gnuplot : plotting data from multiple input files in a single graph

Ask Question

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I am trying to plot a graph using gnuplot.I have 6 text files.Each text file contains two columns.The first column represents time in seconds(it is a floating point number).Second is a sequence number.I want to plot the graph of time vs sequence number in a single graph for all six files.I am using this file to do that.

```
set terminal png
set output 'akamai.png'

set xdata time
set timefmt "%S"
set xlabel "time"

set autoscale

set ylabel "highest seq number"
set format y "%s"

set title "seq number over time"
set key reverse Left outside
set grid

set style data linespoints

plot "print_1012720" using 1:2 title "Flow 1", \
plot "print_1058167" using 1:2 title "Flow 2", \
plot "print_193548"  using 1:2 title "Flow 3", \
plot "print_401125"  using 1:2 title "Flow 4", \
plot "print_401275"  using 1:2 title "Flow 5", \
plot "print_401276"  using 1:2 title "Flow 6"
```

Where my files are:

- `print_1012720`
- `print_1058167`
- `print_193548`
- `print_401125`
- `print_401275`
- `print_401276`

It is giving a strange error as below:

> "plot.plt", line 24: undefined variable: plot

Am I doing something wrong.Is it possible to plot the input data from different files in the same graph.

gnuplot

kenorb
72.6k 31 422 431

asked Jun 18 '12 at 23:44
liv2hak
5,399 30 100 177

Be clever, go to this topic stackoverflow.com/questions/14946530/… – Marcos Alex Jul 19 '13 at 12:47

3 Answers

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✓

You're so close!

Change:

```
plot "print_1012720" using 1:2 ti
plot "print_1058167" using 1:2 ti
plot "print_193548"  using 1:2 ti
plot "print_401125"  using 1:2 ti
plot "print_401275"  using 1:2 ti
plot "print_401276"  using 1:2 ti
```

to:

```
plot "print_1012720" using 1:2 ti
     "print_1058167" using 1:2 ti
     "print_193548"  using 1:2 ti
     "print_401125"  using 1:2 ti
     "print_401275"  using 1:2 ti
     "print_401276"  using 1:2 ti
```

The error is because gnuplot is trying to interpret the word "plot" as the filename to plot, but you haven't assigned any strings to a variable named "plot" (which is good -- That would be super confusing).

edited Dec 10 '12 at 13:55

answered Jun 18 '12 at 23:51
mgilson
215k 40 425 537

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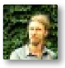
You may find that gnuplot's for loops are useful in this case, if you adjust your filenames or graph titles appropriately.

e.g.

```
filenames = "first second third fo
plot for [file in filenames] file.
```

```
filename(n) = sprintf("file_%d", n
plot for [i=1:10] filename(i) usin
```

answered Jan 27 '14 at 23:06



Richard

28.2k 19 110 175

5 I know this is old, but thank you for adding that alternative solution. Wasn't aware of loops in gnuplot, and they're an amazing feature. – Amit Apr 10 '14 at 13:37

Assuming normal filename convention (name.dat) I think this should be file.".dat". The first . concatenates the filename to "dat" but isn't included in the filename actually used in the plotting command. – jake Oct 28 '14 at 2:10

How can I plot *all* the files in a directory without explicitly writing their names? (stackoverflow.com/q/29969393/855050) – becko Apr 30 '15 at 13:43

I've added an answer to that question, @becko. – Richard Apr 30 '15 at 17:47

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replot is another way to get multiple plots at once:

```
plot file1.data
replot file2.data
```

answered Oct 8 '15 at 17:21

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151k 34 567 485