# Rust Usage

# Results

# Survey 417611

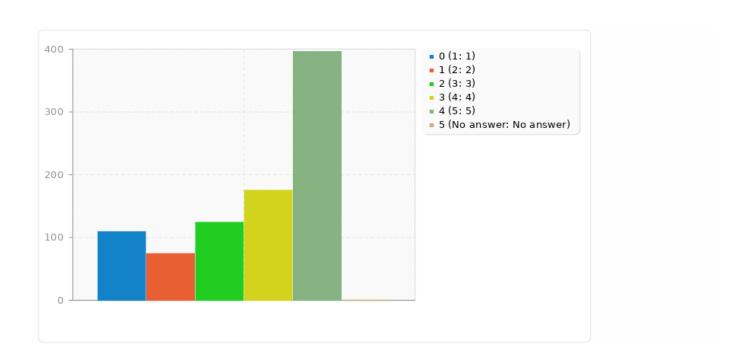
| Number of records in this query: | 878     |
|----------------------------------|---------|
| Total records in survey:         | 878     |
| Percentage of total:             | 100.00% |

Rust is important to my work or projects (1 disagree - 5 agree)

| Answer             | Count | Percentage | Sum     |
|--------------------|-------|------------|---------|
| 1 (1)              | 109   | 12.41%     | 20.84%  |
| 2 (2)              | 74    | 8.43%      |         |
| 3 (3)              | 124   | 14.12%     | 14.12%  |
| 4 (4)              | 175   | 19.93%     |         |
| 5 (5)              | 396   | 45.10%     | 65.03%  |
| No answer          | 0     | 0.00%      | 0.00%   |
| Arithmetic mean    | 3.77  |            |         |
| Standard deviation | 1.41  |            |         |
| Sum (Answers)      | 878   | 100.00%    | 100.00% |
| Number of cases    |       | 0%         |         |

# Summary for G01Q09

Rust is important to my work or projects (1 disagree - 5 agree)

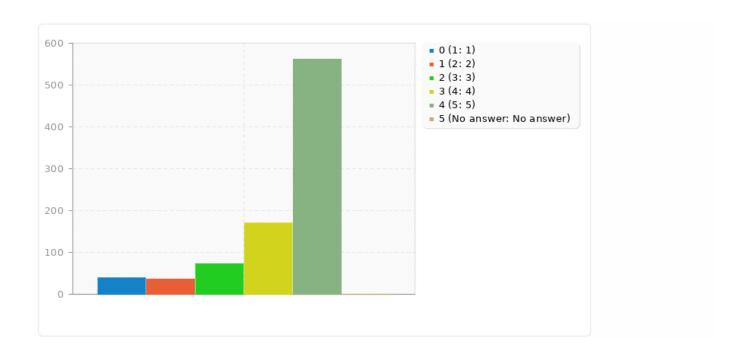


Rust will become more important in my work or projects in the future. (1 disagree - 5 agree)

| Answer             | Count | Percentage | Sum     |
|--------------------|-------|------------|---------|
| 1 (1)              | 39    | 4.44%      | 8.54%   |
| 2 (2)              | 36    | 4.10%      |         |
| 3 (3)              | 72    | 8.20%      | 8.20%   |
| 4 (4)              | 170   | 19.36%     |         |
| 5 (5)              | 561   | 63.90%     | 83.26%  |
| No answer          | 0     | 0.00%      | 0.00%   |
| Arithmetic mean    | 4.34  |            |         |
| Standard deviation | 1.08  |            |         |
| Sum (Answers)      | 878   | 100.00%    | 100.00% |
| Number of cases    |       | 0%         |         |

# Summary for G01Q11

Rust will become more important in my work or projects in the future. (1 disagree - 5 agree)

