EROS

Community Metrics Report

Tully Foote Reporting on July 2015

Comparisons are to August 2014 Report

Contents

Awareness Metrics Membership Metrics Engagement Metrics Code Metrics

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)

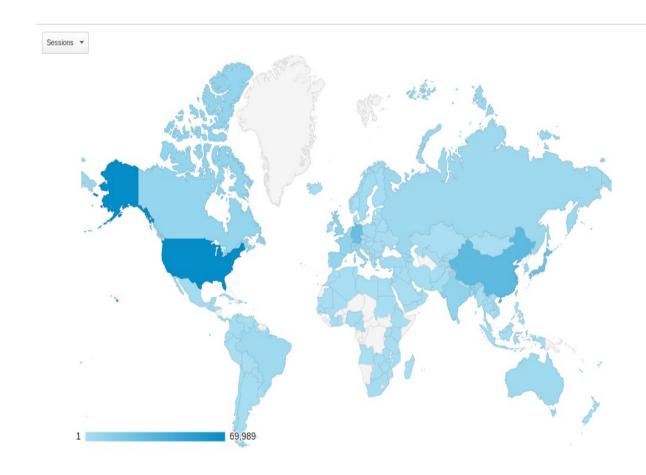
ros.org: Visitors & Page Views

wiki.ros.org Visitors: July 2015

Overview	Site: wiki.ros.org Source: Google	Jul 1, 2015 - Jul 31, 2015 -			
Overview	Analytics				
Pageviews VS. Select a metric	Annual Growth: 18%		Hourly Day Week Month		
 Padeviews Site Content 	Page		Pageviews % Pageviews		
Page	1. /ROS/Tutorials	۳J	51,179 4.43%		
Page Title	2. /	æ	43,628 3.78%		
Site Search	3. /ROS/Installation	æ	23,399 2.03%		
Search Term	4. /indigo/Installation/Ubuntu	æ	18,860 1.63%		
Events	5. /jade/Installation/Ubuntu	æ	15,648 1.36%		
Event Category	6. /ROS/Tutorials/InstallingandConfiguringROSEnvironment	æ	14,214 1.23%		
	7. /ROS/Tutorials/CreatingPackage	æ	12,068 1.05%		
	8. /ROS/Tutorials/WritingPublisherSubscriber(c++)	æ	11,355 0.98%		
	9. /Robots	Ð	10,169 0.88%		
	10. /cn/ROS/Tutorials	æ	9,076 0.79%		
EVEIRS	*	-			
Event Category	6. /ROS/Tutorials/InstallingandConfiguringROSEnvironment	R)	14,214 1.23%		
	7. /ROS/Tutorials/CreatingPackage	R)	12,068 1.05%		
	8. /ROS/Tutorials/WritingPublisherSubscriber(c++)	R)	11,355 0.98%		
	9. /Robots	الآل 10,169 0.88%			
	10. /cn/ROS/Tutorials	R)	9,076 0.79%		

1.		United States	69,989	(24.17%)
2.	•>	China	31,778	(10.97%)
3.		Germany	27,080	(9.35%)
4.	٠	Japan	22,867	(7.90%)
5.	8	India	9,740	(3.36%)
6.		France	9,431	(3.26%)
7.	20 12 21 24	United Kingdom	9,143	(3.16%)
8.	2	Spain	8,617	(2.98%)
9.	٠	Canada	8,497	(2.93%)
10.		Italy	7,176	(2.48%)
11.	:•:	South Korea	7,022	(2.43%)
12.	to.	Singapore	5,457	(1.88%)
13.		Taiwan	5,411	(1.87%)
14.		Russia	4,732	(1.63%)
15.		Brazil	4,359	(1.51%)
16.	×.,	Australia	4,252	(1.47%)
17.	0	Portugal	3,623	(1.25%)
18.		Switzerland	2,871	(0.99%)
19.		Poland	2,706	(0.93%)
20.		Netherlands	2,431	(0.84%)
21.	8	Mexico	2,306	(0.80%)
22.	04	Turkey	2,302	(0.79%)
23.		Austria	2,277	(0.79%)
24.	Re	New Zealand	2,019	(0.70%)
25.	۵	Israel	1,938	(0.67%)

wiki.ros.org visitor locations:



