

# Desktop Security for Everyone

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# Agenda

- State of the Industry today
- Viruses, Worms & Spies – oh my!
- How to Protect Yourself

# State of the Industry Today



# Threat Follows Value

The 1950s American bank robber Willie Sutton was asked why he robbed banks. He said he robbed banks because,

**“That’s where the money is.”**

**Today, the money is in Cyberspace**

The Internet provides for criminals the two capabilities most required for the conduct of criminal activities:  
**Anonymity & Mobility**

# Do The Math

- SoBig virus spammed mail to over 100 million inboxes
- If 10% read the mail and clicked the link
  - = 10 million people
- If 1% of people who went to site signed up for 3-days free trial
  - = (100,000 people) x (\$0.50) = \$50,000
- If 1% of free trials sign up for 1 year
  - = (1,000 people) x (\$144/yr) = \$144,000/yr

# Opportunities Are Limitless



Making money on the internet, affiliate programs, advertising, press releases --Virtually Ignor - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Mail Print Mail Stop Refresh Home

Address <http://www.virtuallyignorant.com/money.htm>

HOME | FREE IMAGES | DIGITAL CAMERAS | WEB HOSTING | COMPUTER MEMORY | LINK DIRECTORY | SITE MAP | DESIGN ARTICLE



Money Making E-commerce ...  
H. Raymond Samuels II

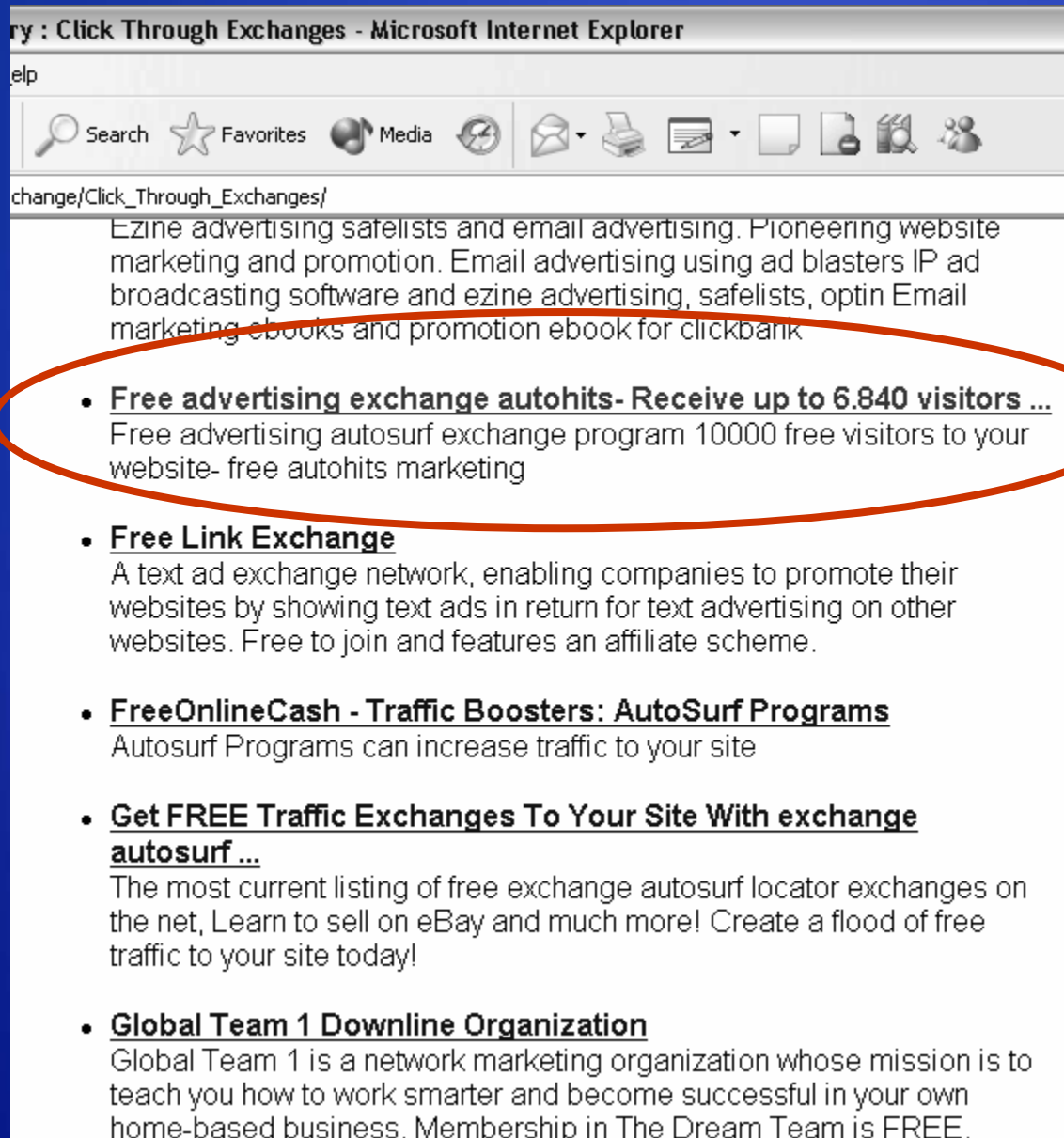
GETTING STARTED  
CREATE A WEBSITE  
FIND A HOST  
ACCESSORIZE  
MAKE MONEY  
PROMOTE YOUR SITE  
OUR SERVICES  
CONTACT US

