

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

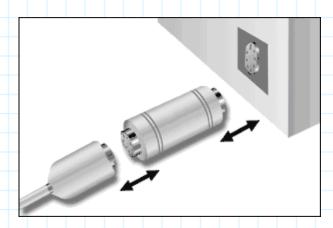
Person Information such as Name, Address, etc.



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.

TREND.	About Us Careers Contact Us
	QUICK LINKS See All Products & Solutions Support Purchase Update C
OME HOME & HOME OFF	CE SMALL BUSINESS MEDIUM BUSINESS ENTERPRISE BUSINESS PARTNERS
Threats	Vince Francisco dia Connel Benedia
> Virus Encyclopedia	Virus Encyclopedia Search Results
	<< Search Again
	1 - 10 of 500 record(s) match your query
	TROJ_PERF.1
	Aliases: No Alias Foundof a keylogger program. Upon execution, this Trojan checks for the presence of certain
	files in the folder where it is executed. If it does not find the s
	TROJ_KEYLOGGER.A Aliases: keylogger.Trojan, PWS-LegMir.gen, TrojanSpy:Win32/keylogger.AO, Win32.Ypsi.B
	is a keylogger . Upon execution, it drops any of several copies of itself. It also creates registry entries that ensure its automatic execution at every Windows sta
	TROJ_KEYLOGF.DR
	Aliases: TrojanSpy.Win32.Delf.S for a keylogger program detected as TROJ_KEYLOGF.A. It drops the keylogger files into
	the user Temp folder and
	TROJ_DELF.NE Aliases: No Alias Found
	file of TROJ_keylogger.X. It is usually dropped into the Windows folder using any of the
	file of TROJ_ keylogger .X. It is usually dropped into the Windows folder using any of the following f TROJ_KEYLOGGER.X



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