

Converting Text Data File(s) With Companion SPSS Script to SPSS Data File Format

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This guide will provide an overview of converting a text-based data file (usually fixed-width text or comma-separated values) with a companion SPSS script file (**.sps**) into an SPSS data file (.sav) file. SPSS script files also are referred to as SPSS syntax files, SPSS control files, and SPSS program files, which are all interchangeable names. The guide will assume that you have successfully installed IBM SPSS statistical software onto a suitable machine for use, as well as understand basic computer concepts: file paths, scripting, and file formats. Be sure to follow any data use regulations, or guidelines, in place for the data you are using. The SPSS software is required to be able to successfully run the SPSS script as well as output the resulting SPSS data file. This step should need to be performed only once because once the data are in the required data format, they won't continually need conversions. **It's recommended that you work with copies of the data and script files because the script file will require editing, in case anything goes awry during the conversion.**

Locate the Data File, and the Files Companion Script

Find the data file you want to convert. The data files tend to be in an ASCII fixed-width data file format with file extensions of ***.dat** or ***.txt**. The data files also can be in other formats, such as comma separated values (***.csv**) or other formats. The associated script file will always have a file extension of ***.sps** to indicate that it's an SPSS script file. Once you know what data file you want converted and have located its associated script, be sure to note the file path of these two files. You will generally need to modify the SPSS script file to point to your specific data files location. The provided scripts typically have a default file path included as a placeholder, which must be modified because each computer setup tends to differ.

For our example (Figure 1), we have a file named *DataFile.dat*, and its associated SPSS script file is named *ScriptFile.sps*.



Name	Date modified	Type	Size
 DataFile.dat	9/24/2018 12:54 PM	DAT File	369,623 KB
 ScriptFile.sps	9/24/2018 1:08 PM	SPSS Statistics Syn...	3,589 KB

Figure 1: Example Files

Preparing/Modifying the SPSS Script File for Importing the Data File Into SPSS

After locating the companion data and script files, the next step will be to open the script file with SPSS and review its contents. To load the script file into SPSS (using the *main menu*), select *File -> Open -> Syntax...*, which will launch a file dialog to select the SPSS script file you wish to open (Figure 2). Navigate to the location of the *ScriptFile.sps* file and select it (Figure 3).

