

Reading Fixed-Width ASCII Files into R

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The majority of old (pre 2010) of government data on crime comes in fixed-width ASCII files that have SPSS or Stata setup files. Important crime data (e.g. UCR and NIBRS) is still being released in this format. I created the R package `asciiSetupReader` to use R users be able to read this type of data. Here I will explain how these files work in theory, then walk through an example of using the package.

Fixed-width ASCII files are text files that are designed to be as small as possible. They do this by not having any indicator of columns. Whereas modern files will have spaces or commas to indicate that a column begins, fixed-width ASCII files have nothing. What they do have are setup files. Setup files indicate which characters in a row belong to which columns. The setup files also provide information and key-value pairs and column names, but lets start with the columns.

The data in the ASCII files is essentially a long string for each row. Below is a string I just made up but is something like what you'd see if you ever opened the text file.

“CA9MWNH35”