

Introduction to Pop-up Advertising

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Summary

This white paper provides an informal introduction to the pop-up ad phenomenon as well as an instruction on how to solve the problem. It covers an introduction to useful software as well as industry terms. It is targeted at novice and inexperienced internet users.

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Introduction to Pop-up Advertising

Recently, one of my website users asked if there was anything they could do to stop pop up adverts. They went on to say that over the last few weeks – they have been getting pop-ups on every website that they visited – and how it was becoming very annoying.

My immediate reaction was to suggest that they had some form of Trojan/spyware and asked them if they had firewall and antivirus software installed on their machine.

They answered...

'No - it doesn't matter if I get a virus – I can just use the system recovery CD to fix the problem' – 'and as for the firewall, hackers won't find anything on my machine so why bother'.

I do not know why I was surprised at the user's response; it is very typical – and, sadly, is often heard by systems administrators.

Over the next few pages – I will describe why users should strongly consider using antivirus, spy-ware removers and pop up blockers. Additionally I will show that securing your personal computer is much simpler than you may think.

What does Spyware have to do with pop-up advertising?

To answer the above question, we need to know a couple of basic facts.....

95% of the time popup advertising is running from a 'Spyware/Adware' program installed on your machine. The program is likely to have installed itself, either through a legitimate piece of software that you purchased, though a website that has tricked you into installing it on your machine or perhaps through a virus.

It is also very possible that your security settings within Internet Explorer are configured incorrectly, and allowed the program to install without your knowledge while you were surfing the internet.

Is it just advertising?

No, Spyware/Adware is 'usually' a marketing tool – it transmits information about which websites you are visiting through the internet – back to a marketing company, who then instruct the Spyware/Adware software to tailor adverts to your specific surfing habits.

So it's not a virus?

No, not all Spyware/Adware should be called a virus, although it does have similar traits.

So why use virus software against Spyware/Adware?

Modern antivirus software uses a technique called – '*heuristics*'. Heuristics is a method at looking inside computer programs for 'virus traits'. For instance, as in the above example - a program may do something as simple as transmit surfing information from your PC onto the Internet. And because it is not obvious, the user may never be aware that they have been

infected and that it is a real possibility their credit card details that they used at the online bookstore are now being distributed amongst various dark and shady individuals or websites.

Most (but not all) Antivirus software detects nasty variants of Adware.

So, I only need a good Antivirus program and nothing else?

No! While Antivirus software can detect malicious software, it is not a complete solution – and other safeguards need to be in place.

What other safeguards do I need then?

Gator is a company that distributes a common piece of Spyware/Adware – and poor configuration of your Internet Explorer security settings allows Gator (and other adware companies) to install their software without your permission.

To prevent companies like Gator from installing its software without your permission, make sure that your Internet Security Settings are set properly.

To tighten the security in your browser follow the steps below. Please note that although these steps are accurate for Microsoft Internet Explorer, other internet browsers will have similar windows and options.

1. Open Internet Explorer
2. From the toolbar select the **Tools** menu
3. Select the **Internet Options** option
4. Click on the **Security** tab (see figure 1)

