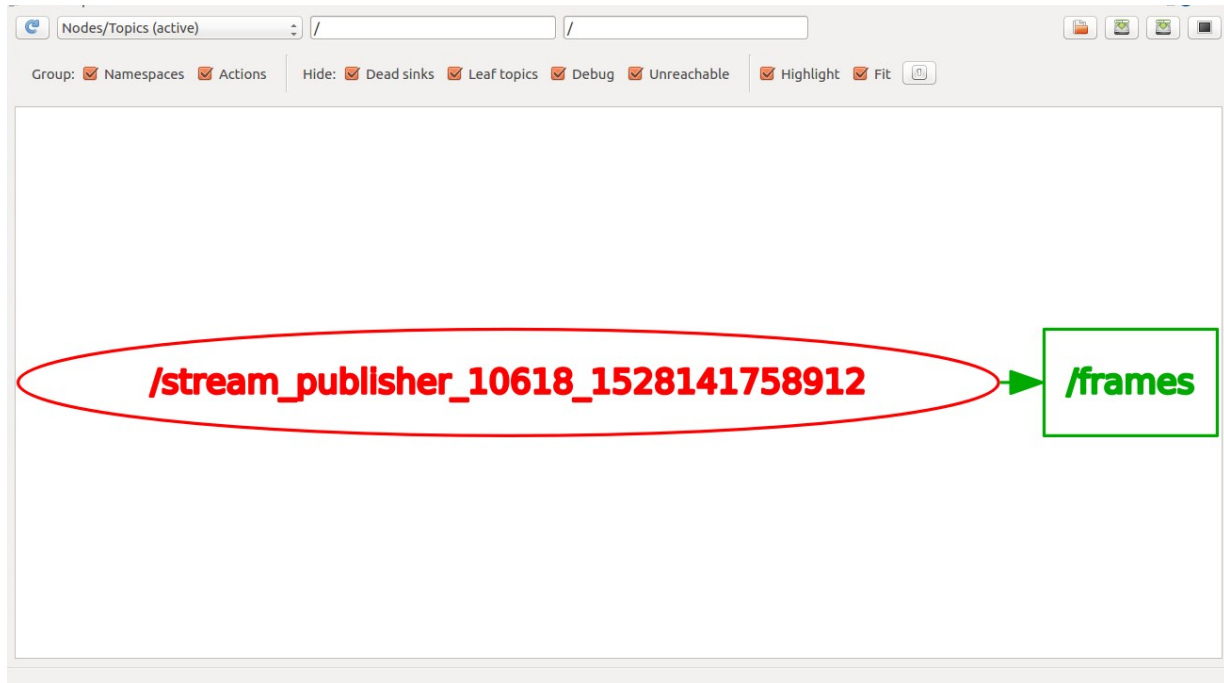


# ROS COMMANDS

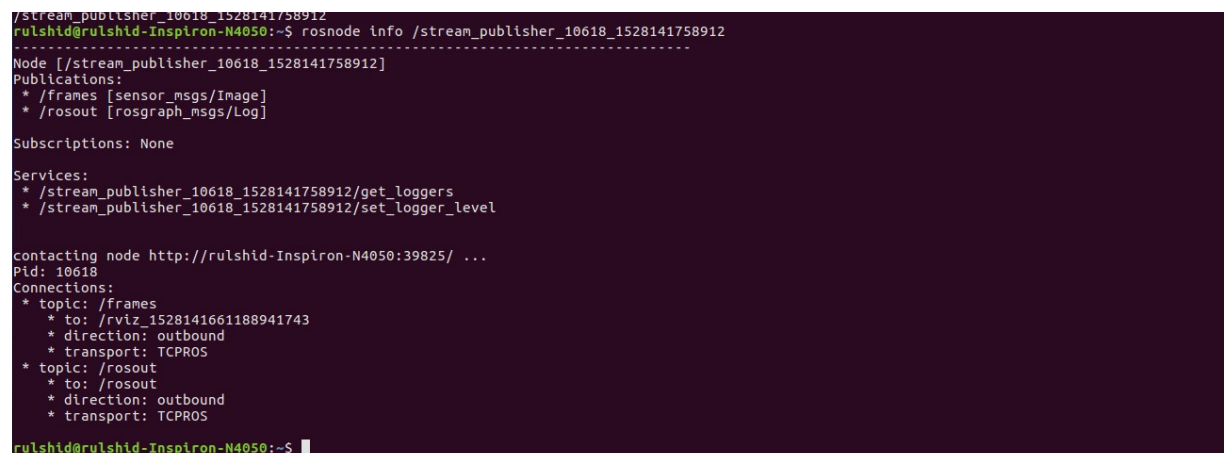
## 1. `roslaunch rqt_graph rqt_graph`



## 2. `roslaunch rqt_graph rqt_graph`



## 3. `roslaunch rqt_graph rqt_graph`



#### 4.rostopic list

```
rulshid@rulshid-Inspiron-N4050:~$ rostopic list
/clicked_point
/frames
/initialpose
/move_base_simple/goal
/rosout
/rosout_agg
/statistics
/tf
/tf_static
rulshid@rulshid-Inspiron-N4050:~$
```

#### 5.rostopic info

```
/tf_static
rulshid@rulshid-Inspiron-N4050:~$ rostopic info /frames
Type: sensor_msgs/Image

Publishers:
* /stream_publisher_10618_1528141758912 (http://rulshid-Inspiron-N4050:39825/)

Subscribers:
* /rviz_1528141661188941743 (http://rulshid-Inspiron-N4050:40445/)

rulshid@rulshid-Inspiron-N4050:~$
```

#### 6.rosmsg list

**rulshid@rulshid-Inspiron-N4050:~\$ rosmmsg list**

**actionlib/TestAction  
actionlib/TestActionFeedback  
actionlib/TestActionGoal  
actionlib/TestActionResult  
actionlib/TestFeedback  
actionlib/TestGoal  
actionlib/TestRequestAction  
actionlib/TestRequestActionFeedback  
actionlib/TestRequestActionGoal  
actionlib/TestRequestActionResult  
actionlib/TestRequestFeedback  
actionlib/TestRequestGoal  
actionlib/TestRequestResult  
actionlib/TestResult  
actionlib/TwoIntsAction  
actionlib/TwoIntsActionFeedback  
actionlib/TwoIntsActionGoal  
actionlib/TwoIntsActionResult  
actionlib/TwoIntsFeedback  
actionlib/TwoIntsGoal  
actionlib/TwoIntsResult  
actionlib\_msgs/GoalID  
actionlib\_msgs/GoalStatus**

actionlib\_msgs/GoalStatusArray  
actionlib\_tutorials/AveragingAction  
actionlib\_tutorials/AveragingActionFeedback  
actionlib\_tutorials/AveragingActionGoal  
actionlib\_tutorials/AveragingActionResult  
actionlib\_tutorials/AveragingFeedback  
