



# BUSINESS TECHNOLOGY QUARTERLY

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## Planning and Budgeting for Technology

By Mark R. Torello

We still hear some of our clients complain about the high cost of technology, especially the support costs related to it. I ask them how much they budgeted for technology this year. More often than not, they reply with \$0. "No wonder you're unhappy getting support bills," I reply, "when you hadn't planned for them."

We are now ALL in an era where technology has become a required element in our personal and professional lives. The technology used in business requires a lot more support than that used at home. It also needs a special kind of support -- support that is quick, professional, and that addresses

the individual needs of the business.

If your organization relies on technology for operations, the amount you spend supporting technology will be higher than for those that only use technology for administration. The following chart,

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## IT Support Enters a New Era of Efficiency

How your network can be monitored remotely & automatically with **TTG Managed Workplace!**

By: Greg Rothausser

Technology support is entering a new era of efficiency with the **TTG Managed Workplace** system. With more and more businesses relying on technology for business operations, the need for a more proactive approach to support has increased. The impact of an emergency or disaster is greater when your technical support is in a reactive mode as opposed to a proactive mode. To provide the best support, your IT firm needs to be ahead of most problems rather than reacting to them, knowing immediately when a critical issue has occurred. Fortunately, The Technology Group, LLC utilizes a system called **TTG Managed Workplace** that allows their systems engineers to be notified automatically when a problem is

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### —NEWS BRIEFS —

**Internet file sharing poses high security and bandwidth risks.** See page 2 for more...

**Outlook users are at risk of losing all contacts, emails, and calendar items.** See page 3 for more...

**Your network can be monitored remotely & automatically with TTG Managed Workplace.** See page 1 for details...

**Choosing the correct firewall can be the most important network security decision you make.** See page 6 for details...

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## Peer To Peer (P2P) Network Dangers

By Richard Pusey, MCSE, CCNA

Peer-to-Peer (P2P) networking is two or more computers communicating directly with each other in the absence of a server. With the introduction of internet file sharing including music and video download and sharing sites, P2P has now taken on a new face, and a scary one at that.

### Why is it scary?

Because to share music, you must "grant" other internet users "access" to your computer and hard drive. While those that are simply looking for your tunes represent little danger, there will be those looking for your credit card data, personal information, contacts, etc. Even more scary are those that just get their kicks by causing harm.

Downloading and sharing music and video files can saturate Internet bandwidth. This may not be a problem at home, but will be at the office. At the office, sharing files and your computer will thwart all security efforts made by the IT department as well as use up more than your share of internet bandwidth causing your co-

workers to experience slower internet connection speeds.

Malicious worms can exploit file sharing programs such as Kazaa and Gnutella so they represent a serious security risk. Internet Service Providers (ISPs) have noticed that large amounts of their internet traffic is P2P, anywhere from 30% to 70%, but they have said it is difficult to identify the traffic as peer-to-peer because the sites have tricks so the traffic appears as something else.

There are ways to protect your company from these dangers. One method is to deploy a filtering application such as Websense Enterprise or WAN management application by Packeteer to name a couple. The other means of reducing this risk is by having a strict policy for not downloading or running software until it is approved by the IT department.

Contact The Technology Group, LLC at (860)524-4400 for assistance in protecting your network and information.

*...to share music,  
you must "grant"  
other internet  
users "access" to  
your computer  
and hard drive.*

## MIP User Group Formed

The Technology Group sponsored its first MIP User Group Meeting on December 3, 2004 in Hartford. The attendees rated the meeting high and unanimously voted to have them once per quarter. Fifteen MIP users from Central Connecticut and Massachusetts

attended. Deborah Swanson gave a brief overview of the new Grant Administration module. The Technology Group will continue to hold these meetings quarterly. User Group Meetings will be held on March 4, June 3, and September 9, 2005. For more information, call Deborah Swanson at (860) 524-4465.

## MIP Tips & Tricks

By Deborah Swanson

**Custom Columns in Version 6.x** – MIP now offers the ability to create custom columns in Financial Statement reports. There are two types of columns you can create: Date Override columns and Formula columns. Note that Budget Variance and Percentage columns are no longer available for selection and must be created as Custom Columns. For specific information on setting up Custom Columns, refer to the MIP Documentation.

