Scrupdate User Manual

Version 2.1.0

Table of Contents

Introduction

What Is Scrupdate?

Scrupdate is a tool that lets you ensure your Windows programs are up to date.[1] It checks for program updates and informs you when updates are available.

How Does It Work?

Scrupdate gets the latest versions of the programs by extracting them from webpages. For each program, you provide the URL of the webpage that contains the program's latest version and choose the method for scraping the version from that webpage. From next time on, when Scrupdate checks for program updates, it will go to each webpage, extract the version, and compare it with the current version of the installed program.[2] If there are any new versions you will be informed.

Getting Started

Step 1: Installing Google Chrome™ Browser

Scrupdate uses the Google Chrome™ browser for scraping the version information of the programs from webpages. If you have not installed it yet, you can download it from here.[3]

Step 2: Installing ChromeDriver

> Before using Scrupdate, you will need to install ChromeDriver. ChromeDriver is the "bridge" between Scrupdate and the installed Google Chrome™ browser.

Download ChromeDriver from here.[4] Next, go to settings, click on the 'ChromeDriver' tab on the left side, click on the 'Install...' button, browse to the location where you've downloaded the ChromeDriver executable file and select it. If the text above turns green, ChromeDriver has been successfully installed.

Step 3: Configuring Program Updates Check

> Before configuring program updates check, you will probably want to hide unwanted programs from the list (these may be programs that are part of the operating system or part of another program). In the list on the main window, select all the programs you want to hide and click on the 'Hide' button.[5]
> You will probably want as well to add missing programs to the list. If a program is missing, you can add it manually by clicking on the 'Add New' button on the main window, filling in the program information, and clicking on the 'Add' button.[6]

> Sometimes you will need to change the version of a listed program because the saved version is wrong, is not formatted properly, or is missing. In these cases, you will need to convert the program from an automatically-added program to a manually-added program and change the version manually. On the main window, click with the right mouse button on a program in the list and select the 'Edit' option (or double click on the program in the list), then uncheck the 'Detect Automatically' option, change the program's installed version to the right version, and save.

On the main window, click with the right mouse button on a program in the list and select the 'Edit' option (or double click on the program in the list), then check the 'Configure Program Update Check' option, enter the URL of the webpage that contains the latest version of the program in the 'Webpage URL' field, select the appropriate method for scraping the version from the specified webpage and fill the additional information for that method in the 'Version Search Method' field, then select the desired options in the 'Version Search Options' field, and optionally, in the 'Advanced Options' field, and then save. Repeat this procedure for each program in the list that you want to check for updates for.

Step 4: Checking for Program Updates

Click on the 'Check for Updates' button. If you have successfully installed the Google Chrome™ browser and ChromeDriver, the program updates check will start. After the check is over, you will be informed if any updates are available and if there were any errors during the check.

User Interface

Main Window

- The Program List:

    This list shows you the programs in Scrupdate's program database. You can add new programs to the list, edit the programs in the list, hide or unhide programs in the list, or remove programs from the list. By clicking with the right mouse button on any program in the list or selecting multiple programs (by checking the checkboxes near the programs, or holding the 'ctrl' key while clicking on programs) and clicking with the right mouse button on any selected program, you can access the options menu for the selected programs. When there is a new version for a program but you want to skip it for some reason, you can open the options menu of that program and select the 'Skip Version' option.

- 'Search':

    This textbox allows you to find specific programs in the list. When you type a text in the textbox, only the programs that contain the specified text in their name will remain in the list. To reset the search, clear the textbox by deleting the text or clicking on the 'X' button inside the textbox.

- 'Filter':

    This option allows you to filter the programs that will be shown on the list. You can show only specific programs in the list by enabling this option and selecting the desired filtering. For example, you can show only the programs that have updates.

- 'Show Hidden':

    When this option is enabled, hidden programs are shown in the list, so you will be able to unhide programs that were hidden from it. When enabling this option, hidden programs will also be included in the program updates check results.

- 'Clear Marks':

    When there are new programs in the list, they are marked in yellow. Clicking on this button clears all the marks.

- 'Hide', 'Unhide', and 'Remove':

    These buttons allow you to hide, unhide, and remove the selected programs in the list respectively.

- 'Add New':

    This button allows you to manually add a new program to the list. Clicking on it opens a window in which you fill the program information.

- 'Check for Updates':

    This button allows you to manually check for program updates. Clicking on it starts a check for program updates. At the end of the check, you will be informed if any updates are available and if there were any errors during the check.

