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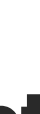
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Prashant Lakhera



Apr 16, 2019 · 3 min read



100 Days of DevOps — Day 65-Bash Script to Monitor Service

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Welcome to Day 65 of 100 Days of DevOps, Focus for today is Bash Script to Monitor Service

Step1: How to check if the service is running?

- There are a number of ways we can check it
- First approach netstat

```
# netstat -antulp|grep httpd
tcp6          0      0  ::::80
LISTEN        19122/httpd
```

100 Days of DevOps — Day 62-Useful Linux Command for Network Troubleshooting

Welcome to Day 62 of 100 Days of DevOps, Focus for today is useful Linux Command for Network Troubleshooting

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- The second approach is ps command

```
# ps aux|grep -v grep |grep -i httpd
root      19122  0.0  0.5 228280  5116 ?        Ss   Mar22   0:13
/usr/sbin/httpd -DFOREGROUND
apache    19123  0.0  0.3 228416  3740 ?        S    Mar22   0:00
/usr/sbin/httpd -DFOREGROUND
apache    19124  0.0  0.3 228416  3740 ?        S    Mar22   0:00
/usr/sbin/httpd -DFOREGROUND
apache    19125  0.0  0.3 228416  3740 ?        S    Mar22   0:00
/usr/sbin/httpd -DFOREGROUND
apache    19126  0.0  0.3 228416  3740 ?        S    Mar22   0:00
/usr/sbin/httpd -DFOREGROUND
apache    19127  0.0  0.3 228416  3740 ?        S    Mar22   0:00
/usr/sbin/httpd -DFOREGROUND
apache    19128  0.0  0.3 228416  3740 ?        S    Mar22   0:00
/usr/sbin/httpd -DFOREGROUND
apache    19130  0.0  0.3 228416  3740 ?        S    Mar22   0:00
/usr/sbin/httpd -DFOREGROUND
apache    19898  0.0  0.3 228416  3740 ?        S    Mar22   0:00
/usr/sbin/httpd -DFOREGROUND
apache    19899  0.0  0.3 228416  3740 ?        S    Mar22   0:00
/usr/sbin/httpd -DFOREGROUND
apache    19900  0.0  0.3 228416  3740 ?        S    Mar22   0:00
/usr/sbin/httpd -DFOREGROUND
```

Step2: Once we checked if service is up and running, stored its status in some variable

```
SERVICESTATUS=`echo $?`
```

Every command returns an exit status (sometimes referred to as a return status or exit code). A successful command returns a 0, while an unsuccessful one returns a non-zero value that usually can be interpreted as an error code.

Step3: Use conditional statement(if-else) to determine if service is not running start it

```
if [ "$SERVICESTATUS" != 0 ]
then
systemctl start $SERVICENAME
echo "$SERVICENAME started"
else
echo "$SERVICENAME is already running"
fi
```

- If the exit code is anything except zero starts the service(This is Centos7 system that why I am using systemctl) else just echo the message service is already running

Output

- If service is running

```
# bash /tmp/httpd.sh
tcp6          0      0  ::::80
LISTEN        19122/httpd
httpd is already running
```

- In case service is stopped

```
# bash /tmp/httpd.sh
httpd started
```

```
1 #!/usr/bin/env bash
2 SERVICENAME="httpd"
3 netstat -antulp|grep "$SERVICENAME"
4 SERVICESTATUS=`echo $?`
5 if [ "$SERVICESTATUS" != 0 ]
6 then
7 systemctl start $SERVICENAME
8 echo "$SERVICENAME started"
9 else
10 echo "$SERVICENAME is already running"
11 fi
```

check_httpd.sh hosted with ❤ by GitHub

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Another way of writing the same script

```
1 #!/usr/bin/env bash
2 servicename="httpd"
3
4 if (( $(ps -ef | grep -v grep | grep $servicename | wc -l) > 0 ))
5 then
6 echo "$servicename is running!!!"
7 else
8 systemctl start $servicename
9 fi
```

check_httpd1.sh hosted with ❤ by GitHub

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```
* Check the number of httpd process
# ps -ef | grep -v grep | grep httpd | wc -l
6

* If it greater then zero, then service is already running, else start the service
```

- Now this work perfectly fine, if I need to check one service, what would be the case if I need to verify a bunch of services

```
1 #!/usr/bin/env bash
2 function servicecheck()
3 {
4 ps aux | grep -v grep |grep $1 >/dev/null
5 if [ $? != 0 ]
6 then
7 echo $1 "is not running";
8 systemctl start $1
9 else
10 echo $1 "is up and running";
11 fi;
12 }
13
14 servicecheck "httpd"
15 servicecheck "rsyslogd"
```

check_service.sh hosted with ❤ by GitHub

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```
* In this case we can define function(eg:servicecheck) and with the help of positional parameter we can pass service name to the function
```

- Another approach which I saw used by many people is to notify admins via email before starting the service

```
echo "$servicename is not running" | mail -s "$servicename is down" laprashant@gmail.com
test@gmail.com
```

```
1 #!/usr/bin/env bash
2 servicename="httpd"
3
4 if (( $(ps -ef | grep -v grep | grep $servicename | wc -l) > 0 ))
5 then
6 echo "$servicename is running!!!"
7 else
8 echo "$servicename is not running" | mail -s "$servicename is down" laprashant@gmail.com
9 systemctl start $servicename
10 fi
```

modified_httpd.sh hosted with ❤ by GitHub

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- I barely scratch the surface and these are one of the many ways. we can monitor service using shell script, please feel free to share your script or ideas on how to enhance this script

Looking forward from you guys to join this journey and spend a minimum an hour every day for the next 100 days on DevOps work and post your progress using any of the below medium.

- Twitter: [@100daysofdevops](#) OR [@lakhera2015](#)
- Facebook: <https://www.facebook.com/groups/795382630808645/>
- Medium: <https://medium.com/@devopslearning>
- Slack: <https://devops-myworld.slack.com/messages/CF41EFG49/>
- GitHub Link:<https://github.com/100daysofdevops>

Reference

100 Days of DevOps — Day 0

D-day is just one day away and finally, this is a continuation of the post(I posted a month earlier)

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Regex

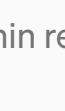
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Wireshark

4 min read



Apr 13, 2019



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Networking

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100 Days of DevOps — Day 61-Jenkins Agent Node

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Jenkins

4 min read

Apr 11, 2019

100 Days of DevOps — Day 60-Introduction to Jenkins

Welcome to Day 60 of 100 Days of DevOps, Focus for today is Jenkins

Jenkins is an open source automation server written in Java. As Jenkins

is written in Java you must need to install java to run Jenkins #yum -y...

Nginx

5 min read



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