actionlib\_tutorials/AveragingGoal  
actionlib\_tutorials/AveragingResult  
actionlib\_tutorials/FibonacciAction  
actionlib\_tutorials/FibonacciActionFeedback  
actionlib\_tutorials/FibonacciActionGoal  
actionlib\_tutorials/FibonacciActionResult  
actionlib\_tutorials/FibonacciFeedback  
actionlib\_tutorials/FibonacciGoal  
actionlib\_tutorials/FibonacciResult  
bond/Constants  
bond/Status  
control\_msgs/FollowJointTrajectoryAction  
control\_msgs/FollowJointTrajectoryActionFeedback  
control\_msgs/FollowJointTrajectoryActionGoal  
control\_msgs/FollowJointTrajectoryActionResult  
control\_msgs/FollowJointTrajectoryFeedback  
control\_msgs/FollowJointTrajectoryGoal  
control\_msgs/FollowJointTrajectoryResult  
control\_msgs/GripperCommand  
control\_msgs/GripperCommandAction  
control\_msgs/GripperCommandActionFeedback  
control\_msgs/GripperCommandActionGoal  
control\_msgs/GripperCommandActionResult  
control\_msgs/GripperCommandFeedback  
control\_msgs/GripperCommandGoal  
control\_msgs/GripperCommandResult  
control\_msgs/JointControllerState  
control\_msgs/JointTolerance  
control\_msgs/JointTrajectoryAction  
control\_msgs/JointTrajectoryActionFeedback  
control\_msgs/JointTrajectoryActionGoal  
control\_msgs/JointTrajectoryActionResult  
control\_msgs/JointTrajectoryControllerState  
control\_msgs/JointTrajectoryFeedback  
control\_msgs/JointTrajectoryGoal  
control\_msgs/JointTrajectoryResult  
control\_msgs/PidState  
control\_msgs/PointHeadAction  
control\_msgs/PointHeadActionFeedback  
control\_msgs/PointHeadActionGoal  
control\_msgs/PointHeadActionResult  
control\_msgs/PointHeadFeedback  
control\_msgs/PointHeadGoal  
control\_msgs/PointHeadResult  
control\_msgs/SingleJointPositionAction  
control\_msgs/SingleJointPositionActionFeedback

