes over 300 new or enhanced features that address critical IT issues such as cloud readiness, virtualization, scalability and performance, identity and security, Bring-Your-Own-Device support, availability and disaster recovery, application development, and manageability. Licensing for Windows Server 2012 has been simplified, with the



only functional difference between the two primary versions is that the Standard Edition supports two virtual instances and the Datacenter supports unlimited ones.

Progent's Microsoft-certified consultants

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RDBMS Experts at Your Service: SQL Server, Oracle, MySQL, or Access Help

DATABASE NEWS



Progent's certified database consultants can provide online expertise for popular database platforms including Microsoft SQL Server, Oracle, Microsoft Access, and MySQL. Services offered by Progent

include database administration, design and application development, database migration, and online troubleshooting.

DBA consulting services from Progent cover software installation and setup, replication and synchronization, storage management and capacity planning, change management, backup/restore options, data migration, tuning, database

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Wireless Site Surveys for WiFi: Maximize Coverage, Reduce Hardware Costs

WIRELESS NEWS

Progent's Wireless Site Survey helps you implement a wireless local area network (WLAN) optimized for your facilities. This offers you an affordable way to provide the coverage, performance, capacity, Quality of Service (QoS), security, and roaming capability your business needs. Progent's Wireless Site Survey services are available as a remote service that

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Windows Server 2012 Has Something for Everyone

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can help you assess the business value of Windows Server 2012 for your company, plan and implement pilot and production systems, optimize your infrastructure for local, multi-site, cloud-based, and hybrid environments, train your IT administration, refine your security strategy, automate network management, assist with application development, and create and test a disaster recovery/business continuity plan.

New Features of Windows Server 2012

Windows Server 2012 offers major innovations that have an impact on almost every aspect of information technology. Combined with System Center 2012 and with Windows 8, Windows 2012 redefines the datacenter for any size organization. Most of the most significant improvements in Windows Server 2012 focus on optimizing cloud functionality and performance. Because cloud computing depends on large-scale virtualization, many of the enhancements offered by Windows Server 2012 center around advances in Microsoft's Hyper-V technology.

Cloud Optimized

Cloud computing is becoming the new reality for information technology because it enables ultra-efficient utilization of IT resources through the dynamic reallocation of available processing power, memory, and storage while sharing the substantial costs associated with creating and maintaining high-performance and high-availability datacenters. Windows Server 2012 can support private or public clouds or hybrid environments by allowing IT managers to pool computing resources seamlessly and securely across physical boundaries.

New and enhanced features of Windows Server 2012 that facilitate cloud-based infrastructure include:

- Multitenancy Support
- Hyper-V Network
- Live Migration Across
- Self-service Provisioning
- Resource Metering
- Active Directory Domain Services (AD DS)

Virtualization Enhancements

Windows Server 2012 Hyper-V offers improvements that benefit both cloud-based and local datacenters. Key enhancements impact resource consolidation, uptime and recoverability, expandability and performance. New or improved Hyper-V features include:

- Generic Routing Encapsulation (GRE)
- VHDX Virtual Hard Disk Format
- Shared Nothing Live Migration
- Live Storage Migration
- Live Merge
- Dynamic Memory
- Smart Paging

Additional Enhancements

Windows Server 2012 has also been enhanced with features that improve scalability and speed, identity and security, Bring-Your-Own-Device (BYOD) support, availability and disaster recovery, development, and manageability. New features in these areas include Storage Spaces to reduce disk storage costs, Federated Identity for centralized authentication across cloud-based and on-premise environments, support for rich graphics on smart phones and tablets, Active-Active File Server Clusters for transparent failover across server clusters, cloud-aware

