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# AI4EU ROBOTICS PILOT

Using AI4EU model in ROS

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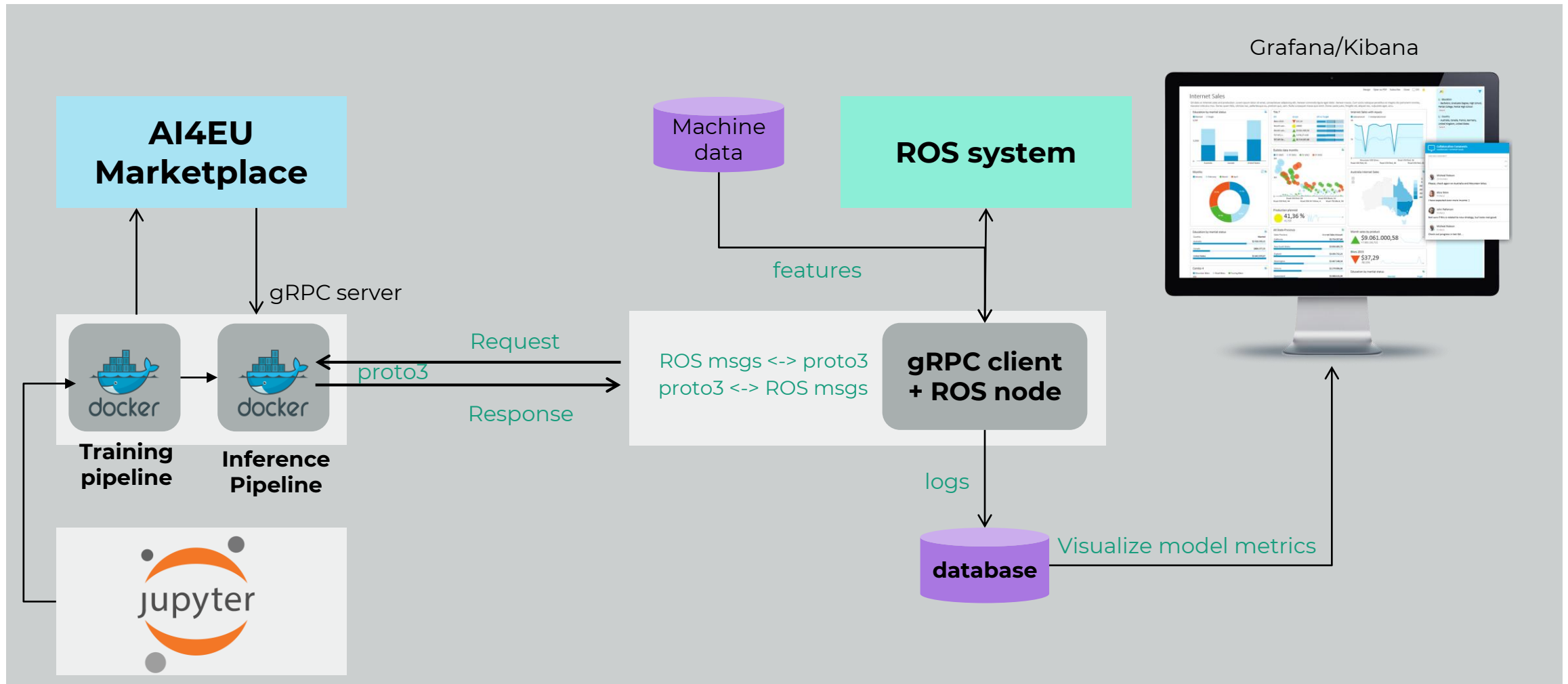
# Combining AI4EU Model with ROS

## Motivation

- ROS is De-facto standard framework for developing robotics application
- Most robots also make use of AI for predictive maintenance and fault diagnosis
- ROS currently does not have a infrastructure for developing ML models.
- gRPC model server will remove the ROS dependency on ML libraries.
- Leveraging the combined capabilities of ROS and AI4EU platform

