

# ROS Community Metrics

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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

# ros.org visitors: July 2011

www.ros.org

## Visitors Overview

Jul 1, 2011 - Jul 31, 2011

Comparing to: Site



**35,505** people visited this site

 **107,506** Visits

 **35,505** Absolute Unique Visitors

 **631,991** Pageviews

 **5.88** Average Pageviews

 **00:08:03** Time on Site

## Top pages

Page	Pageviews	Pageviews
/wiki/	<b>55,081</b>	8.85%
/wiki/ROS/Tutorials	<b>24,717</b>	3.91%
/wiki/ROS/Installation	<b>10,288</b>	2.57%
/wiki/diamondback/Installation/Ubuntu	<b>10,786</b>	1.71%
/browse/list.php	<b>8,821</b>	1.32%
/wiki/Robots	<b>6,029</b>	0.95%
/wiki/openni_kinect	<b>5,371</b>	0.85%
/wiki/ROS/Tutorials/CreatingPackage	<b>5,381</b>	0.85%
/wiki/ROS/Tutorials/NavigatingTheFilesystem	<b>5,005</b>	0.79%
/wiki/ROS/Tutorials/WritingPublisherSubscriber(C++)	<b>4,601</b>	0.78%

1 - 10 of 26,816

Source: Google Analytics

# ros.org visitors: May–July 2011

www.ros.org

## Visitors Overview

May 1, 2011 - Jul 31, 2011

Comparing to: Site



**98,225 people visited this site**

 **333,284 Visits**

 **98,225 Absolute Unique Visitors**

 **1,948,733 Pageviews**

 **5.85 Average Pageviews**

 **00:08:02 Time on Site**

## Top pages

Page	Pageviews	Pageviews
/wiki/	<b>176,476</b>	9.00%
/wiki/ROS/Tutorials	<b>78,418</b>	4.02%
/wiki/ROS/Installation	<b>62,464</b>	2.69%
/wiki/diamondback/Installation/Ubuntu	<b>57,488</b>	1.92%
/browse/list.php	<b>28,734</b>	1.37%
/wiki/openni_kinect	<b>19,682</b>	1.02%
/wiki/Robots	<b>19,022</b>	0.98%
/wiki/kinect	<b>18,480</b>	0.95%
/wiki/ROS/Tutorials/CreatingPackage	<b>18,016</b>	0.92%
/wiki/ROS/Tutorials/NavigatingTheFilesystem	<b>16,960</b>	0.82%

1 - 10 of 57,037

Source: Google Analytics

# answers.ros.org: visitors

# answers.ros.org visitors: July 2011

answers.ros.org

## Visitors Overview

Jul 1, 2011 - Jul 31, 2011

Comparing to: Site



9,267 people visited this site

22,510 Visits

9,267 Absolute Unique Visitors

79,947 Pageviews

3.55 Average Pageviews

00:04:35 Time on Site

## Top questions

Page	Pageviews	Pageviews
/question/299/getting-the-calibration-parameters-of-the-kinect	244	0.60%
/question/1336/rosjavaandroid-pubsub-tutorial	214	0.52%
/question/169/how-do-i-install-a-missing-ros-package	172	0.42%
/question/1503/hzogre-crash-after-update	166	0.40%
/question/160/face-recognition-with-kinect	160	0.39%
/question/1398/installing-turtlebot-software-on-beagleboard	158	0.38%
/question/285/problem-with-mac-os-installation-with-yamrt	156	0.38%
/question/1616/ros-on-android-tutorials	146	0.35%
/question/1410/openni_camera-error	136	0.33%
/question/1492/move_arm-occasional-problems-with-trajectory	138	0.32%

1 - 10 of 2,825

Source: Google Analytics



# answers.ros.org visitors: May–July 2011

answers.ros.org

## Visitors Overview

May 1, 2011 - Jul 31, 2011

Comparing to: Site



**24,338** people visited this site

**66,047** Visits

**24,338** Absolute Unique Visitors

**231,531** Pageviews

**3.51** Average Pageviews

**00:04:27** Time on Site

## Top questions

Page	Pageviews	Pageviews
<a href="#">/question/618/ros-packages-for-ubuntu-1104</a>	<b>1,644</b>	1.30%
<a href="#">/question/299/getting-the-calibration-parameters-of-the-kinect</a>	<b>1,000</b>	0.84%
<a href="#">/question/861/packages-at-http/packages.ros.org/ubuntu-natty-main</a>	<b>728</b>	0.61%
<a href="#">/question/1004/getting-point-cloud-data-from-the-kinect</a>	<b>627</b>	0.53%
<a href="#">/question/160/face-recognition-with-kinect</a>	<b>608</b>	0.51%
<a href="#">/question/679/how-to-use-rgbd-6d-slam-for-path-planning-and</a>	<b>600</b>	0.50%
<a href="#">/question/169/how-do-i-install-a-missing-ros-package</a>	<b>608</b>	0.47%
<a href="#">/question/385/problem-with-mac-os-installation-with-yaml</a>	<b>601</b>	0.45%
<a href="#">/question/666/how-to-use-openraves-ik-with-a-5dof-manipulator</a>	<b>488</b>	0.36%
<a href="#">/question/869/kinect-opencv</a>	<b>472</b>	0.31%

