::ROS

Community Metrics Report

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Reporting on July 2016

Comparisons are to July 2015 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 2016

Overview

Pageviews	Unique Pageviews	Avg. Time on Page	Bounce Rate	% Exit
1,394,363	1,058,375	00:02:49	42.79%	26.44%

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		63,899	4.58%
2. /		51,515	3.69%
3. /ROS/Installation		29,506	2.12%
4. /indigo/Installation/Ubuntu		24,773	1.78%
5. /kinetic/Installation/Ubuntu		23,933	1.72%
6. /ROS/Tutorials/InstallingandConfiguringROSEnvironment		18,178	1.30%
7. /cn/ROS/Tutorials		16,057	1.15%
8. /ROS/Tutorials/CreatingPackage		15,020	1.08%
9. /ROS/Tutorials/WritingPublisherSubscriber(c++)		13,636	0.98%
10. /Robots		11,490	0.82%

wiki.ros.org visitor locations:

1.	🇺🇸 United States	**85,023**	(23.06%)
2.	🇨🇳 China	**62,933**	(17.07%)
3.	🇯🇵 Japan	**30,745**	(8.34%)
4.	🇩🇪 Germany	**28,022**	(7.60%)
5.	🇮🇳 India	**12,918**	(3.50%)
6.	🇹🇼 Taiwan	**11,301**	(3.06%)
7.	🇰🇷 South Korea	**9,990**	(2.71%)
8.	🇸🇬 Singapore	**9,015**	(2.44%)
9.	🇨🇦 Canada	**8,928**	(2.42%)
10.	🇪🇸 Spain	**8,517**	(2.31%)
11.	🇬🇧 United Kingdom	**8,436**	(2.29%)
12.	🇫🇷 France	**7,678**	(2.08%)
13.	🇮🇹 Italy	**7,663**	(2.08%)
14.	🇦🇺 Australia	**6,459**	(1.75%)
15.	🇷🇺 Russia	**5,171**	(1.40%)
16.	🇧🇷 Brazil	**4,805**	(1.30%)
17.	🇨🇭 Switzerland	**3,554**	(0.96%)
18.	🇵🇹 Portugal	**3,120**	(0.85%)
19.	🇳🇱 Netherlands	**3,074**	(0.83%)
20.	🇹🇷 Turkey	**2,603**	(0.71%)
21.	🇭🇰 Hong Kong	**2,462**	(0.67%)
22.	🇮🇱 Israel	**2,386**	(0.65%)
23.	(not set)	**2,374**	(0.64%)
24.	🇲🇽 Mexico	**2,314**	(0.63%)
25.	🇵🇱 Poland	**2,076**	(0.56%)

