

Community Metrics Report

Tully Foote Reporting on July 2018

Comparisons are to July 2017 Report

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Source: Metrics categories borrowed from Dawn Foster of MeeGo: http://wiki.meego.com/Metrics

Awareness Metrics

Discovering the community, learning more about it (potential community members)

ros.org: Visitors & Page Views

wiki.ros.org Visitors: July 2018



Site Content	
Page	+
Page Title	
Site Search	
Search Term	
Events	
Event Category	

Site: wiki.ros.org
Source: Google

Analytics

Annual Growth: 21%

Page		Pageviews	% Pageviews
1. /ROS/Tutorials	æ	103,620	4.70%
2. /	Œ.	62,152	2.82%
3. /kinetic/Installation/Ubuntu	P	55,985	2.54%
4. /ROS/Installation	4	43,803	1.99%
5. /kinetic/Installation	P	37,048	1.68%
6. /cn/ROS/Tutorials	(P	32,001	1.45%
7. /ROS/Tutorials/InstallingandConfiguringROSEnvironment	(P	29,558	1.34%
8. /ROS/Tutorials/CreatingPackage	(P	25,635	1.16%
9. /ROS/Tutorials/WritingPublisherSubscriber(c++)	P	21,841	0.99%
10. /ROS/Tutorials/NavigatingTheFilesystem	ĘP.	17,345	0.79%

1.		United States	34,710	(19.08%)
2.	•>	China	31,946	(17.56%)
3.	•	Japan	15,518	(8.53%)
4.		Germany	12,711	(6.99%)
5.	9	India	8,400	(4.62%)
6.		Philippines	7,235	(3.98%)
7.	(e)	South Korea	6,790	(3.73%)
8.	20 E	United Kingdom	4,325	(2.38%)
9.		Taiwan	4,233	(2.33%)
10.		France	3,725	(2.05%)
11.	٠	Canada	3,354	(1.84%)
12.	C	Spain	2,955	(1.62%)
13.	go.	Singapore	2,842	(1.56%)
14.		Italy	2,744	(1.51%)
15.		Russia	2,465	(1.35%)
16.		Indonesia	2,461	(1.35%)
17.	***	Australia	2,436	(1.34%)
18.	•	Brazil	2,231	(1.23%)
19.	索	Hong Kong	2,147	(1.18%)
20.	C+	Turkey	1,928	(1.06%)
21.		Netherlands	1,511	(0.83%)

Thailand

Switzerland

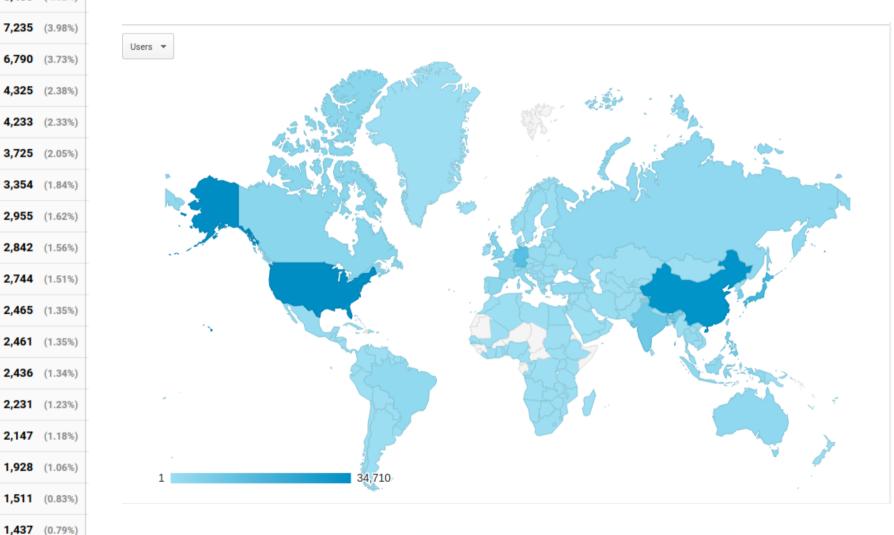
Vietnam

1,335 (0.73%)

1,242 (0.68%)

1,125 (0.62%)

wiki.ros.org visitor locations:



Source: Google Analytics

Site: wiki.ros.org in July 2018

Public wiki.ros.org Mirrors

- Asia:
 - Singapore
 - China
 - Tokyo, Japan
- Europe:
 - Ireland
 - Freiburg, Germany
 - Barcelona, Catalonia
- North America:
 - College Park, Maryland
 - Saint Louis, Massachusetts
 - Potsdam, New York
- South America
 - · Sao Paulo, Brazil

This report does not include data from these mirrors.

