Key Stroke Loggers

Hardware, Software, Prevention

Objectives...

Define Key logger

Hardware Examples

Software Examples

Prevention

What is Keylogging?

Keystroke logging

A program or hardware device that captures every key depression on the computer

Used to monitor employee performance

Used to seal private information

Malicious Uses…

Besides being used for legitimate purposes, keyloggers can be hardware installed to a computer or software that is used to collect sensitive information.

The types of sensitive information include:
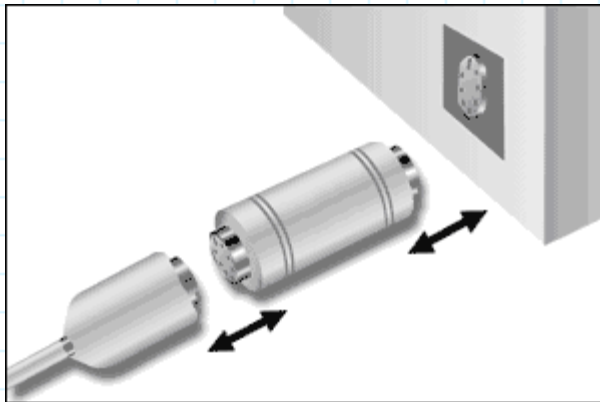
Usernames & Passwords

Credit Card Numbers

Person Information such as Name, Address, etc.

Keylogging Hardware...

These small devices connect directly on the end of a keyboard to the port on the computer and look rather unassuming.

At a later time the person who installed the keylogger can come back to retrieve it. They are easily removed.

Source:
http://epic.org/privacy/dv/keylogger_hw.gif

Software…

There are hundreds of keylogger programs available over the internet for download.

There are three ways for an attacker to install the software on an unsuspecting computer.

Install it from a compact disc or floppy disk.

Package the software as a computer virus or trojan horse.

Gain access to the computer over a network and install surveillance software remotely.

Viruses…

A simple search of a virus encyclopedia shows 500 examples of keylogging malware.

Prevention…

There are several ways to prevent Keyloggers:

Anti-Virus/Spyware & Firewalls

Automatic Form Fillers

Alternative Keyboard Layouts

On screen Keyboards

Anti-Virus/Spyware & Firewalls...

As with any Virus or Spyware you should make sure that you have up-to-date protection.

Anti-Virus:
Make sure its running and using the latest virus definitions.

Anti-Spyware:
Same as your Anti-Virus Software, update regularly.

Firewall:
Make sure its active. It's the first line of defense from online intrusions.

AutoForm Fillers…

A common feature of Web Browsers including Internet Explorer and Firefox.
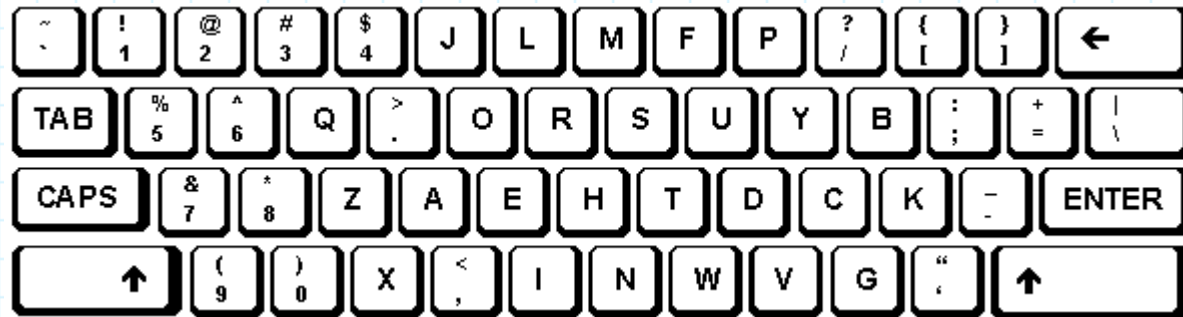
Works against keyloggers but vulnerable to other security breaches.

Alternative Keyboard Layout...

Alternative keyboards make captured keystrokes look like nonsense

You can customize your own board with Microsoft Keyboard Layout Creator

On Screen Keyboards...

Software based keyboards are not very effective.

Clicks are converted back to keystrokes.

On Screen Keyboards...

Web-based Keyboards offer more protection and are often found in online games.

Summary...

Key Loggers record keystrokes:

Legitimate use: Monitor employee productivity

Illegal uses: Steal passwords, usernames, and other personal/corporate data

There are ways to protect yourself:

Be aware of what's installed on your computer

Use caution when surfing the internet

Keep your computer's security software updated