

VoiceRecognition USAGE: Increasing the Accuracy Of Dragon NaturallySpeaking IN AN EHR

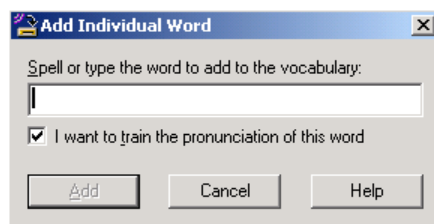
by John Ingram

There should be no doubt about Dragon NaturallySpeaking's out-of-the-box accuracy level. The product has become extremely accurate over the years. A lot of this comes from very smart engineering and vocabulary development geared towards creating subspecialty vocabularies (14 medical subspecialties) as well as language models to cover a wide range of non-native English speakers. With a little bit of work on the part of a Physician, Dragon NaturallySpeaking will become even more accurate through personalizing vocabulary.

All the methods in this article can be utilized by a Physician, or anyone who has a bit of time to work with Dragon NaturallySpeaking. There are methods for adding individual words, adding words from lists, adding words from documents, adding words by spelling them out, and last but not least there a way to delete words from Dragon's vast dictionaries.

If Dragon NaturallySpeaking is consistently getting specific words wrong when dictating a document, it might be a good idea to see if these words need to be added to Dragon NaturallySpeaking's dictionary. If you only need to add one or two words the dictionary, it's a very easy process. Let's see how easy this is in action.

On the DragonBar choose 'Tools', 'Accuracy Center', then 'Add a single word to your vocabulary.' You should get a dialog box that looks like this:



You may either spell the word out letter by letter using Dragon NaturallySpeaking, or simply type the word into this text box. There is a checkbox that will have Dragon NaturallySpeaking help you train the pronunciation of the word as well. REMEMBER after you've added a word or word(s) you should always save your user files. Simply say "save user files" to update Dragon NaturallySpeaking with the words you've added with the pronunciations that you've trained.

A more complicated, but time saving process is to add words from lists. Once again, go through the same process of getting to the Accuracy Center, and choose: "add a list of words to your vocabulary." Instead of just a simple dialog box, Dragon NaturallySpeaking will present you with a wizard like this:



○ | Dragon NaturallySpeaking has become extremely accurate over the years.

○ | If Dragon NaturallySpeaking is consistently getting specific words wrong when dictating a document, it might be a good idea to see if these words need to be added to the dictionary.

○ | There are methods for adding individual words, adding words from lists, adding words from documents, adding words by spelling them out, and delete words.



○ | Everyone in the practice who uses Dragon NaturallySpeaking can have custom words installed into their own user profiles.

○ | Easily add words from your existing documents.

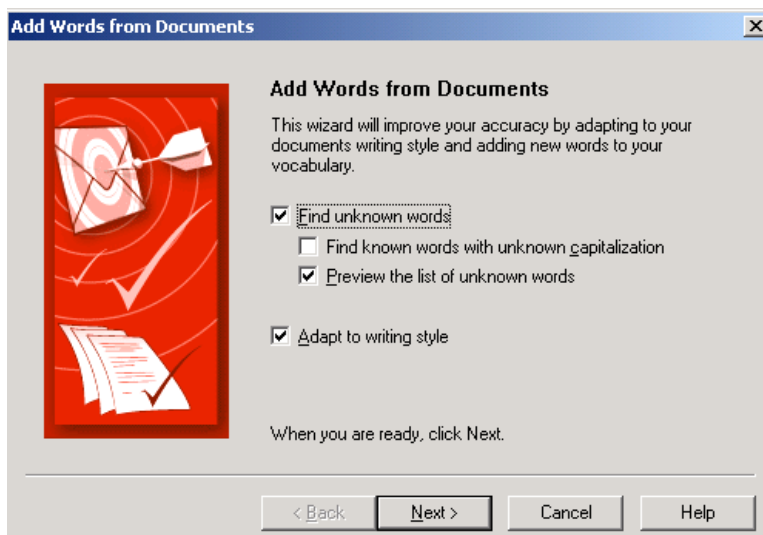
○ | “Add Words from Documents” wizard to make adding words process effortless.

This wizard guides you through the process of adding a particular list of words to your user profile. The one thing to remember when using this tool is that it only works with a plain text (*.txt) file, not Word documents, WordPerfect documents, pdf’s, etc. This wizard gives you a chance to analyze and / or change any words it finds before it adds these new words to the dictionary. You’ll also get a chance to train any new words it finds, as well. In a small practice, after one or two physicians have added words to their dictionaries, they can export these custom word lists to other physicians so that they can import these lists into their user profiles as well. The beauty lies in everyone in the practice who uses Dragon NaturallySpeaking can have these custom words installed into their own user profiles.

Another capability for adding words to Dragon NaturallySpeaking is to add words from documents. To produce the best results prior to running this particular tool, it’s a good idea to gather the documents you want Dragon NaturallySpeaking to analyze and prepare them to get the best results when you add words from these documents using this tool.

