Of course I am always amazed how often Microsoft comes out with new versions of their software, and how it’s usually a year or so behind the actual calendar year. We recently upgraded to server 2010 just a year or so ago, and it’s now 2013! So why am I talking about server 2012?

Microsoft is laying the groundwork for the next generation of computing with this release. There are sweeping changes in how both businesses and public-sector organizations consume technology and attempt to optimize its use. We know that virtualization is a motivator to drive down the costs as it increases efficiencies. Other flexible computing models such as the “cloud”, allow organizations to cut costs and streamline their operations.

Along with these innovations, Microsoft Windows Server 2012 stands out among these technologies and will play an even more important role in helping these organizations to balance legacy applications with a new scalable infrastructure that provides a base or foundation that can support dynamic capacity without sacrificing stability.

So how does Server 2012 promote large-scale virtualization and how does it eliminate the pain of implementation and management? Here are seven quick facts that show you how.

1. Integrated Virtualization: Windows Server 2012 embeds virtualization into the operating system, instead of being an add-on layer, at the bare metal level which allows for greater provisioning.

2. Enhanced Scale and Density: Server Hyper-V now has scalable improvements that support higher processor counts and increased memory capacity. You can now increase the number of processors that run on one virtual machine (VM) by a factor of 16.

3. Simplified Virtual Machine Migrations: Overall Server 2012 makes it easier to migrate VMs around a variety of environments, including deploying to the cloud using Live Migration.

4. Better Deployment and Management for the Virtual Desktop Environment: With the incorporation of remote desktop support and application management capabilities, it allows the administrator better capabilities to manage virtual desktop infrastructure (VDI) environments. It uses templates as part of the remote support toolkit that helps to automate the deployment and management of VDI pools.

5. Simplified Application Development for the Cloud: Server 2012 works with all the major application development tools, including Visual Studio and .NET, and open source technologies like REST, Java and PHP. So it’s easier for internal developers to write and deploy new cloud applications.

Continued On Page 11
From the Director - Bits and Bytes

Fiscal year 2014 brings new challenges for the IT Project, but challenges we are gladly willing to face.

Starting this year, the IT Project has had its contract with the NJ Division of Mental Health and Addiction Services (DMHAS) revamped a bit to bring more value-added services to both the providers and to the Division.

Starting with a comprehensive training program, the IT Project will be featuring 24 education workshops throughout the year. These workshops will focus on technology related areas, such as HIPAA security, meeting the Meaningful Use standards, network security and interactive communication technologies, as well as a variety of other topics.

Another exciting challenge this year, is operating a help desk on behalf of the DMHAS. The IT Project is proud to be “manning” the help desk which will support the following DMHAS applications:

- CIMS (Contract Information Management System)
- QCMR (Quarterly Contract Monitoring Report System)
- USTF (Unified Service Transaction Form) (When it goes live, of course).

If you need assistance with any of the applications above, e-mail the help desk at ITHelpDesk@njamhaa.org, or call 609-838-6064.

We look forward to continuing to provide assistance to all providers, as well as helping out the Division with this new role.

I would also like to remind you to SAVE THE DATE of March 5th, 2014. Put this reminder on your calendar now. It is the date of the next IT Conference, which will be held once again at the Pines Manor in Edison, NJ.

And let’s not forget about the IT Professional Advisory Committee! We are always looking for more participation, especially from the addiction treatment community. Come on out and have your voices heard! Tell your peers and the Division about your obstacles, successes and challenges, and by working together, we can all come up with viable solutions.

Sincerely,

June Noto
Chief Operating Officer, NJAMHAA
Director, IT Project

The IT Project has had its contract with the NJ Division of Mental Health and Addiction Services (DMHAS) revamped...to bring more value-added services.

These trainings are FREE to all organizations who currently contract with the NJ DMHAS. Because we have been requested to offer these trainings to smaller groups of people, I recommend that as soon as you see a workshop you want to attend, you book it immediately. We are seeing that our workshops fill up very quickly, usually within a day or two of announcing them. Don’t miss out and don’t hesitate.
Document Disposal Company Responsible for old Patient Records found in Park
by Krystyna Monticello, Esq.

