Paste Command Examples

Paste command is one of the useful commands in unix or linux operating system. The paste command merges the lines from multiple files. The paste command sequentially writes the corresponding lines from each file separated by a TAB delimiter on the unix terminal.

The syntax of the paste command is

```
paste [options] files-list
```

The options of paste command are:

```
-d : Specify of a list of delimiters.
-s : Paste one file at a time instead of in parallel.
--version : version information
--help : Help about the paste command.
```

Paste Command Examples:

Create the following three files in your unix or linux servers to practice to practice the examples:

```
> cat file1
Unix
Linux
Windows

> cat file2
Dedicated server
Virtual server

> cat file3
Hosting
Machine
Operating system
```

1. Merging files in parallel

By default, the paste command merges the files in parallel. The paste command writes corresponding lines from the files as a tab delimited on the terminal.

```
> paste file1 file2
Unix    Dedicated server
Linux   Virtual server
Windows

> paste file2 file1
Dedicated server  Unix
Virtual server    Linux
                  Windows
```

2. Specifying the delimiter

Paste command uses the tab delimiter by default for merging the files. You can change the delimiter to any other character by using the -d option.

```
> paste -d"|" file1 file2
Unix|Dedicated server
Linux|Virtual server
Windows|
```

In the above example, pipe delimiter is specified

3. Merging files in sequentially.

You can merge the files in sequentially using the -s option. The paste command reads each file in sequentially. It reads all the lines from a single file and merges all these lines into a single line.

```
> paste -s file1 file2
Unix    Linux   Windows
Dedicated server        Virtual server
```

The following example shows how to specify a delimiter for sequential merging of files:

```
> paste -s -d"," file1 file2
Unix,Linux,Windows
Dedicated server,Virtual server
```

4. Specifying multiple delimiters.

Multiple delimiters come in handy when you want to merge more than two files with different delimiters. For example I want to merge file1, file2 with pipe delimiter and file2, file3 with comma delimiter. In this case multiple delimiters will be helpful.

```
> paste -d"|," file1 file2 file3
Unix|Dedicated server,Hosting
Linux|Virtual server,Machine
Windows|,Operating system
```

5. Combining N consecutive lines

The paste command can also be used to merge N consecutive lines from a file into a single line. The following example merges 2 consecutive lines into a single line

```
> cat file1 | paste - -
Unix    Linux
Windows
```

10 examples of paste command usage in Linux

WE will see how to use the **paste** command with some examples. paste command, by definition of man page, is used to merge lines of files. It is very useful for merging a single file and also for merging set of files as well. This article is divided into 2 parts:

- paste command examples for single file handling
- paste command examples for multiple files handling

Let us consider a file with the sample contents as below:

```
$ cat file1

Linux

Unix

Solaris

HPUX

AIX
```

paste command with a single file:

1. paste command without any options is as good as the cat command when operated on a single file.

```
$ paste file1

Linux

Unix

Solaris

HPUX

AIX
```

2. Join all lines in a file:

```
$ paste -s file1

Linux   Unix    Solaris HPUX    AIX
```

-s option of paste joins all the lines in a file. Since no delimiter is specified, default delimiter tab is used to separate the columns.

3. Join all lines using the comma delimiter:

```
$ paste -d, -s file1

Linux,Unix,Solaris,HPUX,AIX
```

-d option is used to specify the delimiter. Using this -d and -s combination, all the lines in the file get merged into a single line.

4. Merge a file by pasting the data into 2 columns:

```
$ paste - - < file1

Linux   Unix

Solaris HPUX

AIX
```

The '-' reads a line from the standard input. Two '-' reads 2 lines and pastes them side by side.

5.Merge a file by pasting the data into 2 columns using a colon separator:

```
$ paste -d':' - - < file1

Linux:Unix

Solaris:HPUX

AIX:
```

This is same as joining every 2 lines in a file.

6. Merge a file by pasting the file contents into 3 columns:

```
$ paste - - - < file1

Linux   Unix    Solaris

HPUX    AIX
```

7. Merge a file into 3 columns using 2 different delimiters:

```
$ paste -d ':,' - - - < file1

Linux:Unix,Solaris

HPUX:AIX,
```

The -d option can take multiple de-limiters. The 1st and 2nd columns is separated by ':', whereas the 2nd and 3rd are separated by a ','.

paste command with multiple files:

Let us consider a file, file2, with the following contents:

```
$ cat file2

Suse

Fedora

CentOS

OEL

Ubuntu
```

8. paste contents of 2 files side by side.

```
$ paste file1 file2

Linux   Suse

Unix    Fedora

Solaris CentOS

HPUX    OEL

AIX     Ubuntu
```

paste command is used in scenarios to merge multiple files side by side. As shown above, the file contents are pasted side by side.

9. paste contents of 2 files side by side with a comma separator:

```
$ paste -d, file1 file2

Linux,Suse

Unix,Fedora

Solaris,CentOS

HPUX,OEL

AIX,Ubuntu
```

10. paste command can take standard input in case of multiple files too:

```
$ cat file2 | paste -d, file1 -

Linux,Suse

Unix,Fedora

Solaris,CentOS

HPUX,OEL

AIX,Ubuntu
```

Like this as well:

```
$ cat file1 | paste -d, - file2

Linux,Suse

Unix,Fedora

Solaris,CentOS

HPUX,OEL

AIX,Ubuntu
```

One more:

```
$ cat file1 file2 | paste -d, - -

Linux,Unix

Solaris,HPUX

AIX,Suse

Fedora,CentOS

OEL,Ubuntu
```

11. Read lines in both the files alternatively:

```
$ paste -d'\n' file1 file2

Linux

Suse

Unix

Fedora

Solaris
```

```
CentOS

HPUX

OEL

AIX

Ubuntu
```

Using the newline character as the delimiter, we can read 2 files line by line alternatively.