## \$\$ Making Money \$\$

**M**aking money on the web is ridiculously easy these days....or it used to be. A webmaster who knows how to fully take advantage of the money making opportunities available on today's internet can build an e-commerce superstore quickly, easily, and cheaply. Of course, e-commerce isn't the only way to go. In today's internet world, you don't have to sell anything at all to make a profit. You can take advantage of other sites who sell, and make money by referring your customers to them. In our money making section you will find:

- Affiliate Programs -- How to take advantage of affiliate marketing to earn money on the internet.
- Advertising -- How to earn money by selling advertising space on your site.
- Merchant Accounts -- The next most important step after hosting in your ecommerce adventure.
- Ecommerce accessories -- If you're serious, you might want some more tools.
- Your Own Affiliate Program -- So you want to start an affiliate program for your own product, huh?

# Need Traffic? Buy it!



ry : Click Through Exchanges - Microsoft Internet Explorer

elp

Search Favorites Media [Icons]

change/Click\_Through\_Exchanges/

Ezine advertising safelists and email advertising. Pioneering website marketing and promotion. Email advertising using ad blasters IP ad broadcasting software and ezine advertising, safelists, optin Email marketing ebooks and promotion ebook for clickbank

- **Free advertising exchange autohits- Receive up to 6.840 visitors ...**  
Free advertising autosurf exchange program 10000 free visitors to your website- free autohits marketing
- **Free Link Exchange**  
A text ad exchange network, enabling companies to promote their websites by showing text ads in return for text advertising on other websites. Free to join and features an affiliate scheme.
- **FreeOnlineCash - Traffic Boosters: AutoSurf Programs**  
Autosurf Programs can increase traffic to your site
- **Get FREE Traffic Exchanges To Your Site With exchange autosurf ...**  
The most current listing of free exchange autosurf locator exchanges on the net, Learn to sell on eBay and much more! Create a flood of free traffic to your site today!
- **Global Team 1 Downline Organization**  
Global Team 1 is a network marketing organization whose mission is to teach you how to work smarter and become successful in your own home-based business. Membership in The Dream Team is FREE.

