

2025 ROS

Metrics Report

Katherine Scott & Tully Foote

Metrics Considerations

- As an open source project we take our users privacy very seriously. **We do not, and will not track our users.**
- This data is non-exhaustive, and does not cover mirrors, unreleased ROS packages, Docker containers, or software distributed by third parties.
- While we strive for accuracy, understanding billions of downloads and visits a year is difficult, especially without proprietary analytics tools.
- Our goal with providing this data is to present a relative estimate of growth, decline, and change in the OSRF communities.

Contents

- ROS.org Metrics
- External Website Metrics
- Distro Metrics
- Code & Academic Metrics

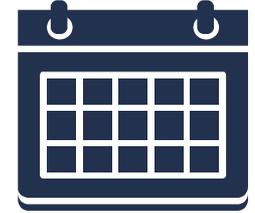


1.

ROS.org Metrics

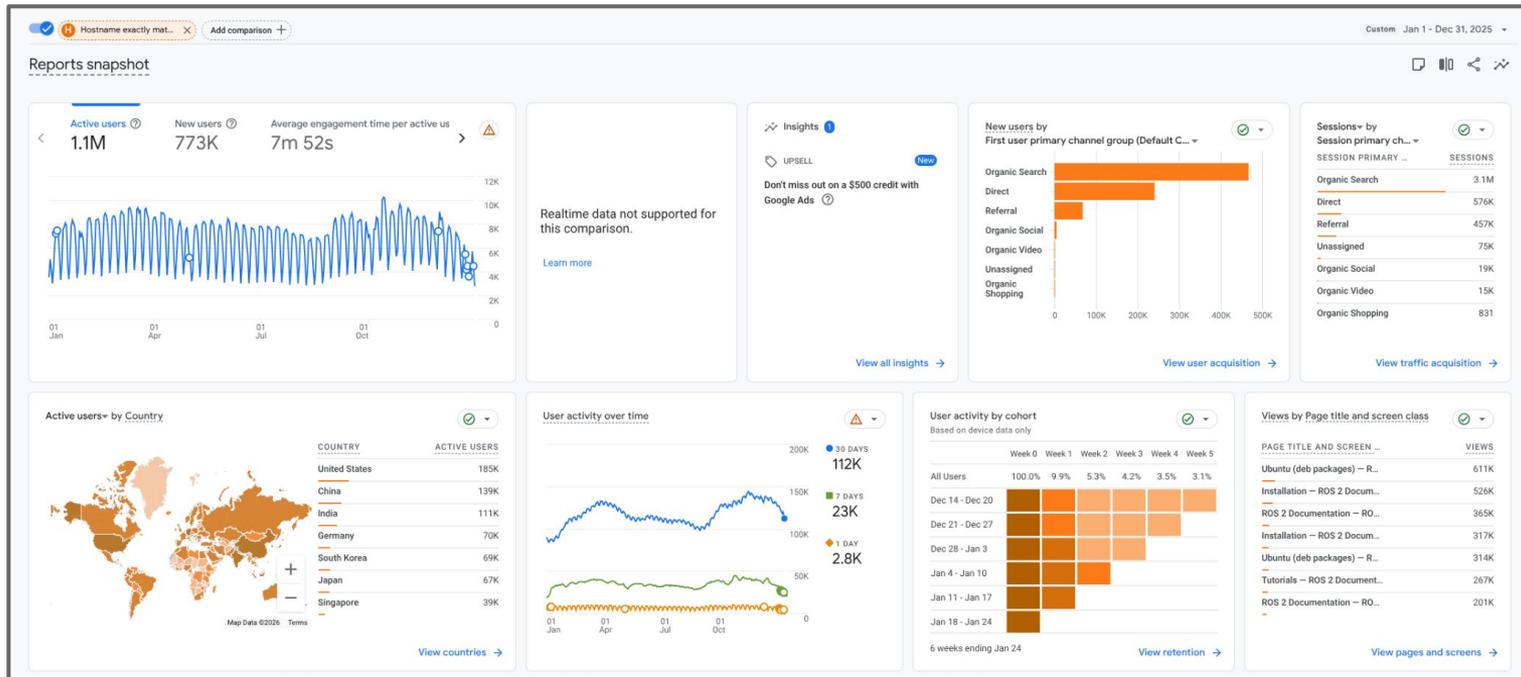
ROS community websites that are hosted by the OSRF and support our open source community.





ROS.org Metrics

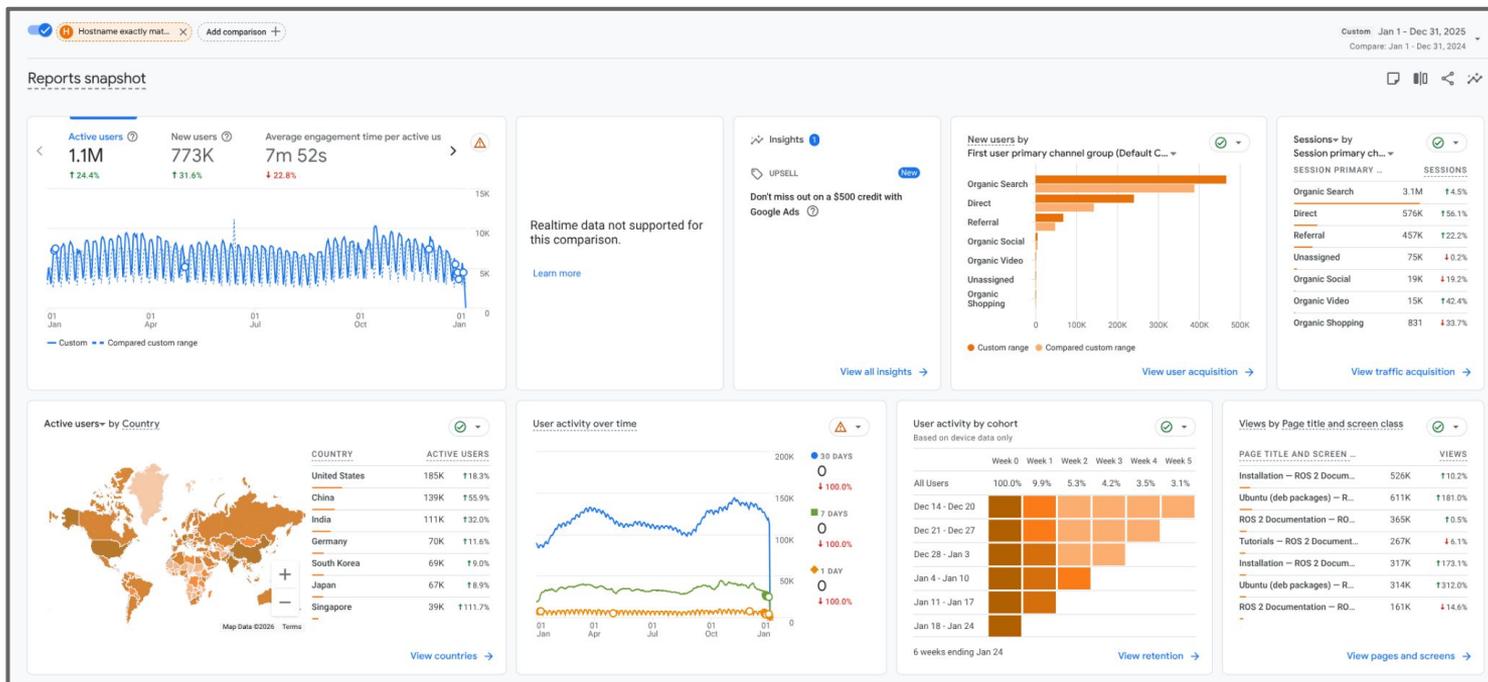
- We usually use October as our benchmark month for ROS data.
- Some metrics use the most recent data available.
- Where possible we show annual data and year over year data.



