

GREENE COUNTY INFORMATION TECHNOLOGY  
2016 ANNUAL REPORT TO THE GREENE COUNTY LEGISLATURE

Greene County Information Technology  
411 Main Street  
Catskill, NY 12414  
John K. Wynne – Director of Information Technology  
[jwynne@discovergreene.com](mailto:jwynne@discovergreene.com)

Prepared: April 2017  
By: John K. Wynne - Director

## Mission Statement

Information Technology is a crucial component of modern government. As a support element for service delivery in County government, information technology is increasingly the vehicle of choice for direct delivery of County services and information.

The mission of Greene County information Technology is to provide reliable and responsive information technology services, application services, infrastructure and data center services to Greene County departments and agencies.

## Technical Vision Statement

Deliver easy to use internet applications to make information more accessible to citizens and all stakeholders in Greene County.

Provide growth on Microsoft, Linux and SQL Based technologies and first rate support on existing systems.

Continually enhance network and application security to protect Greene County information resources.

Enable business continuity by delivering networking and server technologies which provide redundancy, availability, speed, reliability and flexibility

Utilize technologies incorporating data, images, internet, documents, mapping and business processes to promote enterprise solutions and enhance department and agency communication and collaboration.

## Information Technology Staff 2016

John Wynne – Director – Background, has been with Greene County for 14 years as Director of Information Technology

Previous experience – Owner of Columbia-Greene Systems for 14 years. Began Computer Industry career in 1981 with CPI, Computer Professionals International

Serves on Board of Directors of New York State Local Government IT Directors Association

Has served on Board of NYS Office of Critical Infrastructure and Cyber Security

Has served on the Board of the NYS IT Leadership Academy

Senior Systems Support Technician – has been with Greene County for 10 years.

Previous experience – Mid-Hudson Cablevision

Network Engineer – Has been with Greene County for 2 ½ years.

Previous experience – Graduate of St. Lawrence University and ITT.

Since May 16, 2016 – System Support Technician – Had been with Columbia Memorial Hospital for 18 years in IT Technical Support.

## Highlights of 2016

Annual updates of County fleet of computers, peripherals and software. We work on the basis of a 5 year turnover of technology. Therefore, 20% of our more than 400 computers need to be replaced annually. 80 computers are replaced each year. This has proven to be a good fit for Greene County, assuring a reliable and cost efficient inventory of technology.

Although Cyber Security has been a focus for some time. Fortifying networks and desktops became a more proactive endeavor in 2016. We contracted with Tag Solutions to perform penetration testing on our networks. With that, several immediate actions were taken to improve network security. Several procedures and practices were adopted to assure ongoing high levels of network security.

Google Analytics are provided on a monthly basis to all department heads. Allowing them to see the growth of interaction on the internet and illustrate the value of their part of the [greenegovernment.com](http://greenegovernment.com) website.

Completed the move to Voice over the Internet (VOIP) phone system to all but one department.

Support of all County Agencies and Departments.

Continued support of OnBase Electronic Document System and work flow system.

Rebuilt Wireless Network at 411 Main Street, featuring a guest, and a separate trusted wireless network

Installed wireless Network at Cairo Mental Health Building.

Continually work with Board of Elections – supporting the web updates with each election. 2016 was a more demanding year than usual with Presidential elections.

Development an IT disaster recovery and business continuity plan.

Installed new server at Greene County Sheriff and consolidated Civil and Law Enforcement services onto one server.

Improved wide area networks with Branch Office VPN connections and more robust IP standards.

Support and service of Emergency Services was removed from Greene County Information Services responsibilities, and outsourced to Intelligent Technology Solutions in Coxsackie, New York by the County Administrator.

Build of IT Document Library on IT Shared drive with practices and procedures documented and available to all IT Staff.

Backup of all Servers utilizing: Snapshot technology, redundant storage devices and Cairo>Catskill, Catskill>Cairo replication.

Have added additional level of backup to SAN Drives on weekly basis allowing for file level restoration if needed.

Added additional Data Storage capacity with Dell Equallogic SANs and Seagate Business Class storage. We now currently have over 50 terabytes of storage online.

