

Avoiding Viruses and Malware

STAYING SAFE ONLINE

What is a Virus

- ◎ Software with malicious intent
- ◎ Meant to:
 - Steal Identity
 - Steal personal data (passwords, bank account info, credit card numbers)
 - Trick you into buying something (antivirus software)
 - Damage data or Operating System
- ◎ Often propagates itself

Malware vs. Virus

- ⦿ Virus meant to do actual harm
 - Steal money
 - Destroy data
 - Damage network
- ⦿ Malware meant to solicit
 - Buy our AV product
 - Buy these addons
 - Get this product upgrade

Where do they come from

- ⦿ Email
 - Attachments
 - Pictures
 - Links
- ⦿ Websites
- ⦿ Third party software
 - Toolbars
 - Emoticons

What do they look like

- Most recent is fake Anti Virus Software
- Website will pop up a new window saying you are infected
- ****Click here to clean your computer!****
- Clicking anywhere usually installs program
- You are then notified that you have to purchase full program to fully clean your computer

AntiVirus 2010/2011

The screenshot displays the Avast! Antivirus 2010 user interface. The window title is "Antivirus 2010" and the license key is "No license key". The main heading is "Antivirus 2010" with the tagline "Protects your computer from malware".

My Protection
Protection of your computer

Scan my Computer
Files and computer scan

Update Center
Updating antivirus databases

My Settings
Protection preferences

Activate your copy of Antivirus 2010 and unlock all features

My protection status
Antivirus program protects your computer against malicious programs and unauthorized access and provides security access to the network

- Files and private data** (ENABLED)
Documents, presentations, logins and passwords, any personal info, and more
- System and applications** (ENABLED)
Operations system files and applications installed on your PC
- Online activity** (ENABLED)
Browsing web sites, banking and online shopping, email and instant messaging

Quick tasks: **System Scan** **Update Now**

PC is threatened! [Trial Licence, Threat Detected!] 54 threats detected and 0 bad files found **Fix Now!**

AntiVirus 2010/2011

The screenshot displays the Avast! Antivirus 2010 user interface. The window title is "Antivirus 2010" and the license key is "No license key". The main area shows a scan in progress: "Scanning your computer (Scanned - 39%)".

My Protection
Protection of your computer

Scan my Computer
Scanning system (39%)

Update Center
Downloading updates (25%).

My Settings
Protection preferences

Activate your copy of Antivirus 2010 and unlock all features

Scanning your computer (Scanned - 39%)

Started:	15.10.2010 18:50	Scanned objects:	5587
Duration:	00:01:37	Threats detected:	3
Remain:	00:01:58	Suspicious files:	0

Last scanned object:
c:\System Volume Information_restore{B67800AA-8B12-4BCC-BD37-6EAFE10C8519}\RP5

Path	Detected	Status
c:\Program Files\Internet Explorer\iexplore.exe	AdWare.Redirect.xt	Trojan detected
c:\Program Files\Outlook Express\msoe.dll	Email.Win32.Merond	Trojan detected
c:\Program Files\Windows NT\dialer.exe	Backdoor.Dialer.W32	Trojan detected

Buttons: Remove selected, Remove all, Stop scan

PC is threatened! [Trial Licence, Threat Detected!] 3 threats detected and 0 bad files found [Fix Now!](#)

AntiVirus 2010/2011

- ⦿ Pops up when visiting infected websites
- ⦿ Looks like actual Virus Scan or Windows alert
- ⦿ Is actually a webpage
- ⦿ Symptoms
 - Pop ups (continual)
 - Browser hijacking (can only visit vendor page)
 - Icon in system tray (warning message)

Removal of AntiVirus 2010/2011

- ⦿ EXTREMELY difficult to remove
 - It buries itself very deeply into the computer system
- ⦿ Must clean computer and registry
- ⦿ Not recommended for average user
- ⦿ Once disabled, clean with anti virus program or malware removal program
- ⦿ Each version is different and requires different steps