docs.ros.org

Google Analytics 4 results for 2025

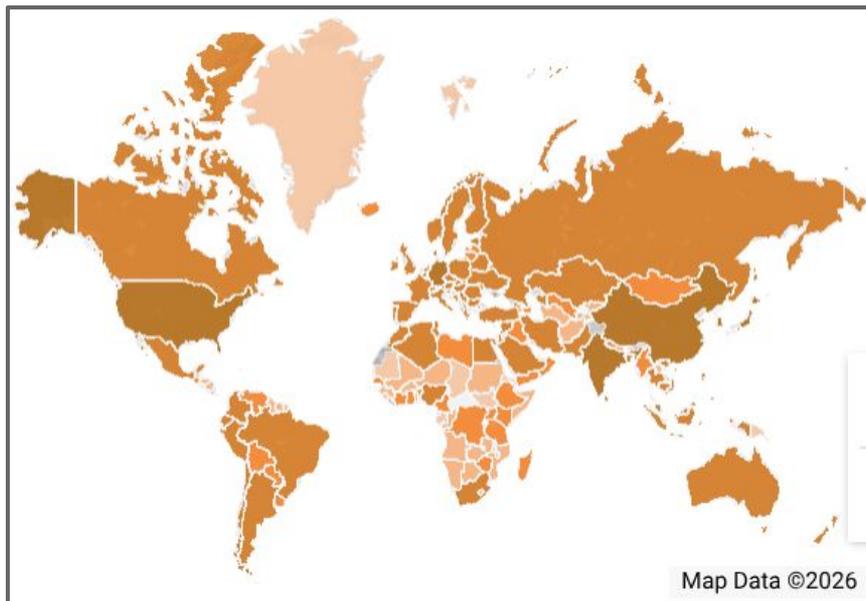




docs.ros.org

ROS 2 documentation users increased by **+24.4%**



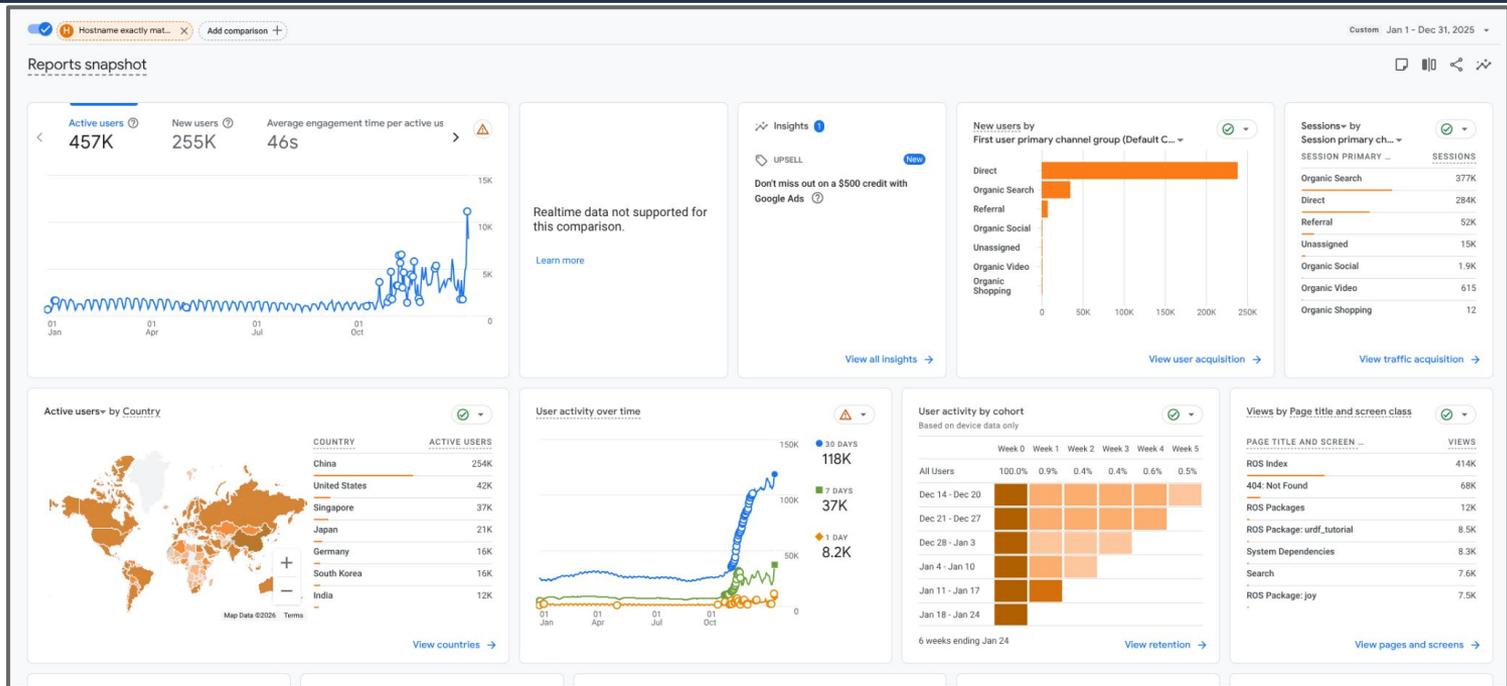


| | | | |
|--------------------------|-------------------|-------------------------------------|-----------------------------------|
| <input type="checkbox"/> | Total | 1,104,219 32.98% of total | 784,116 25.64% of total |
| <input type="checkbox"/> | 1 United States | 184,905 (16.75%) | 135,145 (17.24%) |
| <input type="checkbox"/> | 2 China | 138,877 (12.58%) | 81,654 (10.41%) |
| <input type="checkbox"/> | 3 India | 111,095 (10.06%) | 83,604 (10.66%) |
| <input type="checkbox"/> | 4 Germany | 70,370 (6.37%) | 48,401 (6.17%) |
| <input type="checkbox"/> | 5 South Korea | 68,967 (6.25%) | 52,929 (6.75%) |
| <input type="checkbox"/> | 6 Japan | 67,391 (6.1%) | 44,190 (5.64%) |
| <input type="checkbox"/> | 7 Singapore | 39,182 (3.55%) | 14,055 (1.79%) |
| <input type="checkbox"/> | 8 Hong Kong | 28,158 (2.55%) | 13,191 (1.68%) |
| <input type="checkbox"/> | 9 Taiwan | 27,869 (2.52%) | 18,399 (2.35%) |
| <input type="checkbox"/> | 10 United Kingdom | 26,233 (2.38%) | 17,964 (2.29%) |
| <input type="checkbox"/> | 11 Russia | 25,317 (2.29%) | 17,633 (2.25%) |
| <input type="checkbox"/> | 12 France | 23,859 (2.16%) | 16,418 (2.09%) |
| <input type="checkbox"/> | 13 Canada | 22,732 (2.06%) | 15,986 (2.04%) |
| <input type="checkbox"/> | 14 Italy | 21,152 (1.92%) | 14,587 (1.86%) |
| <input type="checkbox"/> | 15 Türkiye | 20,388 (1.85%) | 14,512 (1.85%) |
| <input type="checkbox"/> | 16 Spain | 17,399 (1.58%) | 11,544 (1.47%) |
| <input type="checkbox"/> | 17 Vietnam | 17,170 (1.55%) | 12,958 (1.65%) |
| <input type="checkbox"/> | 18 Thailand | 14,767 (1.34%) | 11,290 (1.44%) |
| <input type="checkbox"/> | 19 Brazil | 13,909 (1.26%) | 9,179 (1.17%) |
| <input type="checkbox"/> | 20 Australia | 13,786 (1.25%) | 9,857 (1.26%) |

