

What Is a CSV File?

A CSV file (Comma Separated Values file) is a type of plain text file that uses specific structuring to arrange tabular data. Because it's a plain text file, it can contain only actual text data—in other words, printable [ASCII](#) or [Unicode](#) characters.

The structure of a CSV file is given away by its name. Normally, CSV files use a comma to separate each specific data value. Here's what that structure looks like:

```
column 1 name,column 2 name, column 3 name
first row data 1,first row data 2,first row data 3
second row data 1,second row data 2,second row data 3
...
```

Notice how each piece of data is separated by a comma. Normally, the first line identifies each piece of data—in other words, the name of a data column. Every subsequent line after that is actual data and is limited only by file size constraints.

In general, the separator character is called a delimiter, and the comma is not the only one used. Other popular delimiters include the tab (`\t`), colon (`:`) and semi-colon (`;`) characters. Properly parsing a CSV file requires us to know which delimiter is being used.

CSV files are normally created by programs that handle large amounts of data. They are a convenient way to export data from spreadsheets and databases as well as import or use it in other programs. For example, you might export the results of a data mining program to a CSV file and then import that into a spreadsheet to analyze the data, generate graphs for a presentation, or prepare a report for publication.

CSV files are very easy to work with programmatically. Any language that supports text file input and string manipulation (like Python) can work with CSV files directly.