

A basic, step-by-step tutorial to using wildcards to find and replace text patterns in Microsoft Word

Find/replace in Word

In Microsoft Word, we normally use the “find” and “replace” functions to find a word or a string of text and replace it with another. For example, we could tell Word to replace every instance of “color” with “colour”.

What are wildcards?

With wildcards, instead of looking for words, we look for patterns. For example, we could tell Word to replace “January 1st” with “January 1”, but if we wanted to perform this operation for every date, we’d have to do 366 different searches – one for every possible day in the year.

Instead of doing 366 searches, we can tell Word to look for a certain pattern: the name of a month, followed by a space, followed by a single-digit or double-digit number, followed by the letters “st”, “nd”, “rd” or “th”. We can then tell Word to replace the match with the same thing, but without the “st”, “nd”, “rd” or “th”.

About this tutorial

This is not intended to be an exhaustive guide to Word wildcards. For that, there are already plenty of resources online.

Most online tutorials start by listing all the wildcard symbols and explaining what they do, which can be confusing and overwhelming to new users. In this tutorial, I adopt a different approach: I start with some basic examples and explain only the wildcard symbols used for each operation.

The exercises in this document have been tested. However, if you find something that is unclear or that one of the find/replace actions does not work, please send a bug report to my e-mail address, which you can find at <<https://www.anglopremier.com>>.

Download and save the sample text

- Download the sample text from <https://www.anglopremier.com/Resources/PerfectIt/wildcards-sample-text.docx>.
- Save it to a location where you will easily find it.
- Click on “Enable editing” if the message appears at the top of the document
- Return to the pdf and follow the instructions below

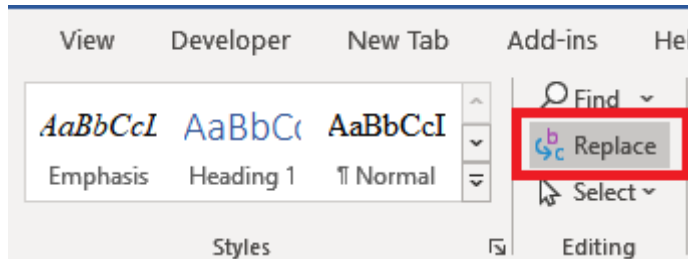
Exercise 1: Insert a hyphen after the “re-” prefix in words that start with the letters “ree”

Some style manuals call for a hyphen after the “re-” prefix if the subsequent word begins with an “e”. In other words, they require us to write *re-enter*, *re-edit*, etc., rather than “reenter”, “reedit”, etc.

Practise imposing this style rule by applying the following solutions.

Solution 1, without wildcards

In the sample document, open the Replace box by clicking on the “Replace” button found in the “Home” tab of the ribbon, or by pressing the shortcut combination (ctrl+H if you use the English version of Office).



Complete the following steps:

- **Enter the following in “Find what”:** ree
- **Enter the following in “Replace with”:** re-e
- Click on “Find next”
- The first word found is “freelance”. This word does not use the “re-” prefix. Since we don’t want to change this to “fre-elance”, click again on “Find next”.
- The next word is “three” – another word we should ignore – so click again on “Find next”.
- The next word is “reeducate”. This time, click on “Replace” to insert a hyphen.
- For each subsequent word, “click” on “Replace” if it is a word that should take a hyphen, or “Find next” if it is not.

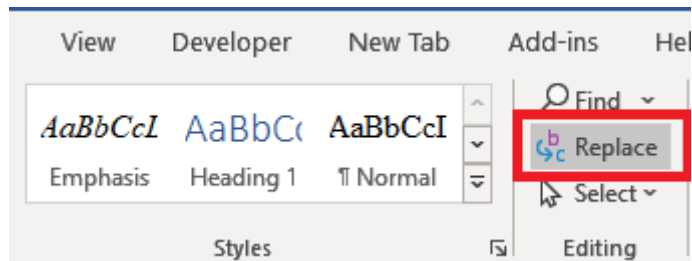
Problem: We can’t select the “Find whole words only” option, since we’re not searching for the whole word. As a result, Word finds any word containing the letters “ree” together, including words like *freelance*, *three* and *reef*.

Close the document without saving it, then reopen it to work on Solution 2.