Source: http://wiki.ros.org/Mirrors

answers.ros.org: visitors

answers.ros.org visitors: July 2018



10. /question/195962/rviz-fixed-frame-world-does-not-exist/

Page

Site Content	
Page	ŀ
Page Title	
Site Search	
Search Term	
Events	
Event Category	

æ 2.54% 1. /questions/ 16,503 P 0.40% 2. /question/87866/how-to-edit-the-bashrc-file/ 2.593 3. /question/57213/how-i-completely-remove-all-ros-from-my-system/ P 2.519 0.39% P 0.35% 4. /questions/ask/ 2.293 5. /question/143496/roslaunch-is-neither-a-launch-file-in-package-nor-is-a-launch-file-name/ 0.25% 1.598 P 0.22% 1,443 6. /question/33769/how-to-get-ros-version/ Ð 0.21% 7. /question/246015/installing-turtlebot-on-ros-kinetic/ 1.379 Ð 1.368 0.21% 8. /question/69754/quaternion-transformations-in-python/ 9. /question/235397/e-unable-to-locate-package-ros-kinetic-desktop-full/ 1.299 0.20%

Site: answers.ros.org

Source: Google

Analytics

Annual Growth: 20%

% Pageviews

Pageviews

1,297

0.20%

Membership Metrics

Taking the time to sign up and join the community (passive and active community members)

Site & list membership

- discourse.ros.org users
 - 3,015 (250% increase)
- ros-users@lists.ros.org subscribers (deprecated):
 - 1,940 (8% decrease)
- wiki.ros.org users:
 - 7,696 (14% increase)
- answers.ros.org users:
 - 22,427 (22% increase)

Sampled: 2018-09-28

Engagement Metrics

Interacting with other community members (active community members)

wiki.ros.org: activity in July 2018

- Wiki pages: 14,751 pages cleared with zero content prior to collecting stats
 - 15,092 (20% decrease)
- Wiki page edits:
 - 17.2 / day (averaged over July, 15% decrease)
- Wiki page views:
 - 71,124 / day (averaged over July, 22% increase)

answers.ros.org: activity

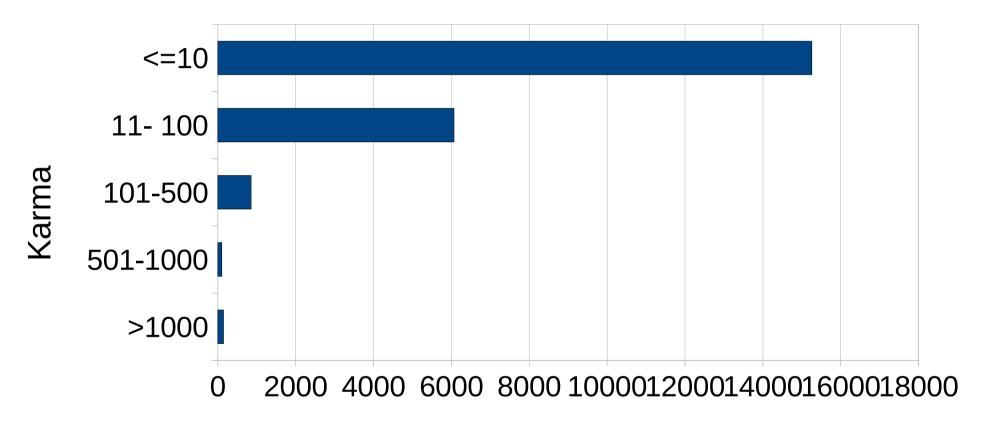
- Total questions:
 - 42,360 (17% increase)
- Answered questions:
 - 29,269 (18% increase)
- New questions in July:
 - 648 (20.9 / day, 27% increase)

Source: answers.ros.org

Sampled: 2018-09-28

answers.ros.org Karma

Sampled 2018-09-28



Number of Users

Histogram of users by karma. Users get karma points for having answers upvoted (+10) or accepted (+15) and for accepting someone else's answer (+2).

