


# Increase ulimit in ubuntu and docker



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## What is ulimit?

It is a number of open file descriptors per process. They can all refer to the same file, or different files. It prevent single users from using too many system resources.

## How can is check ulimit in current shell?

Run `ulimit -a` command from terminal.

Output of the above command:

```
core file size          (blocks, -c) 0
data seg size          (kbytes, -d) unlimited
scheduling priority    (-e) 0
file size              (blocks, -f) unlimited
pending signals        (-l) 62768
max locked memory      (kbytes, -l) 16384
max memory size        (kbytes, -m) unlimited
open files             (-n) 1024
pipe size              (512 bytes, -p) 8
POSIX message queues   (bytes, -q) 819200
real-time priority     (-r) 0
stack size             (kbytes, -s) 8192
cpu time               (seconds, -t) unlimited
max user processes     (-u) 62768
virtual memory         (kbytes, -v) unlimited
file locks             (-x) unlimited
```

## How to set ulimit in current shell?

`ulimit -n {no of files}`

For example -> If you want to set no of open files 65535 below is the command you need to run on terminal. **ulimit -n 65535 ;**

## How to set ulimit permanent?

For the ulimits to persists across reboots we need to set the ulimit values in the configuration file



`/etc/security/limits.conf`

**Format ->**

```
#[domain] [type] [item] [value]
```

domain → a user name or group name

type -> can have the two values (soft| hard)

item -> the property to set

value -> value of the property.

For example -> to add limit of number of files for **user root**:

```
root soft nofile 65535
root hard nofile 65535
```

to set limit of number of files valid for **all users**:

```
* soft nofile 65535
* hard nofile 65535
```

## How to set ulimit in Docker?

**Due to some security reason. docker currently not extends host ulimit property.**

**There are couple of ways to set following are the ways:**

- The latest docker supports setting ulimits through the command line and the API. For instance, docker run takes `— ulimit <type>=<soft>:<hard> .`
- set `ulimit -n 65535` in the file `/etc/init.d/docker`

Docker


Ubuntu

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WRITTEN BY

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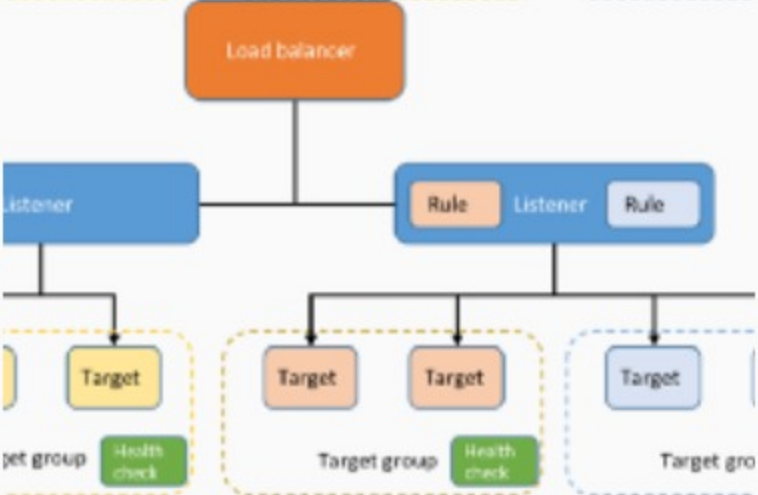
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