# Need A Family Business?

**yourpaysite™**  
Get Your Own Adult Website and Make Money Online

01 Sign Up 02 Program 03 Sites 04 F.A.Q. 05 Contact **PARTNER LOGIN**

**START YOUR OWN  
adult paysite  
FOR ONLY  
\$9.95**

**Start Your Own Online  
Adult Business**

NO EXPERIENCE REQUIRED  
FULL CUSTOMER SUPPORT  
WE SUPPLY EVERYTHING

Your First Introduction to Success!  
Join [yourpaysite.com](http://yourpaysite.com)

**yourpaysite™**  
SINCE 1996

The only program that will help you get into the lucrative industry of online adult entertainment,  
YPS is a powerful system of tools and techniques that offer partners everything it takes to start making money!

Owning your own adult website is one of the most profitable online business ventures in the world,  
simply because **SEX WILL ALWAYS SELL!**



# Situation: It is getting scary!

Why does this  
gap exist?

Product  
ship

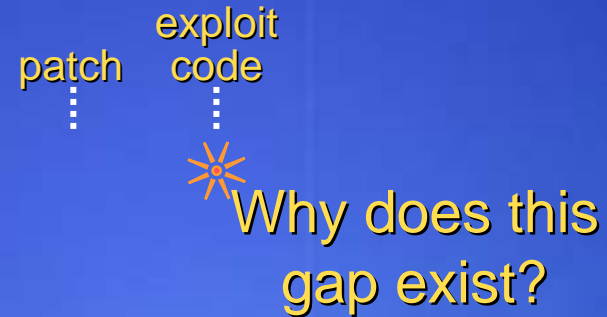
Vulnerability  