discourse.ros.org activity

IIII Site Statistics

	All Time	Last 7	Last 30
Topics	2.0k	22	86
Posts	14.1k	240	744
Users	3.0k	36	124
Active Users	_	255	435
Likes	4.0k	113	310

Source: http://discourse.ros.org/about

Sampled: 2018-09-28

Code Metrics

Engaging with the ROS project at a code level (developers and users)

Binary Downloads – July 2018

- Total Unique Visitors downloading .deb files:
 - 327,985 (41 % increase)
- Total downloads of .deb packages:
 - 16,155,301 (20% increase)
- Unique package names downloaded as .deb files:
 - 11,770 (25% increase)
- Number of unique versions of .deb packages downloaded:
 - 70,481 (32 % decrease)

Source: Apache2, counting only downloads from the main repository (not the testing repository, shadow-fixed, or mirrors) Some server logs may have been lost prior to analysis.

Top 40 Downloaded Packages Direct downloads from packages.ros.org - July 2018

python-catkin-pkg	92118	ros-kinetic-laser-geometry	46135
python-catkin-pkg-modules	91395	ros-kinetic-tf2-kdl	45652
python-rosdep	52892	ros-kinetic-robot-state-publisher	45611
ros-kinetic-tf2-msgs	52857	ros-kinetic-interactive-markers	44281
ros-kinetic-tf2	52785	ros-kinetic-rviz	43686
ros-kinetic-tf2-ros	52409	ros-kinetic-tf-conversions	43531
ros-kinetic-tf	52357	ros-kinetic-gazebo-ros	43140
ros-kinetic-tf2-py	52175	ros-kinetic-tf2-geometry-msgs	42296
python-rosdistro	51691	ros-kinetic-kdl-parser	41745
python-rosdistro-modules	51209	ros-kinetic-cv-bridge	41455
ros-kinetic-rqt-rviz	50373	ros-kinetic-gazebo-plugins	41400
ros-kinetic-rqt-robot-plugins	50304	ros-kinetic-image-transport	41215
ros-kinetic-desktop	49900	ros-kinetic-geometry-msgs	40708
ros-kinetic-viz	49478	ros-kinetic-diagnostic-updater	40701
ros-kinetic-tf2-eigen	48154	ros-kinetic-sensor-msgs	40661
ros-kinetic-pcl-ros	48023	ros-kinetic-actionlib-msgs	40374
python-rospkg	47415	ros-kinetic-pcl-conversions	40122
python-rospkg-modules	47285	ros-kinetic-actionlib	40087
ros-kinetic-desktop-full	47240	ros-kinetic-pcl-msgs	4004 9
ros-kinetic-simulators	46383	ros-kinetic-nav-msgs	39439

Downloads by architecture

Direct downloads from packages.ros.org - July 2018

i386: 2.26 %

amd64: 86.47 %

armhf: 3.63 %

arm64: 3.07 %

source: 0.39 %

artful amd64: 0.26 % artful source: 0.01 % bionic amd64: 5.72 % bionic arm64: 0.06 % bionic armhf: 0.13 % bionic source: 0.03 % jessie amd64: 0.10 % jessie_arm64: 0.00 % jessie source: 0.01 % precise amd64: 0.10 % precise i386: 0.09 % precise_source: 0.02 % raring i386: 0.00 % saucy amd64: 0.00 % saucy i386: 0.00 % stretch amd64: 0.54 % stretch arm64: 0.06 % stretch armhf: 0.00 % stretch source: 0.05 %

trusty_amd64: 15.14 % trusty armhf: 0.35 % trusty i386: 1.03 % trusty source: 0.07 % vivid amd64: 0.00 % wily_amd64: 0.02 % xenial_amd64: 58.52 % xenial_arm64: 2.65 % xenial armhf: 2.77 % xenial i386: 1.06 % xenial source: 0.20 % yakkety amd64: 0.00 % yakkety source: 0.00 % zesty amd64: 0.03 % zesty source: 0.00 %

Binary Downloads by rosdistro

The fraction of packages downloaded per rosdistro

- Hydro and earlier: 0.17 %
- Indigo: 14.50 % (Long Term Support Release)
- Jade: 0.50 %
- Kinetic: 62.89 % (Long Term Support Release)
- Lunar: 2.70 %
- Melodic: 6.49 % (Long Term Support Release)
- Rosdistro independent: 11.22% (packages like python-rosdistro and python-rosinstall, as well as backported 3rdparty libraries like pcl and colladadom)

