

## Result

Successfully did motion planning with OMPL and KDL


### Other Kinematic solvers

I was able to add Track IK instead of KDL by modifying kinematics.yaml but, I didn't find anything different in result, both did same.

### Other Motion Planning Library


- I followed MoveIt tutorial guideline but it needs Kinect distros (latest version of ROS) for Interfacing CHOMPL and other Libraries.
- I had installed Kinect long back but, due to few reason, I deleted it and now I have **Indigo** only.
- Yet I tried to do it but there was error and so I googled and found **very few resource** and I have mailed few people who worked with CHOMPL originally.
- One of them is **Mirnal Krishnan** who is **Robotics Engineer at Google**.
- Here is screenshot of the mail


CHOMP Plugin interface in MoveIt-Tutorial Inbox x

**Ajay G** <ajaygunalan1995@gmail.com>  
to mail ▾  
Greetings.  
I'm Ajay G from Crescent univeristy, Chennnai.  
We have 7 DOF robotic arm and we did the motion planning in MoveIt via the default OMPL.  
I tried to implement CHOMP for our robotic arm but we are unable to do.  
I followed the steps mentioned in the [MoveIt](#) page but i didn't get the result.  
The error is:  

```
unused args [planner] for include of [/home/ajay/ASIMOV/kdl_chompl_ws/src/moveit_config/launch/move_group.launch]
```

  
The traceback for the exception was written to the log file  
When googled the tutorial for CHOMP was very less when compared to ROS.  
**If you could provide some guidance or any sort of instructions or a tutorial on it.**  
It would be really helpful to us.  
Hoping for a positive reply  
Thank You

**Mrinal Kalakrishnan**  
to me ▾  
Hi Ajay,  
Although I was the original author of the CHOMP code, I have not worked on ROS, CHOMP or MoveIt for quite a few years now, and the code has changed a lot. It is currently being supported by the moveit community, so your best bet would be to ask for help on the [moveit-users group](#), which seems pretty active.  
You might also want to give STOMP a try instead, if you think it fits your application, since it seems to have been used more recently: [http://docs.ros.org/indigo/api/stomp\\_moveit/html/stomp\\_moveit\\_setup.html](http://docs.ros.org/indigo/api/stomp_moveit/html/stomp_moveit_setup.html)  
Regards,  
Mrinal

**Ajay G** <ajaygunalan1995@gmail.com>  
to Mrinal ▾  
Dear Mirnal,  
Thank you for fast reply, will check on STOMP and also the MoveIt-user group

6:53 PM (3 hours ago) ☆ ↶ ▾

7:19 PM (3 hours ago) ☆ ↶ ▾

### Why I mailed on 24<sup>th</sup> Mon April 2017?

I had two options:

1. Either to finish all the task perfectly and mail before deadline

Or

2. To do the basic's which I knew already and mail it earlier so as get additional marks on time.

I have chosen option two because **tutorial** on Motion Planning and performance comparison of various kinematic solvers are **very very less in Internet**, so I thought its's better to send the earliest.

### My workflow

Date	Day	Work did
21/04/2017	Friday	googled about various things in mail like doxygen, chompl, et
22/04/2017	Saturday	Researched about motion planning algorithm and finished my documentation
23/04/2017	Sunday	<ol style="list-style-type: none"><li>1. Researched about Kinematic Solver and finished my documentation</li><li>2. Simulated with KDL+OMPL</li><li>3. Simulated with Track IK +OMPL</li></ol>
24/04/2017	Monday	<ol style="list-style-type: none"><li>1. Tried to do simulation with other Motion planning library but lote of error</li><li>2. Googled a lot only to find no tutorial! ☹</li><li>3. Found few people who worked with various librairaies</li><li>4. Mailed them</li></ol>