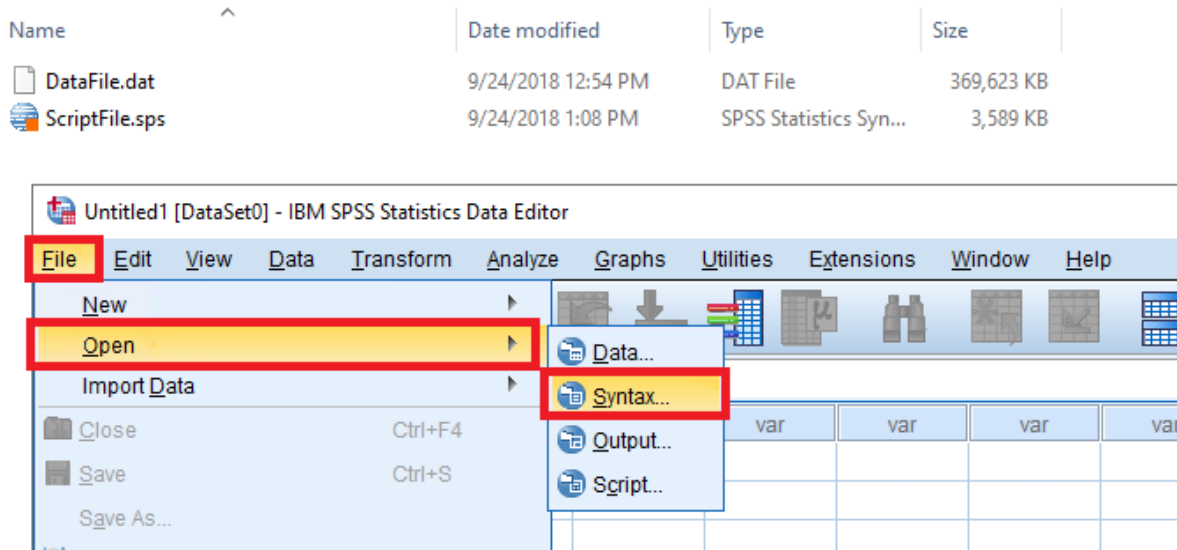


Figure 2: Open SPSS Syntax Script

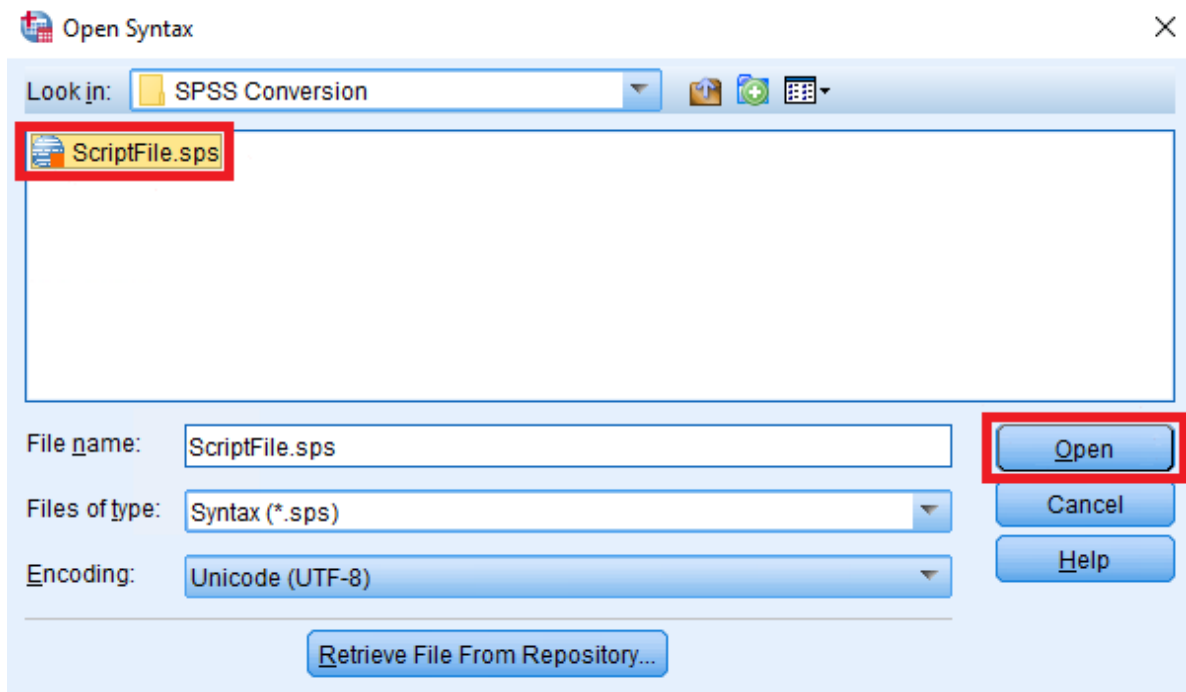


Figure 3: Locate Script File and Open Dialog

(Figure 4) The opened *ScriptFile.sps* will display in the SPSS script editor window. The script has not been executed; it has simply been opened in SPSS in a new Syntax Editor window.

After the script file has been selected, it will appear in a new syntax editor window. Along the left side, it will show the defined functions as an outline of the script commands. Generally, the first command will be a **FILE HANDLE** function used to point to the companion data file that we are working with. Modify this file path from its default value to point to the *DataFile.dat* file path (specific for your working environment).