docs.ros.org

Traffic volume by country

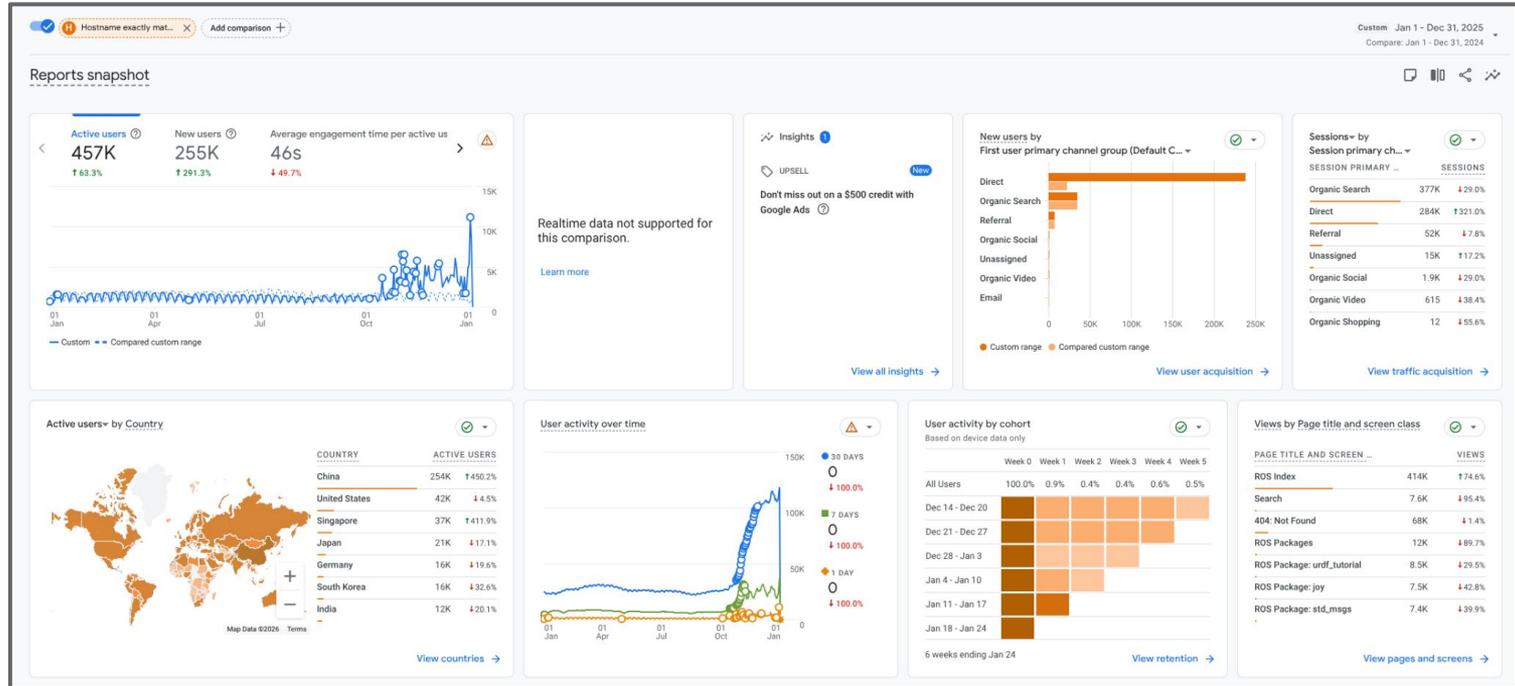




index.ros.org

Google Analytics Results for 2025





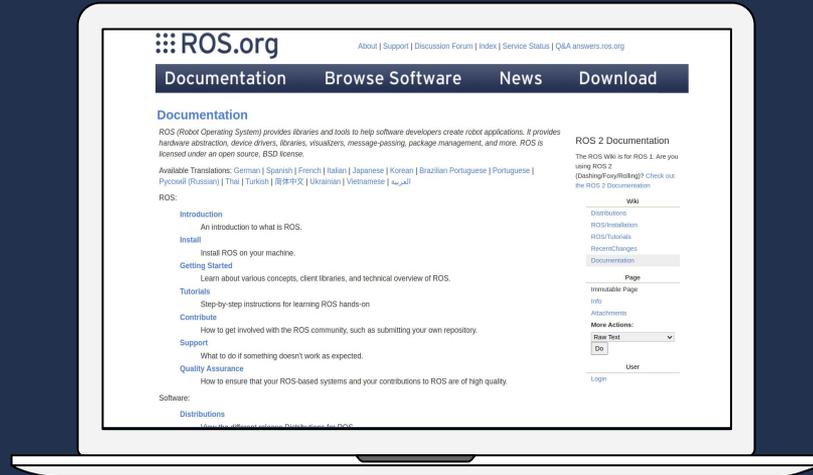
index.ros.org

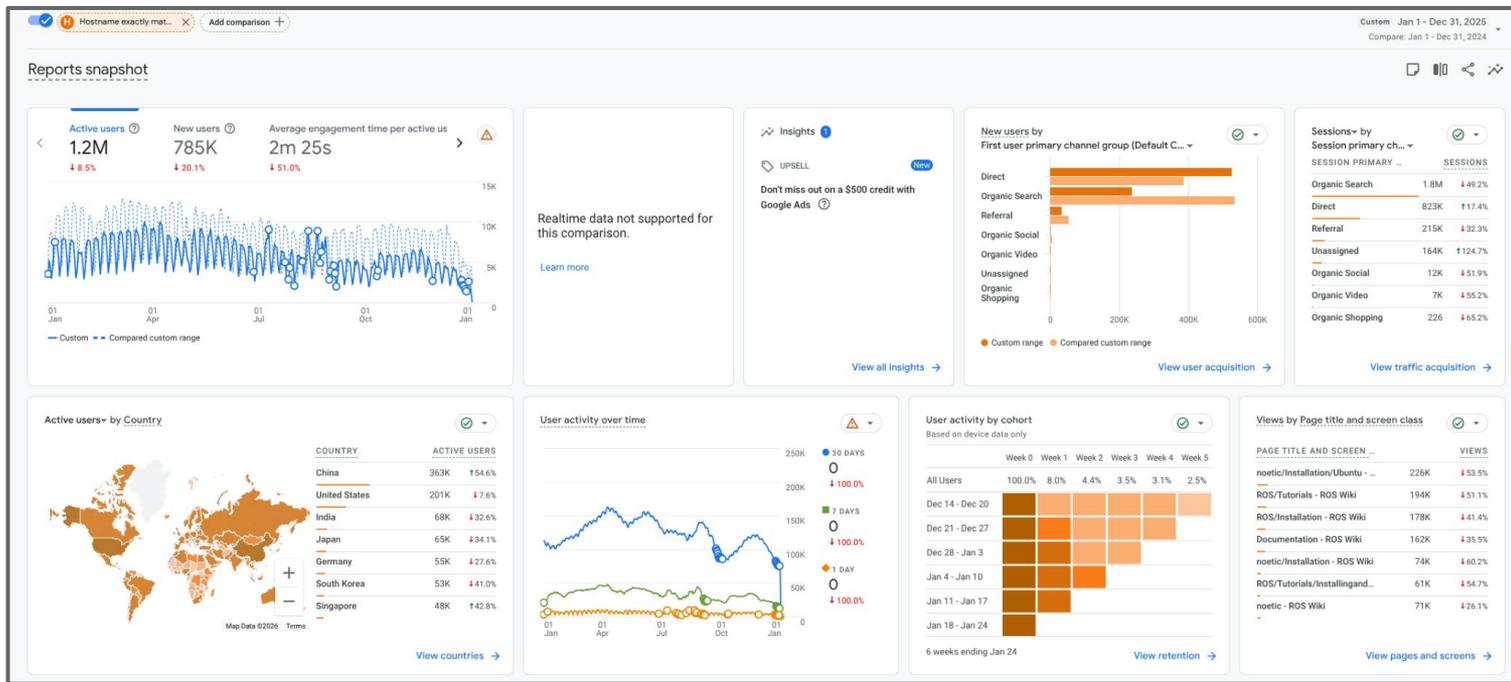
ROS Index users increased by +63.3%



ROS Wiki

The ROS Wiki is now
End-of-Life

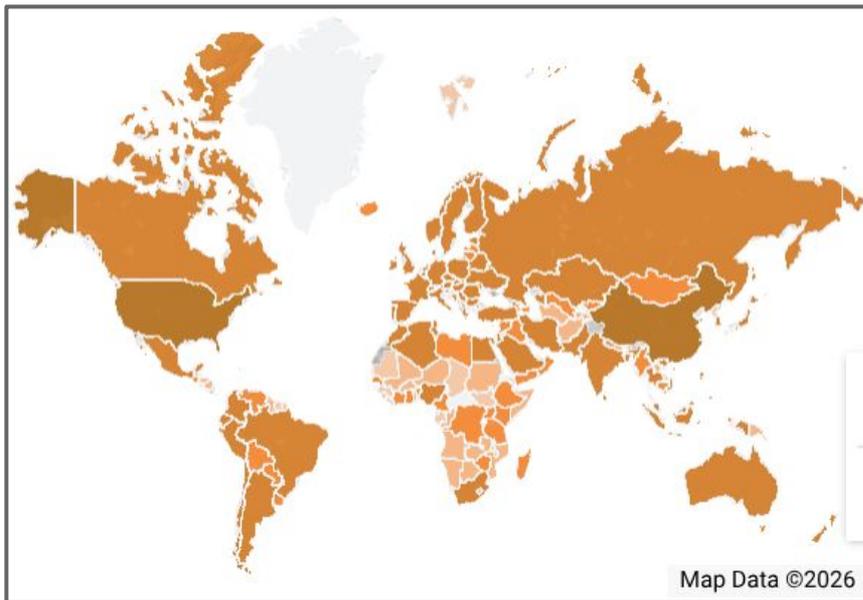




wiki.ros.org

ROS wiki users decreased by -8.5%. This is good! We want to encourage users to switch to docs.ros.org.





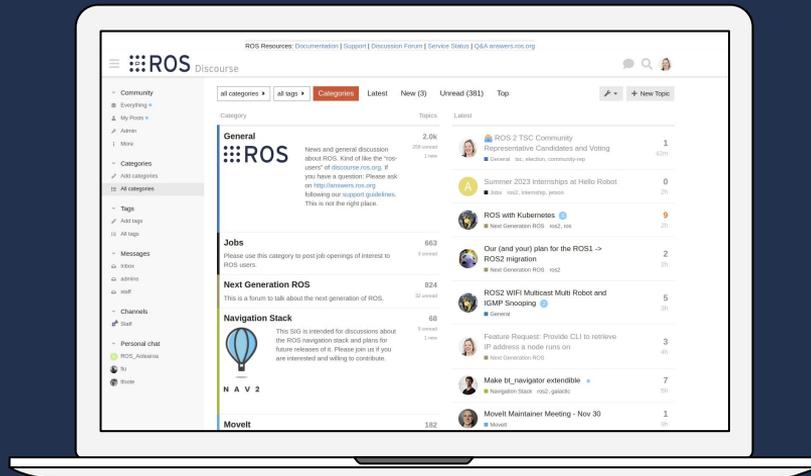
| <input type="checkbox"/> | Country ▾ + | ↓ Active users | New users |
|-------------------------------------|--------------------------|-------------------------------------|----------------------------------|
| <input checked="" type="checkbox"/> | Total | 1,237,850 36.97% of total | 804,370 26.3% of total |
| <input type="checkbox"/> | 1 China | 363,439 (29.36%) | 208,479 (25.92%) |
| <input type="checkbox"/> | 2 United States | 201,282 (16.26%) | 154,316 (19.18%) |
| <input type="checkbox"/> | 3 India | 67,916 (5.49%) | 45,576 (5.67%) |
| <input type="checkbox"/> | 4 Japan | 65,352 (5.28%) | 39,465 (4.91%) |
| <input type="checkbox"/> | 5 Germany | 54,598 (4.41%) | 33,340 (4.14%) |
| <input type="checkbox"/> | 6 South Korea | 53,262 (4.3%) | 35,886 (4.46%) |
| <input type="checkbox"/> | 7 Singapore | 48,496 (3.92%) | 16,786 (2.09%) |
| <input type="checkbox"/> | 8 Hong Kong | 37,880 (3.06%) | 20,889 (2.6%) |
| <input type="checkbox"/> | 9 Taiwan | 26,422 (2.13%) | 15,925 (1.98%) |
| <input type="checkbox"/> | 10 United Kingdom | 23,056 (1.86%) | 15,558 (1.93%) |
| <input type="checkbox"/> | 11 Russia | 22,952 (1.85%) | 15,807 (1.97%) |
| <input type="checkbox"/> | 12 France | 20,124 (1.63%) | 12,867 (1.6%) |
| <input type="checkbox"/> | 13 Canada | 19,740 (1.59%) | 13,460 (1.67%) |
| <input type="checkbox"/> | 14 Türkiye | 17,935 (1.45%) | 12,201 (1.52%) |
| <input type="checkbox"/> | 15 Italy | 17,734 (1.43%) | 11,552 (1.44%) |
| <input type="checkbox"/> | 16 Spain | 14,901 (1.2%) | 9,357 (1.16%) |
| <input type="checkbox"/> | 17 Vietnam | 14,691 (1.19%) | 10,394 (1.29%) |
| <input type="checkbox"/> | 18 Brazil | 11,857 (0.96%) | 7,956 (0.99%) |
| <input type="checkbox"/> | 19 Australia | 11,067 (0.89%) | 7,277 (0.9%) |
| <input type="checkbox"/> | 20 Netherlands | 10,608 (0.86%) | 6,340 (0.79%) |

