

# Making speech commands work well on the desktop: it's all about steps

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Notes:

*The speech commands I used during the talk are in green.*

*We had enough questions during the talk that I didn't have time to show the five-minute tour at the end.*

**UC Slides Short File** (opens slides)

**Function 5** (puts slides in full-screen view)

Questions for the audience: How many use NaturallySpeaking, and what are the pluses and minuses of using NaturallySpeaking?

I've been using speech recognition software since DragonDictate 1.0. It's been both enabling and frustrating. I started using it because I had a bad case of repetitive strain injuries in my hands. But when I was hurt and it hurt to type I found myself cheating a lot despite the pain -- not when I was dictating, but when I was trying to control the computer. That told me the command-and-control interface was frustrating.

Utter Command came out of that frustration. It works with NaturallySpeaking Pro and makes the command-and-control part of using speech much easier and faster.

It's been 15 years since I began using speech to control the computer and more than 5 years since I got serious about making the speech interface better.

I can boil down what I've been doing all this time to three important concepts:

**Speech Screen Down** (advances slide while the microphone is asleep)

First, make commands that **follow the way the brain works**

Second, make commands **consistent** across programs

And third, reduce the number of **steps** it takes to carry out a given task.

I'll talk a little more about the system behind Utter Command, then I'll give some short demonstrations that will step you through the basics -- how Utter Command speeds word processing, accessing menus, accessing documents, folders and websites, and mouse control. I'll also show you some of our learning materials.

Then I'll give you a five-minute whirlwind tour that will give you a sense of many of UC's other abilities. And then we can open things up for questions.

As you watch, think about the three important concepts:

Make commands that **follow the way the brain works**

Make commands **consistent** across programs

Reduce the number of **steps** it takes to carry a given task.

**Speech Screen Down** etc. (*go through the rest of the slides -- an overview of the logic and science behind Utter Command*)

**Speech On**

**Window Close Times 2** (closes full-screen view, then PowerPoint)

## Word Open

NaturallySpeaking gives you the ability to select words by saying them -- but this doesn't work in every program. · new paragraph

## Size 14

NaturallySpeaking also allows you to select words near the cursor. These commands work in programs that don't support the select words ability, but the wording requires several steps.

**Move left 4 words**

**Select back 3 words**

**Press Control b**

**Go to Bottom of Document**

**New Paragraph**

Natspeak: 5 steps · New Paragraph

Utter Command adds finer control in moving and selecting as you dictate in any program -- and it takes fewer words and fewer steps.

**4 Before · 3 Before Bold**

**Another Graph**

NaturallySpeaking plus Utter Command: 2 steps · New Paragraph

Utter Command also gives you finer control at the character level -- you can say as many as four keys in a row. · New Paragraph

## Size 20

<b>Cap Fact</b> <b>Line Size 20</b>	Fact	Cap Fact
<b>Left Backspace s</b>	Fas t	Press Left Arrow, Backspace, Press s
<b>Backspace · Right e</b>	Fate	Backspace, Press Right Arrow, Press e
<b>Backspace · 2 Left e</b>	Fe at	Backspace, Move Left 2, Press e
<b>Delete e</b>	Fee t	Press Delete, Press e
<b>2 Backspace i</b>	Fi t	Backspace 2, Press i
<b>Left Lima</b>	Fl it	Press Left Arrow, Press l
<b>1 1 Letters Delete</b>	F t	Backspace, Press Delete
<b>Letter a c</b>	fac t	Press a, Press c
<b>End Exclamation</b>	fact	Press End, Exclamation Mark
<b>Exclamation Times 5</b>	fact!!!!	Exclamation Mark, Exclamation Mark, Exclamation Mark, Exclamation Mark, Exclamation Mark
<b>6 Backspace · Home Delete</b>	t act	Backspace 6, Press Home, Press Delete, Press t
<b>Tango</b>	F act	Backspace, Press Cap f
<b>Backspace · Cap f</b>		