How to Avoid Them

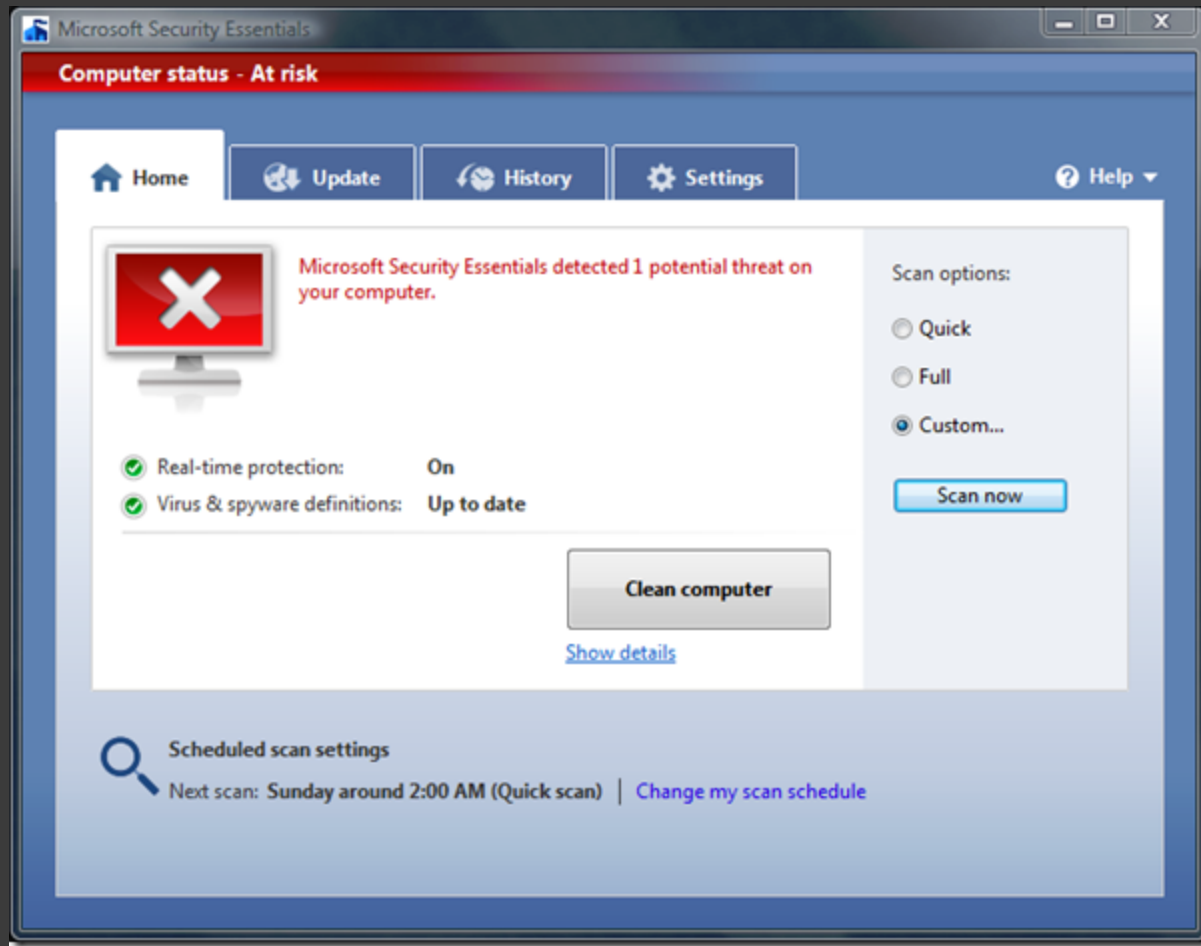
- ⦿ Be cautious about what websites you visit
 - Go to well known sites before risky sites
 - Amazon over joesshoesforless.com
- ⦿ If you see the popup, touch nothing!
 - If at work, call EdIT right away
 - If at home, press <ALT> + F4 and reboot
- ⦿ Scan computer for viruses and malware