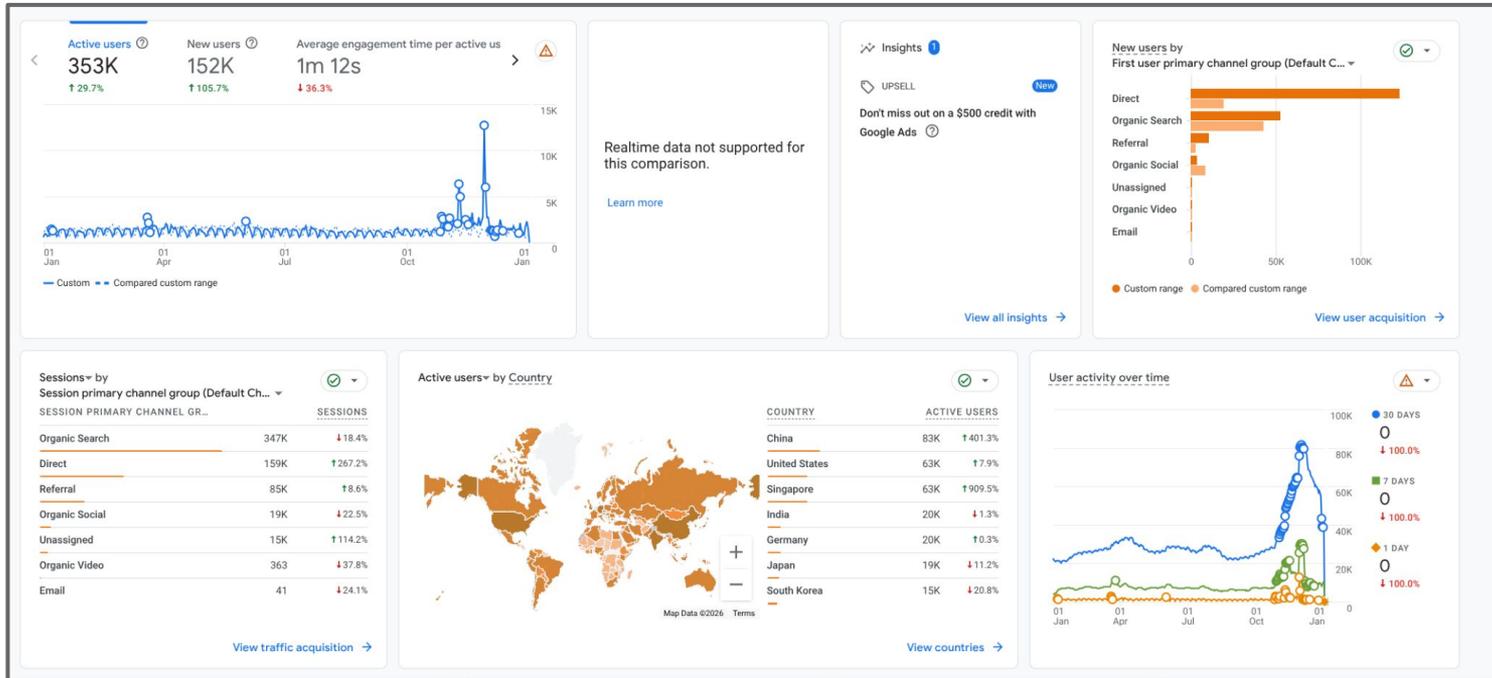
wiki.ros.org

Traffic volume by country



Open Robotics Discourse





discourse.openrobotics.org

According to Google Analytics Discourse viewership grew by 29.7%!



Open Robotics Discourse Metrics

| | 2024 | 2025 | Change |
|---------|--------|--------|--------|
| Topics | 1,052 | 1,472 | +40% |
| Posts | 3,952 | 4,901 | +24% |
| Signups | 2,583 | 3,053 | +18% |
| Users | 11,918 | 13,544 | +14% |
| Likes | 6,915 | 7,245 | +5% |

Metrics are calculated using Discourse metrics reports aggregated over the years of 2024 and 2025.

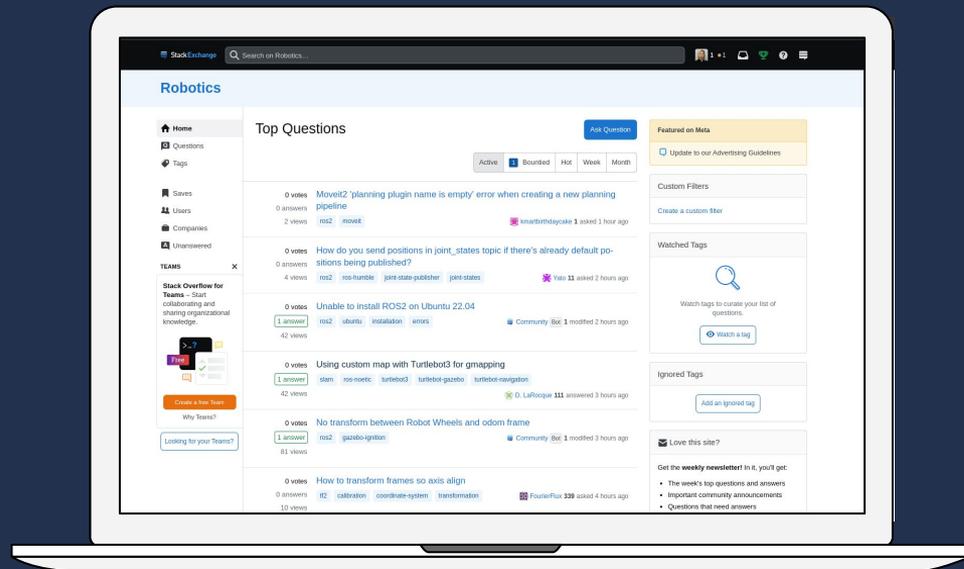
2.

External Website Metrics

The ROS Community can be found participating in numerous communities across the web.

Robotics Stack Exchange

In 2023 we moved from ROS Answers to Robotics Stack Exchange





1540 ROS questions asked in 2025

On Robotics S.E. in 2024, a -42.49% decrease over 2024

94.09% of question are about ROS



2

1449 questions tagged "ros2" vs 5 tagged "ros1"



29.29% of questions were answered

In 2024 we had 1540 questions and 738 answers

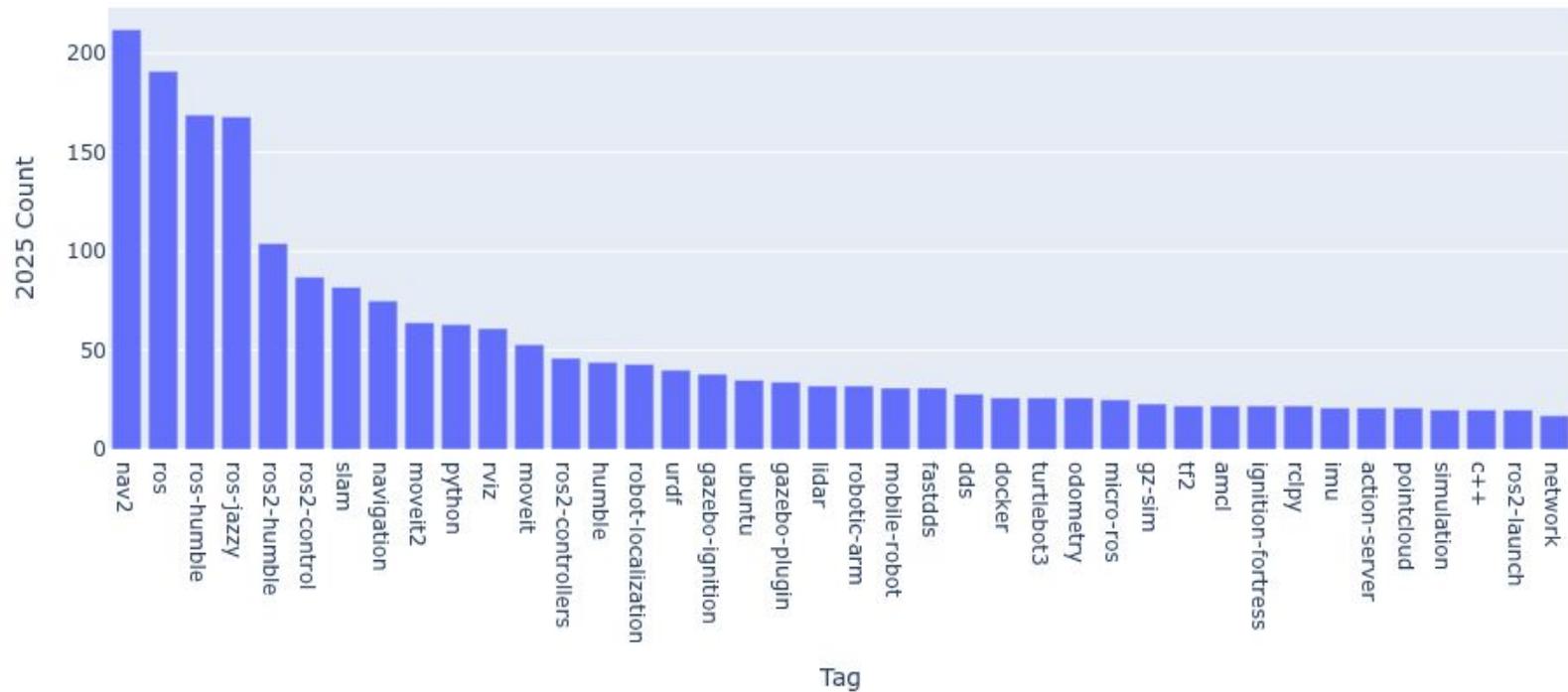
Questions can have multiple answers, or not be marked as "Answered".*

* RSE bots prune unanswered questions after one year, so this number will change.

