ROS Community Metrics

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August 2011 (reporting on July 2011)
Contents

Awareness 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
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

<table>
<thead>
<tr>
<th>Page</th>
<th>Pageviews</th>
<th>% of Site Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>/wiki/</td>
<td>55,961</td>
<td>8.85%</td>
</tr>
<tr>
<td>/wiki/ROS/Tutorials</td>
<td>24,717</td>
<td>3.91%</td>
</tr>
<tr>
<td>/wiki/ROS/Installation</td>
<td>18,263</td>
<td>2.57%</td>
</tr>
<tr>
<td>/wiki/diamondback/Installation/Ubuntu</td>
<td>10,786</td>
<td>1.71%</td>
</tr>
<tr>
<td>/browse/list.php</td>
<td>8,321</td>
<td>1.32%</td>
</tr>
<tr>
<td>/wiki/Robots</td>
<td>6,029</td>
<td>0.95%</td>
</tr>
<tr>
<td>/wiki/openni_kinect</td>
<td>5,371</td>
<td>0.85%</td>
</tr>
<tr>
<td>/wiki/ROS/Tutorials/CreatingPackage</td>
<td>5,351</td>
<td>0.85%</td>
</tr>
<tr>
<td>/wiki/ROS/Tutorials/NavigatingTheFilesystem</td>
<td>5,005</td>
<td>0.79%</td>
</tr>
<tr>
<td>/wiki/ROS/Tutorials/WritingPublisherSubscriber(c++)</td>
<td>4,801</td>
<td>0.76%</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Site</th>
<th>0</th>
<th>2,000</th>
<th>4,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2,000</td>
<td>4,000</td>
<td></td>
</tr>
</tbody>
</table>

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

Source: Google Analytics

Top pages

<table>
<thead>
<tr>
<th>Page</th>
<th>Pageviews</th>
<th>Pageviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>/wiki/</td>
<td>175,478</td>
<td>9.00%</td>
</tr>
<tr>
<td>/wiki/ROS/Tutorials</td>
<td>78,413</td>
<td>4.02%</td>
</tr>
<tr>
<td>/wiki/ROS/Installation</td>
<td>52,464</td>
<td>2.69%</td>
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<tr>
<td>/wiki/diamondback/Installation/Ubuntu</td>
<td>37,483</td>
<td>1.92%</td>
</tr>
<tr>
<td>/browse/list.php</td>
<td>26,734</td>
<td>1.37%</td>
</tr>
<tr>
<td>/wiki/openni_kinect</td>
<td>19,832</td>
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<tr>
<td>/wiki/Robots</td>
<td>19,022</td>
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<tr>
<td>/wiki/kinect</td>
<td>18,460</td>
<td>0.95%</td>
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<tr>
<td>/wiki/ROS/Tutorials/CreatingPackage</td>
<td>18,016</td>
<td>0.92%</td>
</tr>
<tr>
<td>/wiki/ROS/Tutorials/NavigatingTheFilesystem</td>
<td>15,950</td>
<td>0.82%</td>
</tr>
</tbody>
</table>

1 - 10 of 57,037
answers.ros.org: visitors
answers.ros.org visitors: July 2011

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

<table>
<thead>
<tr>
<th>Page</th>
<th>Pageviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>/question/299/getting-the-calibration-parameters-of-the-kinect</td>
<td>244</td>
</tr>
<tr>
<td>/question/1336/rojavaandroid-pubsub-tutorial</td>
<td>214</td>
</tr>
<tr>
<td>/question/169/how-do-i-install-a-missing-ros-package</td>
<td>172</td>
</tr>
<tr>
<td>/question/1503/inzogre-crash-after-update</td>
<td>165</td>
</tr>
<tr>
<td>/question/160/face-recognition-with-kinect</td>
<td>159</td>
</tr>
<tr>
<td>/question/138/Installing-turtlebot-software-on-beagleboard</td>
<td>156</td>
</tr>
<tr>
<td>/question/335/problem-with-mac-os-installation-with-yaml</td>
<td>155</td>
</tr>
<tr>
<td>/question/1616/ros-on-android-tutorials</td>
<td>145</td>
</tr>
<tr>
<td>/question/1410/openni_camera-error</td>
<td>135</td>
</tr>
<tr>
<td>/question/1462/move_arm-occasional-problems-with-trajectory</td>
<td>133</td>
</tr>
</tbody>
</table>

Source: Google Analytics
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

<table>
<thead>
<tr>
<th>Page</th>
<th>Pageviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>/question/618/ros-packages-for-ubuntu-1104</td>
<td>1,544</td>
</tr>
<tr>
<td>/question/299/getting-the-calibration-parameters-of-the-kinect</td>
<td>1,000</td>
</tr>
<tr>
<td>/question/861/packages-at-httppackagesrosorg-rosubuntu-natty-main</td>
<td>728</td>
</tr>
<tr>
<td>/question/1004/getting-point-cloud-data-from-the-kinect</td>
<td>627</td>
</tr>
<tr>
<td>/question/166/face-recognition-with-kinect</td>
<td>606</td>
</tr>
<tr>
<td>/question/879/how-to-use-rgbd-6d-slam-for-path-planning-and</td>
<td>590</td>
</tr>
<tr>
<td>/question/169/how-do-i-install-a-missing-ros-package</td>
<td>558</td>
</tr>
<tr>
<td>/question/385/problem-with-mac-os-installation-with-yaml</td>
<td>531</td>
</tr>
<tr>
<td>/question/866/how-to-use-openraves-ik-with-a-5dof-manipulator</td>
<td>428</td>
</tr>
<tr>
<td>/question/869/kinect-opencv</td>
<td>372</td>
</tr>
</tbody>
</table>

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 views: 18,640.7 / day (averaged over 2011-06-24 – 2011-07-18)

(we’ll track these over time)

Source: MoinMoin
total questions: 1,731 (sampled 2011-08-12)
unanswered questions: 241 (∼14%) (sampled 2011-08-12)
total answers: 3,057 (sampled 2011-08-12)
(we’ll track these over time)

Source: askbot
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:

- ros-diamondback-visualization
- ros-diamondback-visualization-common
- ros-diamondback-desktop-full
- ros-diamondback-simulator-gazebo
- ros-diamondback-visualization-tutorials
- ros-diamondback-slam-gmapping
- ros-diamondback-executive-smach-visualization
- ros-diamondback-executive-smach
- ros-diamondback-executive-smach-common
- ros-diamondback-executive-smach-rx
- ros-diamondback-perception-pcl
- ros-diamondback-common
- ros-diamondback-common-msgs
- ros-diamondback-geometry
- ros-diamondback-diagnostics-monitors
- ros-diamondback-robot-model
- ros-diamondback-diagnostics
- ros-diamondback-image-common
- ros-diamondback-laser-pipeline
- ros-diamondback-driver-common
- ros-diamondback-vision-opencv
- ros-diamondback-ros-tutorials
- ros-diamondback-common-tutorials
- ros-diamondback-image-pipeline
- ros-diamondback-geometry-tutorials
- ros-diamondback-navigation
- ros-diamondback-documentation
- ros-diamondback-image-transport-plugins
- ros-diamondback-simulator-stage
- ros-diamondback-ros

(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