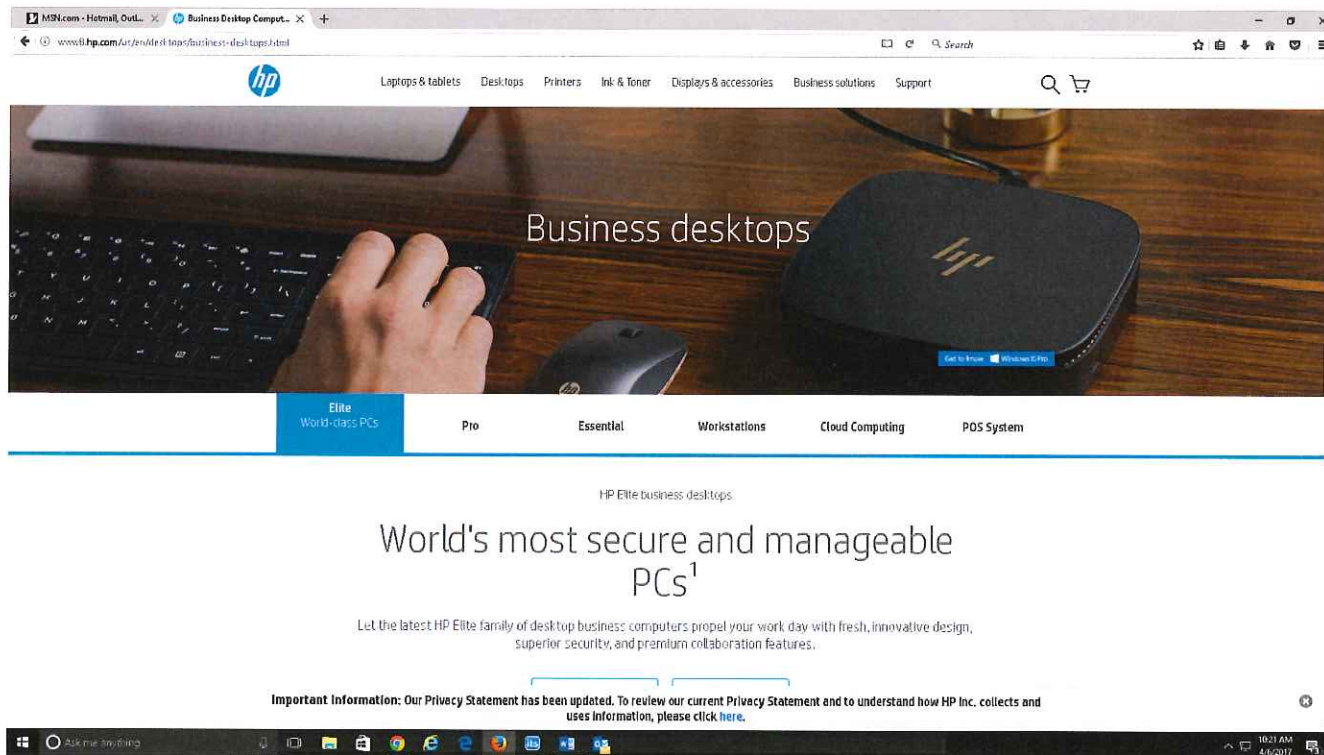
Updated and installed Sheriff's GunKeeper Software system

Installed internet backup systems at key locations using cable modems as secondary connections with integrated Watchgaurd failover connections.

Upgraded the entire Human Services IT infrastructure utilizing grant opportunities. All desktop computers, workgroup printers were replaced to current standards.

Began working with Toshiba towards goal of Managed Print Services which is expected to standardize printing and copying and result in cost savings.

Complete rebuild of IT in Human Services Agency Utilizing grant opportunity, Human Services received all new computers and printers.



## Goals for 2017

# Desktop Replenishment

Every year we schedule the replacement of desktop computer systems throughout the County. Based on over 400 computers this amounts to about 80 systems per year.

Most of our computer system purchasing is done through NYS pricing, competitive pricing or, other Contracts we can utilize. Whichever amounts to the best possible value. A good deal of time is invested in this process.

With each system we purchase the most current, proven operating system.

With each system we deploy one of three office productivity suites:

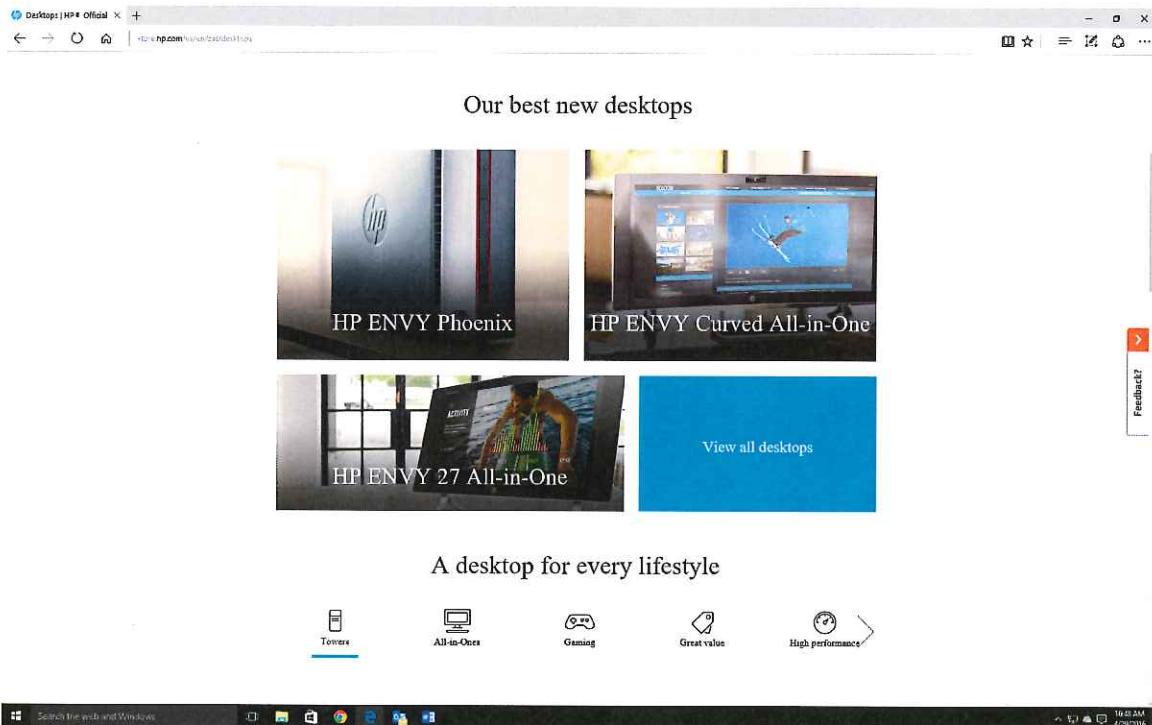
Microsoft Office – Professional

Microsoft Office – Standard

Apache Open Office

There are exceptions to the 5 year replacement rule. Some systems are used very heavily (24/7) and need to be replaced more often. Yet, other systems are used very little. Examples would be a Civil Service testing unit which would be used a couple of times a months this would need to be replaced less often. An Emergency Services Computer Aided Dispatch system is used 24/7 and needs to be replaced more often.

The overall purpose of this is to assure good quality working computers, reasonable replacement schedule and affordability for the County, with less downtime.



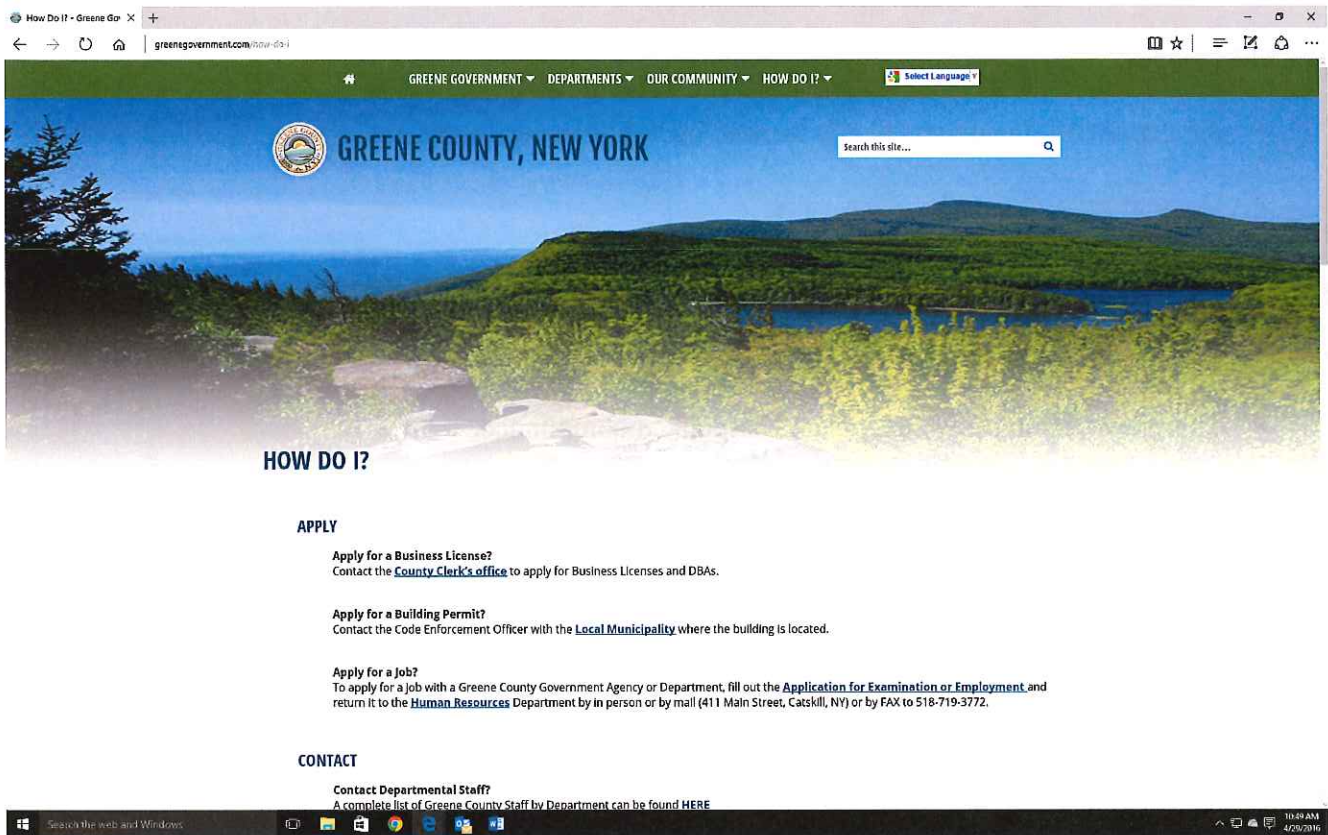


## On Going Website design and updates

GreeneGovernment.com website was totally redesigned in 2015.