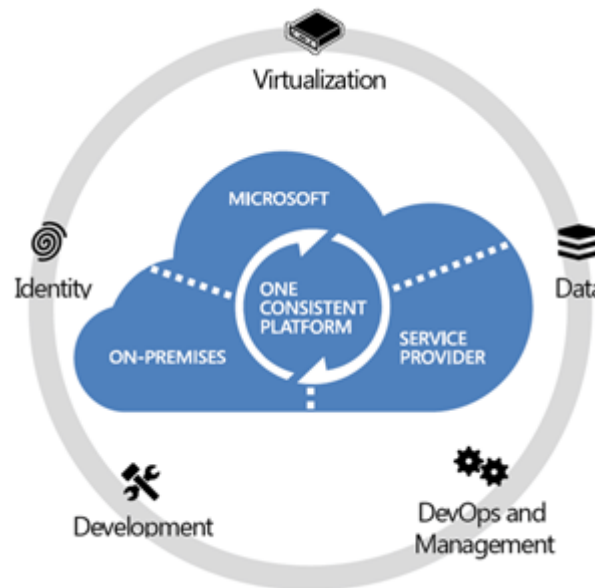
languages and application development tools, and the new Server Manager for centralizing the management of multiple servers.

How Progent Can Help with Windows Server 2012

Progent offers consulting, project management, and technical support services to help businesses of any size get the most out of Windows Server 2012. Progent can provide project management services for creating and executing a Windows Server 2012 migration plan, and Progent's disaster recovery experts can show you how to keep your Windows Server 2012-based network running even under worst-case scenarios.

Find Out More About Progent's Server Support

For information about Progent's consulting services for Windows Server 2012, call **800-993-9400** or send email to windows-server-help@progent.com



Database Administration, Design, Program Development

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consolidation, plus security and compliance. Progent's database application development services can include requirements analysis, logical and physical modeling, ETL development, software installation and testing, plus normalization and data integrity. Progent also offers full documentation and training services.

Progent's software developers can help you design, build, and test a broad range of data-driven applications in areas such as web commerce, business analytics, data warehousing, and sales automation. Progent can also help you customize, optimize, or troubleshoot your existing applications, port legacy applications to current versions of relational database management system (RDBMS) platforms, or consolidate diverse databases into a single cohesive solution.

Database Platforms Supported by Progent

Relational database management systems supported by Progent include:

Microsoft SQL Server



Progent's Microsoft-certified consultants have extensive backgrounds in designing and managing

SQL Server environments. Progent's expert software developers can help you create business applications that combine SQL Server with other Microsoft platforms like SharePoint Server and Microsoft Dynamics, and Progent's infrastructure experts can help you configure virtualization and clustering solutions to maximize the performance, availability, security, and manageability of your SQL Server powered applications.

Progent can also help you to migrate efficiently from legacy database technologies to the latest versions of Microsoft SQL Server.

Oracle



Progent offers affordable online database administration and development services for Oracle 10g and 11g and related technologies such as DataGuard and Streams replication software, ASM file/volume manager, as well as PL/SQL stored procedure language. Progent can provide expert help with general Oracle DBA work such as space management, permissions/accounts, tuning, installation and upgrades, database consolidation, client configuration in Linux or Windows environments, plus efficient migration between Oracle and other RDBMS

platforms or from older to newer releases of Oracle. Progent's can also help you implement the Oracle or RedHat Linux stack (Linux, ASAM, Oracle) and create a runbook to streamline system management.

MySQL



Oracle's MySQL is the leading open-source database and offers low cost of ownership plus high performance and scalability for mid-size business applications such as dynamic web

sites, Online Transaction Processing (OLTP) and Online Analytical Processing (OLAP), or business intelligence (BI). Progent's software developers can help you build MySQL applications for Linux environments with PHP, Perl, and Java or they can integrate MySQL with Visual Studio in order to build applications with Microsoft C# or VBA. Progent can also help you utilize Oracle's MySQL Workbench to simplify database design, modeling, and administration. To cut DBA and job management costs, Progent can help you select and deploy third-party tools. In addition, Progent can help you install and manage the popular LAMP stack (Linux, Apache, MySQL, PHP/Perl/Python) and Oracle's InnoDB storage engine.