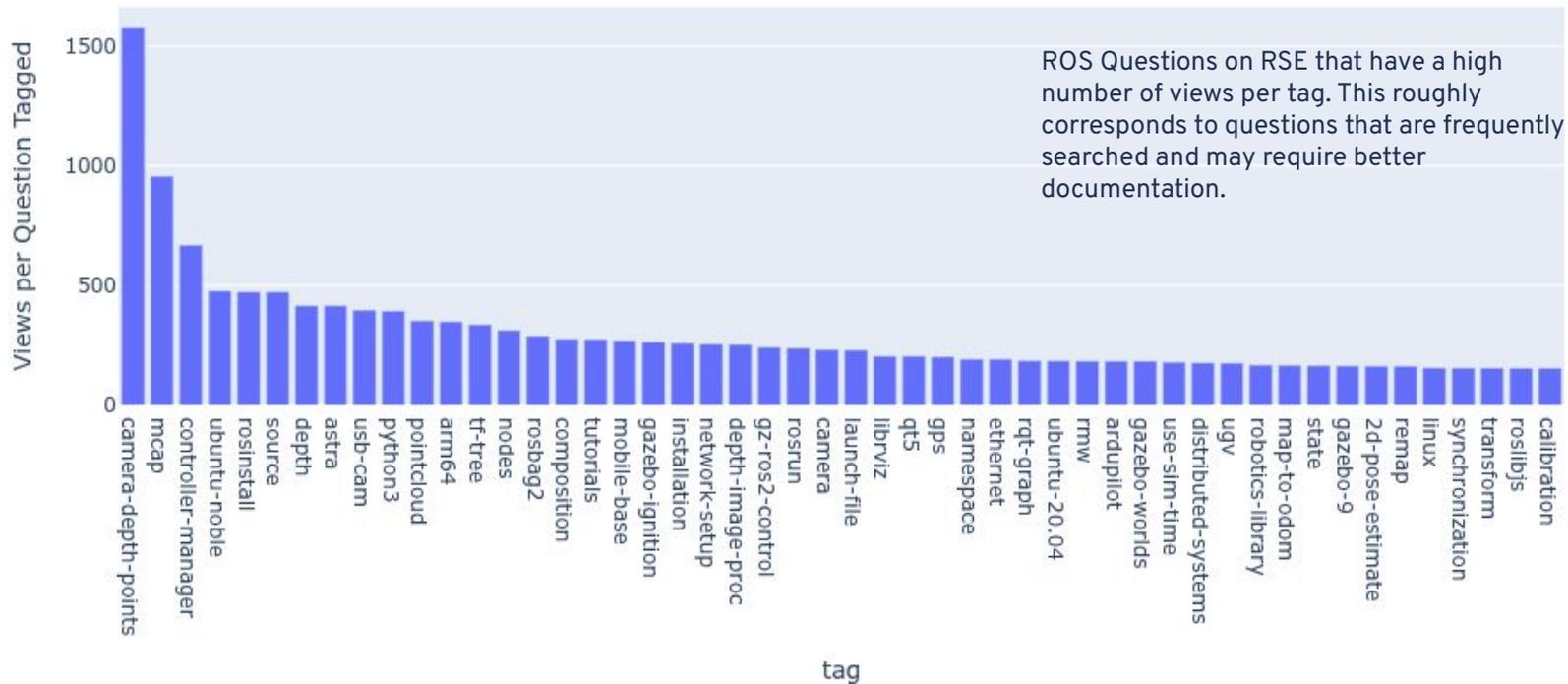
Robotics Stack Overflow Questions Per Month



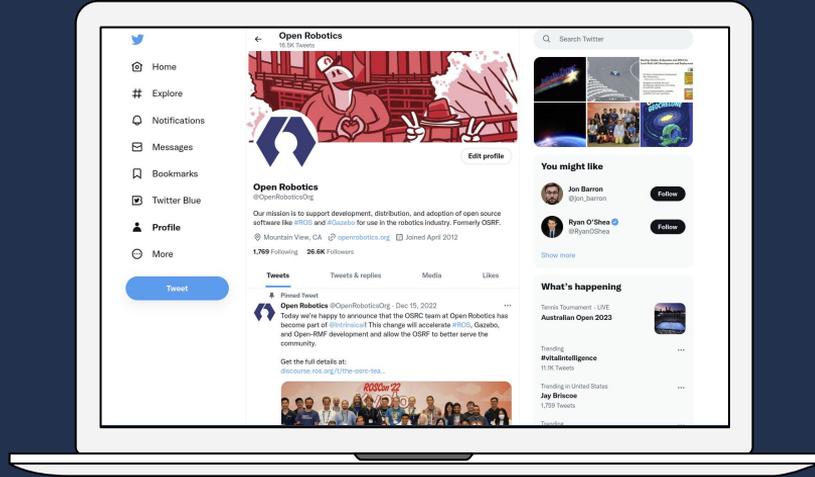
Top ROS Question Tags on Robot Stack Exchange Tags for 2025



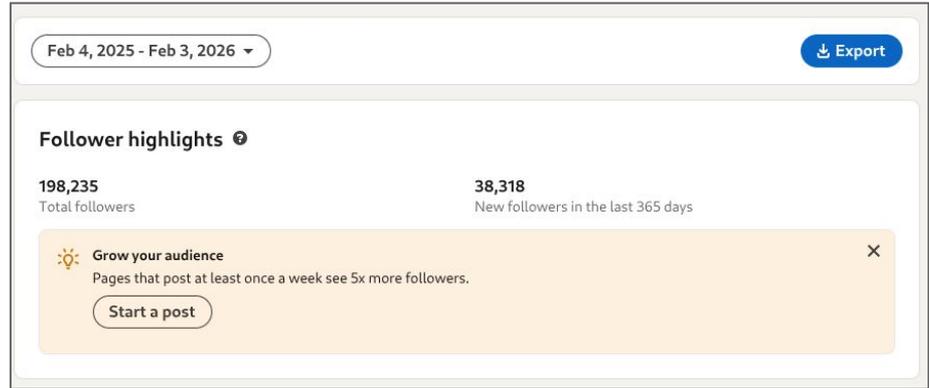
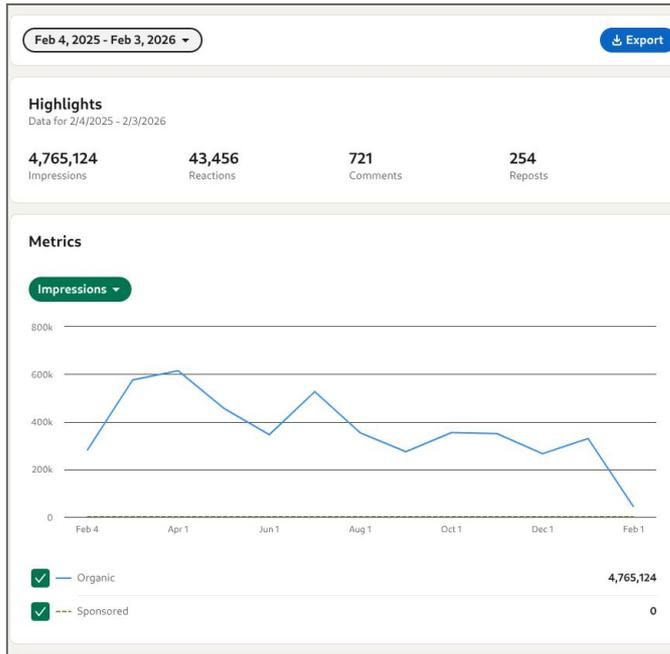
RSE ROS Question Tags with a High Number of Views Per Question



ROS on Social Media Spreading awareness of the project.



LinkedIn



198,235 Followers

As of 1/2026. In Jan 2025 it was ~160,000. **An increase of 23.9%!**

@ROSOrg X Account



**~21,500
Followers**

As of January 2026, an increase of 15%
(in 2025 it was 18,700).



@OpenRoboticsOrg X Account



**~41,400
Followers**

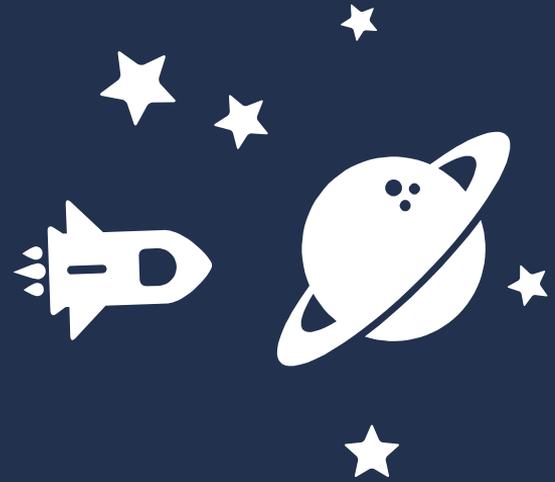
As of January 2026 an **increase of 17.3%** (in 2025 it was 35,300).

ROS™

3.

Download Metrics for Distros & Packages

What packages, distros, and chip architectures are downloaded most by the ROS community?



ROS Package Downloads

Every year we sample download data from our servers at Oregon State University.