Source: Apache2, counting only downloads from the main repository (not the testing repository, shadow-fixed, or mirrors)

Public Debian Package Mirrors

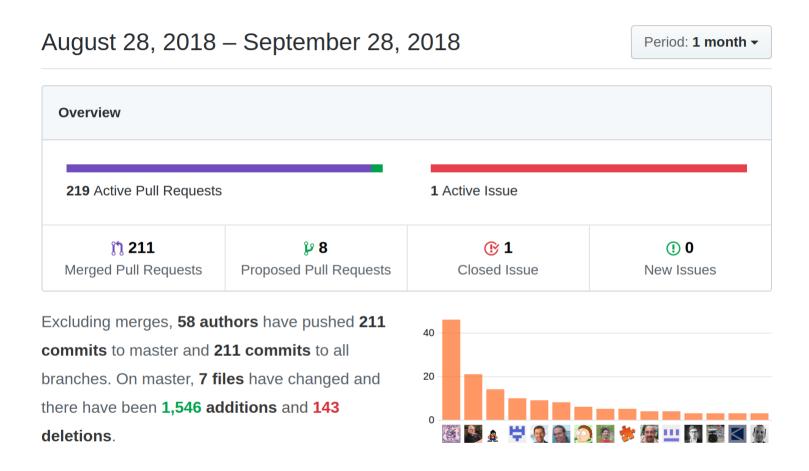
- ExBot Robotics Lab (China)
- USTC (China)
- Tsinghua University (China)
- Ireland
- Singapore
- Freiburg (Germany)
- Delft University of Technology (The Netherlands)
- Clarkson University (USA)
- University of Maryland (USA)
- Centro Universitário da FEI (Brazil)
- University of Tokyo(Japan)

This report does not include data from these mirrors.

Source:

http://wiki.ros.org/ROS/Installation/ UbuntuMirrors

rosdistro activity



The rosdistro http://github.com/ros/rosdistro is the repository where releases are managed and the main index of publicly announced ROS packages. Most pull requests on this repository are requests for indexing or packaging of ROS packages.

Research use

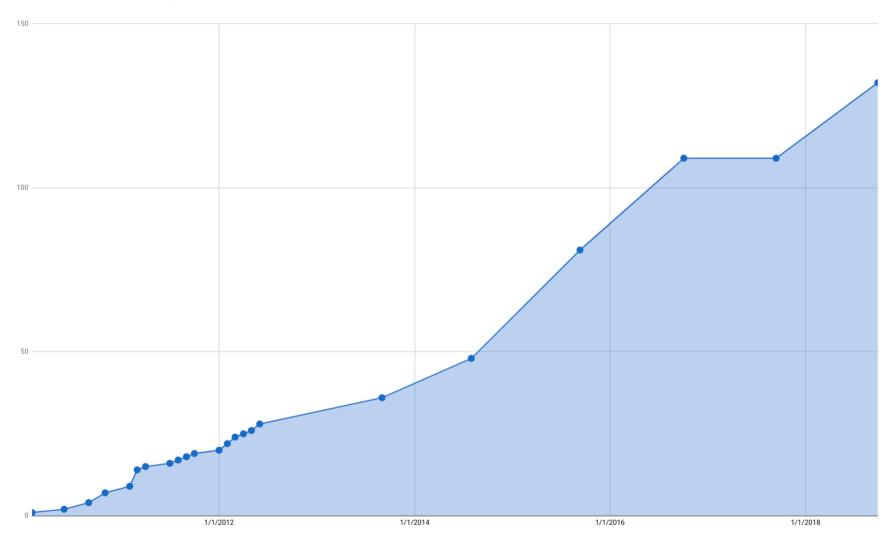
Total number of papers citing "ROS: an opensource Robot Operating System" (Quigley et al., 2009):

4806 (29% increase)

Source: Google Scholar 2018-09-28

Documented ROS Robots

Robots listed on robots.ros.org



The number of different types of robots available to the community with ROS drivers.

Source: Ken Conley, Tully Foote, wiki.ros.org/Robots, 2017 changed over to Robots.ros.org