Sessions ▾

1 ▬▬▬▬▬▬▬ 85,023
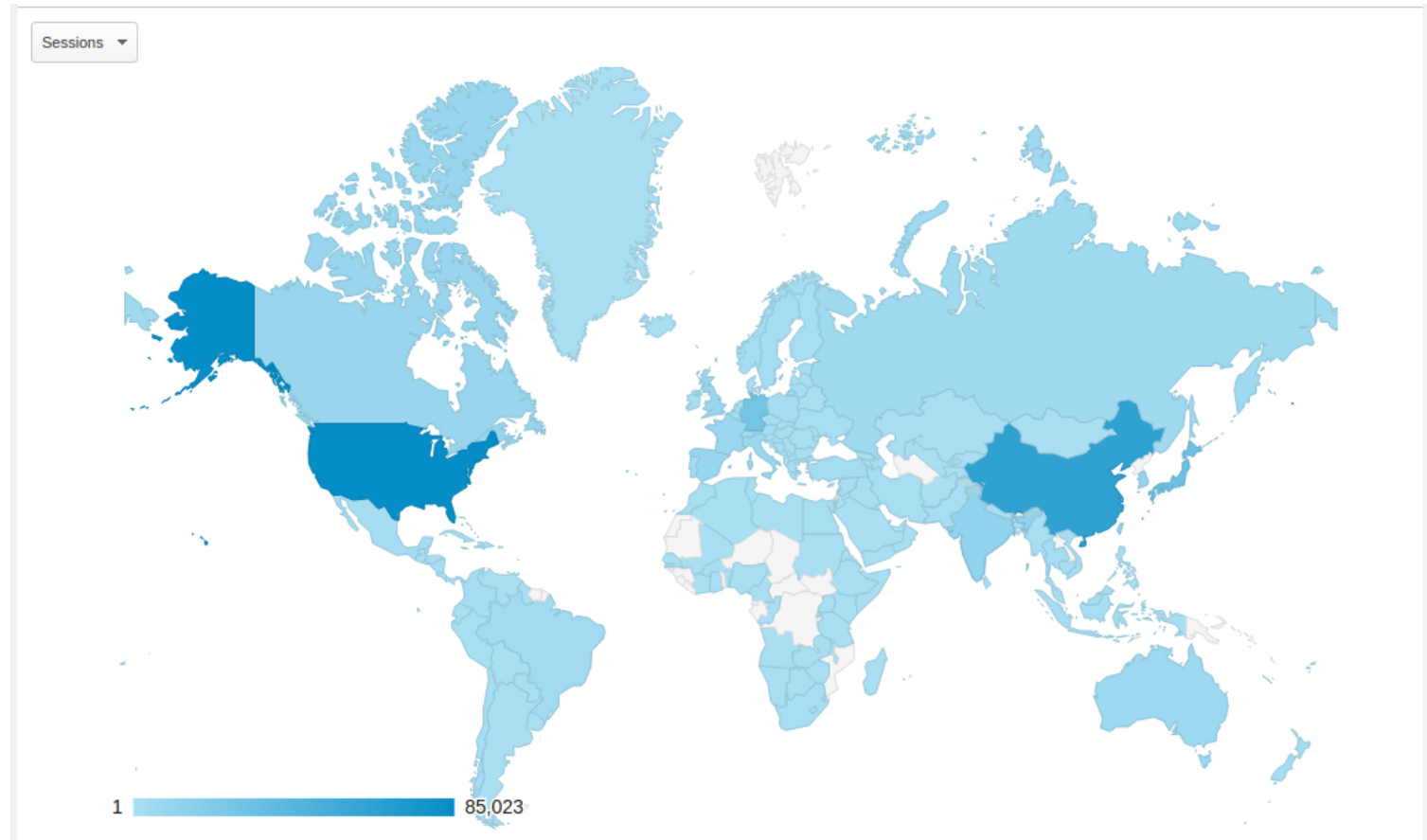
Source: Google Analytics
Site: wiki.ros.org in July 2016

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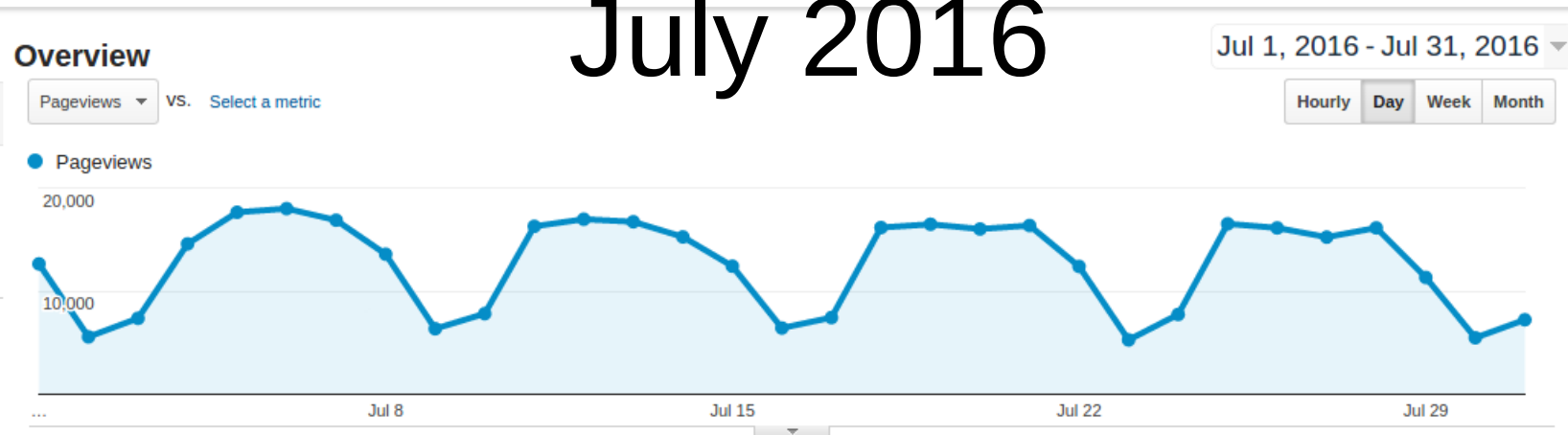# Public wiki.ros.org Mirrors

