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## Linux increase the maximum number of open files or file descriptors

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[1]

**Q.** How do I increase the maximum number of open files under CentOS Linux? How do I open more file descriptors under Linux?

**A.** ulimit command provides control over the resources available to the shell and to processes started by it, on systems that allow such control. The maximum number of open file descriptors displayed with following command (login as the root user).

### Command to list number of open file descriptors

Use the following command to display maximum number of open file descriptors:

```
cat /proc/sys/fs/file-max
```

Output:

```
75000
```

75000 files normal user can have open in single login session.

### The number of maximum files was reached, how do I fix this problem?

Many application such as Oracle database server needs this range quite higher. So you can increase the maximum number of open files by setting new value in kernel variable /proc/sys/fs/file-max as follows (login as the root):

```
# sysctl -w fs.file-max=100000
```

Above command forces the limit to 100000 files. You need to edit /etc/sysctl.conf file and put following line so that after reboot the setting will remain as it is:

```
# vi /etc/sysctl.conf
```

Append a config directive as follows:

```
fs.file-max = 100000
```

Save and close the file. Users need to log out and log back in again to changes take effect or just type command:

```
# sysctl -p
```

Verify your settings with command:

```
# cat /proc/sys/fs/file-max
```

OR

```
# sysctl fs.file-max
```

Updated for accuracy.

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