ROS Basics Tutorial

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Before you use the lab:

- Fill in the FRL access form
- Once the access is authorised, the new user should contact Len McLean to receive induction
- After the induction the new user should contact Anne Murphy to have their ID card coded

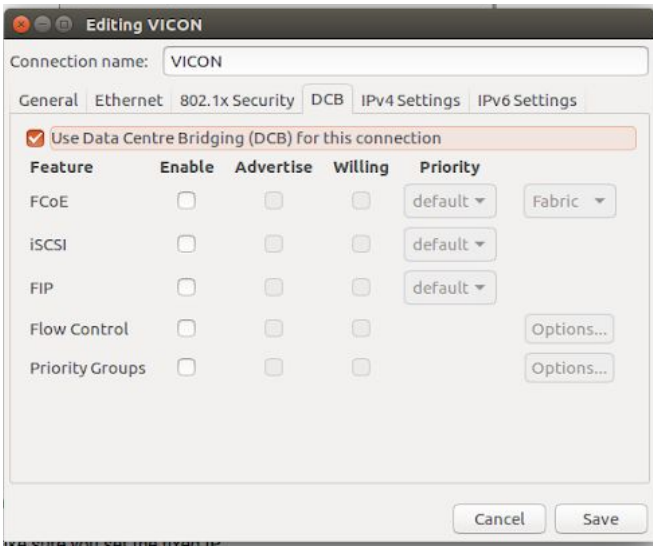
Getting Started:

- Switch the PC and network switch on
- The password for the PC is ‘vicon’ the same as the username
- Open the ‘Vicon Tracker 3.7’
- Clone and compile the vicon bridge into your catkin workspace

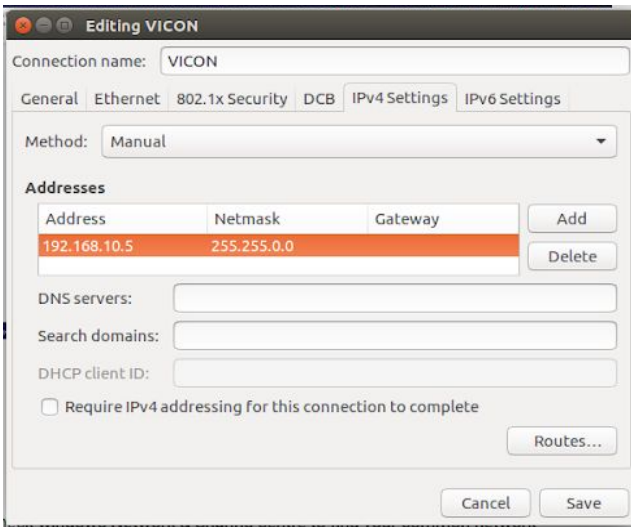
Network PC to your laptop:

1. Plug your laptop into one of the ports on the ethernet switch
2. Open “Edit Connections” on your ubuntu laptop and modify the following settings:

    a. DCB > tick “Use Data Centre Bridging (DCB) for this connection”



    b. IPv4 > Method: Manual
    Address: 192.168.10.* (replace * with any number > 1)
    Netmask: 255.255.0.0



Vicon_Mask Launch File

1. Open the vicon.launch file and uncomment line 4
2. Change the value to “value="192.168.10.1:801"”
3. Comment line 5 as this will overwrite line 4

Grabbing Data

1. **Vicon Tracker system needs to be live to stream data**
2. Launch the vicon.launch file
3. In a separate tab run ‘rostopic list’
4. You should see you objects as ros topics under the namespace ‘/vicon/object_name/object_name’ where object_name is the name of your object.
5. You can view your data using rostopic echo topic_name

Vicon Recorded Data

If you play recorded data using the Vicon Tracker software, this is also streamed through the network. This could allow you for example to record experiments using the vicon tracker software, but then visualise these using ROS tools.