- 'Rescan for Installed Programs':

    This button allows you to manually scan for installed programs. Clicking on it starts a scan for installed programs. At the end of the scan, newly-installed programs are added to the list, and automatically-added programs are updated in the list if they have been changed on the computer (for example, when they have been updated or have been uninstalled).

5

- 'About', 'Help', and 'Settings':
    - *These buttons allow you to open the 'About', 'Help', and 'Settings' windows respectively.*

Settings Window

- 'Enable Scanning for Installed Programs':
    - *When this option is enabled, a scan for installed programs is enabled. Scrupdate will be able to add new programs to the list and update their information in the list automatically when they are updated or when they are uninstalled. Disabling this option makes Scrupdate operate in a manual mode, where you manage the program list manually, regardless of the programs that are installed on your computer. Please note that disabling this option converts all automatically-added programs to manually-added programs.*
- 'Scan for Installed Programs Automatically on Start':
    - *When this option is enabled, a scan for installed programs will be automatically performed every time Scrupdate is opened. When this option is disabled, a scan for installed programs will only be performed when you click on the 'Rescan for Installed Programs' button on the main window, or when a scheduled check for program updates is performed.*
- 'Remember Last Program List Options':
    - *When this option is enabled, the last state of the 'Filter' and 'Show Hidden' options on the main window will be remembered, so that every time you open Scrupdate, they will remain in the same state they were in when you closed it last time, instead of being in the default state.*
- 'Remember Last Program List Column States':
    - *When this option is enabled, the last state of the columns in the program list (which includes the position of each column, the width of each column, and which of the columns is being sorted and in which direction) will be remembered, so that every time you open Scrupdate, they will remain in the same state they were in when you closed it last time, instead of being in the default state.*
- 'Enable Scheduled Check for Program Updates':
    - *When this option is enabled, a check for program updates will be automatically performed in the background on a scheduled basis.[7][8] At the selected time on each selected day, a check for program updates will run in the background, and at the end of each check, you will be informed if any updates are available and if there were any errors during the check.*
- 'Include Hidden Programs in Check Results':
    - *When this option is enabled, hidden programs will be included in the results of scheduled checks for program updates. When this option is disabled, you will not be informed, at the end of scheduled checks, of updates to the programs that were hidden from the list.*
- 'Reset to Default Settings':
    - *This button allows you to reset all the settings to their default values. After it's done, the settings will be in the state they were in when you installed Scrupdate for the first time. Please note that the program database and the installed ChromeDriver are not affected by this operation.*

- 'Reset All':

  This button allows you to reset Scrupdate completely. After it's done, Scrupdate will be closed and all its user-data (which includes the settings, the program database, and the installed ChromeDriver) will be removed.

- 'Windows Scaling Factor':

  This option allows you to scale-up Scrupdate's windows. Use this option to scale-up the windows if you find it hard to use Scrupdate on displays with high resolutions. If you set this option to 'Auto', the most appropriate scaling factor will be determined automatically, so that the windows will always be in the ideal size on any display resolution. If you set this option to 'No Scaling', the windows will remain in their original size, which may be physically small on high display resolutions. Please note that on low display resolutions, the windows will be scaled-down automatically (even if you set this option to 'No Scaling'), so that they will always fit into the display.

- 'Minimum Version Segments' and 'Maximum Version Segments':

  These options allow you to change the way versions are displayed. Displayed versions will have no less than the selected minimum number of version segments and no more than the selected maximum number of version segments. For example, if the selected minimum number of version segments is 3 and the selected maximum number of version segments is 3, the version "1.2" will be displayed as "1.2.0" and the version "1.2.3.4" will be displayed as "1.2.3".

- 'Remove Trailing Zero Segments':

  When this option is enabled, versions are displayed without trailing zero segments (until the minimum number of version segments is reached). For example, the version "1.0.0.0" will be displayed as "1.0" (when the selected minimum number of version segments is 2).

- 'Highlight New Programs in the List':

  When this option is enabled, any new program that is automatically added to the list will be marked in yellow, until you manually clear the mark or disable this option.

- 'Installed ChromeDriver':

  Displays the currently installed ChromeDriver along with its version. You can install ChromeDriver by clicking on the 'Install...' button and selecting a ChromeDriver executable file, and you can uninstall it by clicking on the 'Uninstall' button.