Downloads, Visitors, & Packages 10/2025



| | October 2024 | October 2025 | YoY Change |
|--|-------------------|--------------------|-----------------|
| Unique Packages <small>(packages across versions, distros, syncs, etc)</small> | 94,967 | 171,502 | +80.59% |
| Different Packages | 26,978 | 34,614 | +28.30% |
| Deb Downloads | 48,943,663 | 145,297,902 | +196.87% |
| Unique Visitors | 843,959 | 1,315,867 | +55.91% |

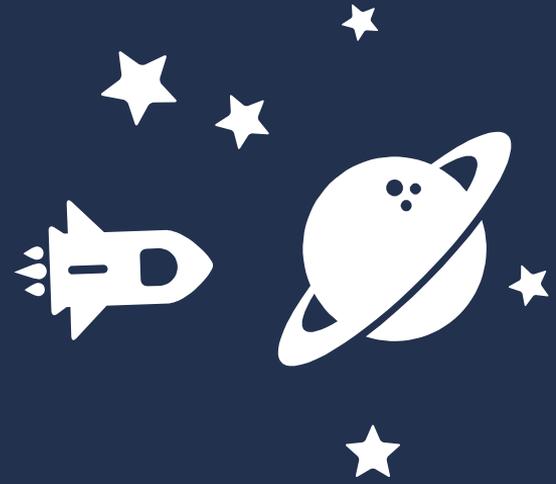
See: <https://awstats.osuosl.org/reports/packages.ros.org/2025/10/awstats.packages.ros.org.html>

2025 Annual Downloads, Data, & Packages



| | 2024 | 2025 | YoY Change |
|--|--------------------|---------------------|----------------|
| Total Packages (packages across versions, distros, rebuilds, syncs, etc) | 423,514 | 552,339 | +23.32% |
| Different Packages | 31,713 | 34,614 | +9.15% |
| Deb Downloads | 531,452,142 | 984,135,185* | +85.18% |
| Data Served (TB) | 177.99 | 179.99* | N/A |

** We migrated our AWStats server this year, we lost some of our download data from January until July 2025, we're reporting the data we were able to recovery for the year.*



Distro Data

ROS Downloads by Distro

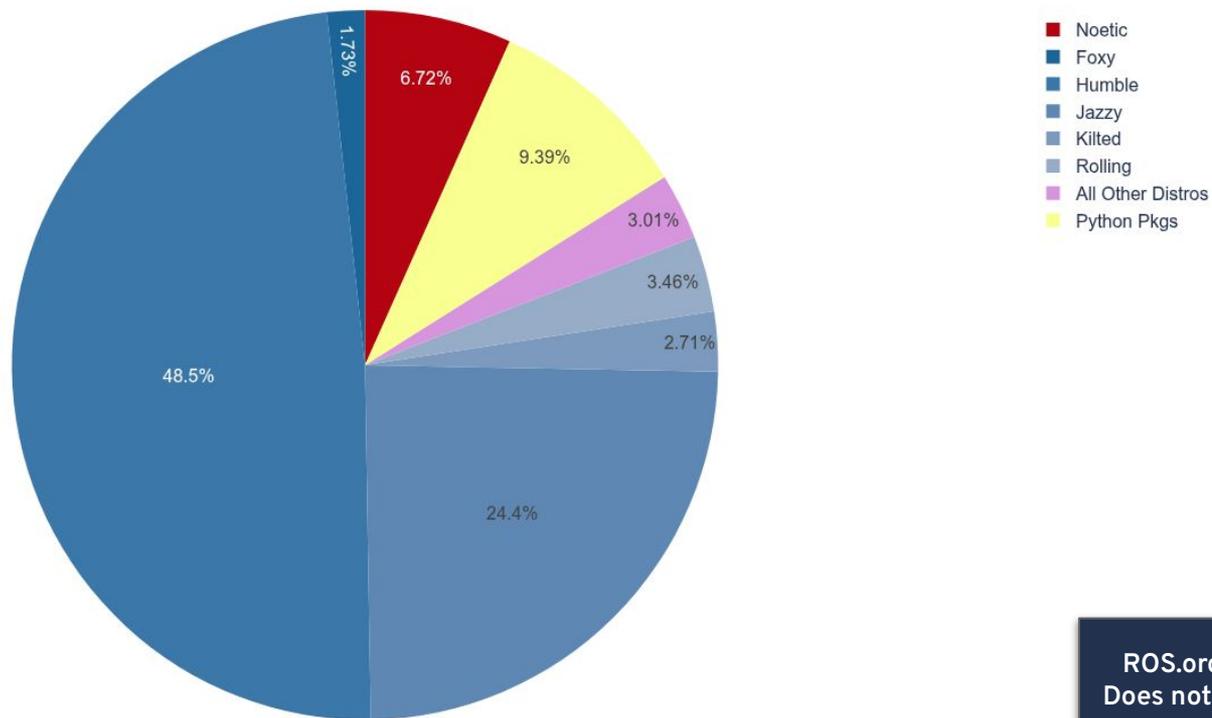
ROS Distro Share by Year



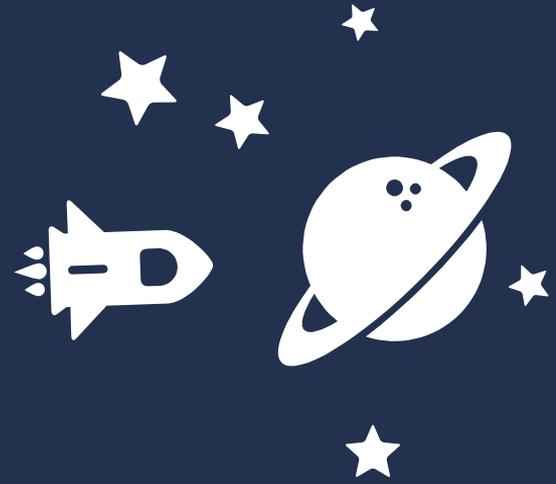
| Distro | Oct 2024 | Oct 2025 | YoY Change |
|----------|----------|----------|------------|
| Noetic | 22.18% | 6.72% | -15.46% |
| Foxy | 3.58% | 1.73% | -2.79% |
| Galactic | 1.25% | 0.94% | -1.58% |
| Humble | 39.38% | 48.53% | +9.15% |
| Iron | 5.26% | 0.70% | -4.56% |
| Jazzy | 9.36% | 24.45% | +15.09% |
| Kilted | N/A | 2.71% | N/A |
| Rolling | 4.90% | 3.46% | -1.44% |

Package downloads, by distro, as a percentage of all downloads from the ROS servers in October 2024, and 2025.

Composition of Downloads (10/2025)



ROS.org metrics only.
Does not include mirrors



ROS by Version

ROS vs ROS 2 downloads and overall downloads



47,204,332

Total packages downloaded October 2024



140,858,493

Total packages downloaded in October 2025



198.3%

Increase in total package downloads for October 2025



984,135,185 *

Total ROS downloads for 2025 (up 85.18% from last year) despite missing data for July of 2025.





12,206,979

ROS 1 packages downloaded in October 2024



11,590,884

ROS 2 packages downloaded October 2025



-5.05%

Decrease in ROS 1 packages downloaded in October 2025



~139,000,000

Estimated number of ROS packages downloaded in all of 2025

 **ROS™**



31,286,555

ROS 2 packages downloaded in October 2024



120,055,696

ROS 2 packages downloaded October 2025



+283.7%

Increase in ROS 2 packages downloaded in October 2025



~897,500,000

Estimated number of ROS 2 packages downloaded in all of 2025





11,590,884

ROS 1 packages downloaded in October 2025



120,055,696

ROS 2 packages downloaded in October 2025



91.2%

Percent of ROS downloads that are ROS 2 in October 2025



+19.26%

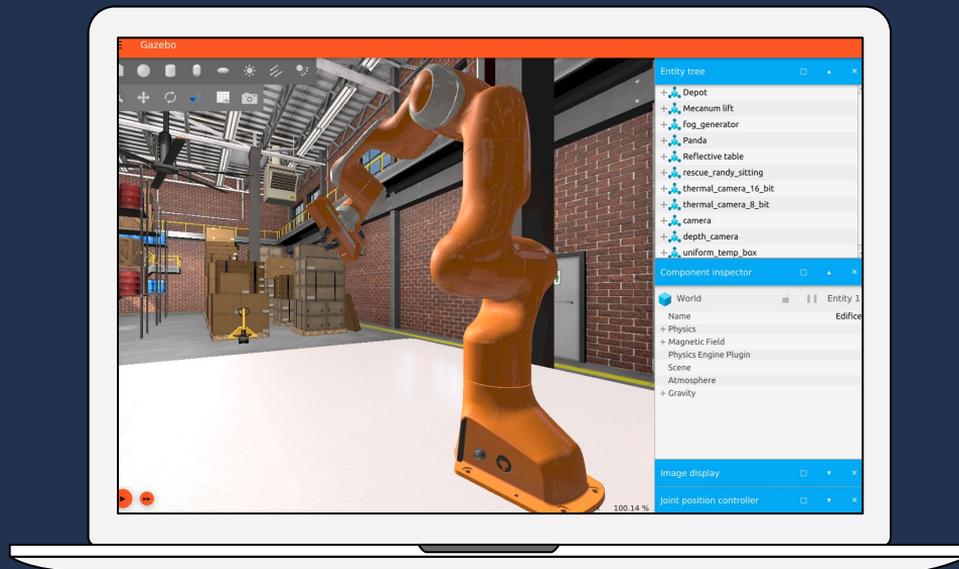
Increase in Oct ROS 2 downloads over the previous year!

ROS 2 was just 71.93% of downloads in October 2024.