- Asia:
  - Singapore
  - Sun Yat-Sen Univerity, China
  - China
  - Tokyo, Japan
- Europe:
  - Ireland
  - Freiburg, Germany
  - Barcelona, Catalonia
- North America:
  - College Park, Maryland
- 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 2016

Overview

Pageviews ▼ vs. Select a metric

Jul 1, 2016 - Jul 31, 2016 ▼

Hourly | Day | Week | Month

● Pageviews

Pageviews	Unique Pageviews	Avg. Time on Page	Bounce Rate	% Exit
390,196	334,077	00:03:49	56.71%	41.61%

Site Content

- Page ▸
- Page Title

Site Search

- Search Term

Events

- Event Category

	Page		Pageviews	% Pageviews
1.	/questions/		14,339	3.67%
2.	/question/87866/how-to-edit-the-bashrc-file/		2,684	0.69%
3.	/questions/ask/		1,332	0.34%
4.	/question/226098/ros-on-ubuntu-xenial-1604/		1,300	0.33%
5.	/question/188732/e-unable-to-locate-package-ros-indigo-desktop-full/		1,067	0.27%
6.	/question/57213/how-i-completely-remove-all-ros-from-my-system/		1,061	0.27%
7.	/question/196455/kinect-installation-and-setup-on-ros-updated/		891	0.23%
8.	/account/signin/?next=/		882	0.23%
9.	/account/signin/		880	0.23%
10.	/question/10543/how-do-i-link-a-library-in-cmake/		805	0.21%

Site: answers.ros.org
Source: Google Analytics
Annual Growth: 32%

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Membership Metrics

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

Site & list membership

- ros-users@lists.ros.org subscribers:
  - 2445 (18% increase)
- wiki.ros.org users:
  - 5875 (20% increase)
- answers.ros.org users:
  - 14,774 (30% increase)
- discourse.ros.org users
  - 280 (New)

Engagement Metrics

Interacting with other community members
(active community members)

wiki.ros.org: activity in July 2016

- Wiki pages:
    - 17,058 (6% increase)
- Wiki page edits:
    - 14.7 / day (averaged over July, 53% decrease)
- Wiki page views:
    - 44,979 / day (averaged over July, 21% increase)

Source: MoinMoin, Google Analyics (sampled 2016-10-03)

answers.ros.org: activity

- Total questions:
  - 30,243 (26% increase)

- Answered questions:
  - 21,697 (24% increase)