- 'ChromeDriver Page-Load Timeout':

  This option allows you to change the maximum time ChromeDriver waits for a webpage to load. If a webpage has not responded or has not been fully loaded within that time, ChromeDriver will move on to the next webpage and an error will be reported.

- 'ChromeDriver User-Agent String':

  This option allows you to change the user-agent string that ChromeDriver uses when browsing webpages. You can choose to use the browser's default one, or to use a custom one.

- 'Use Incognito Mode':

  When this option is enabled, ChromeDriver uses incognito mode when browsing webpages. Browsing in incognito mode reduces the creation of temporary files

and may improve performance, but please note that some webpages may behave differently when being browsed in incognito mode.

Program Adding/Editing Window

- 'Detect Automatically':

  When this option is enabled, it means that the program is an automatically-added program and Scrupdate will automatically update the program's information when it is changed (for example, when you install a new version of the program or uninstall the program). By disabling this option, you will be able to edit the program's information, but you will have to update it manually every time it is changed. Please note that this option is enabled by default for each program that was automatically added to the list (by scanning for installed programs). Also, please note that disabling this option converts the program to a manually-added program, and thus, you can't enable this option after it has been disabled.

- 'Name':

  The name of the program. The specified name should be unique, and therefore, you can't use the name of another program in the list.

- 'Installed For':

  The installation scope of the program.
  "None" – Means that the program is not installed.
  "Everyone" – Means that the program is installed for all users.
  "User" – Means that the program is installed only for the current user.
  Please note that when an automatically-added program is uninstalled, it will not be removed from the list, but instead, it will be marked as an uninstalled program (the program's 'Installed For' field will be set to "None"). You can then manually remove the program from the list if you wish.

- 'Installed Version':

  The currently installed version of the program. It can be empty, but in that case, you will not be informed of updates to the program.

- 'Latest Version':

  Displays the latest version of the program that was scraped from the webpage in the last program updates check.

- 'Configure Update Check':

  When this option is enabled, the program will be included in the updates-check process. By default, this option is disabled, so you will need to enable it for each program that you want to check for an update for.

- 'Webpage URL':

  The URL of the webpage that contains the program's latest version. The program's latest version will be scraped from that webpage.

- 'Version Search Method':

  The method used for locating the version in the specified webpage.
  - o 'Search within the HTML Element with the Following ID':

    When this option is selected, the scraper will try to extract a version from within an HTML element with the specified ID within the webpage. If the HTML element was not found within the webpage or no version was found within the HTML element, an error will be reported.

- o 'Search within the HTML Element(s) That Match the Following XPath':

    When this option is selected, the scraper will try to extract a version from within all the HTML elements that match the specified XPath[1] within the webpage. If no matching HTML elements were found within the webpage or no version was found within any of the HTML elements, an error will be reported.

  - o 'Search Globally within the Webpage':

    When this option is selected, the scraper will try to extract a version from within the entire webpage. By selecting the 'Search from the Following Text within the Webpage' option or the 'Search until the Following Text within the Webpage' option, you can limit the version search to a specific section within the webpage. If no version was found within the selected section within the webpage (or within the entire webpage, if no section was set), or if a section could not be determined because at least one of the specified texts was not found, an error will be reported.

- • 'Version Search Options':

  Additional options for locating the version in the specified webpage.

  - o 'Treat a Standalone Number as a Version':

    When this option is enabled, standalone numbers are treated as versions when searching for a version within the webpage. For example, the number "1" will be considered as the version "1.0", instead of being ignored.

  - o 'Version Search Behavior':

    This option allows you to change the way a version is searched for within the webpage.

    - ▪ 'Get the First Version That Is Found':

      When this option is selected, the search will stop when encountering the first version, and that version will be set as the program's latest version.

    - ▪ 'Get the First Version That Is Found from the End':

      When this option is selected, the search will run backwardly (from end to start). It will stop when encountering the first version, and that version will be set as the program's latest version.

    - ▪ 'Get the Latest Version from All the Versions That Are Found':

      When this option is selected, the search will not stop when encountering any version. During the search, each encountered version will be remembered, and when the search ends, the latest version from all the encountered versions will be set as the program's latest version.

- • 'Advanced Options':

  Advanced options to help locating a version in special cases.