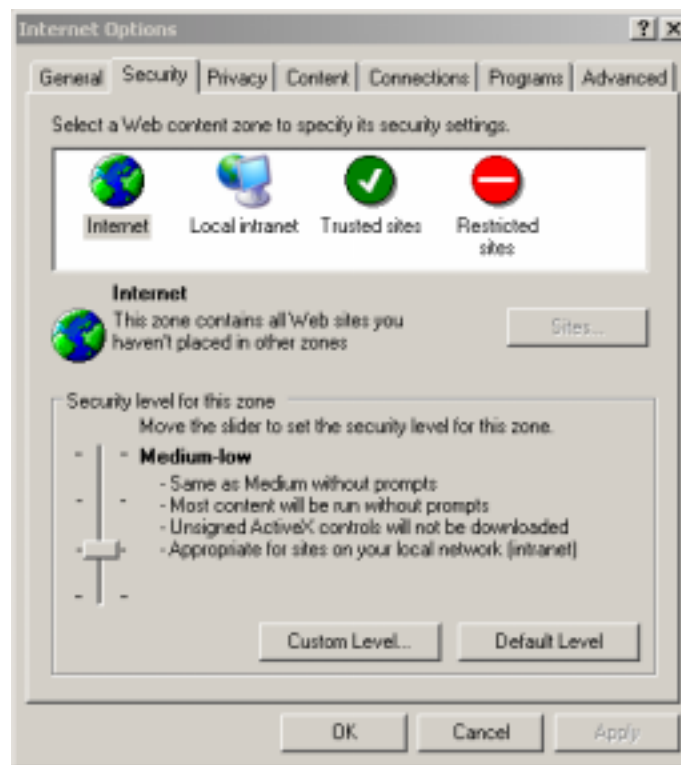
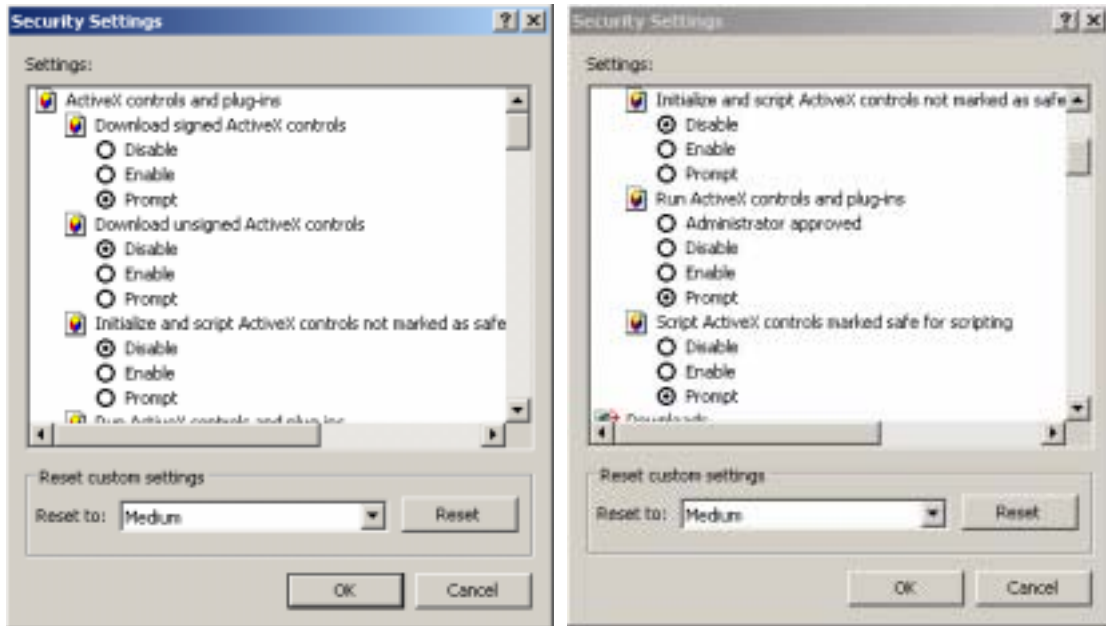


Figure 1 - The Security tab of the Internet Options window

5. Click on the **Custom Level** button
6. Scroll down the list to the ActiveX controls and plug-ins area, set the options as shown in Figure 2



<i>Download signed ActiveX controls</i>	<i>Prompt</i>
<i>Download unsigned ActiveX controls</i>	<i>Disable</i>
<i>Initialize and script ActiveX controls not marked as safe</i>	<i>Disable</i>
<i>Run ActiveX controls and plug-ins</i>	<i>Prompt</i>
<i>Script ActiveX controls marked safe for scripting</i>	<i>Prompt</i>

Figure 2 - ActiveX controls and plug-ins

The changes above will only stop spyware programs from self installing – should you come across a site that uses Gator type programs you will still be prompted to install its software.

This is a typical picture of a security installation dialog. I have circled the name of the software provider, in this case it is 'The Gator Corporation'.

