

# Running Wordstar 6 on Windows 7 Using vDOS

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Thanks to Dennis McCunney for helping me learn how to set vDOS up.

DISCLAIMER #1: I am running Wordstar 6 for DOS on a Windows 7 (64-bit) computer using vDOS. I assume this same procedure will work on a 32-bit Windows 7 system and quite possibly later versions of Windows. But I've not solved the printer problem which I explain at the end of this post. This means that I can't print anything to paper from within Wordstar. Since I use Wordstar for coding, this inability to print to paper doesn't much bother me. (I can use Wordstar to print to ASCII text files just fine, and I can then use some other application to print those files to paper if I need to.) But if printing Wordstar documents to paper is important to you, this method of running Wordstar on Windows 7 needs additional work.

DISCLAIMER #2: I apologize if these instructions seem overly detailed, while omitting many options, alternatives, and tantalizing possibilities. My goal is to present *one* example way to run Wordstar using vDOS that can (hopefully) be followed by anyone, even someone who is not all that computer-savvy. For additional and more sophisticated information, there is a Wordstar Discussion Group at: <https://groups.yahoo.com/neo/groups/WordStar/info>, and a Wordstar Resources Website at: <http://www.wordstar.org/>.

Getting Wordstar to run on Windows 7 using vDOS is a two-phase process: first setting up vDOS and then configuring wordstar to run in the vDOS environment.

## Phase 1: Setting up vDOS

vDOS is free Open Source software that you download (though they would appreciate a donation).

- 1 **Install vDOS.** Download vDOS from <https://sourceforge.net/projects/vdos/> and install it as you would any other piece of downloaded software. (I save it to file, double-click on the saved file, and follow the onscreen directions.)

After installation, you should have a vDOS software folder that contains a vDOS icon. What happens when you click on the vDOS icon is determined by the contents of the `autoexec.txt` and `config.txt` files which should also be in the vDOS folder. (These two files perform functions similar to the old DOS `autoexec.bat` and `config.sys` files.) To set up vDOS to run Wordstar, you edit the `autoexec.txt` file and (optionally) the `config.sys` file. To edit this file, open it with a text-editor like Notepad. (If you use a word processor like Word, be sure to save the file as unformatted plain-text.)

- 2 **Designate virtual drive locations for vDOS.** Edit the `autoexec.txt` file to assign virtual drive letters to those Windows folders that Wordstar will need to access. What

you enter in this file depends on where your vDOS and Wordstar software, and Wordstar data files are located.

**CAUTION:** Microsoft wants everyone to store their data files in some subfolder of `My Documents`. But Wordstar was created before spaces were allowed in folder names. Wordstar can't find documents stored anywhere in, or under, `My Documents`. So you have to defy Microsoft's assumption by storing your Wordstar data files in some folder with no space in the name. For example, `c:\myfiles`.

You assign drive letters to Windows folders by adding `USE` statements to the `autoexec.txt` file in the format: *letter: folder*. These steps assume that your Wordstar software files are located in a folder named `c:\dosapps\ws`, your vDOS software is in `c:\dosapps\vdos`, and your most commonly used Wordstar document files are in a folder named `c:\myfiles` (and its subfolders). So, for example, you would add the following lines to the `autoexec.txt` file.

```
USE v: c:\dosapps\vdos
USE w: c:\dosapps\ws
USE e: c:\myfiles
```

This tricks Wordstar into believing that the vDOS software is stored on mythical drive V, the Wordstar software is on mythical drive W, and your most commonly used Wordstar data files are on a mythical E drive. Note that the mythical drive letters don't have to be sequential, you can use any letter of the alphabet except Z, but you cannot use the same letter twice. I use the letters V for vDOS and W for Wordstar as a memory aid.

You can give Wordstar default access to Windows folders for which you have not specified a mythical drive for by adding the following `USE` statement:

```
USE c: c:\
```

This allows you to navigate to some of the Windows folders on your computer's C drive with Wordstar commands — except as noted in the caveat below:

**CAVEAT.** Wordstar is very, very old school. In olden days, all filenames had to follow the 8.3 rule. Which meant that no filename or folder name could have more than 8 characters to the left of the period, and no more than 3 characters to the right of the period. And no spaces in the name at all. For example, the filename `12345678.TXT` is allowed, but filenames like following are not: `12345678.TEXT` (more than three character to the right of the dot), or `WAYTOOLONG.TXT` (more than eight characters to the left of the dot), or `MY POEM.TXT` (space in the name). Wordstar can't handle files or folders with names that violate the 8.3 rule. If you want to use Wordstar to edit a file that violates the 8.3 naming rule, you have to first rename the file. Nor can Wordstar navigate to, or make use of, folders with names longer than 8 characters or that have spaces in their names, such as `MY DOCUMENTS`.