Gazebo Metrics

Metrics for the Gazebo
simulator



Gazebo Considerations



- There are presently two major versions of the Gazebo simulator: Gazebo Classic, denoted by release numbers, and modern Gazebo, formerly Ignition, denoted by alphabetic release names.
- Gazebo Classic is distributed as a monolithic binary with a handful of supporting libraries. Modern Gazebo consists of dozens of independent binary packages per installation. *As such, it is difficult to report an estimated number of installations for each version.*
- OSRF hosts Gazebo binaries in two locations: the Oregon State University Open Source Lab (OSU-OSL, packages.ros.org), and the OSRF Amazon Web Services account (packages.osrfoundation.org). We report download data from these servers only. We do not report download data from mirrors and other sources (e.g. upstream Ubuntu).



GAZEBO

10,001,614

Total Gazebo packages downloaded in January 2026



8,825,022

Modern Gazebo (Ignition) packages downloaded in Jan 2026



92.14%

Percent of Gazebo downloads that are modern Gazebo (Ignition)



~120,000,000

Estimated number of Gazebo downloads for 2026

 **ROS™**

Total Gazebo Package Downloads

| | December 2024 | January 2026 | Change |
|-----------------|-------------------|--------------------|-----------------|
| OSRF AWS Server | 3,521,442* | 6,768,650** | +92.21% |
| OSU OSL Server | 771,020 | 3,232,964 | +319.31% |
| Total | 4,292,462 | 10,001,614 | +133.00% |

Gazebo has two primary servers, the OSU OSL (packages.ros.org) server that serve ROS packages like `ros-desktop-full`, and the OSRF AWS server (packages.osrfoundation.org) that is primarily used for desktop installs of stand-alone Gazebo.

** We noticed significant mirror-like activity in December of 2024. Over a dozen IPs (mainly GCP, Amazon, and Digital Ocean) downloaded a copy of every file on our servers*

*** Our traffic has grown such that our Apache logs only capture about two weeks of data. We averaged our traffic from 2026-01-13 until 2026-01-27 and extrapolated the average daily results to the entire month of January..*



Gazebo Downloads by Version (January 2026)

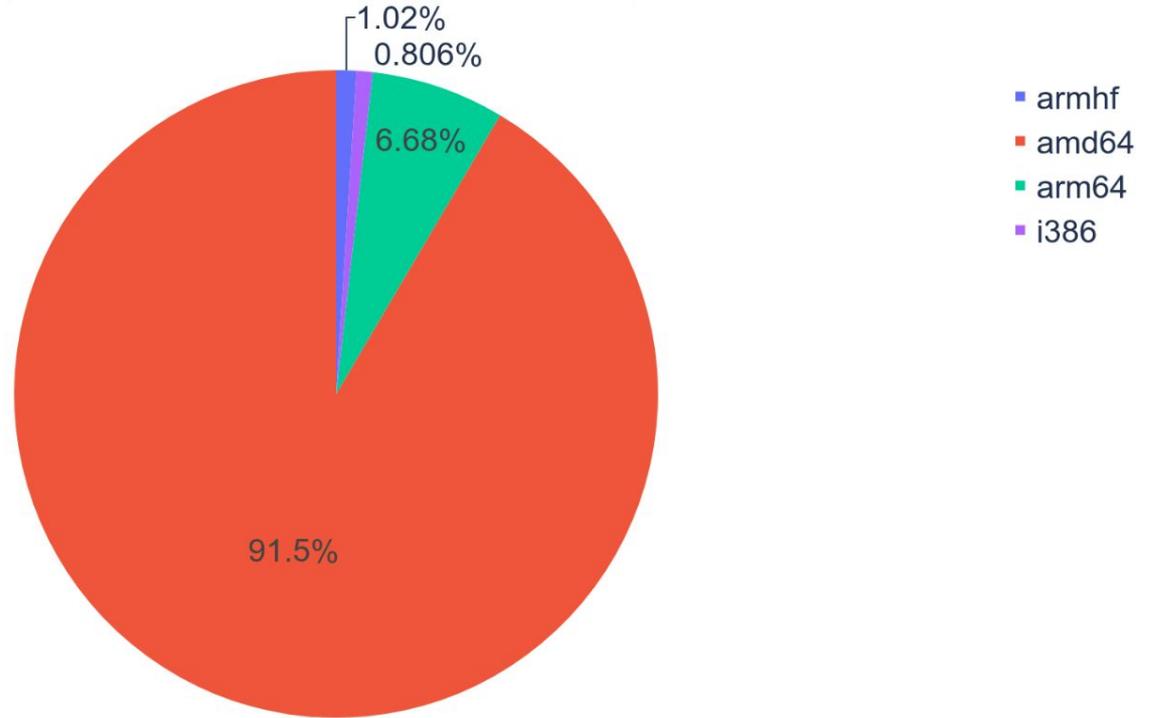
| | Gazebo Classic | Modern Gazebo | Total |
|-------------------|----------------|------------------|------------------|
| OSRF AWS Server** | 94,793 | 6,250,038 | 6,344,831 |
| OSU OSL Server | 657,980 | 2,574,984 | 3,232,964 |
| Total | 752,773 | 8,825,022 | 9,577,795 |
| Percentage | 7.86% | 92.14%* | |

** Modern Gazebo consists of multiple packages per install. We report the ratio of downloads, not the ratio of installs.*

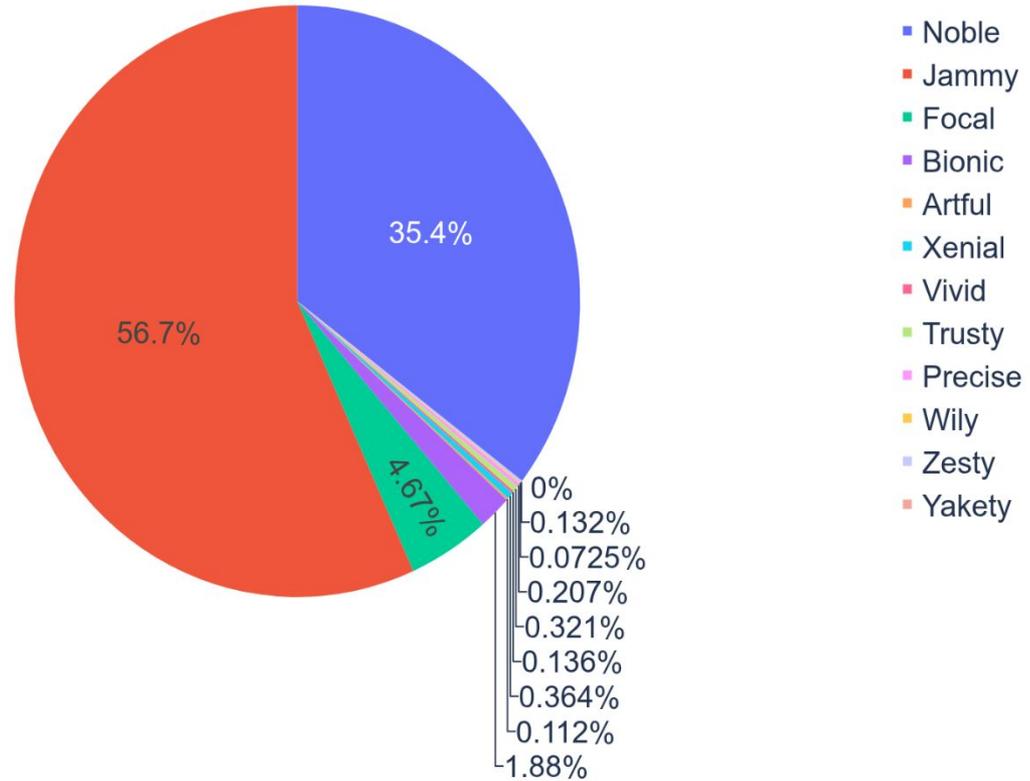
*** AWS server data is estimated based on the two weeks of data that was available on the server.*



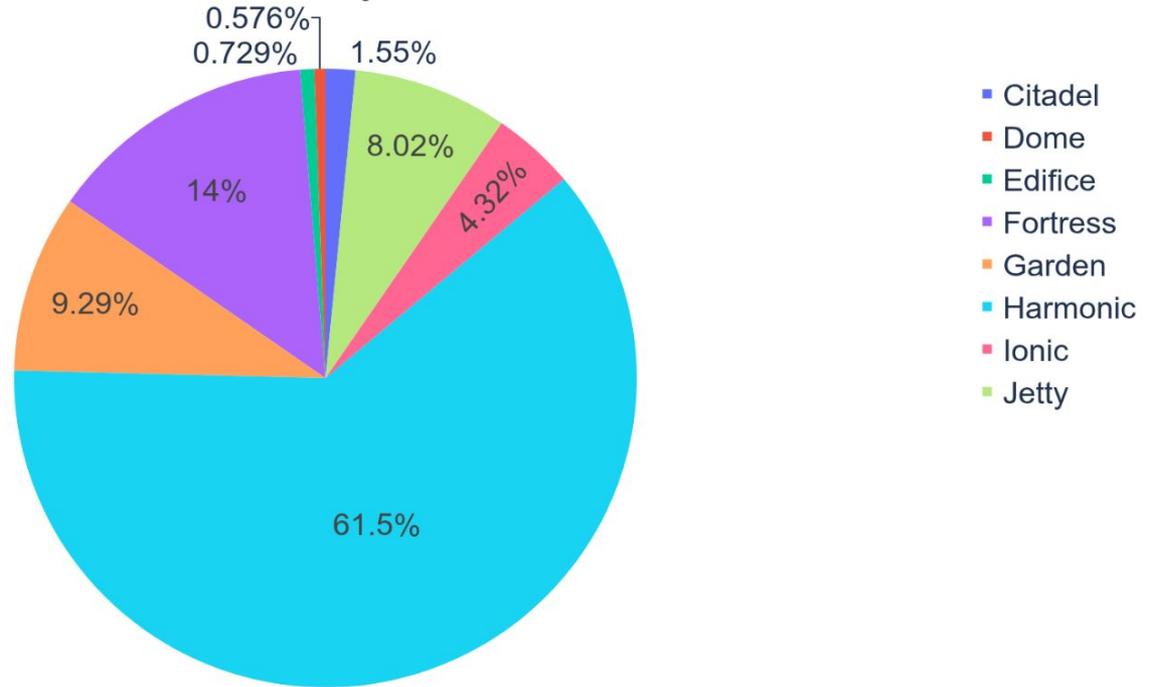
Gazebo Downloads By System Archictechture, January 2026



Gazebo Downloads By Distro, January 2026



Downloads of Gazebo by Release, January 2026



4.

