How to change system proxy settings from the command line on Ubuntu desktop

Author: Dan Nanni

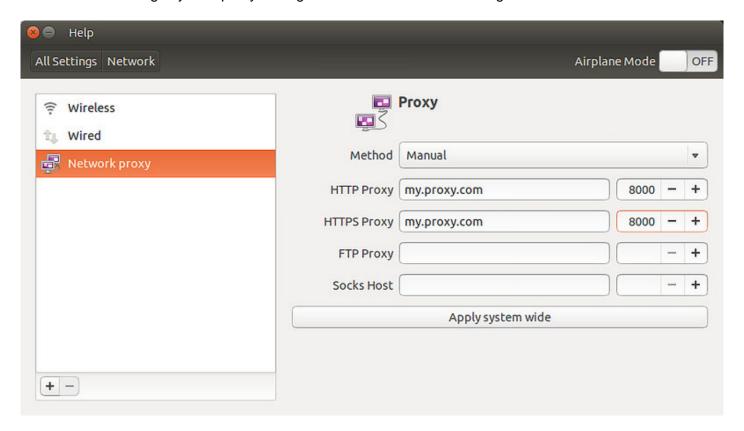
Categories: Desktop, Ubuntu

Tagged as: cli, dconfproxy

Question: I often need to change system proxy settings on Ubuntu desktop, but I do not want to go through a chain of GUI menus: "System Settings" -> "Network" -> "Network proxy", which is cumbersome. Is there a more convenient way to change desktop's proxy settings from the command line?

In Ubuntu desktop, its desktop environment settings, including system proxy settings, are stored in DConf database, which is a simple key/value store. If you modify any desktop properties using System Settings menu, the changes are persisted in the DConf database backend. There are GUI-based or non-GUI-based ways to modify DConf database on Ubuntu. While System Settings or dconf-editor are graphical methods for accessing DConf database, gsettings or dconf are command-line tools that can modify the database.

Here is how to change system proxy settings from the command line using gsettings.



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The basic usage of gsettings for reading and writing a particular Dconf setting is as follows.

To modify a DConf setting:

\$ gsettings set

To read a DConf setting:

\$ gsettings get

Change System Proxy Setting to Manual from the Command Line

The following commands will change HTTP proxy setting to "my.proxy.com:8000" on Ubuntu desktop.

- \$ gsettings set org.gnome.system.proxy.http host 'my.proxy.com'
- \$ gsettings set org.gnome.system.proxy.http port 8000
- \$ gsettings set org.gnome.system.proxy mode 'manual'

If you want to change HTTPS/FTP proxy to manual as well, use these commands:

- \$ gsettings set org.gnome.system.proxy.https host 'my.proxy.com'
- \$ gsettings set org.gnome.system.proxy.https port 8000
- \$ gsettings set org.gnome.system.proxy.ftp host 'my.proxy.com'
- \$ gsettings set org.gnome.system.proxy.ftp port 8000

To change Socks host settings to manual:

- \$ gsettings set org.gnome.system.proxy.socks host 'my.proxy.com'
- \$ gsettings set org.gnome.system.proxy.socks port 8000

All these changes above are limited to the current Desktop user only. If you want to apply the proxy setting changes system-wide, prepend sudo to gsettings command. For example:

- \$ sudo gsettings set org.gnome.system.proxy.http host 'my.proxy.com'
- \$ sudo gsettings set org.gnome.system.proxy.http port 8000
- \$ sudo gsettings set org.gnome.system.proxy mode 'manual'

Change System Proxy Setting to Automatic from the Command Line

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If you are using proxy auto configuration (PAC), type the following commands to switch to PAC.

\$ gsettings set org.gnome.system.proxy mode 'auto'

\$ gsettings set org.gnome.system.proxy autoconfig-url http://my.proxy.com/autoproxy.pac

Clear System Proxy Setting from the Command Line

Finally, to remove manual/automatic proxy setting, and revert to no-proxy setting:

\$ gsettings set org.gnome.system.proxy mode 'none'