

## How to define PATH environment variable for sudo commands

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**Question:** I built and installed a program in `/usr/local/bin`. The program requires root privilege to run. But when I try to run the program with `sudo`, I get "sudo: XXXXX: command not found" error. Somehow `/usr/local/bin` is not included in the PATH environment variable. How can I fix this problem?

When you run a program with `sudo`, the program is executed with a new, minimum environment for security reasons. That is, not all the environment variables you define are inherited to `sudo` commands. In case of PATH environment variable, it is reset to a new "default" PATH variable when `sudo` is used. So if the new default PATH variable does not include the folder where your program is, you will get "command not found" error with `sudo`.

To customize the default PATH variable for `sudo` session, open `/etc/sudoers` file with a text editor, and look for "secure\_path". The value defined in "secure\_path" will be used as the default PATH variable when you execute `sudo` commands.

So add any necessary path (e.g., `/usr/local/bin`) to "secure\_path", and it will be passed to `sudo` commands.

```
Defaults    secure_path = /sbin:/bin:/usr/sbin:/usr/bin:/usr/local/bin
```

This change will be effective immediately.