**Forecasting** - Use the Statement of Revenues and Expenditures by Period report to forecast actual amounts based on current year budget amounts (you choose the budget version) or based on prior year to date actual amounts. The Actual column must be selected on the Content Tab for the Forecasting Tab to be active.

Please refer to our website to see MIP Tips and Tricks published in prior newsletters:



[www.TechnologyGroupLLC.com/news](http://www.TechnologyGroupLLC.com/news)

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**Planning and Budgeting for Technology**

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differentiates the level of expenditure for those that rely on technology for operations and those that do not.

Many businesses new to technology are surprised that the brand new systems just purchased require support, service, and a budget for the year equal to or greater than the capital expenditure for the equipment itself. Surveys have shown that only 30 percent of the total cost of owning a computer system is in the initial purchase of hardware, software and peripherals. Seventy percent of the ownership cost goes to technical support, repairs, training and upgrades.

Based on a small sample size, we have put together a rough **guideline for support expenditures** (hardware not included) based on revenues. (see chart at right) This “dart on the wall” guideline may be used for estimating technology support expenses (percent of revenue to budget for technology support).

Most of you should be looking at the “Rely on technology” column. If you are looking at the “Do not rely” column, chances are that your office is “behind the times” and you are currently thinking about a network or new software that requires a network.

Please note that organizations that rely heavily on technology can require quite a bit more in

**GUIDELINE FOR IT SUPPORT & EXPENDITURES**

Annual Revenue	Rely on technology	Do not rely
<b>Under 1 million</b>	2.5 %	1.0 %
<b>1 to 2 million</b>	2.5 %	1.0 %
<b>2 to 10 million</b>	2.0 %	1.0 %
<b>10-20 million</b>	1.0 %	0.5%
<b>20-50 million</b>	1.0 %	0.5%
<b>Over 50 million</b>	0.7%	0.4%

the budget. Additionally, certain industries tend to have varying levels of technology budget needs. The result from a technology cost study (see chart in next column) exemplifies this concept.

**“...only 30 percent of the total cost of owning a computer system is in the initial purchase...”**

**A study in 2003<sup>(1)</sup>** found that technology expenditures varied greatly by industry. This study

included the total cost of technology including depreciation (the financial cost of hardware and software) as well as support. The study reported its findings of technology expenditures as a percentage of revenues. The results of that study are shown in the chart in the next column.

**If you currently have no budget or would like to refine your technology budget, the above percentages should give you a place to start.** If you are budgeting on the cash basis, you will have to adjust the budget for the actual

expenditures for hardware for the year purchased. The guideline percentages include depreciation, which spreads the cost of hardware acquisitions over 3 to 5 years.

**Technology Costs Including Hardware by Industry**

Education	1.9%
Finance	4.9%
Government	9.7%
Health Care	4.8%
Manufacturing	3.3%
Retail/Wholesale	2.4%
Services/Consulting	4.5%
Telecommunications	8.4%
Transportation	3.8%
Utilities	3.0%

(1) Information Technology Management WEB 2003

Still need help? Give Mark Torello at The Technology Group, LLC a call (860.524.4433).

**Archiving and Backing Up Your Outlook Folders – and Why You Should!**

By: Jeff Gerace, MCP

An often overlooked procedure you can easily perform yourself is backing up and archiving your Outlook folders. Those of us that do not have their Outlook folders stored on a Server (everyone at home as well as many office PCs that were not specifically configured) are at risk of losing

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## IT Support Enters a New Era of Efficiency

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developing. This advanced notice is critical to preventing costly data loss and/or office downtime.

