

Computer Network

Protection Plan

For

**Your
Company**

By



The 5 major sections of this document are:

1) Overview

An overview of your network situation, general industry terms, and the things you need to protect yourself against.

2) Hardware

Protection options for the physical objects in your network

3) Software

Protection options for the intangible objects in your network

4) System

Protection for your server, backup system, and such.

5) Your Coverage

Your selections for coverage

To provide for the various levels of service needed by our business partners, the Panatech Protection Plans are divided into 3 to 4 levels of service and protection.

Bronze is the bare minimum level of protection. *Without at least this level of Protection, Panatech does not even log your computers on our records.*

Silver is usually the basic business level of support and the minimum that you should consider if your business seriously depends on computers.

Gold is the premiere level of Hardware Protection, and offers the best response and price protection of your hardware.

Platinum is the preferred choice in Software and System Protection for companies like yours that want Panatech to be their full 'On Call' computer department, providing the equivalent of an 'umbrella policy' for your support needs.

The recommended **minimum level of protection** are the columns highlighted in yellow on each grid

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✓ **Fixed Costs**

✓ **Improved Service**

✓ **Superior Protection**

100% GUARANTEED

Our Protection Plans can **save you more than 50%** over regular ‘Time & Materials’ charges.

How can that be? Simple: Consistent, well-thought out, scheduled maintenance & monitoring of your computer system that avoids major problems in the first place is far more cost-efficient than the ‘patchwork’, ‘knee-jerk’, ‘emergency’ fixes that most small companies normally do.

Maybe this analogy works for you:

Do you know how much it cost to tear down and rebuild an engine because the oil wasn’t changed regularly? Or how much heart by-pass surgery costs if you ignore the warning signs?

Mechanical, human or computers:

Smart people avoid problems from developing in the first place.

The Panatech Protection Plans do that – and more! Our ‘all inclusive’ style even provides on-site training, support, and problem resolution - at no additional charge!

Our Protection Plans are affordable:



The symbol on the following pages show how little our Protection Plans cost. **Protection Plans with this symbol cost less than one cup of coffee per week!**

The Overview section will provide you with an overview of your network system, highlighting the major network components, and how Panatech can defend you from the vulnerabilities therein.

Some are tangible, like your physical file server computer. Some are intangible, like your software, network connectivity, or email transmissions.

It is important to note that today’s complex networks are an intricate, interwoven web of hardware, software, drivers, configuration and application software. What seems like a hardware problem could be a software problem, or vice versa. That’s why it is so important to have a full suite of Hardware, Software, and System Protection.

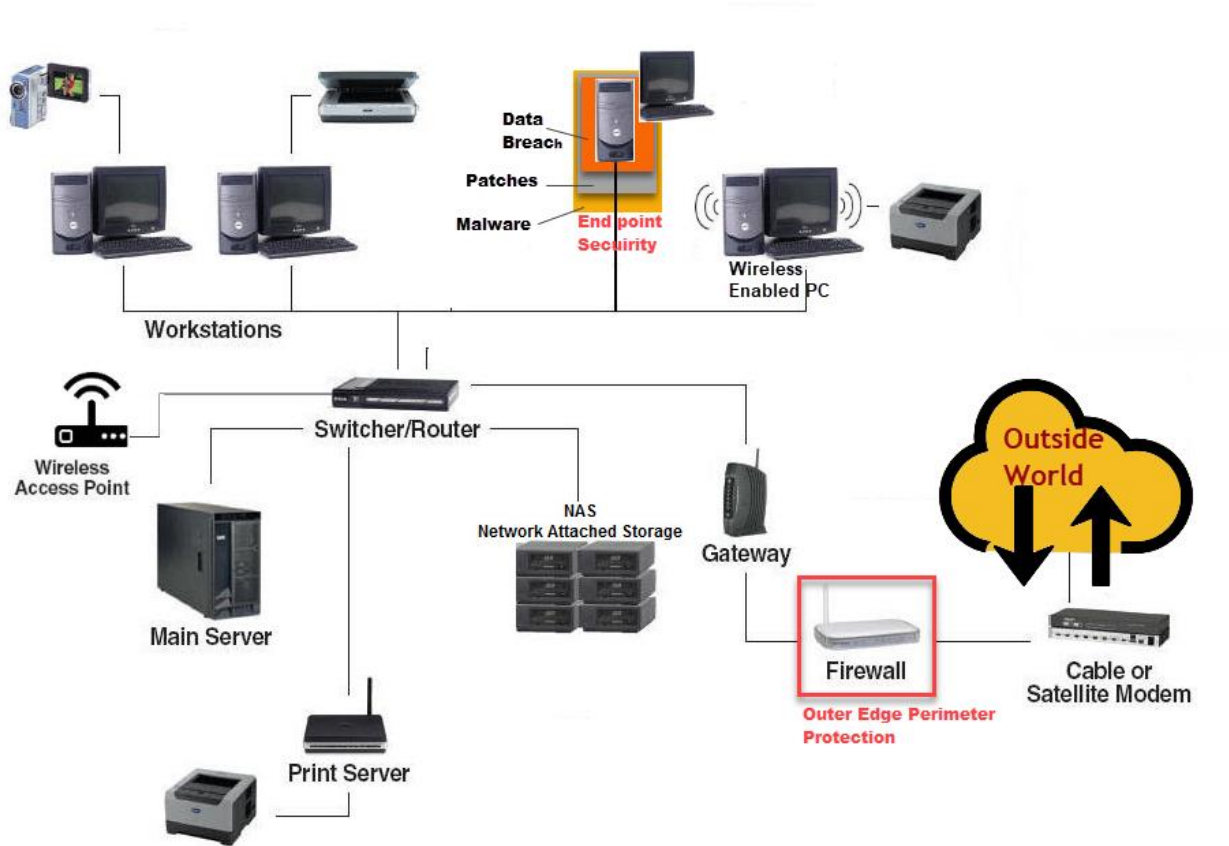
All pricing is shown monthly, as a matter of convenience. The contract is an annual commitment, billed monthly for your convenience

Your satisfaction is 100% guaranteed. If you are not fully satisfied with our performance, we will refund you 100% of your service fees for the entire quarter. We are that sure of what we do!

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Hardware Protection covers the tangible parts of your Network System.

Some of the key parts of your Network are:



Workstations are where most of your work is done. To most people it is ‘the’ computer. In reality, most of the processing work is done on your computer with the data stored on the File Server, but many systems (such as SQL Server) do transfer a large amount of work to the Server.

The **Server** is usually the one or major place that all your centralized data is stored in. This is also the computer that will ‘host’ many services, like SQL (which is a separate program unto itself, not just the data that it stores). Larger companies will have more than one server. Your company should have at least one. Though some people will piggyback their backup onto their main server, it is better to ‘off load’ this important task to a separate device like a BackUp Server System (BuSS) or a Network Attached Storage device (NAS).

The **Switch/Router** is what connects all the devices and lets them ‘talk’ to each other. The format or ‘protocol’ inside your network is called TCP/IP, which stands for Transmission Control Protocol / Internet Protocol. The Switch directs the packets of information from the origin computer to its destination. The Router (usually built into the same device as the ‘Switch’) is specifically responsible for directing information packets from outside (like email and Internet). Most networks these days operate at ‘1 Gigabit per second’. Older networks and some devices operate at only 10 or 100 Mbps. Note that the protocol that you’re using inside of your office network is pretty much the same protocol used to access the outside world (the Internet). It’s important to note in the following sections on ‘Software Protection’ **that your private network connection is basically just an extension of the world wide web.** You and everyone

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else in the world are all just ‘one big (happy) family’ connected together. The speed at which you access the Internet varies based on your Internet Service Provider (ISP), but ranges from 500 Kbps (low end DSL) to over 12,000,000 Kbps (12 Gbps) for broadband Fiber Internet connections at top speed.

Backup/Disaster Recovery is one of the most important, unsung heroes of your system. Like an insurance policy that is worth its weight in gold when you need it, it is often ignored until you do. Our “B/DR” solution offers both local & cloud backup for each day, each Friday, and each end of month or even continuous data protection (backs up files minutes after being changed) if such a feature is needed.

Printers/Peripherals are an important part of your network, since paper copies are essential for most business operations. Most devices these days attach to your computer via a USB cable (USB stands for Universal Serial Bus). Note that some printers are so basic that they can’t even store a page of information in their own memory (because they have none) and so they bog down their host computer for every step. Other printers are so powerful that they not only have huge amounts of memory, but also have their own internal processor (just like your PC) to manipulate images and graphics without bothering their host computer.

Print Server is a device (about the size of a book) that connects to your network as a TCP/IP device (see Switch above) and transfers information along to a printer, as if the printer were hooked up directly to a computer. Some printers have a built-in Print Server and are sometimes described as ‘network ready’

Gateway A gateway is used to allow devices in one network to communicate with devices in another network. If your computer, for example, is requesting an Internet webpage, the request first runs through your default gateway before exiting the local network to reach the Internet.

Firewall is arguably the most important safety device if you have any contact with the outside world. In this context it is a hardware device that process and rejects outsiders from accessing your network as if it were just an extension of their own. This is very different from a personal (software) firewall that goes on each computer!

These days, a single device provides the functionality of a **Router/Switch, Gateway & Firewall**.

Cable/Satellite Modem is how you connect to the outside world. About the size of a book, these devices pretty much have a TCP/IP connector on one end to connect to your Router/Switch, and the other end has a coax cable or other connector to communicate with the outside world. Comcast is a common cable modem provider. Satellite providers are best only in areas not served by wired lines, and are most notable in that the speed that they send information to you (called the download speed) is typically much faster than the information that you can send your information back up to the satellite (upload speed).

Wireless Access Point is used if you want to have a wireless link to a computer. It’s kind of like a wireless phone in your house. There is base station that has all the ‘smarts’ in it, but instead of a cord, there is a wireless link to the handset – or computer in this case. Ranges and reliability vary, but you might expect a 70-300 Mbps transmission speed (vs 100/1000 Mbps above for wired connections), and reliability can be affected by as many things as any wireless device. In cases where very hi-speed transmission is not critical and fixed wiring is problematic, this can be an ideal solution.