Over 277,000 patients were notified by Texas Health Harris Methodist Hospital in Fort Worth (“Texas Health Fort Worth”) earlier this month of a breach of their health information. Only patients seen between 1980 and 1990 whose records were maintained on microfiche are affected or potentially affected by the breach.

Texas Health Fort Worth’s business associate, document destruction company Shred-It, was contracted to dispose of the old microfiche records. As reported by the Star-Telegram, because the microfiche could not be destroyed on-site, Shred-It was to transfer them to another facility for destruction.

Somehow “lost” or misdirected during transit, the records found themselves in a park where a concerned citizen found them and contacted the Dallas police. Records were reportedly found in at least two other public locations, and contained names, addresses, Social Security numbers, birth dates and health information.

As Texas Health Fort Worth stated in a press release, “We have no knowledge that any of the information included on the microfiche has been accessed or used inappropriately. Furthermore, microfiche is no longer commonly used and specialized equipment is needed to read the information it contains.”

While, certainly, it is unlikely that the average Joe has access to microfiche equipment, it is inexcusable that the records wound up in a park, of all places, to begin with. Although Shred-it “assured” Texas Health Fort Worth that it took appropriate action as a result of the incident, Texas Health Fort Worth has switched vendors. I would expect other hospitals in the area to follow suit. It remains to be seen whether the Office for Civil Rights will investigate Shred-it for this incident.

Contact the IT Project today for assistance with your migration plans!
The Office of the National Coordinator for Health Information Technology (ONC) released its second annual report on the adoption of health IT (HIT) this past June. The report provides a snapshot of the nation’s efforts and continuing barriers to health IT adoption. Although Electronic Health Records (EHRs) have been lambasted lately by Congress, the report primarily covers the ongoing big “wins” for health IT adoption: increased participation in the Medicare and Medicaid EHR Incentive Programs (“Meaningful Use”) in 2012, increased adoption of EHR technology among physicians and hospitals and increased rRx, and various federal and state Health Information Exchange (HIE) and HIT efforts.

For example, Center for Medicare and Medicaid Services (CMS) is more than happy to report that over half of the nation’s eligible professionals have received payments through Meaningful Use as of April 2013, with about 80 percent of eligible hospitals receiving incentive payments as well. Among the 50 states, only eight do not have mechanisms broadly available statewide for directed exchange, whether fully implemented or in pilot phases, of which New Jersey is one. Thirty-six states have query-based exchange available either statewide or through at least certain regions.

The report also highlights the variety of programs, pilots and regulatory efforts undertaken by CMS and ONC, among others, and the success these have had since the passage of the HITECH Act. However, ONC acknowledges the barriers that remain for health IT, particularly interoperability, and remains committed to developing flexible, modular standards and policies for the interaction and exchange of information among various types of systems.

To help support interoperability, the State HIE Program recently released a set of online training modules for providers, supporting the roll-out of Meaningful Use Stage 2 set to kick off this October for eligible hospitals, and January 2014 for eligible providers. The Standards and Interoperability (“S&I”) Framework continues to work with stakeholders in the vendor and provider communities to identify barriers and their solutions to achieving national interoperability. And the public/private partnership through the national eHealth Exchange (formerly the Nationwide Health Information Network or NwHIN) continues as ONC’s “incubator of innovation” in HIE.

For the entire snapshot of the nation’s health IT status, read the full report with its easy-to-read charts and graphs. You may be surprised at how much ONC has been involved with, and that has happened in, the evolution of health IT and HIE.