1 - 10 of 4,972

Source: Google Analytics

# Membership Metrics

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

# Site & list membership

- ▶ ros-users@ subscribers: **1,151** (sampled 2011-08-10)
  - ▶ ros.org wiki users: **1,245** (sampled 2011-08-10)
  - ▶ answers.ros.org users: **943** (sampled 2011-08-10)
  - ▶ job postings that mention ROS: **5** (May–July 2011)
- (we'll track these over time)

Source: MailMan, MoinMoin, askbot, ros-users@,  
robotics-worldwide@

# Engagement Metrics

Interacting with other community members (active community members)

# ros.org: activity

- ▶ wiki pages: **8,250** (sampled 2011-08-10)
  - ▶ wiki page edits: **53.3 / day** (averaged over 2011-06-24 – 2011-07-18)
  - ▶ wiki page views: **18,640.7 / day** (averaged over 2011-06-24 – 2011-07-18)
- (we'll track these over time)

Source: MoinMoin

# answers.ros.org: activity

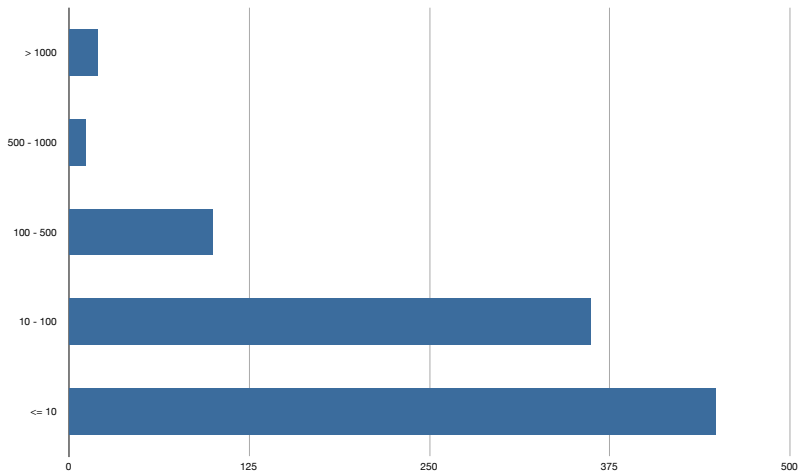
- ▶ total questions: **1,731** (sampled 2011-08-12)
  - ▶ unanswered questions: **241 ( $\approx 14\%$ )** (sampled 2011-08-12)
  - ▶ total answers: **3,057** (sampled 2011-08-12)
- (we'll track these over time)

Source: askbot

## answers.ros.org: karma

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

Histogram of users by karma (sampled 2011-08-12):



Source: askbot

# Code Metrics

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



# Binary downloads - July 2011

Total unique IP addresses of binary .deb downloaders: **4,517**

Total downloads of binary .debs: **290,102**

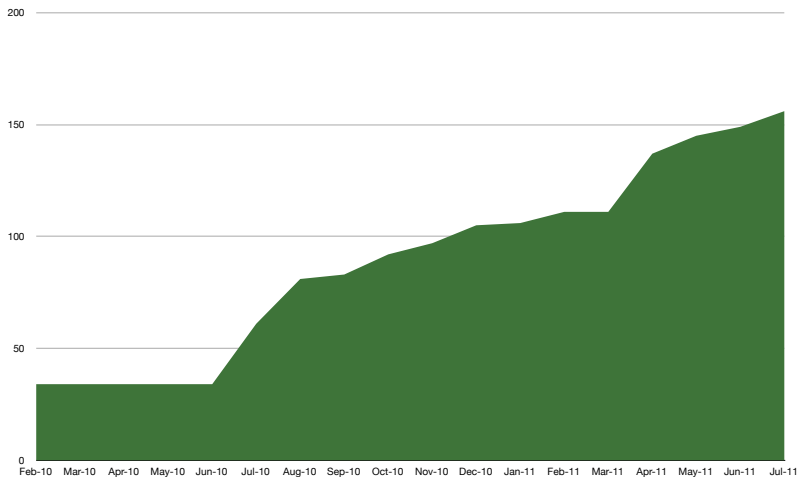
Top 30 most-downloaded binary .debs:



