

The Monthly Security Awareness Newsletter for Computer Users

# OUCH!

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## Java

### GUEST EDITOR

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### OVERVIEW

Software refers to programs or applications you install and use on your computer every day. Examples include your web browser, word processor, email client, video games and movie players. The problem with most software is that it is written to run only on specific computers. For example, software written for Microsoft Windows can run only on Microsoft Windows computers; it cannot run on an Apple Mac computer. The same applies for software written for Apple's Mac; it can only run on a Mac computer.

Java is different. It is a computer language that allows programmers to write software you can run on many different types of computers, such as Microsoft Windows and Apple Mac. To enable programs developed in Java to work on your computer, you need to have Java (often called the Java runtime environment) installed on your

computer. In this newsletter, we are going to explain the dangers of having Java installed on your computer and what you can do to protect your computer. Note: Javascript and Java are two entirely different things. This newsletter only applies to Java.

### WHAT ARE THE RISKS?

A common method cyber attackers use to hack into computers is to develop special programs that take advantage of and exploit weaknesses in your computer's software. These weaknesses are usually specific to one type of computer. This means the hacking tools they develop to attack Microsoft Windows computers work only on Microsoft Windows; their tools do not work on any other type of computer such as an Apple Mac, or vice versa. This limits who they can attack and how.

Java is different. Since it is designed to work on almost any computer, cyber criminals can create a single attack tool that can potentially hack almost any computer in the world as long as it has Java installed. This makes Java's

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weaknesses an attractive target for attackers, as they can hack more computers with less effort. Also, Java is complex, which means it can have many weaknesses. Finally, most people do not even know what Java is or if they have it installed. As a result, Java has become a popular target for cyber criminals.

### BEST DEFENSE

Ultimately, the best defense is simple: if you are not using any programs or applications that require Java, then do not install it on your computer. Only install Java if you absolutely require it. If you are not sure if you have Java already installed on your computer, there is a simple way to check. Simply go to the Java website listed below to check if you have Java installed. Be sure to only check if you have Java installed; do not actually install it.

<http://www.java.com/en/download/installed.jsp>

If you discover you do have Java installed but you no longer need it, uninstall Java from your computer.

### IF YOU MUST

If you absolutely must have Java installed, there are several things you can do to protect yourself.

#### 1. KEEP IT CURRENT:

Make sure you always have the latest version of Java installed on your computer. Old or outdated versions of Java have many known vulnerabilities, making it easy for



***Java is software that can expose you to additional risk, if you do not need Java then do not install it. If you do need Java always be sure to run the latest version.***

cyber criminals to hack into your computer. In addition future releases of Java may have additional security features. Keeping Java updated is relatively simple for Windows computers. To verify the version of Java on your computer, click on the Java icon in the Control Panel and confirm you have the latest version installed and that it is configured for automatic updating. If you do not have the latest version, be sure to update it through the Java Control Panel.

For Apple Mac computers, the options for Java are more complex. In an effort to better protect its users, Apple distributes and updates its own release of Java based on Java 1.6. As long as you keep your Mac operating system

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updated and current, you will keep this version of Java updated also. Apple users can update their Mac computers to Java 1.7 by downloading Java from the Java website; however, you then have to maintain and update that version yourself.

### 2. DISABLE BROWSER PLUGIN:

One of the most common ways that cyber criminals hack Java is through your web browser. If you have Java installed, your browser will have what is called a Java plugin, which lets your browser use Java. When you connect to a malicious website, bad guys may hack your computer through your Java plugin. However, very few websites require Java to work, so in most cases you can safely disable your browser's Java plugin. How you disable your browser's plugin depends on what type of browser you have. Most browsers have a Preference or Settings option where you can disable your browser's Java plugin. In addition, newer versions of Java can disable Java plugins from the Java Control Panel. If you do find a website that requires Java to work, you can then enable it for only that website, then disable it when you are done.

### RESOURCES

Some of the links have been shortened for greater readability using the TinyURL service. To mitigate security issues, OUCH! always uses TinyURL's preview feature, which shows you the ultimate destination of the link and asks your permission before proceeding to it.

What is Java?:

<http://preview.tinyurl.com/717jyb8>

Uninstalling Java on Windows:

<http://preview.tinyurl.com/4x66uco>

Uninstalling Java 7 on a Mac:

<http://preview.tinyurl.com/cowkxy4>

Disabling Your Browser's Java Plugin:

<http://preview.tinyurl.com/cwptsxv>

Browsercheck:

<http://browsercheck.qualys.com>

Common Security Terms:

<http://preview.tinyurl.com/6wkpae5>

SANS Security Tip of the Day:

<http://preview.tinyurl.com/6s2wrkp>

### BECOME A SECURITY PROFESSIONAL

Become a certified security professional from the largest and most trusted security training organization in the world at SANS 2013. Over 40 security classes taught by the world's leading experts. March 08-15, 2013 in Orlando, FL. <http://www.sans.org/event/sans-2013/>

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