If you store Wordstar data files in more than one Windows folder/subfolders, you can optionally specify a different mythical drive for each. For example:

```
USE f: c:\otherfiles
USE g: c:\morefiles\budgets\2014
```

But rather than have a unique drive letter for every folder, most people find it more intuitively easier to simply navigate the Windows C drive after adding a `USE c: c:\` statement to the `autoexec.txt` file.

- 3 **Specify a path.** DOS programs like Wordstar rely on a path to identify where needed software is located. This path must lead to the mythical drives where both the vDOS and Wordstar software files are stored (in our example, that's mythical drives V and W). To specify the path, enter a SET PATH statement in the `autoexec.txt` file below the USE statements. For example:

```
set path=v:\;w\;
```

Note the = sign between `path` and the first drive letter, and that colon, backslash, semicolon (:\;) are required after each drive letter. You don't have to specify any path to your Wordstar data files, but you do have to configure Wordstar to find them as described in [Step #4](#) on page 5.

- 4 **Specify Loading Wordstar.** Enter commands to load Wordstar in the `autoexec.txt` file below the SET PATH statement. The normal way to do this is to first instruct vDOS to go to the mythical directory where your Wordstar data files are stored, and then invoke Wordstar. For example, if you want to work in your `c:\myfiles` folder (which Wordstar thinks is mythical drive E), you would add the following two lines to the `autoexec.txt` file:

```
e:
ws
```

The `e:` statement takes vDOS to the `c:\myfiles` folder (mythical drive E). If you don't include the `e:` statement, Wordstar will start in the vDOS virtual directory and you will have to manually navigate to your working files. As you'll recall, `ws` is the traditional method of loading Wordstar from a command line. However, if you've renamed your `WS.EXE` file to something else, you use that name instead of `ws`. For example, if you've used `WSCHANGE` to create a Wordstar version tailored for writing HTML code and named it `WSHTML.EXE` the line would be `wshtml`.

At the very end of the `autoexec.txt` file there needs to be an `EXIT` statement. This closes out vDOS when you exit Wordstar. The default `autoexec.txt` file has this statement, so just leave it alone.

So our example `autoexec.txt` file should now look like this:

```
@ECHO OFF

USE v: c:\dosapps\vdos
USE w: c:\dosapps\ws
USE e: c:\myfiles
USE c: c:\

set path=v:\;w\;

e:
ws

EXIT
```

If you now try to run Wordstar by clicking on the vDOS icon, it *might* work — but if it doesn't don't panic, Wordstar probably needs to be configured for the vDOS environment. Proceed to Phase Two below.

## Phase 2: Configuring Wordstar

Now you have to configure Wordstar to run in vDOS.

**PROBLEM:** These steps require you to run the old Wordstar WSCHANGE program. But WSCHANGE won't run on a 64-bit system. Feh! If you're using a 64-bit version of Windows 7, there are two ways to solve this problem:

- **Run WSCHANGE within vDOS.** To temporarily use vDOS from the command line, delete the `ws` and `EXIT` lines from the `autoexec.txt` file. Then click on the vDOS icon. vDOS will come up in the directory where your Wordstar software files are stored. Then run WSCHANGE.
- **Run WSCHANGE on a different computer.** Transfer **all** of your Wordstar software files to a 32-bit Windows system. For example, a computer running good old reliable Windows XP. Run WSCHANGE on that system to complete the steps in this section. Then transfer the updated Wordstar files back to your 64-bit system. It doesn't matter how you do the transfer — a USB flash drive, or copy them to a CD, or use LapLink, or even an ancient external floppy drive if you have one in the attic.

To configure Wordstar for the vDOS environment:

- 1 Open a Command Prompt Window. One way to do this with Windows 7 is click the Start button, click on All Programs, click on Accessories, and then click on Command Prompt. (Folks who use the command line a lot usually place a shortcut icon to it on their desktop.)
- 2 Go to the Windows folder where your Wordstar software files are stored. For example:

```
cd c:\dosapps\ws
```

- 3 Load the Wordstar configuration program:

```
wschange ws
```

(The example above assumes that your Wordstar program is `WS.EXE`. If it's something else, `WSHTML.EXE` for example, you'd enter `wschange wshtml`.)