The premise was to remove the walls between departments and make their services simpler for constituents to seek and find information and services from their County Government.

Encouragement of Department heads to understand and contribute content is an ongoing effort.



## Electronic Content Management (ECM)

The installation and initial launch of OnBase ECM was begun in 2015.

Not only can this project address the ongoing problems associated with records management. It addresses the work flow of documents. We are looking to modernize and make more efficient the handling of documents.

In 2017 this project will launch into the Veterans Agency.

ECM Manages:

- the capture of documents in any format, including paper, email, mainframe reports and eforms
- Content according to business rules.
- Storage, organization and tracking of documents so they are there when needed.
- Delivery of documents as soon as they're needed so processes run fast and costs are reduced.
- The preservation of documents and associated compliance.

The screenshot displays the OnBase website's Enterprise Content Management (ECM) page. The page features the OnBase logo (by Hyland) at the top left. A navigation bar includes links for 'OnBase Overview', 'Solutions by Industry', 'Global Services', and 'Stories & Resources'. The main heading is 'Enterprise Content Management (ECM)', followed by the sub-heading 'A market leader in ECM'. The text describes OnBase as a market leader in ECM, managing content from inception to final archival and destruction. It highlights capabilities such as business process management (BPM) and capture technologies. A 'Related Content' section on the right lists various resources: 'Video: What is ECM in the Cloud?', 'Video: Big data's potential impact on content management', 'Webinar: 6 Things to Know About Enterprise Content Management', 'Infographic: 7 things you should know about ECM in the cloud', 'Article: 5 ways to set up ECM for long-term success', 'Infographic: ECM in the cloud continues to grow', and 'AIIM Whitepaper: ECM Decisions for managing, accessing and preserving content'. The AIIM logo is visible at the bottom right of the page. The browser's address bar shows the URL 'onbase.com/evj/product/platform-capabilities/enterprise-content-management/hy100-cfa2'. The Windows taskbar at the bottom shows the time as 10:50 AM on 4/29/2016.

Improve Network and workstation management with modern tools. Planning to

implement Connectwise Labtech RRM in 2017.

## Proactively Resolve Issues & Minimize Downtime

LabTech, the world-class remote monitoring and management (RMM) tool in the ConnectWise® Business Suite™, offers technology solution providers fast, secure, and hassle-free remote control through seamless two-way synchronization with ScreenConnect®.

**Harness the power of automation and drive IT service excellence into your business with features and functionality, including:**

- A single automation platform to operate and run your IT services business
- Instant remote connectivity with ScreenConnect remote control integration
- Single-pane-of-glass visibility into your clients' IT systems
- Industry exclusive out-of-the-box functionality with LabTech Ignite®
- Mac and Linux agents for cross-platform support
- Mobile device management capabilities
- Integrations with industry-leading security, backup and storage, desktop management, and patch management solutions



Navigation Menu

Patch Management

Patching Best Practices

Patch Manager

Patch Status

Patches Failed

Patches Installed

Patches Missing

Favorites

Deploy Agents

Client Management

Ticketing & Timekeeping

Agent Monitoring

Status Overview

Patch Management

LabTech Online

Navigation Menu

Navigation Tree

No Filter Search Clear Options

| Probe Name  | Device Name    | Device IP Address | Device MAC        | Device Status | Device Last Contact Attempt | Device Uptime | Device OS |
|-------------|----------------|-------------------|-------------------|---------------|-----------------------------|---------------|-----------|
| JWYNNEWHPIC | EIOBOARDKUDSK  | 192.168.24.24     | 14DA-E8CE-59-08   | Offline       | 3/29/2017 10:46:38 AM       | 0 mins        |           |
| JWYNNEWHPIC | Afcis MP 3350B | 192.168.24.15     | 00-00-74-E1-2E-5E | Online        | 3/29/2017 10:49:02 AM       | 63335 mins    |           |
| JWYNNEWHPIC | Afcis MP 5001  | 192.168.24.249    | 00-26-75-24-58-30 | Offline       | 3/29/2017 10:47:28 AM       | 0 mins        |           |

Release To Intelligent Technology Solutions, Inc | Started at 11:33

23998 4/6/2017

Currently Monitoring 11 Computers at 2 Locations for 1 Client

Intelligent technology solutions, inc - http://itbtech.ityour.com - User: joyenne - (Network Devices Data Summary)

