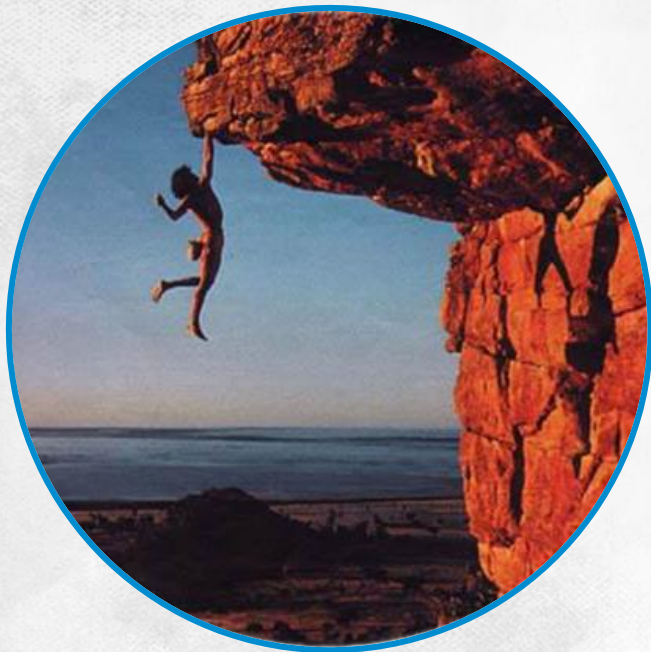




SOCIAL ENGINEERING AND ROGUE SOFTWARE



INTRODUCTION



SOCIAL ENGINEERING EFFORTS AIM

to furtively goad people into doing what another person wants them to do

Social engineering attacks bypass most security solutions

WE USUALLY FALL VICTIM TO MANIPULATION WHEN:



We're doing everyday tasks in an environment we know well



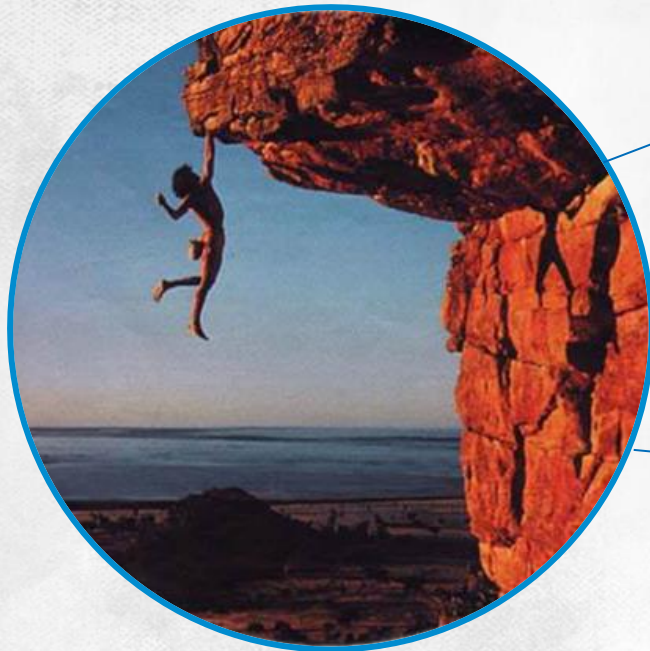
They pertain to non-typical operations: when something requires time and effort, we usually choose the simplest, most obvious solution



We rely on computer systems and software too much



INTRODUCTION



- **THE SUCCESS OF SOCIAL** engineering largely depends on attackers having obtained a large amount of data related to the victim. As people's views on privacy have undergone a radical change recently, obtaining personal information may be very easy
- **AT WWW.SOCIAL-ENGINEER.ORG** you'll find both manuals and social engineering tools

SOCIAL ENGINEERING:

manipulation tactics



GREED

(EVERY MAN HAS HIS PRICE...)

Personnel with low-paying jobs are especially susceptible to social engineering; they're people who believe they are paid less than they should be or who feel unaccepted in the workplace



DILUTING RESPONSIBILITY

(SMITH TOLD ME IT'S OKAY TO DO THAT...)