The WSCHANGE Main Menu should be displayed.

This kind of menu system was created before computers came with a mouse and cursor, before you could “click on” something. To use it, you select a menu item by typing in the letter of the item you want. For example, to select the Computer submenu, you type `C` in the lower-left box. To work your way back up a menu structure, you enter `X`.

You keep typing menu letters until you get down to the item you want. At that point, you'll usually be told what the current setting is, and you'll be asked if you want to change it. Enter Y for "Yes" (or N for "No"). If you enter Y you'll see some instructions on how to do whatever it is. (The letters you enter are not case-sensitive.)

- 4 Configure Wordstar to recognize your mythical vDOS drives for both your Wordstar software and your Wordstar data files. This example assumes that you've added USE statements in the `autoexec.txt` file to designate the following three vDOS mythical drives:

```
USE w: c:\dosapps\ws (which gives access to your Wordstar software files)
USE e: c:\myfiles (which gives direct access to your most commonly used data files)
USE c: c:\ (which gives access to your Windows C drive)
```

Note that you don't have to configure Wordstar to recognize the mythical drive containing your vDOS software.

- a Go to the Valid Disk Drives configuration menu from the Main Menu by entering:

C A A

Your valid drives will be listed. If you're doing this for the first time, most likely only your C hard drive will be listed, plus maybe one or more floppy drives.

- b Enter Y for "Yes" you want to change the drives.

Note that once you say you want to make changes, all drive listings are eliminated. You can't just add one drive, you have to re-add all the old ones plus the new one — what a bore.

- c Enter the first drive letter you want to add. For example, drive C. (Note that you just enter the letter, no colon or backslash.) You are asked if this is a floppy drive. Enter N for "No."
- d Now use the same process to enter the other vDOS mythical drives you've mounted. In this example, E and W.

If your computer actually has a floppy drive you can try to add it's letter (usually A), but since my Windows 7 system don't got no floppy drive, I don't know if Wordstar using vDOS will be able to read or write to a floppy.

- e When you're done entering your drive letters, press [Return].

You're taken back to the list of drives. If the list is now correct, enter N for "No" you don't want to make any more changes. You're taken back to the Computer menu. Enter X and you're taken back to the Main Menu. Enter X again, and you're back to the Main Menu.

5. Specify the search path for the Wordstar software files. These steps assume that your Wordstar software files are stored on the vDOS mythical W drive.

- a Go to Wordstar Files Menu #1. From the Main Menu enter:

C D

- b Go to the Define Default Search Path menu.

A

- c Go to Search Path for Wordstar Files Menu.

A

The current search path is displayed.

- d You're asked if you want to change it. You probably do. Enter y.

You're asked to enter a new value.

- e Assuming that your Wordstar software files are in a Windows folder named `c:\dosapps\ws`, you've mounted that folder to vDOS mythical drive W, and that's where you're running WSCHANGE from, simply type a period followed by [Return].

.

- f Return to Wordstar Files Menu #1 by entering x.

- g Go to Reassign Drive and For All Wordstar Files.

B

- h Enter the drive letter where the Wordstar files are stored. In this example, that would be W followed by [Return].

- i Return to the Main Menu by pressing x until you get there.

- j Finish the configuration by pressing x again and then Y for "Yes," you're finished.

- k If necessary, transfer all your Wordstar files back to your 64-bit Windows 7 system.

Wordstar should now (hopefully) run in your `c:\myfiles` folder when you double-click on the vDOS icon or choose Open from the icon menu.

6. **Customize Wordstar appearance (optional).** You can use the `config.txt` file to adjust Wordstar. This is for things that WSCHANGE does not address. The `config.txt` file describes your options. For me, I only use the following:

Memory

LOW = ON

EMS = ON

This gives Wordstar a little more memory for more efficient use.

## Window

FRAME = ON

This creates a standard Windows-type window for Wordstar to run in. It has borders and a minimize button in the upper right corner. Note that you cannot adjust the window size by dragging the corner, but you can move the entire window around your screen as with any other window. Nor can you exit Wordstar by clicking on the X button in the upper right corner (an error message telling you that you have “files open” is a reminder that you cannot use the X button).