Main View Heads Up Display Status: IN Active Timeflips Links Tools Help

Refresh Monitors Alerts & Info Tickets Search

Navigation Menu

Patch Management

Patching Best Practices

Patch Manager

Patch Status

Patches Failed

Patches Installed

Patches Missing

Favorites

Deploy Agents

Client Management

Ticketing & Timekeeping

Agent Monitoring

Status Overview

Patch Management

LabTech Online

Navigation Menu

Navigation Tree

No Filter Search Clear Options

| Probe Name  | Device Name    | Device IP Address | Device MAC        | Device Status | Device Last Contact Attempt | Device Uptime | Device OS |
|-------------|----------------|-------------------|-------------------|---------------|-----------------------------|---------------|-----------|
| JWYNNEWHPIC | EIOBOARDKUDSK  | 192.168.24.24     | 14DA-E8CE-59-08   | Offline       | 3/29/2017 10:46:38 AM       | 0 mins        |           |
| JWYNNEWHPIC | Afcis MP 3350B | 192.168.24.15     | 00-00-74-E1-2E-5E | Online        | 3/29/2017 10:49:02 AM       | 63335 mins    |           |
| JWYNNEWHPIC | Afcis MP 5001  | 192.168.24.249    | 00-26-75-24-58-30 | Offline       | 3/29/2017 10:47:28 AM       | 0 mins        |           |

Release To Intelligent Technology Solutions, Inc | Started at 11:33

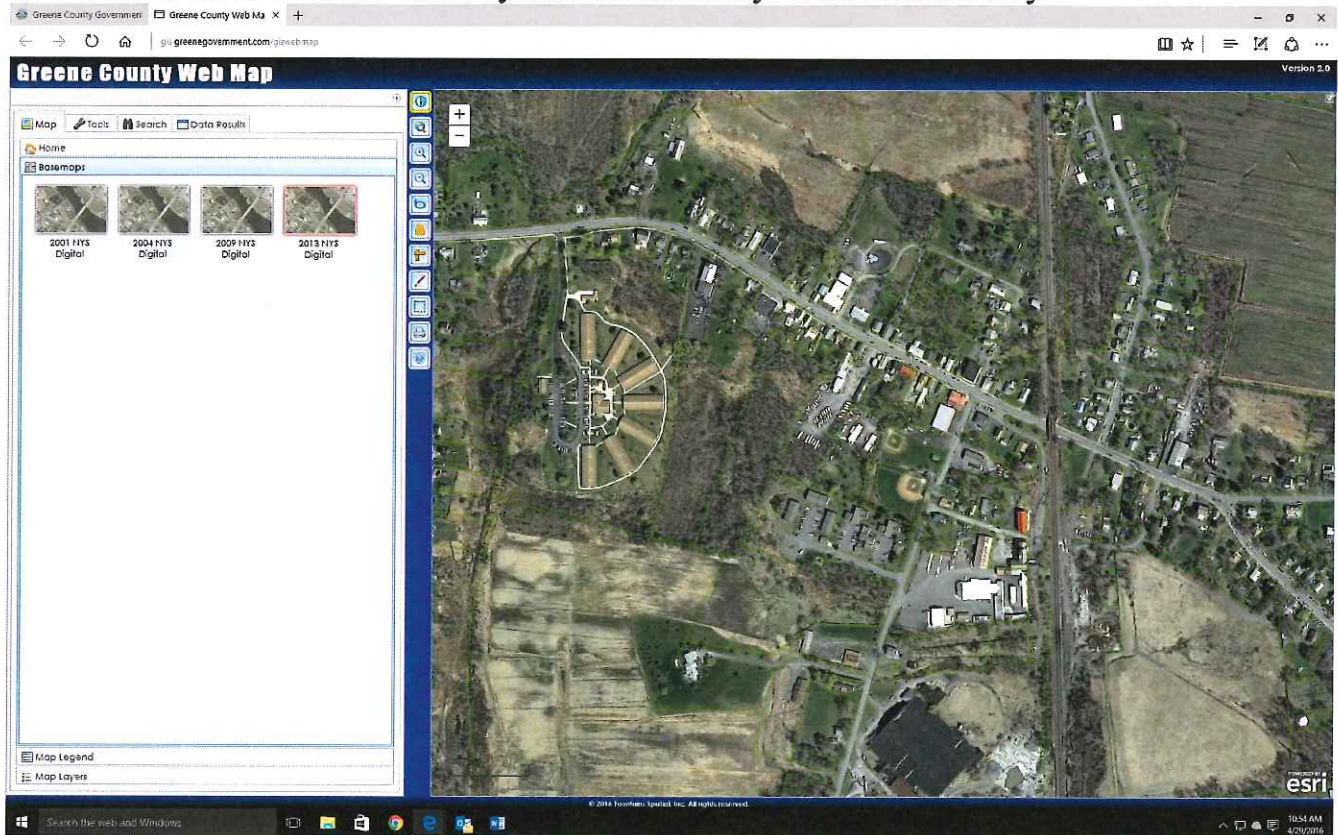
23998 4/6/2017

Currently Monitoring 11 Computers at 2 Locations for 1 Client

We have moved from analog (cassette tapes) of Legislative meetings to digital with GearDictate.