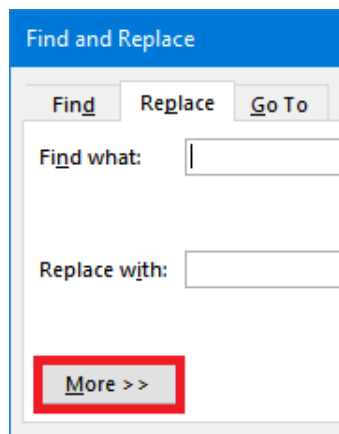
Activating the wildcards option

Solution 2 uses wildcards. Before starting the exercise, activate wildcards as follows.

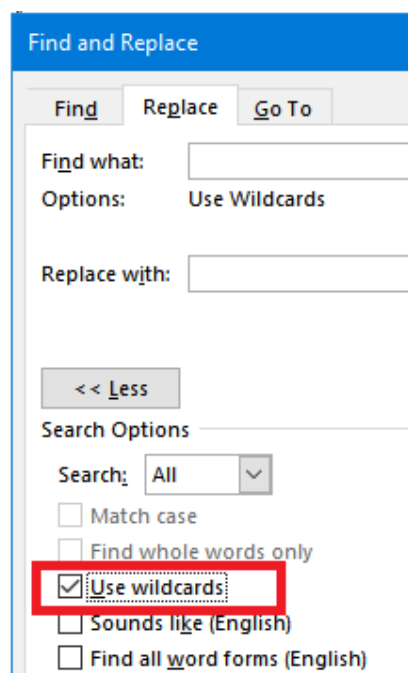
1. Reopen the sample text, then, in the Home tab of the ribbon, click on the word “Replace”, which is found in the “Editing” section (see below).



2. In the Replace box, click on More.



3. Select “Use wildcards”.



Solution 2, with wildcards

With the Replace box still open and the “wildcards” option selected, perform the following find/replace. Make sure you read the explanation of what each symbol is doing:

- **Find what: (<[Rr]e)e**
 - **<** The “less than” symbol indicates that the character that follows must be at the start of a word. This allows our search to ignore the “ree” in “freelance”, because the “r” is not at the start of the word.
 - **[Rr]e** A lower-case or capital “r” followed by an “e”. The square brackets indicate a choice of characters. Since wildcard searches are case-sensitive, we need to search for “r” or “R” so that both “ree” and “Ree” are detected.
 - **The round brackets around “[Rr]e”** Our “Find what” string includes a variable character: “r” or “R”. We therefore need to tell Word to replace the variable character with whichever character was found. In other words, if it finds “R”, then replace it with “R”; if it finds “r”, replace it with “r”. This is achieved with round brackets. To see how it works, read on.
- **Replace with: \1-e**
 - **\1** This replaces the contents of the first set of round brackets with whatever string of character(s) was found. In other words, if a small-case “r” was found, the expression “\1” will insert “re”; if a capital “R” was found, the expression “\1” will insert “Re”.
 - **-e** A hyphen, followed by the letter “e”. In other words, a hyphen is inserted before the “e”.
- **Click on “Find next”, then proceed as before, clicking on “Replace” or “Find next”, as appropriate.**
- **False positives:**
 - Since we were only looking for “ree” at the beginning of a word, the words *freelance* and *three* are no longer detected, which saves us time (especially on a long document). But we still have false positives: words beginning with “ree” in which “re” is not a prefix, namely, *reedy*, *reef*, *reefer*, *reek* and *reel*. It is impossible to create a search that will not have these false positives.

Save the document before continuing.

Exercise 2: Ensure a non-breaking space is used after i), ii), iii), etc.

Solution 1, without wildcards

- **Unselect the wildcards option in the Replace box**
- **Find what: i)<space>**
 - **IMPORTANT:** Throughout this document, “<space>” indicates an actual space. **Do not write the word “space”;** simply enter a space (without the arrow brackets).
- **Replace with: i)^s**
 - The caret (^) followed by an “s” denotes a non-breaking space. This works both in normal mode and in wildcards mode. If you can’t find the caret character on your keyboard, in the find/replace box you can click on “Special” then on “Caret Character”.
- **Click on “Find next”, then proceed as before, clicking on “Replace” or “Find next”, as appropriate.**
 - Note that “i)” works for numerals such as “iii)” and “vii)” because they end in “i)”.
- **Problem:**
 - It will only find roman numerals ending with an “i”, so you’ll need to repeat the exercise for roman numerals ending with a “v” and an “x”, such as “iv”, “v”, “ix”, “x”, etc.