Source: Google Analytics Site: wiki.ros.org in July 2015

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 2015

Overview

Jul 1, 2015 - Jul 31, 2015 -

Pageviews VS. Select a metric			Hou	rly Day Week	Month
Pageviews					
20,000					
- porte					
10,000					-
Jul 8	Jul 15	Jul 22		Jul 29	
Site Content	Page		Pageviews	% Pageviews	
lage →	1. /questions/	M	14,708	4.98%	
age Title	2. /question/87866/how-to-edit-the-bashrc-file/	M	2,625	0.89%	
ite Search	3. /questions/ask/	RJ	1,173	0.40%	
earch Term	4. /account/signin/?next=/	۳J	1,155	0.39%	
vents	5. /question/203610/ubuntu-14042-unmet-dependencies/	۳J	1,025	0.35%	
vent Category	6. /account/signin/	Ð	931	0.32%	
Site: answers.ros.org	7. /question/10543/how-do-i-link-a-library-in-cmake/	M	773	0.26%	
Source: Google	8. /question/196455/kinect-installation-and-setup-on-ros-upda	ated/ @	645	0.22%	
nalytics	9. /questions/scope:all/sort:activity-desc/page:1/	R)	582	0.20%	
Annual Growth: 1%	10. /question/57213/how-i-completely-remove-all-ros-from-my- em/	-syst _d a	518	0.18%	

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:
 - 2069 (18% increase)
- wiki.ros.org users:
 - 4884 (20% increase)
- answers.ros.org users:
 - 11406 (32% increase)

Engagement Metrics

Interacting with other community members (active community members)

wiki.ros.org: activity in July 2015

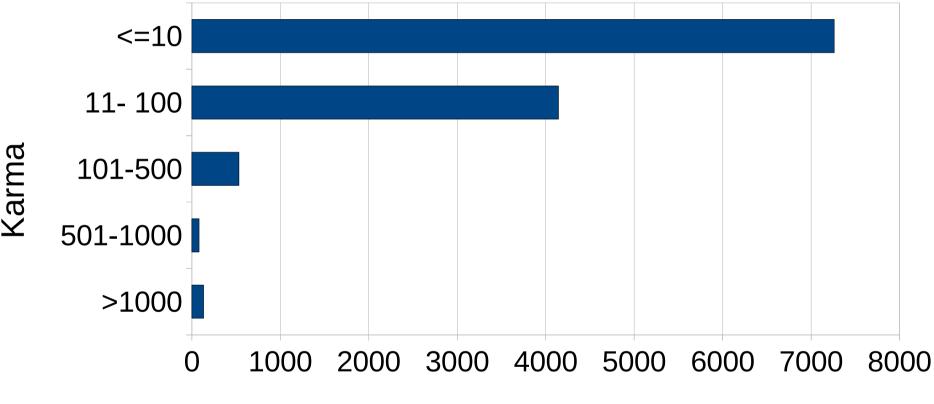
- Wiki pages:
 - 16,043 (9% increase)
- Wiki page edits:
 - 31.6 / day (averaged over July, 5% decrease)
- Wiki page views:
 - 37,235 / day (averaged over July, 18% increase)

answers.ros.org: activity

- Total questions:
 - 24,026 (+5882, 32% increase)
- Answered questions:
 - 17,414 (+5154, 42% increase)
- New questions in July:
 - 523 (16.9 / day, 0% increase)

answers.ros.org Karma

Sampled 2015-09-11



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).

