ROS in transition: a new organizational path under the Open Source Robotics Alliance

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Key aspects for open source organizations



1. <u>Commit permissions:</u> who can change the code (maintainers)



2. <u>Structural decisions:</u> who and how decide on transversal project changes.



3. Funding: who is paying for development

Stanford / Willow Garage

ROS was envisioned by Keenan Wyrobek and Eric Berger at Stanford University starting at 2006. They intended to create "the Linux of Robotics"

In 2008 Keenan and Eric met the investor Scott Hassan and joined Willow Garage (Scott's company)



2008 :: 2012 Willow Garage



Keenan and Eric joined Willow Garage as <u>Directors</u>.



"A whole lot of more than <u>\$4 million went</u> into the development of ROS"



"Since each ROS tool and library had <u>a clear owner on</u> <u>the Willow team</u>, when an intern was blocked by a deficiency he or she had simply to walk over to the correct person's desk"

https://spectrum.ieee.org/the-origin-story-of-ros-the-linux-of-robotics



2008 :: 2012 Willow Garage

2010 - ROS Enhancement Proposals [REP 1]

"A REP is a design document providing information to the ROS community, or describing a new feature for ROS or its processes or environment. The REP should provide a concise technical specification of the feature and a rationale for the feature."



"The MDFN (Malevolent Dictator for Now, TBD) can be consulted during the approval phase, and is the final arbiter of the draft's REP-ability."

https://ros.org/reps/rep-0001.html



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Open Source Robotics Foundation

In 2012, part of the Willow employees left (specially the core team of the Gazebo project) and founded the OSRF. OSRF adopted ROS and the ROS core team in 2013.



Open Source Robotics Foundation

2012 :: 2022 The OSRFoundation and Open Robotics



Open Source Robotics Foundation, Inc. (OSRF) was established in 2012 as Nonprofit Corporation. It has a Board of Directors and a CEO.



The OSRF hired the whole ROS core team and added new members to it during the years.



The funding model was based on establishing <u>public and</u> private contracts that contribute to the open source.

2012 :: 2022 The OSRFoundation and Open Robotics

2018: ROS 2 Technical Steering Committee (TSC)



"The TSC makes decisions on the project roadmap, developer policies and process, release schedule, and other matters that require technical supervision"



"The minimum level of effort commitment required to qualify for TSC <u>membership</u> is 1 full-time equivalent (FTE). This level may be changed by the TSC via a standard TSC motion and vote"

https://discourse.ros.org/t/introducing-the-ros-2-technical-steering-committee/6132

In 2022 the Open robotics business and the senior developers joined Intrinsic, an Alphabet company. In response, the OSRF developed The Open Source Robotics Alliance (OSRA)



"The Open Source Robotics Alliance (OSRA, the Alliance) is a new initiative of the OSRF to organize and strengthen project governance and community involvement."



"The OSRA is a mixed <u>membership</u> and <u>meritocratic</u> model". Companies and individuals can pay to be an OSRA member (funding model for the OSRA).





"The <u>Technical Governance Committee (TGC)</u> manages the overall technical affairs of the OSRA, such as setting technical standards for projects to follow and having oversight of the activities of projects".

TGC Chair | Developer advocate
Representatives of members of the OSRA
Leaders of Projects and project representatives

"The ROS Project Management Committee (PMC) is responsible for the <u>day-to-day operations</u> of the ROS 2 project"



Leader | Members | Comitters | User representatives

The PMC elects its own comitters and members (meritocratic), the ROS Bosses (release coordinators) and propose and vote for the ROS 2 Leader.