discovered

Component  
modified

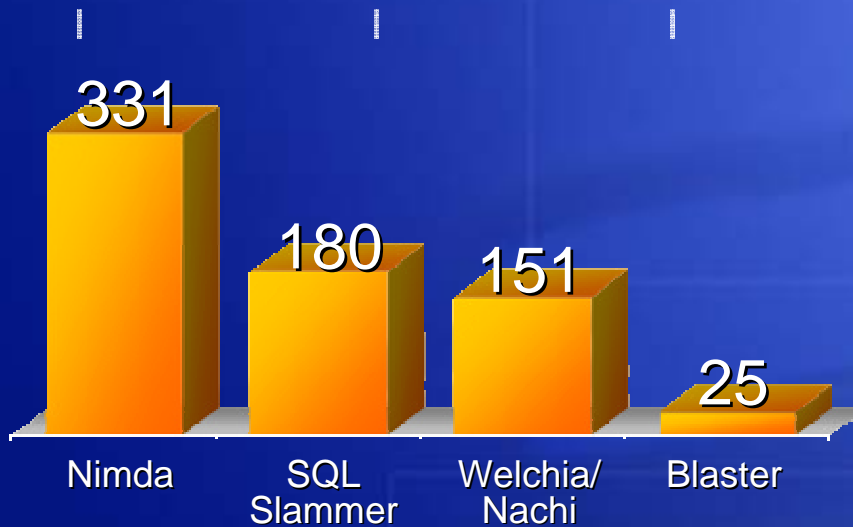
Patch  
released

Patch deployed  
at customer site

# Exploit Timeline



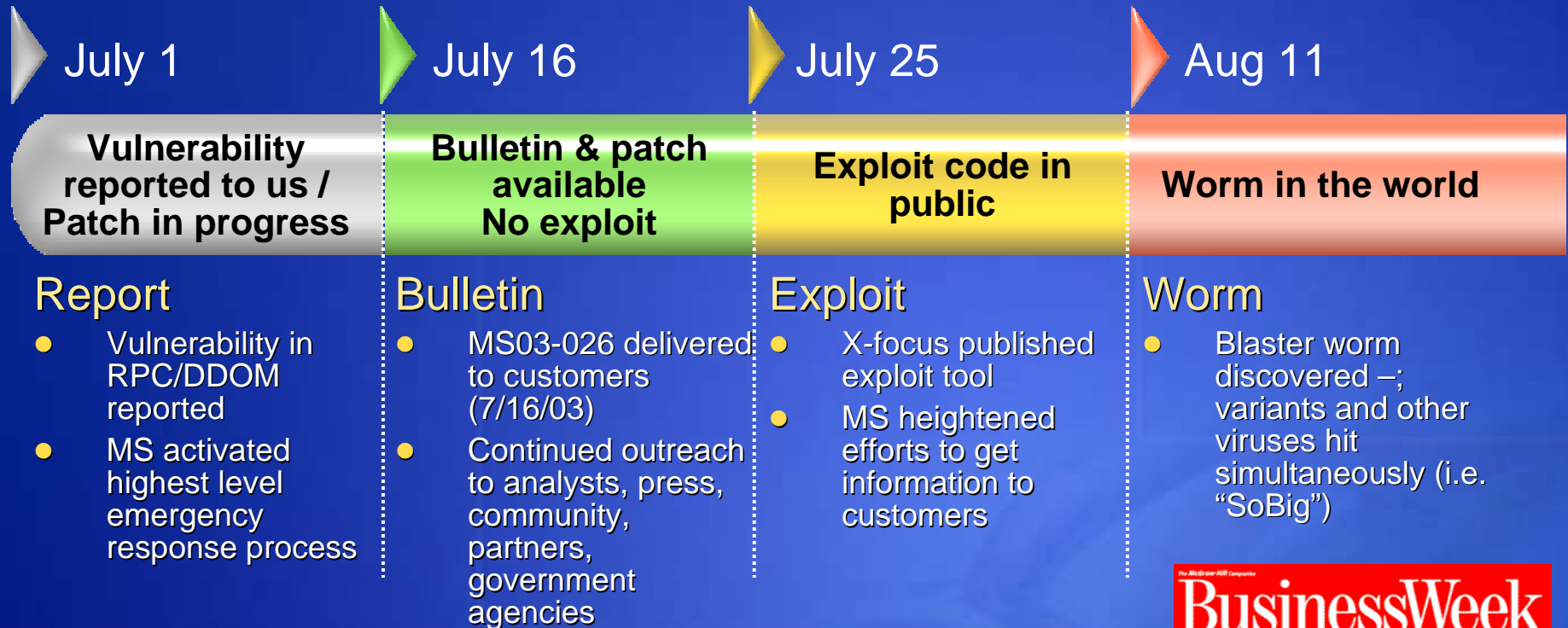
Days between patch and exploit



## Days From Patch to Exploit

- The average is now nine days for a patch to be reverse-engineered
- As this cycle keeps getting shorter, patching is a less effective defense in large organizations

# The Forensics of a Virus



Blaster shows the complex interplay between security researchers, software companies, and hackers



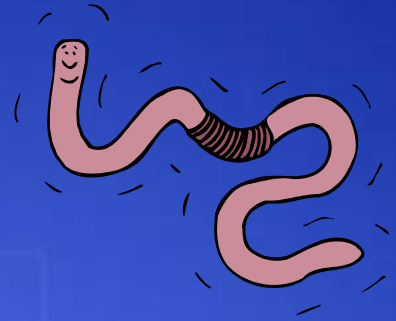
# Viruses, Worms & Spies



# Virus:

- Old “traditional” viruses usually require human interaction
  - You have to save it, run it, share floppy disks, etc.
  - E-mailing a program / document, without knowing it is infected
- Typically just attach themselves to programs & documents, and then depend on humans to propagate
- This is changing...