Microsoft Access



Microsoft Access is the leading relational database for small business as well as departmental apps.

The popularity of Access among both non-programmers and expert developers is largely based on the ease and speed with which Access-based applications can be built and deployed. Access is often used to create friendly front ends to more powerful back-end RDBMS platforms such as SQL Server or Oracle.

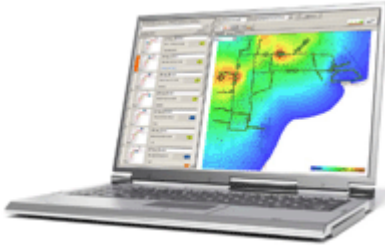
Progent's Microsoft-certified consultants can help you design and manage Access deployments, use VBA to develop custom software such as specialized business analytics, provide webinar training tailored to your needs, or integrate Access with Microsoft technologies like Excel, Outlook, or ActiveX Data Objects. Progent can also show you how to use Access 2010's ability to create web databases enabled by integration with SharePoint 2010's Access Services.

Contact Progent for Database Expertise

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

Wireless Site Surveys Help You Plan or Fix WiFi Networks

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saves time and money, or as a more comprehensive onsite service.

Progent's Remote Wireless Site Survey uses advanced RF modeling as well as

simulation software to collect the information needed to design an efficient WLAN. Progent's Onsite Wireless Site Survey, available nationwide, features on-premise inspection, RF and security audits of your current WLAN, floor plan analysis, testing for RF interference, RF propagation modeling, identification of the optimum locations for your specified Wireless Access Points (WAPs) including Cisco Aironet and Apple AirPort, and a detailed report for a new WLAN.

The onsite survey includes Interviews with your IT team and end users to refine parameters for the WLAN. All 802.11a/b/g/n WLAN design is performed by veteran BICSI RCDD Certified Survey Engineers.

Progent offers expert consulting for creating a state-of-the-art BYOD (Bring Your Own Device) environment. iPhones, iPads, Androids, BlackBerries, Windows Phones, and other smartphones and tablets require robust RF signals and pose serious capacity challenges. Progent's Wireless Site Survey can provide the insight you need to address these issues and design an affordable, effective BYOD solution.

Deliverables for Progent's On-Premise Wireless Site Survey can include:

- RF Spectrum Analysis for WiFi, DECT, ZigBee, and other advanced wireless networks. This includes the detection of RF issues with your facility's physical structure as well as other sources of interference so you can anticipate and resolve problems during the WLAN design phase.
- RF Coverage Maps in the form of color RF contour

images for the areas requiring coverage to help you select the optimal number and location of WAPs and identify RF leakage areas and coverage gaps

- Capacity Plan for delivering the bandwidth needed to support all applications and users
- Cable Paths depicted as red line diagrams you can supply to cabling contractors
- Device Installation guidance on where and how to install wireless devices plus identification of special equipment that may be needed (NEMA enclosures, antennas, etc)
- Infrastructure Requirements to specify all facility and networking resources required for the installation such as available switch ports, Power over Ethernet (POE), electrical power, and rack space

Network Infrastructure Expertise

Progent maintains one of the largest teams of certified Cisco CCIE network engineers of any independent IT support firm in the U.S. and can help you integrate your