The attacker ensures the victim that the responsibility for taking or not taking a decision or action is someone else's (a co-worker's or your boss's)

SOCIAL ENGINEERING:

manipulation tactics



READINESS TO HELP

(COULD YOU GIVE ME A HAND, PLEASE?)

The attacker is a newly hired, perplexed worker, or an attractive blonde who repeatedly forgets passwords, or an elderly person who isn't technology-savvy. Adapting these roles, the attacker finds it easy to obtain confidential data or gain access to a system



RELATIONSHIP OF TRUST

(I'VE HELPED YOU, WHY CAN'T YOU DO ME A FAVOUR?)

In this scenario, the attacker helps another person solve a problem he had triggered earlier (such as re-connecting to the Internet or retrieving a service) and expects reciprocation from the victim

SOCIAL ENGINEERING:

manipulation tactics



EMOTIONAL BLACKMAIL *(YOU HAVE TO HELP ME!)*

Most of us can't leave a person in need and will help out the attacker: even if it's just because we want them to stop bothering us



FRIENDSHIP *(YOU'RE THE ONLY ONE WHO UNDERSTANDS ME...)*

First the attacker fosters a friendly relationship with the victim and then exploits this trust

SOCIAL ENGINEERING:

manipulation tactics



FEELING GUILTY

(SO YOU WON'T DO EVEN THIS FOR ME...)

When the attacker is able to make the victim feel guilty, this will make it easier to convince the victim to do as requested



READINESS TO CO-OPERATE

(LET'S DO THIS TOGETHER!)

The attacker suggests that the easiest way out of a problem (which was often caused by the attacker) is to work on it as a team

SOCIAL ENGINEERING:

manipulation tactics



FEAR (DO THIS, OR ELSE...)

Blackmailing or making the victim fear the consequences may often make him co-operate with the attacker



EXERCISE: SOCIAL

engineering attacks



SPOOFING IDENTITIES USING A SERVICE:



<http://fakenamegenerator.com>



<http://spooftel.com/>



<http://fakemytext.com/>

SOCIAL ENGINEER TOOLKIT ATTACKS:



www.social-engineer.org



Metasploit

ROGUE SOFTWARE



AN EXCEEDINGLY POPULAR

and effective social engineering attack (usually launched in large-scale campaigns that target random Internet users). FraudTools, or rogue software is the software users are tricked into launching, installing or even purchasing



THIS TYPE OF ATTACK IS EASY

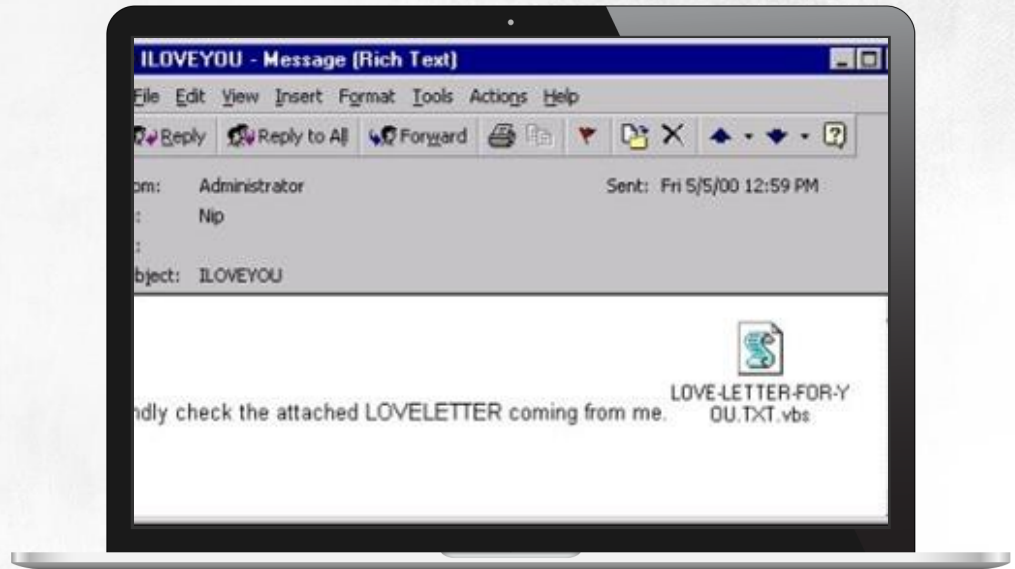
to automate. A case in point was a 2000 attack created by a hacker called Spyder, who mass-mailed email messages with a VBScript attached (VBScript LOVE-LETTER-FOR-YOU.TXT.vbs)