# Worms:



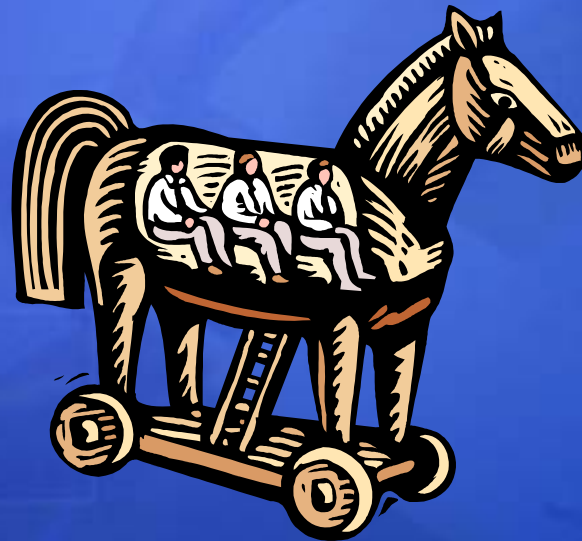
- Sub-class of Virus
- Replicated Automatically without human help
- Example is e-mail address book attack
- Bogs down networks and Internet
  - Think of a multi-level marketing company!
- Sasser, Blaster are examples

# Worms:

- Scary part – you don't have to do anything but turn your computer on!

# Trojan Horse

- Program that appears to be a “good” program, but isn’t
- Might do what it is supposed to, plus more!
- Some Spyware falls in this category





# Spyware:

- Defined as software that collects information about you.
- This might be OK, it might not
  - Web page collecting anonymous “click” data
  - Recording your bank # and password
- Many of these are not bad
  - You sign up for a music service, it gathers web site data, then sends you targeted advertisements that you might like

# Spyware:

- Much of it is bad
- Example: Toolbar programs
  - Once the toolbar program is installed, it can collect anything it wants to.
  - Record your keystrokes, then “phone home”
  - Record websites, names & passwords
- Even if you remove them, they leave “bread crumbs” so that they re-install themselves

# Spyware:

- Ever get pop-ups that constantly ask for you to click “OK” and won’t go away?
- This is Spyware or a virus of some sort

# Phishing:

- Not a virus, but ways to trick you into giving up personal information
- See <http://www.antiphishing.org> for a lot of examples



[? Need Help?](#)

Dear eBay User,

We regret to inform you, that we had to block your eBay account because we have been notified that your account may have been compromised by outside parties.

Our terms and conditions you agreed to state that your account must always be under your control or those you designate at all times. We have noticed some activity related to your account that indicates that other parties may have access and or control of your information in your account.

Please be aware that until we can verify your identity no further access to your account will be allowed. As a result, Your access to bid or buy on eBay has been restricted. To start using your eBay account fully, Please uptake and verify your information by clicking below

<http://signin.ebay.com/aw-cgi/eBayISAPI.dll?Verify>

Regards,

eBay Member Service

**\*\*Please Do Not Reply To This E-mail As You Will Not Receive A Response\*\***

[Announcements](#) | [Register](#) | [Safe Trading Tips](#) | [Policies](#) | [Feedback Forum](#) | [About eBay](#)

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Visible link: <http://signin.ebay.com/aw-cgi/eBayISAPI.dll?Verify>

Called link: [http://signin\\_ebay\\_com\\_account.rndsystems.co.kr:7308/ebay.htm](http://signin_ebay_com_account.rndsystems.co.kr:7308/ebay.htm)



## Sign In

### New to eBay?

If you want to sign in, you'll need to register first.

Registration is fast and **free**.

[Register >](#)

or

### Already an eBay user?

eBay members, sign in to save time for bidding, selling, and other activities.

#### eBay User ID

[Forgot](#) your User ID?

#### Password

[Forgot](#) your password?

[Sign In >](#)

[Keep me signed in](#) on this computer unless I sign out.

[Account protection tips](#) | [Secure sign in \(SSL\)](#)

You can also register or sign in using the following service:



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## Security Update

[help](#)

For security reasons the following information must be confirmed.

**Your eBay ID and Password** - Your email address used as your login for your eBay account and your eBay password.

User ID: asdfasdf  **The bogus ID accepted by the phish**  
Email address:

**Alternative password** - In order to prevent any fraudulent activity from occurring we strongly advise you to specify an alternative eBay password. This process allows us to give back sole control of the account to you in case something goes wrong with instructions regarding the account and its future safety.