Networks are intricate, complicated systems. If a failure turns out to be a non-covered item, then all the labor time to diagnose and identify the problem is billable at the labor rate applicable for that non-covered item.

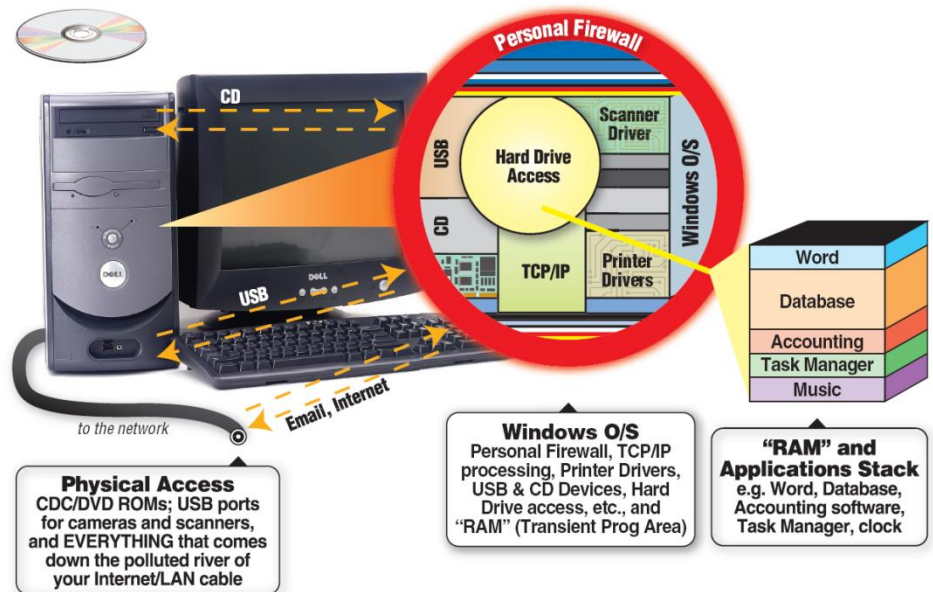
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The Intangibles

Software and System

Protection cover the intangible aspects of your Network System

With the blossoming of computers, networks, peripherals, and the Internet, there now exists a wide range of threats to your system that weren't there even a few years ago. Two new, major areas are **MALWARE** and **PATCHES**. These entities didn't even exist in the 80's/90's. Malware (from 'Malicious ware', a combination of viruses, worms, adware, spyware, and now Ransomware, etc.) is an epidemic. And the Windows Operating System that houses and hosts all of the programs that run on your computers is now so complex that it consumes hundreds and hundreds of Megabytes of disk space, and requires updates ('patches') every month or sooner to keep up with the inter-dependent array of printer drivers, application revisions, and hundreds (not dozens, hundreds) of other 'interfaces' that it is responsible for – or your system won't work properly.



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Patches

are a necessary evil of Microsoft (and other software vendors) and the very, very complicated and convoluted world of Operating Systems, application software, drivers, the Internet, and even the media player that makes music out of the CDs you may listen to from your PC at work. At least twice every month, Microsoft publishes updates ('patches') to their Windows Operating System, their drivers for your printers, display screens, and more. Your application software products (Word, WordPerfect Outlook, Excel, Access, accounting software, to name just a few) are all relying on the other parts of the system to work properly, in order for them to do their job. And that includes your Malware protection, too!

It is not uncommon to find that a 'crazy, unexplained glitch' turns up 'for no apparent reason', only to be solved by an update patch. Suddenly can't print any documents or proposals to your LaserJet printer? A patch update solved that one. These aren't just occasional annoyances, these are business-stopping deal breakers. More seriously, your Windows Operating System is a prime target for all hackers who want to do malicious things to your computer, since it is the basis and foundation for all other software on all of your computers. Without installing the patches for Windows from Microsoft, you are virtually inviting hackers to exploit any vulnerabilities as they are discovered.

Mal-ware:

Viruses have received a lot of publicity. But much the same way that 'Xerox' and 'Kleenex' have become generic titles for their respective industries, so too has the term 'virus' become a bit of a misnomer.

In general, you need to defend yourself against Viruses, Worms, Trojan Horses, Spyware and Adware. Next year, we may be forced to add a few more, new terms to this list. We

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collectively call these malicious attacks against your system by the term MALWARE (as in Malicious).

Sadly, many people think that the copy of “Norton” that they bought 2 years ago is all they need, especially if they maintain an ‘annual subscription’. Not so. For whatever twisted reason, hundreds and thousands of hackers are out there every day sending you malicious things. New variations on an old theme (e.g., another new virus), and sometimes completely new entities, like Spyware. Even if you are diligently maintaining your subscription to your antivirus product (e.g., Norton Antivirus 2017, which came out in 2016), that does not protect you against newly emerging forms of Spyware & Ransomware. Yes, it is frightening and disheartening. You need to not only maintain your subscription to these viruses (so that you can get daily updates against viruses that sometimes appear by the hour), but also to upgrade your protection programs against emerging, new categories of attacks.

There are various tools used in the fight against malware, and to keep your system free of corruption. A suite of protection packages is the primary line of defense, intricately supported by the patches (below) so that the platform is stable for the malware software to operate on. At Panatech, our Protection Plans go further. They include such additional protection as Personal Firewalls, to keep bad things out at the PC level. Remember that your system also needs to be protected from within. A case in point is the scenario where one of your PCs gets infected from a flash drive, an email with a Trojan Horse that you willingly open, etc., and the malware spreads from the inside out. For example, you get an innocent enough looking email with an attachment that says “Your Proposal”, and you tell your email editor to allow it (you’re the boss), but “Your Proposal” turns out to be a program that infects your hard drive and then spreads to other devices on your network. All within your side of the hardware firewall. Some of the current, common malicious attacks that you need to protect yourself against are:

Viruses: are the most common attack, and tend to lock up your computer, or disable certain functions. They are a self-duplicating computer program that spreads from computer to computer, interfering with data and software. Just as biological viruses infect people, spreading from person to person, computer viruses infect personal computers (PCs) and servers, the computers that control access to a network of computers. Some viruses are mere annoyances, but others can do serious damage. Viruses can delete or change files, steal important information, load and run unwanted applications, send documents via electronic mail (e-mail), or even cripple a machine’s operating system (OS), the basic software that runs the computer.

Worms are a program that propagates itself across computers, usually by spawning copies of itself in each computer's memory. A worm might duplicate itself in one computer so often that it causes the computer to crash. Sometimes written in separate “segments,” a worm is introduced surreptitiously into a host system either for “fun” or with intent to damage or destroy information. The term comes from a science-fiction novel and has generally been superseded by the term virus. See also Trojan Horse..

Trojan Horses Like the Greek story of a few centuries ago, this attack too utilizes the victim’s inadvertent cooperation to carry out the attack. If you get a legitimate-looking email like “Your Credit Card has been stolen” that you willingly accept and open – but really just contains a program to attack your computer – you have just been the victim of a Trojan Horse.

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Spyware is a hidden program that sits in the background and records your keystrokes and activity, then sends it back to the host. This could report on what websites your visiting, or your entire Outlook (or other) database of Contact people.

Spam is undesirable, unwanted emails. And they are almost impossible to define. An old friend from high school sends you an email, that's not spam, is it? But if he sends it to 100,000 friends, every day, we'd call it spam. Where to draw the line is what makes spam almost an art, rather than a science. Your ISP (Internet Service Provider) can often provide the best basic filtering. You can buy software to maintain 'white lists' of acceptable people, and 'black lists' of never-acceptable sources, but nothing here is a perfect solution.

Ransomware is the latest and most deadly threat to your company. Its potential cannot be overrated. Unlike the above 'malware' which only harasses you for the apparent amusement of the hacker, the bad guys can now make money (LOTS OF MONEY) by encrypting your data, and then selling it back to you for a price. Visit our website for some very sobering – if not scary – examples of what Ransomware attacks can do to your company

Note that a few years ago, viruses were the only thing you needed to protect yourself against. Every year (or two at the most, unfortunately...) hackers of the world come up with yet another way to attack your business. That's why you need our Silver Software protection at a minimum, so that we can continually update you against both new variations on existing attacks as well as the completely new categories of attacks as they come out.

Note about '**Workgroup**' vs '**Domain**'.

Most small networks (under ~20 PCs) use a 'Workgroup' model. For larger, corporate networks, Microsoft likes a more centralized control process called a 'Domain' setup.

In a Workgroup setup, there is no one computer that is 'in charge', as even the Server is basically just a beefy PC that is also tied into the network Switch/Router. Each PC gives itself a 'Workgroup ID' like 'Sales' or "CompanyName" so that PCs can be 'grouped', such as when you explore 'Network Neighborhood' in Windows Explorer.

In a Domain, there is one (or more) Server(s) (invariably one of the Servers on the network) that is 'in charge'. The Domain Controller is effectively a collection of programs and data files that track "Who's Who" on the network, and what they are allowed to do – and it *enforces* it!. You can't log onto the network unless the Domain Controller lets you. The Router function is now taken away from the Switch/Router device and built into the 'back end' of the Domain Controller server, because now every Internet access for every PC must literally 'go through the Domain Controller server'. Your 'My Documents' on your PC is really stored on the Domain Controller server, so that you can 'pick up where you left off' if you ever have to switch to another PC.

There are Pro's and Con's to each. The Domain Controller can be very powerful, but it comes at a fairly steep price, in terms of both dollars and operational limitations.

