Lab 20.1: Controlling Processes with ulimit

Please do:

`$ help ulimit`

and read /etc/security/limits.conf before doing the following steps.

1. Start a new shell by typing **bash** (or opening a new terminal) so that your changes are only effective in the new shell. View the current limit on the number of open files and explicitly view the hard and soft limits.

2. Set the limit to the hard limit value and verify if it worked.

3. Set the hard limit to 2048 and verify it worked.

4. Try to set the limit back to the previous value. Did it work?

Solution 20.1

1. ```
   $ bash
   $ ulimit -n
   1024
   $ ulimit -S -n
   1024
   $ ulimit -H -n
   4096
   ```

2. ```
   $ ulimit -n hard
   $ ulimit -n
   4096
   ```

3. ```
   $ ulimit -n 2048
   $ ulimit -n
   2048
   ```

4. ```
   $ ulimit -n 4096
   bash: ulimit: open files: cannot modify limit: Operation not permitted
   $ ulimit -n
   2048
   ```

   You can't do this anymore!

   Note that if we had chosen a different limit, such as stack size (`-s`) we could raise back up again as the hard limit is `unlimited`.