Code Metrics

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

Binary Downloads – July 2015

- Total Unique IP addresses downloading .deb files:
 - 46,611 (5 % decrease)
- Total downloads of .deb packages:
 - 3,270,752 (8% decrease)
- Unique package names downloaded as .deb files:
 - 5,592 (40% increase)
- Number of unique versions of .deb packages downloaded:
 - 38,415 (17 % 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 2015

python-rosdistro	10334	ros-indigo-actionlib-msgs	7040
python-catkin-pkg	10331	ros-indigo-message-filters	7040
python-rosdep	9912	ros-indigo-rostest	7039
python-rospkg	9910	ros-indigo-rosbag-storage	7035
ros-indigo-rosbuild	7098	ros-indigo-topic-tools	7034
ros-indigo-roscpp-traits	7097	ros-indigo-rosbag	7033
ros-indigo-xmlrpcpp	7097	ros-indigo-rostopic	7026
ros-indigo-rosconsole	7096	ros-indigo-rosnode	7024
ros-indigo-message-runtime	7096	ros-indigo-actionlib	7023
ros-indigo-cpp-common	7096	ros-indigo-rosservice	7022
ros-indigo-roscpp-serialization	7095	ros-indigo-rosmsg	7022
ros-indigo-rostime	7094	ros-indigo-pluginlib	7017
ros-indigo-roscpp	7093	ros-indigo-roswtf	7010
ros-indigo-rosgraph-msgs	7088	python-wstool	7004
ros-indigo-std-msgs	7082	ros-indigo-std-srvs	6982
ros-indigo-rospy	7063	ros-indigo-nav-msgs	6970
ros-indigo-geometry-msgs	7062	ros-indigo-bondcpp	6967
ros-indigo-sensor-msgs	7057	ros-indigo-diagnostic-msgs	6966
ros-indigo-roslaunch	7048	ros-indigo-dynamic-reconfigure	6961
ros-indigo-rosout	7045	ros-indigo-nodelet	6961

Binary Downloads by rosdistro

The fraction of packages downloaded per rosdistro

- Electric: 0.01 %
- Fuerte: 0.80 %
- Groovy: 3.21 %
- Hydro: 19.46 %
- Indigo: 53.40 % (Long Term Support Release)
- Jade: 10.70 %

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)
- Unspecified (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

Y Fork ros / rosdistro ★ Unstar 140 O Unwatch -41 560 August 11, 2015 - September 11, 2015 Period: 1 month -<> Overview (1) n 266 Active Pull Requests O Active Issues in 262 24 (E) O ① ① Merged Pull Requests Proposed Pull Requests Closed Issues New Issues 4 di 60 Excluding merges, 59 authors have pushed 273 commits to 40 master and 307 commits to all branches. On master, 9 files Ö have changed and there have been 737 additions and 245 0 deletions. The That .

1 262 Pull requests merged by 57 people

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.

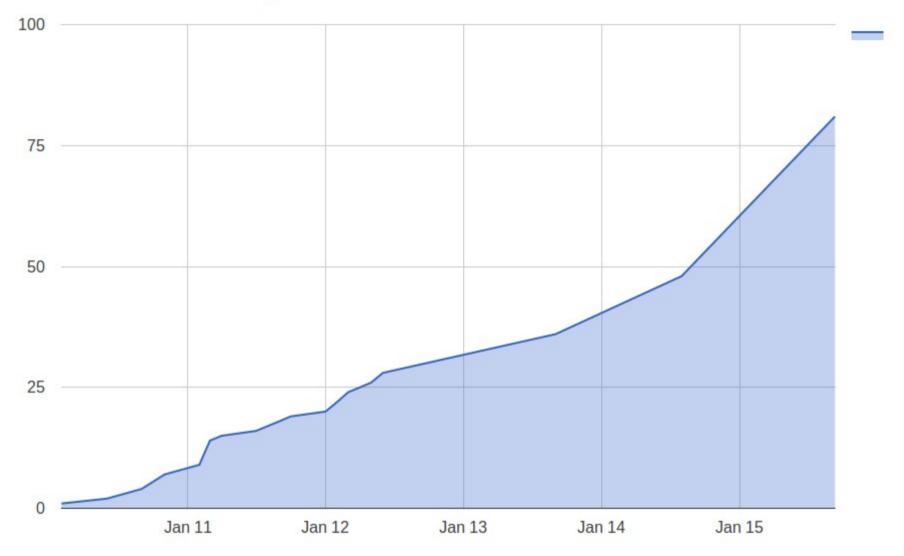
Research use

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

1843 (52% increase)

Source: Google Scholar 2015-09-11

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