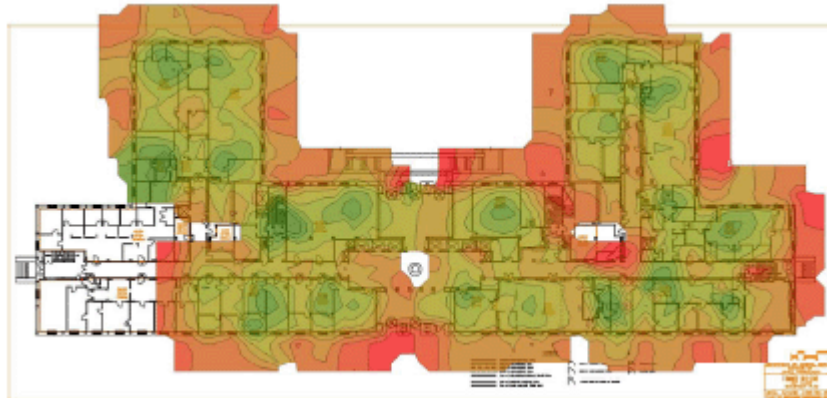
WLAN seamlessly into your corporate network. Progent can help you to configure and manage Cisco routers, switches, and security appliances plus Cisco Mobility products like WAPs and wireless LAN controllers.

Progent also offers integration help with products from Apple,

Juniper, WatchGuard, and other leading vendors of wired and wireless connectivity solutions, and Progent offers consulting from certified security engineers.

Learn More About Progent's Wireless Site Survey

To find out more about Progent's Wireless Site Survey, call Progent at **800-993-9400** or send email to Progent at wireless-help@progent.com



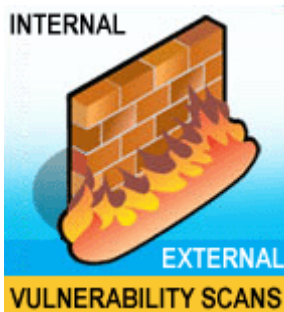
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Penetration Testing Helps Verify Compliance

SECURITY NEWS



Security breaches continue to make the headlines as attacks compromise the databases of some of the most prestigious organizations. How hard would it be for a hacker to break into your network? Have you paid enough attention to blocking attacks launched from inside your firewall? Are there fast and inexpensive

ways to verify your information system is safe?

Progent's certified security engineers have developed a set of affordable fixed-price service packages to scan your network for security gaps, report the results, and suggest effective, budget-friendly remediation procedures.

What Is Penetration Testing?

Penetration testing is the accepted method for enterprises to assess their exposure to cyber attack. With penetration testing, the "good guys" use the latest hacking tools and techniques to try to "break into" their own networks. For more objective results, penetration testing is typically performed by trusted third parties, and until now it has been prohibitively expensive for smaller businesses. Progent's penetration testing packages combine advanced remote scanning technology plus the expertise of Progent's seasoned security engineers to offer big-company security evaluations at prices small companies can afford.

Progent's Security Penetration Testing Packages

Progent offers External and Internal security scanning packages, each of which can be run at different levels of intensity. All packages include scanning, analysis, reporting, and recommendations. The scanning phase is managed remotely from a secure Progent site, saving time and money without sacrificing thoroughness. For an added fee, Progent offers onsite testing nationwide.

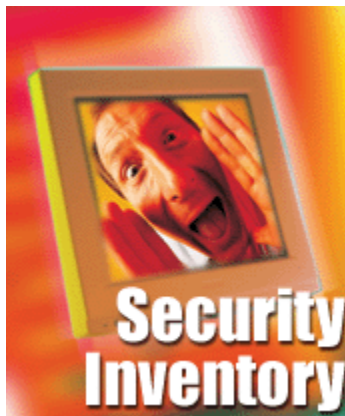
The data collected is analyzed by Progent's security team, which includes engineers certified by standards organizations such as the Information Systems Audit and Control Association and the SANS Institute.

As part of each package, Progent prepares executive and technical reports that summarize the results of the vulnerability scan and suggest mitigation procedures.

Each package also includes executive and technical outbriefing sessions with a Progent security engineer. Suggestions for improvements are clear and actionable, so they can be performed by Progent or by any qualified security consultant. If any remedial work is requested to be performed by Progent, the work will be treated as a separate project.