- New questions in July:
  - 533 (17.2 / day, 1.7% increase)

answers.ros.org Karma

Sampled 2015-09-11
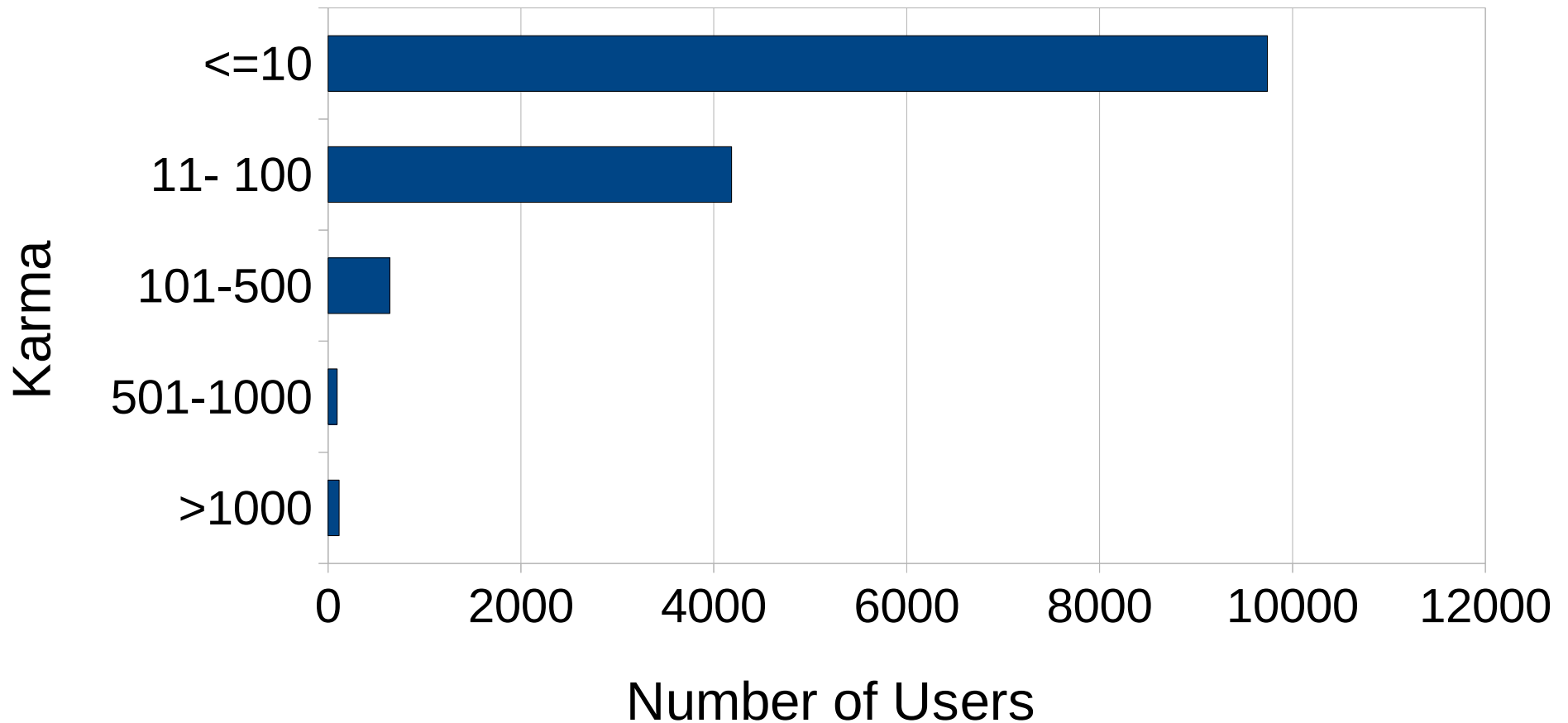
Histogram of users by karma. Users get karma points for having answers upvoted (+10) or accepted (+15) and for accepting someone else's answer (+2).

discourse.ros.org activity

Site Statistics

	All Time	Last 7 Days	Last 30 Days
Topics	202	4	22
Posts	1.2k	14	151
New Users	280	9	31
Active Users	—	38	102
Likes	208	1	19