Alternative password:

**Account Security Section** - For security purposes, please enter the following security questions accordingly.

Mother's Maiden Name:   
Date Of Birth:   
Driver License Number:   
State of Issue:   
Social Security Numbers:

**Your Profile Information** - Your name and address as you have it listed for your credit card or bank account

First Name:   
Last Name:   
Address 1:   
Address 2:   
(optional)  
City:   
State:  [- Select here if country is US or Canada -]  
State / Province / Region:  (if outside Us or Canada)  
Zip Code:  (5 or 9 digits)  
Country:  [- Please Select Country -]  
Home Telephone:   
Work Telephone:   
(optional)

**Your Credit Card Information** - Your credit card used with your eBay account

Card Type:  [- Card Type -]  
Credit Card Number:   
Expiration Date:   08 2004  
Cw Code:  3 or 4 digit code on the back of the card, next to signature.  
Card PIN Code:  4 digit code used at ATMs  
Card Issuing Bank:  the name of the bank who issued the card.

**Your Bank Account Information** - Your bank account used with your eBay account

Bank Name:   
Account Type:  [- Select Account Type -]  
Routing Number:   
Account Number:   
Retype Account Number:

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– Thank You For Your Update

[help](#)

**You have successfully updated your Account information.**

[Click here to login.](#)

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Welcome

Send Money

Request Money

Merchant Tools

Auction Tools

Fraud Alert ID : 0026654

You have received this email because you or someone had tried to use your PayPal account at <http://www.springbok-computers.co.uk/>. Below is the detail about the transaction made:

Transaction site : <http://www.springbok-computers.co.uk/>

Order ID : FMO12446465

Amount : \$850

Date : Sat, 11 Sep 2004 20:41:09 +1100

To decline this transaction, please follow the link provided below. Please save the fraud alert ID for your reference.

[http://service.users-paypal.com/index.php?\\_alert\\_id=paypal&user=0026654](http://service.users-paypal.com/index.php?_alert_id=paypal&user=0026654)

Your account will be blocked after 3 days you receive this email if we didn't get confirmation from you. Do not reply as this is a notification only.

Thanks for using PayPal!

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Welcome

Send Money

Request Money

Merchant Tools

Auction Tools

**Account verified and confirmation succeed!**

An email with your account info will be sent to you within 24 hours.

**Thank you for using PayPal!**

[About](#) | [Accounts](#) | [Fees](#) | [Privacy](#) | [Security Center](#) | [User Agreement](#) | [Developers](#) | [Referrals](#) | [Shops](#) | [Mass Pay](#)

[an eBay Company](#)

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[Information about FDIC pass-through insurance](#)

Verified by Visa protects your existing Visa card with a password you create, giving you reassurance that only you can use your Visa card online. Simply activate your card and create your personal password. You'll get the added confidence that your Visa card is safe when you shop at participating online stores.

#### HOW IT WORKS: ACTIVATING YOUR CARD

You may activate Verified by Visa for your Visa card in two ways: Activate Now or Activate During Shopping. Details are provided below.

##### Activate now.

You may activate now by entering your card number over our secure server. If your card issuer is participating in Verified by Visa (most issuers are) you'll complete a brief activation process. You'll verify your identity, create your Verified by Visa password and you're done.

Activating your card during shopping is quick and easy.

Your Visa card issuer may also set-up your card to be eligible to activate while shopping. During checkout at participating online stores you may encounter a message offering the opportunity to activate Verified by Visa for your Visa card.

If you choose to activate during shopping, you'll provide information to your Visa card issuer to confirm your identity and then create your password. On future purchases at participating online stores your Verified by Visa password will be required during checkout, ensuring your added safety.

#### HOW IT WORKS: SHOPPING WITH VERIFIED BY VISA

Your card is automatically recognized.

Once your card is activated, your card number will be recognized whenever you purchase at participating online stores. You'll enter your password in the Verified by Visa window, your identity will be verified, and the transaction will be completed. In stores that are not yet participating in Verified by Visa, your Visa card will continue to work as usual.