On a more technical note, the Switch/Router usually assigns the 'IP address' to the outside world for your network. In a Domain Controller, it wants to be the DHCP (Domain Host Control Protocol) that assigns your IP addresses, which creates a different setup and maintenance issue

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With a Protection Plan, travel time charges and on-site minimums are reduced by half (i.e., one-way instead of round trip, and 1.5 hrs instead of three)

Initially, Panatech will require at least a 3 hr block of time between 7am and 7pm to implement these safeguards, and bring your computers up to current standards if they are not already. During this time, individual workstations and the server will be down or in exclusive use by Panatech. Frankly, the machines of some new customers are ‘pretty up to date’ and need little or no updating, while others require hours and hours of patches and updates (which must be applied individually and sequentially, often requiring a reboot between updates). There may be a flat, \$50/computer charge for this initial cleanup/setup. If you need us to work outside of these times (e.g., late nights and/or weekends), then that can be arranged, and billed at your discounted, applicable straight rate (no overtime) for all man-hours used.

Remote/telephone support is for application issues, as listed in the Protection Plan table of services. It is not available for billable network or administrative issues, nor for training.

Networks are intricate, complicated systems. If a failure turns out to be a non-covered item, then all the labor time to diagnose and identify the problem is billable at the labor rate applicable for that non-covered item.

And remember that every monthly patch or update that is applied to your system represents a slightly new version of the Microsoft Windows Operating System; This is supposed to fix former problems, but it can just as easily create new problems – every month.

Here is one of many typical scenarios where a Protection Plan saves you money and down time:

A workstation loses its connection a few times a day, then not again for a few days.

So, you replace one component, which seemingly fixes the problem - for a few days.

Then, you could then spend a few hours checking the server end, and reloading the User Rights objects on the server, to no avail.

What would you do next?

Maybe swap out the Switch/Router, a likely culprit, though it is not an inexpensive device?

Then the problem comes back again, the following week.

You find that the simple 6’ patch cable from the wall behind the desk to the PC has ‘gone bad’.

(and yes, exactly this scenario has happened)

The above represents well over \$1,000 in parts and labor. Easily.

The question becomes: ‘**Who pays for all the above parts+labor ?**’ You can’t return the network card, router or other hardware that you used, but turns out you didn’t need. You can’t put labor time spent ‘back on the shelf’. With a Protection Plan, “***It’s our problem***”, so we pay for the whole thing. Without a protection plan, the customer must bear the costs (most notably including the well-intentioned but ultimately fruitless parts & labor) of the other remedies.

Lapse of Coverage:

To avoid misunderstandings, consider this example:

If your network suffers a problem and the problem turns out to be a non-covered item (like a switch/router) then all time and materials spent in Good Faith attempting to find the problem are billable, including parts + labor on items that might have been the problem, but turned out not to be.

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“Them” vs “Us”

Yes, there are some plans out there that are cheaper, including ones offered by the manufacturer. But do you want to jump through hoops when something goes wrong? Manufacturers are concerned about keeping *their* costs down, not *your* company up and running. Consider a recent incident from our Dispatch files, with a new HP (a very well-known and respected company!) PC whose hard drive failed in the first 30 days of service:

HP had a ‘great deal/price’ on hardware repair, but you had to send the entire computer back to them (prepaid, but still...) and they would repair it and send it back to you ‘in a few days’ (hopefully), but possibly with a new hard drive that had absolutely none of your data, credentials, or (hours and hours of) installation and configuration on it. Is that how you want to ‘protect’ your business? That never happens with a Panatech Protection Plan.

Is this the way *you* want to be treated?

Without the full coverage of a Protection Plan, you may have nowhere to turn when ‘something’ pops up. Only with a comprehensive Protection Plan can our resources come to your assistance in a timely manner, and cover all the numerous, often-expensive remedy attempts.

Hours / Minimums / Limitations

Normal working hours are 8am to 6pm, Monday through Friday and excluding the usual holidays.

Work that needs to be performed outside of these hours will be billed at 1.25x the applicable rate within 1 hr of these times, and 1.50x the applicable rate outside of these hours, and only at Panatech’s availability. So *please*, do make your computers available when we need to access them.

Panatech will need remote access to all PCs to perform our duties, between 7pm and midnight, Monday – Friday. If we must do this outside of these hours due to unavailability of your computers, there will be a \$7 charge per PC-Incident.

Computers must be turned on, and have all programs closed for our process to complete as designed. There will be a \$7 charge per PC-incident if we need to ‘work around’ such situations, which usually involves manually logging into each such PC and closing applications one by one. Please note that these charges do not even allow us to break even, but are meant as a financial nudge for the customer to do their part, so that we can complete ours. Thank you.

Telephone support is accrued in 30 minute increments for Bronze or less, 15 minutes for all others.

Connection to any uncovered item (printer, PC, switch) is billed at the non-covered rate, even if one of the pieces is covered. Minimum charges for work not covered by a Protection Plan is round-trip travel time and 3hrs onsite. With a Bronze Protection Plan, charges are 1-way travel time, and 2.5 hrs on-site. With Silver or better, charges are 1-way travel time and 1.5 hr minimum. *This most notably includes your in-house wiring, which is always the customer’s responsibility, but diagnostics are billed at the rate applicable for the affected PC/Server.*

Hardware Protection

The primary cost savings of Hardware Protection is the diagnostics and root-cause discovery of sporadic or erratic problems including network connectivity – as such can be anything from a bad PC memory chip, cable/wiring or routers. It is NOT simply the cost of the hardware replacement. Without Hardware Protection coverage, such diagnostics are billable regardless of the ultimate cause.

Hardware is the backbone of your network. Quite physically, in many cases.

This Section of your Protection Plan is divided into 2 parts:

- a) Server and Workstations
- b) Other Devices (Routers, Backup devices, Printers.)

Why Hardware coverage?:

“With hardware as cheap as it is, why should I cover it under a contract when I can just replace it?”

True, your Silver or Gold premiums could buy a replacement PC in about 2-3 years. But today’s networked PCs incur far more in labor & diagnostic charges than in simple hardware fees.

You can replace a bad hard drive for under \$99, but who’s going to replace it? That’s easily 2-3 hrs (at over \$100/hr) of labor. And what if it turns out that it was really something like an erratic power supply or hard drive controller that was making it *look* like a hard drive failure, then what do you do? Additionally, do you have the skills or the time necessary to recover your contact, calendars, e-mail and databases?

And if you suffer sporadic failures, the cost to simply diagnose the problem is almost astronomical. It is typical for us to track down ‘spotty’ network connection failures by replacing cables, network cards, routers, and even complete computers – which is a huge bill for parts/labors – at no cost if the customer is covered under full hardware + software protection coverage.

It is this ‘between the cracks’ or ‘umbrella insurance coverage’ that you are getting when you add Hardware Protection to your Software Protection Plan.

For hardware pricing, the term ‘Workstation’ refers to a desktop PC, not a laptop. Hardware repair on laptops is quoted individually, as models vary widely, and components can change almost monthly – even with the same manufacturer and model.

All components are quoted as standard office equipment. Computers used in manufacturing, shop or other specialized environments are quoted separately, if applicable.

For hardware not purchased through Panatech, failures occurring within the first 90 days will be billed at your discounted billable rate. Thereafter, they are covered at 100% per your level of selected protection.

Hardware Protection (Server & Workstations)

BRONZE offers you basic Hardware Protection.

You get improved response time for service calls and discounted billable rates for needed billable work (like adding components, moving and re-installing in a new location, etc.)

Discounted trip charges provide a 50% discount on travel charges.

And of course, you get a new unit to replace your old one if the hardware breaks and we can't repair yours!

SILVER is our **suggested minimum** Hardware Protection for most businesses

For the cost of only a single cup of coffee (and a scone) *per month* per PC, you get all the basic Protection of our Bronze plan above, but also these other important benefits:

- Free labor on all Maintenance kit work. For example, your UPS batteries are only rated for a couple of years before they expire and need to be replaced during a service call. And if you don't have a UPS (Uninterruptible Power Supply) protecting each computer from spikes, brown outs and other power threats, then get one now!
We can provide a very good unit for under \$100 if under contract)
- PM (Preventative Maintenance) testing even if you aren't reporting any trouble. We will run each computer through a diagnostic suite of exhaustive tests to check for memory failure, hard drive depletion, and other problems that can be prevented with an 'annual check-up visit to the Doctor'
- "User Error" is probably the most important additional feature. In today's complicated software world, a service call for a 'hardware failure' is often really a software failure. And there is often no way a typical user can tell the difference. With this additional feature, even these 'oops, I thought it was a hardware problem when I called you...' are covered at the lower, 'client' rate.
- Further reduced labor rates for billable work. For example, replacing a defective hard drive is covered at no charge, and with the Silver Protection, you also get further discounts on billable software/configuration work like your network connection & print drivers, etc.

GOLD is most elite Hardware Protection Plan, for businesses that put great demands on their computers.

For only about a cup of coffee a week, you can have our premiere hardware protection coverage. This includes all the features of our Bronze and Silver above, plus

- Full coverage of labor and parts for your UPS connected to the Protected device.
- Completely free installation of device software and configuration, whether because of a blatant hardware failure or 'just because that happens to computers sometimes.'
- A Free Loaner means that you'll never have your desktop computer 'in the shop' while you need to get work done. This includes basic Windows connectivity to your network, and the full suite of Microsoft Office products (Word, Excel, Outlook, etc.) installed and ready to use! (Requires Software Protection too)

Hardware Protection (Server & Workstations)



| Monthly Price /Computer | | | | Hardware Protection (Server & W/S) |
|-------------------------|--------|--------|------|--|
| None | Bronze | Silver | Gold | Description |
| | Call | Call | Call | Standard PC <i>Surcharge may apply for specialized computers</i> |
| | Call | Call | Call | Standard Server <i>Surcharge may apply for specialized computers</i> |
| | ✓ | ✓ | ✓ | Basic Repair/Replacement |
| | ✓ | ✓ | ✓ | Repair/Replacement of defective hardware components |
| | ✓ | ✓ | ✓ | Discounted Trip Charge |
| | | ✓ | ✓ | Lowest Price guarantee on new purchases |
| | | ✓ | ✓ | User Error, Application, environment |
| | | ✓ | ✓ | Diagnostics |
| | | ✓ | ✓ | Utility Software installation for replaced printers, backup devs, UPS's. (O/S installation is covered under Software) |
| | | ✓ | ✓ | Maintenance kits (labor only): UPS batteries, clock batteries, etc. |
| | | | ✓ | Install new hardware or software |
| | | | ✓ | Full coverage of UPS connected to PC/Server Maintenance kits Labor AND Parts – Incl new batteries. |
| | | | ✓ | Free Loaner (only for PCs, with basic Windows and Office only). Requires Software Protection Coverage also |
| | | | ✓ | Annual cleaning, w/ free keyboard/mouse replacement |
| | | | ✓ | Jams & Spills |
| 0-5 | 0-3 | 0-2 | 0-1 | Response Time (days) |
| 0-1 | 0-1½ | 0-1 | 0-½ | Emergency Response Time (days) |
| Call | Call | Call | Call | Emergency fee |
| Call | Call | Call | Call | Billable Rate |

Power spike damage will be covered at Panatech's discretion unless the computer is protected by a UPS, which every computer should be in this day and age.