control\_msgs/SingleJointPositionActionGoal  
control\_msgs/SingleJointPositionActionResult  
control\_msgs/SingleJointPositionFeedback  
control\_msgs/SingleJointPositionGoal  
control\_msgs/SingleJointPositionResult  
diagnostic\_msgs/DiagnosticArray  
diagnostic\_msgs/DiagnosticStatus  
diagnostic\_msgs/KeyValue  
dynamic\_reconfigure/BoolParameter  
dynamic\_reconfigure/Config  
dynamic\_reconfigure/ConfigDescription  
dynamic\_reconfigure/DoubleParameter  
dynamic\_reconfigure/Group  
dynamic\_reconfigure/GroupState  
dynamic\_reconfigure/IntParameter  
dynamic\_reconfigure/ParamDescription  
dynamic\_reconfigure/SensorLevels  
dynamic\_reconfigure/StrParameter  
gazebo\_msgs/ContactState  
gazebo\_msgs/ContactsState  
gazebo\_msgs/LinkState  
gazebo\_msgs/LinkStates  
gazebo\_msgs/ModelState  
gazebo\_msgs/ModelStates  
gazebo\_msgs/ODEJointProperties  
gazebo\_msgs/ODEPhysics  
gazebo\_msgs/WorldState  
geometry\_msgs/Accel  
geometry\_msgs/AccelStamped  
geometry\_msgs/AccelWithCovariance  
geometry\_msgs/AccelWithCovarianceStamped  
geometry\_msgs/Inertia  
geometry\_msgs/InertiaStamped  
geometry\_msgs/Point  
geometry\_msgs/Point32  
geometry\_msgs/PointStamped  
geometry\_msgs/Polygon  
geometry\_msgs/PolygonStamped  
geometry\_msgs/Pose  
geometry\_msgs/Pose2D  
geometry\_msgs/PoseArray  
geometry\_msgs/PoseStamped  
geometry\_msgs/PoseWithCovariance  
geometry\_msgs/PoseWithCovarianceStamped  
geometry\_msgs/Quaternion  
geometry\_msgs/QuaternionStamped  
geometry\_msgs/Transform  
geometry\_msgs/TransformStamped  
geometry\_msgs/Twist  
geometry\_msgs/TwistStamped  
geometry\_msgs/TwistWithCovariance  
geometry\_msgs/TwistWithCovarianceStamped

geometry\_msgs/Vector3  
geometry\_msgs/Vector3Stamped  
geometry\_msgs/Wrench  
geometry\_msgs/WrenchStamped  
map\_msgs/OccupancyGridUpdate  
map\_msgs/PointCloud2Update  
map\_msgs/ProjectedMap  
map\_msgs/ProjectedMapInfo  
nav\_msgs/GetMapAction  
nav\_msgs/GetMapActionFeedback  
nav\_msgs/GetMapActionGoal  
nav\_msgs/GetMapActionResult  
nav\_msgs/GetMapFeedback  
nav\_msgs/GetMapGoal  
nav\_msgs/GetMapResult  
nav\_msgs/GridCells  
nav\_msgs/MapMetaData  
nav\_msgs/OccupancyGrid  
nav\_msgs/Odometry  
nav\_msgs/Path  
pcl\_msgs/ModelCoefficients  
pcl\_msgs/PointIndices  
pcl\_msgs/PolygonMesh  
pcl\_msgs/Vertices  
roscpp/Logger  
rosgraph\_msgs/Clock  
rosgraph\_msgs/Log  
rosgraph\_msgs/TopicStatistics  
rospy\_tutorials/Floats  
rospy\_tutorials/HeaderString  
sensor\_msgs/BatteryState  
sensor\_msgs/CameraInfo  
sensor\_msgs/ChannelFloat32  
sensor\_msgs/CompressedImage  
sensor\_msgs/FluidPressure  
sensor\_msgs/Illuminance  
sensor\_msgs/Image  
sensor\_msgs/Imu  
sensor\_msgs/JointState  
sensor\_msgs/Joy  
sensor\_msgs/JoyFeedback  
sensor\_msgs/JoyFeedbackArray  
sensor\_msgs/LaserEcho  
sensor\_msgs/LaserScan  
sensor\_msgs/MagneticField  
sensor\_msgs/MultiDOFJointState  
sensor\_msgs/MultiEchoLaserScan  
sensor\_msgs/NavSatFix  
sensor\_msgs/NavSatStatus  
sensor\_msgs/PointCloud  
sensor\_msgs/PointCloud2  
sensor\_msgs/PointField