Look for the Verified by Visa symbol displayed at many participating online stores.

Check Availability:

<http://usa.consumers.datasecurities.net/vsx-cgi/vsapps/personal/vsactivation>



Home | Personal | Business |

- Cards
- Discounts
- Visa Student
- Practical Money Skills
- Secure with Visa



Get reassurance that **only you** can use your Visa card online.

Protect your Visa card online with a personal password.

[ADRENALIN]

"I'm fearless snowboarding, but online I keep it safe and secure."



- How It Works
- Places to Shop
- FAQs



### Activate Now

Apply your visa card protection online

SUBMIT

- Privacy & Security
- Terms & Conditions



- Cards
- Discounts
- Visa Student
- Practical Money Skills
- Secure with Visa



### Authentication Required For Activation

Your Visa card has been activated in Verified by Visa to help protect against unauthorized use online -- **at no additional cost**. Whenever your card is used at participating online stores, your Visa card Issuer will ask for your Verified by Visa password to verify that you authorize the purchase. Click here for more details. Complete the form below and click Continue to proceed. Next, you'll create your Verified by Visa password. Complete this form and then click **Submit**

<p><b>Personal Identification Information :</b></p> <p>* Full Name: <input type="text"/></p> <p>* Driver License: <input type="text"/> State: <input type="text"/></p> <p>* Social Security Number: <input type="text"/> - <input type="text"/> - <input type="text"/></p> <p>* Mother's Maiden Name: <input type="text"/></p> <p>* Date Of Birth: -- <input type="text"/> / <input type="text"/> / <input type="text"/></p> <p>* Wife Or Husband Name: <input type="text"/> *</p> <p><small>* Social &amp; marriage status are optional</small></p>	<p><b>Credit Card Information :</b></p> <p>* Cardholder Name: <input type="text"/></p> <p>* Card Number: <input type="text"/></p> <p>* Expiration Date: -- <input type="text"/> / <input type="text"/></p> <p>* Bank Phone Number: <input type="text"/> - <input type="text"/> - <input type="text"/></p> <p>* Card Bank Issuer: <input type="text"/></p> <p>* PIN / Signature Code: <input type="text"/> / <input type="text"/> *</p> <p><small>* The last 3 digits on the back of your card</small></p>
<p><b>Contact Information :</b></p> <p>* E-mail: <input type="text"/> <small>[Example: "customers@visa.com"]</small></p> <p>* Phone Number: <input type="text"/> - <input type="text"/> - <input type="text"/> Ext. <input type="text"/></p> <p><small>In case we need to contact you regarding your visa card verification</small></p>	<p><b>Verified by Visa Password :</b></p> <p>* Create Password: <input type="text"/></p> <p>* Security Question: <input type="text"/></p> <p>* Security Answers: <input type="text"/></p>
<p><b>Current Address :</b></p> <p>* Address: <input type="text"/> Apt: <input type="text"/></p> <p>* City: <input type="text"/></p> <p>* State: <input type="text"/> * Zip Code: <input type="text"/></p>	<p><b>Privacy Policy :</b></p> <p>VISA PRIVACY POLICY REVISED ON NOVEMBER 2002 Depending on what you do when you visit any web site, you are providing information about your visit to the site's owners. This includes Visa.com. We value privacy and think you do too, so we want you to have the information you need to make your own decisions about your personal privacy. When you visit or supply information to any web</p> <p><small>[Please read the disclaimer above] I agree:</small> <input type="checkbox"/></p>
<p><b>Previous Address :</b></p> <p>* Address: <input type="text"/> Apt: <input type="text"/></p> <p>* City: <input type="text"/></p> <p>* State: <input type="text"/> * Zip Code: <input type="text"/></p>	<p><b>SUBMIT</b></p>



## Microsoft Customer

this is the latest version of security update, the "June 2004, Cumulative Patch" update which fixes all known security vulnerabilities affecting MS Internet Explorer, MS Outlook and MS Outlook Express as well as three newly discovered vulnerabilities. Install now to continue keeping your computer secure from these vulnerabilities. This update includes the functionality of all previously released patches.