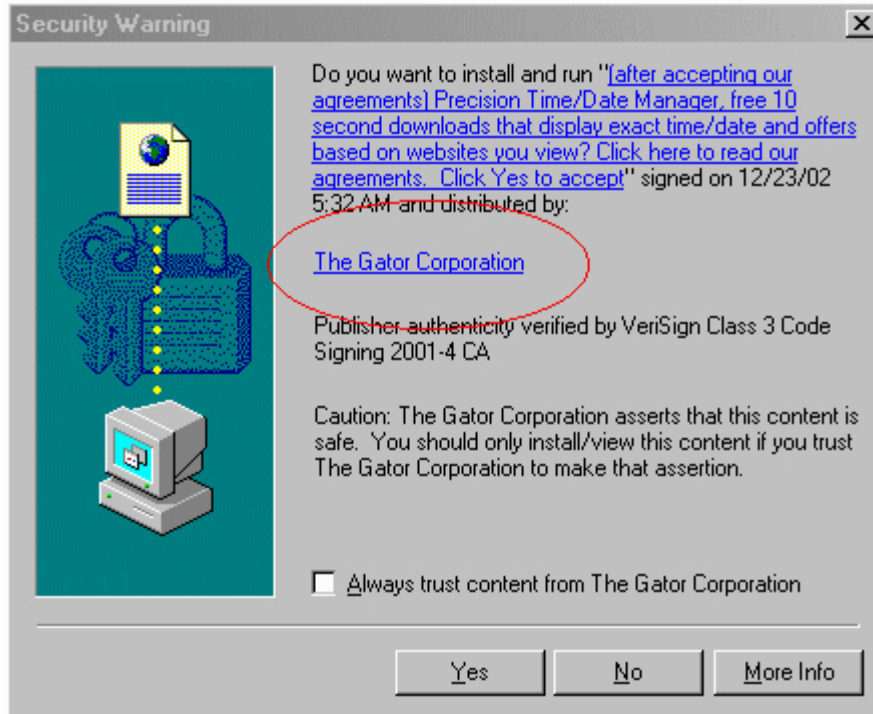


Figure 3 - Security installation dialog

The above security installation dialog will sometimes appear if you are installing additional features for your web browser such as Flash/Shockwave plug-ins or toolbar enhancements. So be prepared to see screens like this from companies such as Microsoft, Macromedia etc. If a security dialog pops up, and you did not expect it to – check that the company name is one you trust, for example – Microsoft. If it is not from a trusted source then I would advise clicking the ‘No’ button.

It is always worth double checking the company name (where I have circled above) before clicking the ‘Yes’ button.

Gator is just one market research company – you will be faced with many more with names like ‘GAIN’, Tangent and others.

I have changed those settings, but I still have the popups!

Yes of course you do, we still need to remove the programs that have infected your machine.

One of the most popular Spyware removal tools is Ad-aware. Ad-aware’s developers have released a free version, suitable for home use and available from many sources

The official Ad-aware program can be obtained from Lavasoft via their website....
<http://www.lavasoftusa.com/software/adaware/>

The Spyware removal program has worked – but I still get one or two pop up adverts while surfing.

This is the nature of internet advertising and for years to come, pop up adverts will be around one way or another.

Some pop-ups are useful and websites utilise them to advise surfers of their site about new features and updates. So blocking all pop-ups is not necessarily a good idea.

The Google toolbar offers a free pop up blocker which I have been using for months, it only takes a few minutes to install the toolbar and it doesn't need configuring.

A very nice feature of the Google pop-up blocker is the sound it makes when it blocks a pop-up, it's a gentle tick sound advising the user that it has blocked a pop up. So if you trust the website that you are browsing and would like to see the pop-up you can click the button on the Google toolbar to force Internet Explorer to refresh the page and allow the site to display pop-ups – most useful indeed!

To obtain the Google toolbar, please go to <http://toolbar.google.com/>

Once the toolbar is installed, pop ups are much easier to manage.

Conclusion

We have covered the basics of protecting your system against pop up advertising. Although we could go further and discuss firewalls and such like – it would require more space than we have here and therefore merits its own paper.

It is important to remember that spyware/virus makers will always be developing new methods to trick you into installing their software. So it is vital to keep your computer up to date with service packs/patches and virus updates. The windows update utility that comes with the Microsoft Windows operating system is a neat way to maintain an up to date system and I recommend that you run it as often as you can.

As you can see from our previous steps, protecting your system against spyware and viruses doesn't take much effort. What we have discussed and a little common sense will keep you safe

Useful Resources

Free Online parasite checker: <http://www.doxdesk.com/parasite>

Free home use Antivirus: <http://www.grisoft.com/>

Windows Update: <http://windowsupdate.microsoft.com>

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