Qualys Browser Checker, an Alternative to Secunia PSI ?

Prepared for the Lexington Senior Center Computer & Technology Club

October 16, 2013, by Gary Patrick

(amended for posting, December 3, 2013
with a look at the Firefox built-in plugin checker)

"Browsers are very complicated pieces of software. Any single flaw has the potential to be used by hackers and thieves to break into your computer. Plugins, which are pieces of software that add new capabilities into a browser, can also provide opportunities for malicious code to get in. Vendors of browsers and plugins are continually finding and fixing such problems. However, this means you have to be alert to update your browser and plugins to make sure that you aren't leaving your machine open to attack."

Conclusions: - right up front -

1) If you use only Firefox as your web browser, and you have Windows Updates set to "automatic" (or "download and notify me to install"), then the Plug-in Checker built into Firefox may be all you need as an updates-needed monitor. Refer to text page #6 and Slides #1-5 after that, for information.

2) Even if you use only Firefox, Qualys checks more than the Firefox Built-in, and may still be of interest to you. Refer to text and Slides #6-14

3) If you use more than one browser, the intermediate-level setting (or higher) of the installable Qualys plug-in offers the convenience of monitoring all your browsers. Install the plug-in in your most frequently-used browser and set the operating level to "intermediate" or "advanced."

4) Because Qualys doesn't start up automatically, each time you want to run it, you need to revisit http://browsercheck.qualys.com in the browser to which you have the plugin installed. For convenience, set up a bookmark to the site (even put it on the bookmark toolbar, if you have that enabled). (Bookmarks are called "Favorites" rather than "Bookmarks" in Internet Explorer).

5) I suggest running Qualys B.C. every week or two, by clicking on your bookmark.

References:
#1) Neil Rubenking in PCMag: http://www.pcmag.com/article2/0,2817,2416801,00.asp
#2) Krebs on Security, 30 Mar 2011. http://krebsonsecurity.com/tag/qualys-browser-check/
#3) FAQ's page at Qualys' website: https://community.qualys.com/docs/DOC-1542#s2

Index to this presentation (eight text pages, plus 15 screenshot slides)

The Qualys Browser Checker comes in two versions, both free of charge:

1) An On-line real-time Scanner for Windows systems;
   Examines the Web Browser then in use, and its plug-ins.

2) An installable plug-in for the Web Browser(s) on your Windows personal computer,
   Has three, selectable levels of examination:
   a) Web Browser currently in use, and its plug-ins (basic, default setting);
   b) All web Browsers installed, and their plug-ins (intermediate setting),
      (even plug-ins that are disabled within the browser);
      Also verifies that Anti-virus, Firewall, and Windows Updates are enabled.
   c) Same as (b), plus looking for any missing Windows security updates. (advanced setting)
      (this usually requires several minutes to complete);
      Results of an advanced scan appear on three tabs. (See screenshot #12 for this,
      (Browsers, System Checks, MS Updates)).
      Clicking each Browser's Icon produces the list of its plug-ins.

Utility of Qualys Browser Check: (Reporting levels detailed on text pages 7 & 8)
   For any item that is insecure or out of date, a "Fix It" button is provided;
   "Fix It" button launches an update installer, or directs the user to the program's website.

System Requirements: Windows XP and newer versions, including Windows 8, or
                     Apple MacOS X 10.6.8 and later (announced Sept. 30th)

Where to get it:
   http://browsercheck.qualys.com and click on "Quick Scan Now" or "Install Plugin."

Additional Notes about Qualys Browser Checker:

1) Recommended to re-scan after updates and fixes, to verify them.
2) Six web browsers supported: Internet Explorer, Firefox, Chrome, Safari, Opera, Camino.
3) It doesn't start automatically; you start it by going to http://browsercheck.qualys.com.
4) If you use only one browser, and you have Windows Updates set to be automatic,
    then the basic level of Q.B.C. is probably all you need.
5) Be aware - updaters or installers you download through the "Fix It" buttons may,
    by default, prepare to install additional bundled software; a checkbox is usually provided
    to opt in/out. A frequent example is an offer to install the "Ask.com" search toolbar.

