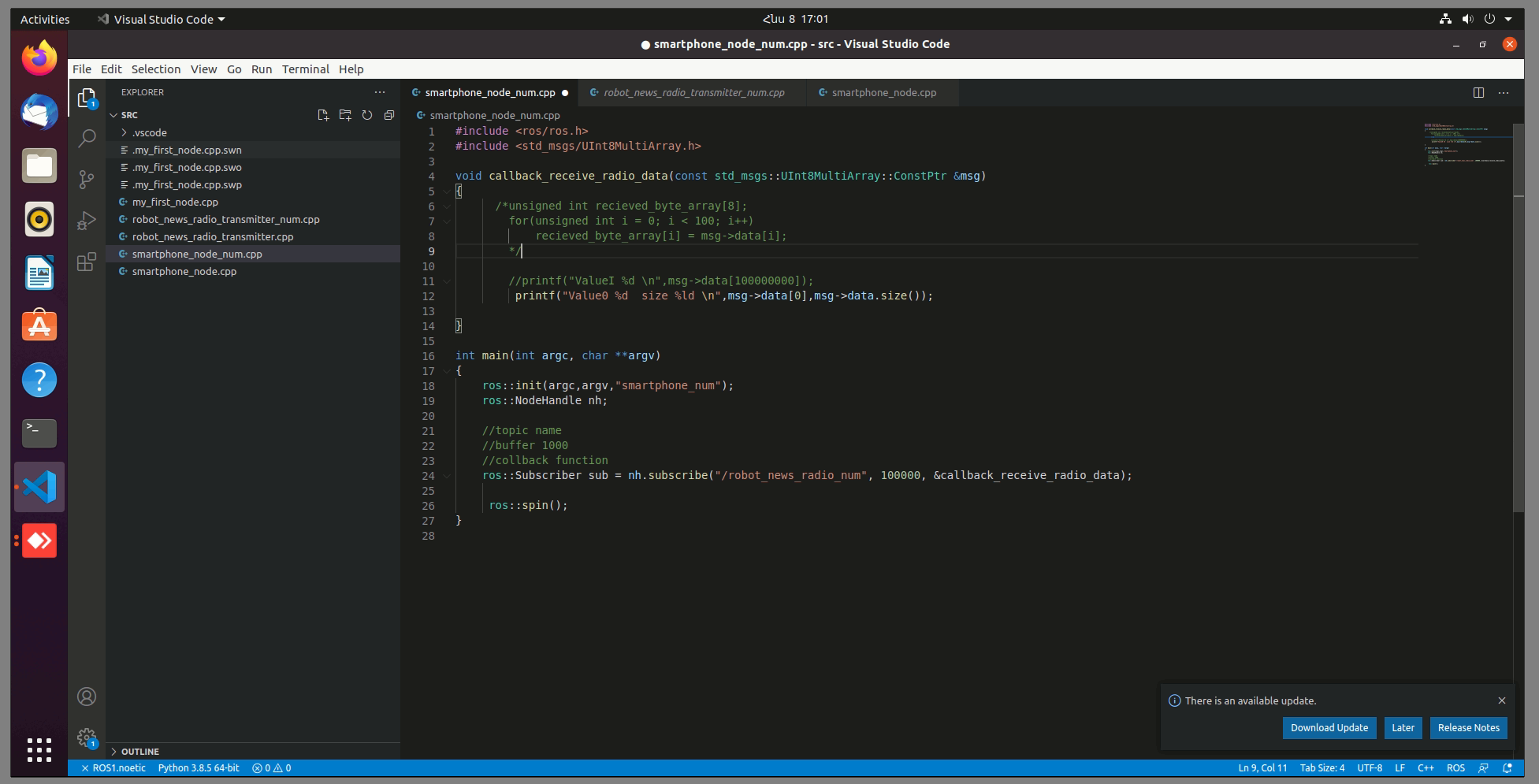
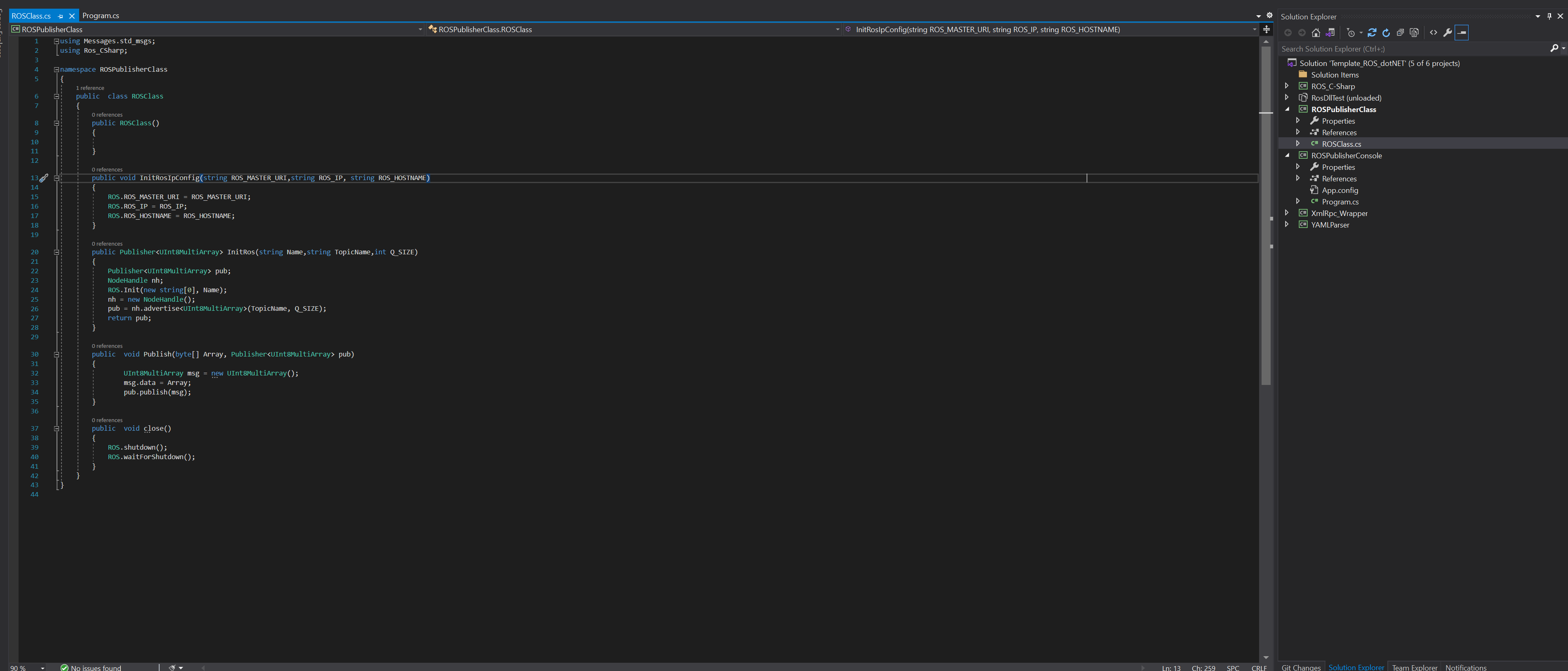
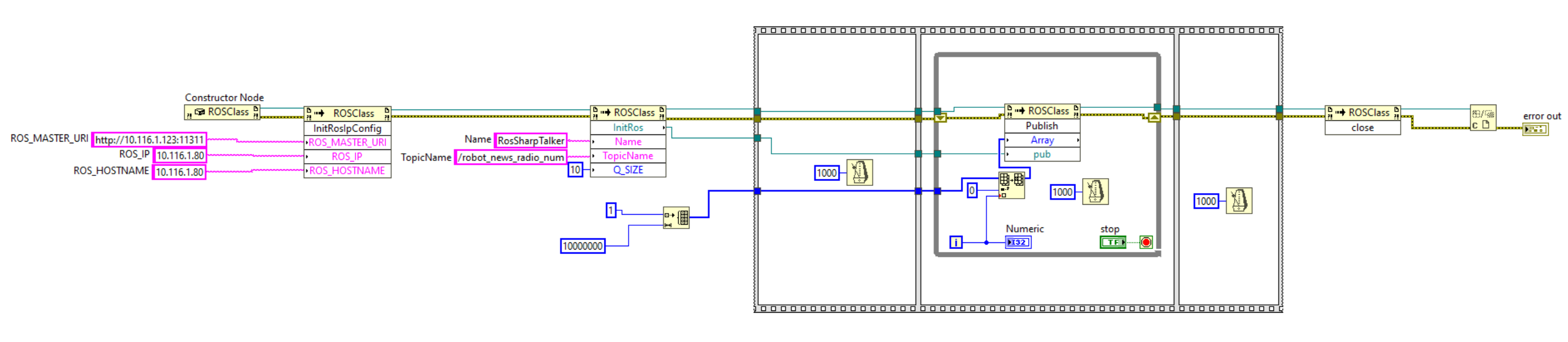
**Getting Started Manual**