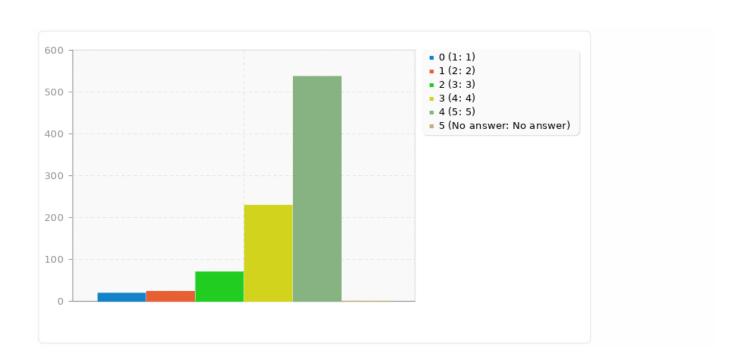


Rust will become more important to other developers and projects in the future (1 disagree - 5 agree)

| Answer             | Count | Percentage | Sum     |
|--------------------|-------|------------|---------|
| 1 (1)              | 19    | 2.16%      | 4.78%   |
| 2 (2)              | 23    | 2.62%      |         |
| 3 (3)              | 70    | 7.97%      | 7.97%   |
| 4 (4)              | 229   | 26.08%     |         |
| 5 (5)              | 537   | 61.16%     | 87.24%  |
| No answer          | 0     | 0.00%      | 0.00%   |
| Arithmetic mean    | 4.41  |            |         |
| Standard deviation | 0.91  |            |         |
| Sum (Answers)      | 878   | 100.00%    | 100.00% |
| Number of cases    |       | 0%         |         |

# Summary for G01Q10

Rust will become more important to other developers and projects in the future (1 disagree - 5 agree)

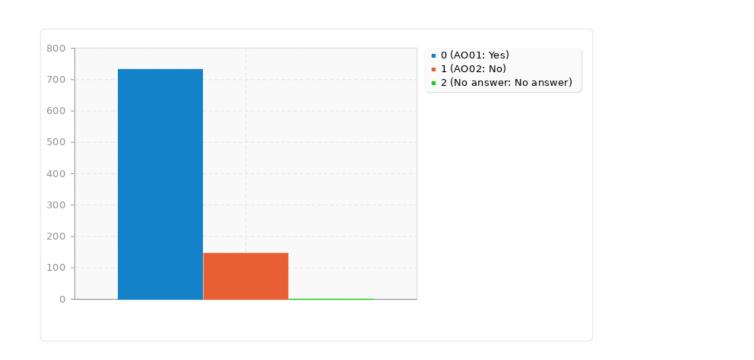


# I develop software using Rust

| Answer     | Count | Percentage |
|------------|-------|------------|
| Yes (AO01) | 732   | 83.37%     |
| No (AO02)  | 146   | 16.63%     |
| No answer  | 0     | 0.00%      |

# Summary for G01Q08

#### I develop software using Rust

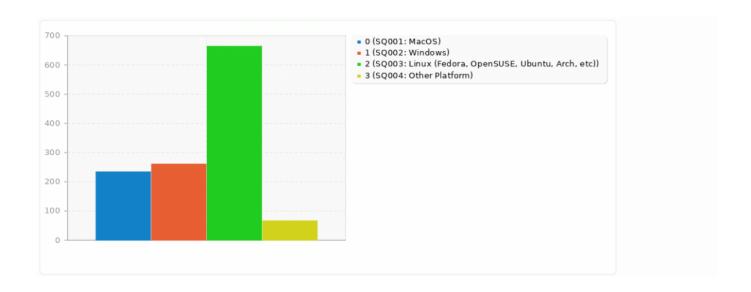


As a developer, I use Rust on the following platforms while programming. Choose all that apply.

| Answer  | Count | Percentage |
|---|-------|------------|
| MacOS (SQ001)                                       | 234   | 31.97%     |
| Windows (SQ002)                                     | 260   | 35.52%     |
| Linux (Fedora, OpenSUSE, Ubuntu, Arch, etc) (SQ003) | 664   | 90.71%     |
| Other Platform (SQ004)                              | 66    | 9.02%      |

# Summary for G01Q02

As a developer, I use Rust on the following platforms while programming. Choose all that apply.