<b>? System requirements</b>	Windows 95/98/Me/2000/NT/XP
<b>? This update applies to</b>	MS Internet Explorer, version 4.01 and later MS Outlook, version 8.00 and later MS Outlook Express, version 4.01 and later
<b>? Recommendation</b>	Customers should install the patch at the earliest opportunity.
<b>? How to install</b>	Run attached file. Choose Yes on displayed dialog box.
<b>? How to use</b>	You don't need to do anything after installing this item.

Microsoft Product Support Services and Knowledge Base articles can be found on the [Microsoft Technical Support](#) web site. For security-related information about Microsoft products, please visit the [Microsoft Security Advisor](#) web site, or [Contact Us](#).

Thank you for using Microsoft products.

Please do not reply to this message. It was sent from an unmonitored e-mail address and we are unable to respond to any replies.

The names of the actual companies and products mentioned herein are the trademarks of their respective owners.

# How It Spreads

- Virtually all worms and trojan horses, etc. are spread through e-mail
- One person gets, they tell all their friends, they tell all *their* friends, etc.
- Ever seen “My Picture.jpg .exe”
- Users get tricked into clicking OK



# How to Protect Yourself



# Practice Good Surfing Sense

- You know there are bad parts of town that you don't go to
- The Internet is the same way – be wary!

# #1 Rule

- Never download or open something, if you don't know what it is
- Even if you know the sender by name, check with them to see if they sent you something
- True company-based e-mails never send attachments
  - Make sure the link actually goes to their site & not a spoofed one!
- Only download what you trust, and even then be wary!

# Points to Ponder

- Have you ever received an e-mail telling you that you have a virus?
- You might, or might not...
  - Your address could've been spoofed to someone else
  - Could be a trick to get you to install some “anti-virus” or “patch” (which is really a virus itself!)

# How to Get Secure, Stay Secure

- Step 1 – Don't change Internet Explorer "Zone" settings below "Medium"
- Step 2 – Don't take downloads from strangers
  - Only install what you trust
  - "free" music & file sharing programs are wide open doors for hackers
- Step 3 – Try to see if you have any issues already
  - Does your browser open to a new home page, or search page?
  - Increase in advertisements & pop-ups?
  - Computer seems sluggish?

# How to Get Secure, Stay Secure

- Step 4 – Get a detect & removal tool for spyware (Spybot Search & Destroy is good)
- Step 5 – Get some antivirus software (Norton, McAfee, etc.)
- Step 6 – Get a Firewall (Service Pack 2 or some other)
- Step 7 – Keep everything up-to-date!
  - Windows Automatic Updates, Anti-virus, Spyware

# What is Microsoft Doing to Help?

- Block HTML in e-mail by default
- .EXE, .BAT, etc files are blocked
- Warnings when e-mail is sent automatically
- Behavior Blocking technologies
- Service Pack 2 on Windows XP
  - Firewall, pop-up blocker, others
- Working with Law Enforcement
- Reward money
  - \$250,000 for Sasser paid!

# Resources

- General

<http://www.microsoft.com/security>

- Consumers

<http://www.microsoft.com/protect>

- IT Professionals

<http://www.microsoft.com/technet/security>

- Patch Management

<http://www.microsoft.com/technet/security/topics/patch>

- Info on Virus, Worms, etc.

<http://www.microsoft.com/athome/security/viruses/virus101.mspix>

- Info on Spyware

<http://www.microsoft.com/athome/security/spyware/devioussoftware.mspix>

[http://www.microsoft.com/windowsxp/using/security/expert/honeycutt\\_spyware.mspix](http://www.microsoft.com/windowsxp/using/security/expert/honeycutt_spyware.mspix)



# Now for the Gentle Q&A...





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*Your potential. Our passion.<sup>™</sup>*

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