

The Basics of Computer Security

If you are an internet user, you may be familiar with the terms “phishing” and “botnet”. Then again, you may not. They are the biggest threats to you in the wide world of computer crime.

Phishing is the process by which a hacker tries to get unsuspecting internet users to divulge their personal identifying information such as social security numbers, user names and passwords, or credit card information.

Phishing is broken down into:

- ☞ **Phishing:** sending generic e-mails with malicious attachments or links to millions of internet users to try to steal their personal information.
- ☞ **Spear phishing:** sending specifically crafted e-mails with malicious attachments or linked to a targeted group of internet users to try to steal their personal information.
- ☞ **Whaling:** sending specifically crafted e-mails with malicious attachments or linked to a targeted group of executives to try to steal their professional identity.

The cost of phishing has been estimated to be \$3.2 billion with over 81,000 phishing web sites in operation - **3.6 million individuals** lost money to computer crime last year. There are hundreds of public and unprotected internet message boards trading stolen personal information, with sophisticated computer programmers available to check the validity of the stolen information.

A “**Botnet**” is a collection of malicious software robots running on hundreds or thousands of computers, mostly using Microsoft Windows, without the owner’s knowledge. It can:

- ☞ Launch denial of service attacks.
- ☞ Install ad ware or spy ware to create a barrage of unwanted advertising.
- ☞ Send out millions of phishing e-mails.
- ☞ Create false Web hits.
- ☞ Hide the phishing site behind constantly changing victim IP addresses.

You should be aware that there are real professionals building sophisticated software for a criminal industry. They are active in countries all over the world, with the U.S. being the host to most of them. To protect your computer and your personal information, you should:

- ☞ Make sure that you receive Microsoft Update patches. Microsoft sends out regular phishing and botnet security updates as part of its “Malicious Software Removal Tool”.
- ☞ Keep your antivirus product of choice current.
- ☞ Be suspicious of forwarded e-mails.
- ☞ Note that several, reputable antivirus vendors provide free online scanning of your computer.
- ☞ Be wary of web site pop-ups asking for user information, credit card or other financial information.

Thieves are increasingly stealing debit card and other bank account credentials to rob accounts, because fraud detection is weaker than it is with credit card accounts. Experts predict that phishing and malware attacks will continue to increase through 2009.

Happy New Year!



A Self-Inspection Checklist

This is a checklist for General Classroom Conditions adapted from the NIOSH Safety Checklist Program for Schools. It is based on regulations issued by the U.S. Dept. of Labor and OSHA. They are not mandatory, but they are recommended as one tool that can greatly increase your school's ability to maintain a classroom that is safe for teachers and students. Why not start the New Year with attention to the often overlooked practice of periodic self-inspections?

1. Are all changes in classroom use and alterations, repairs, construction, or installation of new equipment reviewed with the appropriate state and local agency that has jurisdiction over school modifications? Y N N/A
2. Is an electric solenoid, key-operated, gas shut-off switch installed on each gas supply line to your shop, lab or instructional area? Y N N/A
3. Are classrooms kept clean and free from debris to the greatest extent practical given the types of activities being performed? Y N N/A
4. Are waste materials that are prone to rotting placed in leak proof receptacles with tight fitting covers and removed daily for disposal? Y N N/A
5. Are classrooms maintained, as far as reasonably practicable, to prevent the entrance or harborage of rodents, insects, and other vermin? Y N N/A
6. Is water available that is suitable for drinking, personal hygiene, food preparation, or cleaning? Y N N/A
7. Are all non-drinkable water outlets clearly marked as such? Y N N/A
8. Are lavatories equipped with hot and cold running water, hand soap, and towels or driers? Y N N/A
9. Where showers are required, are soap, hot and cold running water through a common discharge line, and individual towels provided? Y N N/A
10. Is the consumption of food and beverages prohibited in or near toilet rooms or areas containing toxic materials? Y N N/A
11. Is storage of food or beverages prohibited in toilet rooms or in an area exposed to a toxic material? Y N N/A
12. Where employees are required to wear protective clothing, are change rooms provided with storage facilities for street clothes and separated storage facilities for the protective clothing? Y N N/A
13. Is material stored so as not to create a hazard? Y N N/A
14. Are storage areas kept free from hazards that may cause tripping, fire, explosion, or pest harborage? Y N N/A
15. Is sufficient safe clearance available through aisles, loading docks, turns, or doorways when mechanical handling equipment is used? Y N N/A
16. Are head clearance warning signs provided where needed? Y N N/A
17. Are all passageways, work areas, storerooms, and washing facilities kept orderly and sanitary? Y N N/A
18. Are all floors kept clean and, as much as possible, dry? Y N N/A
19. If floors are likely to get wet (such as food preparation), are platforms, mats, or other dry standing places provided where practicable? Y N N/A
20. Are all floors kept free of protruding nails, splinters, holes, or loose boards? Y N N/A
21. Are aisles and passageways kept clear and in good repair, with no obstructions that could create a hazard? Y N N/A
22. Are covers and/or guardrails provided to protect people from falling into pits, tanks, vats, ditches, etc.? Y N N/A
23. Are areas used for storage of materials marked with conspicuous signs that indicate the load-bearing capacity of the floor? Y N N/A
24. Is the weight of stored materials assessed to ensure that it is below the load-bearing capacity of the floor? Y N N/A