The screenshot shows a web browser window displaying the TranscriptionGear.com website. The browser's address bar shows the URL `transcriptiongear.com/geardictate-dictation-software`. The website's header includes a navigation menu with links for 'About TG Com', 'Support', 'Register', 'Login', and 'Wishlist'. A 'Toll-Free: Live Tech Support: 8AM-6PM M-F EST' banner is visible at the top left. The main content area features a search bar with the text 'Search our products...' and a 'Go' button. Below the search bar, there are several product categories: 'Olympus DS-7000', 'Olympus DS-3500', 'Philips DPM8000', 'Philips DPM8100', 'Clearance Warehouse', and 'Request a Quote'. A blue navigation bar contains the following categories: 'DICTATION', 'TRANSCRIPTION', 'SPEECH RECOGNITION', and 'SHOP BY INDUSTRY'. The main heading for the product is 'GearDictate 4 Dictation Software', with links for 'Overview', 'Details', 'Technical Specs', and a 'Buy Now' button. The central text reads: 'Introducing GearDictate 4. The World's Most Advanced Dictation App.' Below this, a sub-headline states: 'GearDictate is great for medical, legal and other professionals who need a powerful dictation application without tying up a telephone line or carrying around a digital voice'. The browser's taskbar at the bottom shows the Windows logo, search bar, and system tray with the time '11:09 AM 4/28/2016'.

Greene County Web Map has been redesigned and resides on new VMWare server with Microsoft Server 2012 to assure years of reliability and serviceability.





# Keen eye on Cyber Security, watching our perimeters

AVG Cloud Anti-Virus at all desktop computers and Servers.

The screenshot shows a web browser window displaying the AVG website. The browser's address bar shows 'avg.com'. The website header includes the AVG logo and navigation links for PC, Mac, Android, Partners, Business, and Support. A 'Log in to AVG MyAccount' link is also visible. The main content area features a large banner for 'AVG Antivirus Protection PRO' with the tagline 'Advanced antivirus & online protection for UNLIMITED devices'. A prominent orange button offers a 'FREE Trial Download', with a 'Buy Now \$59.99' link below it. The banner also displays images of a laptop, a tablet, and a smartphone. Below the banner are navigation links for 'AVG Protection Overview', 'PC features', 'Mac features', and 'Android features'. The Windows taskbar at the bottom shows the search bar and system tray with the time 11:40 AM on 4/28/2016.

# Watchguard Security Firewalls at all internet conditions

The screenshot shows a web browser window displaying the WatchGuard website. The browser's address bar shows 'www.watchguard.com/eng/solutions/security/threats/advanced-malware'. The website header includes the WatchGuard logo and navigation links for SOLUTIONS, PRODUCTS & SERVICES, RESOURCES, PARTNERS, ABOUT US, and SUPPORT. The main content area features a large red banner with the text 'Advanced Malware'. Below the banner is a section titled 'Survive the Epidemic of Advanced Evasive Malware'. The text reads: 'Whether as old-fashioned virus attachments in email, trojans delivered through network attacks, or modern ransomware forced through drive-by-download web attacks, malware has long been the bane of IT organizations.' Below this text are three statistics: 'Researchers identified more than 500+ EVASION TECHNIQUES in use today.', 'More than 140 million NEW malware variants are created each year.', and '97% of executable malware found on endpoints was new enough to NOT have an AV signature'. Below the statistics is a section titled 'So what is advanced malware and how does it work?'. The text explains that malware is software designed to infect a computer to perform malicious actions, and that modern malware is more adaptive than ever, able to change the way it looks to evade signature-based detection. The Windows taskbar at the bottom shows the search bar and system tray with the time 10:16 AM on 4/6/2017.

## VOIP Telephone Project continues...

VOIP telephones offer – Reduction of costs associated with traditional telephone services.

Unified Communications Platform.

Improved inter department communications.

The screenshot shows a web browser window with the following elements:

- Browser Tabs:** WebEOC 7.8 Login, Remote Access and Remo, Greene County Governme, Reallinx | Global Managed, Ask.com - What's Your Qu, Reasons for Choosing.
- Address Bar:** voip.about.com/od/voipbasics/a/ReasonsForVoIP.htm
- Navigation:** ABOUT.COM, FOOD, HEALTH, HOME, MONEY, STYLE, **TECH**, TRAVEL, MORE.
- Search Bar:** Search...
- Breadcrumbs:** About.com > About Tech > Voice Over IP > Introduction to VoIP
- Article Title:** **Reasons for Choosing Voice over IP - VoIP Advantages**
- Author:** By Nadeem Unuth, Voice Over IP Expert
- Share Buttons:** f SHARE, PIN, +
- Ads:** Business VoIP Providers, VoIP Phone Numbers, Sip VoIP Service, Home VoIP, Telecom VoIP, Voice over IP Phone, Internet VoIP
- Updated:** Updated October 22, 2015
- Main Text:**

Voice over IP (VoIP) was developed in order to provide access to voice communication in any place around the world. In most places, voice communication is quite costly. Consider [making a phone call](#) to a person living in a country half the globe away. The first thing you think of in this case is your phone bill! VoIP solves this problem and many others.