Alternatives to Qualys Browser Checker   (see reference #1 back on page 2)
  1) Secunia PSI (covered in an August 2013 talk); covers about 3000 programs
  2) Firefox's own Plug In Checker – see more on page 6
      a) Automatically puts up a banner if it detects plug-ins out of date (see Slide #1)
      b) Checker can be run manually any time, as shown in Screenshot Slide #5
      c) Doesn't check other browsers of course
      d) Doesn't seem to detect if Firefox itself needs an update!
      e) Surprisingly, reports "unknown status" on some quite common plug-ins
          (Foxit PDF Reader, and Windows Presentation Foundation, for example)
  3) Exploitshield Browser Edition
      a) Not an update checker
      b) Instead, shields the browser and browser add-ons from exploit attacks
  4) App Advisor
      a) Installs a browser extension that automatically rates apps for risk to privacy and security
      b) Seems to be more oriented toward mobile devices

A Side Trip to look at the Firefox Plugin Checker:

1) Firefox's monitoring of its Plugins is automatic.
   Notifies you by a yellow banner (see Slide #1) when something needs to be
    updated manually.
   Click on the yellow banner to bring up the report list (Slide #2).
   Use the "Update" buttons where provided, to fix problems.

2) Plugins can be checked manually at any time:
   a) First, I recommend checking if Firefox itself is up to date, by clicking on
      "Help" in the Firefox menu bar at the top, then
   b) Click on "About Firefox" in the drop down menu that appears;
       Firefox will either give status as Up to Date, or present a dialog box with a
       button "Restart to Update" to update it   (see Slide #3)

   Then check that all Plugins are up to date:
   c) Click on "Tools" in the Firefox menu bar (see Slide #5)
   d) Click on "Add-ons" in the dropdown menu that appears, then
   e) Click on "Plugins" over in the left hand list that appears.
   f) Then click on a blue, underlined link above the plugins list that says
      "Check to see if your plugins are up to date." (See slide #5).
      A list of plugins and status will appear, with update buttons as needed,
      as shown in Slide #2.   These are Plugins that are specific to Firefox.
      (Your other browsers are not examined, and plugins found that are associated
       with browsers other than Firefox will be reported as "Unknown").

File   Edit   View   History   Bookmarks   Tools   Help

Qualys BrowserCheck   ×   m Mozilla — Plugin Check & Updates — mozi... ×   +

Keeping your plugins up to date helps Firefox run safely and smoothly.

This is the Firefox built-in, automatic plug-in update-checker. (This display is the result of clicking on the the yellow warning banner that comes up near the top of the Firefox Browser window, when appropriate).

(The top of this webpage has been moved up, out of view, in order to be able to show all of the "Outdated Plugins" report below.) The top of the page says "Mozilla" and "Check Your Plugins" in big letters.

Plugin Status

- Step 1: Click Update to update a plugin.
- Step 2: Complete all recommended updates before restarting your browser.

Outdated Plugins

Plugin	Status	Action
Adobe Acrobat Adobe PDF Plug-In For Firefox and Netscape 8.3.1	vulnerable	Update Now
Java Deployment Toolkit 7.0.250.17 NPRuntime Script Plug-in Library for Java(TM) Deploy	vulnerable	Update Now
Java(TM) Platform SE 7 U25 Next Generation Java Plug-in 10.25.2 for Mozilla browsers	vulnerable	Update Now

×

Slide #3

Mozilla — Plugin Check & Updates — mozilla.org - Mozilla Firefox

File   Edit   View   History   Bookmarks   Tools   Help

Firefox Help
Troubleshooting Information
Submit Feedback...
Restart with Add-ons Disabled...
Report Web Forgery...

About Firefox

This screenshot illustrates how to check for an update for Firefox, from within the Firefox browser. Click on "Help" in the Menu Bar (2nd banner from the top), and select "About Firefox" from the dropdown menu. That brings up the Dialog Box below, with the "Restart to Update" button; click on it.
(Firefox has not been run on this p.c. for some time, so FF detected the need for update and has downloaded the file, awaiting action.)

About Mozilla Firefox

Firefox

15.0.1

Restart to Update

You are currently on the **release** update channel.

Firefox is designed by Mozilla, a global community working together to keep the Web open, public and accessible to all.

Sound interesting? Get involved!

