

# Getting rid of the Point Cloud Library (PCL) #3307

kminoda started this conversation in **General**



**kminoda** on Mar 3, 2023 Collaborator

Currently, Autoware is heavily dependent on Point Cloud Library (PCL), an open sourced library for handling point cloud data.

Although the library is handy to use mainly because of its wide user community, using the library sometimes induces unnecessary issues or caps the performance of Autoware.

What do you think about this? I especially would like to know two main points:

1. What would be the pros & cons of getting rid of PCL?
2. What would the development roadmap and timeline would be?

Thanks!

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## Category

**General**

## Labels

None yet

## 3 participants



## 2 comments

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**sykwer** on Mar 3, 2023 Collaborator

Pros: We can avoid unnecessary copies as much as possible.

The entire Autoware system needs to be designed such that all the large-data instances are singletons in terms of physical memory.

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0 replies



**RyuYamamoto** on Mar 3, 2023 Collaborator edited

Pros:

It is easy to improve algorithms, introduce new features, code readability and performance can be improved.  
not affected by external releases.

Cons:

Maintenance costs may be higher, because Autoware has a lot of PCL dependencies.

I think we need to investigate the scope of impact.

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