Tools for Avoiding and Cleaning

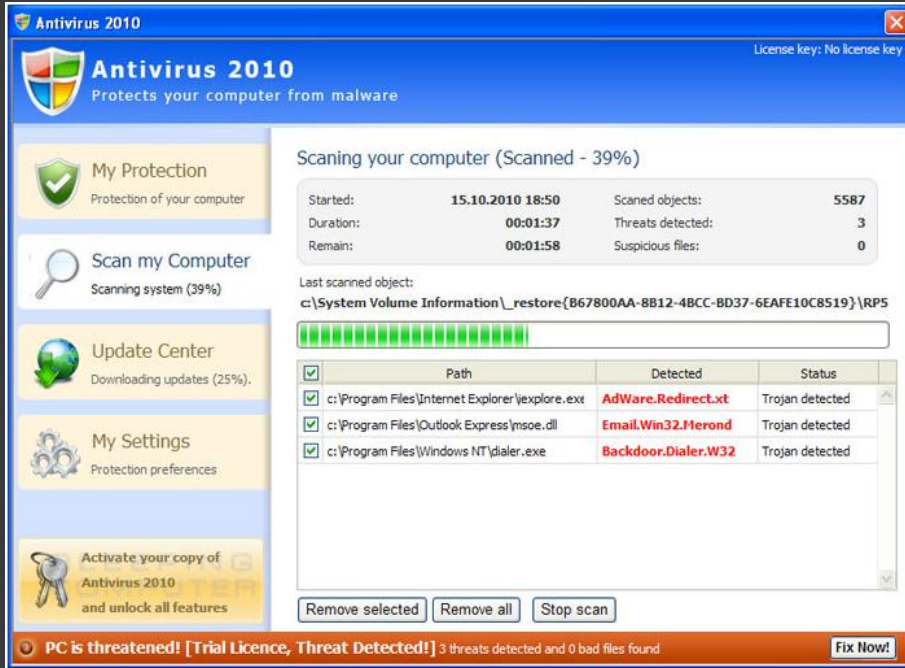
◎ Good AV software is a MUST

- Microsoft Security Essentials
(http://www.microsoft.com/security_essentials/)
- McAfee
(<http://www.purdue.edu/securepurdue/download/index.cfm>)
- McAfee Site Advisor
 - Included with McAfee Security Center
- Malwarebytes (<http://www.malwarebytes.org/>)

Microsoft Security Essentials



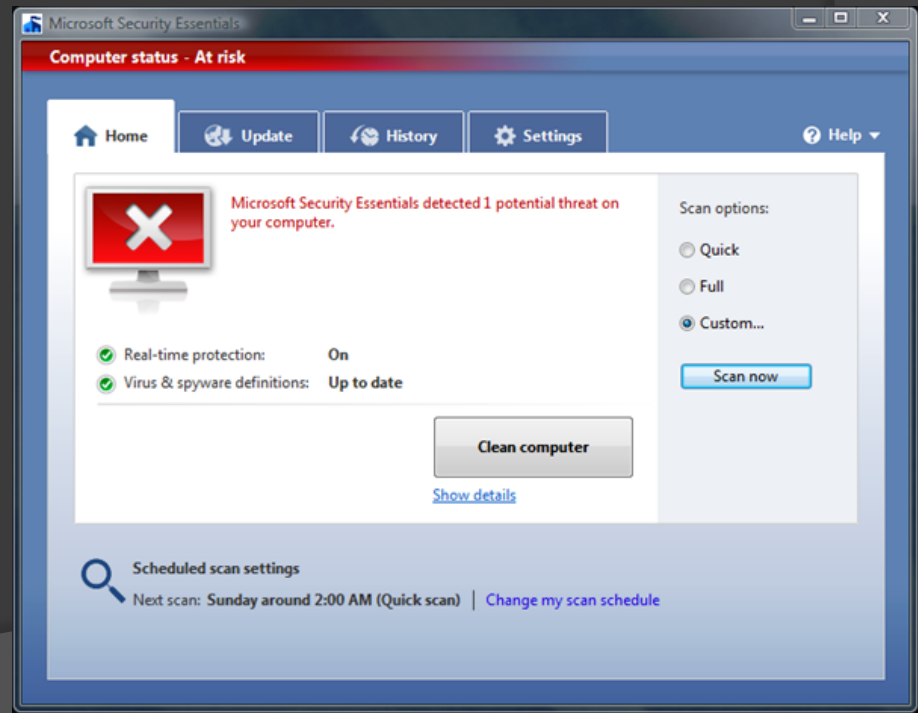
Real or Fake???



Antivirus 2010



Microsoft Security Essentials



McAfee Security Center

On-Demand Scan Progress - (Multiple Scan Items)

Scan Detection Help

Notification: Clean failed for one or more of the selected items.

Progress: [Progress Bar]

Name	In Folder	Detected As	Detection Type	Status
00000000.ie	\\Fs-pc003\C...	Cookie-207	Potentially Un...	Deleted
00000142.ie	\\Fs-pc003\C...	Cookie-207	Potentially Un...	No Action Ta...
00000000.ie	\\Fs-pc003\C...	Cookie-Yieldm...	Potentially Un...	Deleted
00000225.ie	\\Fs-pc003\C...	Cookie-Yieldm...	Potentially Un...	No Action Ta...
00000768.ie	\\Fs-pc003\C...	Cookie-Yieldm...	Potentially Un...	No Action Ta...
00001694.ie	\\Fs-pc003\C...	Cookie-Yieldm...	Potentially Un...	No Action Ta...
00001900.ie	\\Fs-pc003\C...	Cookie-Yieldm...	Potentially Un...	No Action Ta...
00002203.ie	\\Fs-pc003\C...	Cookie-Yieldm...	Potentially Un...	No Action Ta...
00002300.ie	\\Fs-pc003\C...	Cookie-Yieldm...	Potentially Un...	No Action Ta...
00002407.ie	\\Fs-pc003\C...	Cookie-Yieldm...	Potentially Un...	No Action Ta...
00000000.ie	\\Fs-pc003\C...	Cookie-Spec...	Potentially Un...	Deleted