On your primary development platform, how did you install your Rust toolchain?

| Answer   | Count | Percentage |
|--|-------|------------|
| rustup (AO01)  | 662   | 90.44%     |
| Package Manager (dnf, apt, brew, zypper, etc) (AO02) | 60    | 8.20%      |
| Other manual method (AO03)                           | 9     | 1.23%      |
| I don't know (AO04)                                  | 1     | 0.14%      |
| No answer  | 0     | 0.00%      |

# Summary for G01Q04

On your primary development platform, how did you install your Rust toolchain?

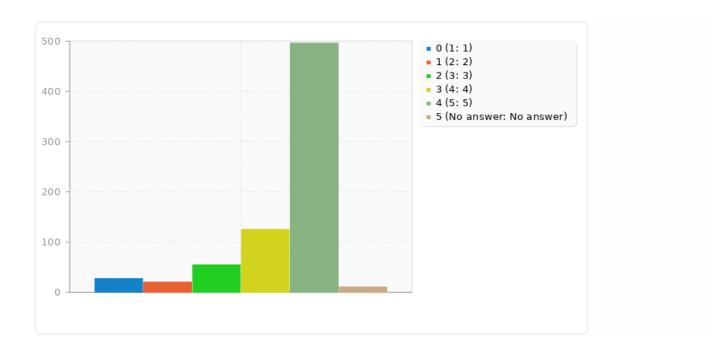


# Summary for G01Q03(SQ001)[Integrated Development Environments with Language Features (syntax highlight, errors, completion, type checking)]

The following features or tools are important in my development environment (do not use 1 - use a lot 5).

| Answer             | Count | Percentage | Sum     |
|--------------------|-------|------------|---------|
| 1 (1)              | 27    | 3.11%      | 5.41%   |
| 2 (2)              | 20    | 2.30%      |         |
| 3 (3)              | 54    | 6.22%      | 6.22%   |
| 4 (4)              | 125   | 14.40%     |         |
| 5 (5)              | 496   | 57.14%     | 71.54%  |
| No answer          | 10    | 1.14%      | 0.00%   |
| Arithmetic mean    | 4.44  |            |         |
| Standard deviation | 1.01  |            |         |
| Sum (Answers)      | 722   | 100.00%    | 100.00% |
| Number of cases    |       | 0%         |         |

# Summary for G01Q03(SQ001)[Integrated Development Environments with Language Features (syntax highlight, errors, completion, type checking)]

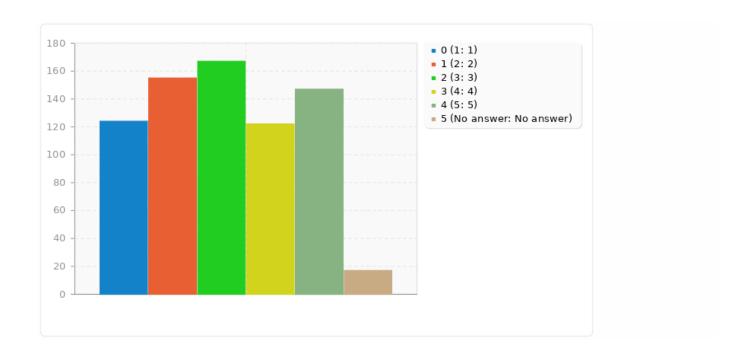


#### Summary for G01Q03(SQ002)[Debugging tools (Ildb, gdb)]

The following features or tools are important in my development environment (do not use 1 - use a lot 5).

| Answer             | Count | Percentage | Sum     |
|--------------------|-------|------------|---------|
| 1 (1)              | 124   | 14.40%     | 32.40%  |
| 2 (2)              | 155   | 18.00%     |         |
| 3 (3)              | 167   | 19.40%     | 19.40%  |
| 4 (4)              | 122   | 14.17%     |         |
| 5 (5)              | 147   | 17.07%     | 31.24%  |
| No answer          | 17    | 1.94%      | 0.00%   |
| Arithmetic mean    | 3.02  |            |         |
| Standard deviation | 1.38  |            |         |
| Sum (Answers)      | 715   | 100.00%    | 100.00% |
| Number of cases    |       | 0%         |         |