Licensing Information   End-User Rights   Privacy Policy

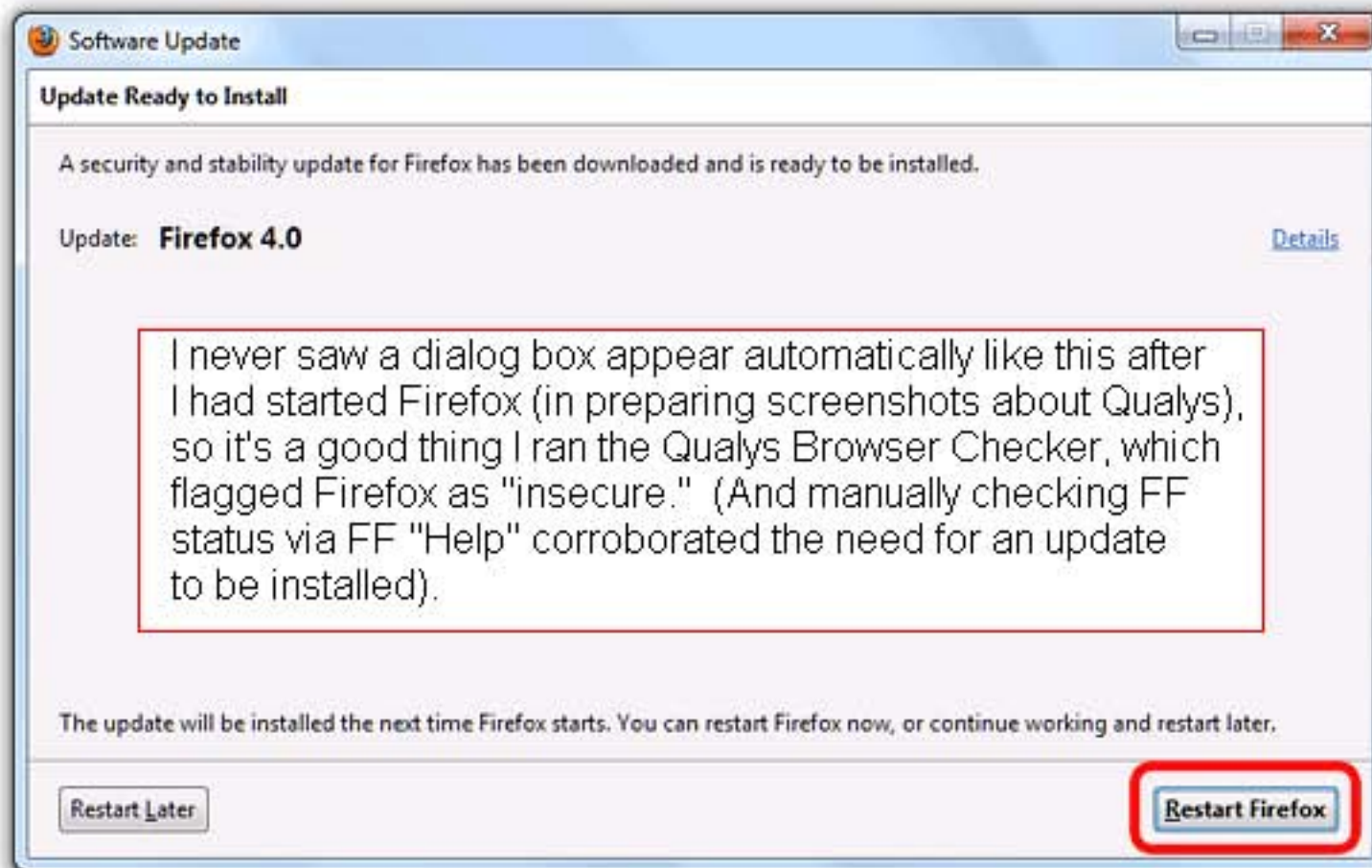Firefox and the Firefox logos are trademarks of the Mozilla Foundation.

I think, however, FF automatic updating should have displayed a dialog box on the browser window, automatically, calling attention to an "update ready to install," before I ever clicked on "Help." (Refer to Mozilla document, next slide).

Update Firefox to the latest version | Fir... ✕ | + (Menu bar, navigation bar, etc. turned off for more height)

This is from the Mozilla Support page for Firefox, explaining Firefox version updates.

How do automatic updates work?

By default, Firefox is configured to automatically check for updates.

- Updates will be downloaded in the background and installed when you restart Firefox.
- If an update has been waiting to be installed for more than 24 hours, you'll see a notification with the option to restart Firefox and install the update.

Software Update

Update Ready to Install

A security and stability update for Firefox has been downloaded and is ready to be installed.

Update: **Firefox 4.0**   Details

I never saw a dialog box appear automatically like this after
I had started Firefox (in preparing screenshots about Qualys),
so it's a good thing I ran the Qualys Browser Checker, which
flagged Firefox as "insecure." (And manually checking FF
status via FF "Help" corroborated the need for an update
to be installed).

The update will be installed the next time Firefox starts. You can restart Firefox now, or continue working and restart later.

Restart Later   **Restart Firefox**

Note: Firefox does not automatically update plugins (like Adobe Flash, Quicktime or Java). Update your plugins at Mozilla's plugin check page.