Scanning Files Time: 0:16:47 Scanned: 14730 Detections: 100

↑ Viruses found

McAfee SecurityCenter

McAfee securitycenter

updates support help

my security index

These indices measure how secure your computer is. An index value of 10 is best, while 1 indicates a potential security risk.

My Security Index	1.4
My AntiVirus Index	1.0
My AntiHacker Index	1.0
My AntiAbuse Index	1.0
My AntiSpam Index	8.0

windows updates

Windows Updates Enabled

my service status

Specifies which McAfee services are protecting your computer.

VirusScan	Not Installed
Personal Firewall Plus	Not Installed
Privacy Service	Not Installed
SpamKiller	Protecting

about securitycenter

SecurityCenter provides simplified access to your installed McAfee products. SecurityCenter also provides a real-time external security alert system, which assesses, informs, and warns you about current security threats.

- Configure SecurityCenter
- Check for McAfee updates
- About "My Security Index"

my security center

viruscan

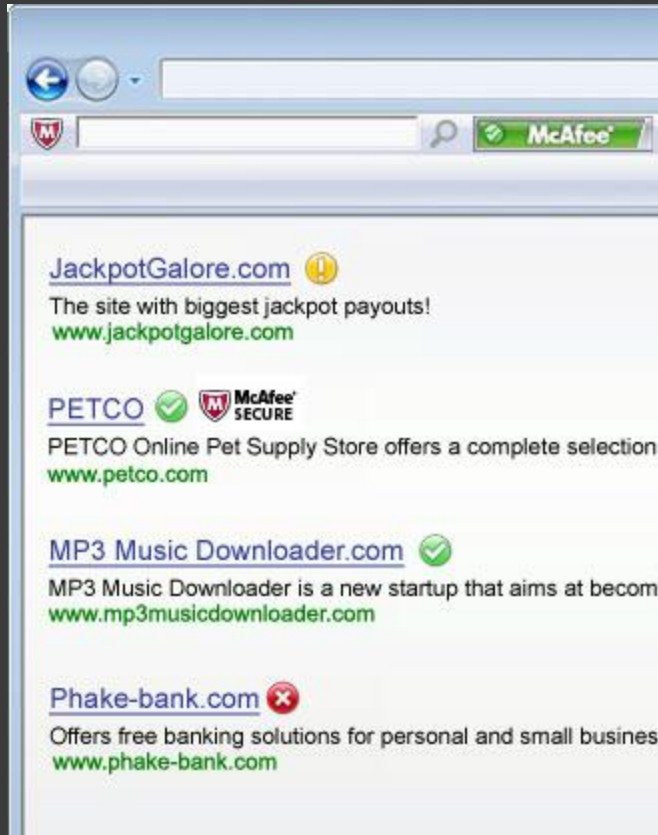
personal firewall plus

privacy service






spamkiller

McAfee Site Advisor



- Helps block risky sites



Rating Icons

-  **McAfee SECURE:** Tested daily for hacker vulnerabilities.
-  **SAFE:** Very low or no risk issues.
-  **CAUTION:** Minor risk issues.
-  **WARNING:** Serious risk issues.
-  **UNKNOWN:** Not yet rated. Use caution.

Secure Search Icons

-  **SECURE SEARCH BOX:** Worry free searching.
-  **BROWSER BUTTON:** Validates site rating.

McAfee Site Advisor

A screenshot of a Google search for "wallpapers". The search results show several links to wallpaper websites. A red-bordered McAfee SiteAdvisor warning box is overlaid on the results. The warning box contains the following text:

McAfee SiteAdvisor

Beautiful Wallpaper - free desktop wa...
beautifulwallpaper.com

Use caution.