ROGUE SOFTWARE

✓ **OVER THREE MILLION PEOPLE** wanted to find out who's in love with them and why and opened the attachment despite not knowing the source of the email

✓ **MASS-MAILING ROGUE EMAILS** that tell recipients they have won money, received a great work proposal or request them to be their friends in a social networking site are still among the most common ways to obtain confidential information about targets



FAKE EMAILS

To file in for the processing of your prize winnings, you are advised to contact our Certified and Accredited claims agent for category "A" winners with the information below:

Name: Mr.Henk Wolter

Email: agntoffice07@aim.com

Phone: 0031 633 690 563

Fax: : 0031 847 553 129

Amsterdam . The Netherlands

You are advised to provide him with the following necessary information for vetting process which is a standard practice just to ensure that we are dealing with the right individual.

...

FRAUDTOOLS: XP ANTIVIRUS

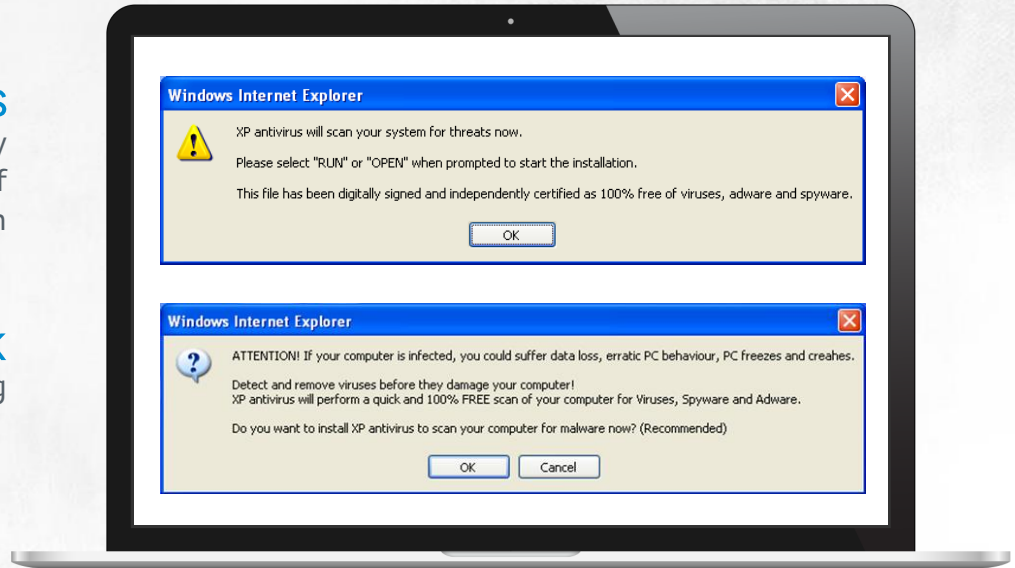
The First Warning

SOCIAL ENGINEERING ATTACKS

employing rogue antiviruses are extremely effective, as proved by the thousands of people who bought fake antivirus scanners in 2008

THE FIRST STEP OF THE ATTACK

was displaying an alarming-sounding warning message that looked like Windows messages



FRAUDTOOLS: **XP ANTIVIRUS**

The First Warning



THE WARNING WAS WRITTEN IN GOOD ENGLISH
and contained a clear, precise prompt: Detect and remove viruses before they damage your computer!