Source: http://discourse.ros.org/about
Sampled: 2016-10-03

Code Metrics

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

Binary Downloads – July 2016

- Total Unique IP addresses downloading .deb files:
  - 113,345 (143 % increase)
- Total downloads of .deb packages:
  - 8,441,279 (158% increase)
- Unique package names downloaded as .deb files:
  - 7,582 (35% increase)
- Number of unique versions of .deb packages downloaded:
  - 63,636 (66 % 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 2016

ros-indigo-roscpp	26454	ros-indigo-rosbag	25676
ros-indigo-message-generation	26159	ros-indigo-roslaunch	25667
ros-indigo-std-msgs	26120	ros-indigo-actionlib-msgs	25647
ros-indigo-rospy	26022	ros-indigo-rosout	25625
ros-indigo-roslib	26006	ros-indigo-rostest	25598
ros-indigo-geometry-msgs	25985	ros-indigo-roslz4	25518
ros-indigo-message-runtime	25967	ros-indigo-topic-tools	25500
ros-indigo-sensor-msgs	25950	ros-indigo-rosbag-storage	25486
ros-indigo-genpy	25948	ros-indigo-message-filters	25450
ros-indigo-gencpp	25922	ros-indigo-rosservice	25414
ros-indigo-rosconsole	25915	ros-indigo-rosmsg	25368
ros-indigo-rosgraph-msgs	25887	ros-indigo-rosnode	25342
ros-indigo-xmlrpcpp	25886	ros-indigo-rostopic	25336
ros-indigo-rospack	25882	ros-indigo-roswtf	25280
ros-indigo-rosbuild	25875	ros-indigo-std-srvs	25137
ros-indigo-rosgraph	25837	ros-indigo-nav-msgs	25111
ros-indigo-rosclean	25705	ros-indigo-actionlib	25027
ros-indigo-rosmaster	25695	ros-indigo-visualization-msgs	24908
ros-indigo-rosparam	25686	ros-indigo-pluginlib	24827
ros-indigo-rosunit	25683	ros-indigo-rosconsole-bridge	24754

Downloads by architecture
Direct downloads from packages.ros.org - July 2016

i386: 7.16 %
amd64: 86.41 %
armhf: 3.62 %
arm64: 0.06 %
source: 0.43 %

jessie_amd64: 0.23 %
jessie_arm64: 0.06 %
jessie_armhf: 0.00 %
jessie_source: 0.01 %
precise_amd64: 1.73 %
precise_i386: 0.70 %
precise_source: 0.03 %
quantal_amd64: 0.04 %
quantal_i386: 0.03 %
quantal_source: 0.03 %
raring_amd64: 0.03 %
raring_i386: 0.02 %
raring_source: 0.02 %
saucy_amd64: 0.09 %
saucy_i386: 0.08 %
saucy_source: 0.03 %

trusty_amd64: 73.01 %
trusty_armhf: 2.94 %
trusty_i386: 5.49 %
trusty_source: 0.24 %
utopic_amd64: 0.02 %
utopic_i386: 0.01 %
utopic_source: 0.01 %
vivid_amd64: 0.26 %
vivid_i386: 0.06 %
vivid_source: 0.01 %
wily_amd64: 0.38 %
wily_i386: 0.09 %
wily_source: 0.01 %
xenial_amd64: 9.12 %
xenial_armhf: 0.57 %
xenial_i386: 0.53 %
xenial_source: 0.04 %

Binary Downloads by rosdistro

The fraction of packages downloaded per rosdistro

- Groovy and earlier: 0.46 %
- Hydro: 1.92 %
- Indigo: 72.84 % (Long Term Support Release)
- Jade: 3.96 %
- Kinetic: 11.02 % (Long Term Support Release)
- Rosdistro independent: 9.79% (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

- Hefei (China)

- Sun Yat-Sen University (China)

- Shanghai (China)

- Ireland

- Freiburg (Germany)

- Delft University of Technology (The Netherlands)

- University of Maryland (USA)