Other possibilities include:

- **Window size.** By default, the Wordstar window occupies about 70% of your screen. You can change this by entering `WINDOW = %`. For example, `WINDOW = 50` would occupy half your screen. `WINDOW = 100` would occupy the whole screen.
- **Rows and Columns.** By default, Wordstar displays 24 rows which are 80 characters across. You can use `ROWS = number` and `COLS = number` to customize this. For example `ROWS = 48` will display 48 rows (minimum is 24, maximum is 60). `COLS = 90` will display 90 characters across (minimum is 80, maximum is 160).
- **Other stuff.** As you can see from the `config.txt` file there are other aspects you can customize. Including, maybe, printing to a printer (see “The Printer Problem” on page 8).

## Issues & Problems

### *Working From the Command Line.*

You can configure the `autoexec.txt` file so that when you click on the vDOS icon you get a Command Prompt window rather than automatically loading Wordstar. You can then run Wordstar (or some other program) from the command line.

To configure the `autoexec.txt` file to bring up a Command Prompt window, delete the line that loads Wordstar (`ws`) and the `EXIT` statement at the end of the file, and change the `e:` statement to identify whatever mythical drive you want to start in (most likely that would be the C drive, so change `e:` to `c:`).

A couple of points to note:

- If you’re running different DOS programs from the vDOS Command Prompt window, you have to have *already* assigned their software directories mythical drive letters with a `USE` statement in the `autoexec.txt` file as explained in Step #2 on page 1. *And* added that mythical drive letter to the `PATH` statement as explained in Step #3 on page 3.
- If you run a program from the command line, it will use the `config.txt` file that’s in the current directory. If there’s no `config.txt` file in that directory, the program will run with default settings (ugly). If you have different programs that require different

`config.txt` file settings, you have to launch them from different directories which contain an appropriate `config.txt` file.

To quit a vDOS Command Prompt window, just enter `EXIT` followed by [RETURN]

## ***File Issues***

When using Wordstar, keep in mind that so far as Wordstar is concerned all your document files are stored on your vDOS mythical drives. If you've assigned your Windows root `C:\` folder to a vDOS mythical C drive (as recommended) you should be able to use Wordstar to navigate around your folders without difficulty (so long as their names conform to the 8.3 rule).

However, if you've assigned vDOS mythical drive letters to specific folders, navigation becomes a little counter-intuitive. Suppose you added the following to your `autoexec.txt` file and configured Wordstar to recognize drive G:

```
USE g: c:\morefiles\budgets\2014
```

To Wordstar, the Windows subfolder `c:\morefiles\budgets\2014` is now simply drive G. So if you're working on the `draft1` file in the `c:\myfiles` folder and want to save it to the `c:\morefiles\budgets\2014` folder, you'd tell Wordstar to save it as `g:\draft1`. If, however, you've included a `USE c: c:\` statement in the `autoexec.txt` file you might find it more intuitive to save it as `c:\morefiles\budgets\2014\draft1`, even though that requires more keystrokes.

## ***The Printer Problem***

By default, Wordstar assumes that your printer is connected to your computer's Parallel port (LPT1). But modern computers don't come with a parallel port, and neither do modern printers. Oops. It's possible from within Wordstar to specify using a Serial port (COM1, COM2, etc) instead of the Parallel port, but today's computers don't come with Serial ports either and neither do printers. Drat! The result is that when you try to print something, Wordstar can't find a Parallel or Serial port to send to, so printing fails (and probably crashes the program). Bah!

This doesn't really bother me because I use Wordstar for writing raw HTML and I rarely use it to print something on a piece of paper (black marks on dead trees are so 20th Century). If I do need to print something to paper, I simply use Wordstar's ASCII print driver (with appropriate Wordstar dot commands) to print to file. That file is a plain text file, and if I add `.TXT` to the filename (*WHATEVER.TXT*), then any word processing application such as Microsoft Word, or the free Notepad utility, can open it and print it to paper. But if I want special formatting like *bold* or *italic*, I have to do that formatting with the other application. The same for different fonts and font sizes.

However, it might be possible to figure out how to edit the `config.txt` file so that Wordstar can find and use your printer. Or find some other software method of mapping a USB port or a networked printer to something Wordstar can use. Unfortunately, I haven't had time to research it. If someone figures out how to do this, send me an email and I'll add it to these instructions.

Check out <http://sfwriter.com/ws-vdos.htm>, as a possible source of information on solving the printer problem.