IF YOU STILL DIDN'T KNOW
what to do, the OK button was highlighted by default



WHEN YOU CLICKED OK, YOU WERE TOLD
that scanning and removal will be started in a moment, and that XP Antivirus is digitally signed, secure and independently certified as 100% free of viruses, adware and spyware

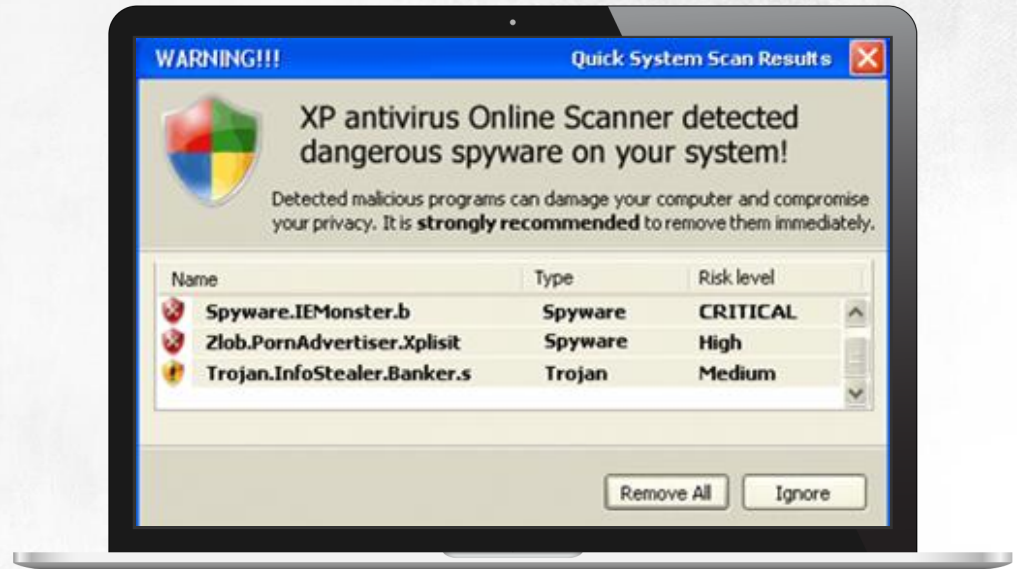
FRAUDTOOLS: XP ANTIVIRUS

You've got a problem, but we can solve it

SCANNING WAS STARTED simultaneously. In another window you could trace the progress of the scanning, even though the user did not agree to install any ActiveX controls or to download and start the antivirus

THE SCAN ALWAYS PRODUCED the same result: the computer was apparently infected with many malicious programs

THE ATTACKERS INFORMED users they could remove the malware quickly and in a secure way: they just need to agree to install XP Antivirus