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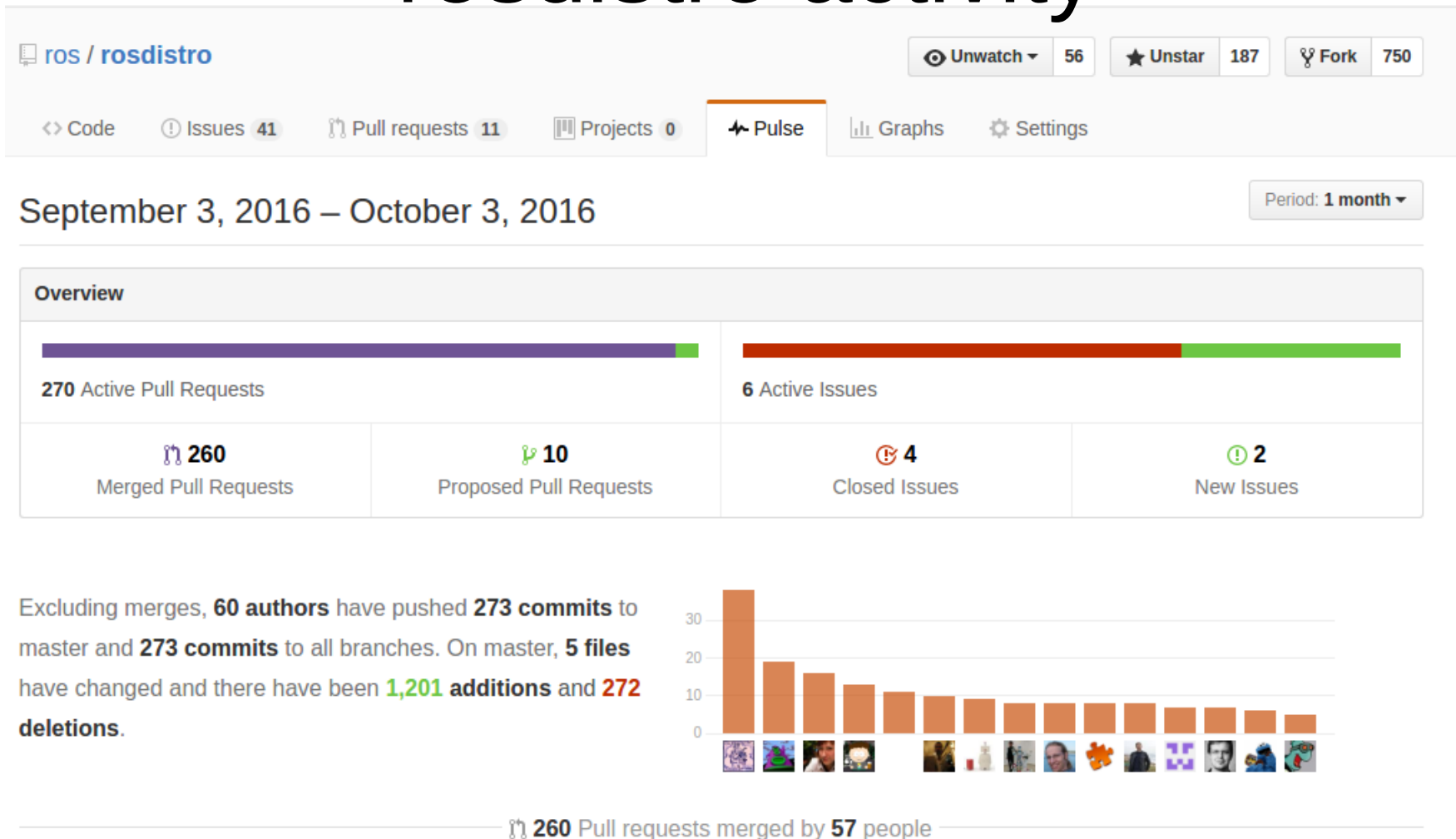
The rosdistro http://github.com/ros/rosdistro is the repository where releases are managed and the main index of publicly announced ROS packages. Most pull requests on this repository are requests for indexing or packaging of ROS packages.

