

Trying to write a heredoc into an existing file using Sed in bash

Asked 6 years, 3 months ago Modified 6 years, 3 months ago Viewed 904 times



I'm attempting to write a heredoc at the top of my php.ini file directly under the [PHP] line. I'm also attempting to do it assuming the following conditions:

1



1. [PHP] might not be at the very top (in other use cases, it would be nice to know how to put a heredoc anywhere in a file after something, so specifying 'line 2' isn't really useful



2. The heredoc has to be contained in the file. No use of sed where another file is opened and read into the existing file



3. Assume there is only one instance of the [PHP] identifier. In this learning exercise, I'm not worried about iterating a list, or Sed / Awk finding more than one instance of my search string

4. I'd really like to have each item on its own line just like in the heredoc

Script:

```
myvar=$(cat << END_HEREDOC
[xdebug]
zend_extension=/usr/lib/php/20151226/xdebug.so
xdebug.remote_host = localhost
xdebug.idekey = "PHPSTORM"
xdebug.remote_autostart = 1
xdebug.remote_connect_back = 1
xdebug.remote_enable=1
xdebug.remote_port=9000
xdebug.show_local_vars=0
xdebug.var_display_max_data=10000
xdebug.var_display_max_depth=20
xdebug.show_exception_trace=0
xdebug.remote_handler=dbgp
END_HEREDOC
)

echo ${myvar}

sed -i "\[PHP\]('${myvar})'" php.ini
```

In every iteration I've tried, I simply end up with a php.ini looking like this:

```
[PHP]
${myvar}
```

Or, I get the following error:

```
sed: -e expression #1, char 15: unknown command: `e'
```

My goal is:

```
[PHP]

[xdebug]
zend_extension=/usr/lib/php/20151226/xdebug.so
xdebug.remote_host = localhost
xdebug.idekey = "PHPSTORM"
xdebug.remote_autostart = 1
xdebug.remote_connect_back = 1
xdebug.remote_enable=1
xdebug.remote_port=9000
xdebug.show_local_vars=0
xdebug.var_display_max_data=10000
xdebug.var_display_max_depth=20
xdebug.show_exception_trace=0
xdebug.remote_handler=dbgp
```

bash sed heredoc

Share Edit Follow

asked Nov 30, 2017 at 20:27



CarComp

1,957 1 23 50

You sed command is of the form sed "/a/b/" shouldn't it be sed "s/a/b/" ? – Socowi Nov 30, 2017 at 20:48

2 Answers

Sorted by: Highest score (default)



2



While this task can be done with sed, sed is not optimal. It does not support variables. Anytime one has to incorporate shell variables within a sed command, one opens potential security flaws. Awk, by contrast, is well-suited to this task. If you have GNU awk (gawk), try:

```
$ cat script.sh
myvar='
[xdebug]
zend_extension=/usr/lib/php/20151226/xdebug.so
xdebug.remote_host = localhost
xdebug.idekey = "PHPSTORM"
xdebug.remote_autostart = 1
xdebug.remote_connect_back = 1
xdebug.remote_enable=1
xdebug.remote_port=9000
xdebug.show_local_vars=0
xdebug.var_display_max_data=10000
xdebug.var_display_max_depth=20
xdebug.show_exception_trace=0
xdebug.remote_handler=dbgp
'

awk -i inplace -v x="$myvar" '{print} /\[PHP\]/{{print x}}' php.ini
```

The result is:

```
$ cat php.ini
[PHP]

[xdebug]
zend_extension=/usr/lib/php/20151226/xdebug.so
xdebug.remote_host = localhost
xdebug.idekey = "PHPSTORM"
xdebug.remote_autostart = 1
xdebug.remote_connect_back = 1
xdebug.remote_enable=1
xdebug.remote_port=9000
xdebug.show_local_vars=0
xdebug.var_display_max_data=10000
xdebug.var_display_max_depth=20
xdebug.show_exception_trace=0
xdebug.remote_handler=dbgp
```

BSD/OSX or other non-GNU awk

If your awk does not support GNU's `-i inplace` option, then replace the awk line with:

```
awk -v x="$myvar" '{print} /\[PHP\]/{print x}' php.ini >tmp && mv tmp php.ini
```

Notes

`myvar` can be defined directly, as shown above, without using `cat` or here-docs.

Share Edit Follow

edited Nov 30, 2017 at 21:01

answered Nov 30, 2017 at 20:48



John1024

112k 14 145 177

I chose this answer because of elaboration on using the correct tool. Thanks for steering me towards Awk. I assumed Awk and Sed were basically the same thing. Like VI or Emacs. I'm going to explore using it more. Sed is 'awk'ward sometimes. – [CarComp](#) Dec 1, 2017 at 13:25



1



You can use the `sed -i` command which inserts text from a file, but use process substitution to replace the filename with the heredoc:

```
#!/bin/bash
```

```
sed -i '' '/\[PHP\]/r' <(<cat << END_HEREDOC
[xdebug]
zend_extension=/usr/lib/php/20151226/xdebug.so
xdebug.remote_host = localhost
xdebug.idekey = "PHPSTORM"
xdebug.remote_autostart = 1
xdebug.remote_connect_back = 1
xdebug.remote_enable=1
xdebug.remote_port=9000
xdebug.show_local_vars=0
```

```
xdebug.var_display_max_data=10000  
xdebug.var_display_max_depth=20  
xdebug.show_exception_trace=0  
xdebug.remote_handler=dbgp  
END_HEREDOC  
) php.ini
```

[Share](#) [Edit](#) [Follow](#)

edited Dec 1, 2017 at 1:33

answered Nov 30, 2017 at 23:50

[Cole Tierney](#)

9,926 2 28 36

After I upvoted this, I found this doesn't work as is. cat needs arg - and if "N" command required after "r". I corrected your script as pastebin.com/F20vgr7K . (see also my newly written answer of referred question stackoverflow.com/a/56182135/26736). Anyway your code helps me because I don't know "<(..)" bash trick. Thanks ! – [benok](#) May 17, 2019 at 8:19