What do the Qualys BrowserCheck status levels mean?

Each item in Qualys BrowserCheck results has a status assigned;
Click on the status to expand details in your results to see specific version information.

The following status levels may appear in your results:

- **Up To Date** (green) - Installed version is the latest; no updates available.

- **OK** (green) - the reported item has passed the recommended security settings.

- **Update Available** (orange) - installed version is not the latest.
  Click on the status button to see details and a link to install an update.

- **Insecure Version** (red) - should be updated immediately.
  Use the Fix It button to go to the vendor's website to get the latest version

- **Insecure** (red) - the reported item has not met the recommended security settings criteria.

- **Obsolete** (red) - installed version is no longer supported by the vendor.
  Use the Fix It button to go to the vendor's website to get the supported version.

- **Support Retiring** (orange) - the version of the installed operating system is
  retiring soon. After the retiring date, the vendor will no longer provide support or
  security updates for the retired version. Use the Fix It button to go to the
  vendor's website to get a version of the operating system that is supported.

- **Support Retired** (red) - the installed operating system version is currently retired.
  The vendor is no longer providing support or security updates.
  Use the Fix It button to go to the vendor's website to get a supported version.

What do the Qualys BrowserCheck status levels mean? (continued)

- **Warning/Potential Threat** (orange) – the current browser does not provide enough information to confirm the file version installed; you should make sure you are running the latest version.

- **Warning** (orange) - needs to be reviewed and appropriate action should be taken.

- **Pre-release** (light blue) - the current items is a beta, alpha or a dev version.

- **Unknown** (gray) - the security status of the plug-in is unknown.

- **Disabled** (gray) - the plug-in is either disabled in the browser or not enabled/installed. (This status is not available with 'All Browsers and Plugins' scan option.)

More information about the three configurable levels ("Scan Type") for the installed Qualys plugin:
(This information is adapted from Neil Rubenking (reference #1))

The basic, current-browser-only scan is the default mode upon installation of the Qualys Browsercheck plugin. Selecting "Intermediate" or "Advanced" scan type enhances this by checking all installed browsers plus Operating System security settings.   Choose the "Scan Type" in a box in the upper right corner of the report page.

The Advanced scan, which can take several minutes, adds a check for missing Microsoft security updates. Results of an Advanced scan appear on three tabs.

1) The first tab lists your installed browsers, with a green check if they're fully secure or a red X otherwise. Clicking each browser's icon brings up a list of that browser's plug-ins, with the built-in ability to update any outdated items.

2) The System Checks tab lets you know whether your operating system is fully secured. It also reports on

the readiness of your firewall and antivirus, drawing this information from the security center in Windows. If the firewall or antivirus is outdated or turned off, you'll get a warning. Note, though, that BrowserCheck won't warn if antivirus protection is completely absent.

3) On the MS Updates tab, BrowserCheck reports whether your system has missed any significant updates. If so, it advises installing them using Windows Update. It should be noted however, that Browsercheck will sometimes list Microsoft software updates that are optional, not a "required" security update. One can read Microsoft's description of the update to determine whether to install or skip these optional updates.

Check your browser.

Qualys BrowserCheck will perform a security analysis of your browsers
and plugins, and will run several system checks including the Top4 Security Controls.

Install Plugin

The "Install Plugin" button is pretty prominent, but alternatively, you can just run a real-time scan on your current browser by clicking on this link: → Scan without installing plugin

Check your browser and system security

Click the "Install Plugin" button to enable fast, safe scanning.

Find vulnerabilities at the click of a button

Scan and view all security issues in an easy-to-understand detailed list.

Take charge of any issues found

Fix It

Follow recommended steps to resolve each vulnerability found.

Firefox automatically sends some data to Mozilla so that we can improve your experience.   Choose What I Share

What browsers are supported by Qualys BrowserCheck?

Operating System	Internet Explorer**					Firefox	Chrome	Safari		Opera	Camino
	10	9	8	7	6	3+	4+	3	4+	9.5+	2
Windows 8	X					X	X	X	X	X	
Windows 7	X	X	X	-	-	X	X	X	X	X	-
Windows Server 2008 R2		-	X	-	-	X	X	X	X	X	-
Windows Server 2008		-	X	X	-	X	X	X	X	X	-
Windows Vista		X	X	X	-	X	X	X	X	X	-
Windows Server 2003		-	X	X	X	X	X	X	X	X	-
Windows XP SP1, SP2, SP3		-	X	X	X	X	X	X	X	X	-
Windows 2000 SP4		-	-	-	X	X	-	X	-	X	-
Mac OS X (Intel) and above		-	-	-	-	X	X	X	X	X	X
Linux		-	-	-	-	X	X			X	

In addition to the above this tool is also available for **Android**, **iPhone**, **iPad**, Maxthon, SeaMonkey, Arora, Fennec, Minefield, Flock, Rockmelt, SR Iron, Dolphin, Sleipnir, Lunascape, Orca, K-meleon browsers.