Three Levels of Testing

Progent's security vulnerability scanning packages are available in three levels which vary in intensity from friendly, co-operative testing to aggressive testing that mimics the activities of hackers. Level 1 testing, which is the least expensive, scans for potential security gaps but does not verify or exploit them. Level 2 testing is more aggressive and tries to exploit and expand the vulnerabilities found. Level 3 testing pulls out all the stops and includes Phishing attacks, malicious email, MITM attacks, pillaging compromised devices, social engineering, and testing of controls.



An important option for Progent's External Penetration Testing is web application analysis. Progent's security engineers use advanced, automated tools and manual examination to scan your web application for common vulnerabilities.

Find Out More About Progent's Penetration Tests

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

Business Continuity Planning Services

In the post 911 world, regulators, auditors, customers and prospects of larger enterprises are demanding to see a tested business continuity plan. CIOs who are unable to produce one can hurt their company's ability to compete. Progent offers high-level online consulting for business continuity planning to help you prepare for disasters, reduce downtime for your most critical IT operations, and comply with examiners' letters and agency requirements. Continuity planning services include:

- Perform risk and business impact analysis
- Identify dependencies
- Identify key human and physical resources
- Prioritize business-critical IT functions
- Qualify colocation centers and hot backup sites
- Verify remote access capability for key workers
- Plan and test an emergency notification system
- Document a comprehensive recovery and test plan
- Train management, technical staff, and other key people

SQL Server 2012 Just Won't Quit

TECHNOLOGY FOCUS



SQL Server is Microsoft's top database management and analysis system and is tightly integrated with key Microsoft platforms such as SharePoint, Excel, CRM, and Dynamics GP (Great Plains). SQL Server 2012 has a broad range of features that offer major improvements in vital areas such as availability, security, performance, manageability, analytics, cloud readiness, scalability, collaboration, fast application development, and data discovery. SQL Server 2012 also consolidates the key editions of SQL Server from five to three, simplifying the selection of a version that fits your needs.

Progent can provide the expertise of Microsoft-certified engineers as well as experienced application developers, DBAs, DR/BC experts, network designers, and security specialists to help you evaluate the potential benefits of SQL Server 2012 for your business, set up pilot systems at your datacenter or at Progent's lab, plan and carry out a smooth migration to SQL Server 2012 either from prior releases of SQL Server or from other platforms, and design an efficient and secure environment that helps you maximize the business benefit of SQL Server 2012.

AlwaysOn High-Availability for SQL Server 2012

The headline innovation incorporated into SQL Server 2012 is Microsoft's AlwaysOn solution, which provides flexible and cost-effective system design options for insulating mission-critical application databases from downtime caused either by scheduled maintenance or network failures. Microsoft designed AlwaysOn to achieve or exceed the famous "five nines" availability, or 99.9999% uptime, which translates into just a few minutes of downtime per year.

AlwaysOn technology uses two enhancements in SQL Server 2012 to eliminate the inefficiencies of SQL Server 2008's Failover Clustering Instances (FCIs) for

high availability (HA) and SQL Server 2008's database mirroring mechanism for disaster recovery (DR). For a more effective and affordable HADR solution, SQL 2012 includes AlwaysOn Failover Cluster Instances and the new AlwaysOn Availability Groups.

AlwaysOn Failover Clustering Instances support multi-subnet clustering across geographically dispersed sites, allowing you to deploy so-called Stretch Clusters. This architecture offers both a high level of availability as well as the basis for an advanced disaster recovery solution. SQL Server 2012's AlwaysOn FCI also improves failure detection and provides more flexibility for configuring an optimal failover policy. In addition, SQL Server 2012 has

an option for indirect checkpoints as a viable alternative to automatic checkpoints. This new feature allows you to specify the maximum permissible downtime for a database so you can safely guarantee the recovery time of critical databases in case of a failover event.

AlwaysOn Availability Groups in SQL Server 2012 improve mirroring in SQL Server 2008 by allowing log-based data

movement without shared disks and thereby enabling zero data loss in case of a fail over condition.