There are of course a few [drawbacks](#) attached to the use of VoIP, as is the case with any new technology, but the advantages largely outbalance these.

Let's explore below the benefits of VoIP and see how it can improve your home or [business voice communication](#).
- Left Sidebar:** Sign Up for Our Free Newsletters. Includes checkboxes for About Today, Electronics & Gadgets, and Voice Over IP, and an email input field.
- Right Sidebar:** JOBS ON MONSTER. Lists job opportunities such as Senior Systems Analyst, Auto Technician, Merchandising Rep, and HDI SALES CONSULTANT.
- Taskbar:** Search the web and Windows, task icons, and system tray showing 11:15 AM 4/28/2016.



# Continue migration from Conventional Phone Services to SIP Trunks

SIP Trunk Features | SIP Phone... X +

www.sip.us/features/

## SIP Phone Service Overview

### What is SIP Trunking?

SIP trunking is a method of delivering telephone and other unified communications services over the Internet to customers that have SIP enabled private branch exchange (IP-PBX) solutions. SIP utilizes both Voice over Internet Protocol (VoIP) and Session Initiation Protocol (SIP) and it replaces traditional telephone lines or PRI's (Primary Rate Interface).


### How do SIP Trunks Work?

Traditional business phone systems consist of two key components. The PBX, which provides call management and features such as Auto Attendants and voicemail, and the PRI lines which connect calls to the PSTN (Public Switched Telephone Network) where they are routed to the destination telephone. When SIP trunks are utilized, the IP enabled PBX connects to the data network instead of the PRI lines and the voice traffic travels the Internet to connect to the PSTN. SIP Trunks can also be used with analog adapters or SIP-to-T1 gateways, allowing you to keep your legacy PBX equipment and take advantage of lower telecom costs.

### Why do Businesses Choose SIP Phone Service?


While there are many advantages to the VoIP SIP trunk approach, the primary drivers are cost and flexibility. SIP trunking eliminates the need for PRI lines and the associated cost. Unlike PRI lines, which contain 23 channels, SIP trunks can be purchased in increments as low as one channel, or one concurrent call. This gives businesses the ability to purchase and pay for only what they need and to easily scale as capacity requirements change.

## SIP.US Platform Features



### Tier-1 Redundant Network

SIP.US uses only Tier-1 upstream providers to route traffic for our customers. This means that our clients



### Powerful Control Panel

We offer a powerful easy-to-use control panel to manage all aspects of your account. You can easily

Windows taskbar: 11:00 AM 4/6/2017

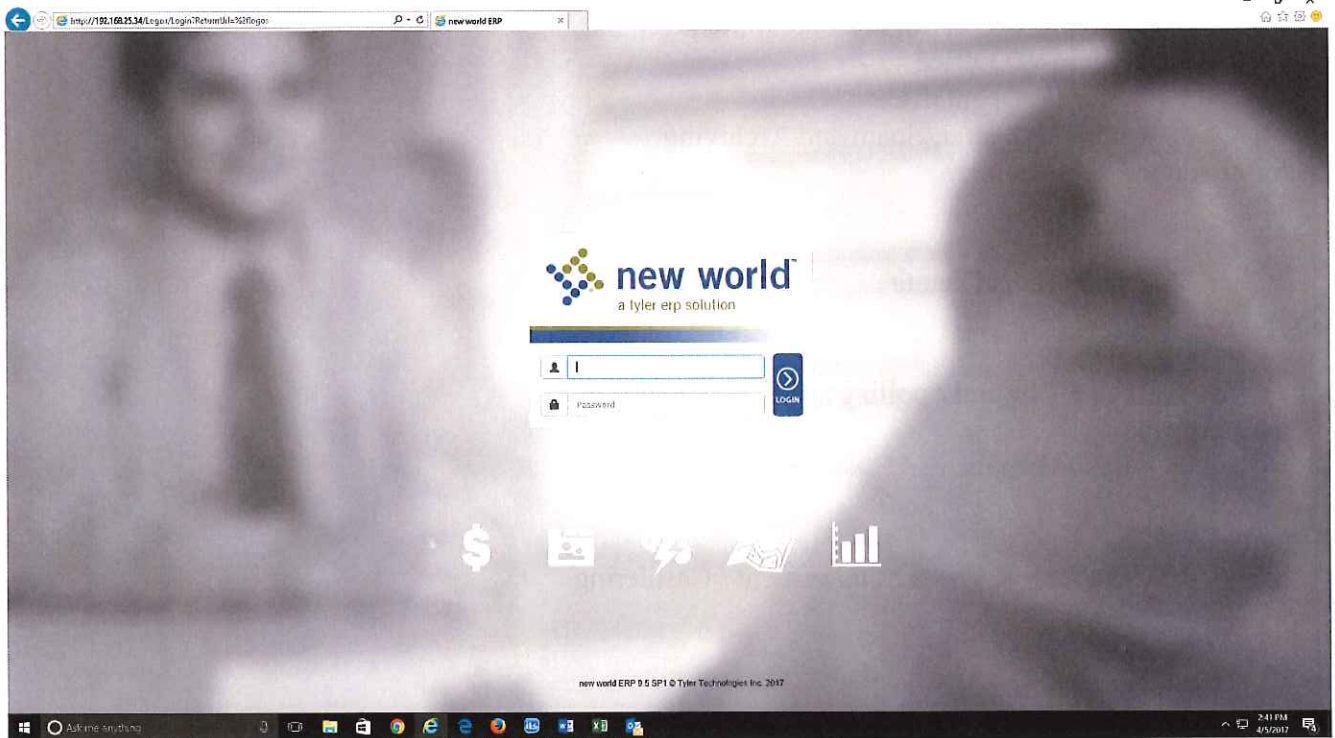
## Goals for Information Technology Staff in 2017

