A set of robots mapping an area can potentially combine their information to produce a distributed map more efficiently and reliably than a single robot alone. Multi-robot swarm coordination depends on a consistent, reliable map of the environment. Map-merging algorithms are therefore key komponents for such systems. In this work I present a novel algorithm for merging two-dimensinal maps created by different robots independently without initial knowledge of relative poses of robots. The algorithm is inspired by computer vision image stitching techniques for creating photo panoramas. Presented algorithm relies only on map data represented as occupancy grids, which allows great scalabity for heterogeneous multi-robot swarms and makes algorithm easily deployable with various SLAM algorithms. The map-merging algorithm was implemented as publicily available ROS package and was accepted in ROS distribution. Performance of the algorithm has been evaluated in ROS enviroment using VREP simulator. For purposes of evaluation ROS package for exploring was developed as part of this work.