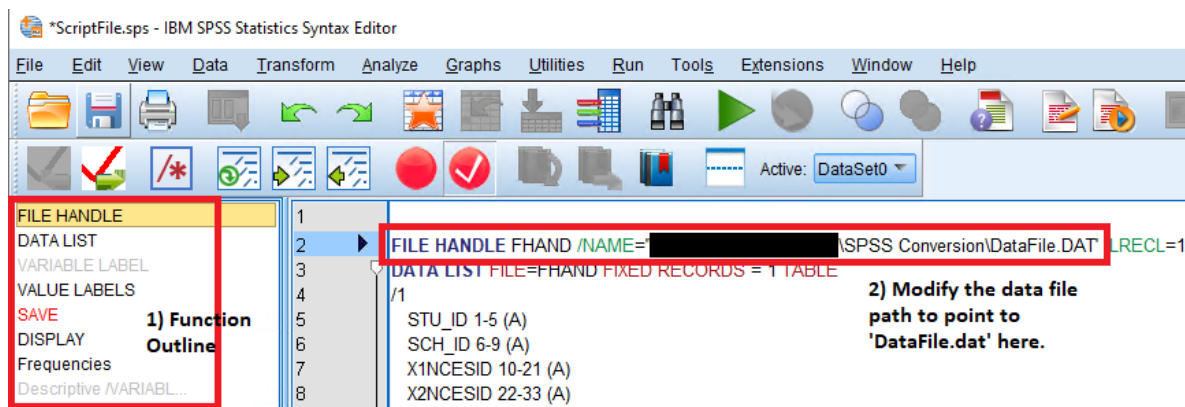


Figure 4: Syntax Editor: Update File Handle Path

Next, review the function outline to determine if you have a **SAVE** command step in the script file. The **SAVE** command specifies that the script will save an output file as part of the script. Click the **SAVE** command in the function outline to jump to that function in the script or scroll down to locate it. Modify the output file path of the resulting SPSS data file (*.sav*) to where you want to output the generated file. Note here that the text for **SAVE** is red (Figure 5), which indicates there is an issue with the syntax for that command. All SPSS commands must end the code block with a period at the end of the function. Adding a period after the **SAVE** command fixes this issue in our instance. Generally, the provided scripts should be syntactically correct and not require modifications.

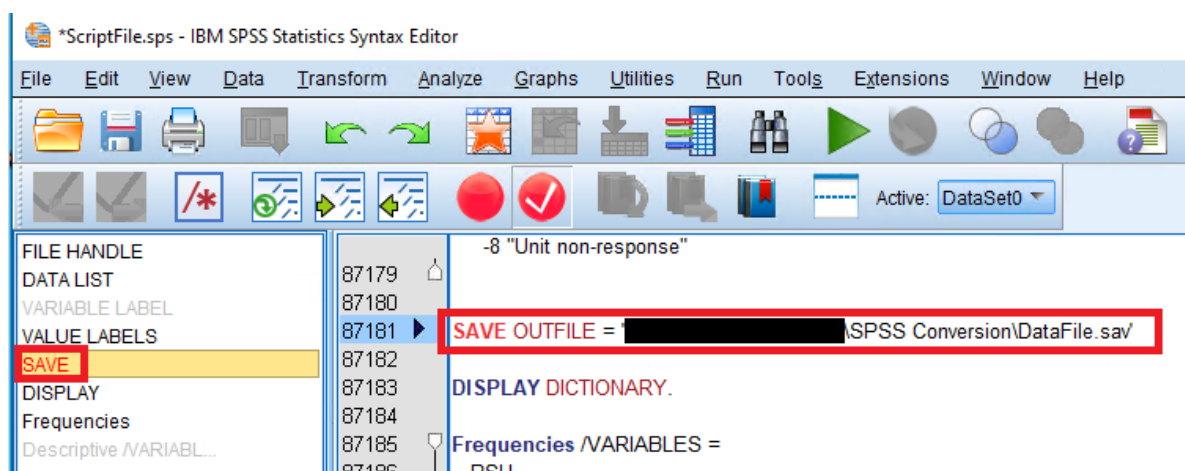


Figure 5: Modify SAVE command

If your script does not include a **SAVE** command as part of the script, the last section will cover manually

saving the SPSS data file using the menu options.

