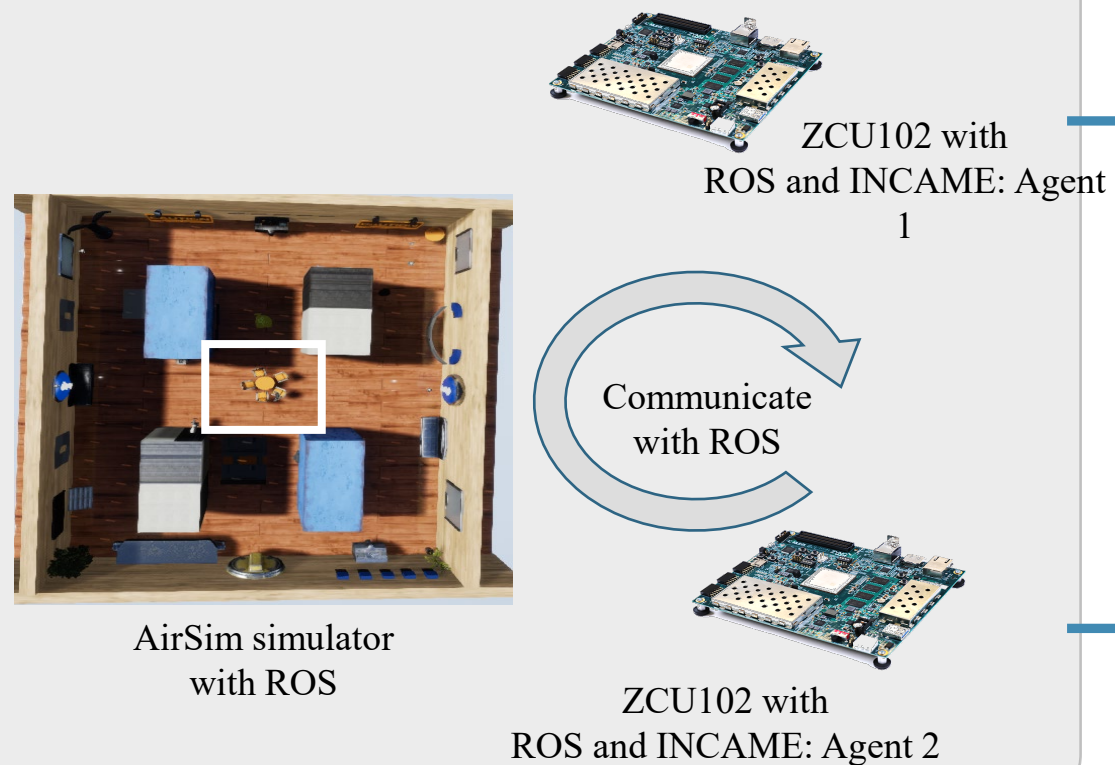
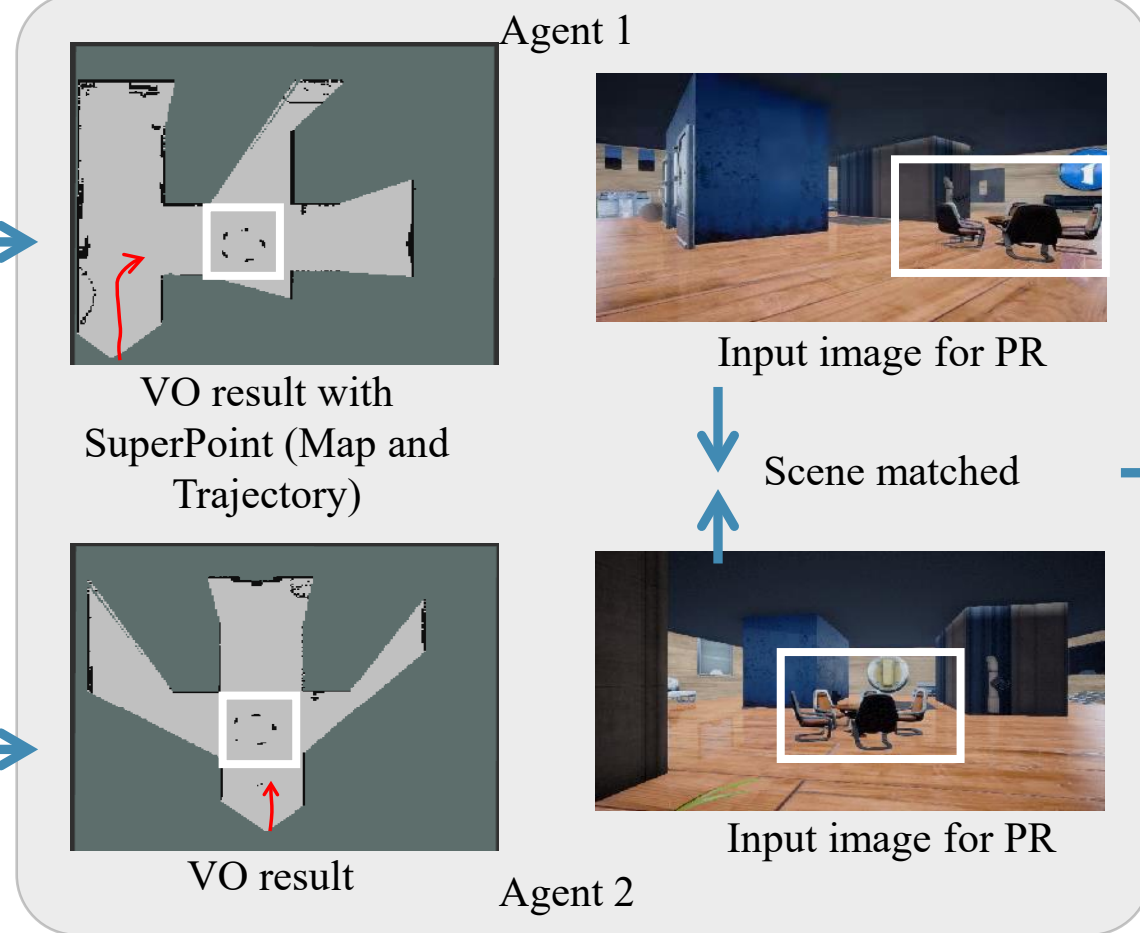