TTG *Managed Workplace* consists of two components: The first is called the **Service Center**, which resides on a server at our office. The second is **Onsite Manager**, and this component is installed on a server at your location. The Onsite Manager maintains a continuous monitoring of your network, and communicates this information back to our server. This information is logged, but more importantly, it is also evaluated for whether or not there is a critical issue. If the issue is critical, **the system will generate an email or pager alert to your technician.**

For example, let's assume that you are running your own mail server on Microsoft Exchange, or an accounting program running on Microsoft SQL, and the database services suddenly stop. In the "normal" situation, a user would notice that they had not received any email lately, or that they received an error when they opened the accounting application. You would then call your technician and explain that "We can't get any email" or "We can't get into our accounting system." Your technician would get to your site as soon as possible and begin investigating the problem. With TTG *Managed Workplace*, when the service

**TTG Managed Workplace allows systems engineers to be notified automatically when a problem is developing.**

stops, the program evaluates the service to determine if it is critical. (SQL Database Engines and Exchange services will always be set as critical.) If it is critical, **TTG Managed Workplace automatically restarts the service** and sends an email or page to your technician

detailing what services stopped and whether or not they successfully restarted. So in this example, you suffer no downtime from a failed service and your technician knows about the problem faster, as well as the details as to exactly what happened. I'm sure you can see how money has been saved in this example.

Similar events can be configured to alert your technician when disk space is getting critically low, processor usage is too high, a drive is failing, or many other indicators of system health, all with the goal of correcting the problem before it gets to the point that you have downtime.

As mentioned above, TTG *Managed Workplace* also logs a wide variety of data. This data provides a history that can be viewed in a variety of reports. We can look at trends for performance indicators, view a list of applications installed on your workstations, and even scrutinize your systems' event logs – all of this can be done remotely from our office. As an example, one of your users complains that their PC is really slow – much slower than it used

to be. Your technician can look at the performance counters on that PC and determine that the processor or memory is being all used up. Furthermore, they can look at a list of all installed applications on that PC and potentially diagnose spy ware issues, lack of Anti-virus, etc. All of this helps prepare your technician so that he arrives onsite prepared, addresses the issues quickly and efficiently, and gets your employees up and running sooner.

Finally, TTG *Managed Workplace* offers an excellent mechanism for maintaining a clear communication channel between the technician and the on-site contact by using trouble tickets. Trouble tickets allow you to fill out a simple form on the Service Center website listing the problem, the priority of the issue, and any notes about the issue. An email will then be automatically sent to your technician with all of the salient details. As he works on the issue, he can add notes to that trouble ticket, and eventually "close" it. Even closed, it remains in the System Center should you or your technician need to review it.

The Technology Group is committed to providing its clients with the very best support, approximating as closely as possible the level of services of an in-house IT staff. TTG *Managed Workplace* goes a long way towards achieving that goal.



Call The Technology Group, LLC for **lower than web site prices** on DELL computers. 860-524-4400.

## A matter of money...

### Which is Better: Peachtree or QuickBooks?

By Deborah C. Swanson

Clients ask us this question all the time. But the answer is not a simple one. Both are highly rated accounting systems, comparably priced and easy to use.

Only after asking several questions can we offer an opinion on which will better meet the needs of your small business:

- **What level of security do you require?**
- **Do you have accounting experience?**
- **Will you do your own payroll or outsource?**
- **Is inventory tracking a significant need for your business?**

QuickBooks is a good fit for a small business with only one or two accounting users where security is not of great concern. QuickBooks is also preferred when the users have little accounting experience. If you are preparing your own payroll, QuickBooks' payroll features are extremely easy to use and understand.

Peachtree provides strong security features as well as an inventory tracking system that is feature rich and easy to use.

There are many other issues to consider when evaluating accounting software for your small business.

Our staff is trained to identify your requirements and match your business with software that will meet your needs today and into the future.

Contact Deborah Swanson at (860) 524-4465 for more information.

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### Archiving and Backing Up Your Outlook Folders

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all contacts, emails, and calendar items. This can be disastrous to those who rely on this information.