- Linked to red sites
- 0 pop-ups
- Testing 1 download [More info...](#)

[Try / buy other McAfee products](#)

A screenshot of a Windows Internet Explorer browser window. The title bar reads "SiteAdvisor Enterprise Plus: This site is blocked - Windows Internet Explorer". The address bar shows "sacore:BlockPage.html?id=129400340038300000:1968". The main content area displays a message:

This site is blocked
medicaresoftware.net

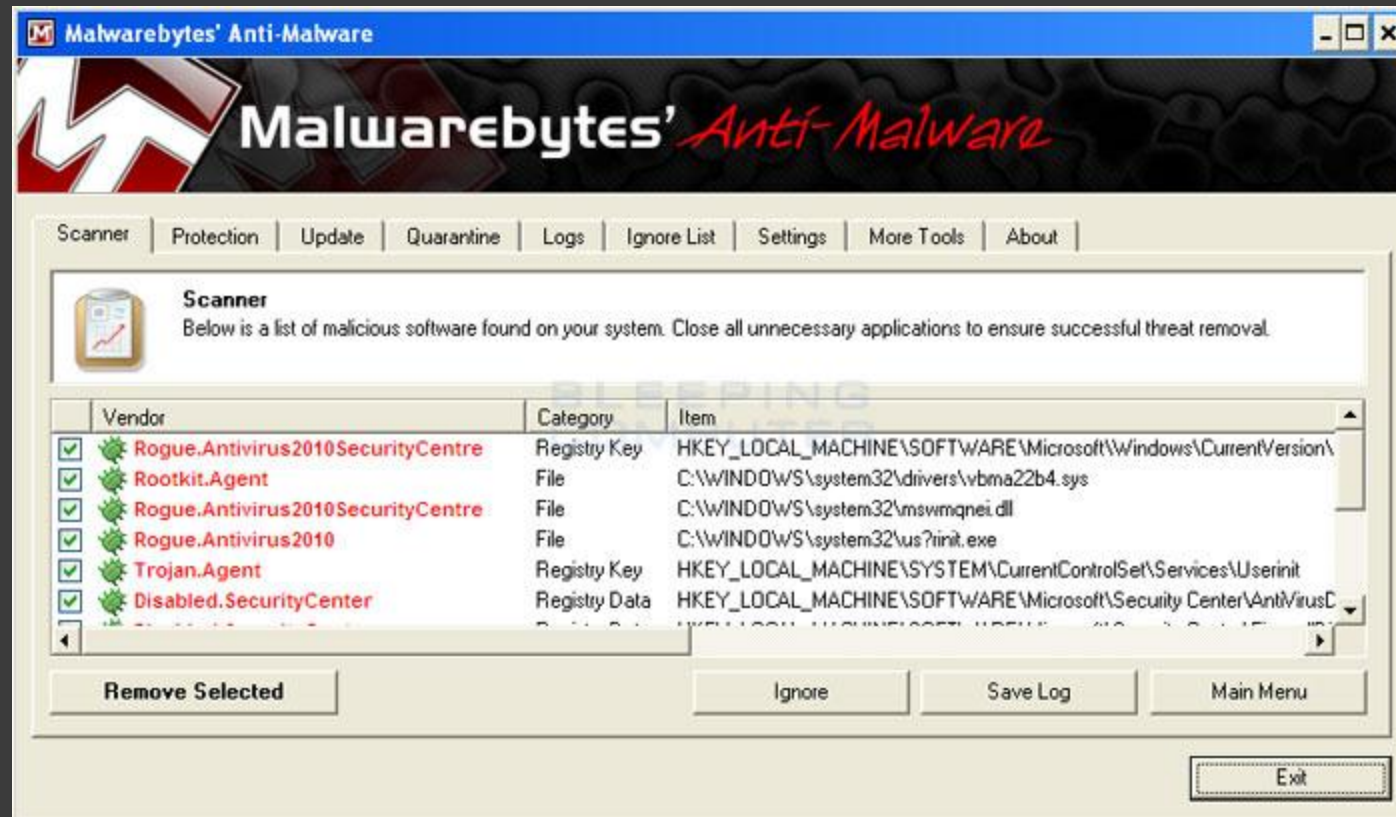
This site is being blocked due to the rating of this site
McAfee Security Rating: Red

[Cancel](#)

Powered By: **McAfee** SiteAdvisor

Malwarebytes

- Help clean computers of malware



Let's Be Careful Out There

- ⦿ The internet isn't as safe as it used to be
- ⦿ This doesn't mean we should bar the doors and cower in fear
- ⦿ Some simple steps will help us stay safe online



Good Practices

- ◎ Best defense is good judgment
 - Don't click links in email
 - Don't go to dangerous websites
 - Use programs to help protect yourself
 - Look at every screen when installing software
 - Don't just click buttons when prompted to; take your time and look at everything
 - When in doubt, ask for help or shut down