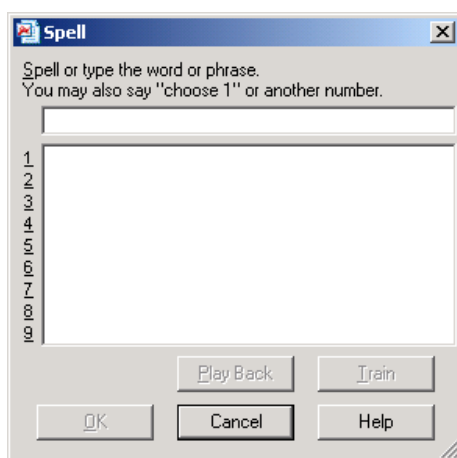
You should check your documents to make sure paragraphs are separated and convert text within tables or bulleted lists into regular lines of text. You should remove any text formatting, because some of the coding tags associated with formatting (things such as bold or italicized text for instance) may decrease the accuracy if documents are left with text formatting and not converted into plain text. Last, if you have text inside of graphics, this text will not be recognized, as well as, if you have text information within headers, footers, or titles you should move that information into the body of text somewhere. A quick note on duplication: remove any duplication (multiple instances of the same type of diagnosis as an example) as it may adversely affect any statistical information Dragon NaturallySpeaking may draw out of that particular set of documents.

Here’s what the “Add Words from Documents” wizard looks like when you first started from the Accuracy Center.



The key to using this particular wizard, is to make sure that you “groom” your documents prior to running this wizard. Dragon NaturallySpeaking can keep it simple and just add words to your dictionary simply by spelling the words through the spell dialog box, in contrast to all-out document analysis.

To begin this process simply say “spell that” and say the first few letters of a particular word. Dragon NaturallySpeaking will open the spell dialog box and you can finish typing the word out or use Dragon NaturallySpeaking to spell the rest of the word letter by letter. Here is what the spell dialog box looks like:



There is one limitation to using the spell dialog box: You can’t use this dialog box to add words containing hyphens or spaces. If you attempt to add words like this through this dialog Dragon NaturallySpeaking will actually think you’re adding each word individually. This is not the way that this tool is intended to be used. The spell dialog box is designed to add words (if used in this fashion) as single words and not phrases. If you wish to add words as a phrase, or with a spoken form different from the written form, you should add them directly through the vocabulary editor dialog box.

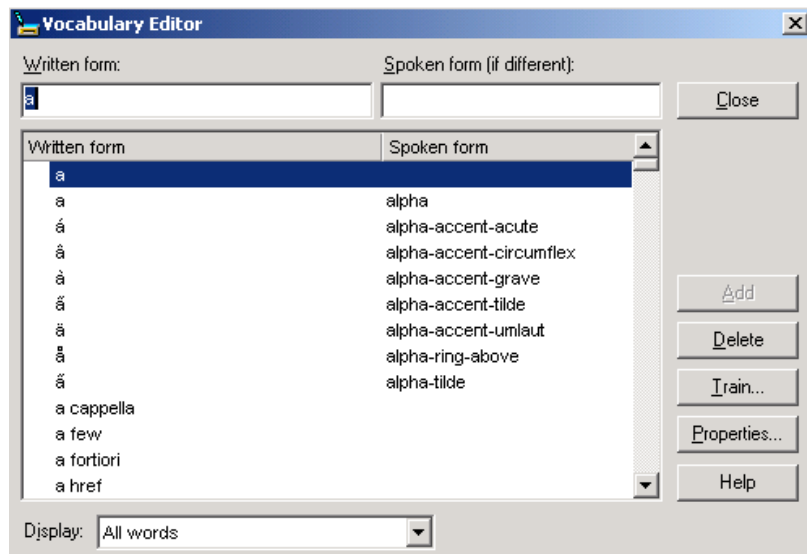
If you would like to use the vocabulary editor directly:

From the DragonBar: Click Words >> View/Edit, or say “Open Vocabulary Editor.” Here’s what the vocabulary editor dialog looks like:

○ | Make sure to groom (remove any text formatting, etc.) before using “Ass Words from Documents” wizard

○ | Another way to add words: the “Spell” dialog box

○ | Do not add hyphenated or words containing spaces with this tool (add individually).



○ | Last, but not least: the Vocabulary Editor....

The vocabulary editor has many features and functions so you can add words with a written form only (means Dragon NaturallySpeaking phonetically guesses from the actual written form to place the word on the screen), or you may have words with a written form different from the actual spoken form (meaning Dragon NaturallySpeaking will type a particular written form if it hears this spoken form).

○ | To modify Dragon NaturallySpeaking's vocabulary is the quickest way to increase accuracy to the product's already phenomenal accuracy level.

You should customize your vocabulary by deleting words. It's a good idea to become familiar with the vocabulary editor dialog. As a rule of thumb with Dragon NaturallySpeaking it's really not a good idea to delete words from its dictionary unless absolutely necessary. Under normal usage you shouldn't need to delete any word from the active dictionary/vocabulary. If a particular word you need or use a lot is being confused with a 'culprit' word you never use you may need to delete the offending word. This function will have to take place using the vocabulary editor dialog.

Type the written form of the word and click the delete button. It's that simple. You should understand if the word you just deleted it is in another document, and you pull that document up with Dragon NaturallySpeaking, the software may see the previously deleted word and re-install it into the dictionary. Second, there are thousands of common words within the active vocabulary that Dragon NaturallySpeaking will not allow you to delete.

To modify Dragon NaturallySpeaking's vocabulary is the quickest way to increase accuracy to the product's already phenomenal accuracy level. Whether we want to add single words, add words through to document analysis, or even if necessary, delete words, many physicians can improve their accuracy. This article was dictated using Dragon NaturallySpeaking. I use Dragon NaturallySpeaking every day to get my work done, why aren't you?

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