FRAUDTOOLS: XP ANTIVIRUS

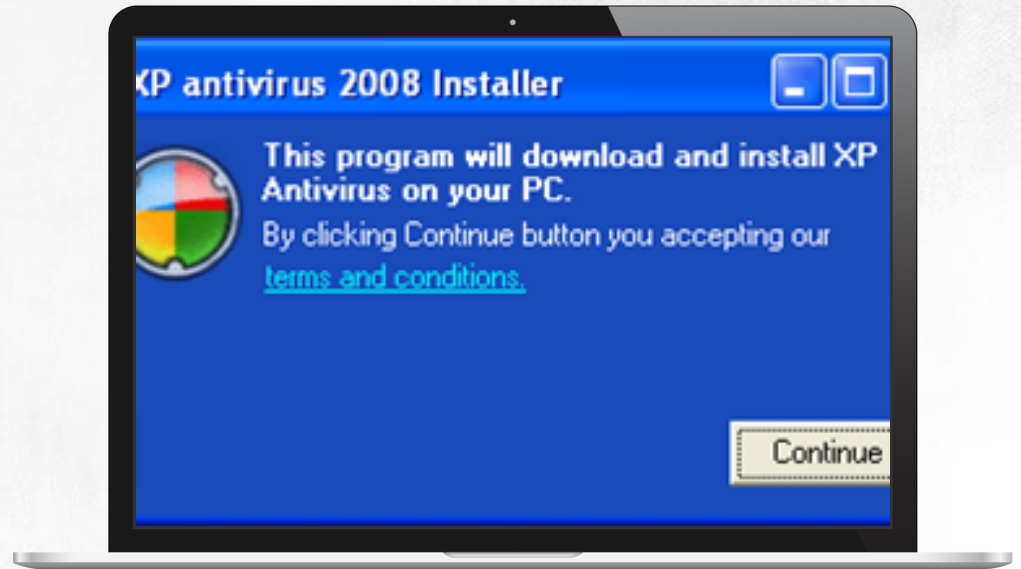
You can trust us



SO AS NOT TO RAISE any suspicions, the installer started at that point contained an icon resembling the one used by Windows Security Center and also had a Windows-compliant logo.

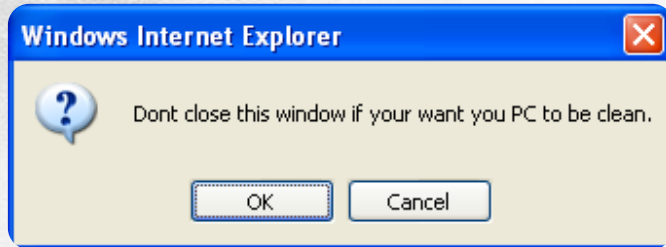


THE ATTACKERS ALSO prepared a license agreement users could (but were not forced to) accept before installing



FRAUDTOOLS: XP ANTIVIRUS

You can trust us



FRAUDTOOLS: XP ANTIVIRUS

And here's our license agreement

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FRAUDTOOLS: XP ANTIVIRUS

And here's our license agreement

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FRAUDTOOLS: XP ANTIVIRUS

And here's our license agreement

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THIS REDUCES ALL PROBLEMS TO TECHNICAL DIFFICULTIES WHICH WILL BE RESEARCHED AND SOLVED. ANTIVIRUSXP2008.COM IS NOT RESPONSIBLE FOR ANY HELP THE CUSTOMER GETS FROM THIRD PARTY TECHNICIANS. ALSO ANY ACTIONS TAKEN BY THE CUSTOMER ARE MADE AT HIS OR HER RISK.

C. SOME OF OUR PRODUCTS MAY BE UNSUITED TO RUN WITH OTHER SOFTWARE. **WE HAVE THE RIGHT TO UNINSTALL INCOMPATIBLE PRODUCTS.** WE WILL NOTIFY OUR CUSTOMERS BEFORE UNINSTALLING SUCH PRODUCTS. A CUSTOMER CANNOT CLAIM A REFUND IF THE REASON IS A REQUISITION OR REMOVAL OF CONFLICTING SOFTWARE. COEXISTENCE OF SOME PRODUCTS MAY LEAD TO MANY UNSATISFACTORY EFFECTS AS WELL AS TO SLOW THE CUSTOMER'S SYSTEM. THAT IS **WHY THE USAGE OF ANTIVIRUS XP 2008 REQUIRES THE UNINSTALLATION OF PRODUCTS WHICH REPRESENT A RISK TO THE SYSTEM. ...**

E. **WE ARE NOT LIABLE IF THE CUSTOMER'S SYSTEM WAS RESTORED OR REPAIRED** AND A REFUND WILL NOT BE MADE IN SUCH A CASE.

IN A FEW CASES, PROTECTION-RELATED ANTIVIRUS XP 2008 CANNOT DEAL WITH OVERLOADED AND DAMAGED SYSTEMS. IN SUCH CASES, THE ANTIVIRUSXP2008.COM IS NOT RESPONSIBLE.

F. **ANTIVIRUSXP2008.COM CANNOT BE HELD RESPONSIBLE FOR ACTIONS PERFORMED BY THE CUSTOMER WHEN NOT USING OUR SOFTWARE.**



FRAUDTOOLS: XP ANTIVIRUS

There's technical support in case you're still not sure

THE
SCANNER'S
website had a
professional
look and
encouraged
users to contact
the support
centre if need
be




FRAUDTOOLS: XP ANTIVIRUS

Great you've installed the program, but...