Close the document without saving it, then reopen it to test Solution 2.

Solution 2, with wildcards

In the sample document, open the Replace box and perform the following search:

- **Select the wildcards option**
- **Find what: ([ivx]\)\<space>**
 - [ivx] Find the letter “i”, “v” or “x”.
 - \) A closing round bracket. As we’ve already seen, round brackets have a special meaning when we’re using wildcards, so we need to put a backslash before the round bracket if we want Word to actually find an opening or closing round bracket.
 - **The round brackets around [ivx]\)** For each hit, we might find an “i”, a “v” or an “x”. If we place brackets around this set of characters, we can tell Word to replace it with whatever string was found.
- **Replace with: \1^s**
 - \1 Replace the contents of the first expression that is in round brackets with the same as what was found. In other words, if an “i” was found, replace with an “i”; if a “v” was found, replace with a “v”; if an “x” was found, replace with an “x”.
 - ^s Insert a non-breaking space.
- **Click on “Find next”, then proceed as before, clicking on “Replace” or “Find next”, as appropriate.**
 - Note that, before we perform the replacements, “ii)” appears at the end of a line, but when we replace the ordinary space after with a non-breaking space, “ii)” moves to the start of the next line. The same happens when we replace the spaces after “iv)” and “vi)”.
- **False positives:**
 - In the sentence “The Defence Minister (Liam Fox) said he would inform the prime minister”, the “x” in the word “Fox” is followed by a closing round bracket, so it generates a false positive.
 - In most texts in English, you should have only a few false positives, since brackets will rarely end with an “i”, a “v” or an “x” (not many English words end with those letters). You could use “Replace all” anyway, as it usually won’t do any harm if you add a non-breaking space where there doesn’t need to be one. Nevertheless, we could further refine our search string further to eliminate false positives. Solution 3 eliminates the false positives.

Close the document without saving it, then reopen it to test Solution 3.

Solution 3, also with wildcards

- **Find what: (<[ivx]{1,7}\)\<space>**
 - <: The “less than” symbol at the start of a “Find what” string indicates that we are looking for the start of a word (in this case, the “word” being the full Roman numeral).
 - {1,7}: Between the start of the Roman numeral and the space after it, there may be between 1 and 7 characters (xxxviii = 38), all of which will be “i”, “v” or “x”.
 - \): A literal closing round bracket.
- **Replace with: \1^s**
 - This is the same syntax as in Solution 2. We are still replacing the part we’ve placed in round brackets (this time, the full Roman numeral) with itself, followed by a non-breaking space.
 - Imagine your client also requires these list tags to be in italics. Since we’re now searching for the entire roman numeral, we can italicize it. With your cursor in the “Replace” box, press ctrl+i, or whatever the italics shortcut is on your keyboard (ctrl+k on Spanish and French keyboards). The words “Font: Italic” should now appear below the “Replace with” box.
 - If you can’t find the keyboard shortcut for italics, click on “Format”, then “Font”, then, in the “Font style” section, select “Italics”.
- **Click on “Find next”, then, for each word found, then proceed as before, clicking on “Replace” or “Find next”, as appropriate.**
 - Note that conversion to italics would not have been possible with Solution 2.

- **What if some list tags already have a non-breaking space?**
 - If we wanted to italicize the list tags but some already had non-breaking spaces, our search string would not find them, since it looks for a normal space. Instead of putting a space at the end, we can tell Word to look for either a space or a non-breaking space, using “[^s]”. You don’t need to do this now. But when using wildcards, it’s often a good idea to use [^s] to look for a space, so that non-breaking spaces are also found. The search string we just used would thus become:
 - (<[ivx]{1,7}\)[^s]

Save the document, then reopen to complete Exercise 3.

Exercise 3: Convert “Monday January 1st” (and similar) to “Monday, January 1st”

Our text has a list of dates written in this format. But imagine our client asks for the comma to be removed? There are ways we could achieve this without wildcards, but there is a problem with each of these solutions:

Solution 1, without wildcards

- **Unselect the wildcards option**
- Find what: day
- Replace with: day,
- **Click on “Find next”, then proceed as before, clicking on “Replace” or “Find next”, as appropriate.**
- **Problem:**
 - Word also wants to change “daytime” (which contains “day”) to “day,time”.