# Summary for G01Q03(SQ002)[Debugging tools (Ildb, gdb)]

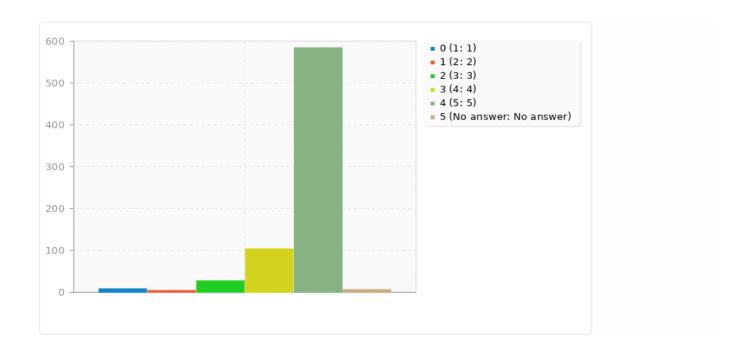


#### Summary for G01Q03(SQ003)[Online Documentation (doc.rust-lang.org, docs.rs)]

The following features or tools are important in my development environment (do not use 1 - use a lot 5).

| Answer             | Count | Percentage | Sum     |
|--------------------|-------|------------|---------|
| 1 (1)              | 8     | 0.92%      | 1.38%   |
| 2 (2)              | 4     | 0.46%      |         |
| 3 (3)              | 27    | 3.10%      | 3.10%   |
| 4 (4)              | 103   | 11.81%     |         |
| 5 (5)              | 584   | 66.97%     | 78.78%  |
| No answer          | 6     | 0.68%      | 0.00%   |
| Arithmetic mean    | 4.72  |            |         |
| Standard deviation | 0.66  |            |         |
| Sum (Answers)      | 726   | 100.00%    | 100.00% |
| Number of cases    |       | 0%         |         |

# Summary for G01Q03(SQ003)[Online Documentation (doc.rust-lang.org, docs.rs)]

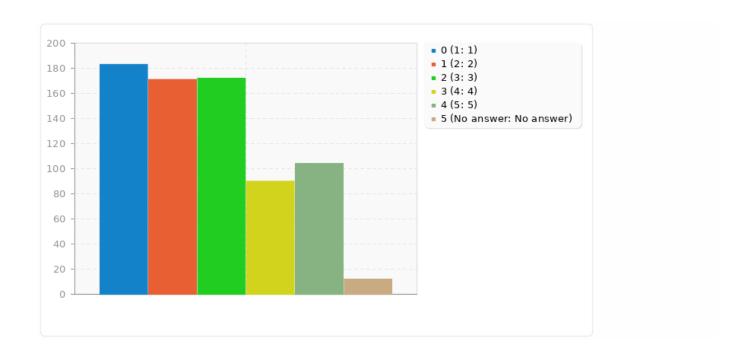


#### Summary for G01Q03(SQ004)[Offline Documentation (local)]

The following features or tools are important in my development environment (do not use 1 - use a lot 5).

| Answer             | Count | Percentage | Sum     |
|--------------------|-------|------------|---------|
| 1 (1)              | 183   | 21.13%     | 40.88%  |
| 2 (2)              | 171   | 19.75%     |         |
| 3 (3)              | 172   | 19.86%     | 19.86%  |
| 4 (4)              | 90    | 10.39%     |         |
| 5 (5)              | 104   | 12.01%     | 22.40%  |
| No answer          | 12    | 1.37%      | 0.00%   |
| Arithmetic mean    | 2.67  |            |         |
| Standard deviation | 1.36  |            |         |
| Sum (Answers)      | 720   | 100.00%    | 100.00% |
| Number of cases    |       | 0%         |         |

# Summary for G01Q03(SQ004)[Offline Documentation (local)]

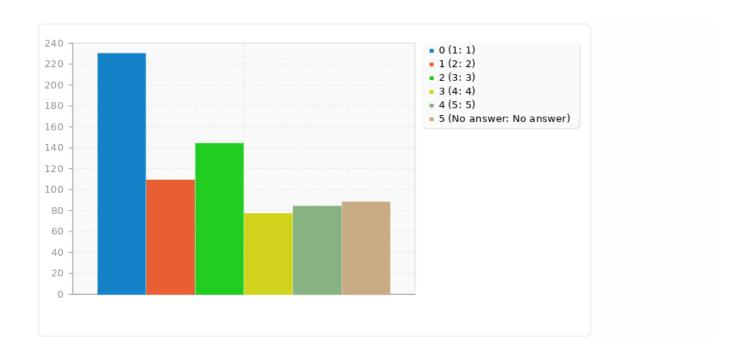


#### Summary for G01Q03(SQ005)[Build Caching (sccache)]

The following features or tools are important in my development environment (do not use 1 - use a lot 5).