AFTER THE ATTACKERS CONVINCED their victims to install the rogue antivirus and get rid of all legitimate antiviruses, they start tricking money out of them

TO COAX USERS TO ABANDON basic security practices and hand over their credit card numbers, the rogue antivirus

 Detected new viruses and malicious programs with each system restart



FRAUDTOOLS: XP ANTIVIRUS

... It's time you paid...

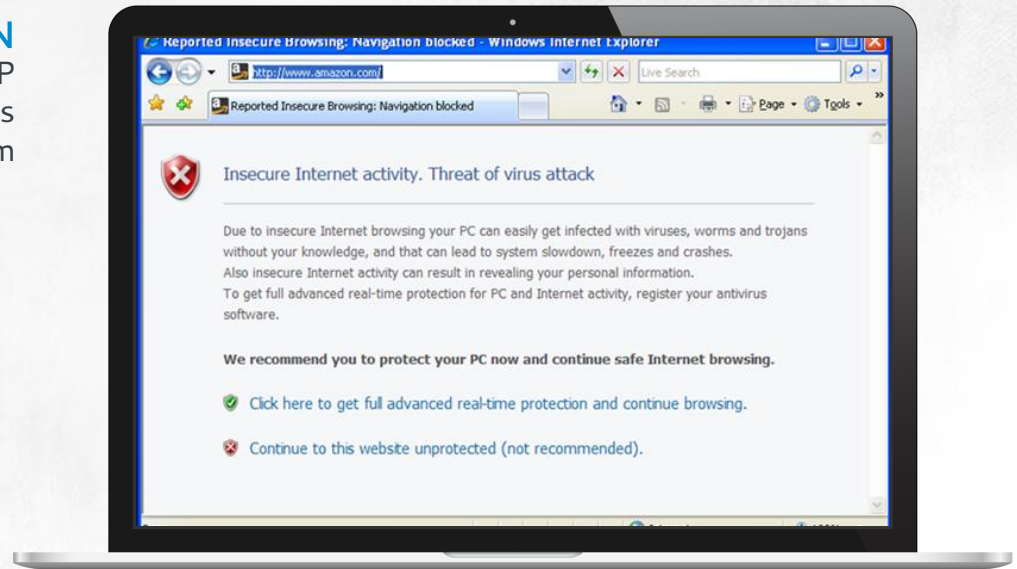


REPLACED A USER'S SCREEN saver with one that simulated the STOP system error message. To conceal this change, it hid the Screen Saver tab from users



INSTALLED AN INTERNET EXPLORER PLUGIN

that intercepted some communications with random websites and displayed a warning that resembled the standard system warning about insecure websites or websites that lack a valid certificate



FRAUDTOOLS: XP ANTIVIRUS

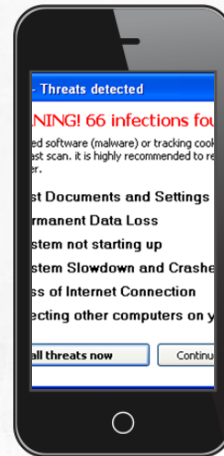
... or someone will be reading your private messages



REGULARLY (INTRUSIVELY) DISPLAYED reminders about how risky it was to use an infected machine



DISPLAYED A RED SHIELD ALERT on the status bar that warned users about no antivirus being found. It also displayed other warnings at regular intervals



FRAUDTOOLS: XP ANTIVIRUS

You do trust antiviruses, don't you?