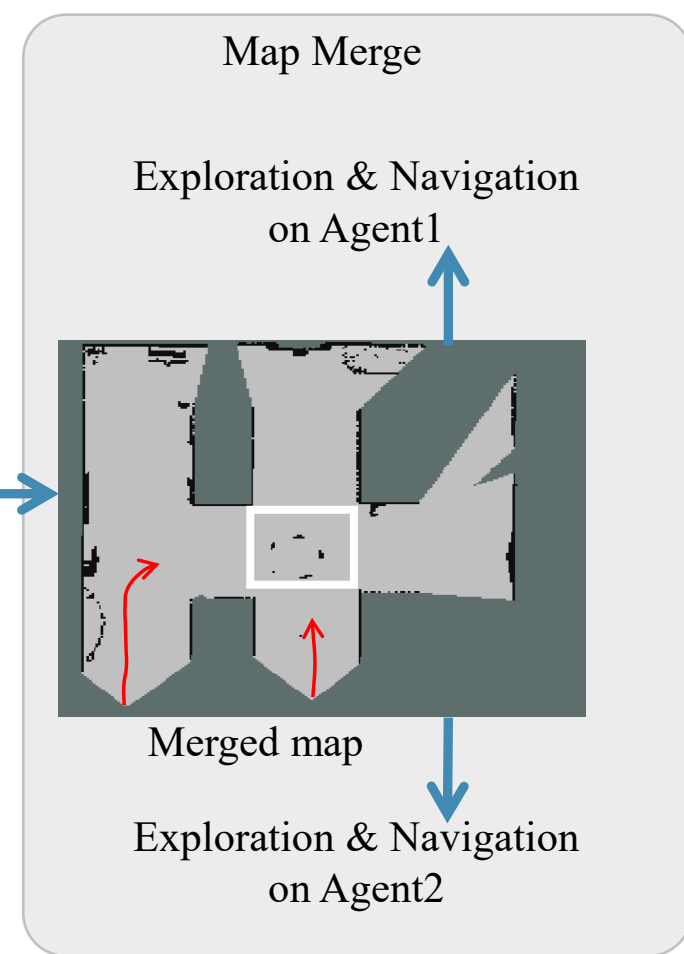
## Evaluation System with Multi-robot ROS



(a) Evaluation System based on multi-agent ROS. The AirSim simulator runs on the server, providing input images for two agents. The computation of each agent runs on a ZCU102 board with INCAME. The communication is based on ROS.



(b) The map and trajectory (left) are generated by VO based on SuperPoint feature-points. The two input pictures are from the same scene (right) with the chairs in white boxes. The PR representation of these two pictures is similar.



(c) After the same scene detected, the relative pose of the two agents is evaluated by the similar scene. The map and trajectory are merged via the relative pose.