With a Protection Plan, travel time and on-site minimums for covered equipment in this area are reduced by half for billable visits. (i.e., one-way instead of round trip, and 1.5 hrs instead of three). "Standard Servers" typically under \$6,000 retail value.

Note that standard LCD screens (up to 20") are replaced as needed on all plans, mice & keyboards only on the Gold plan as they invariably go bad mostly because of office cleanliness, which is normal, but not defective in the strict sense of the word.

Note that if you don't have an Uninterruptible Power Supply (UPS – sometimes just called a 'battery backup') on every computer, and at least a line conditioner on every device (e.g., printer) you are exposing yourself to a myriad of problems for no reason. Our Silver and Gold Protection Plans include coverage of

Hardware Protection (Server & Workstations)

attached UPS including replacement batteries (they need to be replaced every 1-3 yrs!). UPS batteries are replaced (and properly disposed of) at no charge under the Platinum Protection Plan.

Note that while replacement parts are almost always available longer than the expected life of the machine, such can happen in which case Panatech will do a 'best effort' to replace parts that are no longer available, and offer you a credit toward the purchase of a new, replacement machine.

Also note that while a defective hard drive might be purchased for under \$200, it also involves a 2-3 hr (portal to portal) service call to install, which is more than double the cost of the hardware alone, and it is that cost which is included in even your basic, Bronze plan.

Note that even connectivity coverage requires that you have current versions of Windows (including patches) if required by the vendor, which is sometimes the case.

Note that if the hardware replacement also requires software re-installation (such as replacing a hard drive that has lost the entire Windows O/S, configuration, registry settings as well as data restore), that is not covered under this hardware section, it must be covered under the following [Software section](#) to be non-billable or even billable at a discounted rate.

The column highlighted in **yellow is our recommended minimums** for serious business components.

As the diagram in the Overview section shows, everything has to go through this box called the switch/router. If that goes down, your 'network' is just a hundred pieces that don't talk to each other. Got to get invoices out, and your hi-speed laser printer goes down? Trying to meet a payroll deadline, and your personal, private inkjet dies? Sometimes, you just have to have output.

Hardware Protection (Other Devices)

| The ext section/table describes that coverageMonthly Price/ Device PLAN | | | | Hardware Protection (Other devices) |
|---|--------|--------|------|--|
| None | Bronze | Silver | Gold | Description |
| | n/a | n/a | Call | Switch Un-Managed |
| | n/a | n/a | Call | Switch Managed |
| | n/a | n/a | Call | Commercial Router |
| | Call | Call | Call | Basic Printers <i>(Under \$1,000 retail price)</i> |
| | ✓ | ✓ | ✓ | Basic Repair/Replacement |
| | ✓ | ✓ | ✓ | Discounted Trip Charge |
| | | ✓ | ✓ | Lowest Price guarantee on new purchases |
| | | ✓ | ✓ | User Error, Application, environment |
| | | ✓ | ✓ | Diagnostics |
| | | ✓ | ✓ | Annual Performance Review, incl PM, UPS batteries |
| | | ✓ | ✓ | Maintenance kits (labor only) : Print Heads, Laser Drum/Fuser assemblies |
| | | | ✓ | Software installation on PC or lost connectivity issues (for replaced printers, backup devs, UPS's) |
| | | | ✓ | Free Loaner (on most devices) |
| | | | ✓ | Jams & Spills |
| | | | ✓ | Maintenance kits Labor AND Parts : Print Heads, Laser Drum/Fuser assemblies, Black only |
| | | | ✓ | Fuzzy/resolution issues on printers |
| | | | | |
| 0-5 | 0-4 | 0-3 | 0-1 | Response Time (days) |
| 0-1 | 0-2 | 0-1½ | 0-½ | Emergency Response Time (days) |
| Call | Call | Call | Call | Emergency fee |
| | | | | |
| Call | Call | Call | Call | Billable Rate, for non-covered services |

With a Protection Plan, travel time and on-site minimums are reduced by half for billable visits. (i.e., one-way instead of round trip, and 1.5 hrs instead of three).

Installation of new workstations is offered at a flat rate of 3.0 hrs for the first workstation, and 2.0 hrs for each additional workstation done at the same time, at the appropriate hourly rate for each PC. If you agree to a 24-month Protection Plan agreement, then you will only be billed at one-half of the appropriate hourly rate.

- 1 For first Router/Switch/Gateway per network. 50% discount for all subsequent on same network
- 2 Printers must not be operated at more than their mfr stated duty cycle of pages per month, less 3% per year of life

Having hardware protection coverage does not imply coverage for anything other than physical defects that occur while using the covered equipment and following the manufacturer's recommended guidelines while doing so. Hardware protection coverage does not provide coverage for driver, firmware or software issues in connection with the covered equipment. [Software Coverage](#) is required for that.

For hardware not purchased through Panatech, failures occurring in the first 90 days are billed at your discounted billable rate. Thereafter, they are covered at 100% per your level of selected protection

Hardware Protection (Other Devices)

Hardware coverage is for computers used for conventional office use, not factory or laboratory use (e.g., where the PC is used as part of equipment testing). Use in any other manner than typical office use voids Panatech's responsibility.

Computers don't last forever, typically 6-8 years before the parts become obsolete or difficult / impossible to find. Any component which is 8 yrs. or more from date of manufacture may be subject to additional charges directly tied to our cost of acquiring parts if such is necessary.

Volume Discounts:

Large installations are entitled to the following discount structure on Platinum and Gold coverage.

This is an incremental discount structure (e.g., the first 20-25 units are at base price, and it is the additional units that are discounted)

| Gold: | | Silver: | |
|--------------|-----------------|----------------|-----------------|
| 0 - 20 | (current price) | 0 - 25 | (current price) |
| 21 - 40 | (15% discount) | 26 - 50 | (10% discount) |
| 51 - 75 | (25% discount) | 51 - 75 | (20% discount) |
| 76+ | (30% discount) | 76+ | (25% discount) |

Software Support / Protection

The most vulnerable part of your computer network is in the software, and security. Not only do your computers need to be protected against the lost time and expense of re-installing and re-configuring if something happens to them, but you also have to protect against the new threat of cybersecurity vandals.

No matter how 'secure' your physical PC is behind locked doors in a secure office building, the moment it is connected to the internet – and they ALL are – your computers are effectively sitting in the middle of the street in downtown Manhattan.

Panatech offers 4 levels of protection, monitoring and support to fit your needs:

- Bronze Enterprise Class (Fortune 500) strength Malware protection
- Silver On-going weekly Patch Management updates; basic monitoring & reporting
- Gold Security/Breach enhanced monitoring & reporting; basic Help Desk
- Platinum Full suite of monitoring and reporting, as well as full Help Desk support

Our Bronze/Silver plans are ideal for companies that have an on-site IT support person and just need our 'industrial-strength' malware protection and cost-effective 'grunt work' of patch management. These plans provide our specialized cybersecurity software and the 'after hours' patch management in order to relieve your person to do the personal support that they are uniquely qualified for. We have the industrial-grade software that others don't and it's more efficient for us to do it after hours than for your IT person to bump co-workers off their computer between 9-5.

Our Gold/Platinum plans are ideal for companies with limited or no existing 'in house' support, or whose business requires advanced protection against data breaches or any computer downtime whatsoever. These plans include 'Help Desk' support and advanced diagnostics to ensure that you are not 'caught by surprise', as well as no-charge fixes for most unexpected crash repairs.

Prices are monthly per computer.

Which level do you need?

- **Bronze**
 - Malware Protection against viruses, worms, trojans, and Ransomware
 - Data Theft Protection
 - HIPAA and PCI DSS compliant

What this means in more detail: Malware (Malicious ware) Protection is the 'front door' security against attacks. Viruses, Ransomware and Data Theft are bundled under the name of 'Malware', but each are separate threats that each require specialized protection. The newest, most serious of these is Ransomware wherein your data isn't just messed with like a virus, but actually encrypted /locked until you pay big money to get it back. Data Theft is where bad guys steal your customers' data (credit cards, personal data, etc.) which is a big liability to you for having been the source of a data breach even if your computers are otherwise completely untouched. This Enterprise-level, specialized software features an A.I. (Artificial Intelligence for 'sniffing out' malware) and a fully staffed Security Operations Center / response team.

Why your company would need it: Everyone needs this level of protection, and most anti-virus software includes only a relative token amount of protection from the deadly ransomware. So even if you have support for other aspects of your computer operations, our Bronze package is probably a cheaper and more effective solution for this component of your protection. Unlike most malware

Software Protection (Workstations)

software in use, ours is certified as HIPAA (medical) and PCI DSS (credit card) compliant and comes with up to \$1 Million in insurance protection; If yours is not, it should be

- **Silver**

- Patch Management, from Microsoft and other major providers
- Reports: Asset Management of Hardware and Software, among others
- “Around You” after-hours scheduling: so your people are not interrupted by reboots, etc.

