How to solve qmail /usr/local/bin/tcpserver: libc.so.6: failed to map segment from shared object: Cannot allocate memory

Author : admin

If you're building (compiling) a new qmail server on some Linux host and after properly installing the qmail binaries and daemontools, suddenly you notice in **readproctitle service errors:** or somewhere in in qmail logs for instance in**/var/log/qmail/current** the error:

/usr/local/bin/tcpserver: error while loading shared libraries:
libc.so.6: failed to map segment from shared object: Cannot allocate memory

then *you have hit a bug caused by insufficient memory assigned for tcpserver* in your **/var/qmail/supervise/qmail-smtpd/run** daemontools qmail-smtpd initialize script:

This kind of issue is quite common especially on hardware architectures that are 64 bit and on Linux installations that are **amd65 (x86_64)** e.g. run 64 bit version of Linux.

It relates to the 64 bit architecture different memory distribution and thus as I said to solve requires increase in memory softlimit specified in the **run** script an example good qmail-smtpd run script configuration which fixed the **libc.so.6: failed to map segment from shared object: Cannot allocate memory** I use currently is as follows:

#!/bin/shQMAILDUID=`id -u vpopmail`NOFILESGID=`id -g vpopmail`MAXSMTPD=`cat /var/qmail/control/concurrencyincoming`# softlimit changed from 8000000exec /usr/local/bin/softlimit -m 32000000 \/usr/local/bin/tcpserver -v -H -R -l 0 \ -x /home/vpopmail/etc/tcp.smtp.cdb -c "$MAXSMTPD" \
-u "$QMAILDUID" -g "$NOFILESGID" 0 smtp \
/var/qmail/bin/qmail-smtpd \
/home/vpopmail/bin/vchkpw /bin/true 2>&1

The default value which was for softlimit was:

exec /usr/local/bin/softlimit -m 8000000

A good softlimit raise up values which in most cases were solving the issue for me are:

exec /usr/local/bin/softlimit -m 3000000

orexec /usr/local/bin/softlimit -m 4000000

The above example run configuration fixed the issue on a amd64 debian 5.0 lenny install, the server hardware was:

CPU: Intel(R) Core(TM)2 Duo CPU @ 2.93GHz
System Memory: 4GB
HDD Disk space: 240GB

The **softlimit** configuration which I had to setup on another server with system parameters:

Intel(R) Core(TM) i7 CPU (8 CPUS) @ 2.80GHz
System Memory: 8GB
HDD Disk Space: 1.4Terabytes

is as follows:

```
#!/bin/sh
QMAILDUID=`id -u vpopmail`
NOFILESGID=`id -g vpopmail`
MAXSMTPD=`cat /var/qmail/control/concurrencyincoming`
exec /usr/bin/softlimit -m 64000000 \
/usr/local/bin/tcpserver -v -H -R -l 0 \
-x /home/vpopmail/etc/tcp.smtp.cdb -c "$MAXSMTPD" \
-u "$QMAILDUID" -g "$NOFILESGID" 0 smtp \
/var/qmail/bin/qmail-smtpd \
/home/vpopmail/bin/vchkpw /bin/true 2>&1
```

If none of the two configurations pointed out in the post works, for you just try to manually set up the **exec /usr/bin/softlimit -m** to some high value.

To assure that the newly set value is not producing the same error you will have to, reload completely the daemontools proc monitor system.
To do so open **/etc/inittab** comment out the line:

```
SV:123456:respawn:/command/svscanboot
```

to

```
#SV:123456:respawn:/command/svscanboot
```

Save again **/etc/inittab** and issue te cmd:

```
linux:~# init q
```

Now again open **/etc/inittab** and uncomment the commented line:

#SV:123456:respawn:/command/svscanboot
to
SV:123456:respawn:/command/svscanboot

Lastly reload the inittab script once again with command:

linux:~# init q

To check if the error has disappeared check the **readproctitle process**, like so:

linux:~# ps ax|grep -i readproctitle

The command output should produce something like:

3070 ? S 0:00 readproctitle service errors: .....

Hope that helps.