1. System Configuration  
    2x PXI 8880 with Windows and Ubuntu 20.4 systems  
   2x PXIe-8238 PXI Ethernet Interface Module
2. Install ROS 1  
    [Noetic](http://wiki.ros.org/noetic)on Ubuntu

  
[Ubuntu install of ROS Noetic](http://wiki.ros.org/noetic/Installation/Ubuntu)  
[ROS Tutorials](http://wiki.ros.org/ROS/Tutorials)

1. ROS Subscriber Code  
   
2. C# Open Source [Git](https://github.com/uml-robotics/ROS.NET) Library for ROS (Template\_ROS\_dotNET.sln)  
   
3. Integrated C# DLL to LV environment  
   
4. Some ROS commands on Ubuntu  
    catkin\_make

source devel/setup.bash

export ROS\_HOSTNAME=10.116.1.12

export ROS\_IP=10.116.1.12

export ROS\_MASTER\_URI=http://10.116.1.12:11311

roscore

rosrun my\_robot\_tutorials smartphone\_node\_num

rosrun my\_robot\_tutorials robot\_news\_radio\_transmitter\_num

1. TCP Benchmarking tool [iPerf](https://iperf.fr/)
2. Attached Files  
     
   catkin\_ws -> Ubuntu PXI code  
   ROS.NET-master -> C# Code  
   ROS\_Publish.vi -> LabView Publisher vi  
   10Gb\_s ROS Benchmark CSharp (4Gb\_s)