What this means in more detail: Patches are another name for ‘bug fixes’ that Microsoft and others release every month, sometime weekly. If not ‘patched’, your computers are vulnerable regardless of the Malware protection, as such are often core defects in the software that allow ‘back doors’ into your system. In fact, the infamous EquiFax breach was caused by exactly this: Full “Malware Protection” but missing patches. This is a time-consuming task that often requires multiple re-boots that most people *think* that they ‘got around to’ doing, but most do not. We do this after hours to not disrupt your operations, which any ‘on site IT person’ probably would not be able to do. This level also includes basic reporting of your computer network such as monthly reports of the activity time spent and an Inventory Audit report listing all your covered devices, their software and hardware levels, etc.

Why your company would need it: This MUST be done by *someone*. Most people THINK that they are doing it, but the majority are not in actuality. Because of economy of scale we can do this remotely, after hours, at an extremely inexpensive price of only \$20 more than Bronze. Even if you have an on-site, on-staff person, they are costing you more than \$20 for this time consuming task, and they are likely doing it during business hours and disrupting the work of people that need their computers. And unless your company has invested in IT reporting tools, you will not get the Activity and Asset Management reports that we provide.

The above 2 functions (CyberSecurity and Patches) are 100% essential to computer safety. Even if you have an in-house IT person, it is probably more cost-effective to use our industrial-grade, after hours maintenance for the above Security Software and Patches, than your in-house employee or current provider.

- **Gold**

- Pro-active, weekly status checks of computer health
- Executive Summary of overall health
- Help Desk and Telephone support for Office/Network

What this means in more detail: There are two major areas of increased support at this level. First, this level provides advanced diagnostic, and pre-emptive monitoring/reporting of imminent failures (e.g., hard drive over-utilization, disk space errors, etc). Included are weekly health reports of each device showing “Red X vs Green Check” for all the major areas of concern. The second area of increased value at the Gold level is the extended Help Desk support shown on the following table, for many of those “It just stopped working for no reason!?” things that computers do.

Why you would need this: Many companies are very dependent on their computers every day and cannot afford to wait until they crash before they take action. Replacing a failing drive or restoring a corrupted Windows registry ahead of time can have minimal down time, vs waiting until the computer suddenly stops working, *then* doing the forensic diagnostics, and then begin recovering/restoring all the data on the failed system can save you a few days of non-productive downtime. Additionally, if you don’t have a ‘Guru’ on staff to explain why “My Outlook suddenly

Software Protection (Workstations)

stopped working” or “My browser freezes up”, or the like then the Gold Level Help Desk functionality will mitigate that lost productivity at your company.

- **Platinum**

- Additional Data Breach and Risk assessment
- Premium Care Help Desk, including “I see what you see” remote support
- Microsoft Office support
- Free re-installation of all system files in event of crash.

What this means in more detail: The Platinum level includes a few additional areas of coverage for more thorough protection and support. First is an additional monitoring/reporting layer for data theft. Companies that keep personal information on their computers (e.g., credit card information, social security numbers, financial information, health information etc.) are required by law to take reasonable efforts to protect that data from being divulged. Bad guys may not harm your computers one iota, but if they find (and take) unsecured personal information, you are liable at many levels. Additionally, the Platinum level provides extensive one-on-one Help Desk support for most all of the “I need someone to explain this to me...” problems, as detailed in the following table.

Why you would need this: Two different reasons: First, if your computers contain ANY personal information (credit card, financial, health), you MUST take extra precautions to safeguard it. And if you do not have on onsite ‘Guru’ and need the simplicity when a problem comes up to say “Just call someone to explain or fix it, and let’s get back to work...”, then this is the plan for you.

Additional Notes:

Malware/Patches: Note that the infamous EquiFax breach of 2017 was caused exactly because of a failed *patch update* that the other anti-malware software was relying on.

In the event of a successful attack the “Anti-deductible” is the number of included hours (e.g., free) to undo all the detriment of the attack, per device per month and are not transferable nor roll forward. In the unlikely but possible event that internal wiring is the culprit, only computers covered at the Platinum level are exempt from billable diagnostic charges.

3rd party products (like Adobe, JavaScript for web browsers, etc.) that have become standard tools of everyday life, some you may not even realize, like

- Adobe Reader
- Flash Plug-In
- Chrome
- Java (used as a client-side tool by almost all web browsers, behind-the-scenes)
- Silverlight (a popular Microsoft add-in, but not included in their patches)

We do not offer email spam protection because frankly, email providers like RackSpace.com etc. do a very good job of it at a price that is competitive with standard email services.

Network connectivity issues are instances such as when the computer is not able to see/access the network at all, and other related software issues. Free desktop PC loaner includes Windows O/S, MS Office, and 1 hr. of personal configuration. Only Panatech may install updates, patches and virus/malware software. Doing so on your own, however well intentioned, may result in conflicting configurations and billable repair

Software Protection (Workstations)

With a Protection Plan, travel time and on-site minimums for covered equipment in this area are reduced by half for billable visits. (i.e., one-way instead of round trip, and 1.5 hrs instead of three).

Panatech will require up to 1 hr on each PC for initial setup, during which time the computer will not be available to your employees. Note that there may be a 'clean up' charge for 'pre-existing conditions' on new coverage, not to exceed an amount equal to \$59 for each covered PC and \$199 for each Server. This will remove/uninstall old versions of Malware protection software, as well as existing viruses and other malware

To be eligible for Platinum coverage, you must have at least 50% of your computers be at the Platinum protection level, including your Server (green section).

Physical Installation of new workstations is offered at a flat rate of 3.0 hrs for the first workstation, and 2.0 hrs for each additional workstation done at the same time, at the appropriate hourly rate for each PC. If you agree to a 24-month Protection Plan agreement, then you will only be billed at one-half of the appropriate hourly rate. Note that most computer supply stores will charge up to \$140 just to remove initial adware and do basic Microsoft updates.

Software Protection (Workstations)



| Monthly Price / Computer | | | | | Software Protection (workstations) |
|--------------------------|--------|---|------|----------|--|
| None | Bronze | Silver | Gold | Platinum | Per Workstation |
| | Call | Call | Call | Call | |
| | | Silver is the minimum level for full Protection for Patch Management and Security. Gold & Platinum add Monitoring, IT support, and "Help Desk" | | | |
| | X | ✓ | ✓ | ✓ | Remote Access (for Panatech Support) |
| | ✓ | ✓ | ✓ | ✓ | Malware Protection |
| | ✓ | ✓ | ✓ | ✓ | Anti-Malware |
| | ✓ | ✓ | ✓ | ✓ | Anti-Ransomware |
| | ✓ | ✓ | ✓ | ✓ | Breach entry point identification |
| | 0 | 8 | 16 | 99 | "Anti-deductible" included hrs. to repair |
| | | ✓ | ✓ | ✓ | Patch Management |
| | | ✓ | ✓ | ✓ | Microsoft O/S and security patch installation |
| | | ✓ | ✓ | ✓ | 3rd Party Software Upgrades (labor) |
| | | ✓ | ✓ | ✓ | Monitoring & Reporting |
| | | ✓ | ✓ | ✓ | Inventory Asset Management Audit Report |
| | | ✓ | ✓ | ✓ | Monthly "Take Control" Report |
| | | | ✓ | ✓ | 24/7 Monitoring & weekly workstation Health |
| | | | ✓ | ✓ | Executive Summary Reports |
| | | | ✓ | ✓ | Server Health |
| | | | X | ✓ | Data Breach and Vulnerability Monitoring/Report |
| | | | X | ✓ | Dark Web monitoring ¹ |
| | | | ✓ | ✓ | Help Desk |
| | | | ✓ | ✓ | Free Telephone Support for the following: |
| | | | ✓ | ✓ | Basic Microsoft O/S and Browser support |
| | | | ✓ | ✓ | Network Connectivity issues |
| | | | ✓ | ✓ | Attach/login in to new printers or servers |
| | | | ✓ | ✓ | Add / Remove users, password, & security |
| | | | | ✓ | Premium Care |
| | | | | ✓ | Remote "I see what you see" App Support |
| | | | | ✓ | Personal "One on One" review/consultation of 'phishing' and other threats at no charge |
| | | | | ✓ | Microsoft Office basic support |
| | | | | ✓ | Cache cleanup & speed/performance optimization |
| | | | | ✓ | 100% free File recovery (w/B/U below) |
| | | | | ✓ | 100% free Complete PC re-install (w/ BDR) |
| | | | | ✓ | No Trip charge for onsite visits |
| N/A | N/A | Call | Call | ✓ | +BU (Offsite Cloud Data Backup) |
| N/A | N/A | Call | ✓ | ✓ | +BU/DR (Full Disaster Recovery, NAS purch req'd) ² |
| Call | Call | Call | Call | Call | Hourly Rate for billable service |

¹ If all workstations are covered at Platinum, else the 'per company' coverage in the Green section is required.

² See the Backups Section (p19-20) below

Software Protection (Workstations)

Internet Connection is critical. That is how your malware updates and patches get to you, and how we access your system for Remote Access / Remote Support. Therefore, your Internet speed affects the service we can provide you.