| Answer             | Count | Percentage | Sum     |
|--------------------|-------|------------|---------|
| 1 (1)              | 230   | 29.11%     | 42.91%  |
| 2 (2)              | 109   | 13.80%     |         |
| 3 (3)              | 144   | 18.23%     | 18.23%  |
| 4 (4)              | 77    | 9.75%      |         |
| 5 (5)              | 84    | 10.63%     | 20.38%  |
| No answer          | 88    | 10.02%     | 0.00%   |
| Arithmetic mean    | 2.5   |            |         |
| Standard deviation | 1.41  |            |         |
| Sum (Answers)      | 644   | 100.00%    | 100.00% |
| Number of cases    |       | 0%         |         |

# Summary for G01Q03(SQ005)[Build Caching (sccache)]

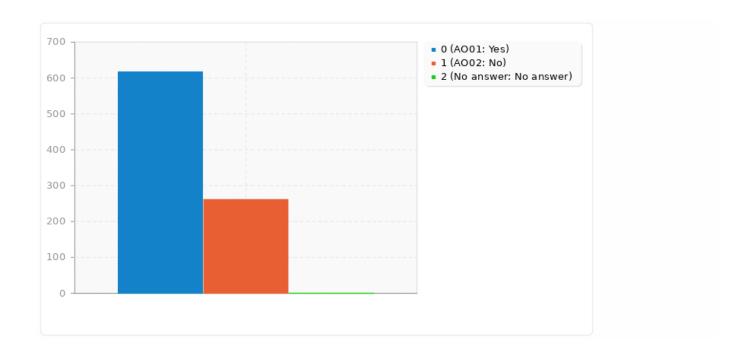


Do you run, provide, distribute or deploy Rust software?

| Answer     | Count | Percentage |
|------------|-------|------------|
| Yes (AO01) | 617   | 70.27%     |
| No (AO02)  | 261   | 29.73%     |
| No answer  | 0     | 0.00%      |

# Summary for G03Q13

Do you run, provide, distribute or deploy Rust software?

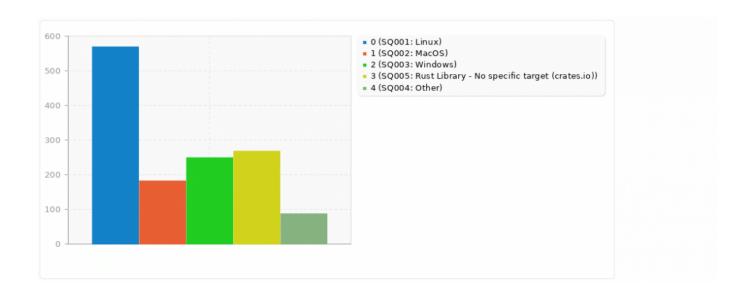


Which platforms (operating systems) do you target for Rust software. Check all that apply.

| Answer  | Count | Percentage |
|---|-------|------------|
| Linux (SQ001)   | 569   | 92.22%     |
| MacOS (SQ002)   | 182   | 29.50%     |
| Windows (SQ003)                                       | 249   | 40.36%     |
| Rust Library - No specific target (crates.io) (SQ005) | 268   | 43.44%     |
| Other (SQ004)   | 87    | 14.10%     |

# Summary for G02Q08

Which platforms (operating systems) do you target for Rust software. Check all that apply.