### Additional Efforts Highlighted by ONC Include

- Improving consumer and provider confidence and trust in health IT and HIE
- Engaging consumers in their e-health and identifying solutions for consumers to better control and direct the flow of their information through HIE
- Gathering data through various public forums and surveys on privacy and security concerns for safeguarding health information in health IT
- Developing interactive tools for providers to assess mobile device security as well as general security tools for safeguarding electronic Personal Health Information and EHRs, and minimizing breaches
- Identifying strategies for improving coordination and integration of behavioral health providers into broader health IT efforts, including launching an interstate direct behavioral health pilot
- Identifying strategies for improving coordination and integration of long-term and post-acute care providers into broader health IT efforts.
Bill Gates had a vision of a “computer on every desk and in every home,” and, by 2002, one billion PCs had been sold according to Gartner at the time. That number had been predicted to double by 2008, but it was precisely then the PC industry suffered its worst growth rate since 2002.

Now PCs are not just down, they are disappearing as both a consumer choice — from which much business use is driven — and as a corporate option. Tablets are officially taking over, but what are they really doing in the enterprise?

**By the Numbers**
Gartner says the decrease in PC shipments is a reflection of a long-term change in user behavior, mainly from the adoption of replacement devices like the tablet.

In its Q1 2013 report “Forecast: Devices by Operating System and User Type,” Gartner puts predicted worldwide tablet shipments at 197 million units in 2013, a 69.8% increase from 2012. This percentage is similar to the year over year growth from 2011 to 2012.

According to Changewave Research, (a service of 451 researchers) overall business IT spending is set to improve in Q2 2013, led by smartphone and tablet demand. In its Q1 2013 survey (“Corporate Demand for Smartphones, Tablets & PCs”), 25% of respondents said their companies will be purchasing tablets for employees in Q2 2013. This is one point above the all-time high registered in the prior quarter survey.

The report showed that Bring Your Own Device (BYOD) is allowed for both smartphones and tablets at the majority of (38%) companies (36% have no BYOD policies at all). And while the percentage of companies whose BYOD includes “smartphones only” was flat, the rate for “tablets only” doubled since a November 2012 report.

**Apple Again**
For corporate purchases, iPad is the top choice at 77%. Indeed, when Apple launched the 4th gen iPad, CEO Tim Cook noted that 94% of the Fortune 500 is testing or deploying the device.

Changewave’s survey shows Samsung and Microsoft tablets tied for second choice at 16% each. Because of the integration with traditional desktop applications, a Microsoft device may seem like a logical choice for business, but the Surface Pro for Windows 8, for example, has been subject to much criticism.

In addition, while a small percentage of businesses will move to Windows 8, just as they did with Vista, the real issue for 2013, according to Bob O’Donnell, Program VP, Clients and Displays, IDC, is the migration to Windows 7. He says that more than 40% of commercial enterprises are still running XP.

To view the full article, please visit [http://mobileenterprise.edgl.com/top-stories/Tablets-Take-Over86171](http://mobileenterprise.edgl.com/top-stories/Tablets-Take-Over86171)
According to a recent survey from Ricoh, conducted by Harris Interactive, employees feel a great pressure when they are out of the office—and it comes from the top. In fact, 54% say their bosses “expect” them to work during vacations.

“In today’s environment in business, there is a fear of irrelevance, especially in areas where the employee has responsibility,” said Terrie Campbell, VP, Strategic Marketing, Ricoh Americas Corporation, in an interview with Mobile Enterprise. “Am I out of sight, out of mind, or are decisions being made that will negatively affect me?”

While a good percentage will keep up with emails, many will simply not take the time out of their vacation to create a presentation. Even for those who truly enjoy their jobs, there is noticeable pushback when it comes to intrusions on personal time—more than half of respondents would rather have a root canal than work during time off.

“That’s a strong indication about how strong the emotions are around the subject,” Campbell said.

This is confirmed by another recent survey, also conducted by Harris Interactive, on behalf of TeamViewer, a provider of remote control and online meetings software. Almost all participants in the annual Work/Life Balance Index (89%) said they would react badly if asked to work on vacation.