**Another Graph**

**Size 14**

That took 16 steps. If I were to use NaturallySpeaking alone it would've taken 41 steps. · new paragraph

Utter Command also adds flexibility in document level navigation. People who use speech often get tired of saying screen down screen down etc. · new paragraph

I'm going to show you several solutions, but first I need to make this document longer. · new paragraph

**1 Through 8 Period Enter**

**7 Up End**

**Cap Introduction**

**Down End**

**Cap Topic**

**Down End**

**Cap Another Topic**

**2 Before Copy**

**Down End Paste Repeat 4**

**Down End**

**Cap Summary**

**8 Up Home**

**Down 3 Enter Repeat 8**

**Bottom 2 Enter**

Here are a couple of simple ways to get around. · new paragraph

**Screen 1**

**Screen 3**

**2 Screen Up**

**Go Bottom**

If you use numbers, letters or symbols to organize your documents you can jump among sections. · new paragraph

**Find One Period**

**Find Six Period**

**Go Bottom**

You can also find keywords or phrases this way. · new paragraph

**Find Introduction**

**Find Summary**

**Go Bottom**

I can find these words because they're on my keyword list.

**UC Keyword**

**Introduction**

**Summary**

**Window Close**

Here's how to add words or phrases to your keyword list -- watch the bottom of the list.

**2 Before Add keyword**

**Enter**

**Another**

**Enter**

**Yet another one**

**Enter**

**Control s Window Close**

**Another Graph**

Utter Command also allows you to combine keyboard shortcuts. This guarantees you a viable way to do everything across all programs. - new paragraph

NaturallySpeaking allows you go through menus by saying the words on the menu -- this works in many, but not all programs. - new paragraph

**Tools**  
**Word Count**  
**Close**

With Utter Command you can go through menus much faster using keystrokes that can be combined. - new paragraph

**Under t**  
**Letter w**  
**Close**

**Under t w Close**

This allows you to access any menu item using a single speech command. And it works in any program -- even programs like OpenOffice writer, which you can't access by saying menu words. - new paragraph

**Writer Open**  
**Under t w Close**  
**Window Close Under d**

Utter Command also makes navigation easier at the file system level. You can go to any file, folder or Web site that's on your File, Folder or Site list. - new paragraph

**UC File**  
**Demo 1**  
**UC Folder**  
**Notes**  
**UC Site**  
**Redstart Systems**  
**Window Close**

**Demo 1 File**  
**Redstart Systems Site**  
**Notepad Open Notes Folder**

**Window Close Times 2**  
**WordPad Close - Word Open**

In Firefox, we use a Firefox add-on that puts screen numbers on links. You can turn the numbers on and off and say the numbers to go to a link. You can go to a link number even if it's off the screen. - new paragraph

**Firefox Open**  
**5 Go**  
**11 Go**  
**16 Go**  
**Window Close**

Utter Command also allows you to move the mouse and click anywhere on the screen using a single command. - new paragraph

**Solitaire Open - Rulers Open**  
**Window 5 By 5** (moves window)  
**15 By 10**  
**Touch**  
**By 16**  
**Drag By 25**  
Etc.

**Function 2** (new game)  
**Window Close - Rulers Off**

You can put rulers on any edge of your screen, and you can use the mouse commands with or without the rulers on. - new paragraph

Every command is documented in detail in 10 lessons. There's also a full reference that includes a brief explanation for every command. And we have an index of commands. You can get to any subsection of the electronic version of the documentation using a single speech command. - new paragraph

**UC Lesson 1**  
**UC Lesson 1.2**  
**UC Lesson 3.2**  
**UC Index - page 5**  
**Window Close**

We also provide onscreen guides that contain useful information like the radio operator alphabet, top shortcuts for programs, and self-guided tours. - new paragraph

**UC Alpha**  
**UC Top Word**  
**UC Task**  
**Bottom Find Tour 3**  
**Bottom Find Tour 7**  
**Window Close**

There are also custom On-screen Guides - new paragraph

**UC Custom 1**  
**Go Bottom**  
**Put your Commands here**  
**Window Close - No**

There's also material on the Redstart systems website that aids learning, including videos of many of the task tours.