Internet speeds are actually two speeds: the Download speed (data comes down into your computers from the Internet) and Upload speed (data coming up from your computers to the Internet).

| | Up | Down | <i>Speeds shown are Mbps (Megabits Per Second) (divide by 8 to get Mega BYTES per second)</i> |
|-----------------------------|-------------|-----------|--|
| Basic Need | | | |
| Office w/ 5+ PCs | 2 | 5 | Updates/downloads typically hit all your PCs at one night. |
| With "Cloud Backup" | 3+ | 5 | "Cloud Backups" happen via an 'Upload' to the Internet. |
| Typical Providers" | | | |
| Basic Cable | 3 | 12 | About the cheapest, most basic cable service (e.g., Comcast, etc.) And this is 'per company', shared amongst your PCs |
| "Often typical" | 8-20 | | For those who pay for more than the 'bare bones basic' |
| <u>Basic Wired (DSL/T1)</u> | 1 | 4 | Using existing, copper telephone wire. |

You can test the speed on our network at www.SpeedTest.Net

So **3** Mbps (mega bits per second) is 1.35 GB (Gigabytes) per Hour x12 hrs = 16 GB overnight
 So 5 Mbps = 2.25 GB/Hr x12 hrs = 27 Gb = ~ 0.025 TB
 So 10 Mbps = 4.50 GB/Hr x12 hrs = 54 Gb = ~ 0.050 TB
 So 15 Mbps = 6.75 GB/Hr x12 hrs = 81 Gb = ~ 0.075 TB
 So **20** Mbps = 9.00 GB/Hr x12 hrs =108 Gb = ~ 0.100 TB

There are no 'hard and fast' rules about speeds, just trade-offs. For example even if you only had DSL/T1 speed but wanted to have the security of Cloud Backups, we could install a local drive/device that collects your data at night and then feed it up to the Cloud (however slowly) during the day. See "NAS" below

Software Protection (Workstations)

Backups: There are 2 categories of Backup: “Just the Data Files”, and “Disaster Recovery” which includes the data *and* all the Windows Operating system files & configuration such as the O/S, Registry, INI files, etc., since a ‘from scratch’ install could take a day or more, if even only a hard drive needed replacement. The basic B/U includes such invaluable features as saving daily backups for over a month, as well as making ‘every 5 minute’ backups, as well as being able to recover deleted files even months after you deleted them.

“BDR” ensures a timely restoration of your operations, almost regardless of the ‘disaster’. But to do so requires a separate storage spot (called **NAS** for Network Attached Storage device) on your network. These ‘boxes’ are plugged into your network like any other device, are about the size of a breadbox and range in cost from about \$600 to about \$2,500 depending on your need for capacity and speed. Adding BDR to your basic B/U not only increases your coverage but also adds an extra layer of protection by allowing local data storage, independent of cloud storage, and is therefore highly recommended.

You may *also* require a NAS (Network Attached Storage device) if you have a slow internet connection relative to the amount of data that you want backed up to the cloud, as the NAS is a ‘temporary loading zone or staging area’ for the data to be quickly transferred from your computer at night, and then pushed up to the cloud during the day when your computer needs to be used for normal operations without being hampered by background processes like data transfer.

We must be allowed to add a secret, but Administrative-level password to each computer. This is necessary so that we can access each computer to install patches, etc. We will add one username/password for all computers, in addition to whatever usernames/passwords that you have. **We must also be allowed to set the ‘Administrator’ password on the Server and Workstations** to an identical value (you can choose this password if you want, but they must all be the same). You must also leave all your PCs on, on the days/evenings that we do remote updates. Patches and updates may need to be done overnight, if ‘Slow’ Internet connection is present.

Minimums for your computers: Windows 10, or newer, with an Intel I5 (or equivalent, or better), 4 Gb of Ram (8Gb is Microsoft recommended minimum) or more, and at the greater of 20% free hard drive space or 20 Gb free space. We can provide the material and labor to upgrade your computers if they fall below these minimums, or a replacement computer. These are fairly ‘generous’ minimums and you really shouldn’t be running a network with less than these. Also, your Operating System (Windows) must at least be at ‘Maintenance level’ support by Microsoft. Windows 7 and 8 have already been declared as ‘unsupported’ by Microsoft by 2020 & 2023 respectively.

Panatech will need complete access to all PCs about once per month, to perform our duties, during regular business hours (7am-6pm). Charges may apply if your computers are not made available to us.

On-Site Application Support consists of any of the myriad of things that suddenly go wrong for no apparent reason: Outlook screws up, lost printer connections, network connections, etc. This does not include any support that involves outside vendors, such as your accounting software, your ISP (Internet Service Provider), or other non-Office® products.

Support of non-Microsoft Office products is limited to liaison/coordination activities. We can not and should not be relied upon for specific problem solving on these applications, including lock-ups, corruption or mis-calculations. We are not proficient on the hundreds of software products out there, and make no representation that we are. This is why you need a specialized support contract with those software suppliers and service providers. For clients covered at the Silver, Gold or Platinum levels, Panatech will perform all software patches and upgrades from Microsoft and the chosen antivirus (malware) suppliers. Client must

Software Protection (Workstations)

NOT perform their own upgrades or patch applications. Doing so may disrupt the integration, flow and consistency of operations, resulting in additional problems and work. Labor time to address and/or fix such problems may be billable and is excluded from any included hours in your Protection Plan.

You must supply us with all product CDs and Registration Keys (serial numbers), so that we are enabled to re-install your software if needed. Billable time applies otherwise.

For example, it is quite commonplace for a ‘broken’ printer to be really a configuration/ connection problem – the physical printer itself is just fine. As it turns out, all information sent to the printer has to go through a ‘driver’ or ‘translation table’ for that particular model of printer, and that driver is logged/registered in the Windows Registry of ‘housekeeping’ information, and that Registry could be corrupted in many ways, and then, well, you get the idea. But the physical printer is just fine!

Patches include the Microsoft Windows Operating System. Application patches and upgrades (including Office) are not included. All other such patches/upgrades may need to be done onsite.

All Operating System Software must be kept current and still be on the ‘supported’ list by Microsoft. Typically, Microsoft will support a product 2-3 years after they issue a new release, which is also about every 2-3 years. You are responsible for the cost of the software upgrades from Microsoft. Computers not maintained to this standard will only be supported on a nominal best efforts basis, with limited unbillable time as there is little/nothing we can do once Microsoft drops support. Customer is responsible for all subsequent support costs.

Having software protection coverage does not imply coverage for any failure caused by hardware related defects or failures determined to be caused by inappropriate usage (not following all manufacturer’s recommended guidelines). **Hardware Coverage** is required for that.

Support of non-Microsoft Office products is limited to liaison/coordination activities. We cannot and should not be relied upon for specific problem solving on these applications, including lock-ups, corruption etc. We are not proficient on the hundreds of software products out there, and make no representation that we are. This is why you need a specialized support contract with those software suppliers.

Volume Discounts:

Large installations are entitled to the following discount structure. This is an incremental discount structure (e.g., the first 20-35 units are at base price, and it is the additional units that are discounted)

| | | | |
|-------------------------|---------------------------------|-----------------------|---------------------------------|
| <u>Platinum:</u> | | <u>Gold:</u> | |
| 0 - 20 | Std price on the first 20 units | 0 - 25 | Std price on the first 25 units |
| 21 – 50 | 25% discount on these units | 26 – 55 | 20% discount on these units |
| 51 – 75 | 35% discount on these units | 56 – 80 | 30% discount on these units |
| 76+ | 40% discount on these units | 80+ | 35% discount on these units |
| <u>Silver:</u> | | <u>Bronze:</u> | |
| 0 - 30 | Std price on the first 30 units | 0 - 35 | Std price on the first 35 units |
| 31 – 60 | 15% discount on these units | 36 – 65 | 10% discount on these units |
| 61 – 85 | 25% discount on these units | 66 – 90 | 20% discount on these units |
| 86+ | 30% discount on these units | 91+ | 25% discount on these units |

System-wide Protection

When it comes to ‘putting all the pieces together’, this Section on System-wide Protection’ is the keystone of your network support

It is often said that the whole is greater than simply the sum of its parts.

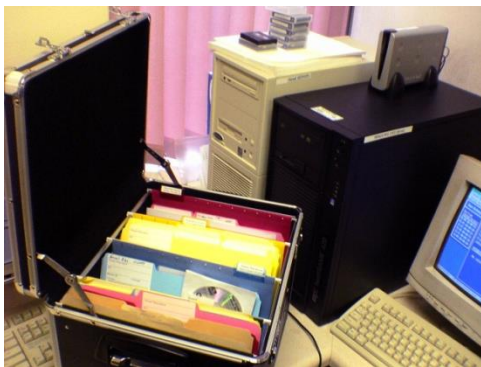
This is particularly true of you complex computer network, where the complex inter-relation of all the hardware, software, drivers, configurations, protocols and the like have to work in perfect synchronization in order for your business to benefit from the full potential of your computer investment.

In the previous Sections, we foreshadowed that you will need to have Remote Access into your system in order for much of this Protection to take place. The System-wide Silver Protection plan is the base-level protection that includes exactly this Remote Access functionality. This functionality can then be distributed to all the other workstations in your network. That is why you must have Silver (or higher) Protection here in the System-wide section in order to utilize the benefits of Silver (or higher) Protection in the previous Sections.

This System-wide Protection Section is divided into 3 parts

- Server
- Backups
- Dark Web

Lock Box Protection – a Panatech exclusive: Microsoft has gotten very protective of its revenue in the past few years, particularly when it comes to licensing and copy protection. That affects you because without the original CD and Product Key, you are not considered the legal owner of the software. If your hard drive crashes and needs to have the software re-installed (be it a ‘lowly’ application like Word, or the omni-present Windows Operating System itself), you will need the original CD and the Product Key (registration) assigned/sold to you. You cannot just ‘borrow’ a copy. And if ‘Bob’ over in sales borrows a CD that you just left in a drawer, but doesn’t return it, you are out hundreds or thousands of dollars of software. And that’s in



addition to the many thousands of dollars of lost productivity to your company while a replacement is procured (and it is impossible to re-install a network, even with maintenance contracts, if you can’t provide a legal copy of the software). The Panatech Lock Box has separate, color-coded sections for Servers, Workstations, and Backup/Peripherals. And a custom folder for each device, with pockets for each CD, serial numbers and log notes. Would *you* be this meticulous on your own?

Lock-box protection keeps your valuable CDs and network information safe

System - wide Protection (Server)

Bronze is the basic Protection plan, that at least provides you with minimum coverage for your Server, arguably the most critical component in your network. This gives you a strong base for documenting and protecting your network. We will do a full documentation of the devices on your network, come on-site annually for a full review and inspection of your server, provide telephone support, discounted trip charges, priority support, and our unique ‘Lock Box’ protection.