Registered a rogue Security Center window in the system. This Security Center detected XP Antivirus and recommended users to install it



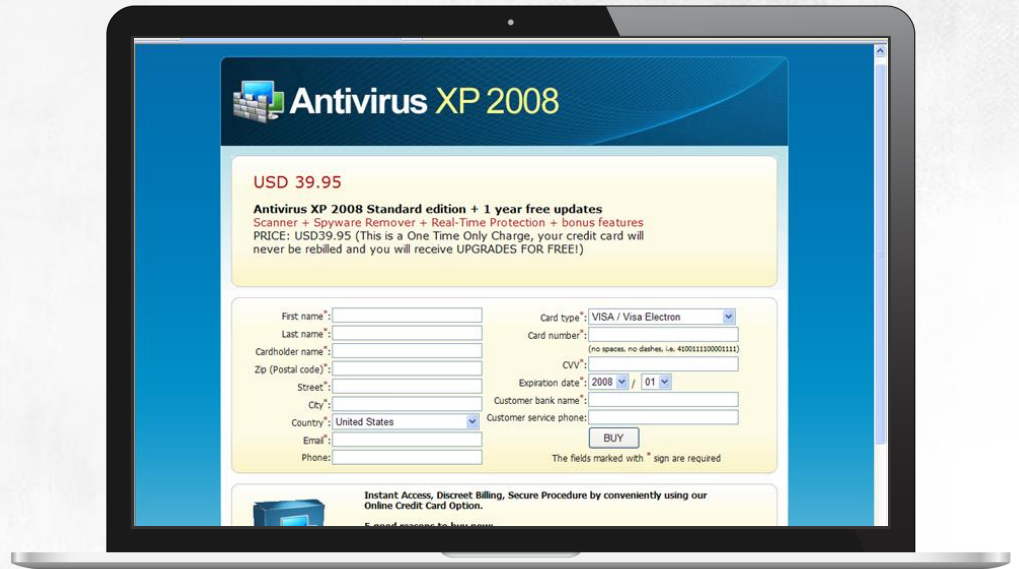
FRAUDTOOLS: XP ANTIVIRUS

The Great Finale



PEOPLE WHO FELL VICTIM

to this manipulation and registered a copy of XP Antivirus were in for a nasty surprise: instead of paying 39.95 dollars they were charged from 89.20\$ up to even 400\$



FRAUDTOOLS: **XP ANTIVIRUS**

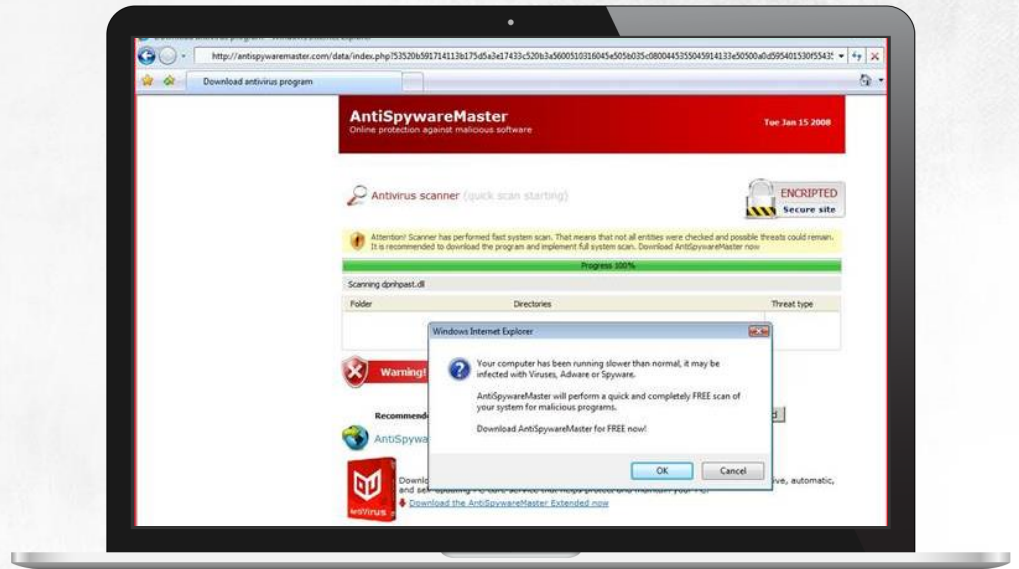
The Great Finale



A LOT OF WORK WENT
into this program



THERE WERE VERY MANY
others like this one



THANKS