More than a third would do the work—unhappily. Thirteen percent said they would shut off their devices altogether while 11% would pretend they did not receive the text or message. An additional 6% said they would actually start updating their resume during their vacation and look for another job.

The Wi-Fi Factor

Even if an employee wanted to do document revisions, without gritting teeth, it’s difficult. Only 24% say their employer makes it easy to access work-related documents from home or a remote location, according to Ricoh’s survey.

Emails, in contrast, don’t seem to negatively affect individuals, and actually makes it easier for a third of respondents to return to work. Is this because connectivity is constant now that mobile devices are prevalent?

“The iPads and huge wave of smartphones has made it much more convenient to communicate,” Campbell replied. “Now I don’t have to stop and find a hotspot. Now I don’t have to stop and connect a laptop to a network, enable the VPN, open the email, etc.”

To view the full article, please visit http://mobileenterprise.edgl.com/top-stories/does-mobile-technology-ruin-vacations-87401?referalttype=newsletter

Contact: Megan Remy (mremy@ntst.com) (913) 696-2819
How to Record Calls on iOS

1. Download the Call Recorder app for your iPhone, launch the application, and accept the terms and conditions (Note: Call Recorder is also available for Android).

2. Enter the phone number associated with your iPhone.

3. Now, with the app open, you’re almost ready to begin recording your first call. Press the Account button on the menu bar at the bottom of the screen. At this screen, you can add credit for minutes. Three minutes for U.S. calling are provided for testing purposes.

4. Return to the main Dialer screen and either press the Book button to bring up contacts or type in the number you desire to record.

5. Once you’re at the call screen, simply carry on your conversation as you normally would, as the call is being recorded in the background.

6. After you’re finished, you can access your recordings via the Recordings screen, which can be accessed through the menu bar. Additionally, you can press the Edit button, select recordings, and then either email or sync them via iTunes for safekeeping.

To view the full article, visit http://www.techrepublic.com/blog/smartphones/how-to-record-calls-on-ios/

EHR Vendor Loses Meaningful Use Certification

The U.S. Department of Health and Human Services (HHS) announced on Thursday that two EHRs have had their Meaningful Use certification revoked. EHRMagic-Ambulatory and EHRMagic-Inpatient, which are developed by EHRMagic, Inc., were previously certified for the Medicare and Medicaid EHR Incentive Programs. It is the first time that a certified EHR has had its certification status revoked.

The Office of the National Coordinator for Health Information Technology (ONC) and InfoGard Laboratories, an ONC authorized certification body for Meaningful Use, both were notified that the EHRs did not provide required functions and shouldn’t have passed certification. After retesting, the EHRs failed.

ONC has made it clear that certification is an ongoing process, stated Dr. Mostashari, National Coordinator for Health Information Technology “We and our certification bodies take complaints and our follow-up seriously. By revoking the certification of these EHR products, we are making sure that certified EHR products meet the requirements to protect patients and providers.”

Eligible professionals and hospitals who purchased the decertified EHRs will have no choice but to implement an alternative EHR in order to continue participating in Meaningful Use. EHRMagic customers now are in a difficult situation, with significant costs, downtime and retraining to transition to a new EHR as well as loss in incentive payments they would have otherwise been potentially eligible for.

iHealthBeat.org reports that no one has attested to Meaningful Use using the EHRMagic products yet, according to Peter Ashkenaz, an ONC spokesperson. This means that EHRMagic customers will at least not be faced with potential recoupment of payments. It remains unclear what liability EHRMagic may have to its customers for failing to retain certification for its EHR products.
The increasingly heavy-handed Office for Civil Rights (OCR) announced news on July 11, 2013 of yet another resolution agreement for HIPAA violations; this time hitting WellPoint Inc., a managed care company, with $1.7 million for an Internet breach that occurred between 2009 and 2010 affecting over 600,000. The U.S. Department for Health and Human Services (HHS) stated in the press release,

This case sends an important message to HIPAA-covered entities to take caution when implementing changes to their information systems, especially when those changes involve updates to Web-based applications or portals that are used to provide access to consumers’ health data using the Internet.