Running the SPSS Script

Once you have the necessary paths defined in the script, you can either choose to run the entire script or continue to remove unnecessary script function. In Figure 5, our example script includes **DISPLAY** and **Frequency** commands. These commands will cause SPSS to display frequency calculations based on the script. For our purposes, these steps are unnecessary. You also can execute them if you are interested in those details. To remove those sections, you can simply delete those lines from the SPSS script file.

With the script ready to run, the next step will be to execute the script to have it run. To do this, go ahead and click *Run* from the menu, selecting *All* for it to run the entire SPSS script. Note here that the **SAVE** command is no longer **red** (Figure 6), after we added the ending period to fix the syntax issue.

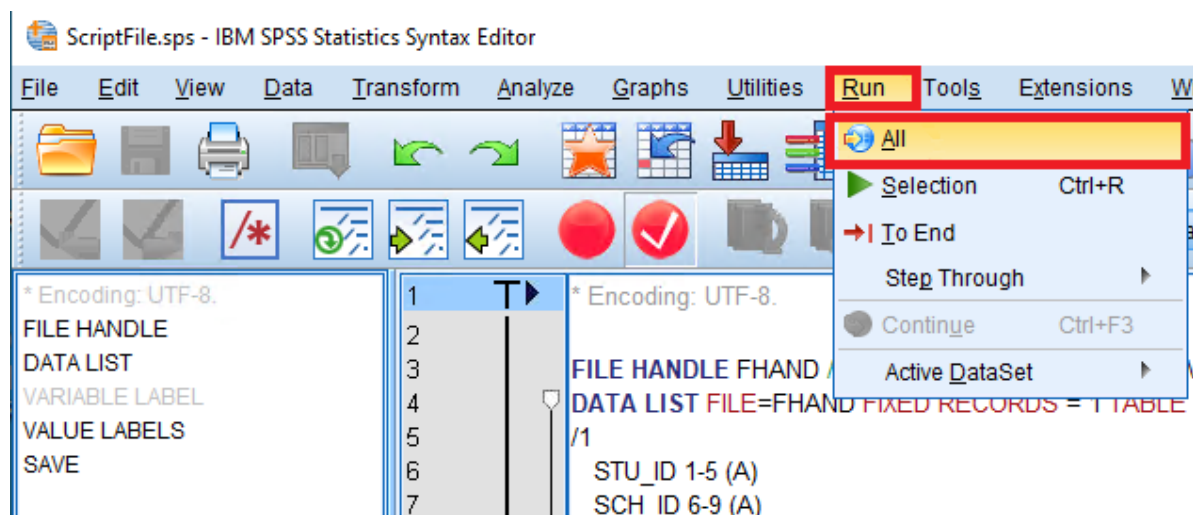


Figure 6: SPSS Run Script

The script will then begin executing the steps and then lastly will perform the **SAVE** command to generate our SPSS data file defined in the script. SPSS will open a new output window that will provide status updates of the script as it is running. You can check the message output if any errors or issues were encountered when running the script. Check the file path you defined for the **SAVE** command, and you should see your newly generated SPSS data file (**.sav**) once the script has finished.

With the script fully executed and the **.sav** file now generated, the file conversion is complete. You can close out SPSS and continue to work with your newly generated SPSS data file. See the last section if the original SPSS script provided by the study did not contain a **SAVE** command.

No SAVE Command: How to Output to an SPSS Data File After Running the Script

If your script does not include a **SAVE** command for outputting the dataset to a data file, one final step will be required. The script will still run and pull in all data from the data file (with all the defined value labels) using the script file into SPSS. After the script has completed running, review your SPSS main window,

where you will now see the dataset loaded successfully.

From the main menu, you are able to save the dataset as an SPSS data file. In the toolbar select *File -> Save As...* which will open a dialog box. The default data format is *SPSS Statistics (.sav)* which will be the format you should choose. Additional data formats will be available as well if you need them for other tasks. Specify the output file path and file name, and then click *Save*. The dataset has now been output as an SPSS data file for use with the **EdSurvey** package to your specified output path.