# High Level Architecture

## ROS + gRPC server

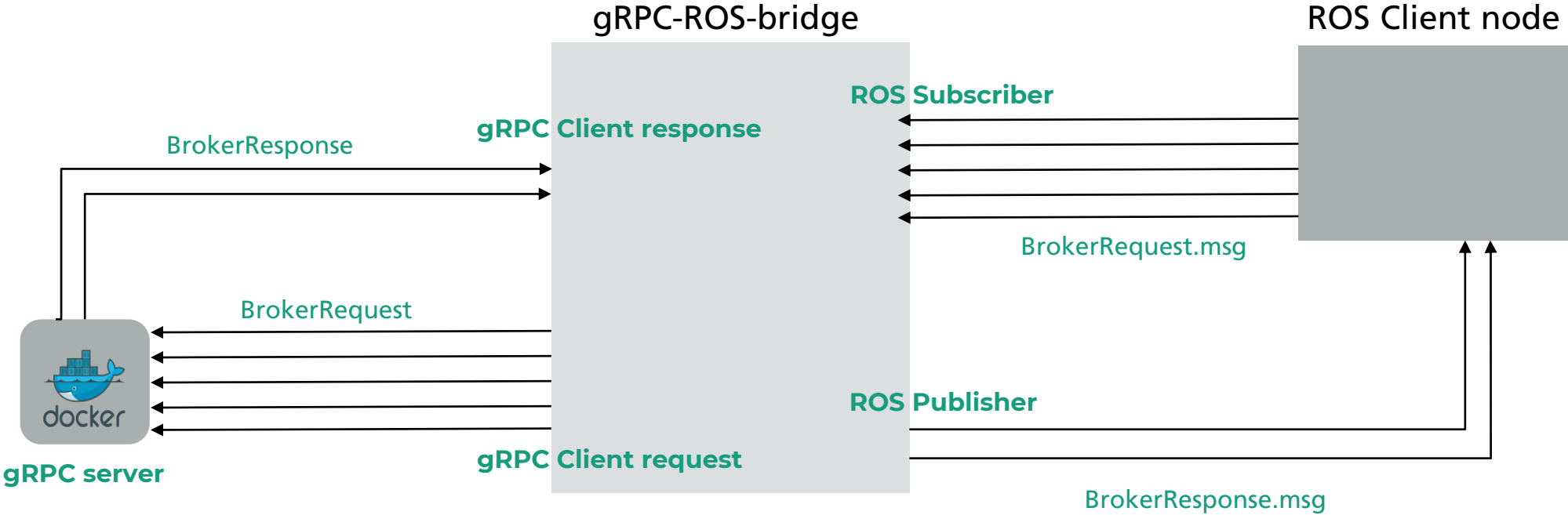


# High Level Architecture

## ROS client side

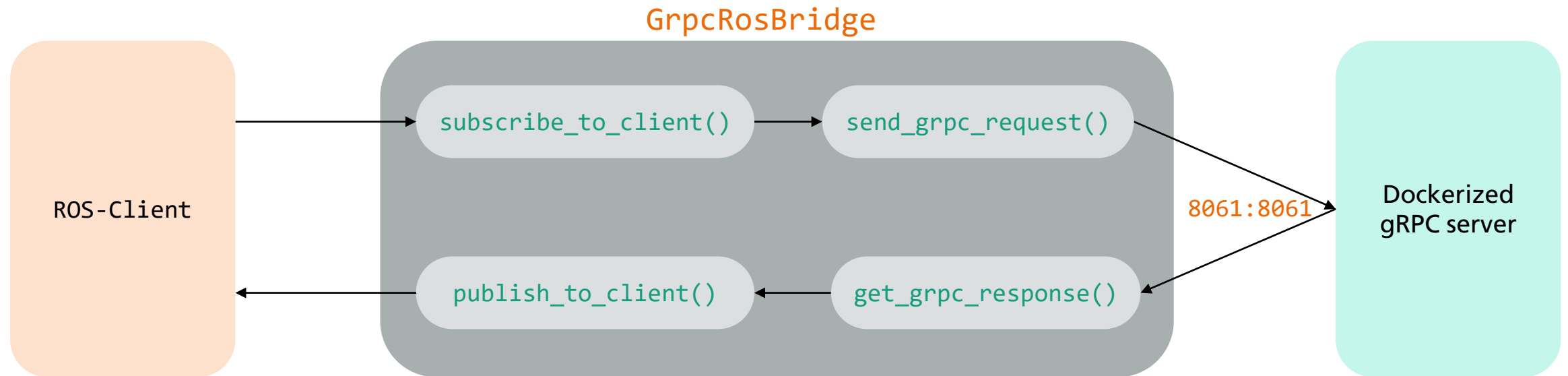
### Payload structure

BrokerRequest	BrokerResponse
int32 id	int32 id
float32 sensor_1	bool prediction
float32 sensor_2	
float32 sensor_3	
float32 sensor_4	



# Software Architecture

## ROS client and gRPC Server



# End of Presentation