Data (including names, birth dates, Social Security numbers and health information) was unsecured in a web-based application database after an upgrade. The resolution agreement alleges that the data was disclosed improperly over a five-month period. HHS indicated that:

- WellPoint failed to implement policies for authorizing access to ePHI (Electronic Personal Health Information).
- WellPoint failed to perform an “adequate” technical evaluation after a software upgrade affected authentication controls
- WellPoint failed to implement technology to verify (authenticate) access to ePHI by authorized individuals.

Covered entities affiliated with WellPoint include certain Anthem, Blue Cross and Blue Shield, and UNICARE health plans, among others. There was no Corrective Action Plan accompanying the resolution agreement, which seems to indicate OCR was happy with the mitigative action taken by WellPoint after the fact. However, the Indiana Attorney General’s office had filed suit against WellPoint back in 2010 for failing to provide notification as required under state breach laws, and the Connecticut Attorney General’s office opened an investigation as well.

For entities planning software and other upgrades and modifications (all you “Meaningful Users”, to start), you can retrieve a copy of the news release and resolution agreement to give to and hammer home with your Security Officer and IT Departments here.
Internet Explorer 10 (IE) was released to Windows 7 users in February 2013. It did not receive a terribly warm welcome. IE 10 was not compatible with many cloud-based apps. The most common troubleshooting question for the past few months has been, “Do you have Internet Explorer 10? Uninstall it and go back to Internet Explorer 9.”

Internet Explorer 10 does have a compatibility mode which will render a web page the way Internet Explorer 9 would. This does not always work. If you have a cloud application that does not work with IE 10, you may simply have no choice but to uninstall IE 10 until your cloud vendor updates their application to work with IE 10.

This will certainly happen. Microsoft still has a large user base. No cloud vendor will ignore IE 10 compatibility. Many vendors have made their programs compatible with IE 10 and more will in the coming months. Slowly but surely, IE 10 will find its place.

There is one advantage to IE 10 that would surprise many people. All modern browsers today have security software written into them to block malicious websites and viruses. A recent study compared their ability to keep malware out. Firefox and Safari use Google’s Safe Search database to examine a particular URL. They blocked 9.92% and 10.15% of known malicious URLs respectively. Google Chrome also uses Google’s Download Protection, which looks at a file rather than a URL. Chrome blocked 83.16 percent of malicious URLs. IE 10 uses Microsoft’s own SmartScreen and Application Reputation technology. It blocked 99.96 percent of malicious URLs.

While IE 10 may take some getting used to, it will make web surfing safer.

And just a word to the wise, if you quickly need to emulate IE 8 or IE 9, while you are running version 10, press the F12 key, and sure enough IE opens a window for developers. Click on the menu item that says “Browser Mode: IE10.” When you do, you will be able to drop down as far as IE 7, 8 or 9. This is a sure fire shortcut to uninstalling IE and reinstalling a lower version. It is not, however, a permanent fix and needs to be done when you launch IE.

Windows Multipoint Server is a new product which might be of use to your organization.

Do you have a training room to provide staff or consumers with computer training? Are your PC’s in that training room old and slow? Windows Multipoint Server can help.

Multipoint Server is based on, and is similar to, Windows Terminal Server, where the PC simply runs a thin client and all the processing takes place on the server. Many agencies run Terminal Server in some fashion, either for remote access or to run certain applications. All that the Remote Desktop Client sends are key clicks and mouse motion. This allows older PC’s to be used, since the RDP client isn’t very resource intensive.

However, Multipoint Server also allows you to use multiple keyboards, mice, and monitors. If you have a PC with three video outputs and had six USB keyboards and mice, Multipoint Server would allow you to make that one PC into three separate workstations. That can help stretch your budget for IT equipment. Each user has their own experience and their own session running. Multipoint Server is easy to set up and uses the RDP client which is already built into Windows.