Research use

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

2683 (46% increase)

Source: Google Scholar 2016-10-03

Robots listed on wiki.ros.org/Robots
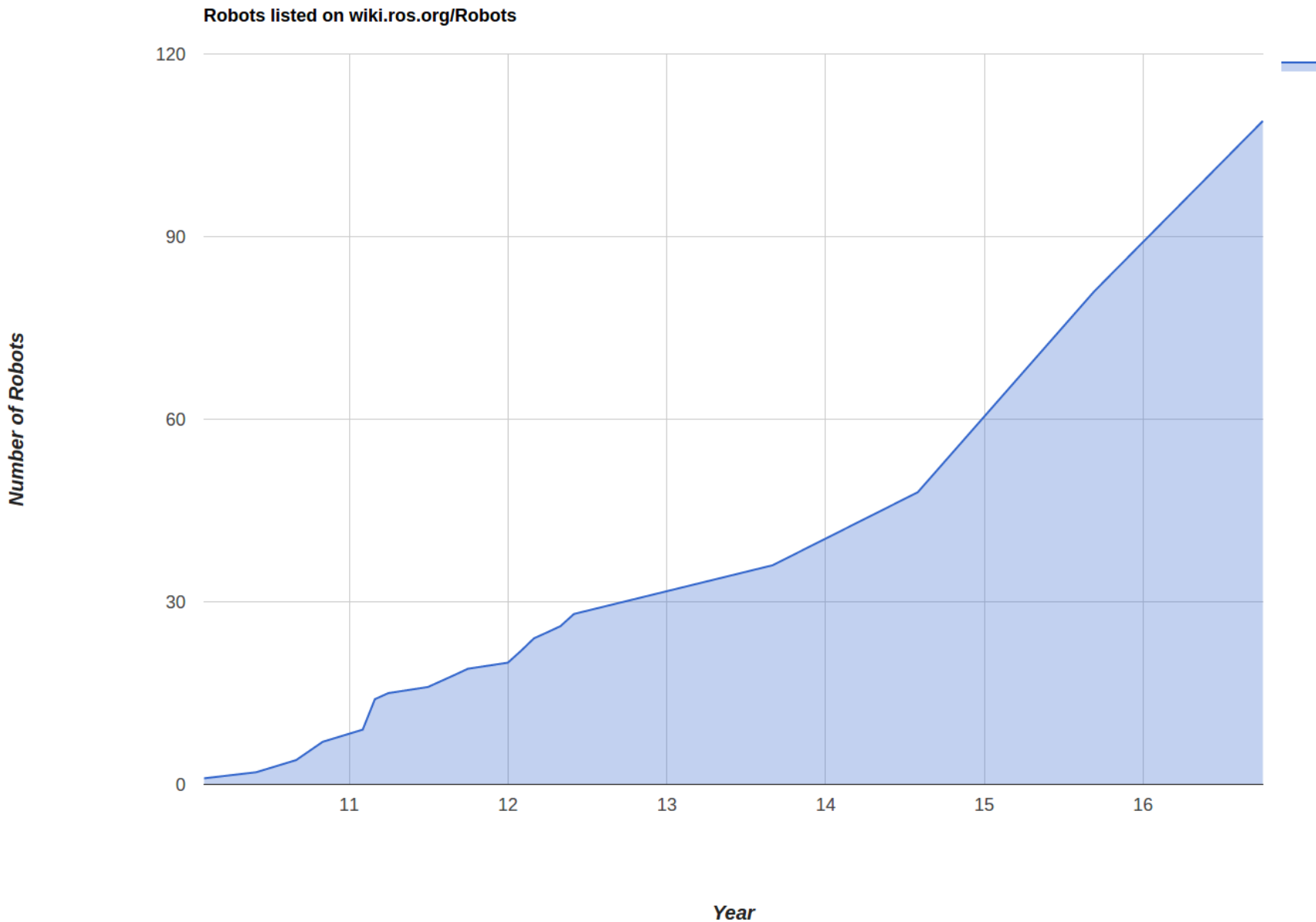
The number of different types of robots available to the community with ROS drivers.

Source: Ken Conley, Tully Foote, wiki.ros.org/Robots