

Enabling internet over USB

## Internet over USB

- Beaglebone board can communicate to the internet over the USB cable by sharing your PC's internet connection.
- You need not to use a separate ethernet cable to connect your board to internet.
- The required drivers are enabled by default in the kernel and loaded when Linux boots on the BBB
- But you must enable internet sharing on your HOST

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- Target settings :
  1. Add name server address in : `/etc/resolv.conf`
    - `nameserver 8.8.8.8`
    - `nameserver 8.8.4.4`
  1. Add default gateway address by running the below command
    - `route add default gw 192.168.7.1` (Using PC as default gateway)

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- **Host settings:**

- Enable IP packet forwarding for IPv4 in this file: `/etc/sysctl.conf`
- **Uncomment the line if commented:** `net.ipv4.ip_forward=1`
- Run the below commands:
  - `sudo iptables --table nat --append POSTROUTING --out-interface wlp2s0 -j MASQUERADE`
  - `sudo iptables --append FORWARD --in-interface wlp2s0 -j ACCEPT`
  - `sudo echo 1 > /proc/sys/net/ipv4/ip_forward`
- *If you reboot your machine, again you must run these commands.*
- *So, its better if you create a small script and execute when your machine reboots.*