Multipoint is limited in how many sessions it can run at one time. Multipoint Standard can run up to 10 sessions; Multipoint Professional can run up to 20. Multipoint could work best for a training room, a kiosk, or perhaps a department. Certainly it can’t do everything. However, if you have a need that fits Multipoint Server’s scale, it might find a place in your organization.
Windows RT Tablet: First Look

Is the tablet ready for business?

We have had android and iPad tablets and they are great things to take with you; they are light and easy to use. But, there have always been deficiencies with them. They are great to get your e-mail and browse the web, but try typing a Word document or a PowerPoint presentation and you are out of luck. Microsoft saw these deficiencies and decided to “have a go at it”.

The Windows RT OS is based on Windows 8, which is not a particularly good start. But, the touch screen on it does make it usable. However, it is not Windows 8, so it does have limitations. The only software that can be installed are the apps from the Microsoft app store. This means that you are stuck with IE as the web browser.

One thing that has always hampered the tablet is compatibility to standard software, such as the Microsoft Office Suite. The surface has no such problem since Office 2013 is built into the OS, but because you can not install software, you can only use that version. That is not a particularly bad thing.

Another traditional problem is printing. Most tablets can print, but you have to go through multiple steps, such as save to webdav then select Internet printing. The surface tablet can connect to printers like any other Windows device. This is a significant plus for this tablet.

The traditional business use of the tablet is for e-mail. The e-mail client on the surface is good. It can interface with Exchange and 365 using the Activesync connector. It can also work with Pop and iMap protocols. Calendars, contacts and tasks can be synchronized, as well. In meetings, notes can be taken with Office or any number of apps available from the store.

As well as Word, it has Excel and Powerpoint on it, so it can handle a variety of tasks, from spreadsheets to presentations with the HDMI output to a projector.

So, all this being said, is the tablet ready to replace the PC? No, it still has serious limitations for the true power user. It has, however, been moved from the status of a shiny toy to a usable business device. In fact, this entire article has been written on one without using the optional keyboard.

Samhsa Offers Health Information Technology Forum.

The Substance Abuse and Mental Health Services Administration (SAMHSA) has launched a new Health Information Technology (HIT) Forum. The forum is intended to facilitate the exchange of ideas, suggestions, and personal experiences dealing with HIT for substance abuse treatment providers, mental health providers, software publishers, state agencies, consumers, families, and others involved in the field. SAMSHA expects dialogues on the message board to ultimately address a wide array of topics such as electronic health records systems, health information exchanges, privacy, meaningful use criteria, experiences dealing with specific hardware and software, technology-assisted care, consumer self-management approaches, and requests seeking advice from other stakeholders. The views expressed on this forum will be solely those of their authors, not those of SAMHSA.
Microsoft Windows Server 2012 – 20 Quick Facts

By: June Noto, Director, IT Project

6. Accelerated Problem Resolution: Using unified DevOps and unified application lifecycle management with a standardized framework, the O/S supports better application troubleshooting and a more effective systems management platform.

7. Common Identity Management in the Cloud: Active Directory lets organizations leverage a single identity profile to access applications in both the cloud and on the customer’s site. Using Windows PowerShell, you can deploy Active Directory in the cloud and more easily clone Active Directory VMs.

When it comes to protecting access to critical information, whether the data is located in the cloud or in your on-premise system, ensuring that only authorized users can access it is paramount. But security isn’t the only consideration when it comes to data storage. Data must be stored in a stable environment that guarantees its integrity and availability. And Server 2012 provides this and much more.

1. Better Business Continuity/Disaster Recovery: Server 2012 includes a feature that is particularly appealing to smaller businesses that need a cost effective way to back up data to remote locations. Hyper-V Replica, which is integrated in Windows Hyper-V, provides a mechanism that administrators can configure through PowerShell so specific VMs can be replicated to an off-site location. No special hardware is needed and it can be done over a standard broadband connection.