** On 64-bit Windows, BrowserCheck Plugin is supported only in 32-bit version of the Internet Explorer. Javascript based scan is available in 64-bit Internet Explorer.

List of SW Items Monitored:	Windows	Mac	Linux	iOS
OS support expiration	X*			
OS Auto Update, Auto Install Checks	X*			
OS security updates	X*	X		X
Firewall check	X*	X*		
Anti-Virus check	X*			
Disk Encryption check	X*~			
Web Browser used to scan	X	X	X	
Adobe Flash Player	X	X	X	
Adobe Reader 5.x and above	X	X	X	
Adobe Shockwave Player	X	X		
Apple Quicktime	X	X		
DivX Web Player	X	X		
Foxit Reader	X*			
Flip4Mac Windows Media plugin		X		
Microsoft Silverlight	X	X		
Microsoft Windows Media Player	X*			
Novell Moonlight			X	
Real Player	X	X*		
Java Runtime	X	X	X	
Totem Media Player			X	
VLC Media Player	X	X	X	
Yahoo! BrowserPlus	X	X		
Windows Presentation Foundation plug-in	X*			
iTunes		X*		
Microsoft Apps for Mac		X*		

Notes:

* means this item check is available only by the Qualys Plugin installed in Internet Explorer, Firefox, or Chrome.

~ means this feature is available only for Winmagic, Symantec PGPGuard, McAfee Endpoint Encryption, and Windows Bitlocker.

This is how the Browsercheck results report looks in the Chrome browser, instead. Slide #11

heck   ✕

🔒 Qualys, Inc. [US] https://browsercheck.qualys.com   ☆ ⓠ ☰

Scan Complete

10 Security Issues Detected

Follow the recommended actions in the results below to get software updates and resolve security issues.

Automatic scans: OFF

Scan Type:

Advanced Scan
Browsers, OS settings, mis... ▼

Re-Scan

Results: **Browsers / Plugins**   System Checks   MS Updates

Click on a browser button to see related items. Disabled status for result items is not available with this scan type. See FAQ for more details.

Detected Browsers:

Adobe Shockwave Player
Product Version:
12.0.3 Development

Insecure Version   *Fix It*

Apple Quicktime
Product Version:
QuickTime 7.7.2 (1680.56)

Insecure Version   *Fix It*

Real Player
Product Version:
6.0.9.584

Obsolete   *Fix It*

Java Runtime
Product Version:
7.0.250.17

Update Available

Windows Media Player

BROWSERCHECK
BUSINESS EDITION

Browser security for your organization

Monitor all your computers and check whether they're staying up-to-date.

Easy, Accurate & FREE!

Try It Now ›

f 🐦 ✉

Need Help?

Send us your feedback

Tell a friend

eck   ✕

🔒 Qualys, Inc. [US] https://browsercheck.qualys.com   ☆ 🛡 ☰

Automatic scans: ◯ OFF

Scan Complete

10 Security Issues Detected

Follow the recommended actions in the results below to get software updates and resolve security issues.

Scan Type:

Advanced Scan
Browsers, OS settings, mis... ▾

Re-Scan

Results: Browsers / Plugins   System Checks   **MS Updates**

Excel
1 Important

    Insecure   *Fix It*

Office Update
2 Important

    Insecure   *Fix It*

BROWSERCHECK
BUSINESS EDITION

Browser security for your organization

Monitor all your computers and check whether they're staying up-to-date.

Easy, Accurate & FREE!

Try It Now >

f 🐦 ✉

Need Help?

Send us your feedback

Tell a friend

Java Setup - Complete

I had to change to my Administrator account for this installation to occur.

ORACLE

✔ **You have successfully installed Java**

When Java updates are available, you will be prompted to download and install. We recommend you always do so to ensure your system has the latest performance and security improvements.

See the instructions if you want to change this behavior.

When you click close, your browser will be opened so you can verify that Java is working.

I do not recall seeing Java prompts to update. Maybe this too is attributable to the fact I do not regularly work in my Windows Administrator account ?

Close