  - o 'After the Webpage Is Loaded, Wait For...':

    This option allows you to set a time to wait after the webpage is loaded before continuing to search for a version. You can use this option to make an intentional delay in case where the webpage is doing post-load processing and the elements have not been processed yet at the time of scraping. For example, if a webpage is designed in such a way that only

the core elements of it are loaded, and the rest of the elements are processed only after it has been loaded, you will need to set this option accordingly, so the webpage will have a chance to finish its post-load processing before the scraper attempts to search for a version within it.

- o 'Before Searching for a Version, Simulate Mouse Clicks on...':
  When this option is enabled, mouse clicks will be performed on elements (such as: buttons, links, labels, and etc.) within the webpage, according to the specified instructions, before the scraper attempts to search for a version within the webpage. You can use this option to make an interaction with the webpage, in cases where mouse clicks are needed for making the version visible (for example, when the version is found within a pop-up dialog that is only shown when clicking on a button).

  - ▪ The Webpage Element Locating Instruction List:
    This list shows you the instructions that will be used to locate the webpage elements that a mouse click will be performed on, in order. You can add new instructions to the list, move up and down instructions in the list, or remove instructions from the list. To add a new instruction to the list, select the method for locating the webpage element in the 'Locating Method' selection-box, enter the argument for that method (it can be an HTML element ID, an XPath, or an inner text of HTML element(s), according to the selected method) in the 'Locating Method Argument' text-box, select the interval for performing the click (that is, the time to wait after clicking on the element, before clicking on the next element) in the 'Interval' selection-box, and click on the '+' button. To move an instruction up or down in the list, select the instruction and click on the '↑' or '↓' buttons to move the instruction up or down respectively. To remove instructions from the list, select them (for selecting multiple instructions hold the 'ctrl' key while clicking on the instructions) and click on the 'X' button. Please note that you can only add up to 5 webpage element locating instructions.

- 'Check Configuration':
  This button allows you to check the validity of the program update check configuration. When you click this button, the scraper will run and try to locate a version in the specified webpage using the configuration. At the end of the process, if a version was successfully found it will be shown, otherwise a warning (with the failure reason) will be shown. If there were any errors during the process you will be informed. When you click this button while holding down the 'shift' key, the check will be performed in a visible browser window.

Tips

- Try to use the least global version search method. For example, If the program's version is found within a button that has an HTML element ID, use the method of searching for a version within an HTML element with a specific ID, instead of the method of searching for a version globally within the webpage.
- Pay attention to URL redirects. In cases where a generic URL redirects to a more specific URL, you will need to use the generic URL, so Scrupdate will always be redirected to the most recent URL. For example, "http://example.com/current-version" may redirect to "http://example.com/versions/1.2.3.4", so you will need to use "http://example.com/current-version". In most cases, you can get the generic URL from the webpage element you've clicked that redirected you to the specific URL, by clicking with the right mouse button on the element and selecting the option to copy its URL.
- It's recommended to use the latest version of ChromeDriver that is compatible with the version of the installed Google Chrome™ browser. As the Google Chrome™ browser is updated from time to time, ensure that you update ChromeDriver as well, so you will always have the latest features and security improvements.
- Always prefer using the HTTPS protocol over the HTTP protocol, as it is more secure.

Notes

[1] Scrupdate only informs you about updates. It doesn't update the programs.

[2] Scraping the program's latest version from a webpage (usually from the program's download webpage) is better than fetching it from a database that contains the latest version information of various programs because you get the latest version directly from the source. However, keep in mind that webpages are dynamic. The website's author can change the content of the webpages over time, which can result in errors in the scraping process. So, you will need to update the configuration from time to time.

[3] Scrupdate only supports the Google Chrome™ browser. It will not work with other browsers due to compatibility issues. If you are using another browser as your primary browser, you can install the Google Chrome™ browser side-by-side with your primary browser, it will not interfere with your primary browser (as long as you don't set it as your default browser).

[4] The version of ChromeDriver must be equal to or below the version of the installed Google Chrome™ browser.

[5] If automatic scanning for installed programs is enabled and you delete a program from the list, the program may be recreated on the next scan. To prevent this from happening, you will need to hide the program instead of deleting it, so it will not be recreated when scanning for installed programs.

[6] Manually-added programs are not automatically updated in the list. You will need to update a manually-added program's information in the list in yourself, every time you install a new version of the program or remove the program.

[7] A scheduled check for program updates will not start when Scrupdate is open.

[8] If you've enabled a scheduled check for program updates and a scheduled check was missed (for example, because the computer was turned off or was sleeping), the check will start as soon after you log into or unlock your user-account.

12

References

{1} The XML Path Language (XPath).

13