2. More Efficient Storage Transfers: Server 2012 Offloaded Data Transfer feature, offloads the file transfer to a storage array to optimize array throughput, limit latency and cut CPU, network consumption and other resource used by the host computer.

3. An End to Corruption in Real Time: Finally, Microsoft has improved the CHKDSK utility to find and automatically fix corrupt disks in real time. Yes, admins can continue to use the command-line interface, but this manual intervention should no longer be needed. The utility will run in the background, and identify and fix corrupt disks while the machine is online, rather than during a boot-up process.

4. Greater Resiliency for Larger Storage Volumes: A new file system increasing reliability and improved resiliency, because the Resilient File System relies on 64-bit checksums at each layer, to automatically detect and correct data corruption, even when the file is still being used. If it can’t fix it, it removes the bad data without taking down the rest of the volume.

5. Support for 4K Sector Hard Drives: With the industry moving from a 512-byte sector physical disk format to 4,096-byte sector hard drives, interoperability with legacy applications and operating systems becomes a real concern. Server 2012 offers native support for the 4K sector hard drives, allowing organizations to use the format to meet increasing scale requirements.

While networking speeds are in the Gigabit range, the fastest server is useless if the connected network can’t keep up with traffic demands. And now, Server 2012 is designed to support the distinct requirements of a virtual environment.

1. Integrated Network Virtualization: Server 2012 comes with built-in network virtualization capabilities that allow systems administrators to segregate traffic flows from other workloads without the complexity associated with conventional virtual LANs. For example, you can now assign the same, nonconflicting IP address range for two different tenants sharing the same host without commingling the traffic on the network.

2. Load Balancing and Failover: With the introduction of network interface card teaming, Server 2012 offers greater operational stability and reduction in failures. It makes two or more NICs look like a single virtual device. So the server can aggregate the bandwidth of all the NICs, protecting software from the failure of any individual NIC and allows admins to balance the load among the devices.

3. High Virtual Machine Throughput: When using computer intensive applications, such as database servers, there tends to be throughput challenges. Microsoft has addressed this issue with System Root I/O Virtualization. SR-IOV effectively lets VMs Input/Output directly on the physical network adapter to achieve higher VM network throughput while limiting host processor overhead.

So whether your environment is entirely virtualized or includes physical servers, keeping the infrastructure running at optimal levels, without costing an exorbitant amount requires highly effective system management tools. And Microsoft Windows Server 2012 integrates critical administrative capabilities to achieve a higher
level of performance while providing the functionality that admins need.

1. Automated Task Management: PowerShell 3.0 automates the management of most common tasks and PowerShell scripts. You can use a graphical user interface (GUI) but the default installation option is an item on the command-line interface to make it easier to manage. The platform also derives enhanced functionality from tools like Active Directory Administrative Center, which offers a history window that can be useful in a forensic analysis.

2. Reinforced Security Through a Consolidated Interface: Server 2012 Core Installation uses a command-line interface that can provide organizations a way to lock down security. This interface increases OS security by removing the GUI components that provide a more expansive threat surface for server attacks.

3. Clearer Visibility Into Utilization and Performance: There is a new version of Task Manager that is optimized for a multiprocessor environment, which offers a better perspective on resource use and performance.

4. Automated IP Address Discovery and Management: The IP Address Management (IPAM) Framework included in Server 2012, automatically discovers IP address and supplies ongoing monitoring, auditing and management capabilities. IPAM can now manage and track all domain controllers, DHCP and DNS servers, and the framework can report data by IP address, client ID, host name or username.

5. Flexibility to Shift Workloads Between and Among Cores: A virtual environment lets organizations shift workloads based on capacity and other requirements. Microsoft now allows for more flexibility in shifting workloads through improvements in the Client Access License (CAL). So now, users and devices licensed with a CAL can access any physical or virtual instance running on any server.

You now have a good overview of the improvements that Microsoft has introduced into Server 2012. The hard part now is figuring out which edition you need. You can visit Techsoup.org for non-profit pricing as well as learning more about the flavors and versions available for Server 2012.