Close the document without saving it, then reopen it to test Solution 2.

Solution 2, also without wildcards

- **Find what: Monday**
- **Replace with: Monday,**
- **Click on “Find next”, then proceed as before, clicking on “Replace” or “Find next”, as appropriate.**
- **Problem:** This is cumbersome, as you’ll have to repeat the exercise for every day of the week. Also, Word won’t check that the day of the week is followed by the name of a month, so if your text contained, say, the expression “Sunday best”, it would become “Sunday, best”.

Close the document without saving it, then reopen it to test Solution 3.

Solution 3, with wildcards

- **Select the wildcards option**

- **Find what:**

<([MTWFS][a-z]@day)> <([JFMASOND][a-z]{2,8} [0-9]{1,2}[stndrh]{2})>

- < The “less than” symbol at the start of our string indicates that we are looking for the start of a word.
 - [MTWFS] This looks for a capital M, T, W, F or S, i.e. the letters that all the days of the week start with.
 - [a-z] Any lower case character (including characters with diacritics, such as é and ñ).
 - @day As many consecutive matches of the previous item as possible (i.e. multiple consecutive lower-case letters) followed by the letters “day”.
 - > The end of a word.
 - [JFMASOND] Any of the upper-case characters included in the square brackets (i.e. any of the capital letters that appear at the start of month names).
 - [a-z]{2,8} Between 2 and 8 lower case letters. I.e. every possible month from the one with the shortest spelling (**May**) to the one with the longest (**September**).
 - NB: You might have thought that for the days we could have used “[MTWFS][a-z]{2,5}day”. But Word finds the longest string possible when you use curly brackets, so using this method it fails to find, for instance, “Monday”, because it finds five lower-case characters after the M and therefore doesn’t find “day” after the five lower-case characters.
 - [stndrh]{2} Any two consecutive letters from among those listed in the square brackets. The letters listed are those used to form ordinals in English (“st”, “nd”, “rd” and “th”).
- Round brackets** As used in the previous solutions. Note, though, that this time we have two sets of round brackets, which is why we must use \1 and \2 in the Replace box (see below).
- Replace with: \1, \2**
- \1 Inserts whatever was found by the string in the first set of round brackets in “Find What”. This will be one of the days of the week.
 - ,<space> A comma and space after the day of the week.
 - \2 Inserts whatever was found by the string in the second set of round brackets in “Find What”. This will be one of the months of the year.
- **Click on “Find next”, then “Replace”. Because we’re searching for such a precise pattern, once you can see that it is working properly you can click on “Replace all”, as there won’t be any false positives.**

Save the document before continuing.

Exercise 4: Convert “Monday, January 1st” (and similar) to “Monday 1st January”

This time we need three sets of round brackets, as we need to identify the day, month and date separately. We then need to change the order in which they appear, placing the date (i.e. the ordinal number) before the month. Let’s go straight to the best solution, with wildcards, based on Solution 3 above.

Best solution, with wildcards

- **Find what:**
<([MTWFS][a-z]@day)>, <([JFMASOND][a-z]{2,8}) ([0-9]{1,2}[stndrh]{2})>
 - This is the same as in the previous operation, except for two differences. First, it includes the comma that we inserted between day and month in the previous operation. Second, the second set of round brackets ends after the name of the month, and a third set is used to mark the date.
- **Replace with: \1 \3 \2**
 - \1 The day (i.e. the contents of the **first** pair of round brackets) still comes first.
 - \3 The date (i.e. the contents of the **third** pair of round brackets) comes next. Note that this time we only have a space after \1, not a comma.
 - \2 The month (i.e. the contents of the **second** pair of round brackets) comes at the end.
- **Click on “Find next”, then “Replace”. Because we’re searching for such a precise pattern, once you can see it is working properly you can click on “Replace all”, as there won’t be any false positives.**

More information on wildcards

As mentioned at the start of this document, this is intended to be a beginner’s guide. For more details on how all the wildcard symbols work I would highly recommend the section called “The theory” at wordmvp.com ([direct link here](#)). The document also includes some exercises.