AlwaysOn Availability Groups improve database uptime as well as resource utilization by letting you define sets of user databases that fail over as a single logical unit and to create a set of primary and secondary availability replicas to host copies of each availability database. Availability Groups can have four secondary replicas and feature listeners for fast application failover over, automatic page repair to event page corruption, and the ability to force a Failover Clustering (WSFC) quorum. Secondary replicas can be used actively for read-intent applications and backup in order to improve hardware utilization.

Learn More About Progent's SQL Server Consulting

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



Windows 8 Touches All the Bases

TECHNOLOGY FOCUS



Windows 8 includes headline features such touch-screen support and a new

tile-based Start interface, but Microsoft's latest client operating system also introduces less conspicuous yet significant improvements such as more built-in security, faster booting, expanded connectivity, enhanced cloud support, fault-tolerant storage, better synchronization, advanced backup/recovery, more powerful search, lower power consumption, and client virtualization.

Predictably, some of these enhancements come with a cost. Incorporating Windows 8 into a business network may require that you reconfigure your remote access environment, modify your security scheme, update or replace applications and utilities, and retrain users.

Progent's Microsoft-certified consultants can help you evaluate the business benefits and engineering challenges related to upgrading existing PCs to Windows 8 or adding new Windows 8 clients to your network. Progent can help you to resolve problems encountered during the process of upgrading to Windows 8, adjust your remote connectivity environment and your network infrastructure as needed, redesign your IT security strategy to take full advantage of the security enhancements built into Windows 8, recommend new desktop management procedures in order to simplify administration of all your Windows 8 clients, and provide customized webinar training sessions to bring your IT management staff and your end users up to speed quickly on Windows 8.

For larger organizations, Progent's project managers can help set up test labs to evaluate Windows 8 and design and execute Windows 8 desktop migration plans based on leading practices.

New Features of Windows 8

Windows 8 includes many new features that address a variety of customers ranging from gamers to workstation power users. Many of these features are designed to improve the usefulness and manageability of Windows-based smartphones, tablets, and laptops. Professional and Enterprise versions of Windows 8 have important features that enhance the productivity of users working with mainstream business applications.

These new capabilities, when combined with the latest computer hardware, offer big advantages over previous

releases of Windows and should be factored into any ROI calculation. High-value innovations incorporated in Windows 7 include:

- UEFI (Unified Extensible Firmware Interface)
- Client Hyper-V Virtualization
- Storage Spaces
- Windows To Go
- Native Support for USB 3.0
- Improved Multiple Monitor Support
- High Performance File Explorer (to replace Windows Explorer)
- File History
- Support for Near Field Communications (NFC)

Progent's Windows 8 Migration Services

Progent's Microsoft-certified consultants can help you follow leading practices in deploying Windows 8 in a production system. For large-scale Windows 8 desktop rollouts, Progent's methodology is one that has proven effective in Windows 7 migrations. This process is centered on automating the capture and replication of standardized images of operating systems, drivers, and core applications to be deployed in various business groups and a wide range of work environments.



By using Microsoft's advanced deployment tools for Windows 8, Progent can help you achieve a high degree of automation during the rollout process, thereby avoiding the delays and mistakes that often accompany a manual deployment. Progent can help companies with any phase of a Windows 8 rollout and also offers project management services to help you complete your migration on time and within budget.

To control costs, save time, and minimize engineering risk for large-scale migrations, Progent uses Microsoft's deployment automation tools provided with the Windows Assessment and Deployment Kit (ADK). These tools include Windows System Image Manager (Windows SIM) to create custom baseline images, Deployment Imaging Servicing and Management Tool (DISM) for editing existing images, Application Compatibility Toolkit (ACT) for uncovering compatibility issues, User State Migration Tool (USMT) for migrating the personal data of individual users, and Volume Activation Management Toolkit (VAMT) for centralized activation management.

Contact Progent for Virtualization Help

For Windows 8 help, call Progent at **800-993-9400** or send email to **information@progent.com**

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