Source Code & Academic Metrics

Source code and citations

ROS 2 Github Metrics

| | 2024 | 2025 | YoY Change |
|---------------|----------------|----------------|-----------------|
| Contributors | 259 | 288 | +11.2% |
| Pull Requests | 10,889 | 14,982 | +37.59% |
| Additions | 289,453 | 631,974 | +118.33% |
| Subtractions | 147,606 | 226,018 | +53.12% |

These metrics cover every PR to every repository in the ros2 Github organization. 

Gazebo Github Metrics

| | 2024 | 2025 | YoY Change |
|---------------|---------|---------|------------|
| Contributors | 112 | 116 | +3.57% |
| Pull Requests | 6,032 | 5,545 | -8.07% |
| Additions | 943,622 | 409,390 | -56.62% |
| Subtractions | 670,599 | 81,232 | -87.87% |

These metrics cover every PR to every repository in the gazebo-sim organization. 

Open-RMF Github Metrics

| | 2024 | 2025 | YoY Change |
|---------------|----------------|------------------|----------------|
| Contributors | 33 | 29 | -12.12% |
| Pull Requests | 2,109 | 1,801 | -14.60% |
| Additions | 335,104 | 2,934,914 | +776% |
| Subtractions | 193,174 | 90,736 | -53.03% |

These metrics cover every PR to every repository in the Open-RMF organization.



ROS Control Github Metrics

| | 2024 | 2025 | YoY Change |
|---------------|---------|---------|------------|
| Contributors | 85 | 134 | +57.65% |
| Pull Requests | 7,930 | 10,466 | +31.98% |
| Additions | 532,046 | 322,374 | -39.41% |
| Subtractions | 75,765 | 156,796 | +106.95% |

These metrics cover every PR to every repository in the ROS Control organization. 



14,551

Citations of “ROS: an open-source Robot Operating System” (Quigley et al., 2009) on
2026-01-26.

There were 13,335 citations on 2025-01-22, an increase of 9%





1,929

Citations of “Robot Operating System 2: Design, architecture, and uses in the wild”
(Macenski et al., 2022)

There were 1016 citations on 2025-01-22, an increase of 89.9%!





1579+

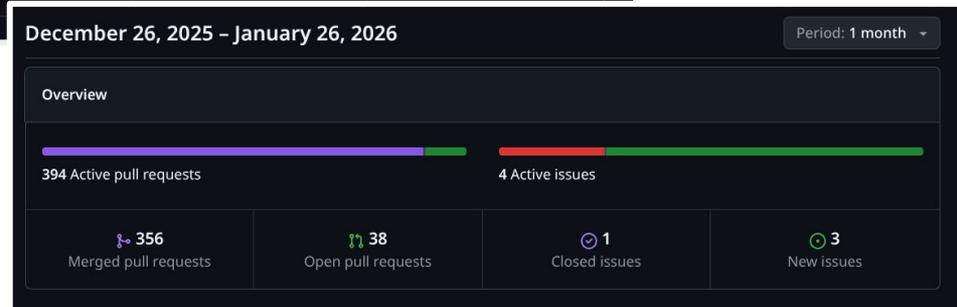
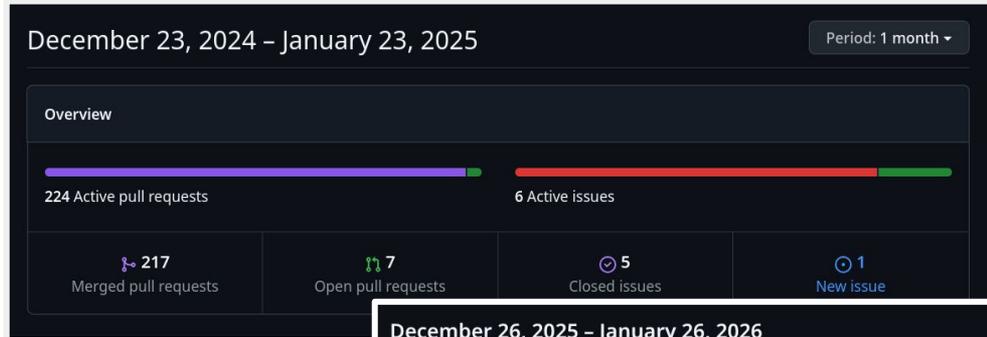
Companies Using ROS

Open Robotics maintains a list of companies using ROS culled from job listings, ROS Discourse posts, and other sources. This isn't a definitive list, it is simply the companies we know about!

At the start of 2025 we knew 1250 companies, an increase of 26%!



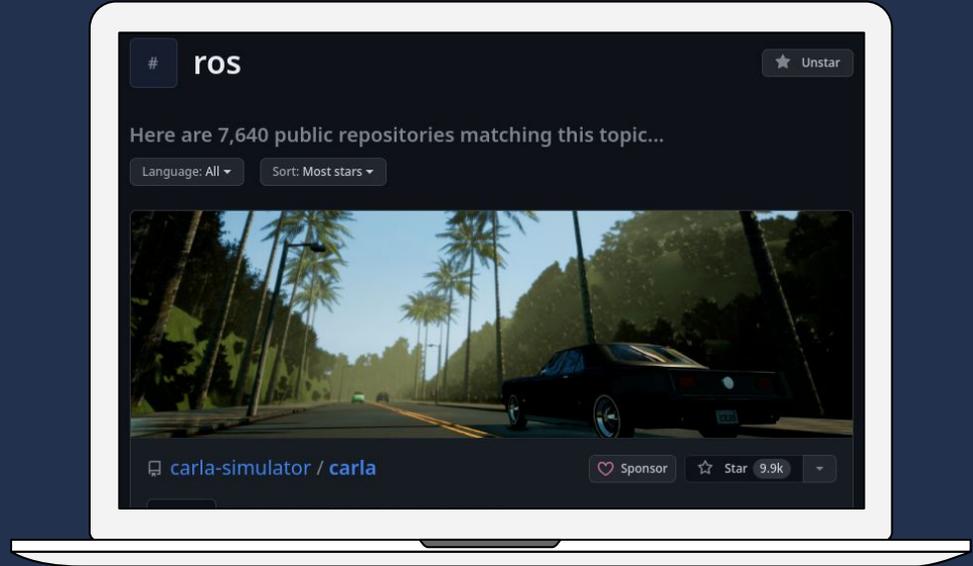
The roscdistro is the repository where releases are managed and the main index of publicly announced ROS packages. Most pull requests on this repository are requests for indexing or packaging of ROS packages.



8,744

Number of Github
repositories tagged with
#ROS on 2026-01-26

On 2025-01-22 there were
8,349, an increase of 4.73%

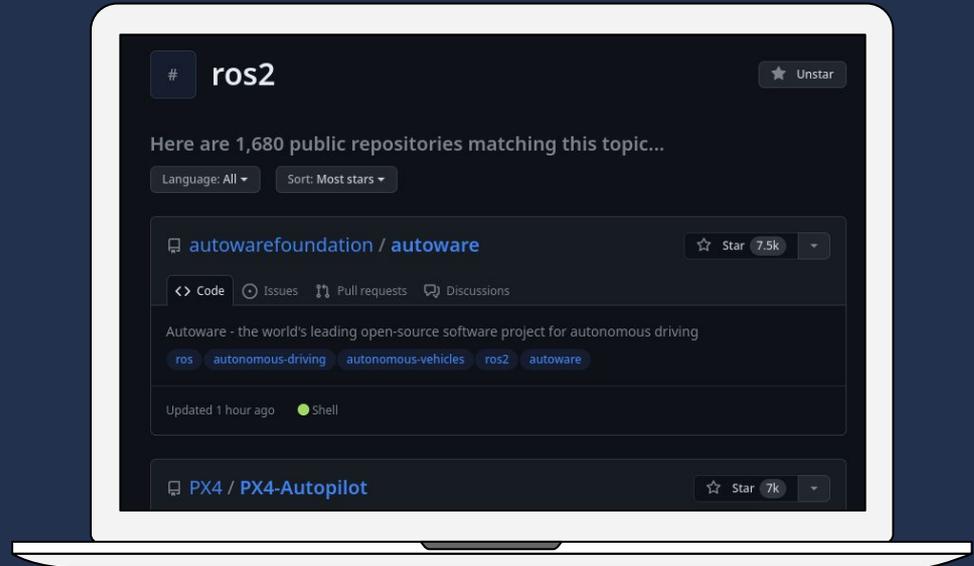


ROS

3,848

Number of Github repositories
tagged with #ROS2 on
2026-01-26

There were 2,760 repositories
tagged #ROS2 on 2025-01-22,
an increase of 39%



Additional Resources

- OSU OSL AWStats
 - bit.ly/ROS-AWStats-2026
- Linux Foundation Insights (highly recommended)
 - bit.ly/ROS-LFX
- “Live” ROS Metrics
 - metrics.ros.org