Continue staff training.

Development a path for advancement of IT Staff.

The screenshot shows a web browser window displaying the KnowledgeNet website. The browser's address bar shows 'knowledgegenet.com'. The website's navigation menu includes 'SOLUTIONS', 'COURSE CATALOG', 'COURSE CALENDAR', 'RESOURCES', and 'WHY KNOWLEDGENET'. The main content area features a large image of two IT professionals in a server room. Overlaid on this image is the text 'Learn from the Experts in Live, Online Classes!' and two buttons: 'Take a Tour' and 'Free Trial'. A 'zopimchat' window is open in the bottom left corner, with the text 'Start Chatting!' and a 'Type your message here' input field. The Windows taskbar at the bottom shows the search bar, taskbar icons, and system tray with the time '11:37 AM' and date '4/28/2016'.

# Major upgrades to the Greene County Accounting System – Software and Hardware planned for 2017



## Greene County Agencies and Key software and IT Programs

### All agencies

- New World Systems Financial
- New World Systems HR
- greenegovernment.com
- OnBase – Electronic Content Management
- Microsoft Office
- Apache OpenOffice
- Email – Server, Spam and Archiving

### Administrator / Legislature

- IQM2
- MinuteTraq
- Gear Tools Dictate

### Board of Elections

- NTS
- NYS Election / polling systems

### County Attorney

- Lexus/Nexus

### County Clerk

- Property Records Management / Cashiering

### District Attorney

- Scheduling
- Case Management
- Lexus/Nexus

### Emergency Services

- Interact Computer Aided Dispatch
- Pro Q&A
- Backup Site
- Weber
- WebCAD
- GeoComm

### Family Planning

- VPN Access
- Medent

### Highway

- VOIP
- BOVPN

### Human Services

- Client Management

### Mental Health

- Accumed – Billing

QuicDocs – Patient Records

Motor Vehicles

Connections to NYS

Planning and Economic Development

Support for all activities

Probation

Automon Case Management

Onbase

Public Defender

NYSPDS Case Management System

Lexus/Nexus

Public Health

Medent

Legacy Billing Systems

EOI Board

KIDS

Real Property Services

GIS Website

ESRI

RPS

Records Management

Onbase ECM

Sheriff

Tracs

SJS

Black Creek

Life Scan

Civil Process

GunKeeper

Social Services

Connections to NYS Networks

Peachtree Accounting

Treasurer

New World Accounting

Systems East TCS

Weights and Measures

WeMe

## Computers in Greene County Agencies

|                                 | County Owned | State Owned |
|---------------------------------|--------------|-------------|
| Administrator / Legislature     | 10           |             |
| Board of Elections              | 9            |             |
| Board of Electrical Examiners   | 0            |             |
| Buildings and Grounds           | 6            |             |
| Civil Service                   | 3            |             |
| County Attorney                 | 3            |             |
| County Clerk                    | 18           |             |
| District Attorney               | 19           |             |
| Emergency Services              | 30           |             |
| Family Planning                 | 14           |             |
| Highway                         | 12           |             |
| Historian                       | 1            |             |
| Human Resources                 | 4            |             |
| Human Services                  | 25           |             |
| Information Technology          | 10           |             |
| Mental Health                   | 60           |             |
| Motor Vehicles                  | 2            | 10          |
| Planning / Economic Development | 9            |             |
| Probation                       | 12           |             |
| Public Defender                 | 12           |             |
| Public Health                   | 31           |             |
| Real Property Tax Services      | 5            |             |
| Records                         | 2            |             |
| Sheriff                         | 18           |             |
| DSS                             | 34           | 85          |
| Solid Waste                     | 1            |             |
| Stop DWI                        | 1            |             |
| Tourism                         | 4            |             |
| Veterans                        | 3            |             |
| Weights and Measure             | 1            |             |
| Totals                          | 359          | 95          |

Thank you for your continued support of Greene County Information Technology

John K. Wynne  
Director

