

# Use Ros from a remote computer

In this tutorial we will see how to set up the connexion between the ROS master of the REETI and a remote linux computer.

## Setting the Environment Variable

In order to use ROS from a remote computer you will need to add some environment variables on your computer and on the REETI.

On the REETI :

- Open the `".bashrc"` file in the `"home"` directory of the REETI
- On a terminal use `"ifconfig"` in order to get the IP address of the REETI : (e.g `192.168.0.10`)
- On the `".bashrc"` file add the following lines:
  - `ROS_IP=<Ip Address of your reeti (e.g192.168.0.10)>`
  - `ROS_HOSTNAME="reeti"`

On the remote computer:

- Open the `".bashrc"` file in the `"home"` directory of the computer
- On a terminal use `"ifconfig"` in order to get the IP address of the computer (e.g `192.168.0.20`)
- On a terminal get the hostname of your computer by typing `"hostname"` (e.g `mylaptop`)
- On the `".bashrc"` file add the following lines:
  - `ROS_IP=<Ip Address of your computer (e.g192.168.0.20)>`
  - `ROS_HOSTNAME="<Host Name Of Your computer (eg. "mylaptop")>"`
  - `ROS_MASTER_URI="http://<IP_ADDRESS_REETI>:11311" (e.g http://192.168.0.10:11311)`

Save and close the files and restart your reeti (to restart the roscore with good ROS\_IP and ROS\_HOSTNAME).

To get more informations on how to setup ROS with multiple computers, read [this page](#).

## Testing the connexion

Once your Reeti is restarted, roscore and ReetiRosNode are started automatically.

Open a terminal in the remote computer and launch : `"rosservice list"`, you should be able to see the different services of the node you launched earlier as `"/Say"` or `"/SetPose"`.

You can now create new ros nodes on your computer and make them communicate with the Reeti Ros Node on the REETI.

## TroubleShooting

If when you using a node on the remote computer you fail to call the associated service on the REETI and the roscore on the REETI prints: **"Could n't find an AF\_INET address for"**.

Edit (as root) the `/etc/hosts` file of the remote computer and then add the following line :

- `IP_ADDRESS_REETI reeti`

Edit (as root) the `/etc/hosts` file of the reeti and then add the following line :

- `IP_ADDRESS_COMPUTER HOSTNAME_OF_THE_COMPUTER`

Close all the opened terminal and retry.