sensor\_msgs/Range  
sensor\_msgs/RegionOfInterest  
sensor\_msgs/RelativeHumidity  
sensor\_msgs/Temperature  
sensor\_msgs/TimeReference  
shape\_msgs/Mesh  
shape\_msgs/MeshTriangle  
shape\_msgs/Plane  
shape\_msgs/SolidPrimitive  
smach\_msgs/SmachContainerInitialStatusCmd  
smach\_msgs/SmachContainerStatus  
smach\_msgs/SmachContainerStructure  
std\_msgs/Bool  
std\_msgs/Byte  
std\_msgs/ByteMultiArray  
std\_msgs/Char  
std\_msgs/ColorRGBA  
std\_msgs/Duration  
std\_msgs/Empty  
std\_msgs/Float32  
std\_msgs/Float32MultiArray  
std\_msgs/Float64  
std\_msgs/Float64MultiArray  
std\_msgs/Header  
std\_msgs/Int16  
std\_msgs/Int16MultiArray  
std\_msgs/Int32  
std\_msgs/Int32MultiArray  
std\_msgs/Int64  
std\_msgs/Int64MultiArray  
std\_msgs/Int8  
std\_msgs/Int8MultiArray  
std\_msgs/MultiArrayDimension  
std\_msgs/MultiArrayLayout  
std\_msgs/String  
std\_msgs/Time  
std\_msgs/UInt16  
std\_msgs/UInt16MultiArray  
std\_msgs/UInt32  
std\_msgs/UInt32MultiArray  
std\_msgs/UInt64  
std\_msgs/UInt64MultiArray  
std\_msgs/UInt8  
std\_msgs/UInt8MultiArray  
stereo\_msgs/DisparityImage  
tf/tfMessage  
tf2\_msgs/LookupTransformAction  
tf2\_msgs/LookupTransformActionFeedback  
tf2\_msgs/LookupTransformActionGoal  
tf2\_msgs/LookupTransformActionResult  
tf2\_msgs/LookupTransformFeedback  
tf2\_msgs/LookupTransformGoal

tf2\_msgs/LookupTransformResult  
tf2\_msgs/TF2Error  
tf2\_msgs/TFMessage  
theora\_image\_transport/Packet  
trajectory\_msgs/JointTrajectory  
trajectory\_msgs/JointTrajectoryPoint  
trajectory\_msgs/MultiDOFJointTrajectory  
trajectory\_msgs/MultiDOFJointTrajectoryPoint  
turtle\_actionlib/ShapeAction  
turtle\_actionlib/ShapeActionFeedback  
turtle\_actionlib/ShapeActionGoal  
turtle\_actionlib/ShapeActionResult  
turtle\_actionlib/ShapeFeedback  
turtle\_actionlib/ShapeGoal  
turtle\_actionlib/ShapeResult  
turtle\_actionlib/Velocity  
turtlesim/Color  
turtlesim/Pose  
visualization\_msgs/ImageMarker  
visualization\_msgs/InteractiveMarker  
visualization\_msgs/InteractiveMarkerControl  
visualization\_msgs/InteractiveMarkerFeedback  
visualization\_msgs/InteractiveMarkerInit  
visualization\_msgs/InteractiveMarkerPose  
visualization\_msgs/InteractiveMarkerUpdate  
visualization\_msgs/Marker  
visualization\_msgs/MarkerArray  
visualization\_msgs/MenuEntry

## 8. rosmmsg info

```
visualization_msgs/MenuEntry
rulshid@rulshid-Inspiron-N4050:~$ rosmmsg info sensor_msgs/Image
std_msgs/Header header
  uint32 seq
  time stamp
  string frame_id
uint32 height
uint32 width
string encoding
uint8 is_bigendian
uint32 step
uint8[] data
rulshid@rulshid-Inspiron-N4050:~$
```

## 9. rosnod machine

```
rulshid@rulshid-Inspiron-N4050:~$ rosnod machine
rulshid-inspiron-n4050
rulshid@rulshid-Inspiron-N4050:~$
```