(counts GET requests to <http://packages.ros.org/ros/>, which may include aborted or failed downloads and does not include downloads from mirrors)

Source: Apache

# Released stacks



Source: rosdistro

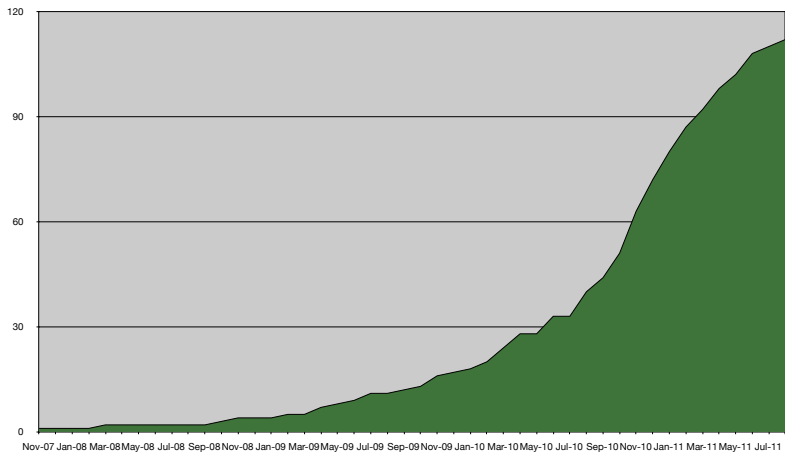
# Research use

- ▶ Number of papers citing “*ROS: an open-source Robot Operating System*” (Quigley et al., 2009): **125** (sampled 2011-08-11)

(TODO: What's a better way to count papers using ROS? What else should be measuring to assess impact in the research community?)

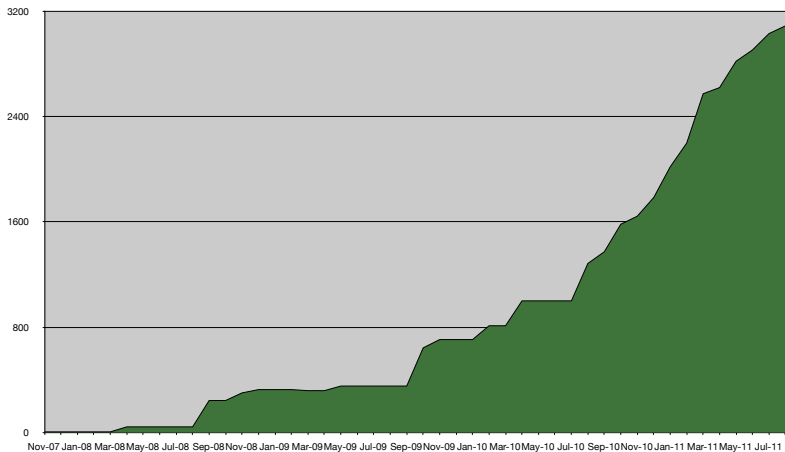
Source: Google Scholar

# Known repositories



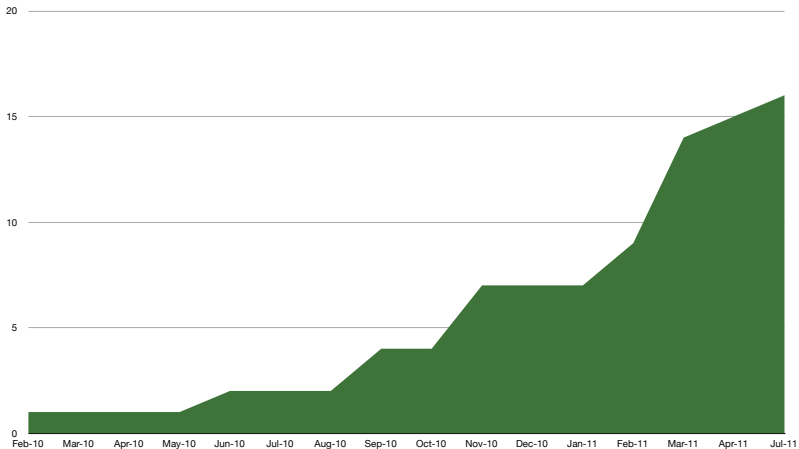
Source: rosbrowse

# Known packages



Source: rosbrowse

# (non-custom) robots officially supporting ROS



Source: Ken Conley