Archiving is the process of removing old e-mail from your current Outlook folders based on their date and storing them in an accessible file. Archiving can be a critical maintenance step in preventing data loss, maintaining performance, and cataloging mail for easy referral. An archive file is generally stored on the local hard drive or on a server. Outlook has a 2GB limit on .PST files (.PST files are Microsoft personal folder files that contain your Outlook folders), which can become corrupt if that size is exceeded. As a .PST file size increases, it takes additional resources for your

PC to parse the file when opening and accessing data. Archiving is one way to keep your file size down and keep performance from degrading. You can also utilize archiving functionality to catalog your Outlook folders. A nice way to automatically perform automatic archiving based on a schedule and criteria is to configure Autoarchive, which is a feature available with all versions of Outlook. An archive file is dynamic and can be appended as each archive process occurs, which allows you to create a single file in one location and continually add to it.

Backing up Outlook is similar to archiving; however, it can only be initiated manually using the native Export process built in to Outlook, and it is intended to be a static file, not incremented or changed once created. You can backup your e-mail into several formats, including MS Excel, MS Access, and others. Most commonly, backups are created as .PST

files for ease of recovery and usability. Backups are an important means of protecting your email, contact, and calendar data. You should copy your Outlook .PST file to a CD, Zip disk, or floppy on a regular basis for safe keeping. If your hard-drive should fail or your .PST file become corrupt, you will not lose all of that important information if it has been backed up.

**...a critical  
maintenance  
step in  
preventing  
data loss....**

## Firewall Basics & Product Review

By: Christopher Newton

The Internet can be compared to a bustling metropolis. While a metropolis is full of people, vehicles, and infrastructures, the internet is full of frames and data

packets. Also like a bustling metropolis, the Internet has its fair share of "dark alleys". Internet alleys include hackers that are eagerly pursuing a way into your network. Once in, they are hoping to snatch or deface your data like a loose hanging

purse. So how does one protect oneself from these Internet bandits and safeguard the data contained within their network? **Design** the network infrastructure for security and **protect it with a certified firewall.**

You can check if a firewall is certified on [www.truesecure.org](http://www.truesecure.org). The firewall is hands-down the most important means of protecting your network from unauthorized users or hackers. A firewall is either an appliance (i.e. Cisco PIX) or a software application (i.e. Checkpoint Firewall-1) that acts as a sentry between the traffic on the inside of your network and the traffic on the Internet. The firewall will determine, based on a set of given guidelines or rules, what is approved traffic and what is bad traffic. As a result, approved traffic is allowed to pass through the firewall while the bad traffic is disallowed access.

We can separate firewalls into

three categories: Consumer, Corporate and Corporate Plus Grade firewalls.

**Consumer Grade Firewalls-** (Netgear RP614, Linksys BEFSR41, DLINK DI-604)- These firewalls are targeted towards mainstream consumers. They function as a basic Router/Firewall/NAT

(Network Address Translation) device and are a solid buy for most home users and small offices. To break down the functions of these devices: the router portion connects your network to your ISP (Internet Service Provider), the firewall portion

determines what traffic can go in and what traffic can go out, and finally the NAT portion allows the multiple computers behind/connected to your appliance to share the connection to the Internet through the ISP. Each of these devices, the Netgear, Linksys and DLINK, provide nearly equal services and support.

**Conclusion-** Consumer Grade Firewalls are just that - they are designed for the consumer. They were not designed to handle large traffic loads that Corporate Grade Firewalls were designed to handle. Placing a Consumer Grade Firewall in a network topology that requires at least a Corporate Grade Firewall will result in poor performance, possible downtime if the device fails, and inadequate security.

**Corporate Grade Firewalls-** (Netgear ProSafe FR114P)- These firewalls are targeted towards

small/remote offices to smaller 25+ employee corporations. They are designed to withstand greater thresholds, offer more services/features, and most importantly protect your data/network to a greater extent.

The Netgear ProSafe FR114P comes ICASA certified (a well respected and industry standard security certification), and includes SPI (Stateful Packet Inspection) - a security process in which the firewall keeps track of not just where the individual packets of data are going on your network, but also the connections made in the process and their level of validity. DoS (Denial of Service- an illegal practice used to deny a user of Internet Service by flooding their firewall with garbage data) awareness and protection, and VPN (Virtual Private Network- allows remote users to connect into your internet network as if they were onsite) is also included.

