

# Tab-separated values

Tab-separated values (TSV) is a text data format for storing tabular data where records are separated by newline and values within a record are separated by tabs.[3] The TSV format is a delimiter-separated values (DSV) and is similar to commaseparated values (CSV).

TSV is a relatively simple format and is widely supported. It is often used in <u>data exchange</u> to move tabular data between different computer programs that support the format. For example, a TSV <u>file</u> might be used to transfer information from a database to a spreadsheet.

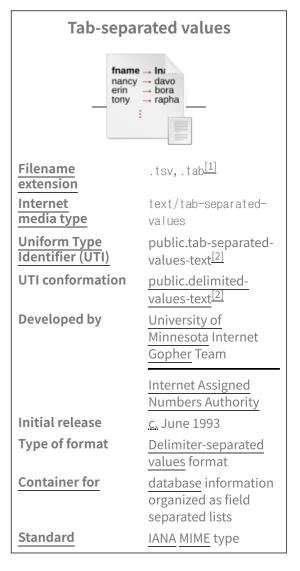
### **Example**

The head of the <u>Iris flower data set</u> can be stored as a TSV using the following <u>plain text</u> (note that the HTML rendering may convert tabs to spaces):

Sepal	length	Sepal	width	Petal length	Petal width	Species
5.1	3.5	1.4	0.2	I. setosa		
				I. setosa		
4.7	3.2	1.3	0.2	I. setosa		
4.6	3.1	1.5	0.2	I. setosa		
5.0	3.6	1.4	0.2	I. setosa		

The TSV plain text above corresponds to the following tabular data:

Sepal length	Sepal width	Petal length	Petal width	Species
5.1	3.5	1.4	0.2	I. setosa
4.9	3.0	1.4	0.2	I. setosa
4.7	3.2	1.3	0.2	I. setosa
4.6	3.1	1.5	0.2	I. setosa
5.0	3.6	1.4	0.2	I. setosa



## **Character escaping**

The IANA media type standard for TSV achieves simplicity by simply disallowing tabs within fields. [4]

Since the values in the TSV format cannot contain literal tabs or <u>newline</u> characters, a convention is necessary for lossless conversion of text values with these characters. A common convention is to perform the following escapes: [5][6]

escape sequence	meaning
₩n	line feed
₩t	<u>tab</u>
₩r	carriage return
WW	backslash

Another common convention is to use the CSV convention from  $\underline{RFC}$  4180 (https://www.rfc-editor.org/rfc/rfc4 180) and enclose values containing tabs or newlines in double quotes. This can lead to ambiguities. [7][8]

## Line endings

Records are typically separated by a line feed, as is typical for Unix platforms, or a carriage return and line feed, as is typical for Microsoft platforms. Some programs may expect the latter. The de-facto specification specifies that records are separated by an EOL, but does not specify any specific newline.

### See also

- Comma-separated values
- Delimiter collision

#### References

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#### **Sources**

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### **Further reading**

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