How do you or your team/community build or provide Rust software for people to use? Think about your build pipeline or deployment processes for this question.

| Answer  | Count | Percentage |
|---|-------|------------|
| Local use only (cargo build / cargo run) (SQ007)                            | 415   | 67.26%     |
| Containers, using rustup inside the builder (SQ001)                         | 217   | 35.17%     |
| Containers, using a packaged rust (dnf, zypper, apt, pacman, etc) (SQ002)   | 83    | 13.45%     |
| Packaged for a package manager (rpm, deb, brew, msi, pkg, dmg, etc) (SQ003) | 121   | 19.61%     |
| Provided as a library (source, crates.io) (SQ004)                           | 298   | 48.30%     |
| Other Process (SQ005)   | 131   | 21.23%     |
| Unknown (SQ006)   | 13    | 2.11%      |

#### Summary for G02Q05

How do you or your team/community build or provide Rust software for people to use? Think about your build pipeline or deployment processes for this question.

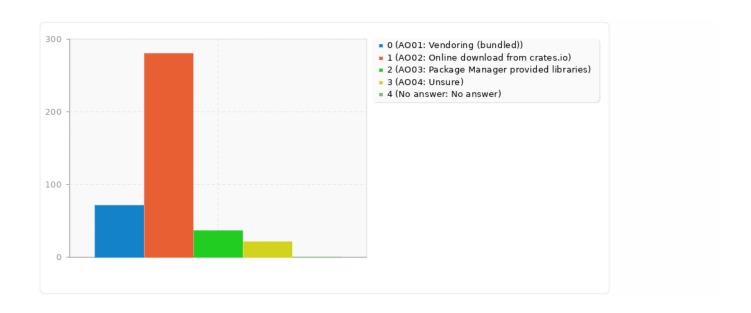


In your release process, how do you manage your Rust dependencies?

| Answer                                    | Count | Percentage |
|---|-------|------------|
| Vendoring (bundled) (AO01)                | 71    | 17.40%     |
| Online download from crates.io (AO02)     | 280   | 68.63%     |
| Package Manager provided libraries (AO03) | 36    | 8.82%      |
| Unsure (AO04)                             | 21    | 5.15%      |
| No answer                                 | 0     | 0.00%      |

# Summary for G02Q06

In your release process, how do you manage your Rust dependencies?

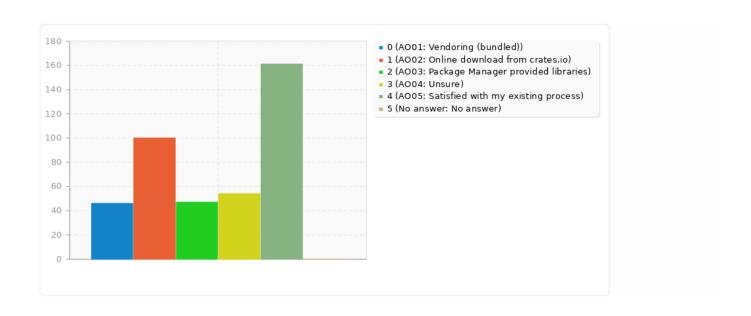


In your ideal workflow, how would you prefer to manager your Rust dependencies?

| Answer                                    | Count | Percentage |
|---|-------|------------|
| Vendoring (bundled) (AO01)                | 46    | 11.27%     |
| Online download from crates.io (AO02)     | 100   | 24.51%     |
| Package Manager provided libraries (AO03) | 47    | 11.52%     |
| Unsure (AO04)                             | 54    | 13.24%     |
| Satisfied with my existing process (AO05) | 161   | 39.46%     |
| No answer                                 | 0     | 0.00%      |

# Summary for G02Q09

In your ideal workflow, how would you prefer to manager your Rust dependencies?



How do you manage security updates in your Rust dependencies?

| Answer  | Count | Percentage |
|---|-------|------------|
| Security scanners (e.g. cargo audit) (SQ001)  | 254   | 50.80%     |
| Frequent update of all dependencies (e.g. cargo outdated) (SQ002)                   | 315   | 63.00%     |
| Don't actively follow security issues in dependencies (SQ003)                       | 126   | 25.20%     |
| Rely on external source to manage (ie distribution packaged rust libraries) (SQ004) | 40    | 8.00%      |
| Unknown (SQ005)   | 30    | 6.00%      |

# Summary for G02Q07

How do you manage security updates in your Rust dependencies?