Silver is the minimum protection, for malware and patch management, and remote support.

Silver Protection gives your free coverage for changes to your system that you would otherwise have to pay ‘time and materials’ for, like adding new users, changing login rights, adding new hardware, etc.

You also get Protection from the most common ailments of a network system, namely

- Mal-ware and Patch Management is the most important feature that comes with Silver Protection
- Remote Access is what allows us to do the mal-ware protection and patch management. It also gives you the “I see what you see” support, or just ‘come right in, electronically”, and fix the problem without you even being involved.
- Connectivity issues (“The hardware is working, they just can’t *talk* to each other!”)
- Quarterly review of your server logs and errors, as well as backup logs, to check for any anomalies. We keep an eye on your computers, so you can keep your eyes on your business.
- Remote Maintenance means that we can manage things like your disk space allocation, shared folder access rights, login authority, etc. for you.
- Install new devices to your Server, install new users (you should *not* be re-using the same user name and password when employees come and go!),
- Storage analysis give you a graphical display of the nested consumption of your disk space, showing where storage bottlenecks are, and what can be done about them.
- Other benefits as shown on the following table to keep your Server ‘tuned-up’, like regular system defragmentation

Gold is the **recommended minimum**, because it includes the complete purchase of the Malware (anti-virus) suite, freeing you completely from the responsibility and worry of keeping your malware protection fully in force. In addition, Gold protection also gives you

- System reinstallation after a crash. If your Server crashes, it normally takes a day or so just to get the Windows Server Operating system back on.
- Quarterly on-site inspection in review. So you get a personal, face-to-face meeting to review and discuss your network situation, and address any needs and concerns that you may have
- On-site application support for any reason you want. Just call us and we’ll be there at no additional charge

Platinum is a new service that we are offering for even further protection and more thorough documentation.

With a Protection Plan, travel time and on-site minimums for covered equipment in this area are reduced by half for billable visits. (i.e., one-way instead of round trip, and 1.5 hrs instead of three).

System - wide Protection (Server)



| Monthly Price | | | | | System wide (Server) <small>(this replaces your Software Protection, just for the Server)</small> |
|---------------|--------|--------|------|----------|---|
| None | Bronze | Silver | Gold | Platinum | SERVER* |
| | Call | Call | Call | Call | |
| | | | | | Basic Protection |
| | ✓ | ✓ | ✓ | ✓ | Remote Access by Panatech |
| | ✓ | ✓ | ✓ | ✓ | Network Connectivity issues |
| | ✓ | ✓ | ✓ | ✓ | Basic Server operations |
| | ✓ | ✓ | ✓ | ✓ | Network Documentation |
| | ✓ | ✓ | ✓ | ✓ | On-site Lock Box software management |
| | | ✓ | ✓ | ✓ | Malware Protection |
| | | ✓ | ✓ | ✓ | Anti-Virus |
| | | ✓ | ✓ | ✓ | Anti-Malware |
| | | ✓ | ✓ | ✓ | Anti-Ransomware <i>(with Forensic analysis)</i> |
| | | ✓ | ✓ | ✓ | Breach entry point identification |
| | 0 | 8 | 16 | 999 | “Anti-deductible” included hrs. to repair |
| | | | ✓ | ✓ | Patch Management |
| | | | ✓ | ✓ | Microsoft O/S and security patch installation |
| | | | ✓ | ✓ | Reporting |
| | | | ✓ | ✓ | Monthly Executive Activity report |
| | | | ✓ | ✓ | Weekly workstation Health & Monitoring report |
| | | | | ✓ | Independent Network Security Report |
| | | | | ✓ | Independent Network Audit Report |
| | | | | ✓ | Independent Network SQL Report |
| | | | | | Annual, and quarterly upon request |
| | | ✓ | ✓ | ✓ | Help Desk |
| | | ✓ | ✓ | ✓ | Add / Remove users, passwords, security access |
| | | | ✓ | ✓ | Install new hardware or software (labor only) |
| | | | ✓ | ✓ | Attach/Login to new network printers. |
| | | | | ✓ | Premium Care |
| | | | | ✓ | Advanced, pre-failure detection ⁽¹⁾ |
| | | | | ✓ | Cache cleanup & speed/performance optimization |
| | | | | ✓ | Tel support |
| | | | | ✓ | Complete Software + O/S install after crash, incl data restore (Silver Backup Protection req'd) |
| | | | | | Add-on, if you have SQL Server to be maintained: |
| N/A | N/A | N/A | Call | Call | SQL Express |
| N/A | N/A | N/A | Call | Call | SQL Standard |
| | | | | | All Backup services are covered on the next pages |
| Call | Call | Call | Call | Call | Billable Rate , for non-covered services |

Note: Your router and gateway hardware must also be covered (‘red’ section) to defend your server from overt, outside attacks.
 (*) **Includes Servers up to level 5 RAID** (5 drives) totaling no more than 500Gb, up to 2 CPUs and 8Gb of RAM..
 Larger servers quoted separately.
 (1) **Advance, pre-failure detection** includes constant monitoring of disk consumption, over-heating, and imminent drive failure (on SMART-drives, as many are these days from the manufacturer)

System - wide Protection (Server)

Microsoft SQL Server software is a very specialized application, arguably as complicated as the Operating System itself, and certainly as expensive from Microsoft. Maintenance and repair of your SQL can be added to the basic Server Operating System coverage of the previous page, at the prices listed. Because of the specialized version of the task, the Server hosting SQL must be covered at the Gold or Platinum level. Note that this does not include specific 'line-of-business' support (like your Accounting programs), as they require more detailed knowledge of that software package, but we can implement whatever Database Administration (dba) that your application specialists require.

Mal/Ransomware and Patches

Unlike workstation protection which offers entry-level support that includes Mal/Ransomware with the 'next step up' level to include patches, the patches are so critical to a Server that this protection starts with patch management at the lowest level and the Mal/Ransomware is the next step up.

Minimums for your Servers: Windows 10, or newer, with an Intel I5 (or equivalent, or better), 4 Gb of Ram (8Gb is Microsoft recommended minimum) or more, and at the greater of 20% free hard drive space or 20 Gb free space. We can provide the material and labor to upgrade your computers if they fall below these minimums, or a replacement computer. These are fairly 'generous' minimums and you really shouldn't be running a network with less than these. Also, your Operating System (Windows) must at least be at 'Maintenance level' support by Microsoft. Windows 7 and 8 have already been declared as 'unsupported' by Microsoft by 2020 & 2023 respectively.

All Operating System Software must be kept current and still be on the 'Mainstream supported' list by Microsoft. Typically, Microsoft will support a product 2-3 years after they issue a new release, which is also about every 2-3 years. You are responsible for the cost of the software upgrades from Microsoft, and labor to install at your applicable rate. "Updates" are minor revision/improvements to the software whereas "Upgrades" are a new product such as migrating from Windows Server 2003 to Windows Server 2008. A loaner server may be available for an additional daily fee. Labor to configure the loaner is billable at the applicable rate.

Support of non-Microsoft Office products is limited to liaison/coordination activities. We are not proficient on the hundreds of software products out there, and make no representation that we are. This is why you need a specialized support contract with those software suppliers.

If you have Server Protection at the Gold or Platinum level, then all of your PCs must be covered at least at the Gold level for Software Protection. This is because a virus or any other anomaly at the PC level can bring down the Server, which we would be responsible for.

Panatech's Protection and Support for performance and ongoing functionality does not exceed that of the manufacturer; most notably Microsoft products that are discontinued or no longer supported by Microsoft.

We cannot guarantee performance if Microsoft themselves no longer support the software, most notably: Operating Systems, SQL Server, and Exchange Server.

If your software becomes unsupported by Microsoft, an upgrade/replacement may be required to keep your system running, but that cost per se is not covered by your Protection Plan.

Panatech will provide up to 12 hrs of on-site time at no charge under the appropriate Protection Plan to fix a Server problem if the hardware/software is no longer supported by the respective manufacturers.

System –wide Protection - Backups

Backups are like the insurance policies of your network. Or like the fire extinguishers required by law but that you walk right by every day and never notice. Until you need them.

Then they are priceless – absolutely worth their weight in Gold (or Platinum)

If corruption was discovered today that started last week, would you only have last night’s backup? (That’s corrupted too, it does you no better than the corrupt system you already have.)

After a system crash, you do NOT want to hear:

“Well boss, it’s the strangest thing about our backups. You see....”

Our backup protection plans offer you peace of mind on this critical insurance issue:

| System-wide Protection (Server Backup) | | | | |
|---|--------|--------|------|---|
| None | Bronze | Silver | Gold | Backup issues are covered/treated as Server System failures for the purpose of pricing & response time |
| | Call | Call | Call | |
| | ✓ | | | Either Cloud Backup or Local Backup ⁽¹⁾ . |
| | | ✓ | ✓ | Both Cloud Backup and Local Backup ⁽¹⁾ . |
| | | ✓ | ✓ | Daily or Weekly verification if Backups are disrupted. |
| | | ✓ | ✓ | Free Data Recovery assistance |
| | | | ✓ | “Minute by Minute” incremental Backups |
| | | | ✓ | Recover deleted files from months ago. |
| | | | ✓ | Image backup to restore crashed server in usually 1-2 hrs. ⁽²⁾ . |
| | Call | Call | ✓ | Encrypted, “Hot” Backup of SQL database(s) specifically. <i>Essential if SQL might be open during backup, as otherwise SQL is only backed up with ‘the entire server’.</i> |

(1) For Local Backup, the customer pays for the physical storage device (NAS – Network Attached Storage) but which Panatech will sell, deliver, install, and maintain for free. The storage size (and cost) is directly proportional to the amount of data (and speed of access) that the client wants. These are typically a one-time charge ranging from about \$600 to \$2,500.