**Redstart Systems Site**  
**3 Go**

**Window Close**  
**Window Close - No - Speech Off**

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Now I'll give you a quick tour -- you'll recognize some of the things I've showed you, and you'll also see some new things. I'll do writing and editing, open the word count dialog box, make a table, use the Insert Picture From file dialog box, prepare email, control the sound system, manipulate text and Windows and access the Internet. - new paragraph

This tour uses 85 speech commands and will take about 5 minutes. The same tour via keyboard and mouse would take 281 steps and more than twice as long. The same demo using NatSpeak alone would take more steps and a little longer than the keyboard and mouse.

<p>Speech On · Word Open  Today Long  new paragraph · we saw many many little birds  skimming over the water  4 Befores  swooping over the marsh  2 Before · 1 Befores Delete  around · spacebar  3rd Word · 2 Words Bold  Go Home  This morning · spacebar  Delete w  Another Graph</p> <p>Under i p f  Bird Pictures Folder  1 Right Enter</p> <p>new paragraph · This afternoon we assessed  productivity Colon · new paragraph</p> <p>Excel Open Max  Cell Charlie 6  Days Short Tab  Cell Bravo 7  Cap Brainstorms  Enter Up  Under Oscar Charlie Apple</p> <p>Tab 1 Tab 2 Tab Short  4 Point 7 Tab Short  6 Point 5 Tab Short  9 Point 8 Tab Short Repeat 3  Alternate Equals · Enter</p> <p>93 by 8 No Touch  Cell Echo 7 · Touch  Cell Golf 7 · Touch</p> <p>5 2 Letters  1 Ups  Copy to Word  All Copy</p> <p>Express David Eileen CC Kim  Cap Today's activities  Tab Paste  new line · Cap Cheers Comma · new line · Kim  Window Close · No · Window Close</p>	<p>Notepad Open  Watch speech make words and Windows dance  Size 14  Size 50 by 40</p> <p>Media Player Open  Local 80 by 80  Down Enter  Win Min</p> <p>Window 0 by 50  Window 50 by 50  Window 0 by 0  Size 80 by 90</p> <p>Line duplicate Repeat 10  Down Enter Repeat 10  Up Backspace Repeat 10  Home Hyphen Space  Down Home Hyphen Space Repeat 10  Size 55 by 40</p> <p>Media Pause  Media Play  Media 2 After</p> <p>Weather Site  New York Times Site  Redstart Systems Site  6 Go  Zoom In  Zoom In 2  Zoom Out 2  12 Go  13 Go  Go Back  2 Back  Screen 2  Tab Back  Tab Forward  Document Close Times 2  Screen Clear  Notepad Open Max  Word Close · No  Excel Close · No  Window Close · No  Firefox Close · Speech Off  Speech Media Stop  Speech Media Player Close</p>
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We have a few minutes for questions.

I should mention that my email address is at the bottom of the handout. That's a good way to you get ahold of me for questions for feedback of any kind.

I should also mention that we're in the last stages of building our training program, and we're looking for pilot projects to try things out on. Once you get the steps down it's important to be able to learn the steps quickly.

Questions, comments?

Further resources:

Redstart Web site:

[www.redstartsystems.com](http://www.redstartsystems.com)

Utter Command overview (system requirements and recommendations are at the bottom of this page)

[www.redstartsystems.com/uttercommand.html](http://www.redstartsystems.com/uttercommand.html)

Utter Command Steps graph, tour scripts and videos (scroll up for tour scripts and videos):

[www.redstartsystems.com/uctasktours.html#graph](http://www.redstartsystems.com/uctasktours.html#graph)

Utter Command Papers and presentations

<http://www.redstartsystems.com/papers.html>