**Conclusion-** Corporate Grade Firewalls are the bare minimum for Internet Security. The price difference between the Consumer Grade and Corporate Grade is negligible and the gain found in the security and features alone are worth the incurred cost. The Netgear ProSafe FR114P is a good low cost option.

**Corporate Plus Grade Firewalls-** (SonicWALL TZ170, Cisco PIX 501,506e, Checkpoint Firewall-1)- Corporate Plus Grade Firewalls provide the user with unmatched performance and reliability. These high-end firewalls target small/remote offices through enterprises with over 500,000 simultaneous

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**The firewall is hands-down the most important means of protecting your network from unauthorized users, or hackers.**

## Firewall Basics & Product Review

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connections. They provide highly configurable Operating Systems that include all the features network engineers look for in a firewall (advanced monitoring, reporting, etc.) and allow for multiple IP Address hosting, more in-depth VPN functionality with a higher grade of encryption and policy based NAT to allow/deny defined clients.

The **SonicWALL** features policy based content filtering, allowing the client to define groups of individuals able to access resources such as the Internet or internal servers leaving those not in the content group unable to do so. For example, given two groups, Managers and Employees, one would be able to allow the Managers group access to the Internet and leave the Employees group with internal network access only.

While the **Cisco PIX** product line does not have this content filtering system built into it, it does come ready with third party applications or appliances. What the Cisco PIX does feature is world renowned reliability, a firewall that is second to none with the ability to filter not only on the level of data coming off the wire, but also at the layer of the actual applications running. For those of us trying to stop employees from using network bandwidth to listen to Internet Radio or stream movies, this is a goldmine. The Cisco PIX also comes with VoIP (Voice over IP) support and security for Internet Phone technologies and a built in Intrusion Detection system with

signatures for preventing many popular methods of network attacks.

Unlike the previous products, the **Checkpoint Firewall-1** is a software-based application, meaning it runs on a computer instead of being housed inside a device. The down side to this approach is that it relies on a computer. If that computer crashes, so does your firewall! But Checkpoint Firewall-1 has many advantages. It is a top of the line firewall that is OPSEC Certified and includes premium features such as Internet authentication and tracking (view when your employees access the Internet, where they go and how long they did so for) that integrates with Active Directory and your existing users, a detailed reporting system, and an advanced Stateful Inspection system (Checkpoint is credited with creating Stateful Inspection in 1993).

**Conclusion-** The Corporate Plus Grade Firewalls are top-of-the-line products, with features not found in the other categories. They come at a price however, starting in the mid-\$500 range. As a note, not-for-profit organizations can take advantage of greatly reduced prices on Cisco PIX products, with savings of over 90%. Please contact us for more information on how to take advantage of these special prices.

Before we bring this article to a close here is some food for thought: **a computer running Windows XP with Service Pack 1 takes less than 4 minutes to be taken over and compromised. How valuable is your data?**

*...how valuable is your data?*

## Internet Marketing Basics The User's Point of View

By Gary E. Torello

When asked "What does your firm do?" many business people respond with the usual list of services and products. In much the same way, most web sites seem to say: "Here's the list of services and products that we have to offer.

Unfortunately, many potential clients don't know exactly what product or service they need or want. What they do know however is what their problems are.

*"I need a product that will solve my printing productivity problem!"*

This type of person (potential customer) may not have the knowledge or desire to comb through cleverly written and decorated web sites for the correct model, then finally read the specifications, and further deduce exactly the product or service they need.

When having your web site designed or redesigned, keep the user in mind. Clearly identifying your products and services by what problem they solve, and/or what benefits they produce will go a long way towards effectively communicating with your audience.

Call The Technology Group, LLC at 860-524-4400 for professional web site development services that achieve results



**The Technology Group, LLC**

*Satisfying clients is not just our goal... It's our purpose.*

**860-524-4400**

*Current security alerts and past newsletters available on our website:*

**[www.technologygroupllc.com](http://www.technologygroupllc.com)**

**Worth Repeating**

A computer does not substitute for judgment any more than a pencil substitutes for literacy. But writing without a pencil is no particular advantage.

- Robert McNamara



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