For Cloud backups you must have sufficient internet upload speed (3 Gbps or better) if you do not have a NAS. With a NAS, we could ‘siphon’ the data from the NAS to the cloud during the day without hampering your daily workflow.

(2) A customer-purchased NAS (Network Attached Storage) device is required. Restore estimate time is for typical amounts of data. If you have a large amount of data to restore, the extra time to copy back the huge amounts of lost data are in addition to the ‘1-2 hrs typical’ time.

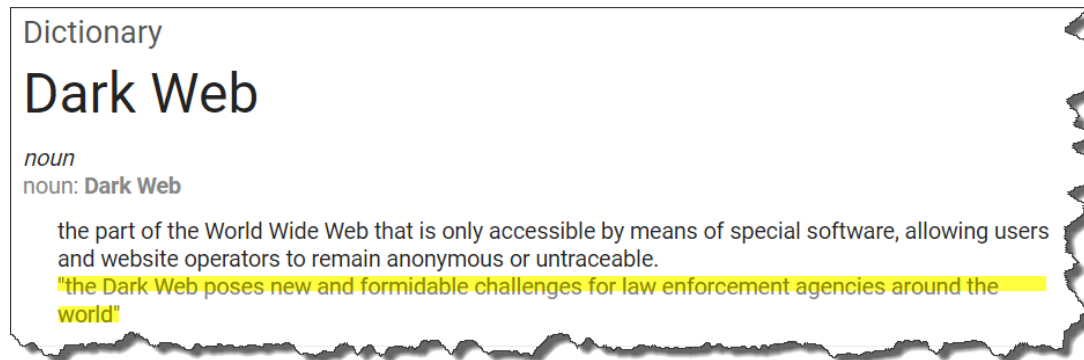
Note that Cloud backups require that you have Internet connection sufficient to transfer the amount of data that you wish to backup, possibly in combination with local hardware devices to cache the data up to the Cloud during the day if needed.

System –wide Protection - Backups

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System –wide Protection - Dark Web

The “Dark Web” is a very different and sinister animal that you have to defend yourself from:



Simply put, there are ‘back doors’ that foster a ‘black market’ on the Internet where user names and passwords are bought and sold like scarves in an open air marketplace, putting your entire company at risk.

This protection combines intelligence with search capabilities to identify, analyze and proactively monitor your organization’s compromised or stolen employee and customer data. Among the many technical details, we will provide monthly reports of all **usernames/passwords** that appear for your domain (e.g., ‘anyone @ YourCompany.com), as well as any other threats or objects related to “YourCompany.com”

Why is “Dark Web Protection” essential? One simple example:

Imagine what can happen if even *one* of your employees is careless with his or her emails and their user/password becomes ‘in play’ on the Dark Web. A Bad Guy (to use a polite term) uses it to send an email from this employee, *from your company* to everyone in sight on your contact list. Naturally, they open it because “It’s from *you*, a ‘trusted’ source”. But it is a ransomware attack that YOU just sent them. The jury is out to the extent of your liability if carelessness on your part allowed this crime, but there is no question that your clients *will* blame you.

And that’s the good, lightweight scenario. What is further possible:

Once they have a valid user/password, they can often access other aspects of your company’s resource and do all that a spiteful employee could, including the disabling of safeguards on your company’s computers, and ransoming them. Sadly, the ‘down side’ is almost endless.

Pricing is straightforward and monolithic

- base price for your domain (e.g., ‘...@YourCompany.com’) including 10 seats
- Only per seat above the included 10.

The scope of the ‘web crawling’ is proportional to the size of your company and the number of users therein, for which the number of workstations is a reasonable surrogate. So the ‘PC count’ is used for the ‘seat/users’ count. So if you had 10 workstations, your coverage would only cost you \$125/month. If you had 20 workstations (10 above the 10 included in the base) that would be an additional \$6.90 for the month.

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Your System

| | Counts | | | |
|-----------------|--------|--------|------|----------|
| | Bronze | Silver | Gold | Platinum |
| Hardware | | | | |
| Workstations | | | | |
| Servers | | | | |
| Printers | | | | |
| Others | | | | |
| Software | | | | |
| Workstations | | | | |
| BDR Cloud | | | | |
| BDR Local | | | | |
| System | | | | |
| Server | | | | |
| Backups - Cloud | | | | |
| Local | | | | |
| DarkWeb | | | | |

Notes on next page...

Your System

| | Notes.... | | | |
|-----------------|-----------|--------|------|----------|
| | Bronze | Silver | Gold | Platinum |
| Hardware | | | | |
| Workstations | | | | |
| Servers | | | | |
| Printers | | | | |
| Others | | | | |

| Software | | | | |
|--------------|--|--|--|--|
| Workstations | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| System | | | | |
|-----------------|--|--|--|--|
| Server | | | | |
| Backups – Cloud | | | | |
| Loal | | | | |
| DarkWeb | | | | |

Terms of Engagement

1. **ENTIRE AGREEMENT:** This Agreement constitutes the entire agreement between PANATECH Computer Management Inc. and Client with respect to the subject matter hereof and supersedes any previously delivered terms and conditions of Client's solicitation of offer, purchase order, or other standard form of communications. It shall not be modified except by a written agreement signed by Panatech and Client by their duly authorized representatives.
2. **COMPENSATION:** Panatech's primary asset is its time and knowledge. Unless stated in a written, fixed-price proposal, all time spent by Panatech with the Client is billable. This includes 1-way travel time for Clients under maintenance contracts, and round-trip travel time otherwise. Except as stated otherwise under contractual Protection Plans, the on-site minimums are 2.5 hours for maintenance contract Clients, 3.0 hours otherwise. Standard working hours are Monday through Friday from 8am to 6pm. Time-and-a-quarter rates apply for work performed within 1 hour of these standard times, and time-and-a-half applies otherwise on business days. Double Time on weekends and holidays. Covered (Non-billable) work becomes billable outside of the Standard Working Hours.
3. **BACKUPS:** Backups of programs and data are always the responsibility of the Client. Client is responsible for testing and verification of backed up data, including its contents and accuracy.
4. **CLIENT DATA:** Panatech does not assume any responsibility for the integrity of Client data, regardless of any hardware or software maintenance contracts in effect, or programs written regarding backup.
5. **INTELLECTUAL PROPERTY:** Panatech retains all rights to the intellectual property of its custom software. In addition, Panatech may leave certain software (editors, utilities, libraries, etc.) on the Client hardware, which nonetheless remain the exclusive property of Panatech. Certain methodologies and operations may be regarded as trade secrets and will not be divulged to the Client.
6. **INTERCOMPATIBILITY:** Panatech makes no claims or guarantees about the compatibility or functionality of hardware or software components. Time spent in an attempt to get any of Client's hardware or software to work with any other hardware or software is billable. Even if covered by Maintenance Contract, installation and configuration of software is not included (unless explicitly stated otherwise).
7. **ELECTRICAL POWER AND ENVIRONMENT:** Client has must for provide clean, reliable power to their computers, as well as a clean environment (e.g., free from static, dust, dirt, vibration, animal or insect infestation, etc.). This usually requires a battery UPS on the server and active line conditioners on the workstations. Client must ensure that all electrical outlets are fully grounded.
8. **PAYMENT TERMS:** Client shall pay the amount invoiced, when due, time being of the essence. Unless otherwise specified, payment terms are Net 30 Days. A service charge of 1.5% per month, but not to exceed the highest amount lawfully allowed by contract in this state, may be made on all sums which have not been paid within 60 days from invoice date. Client agrees to promptly pay any such service charges. Any claim by Client of inadequate performance or service related to said invoice must be presented in writing to Panatech within 30 days of invoice.
9. **SECURITY INTEREST:** Client hereby grants Panatech a security interest and lien in and to the goods delivered to Client as security for the repayment of the purchase price hereof. Client agrees that, upon Panatech's request, Client shall execute and deliver financing statements covering such goods and that Panatech may file such financing statements in any appropriate governmental office. Should Client fail to execute said financing statement promptly upon request, Panatech is granted a power of attorney to execute and file such financing statements on behalf of Client.
10. **LIMITATION OF LIABILITIES:** In no event shall Panatech be liable for more than the amounts paid to us by Client for services rendered relevant to the complaint, in the 12 months preceding the complaint.
11. **PERSONAL:** Panatech's Errors and Omission Insurance policy is strictly limited to commercial services, as defined in our Protection Plan. Therefore, we cannot provide even 'good will' advice or assistance not directly contracted with Panatech, notably individuals that we would otherwise be happy to 'do a favor' for. Even 'suggestions' or 'recommendations' would constitute 'support', and a violation.
12. **COVENANT NOT TO COMPETE:** Under no circumstances may the Client contract or deal with any of Panatech's employees or independent contractors, for one year from the date of separation of any employee or contractor from Panatech. Violations are punishable by a fee of \$75,000.00.
13. **WARRANTIES:** Panatech assigns its rights to Client under any warranty agreements covering the hardware and software which may exist between Panatech and its suppliers. CLIENT RECOGNIZES THAT ALL HARDWARE AND SOFTWARE IS SOLD AS IS AND THAT ALL HARDWARE & SOFTWARE IS SOLD WITHOUT WARRANTY OF ANY KIND - EXPRESSED OR IMPLIED - INCLUDING MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND THAT PANATECH IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR ECONOMIC LOSS ARISING OUT OF OR RELATED TO HARDWARE, SOFTWARE, CUSTOMIZATION OR TRAINING PROVIDED. CLIENT RECOGNIZES THEIR RESPONSIBILITY TO TEST ALL PROGRAMS BEFORE RELYING ON THEM.
14. **ATTORNEY FEES:** If it is necessary for Panatech to institute legal proceedings against Client to enforce the terms of this contract, Panatech shall be entitled to recover from Client its reasonable attorney's fees plus all other legal and court costs.
15. **GOVERNING LAW:** This Agreement shall be governed by the laws of the State of Illinois. In action or suit to enforce any right or remedy under this agreement or to interpret any provision of this Agreement

Printed Name _____

Signature _____

date _____