### Network Operators and Open Source Software Study

### Complete Survey and Results

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This document is one subsection of the Network Operators and Open Source Software project report. Full report available from <a href="https://possie.techark.org/">https://possie.techark.org/</a>

### Survey Mechanics and Full Results

### **Detailed Survey Report**

The following sections outline the background and detailed results from the Operator Open Source Software Survey.

### **Survey Mechanics**

Starting from the premise that this was an information-gathering exercise, as opposed to a rigorous information science study, the questionnaire was set up to capture as much information as possible. Respondents self-declared demographic information and were often asked to select "all that apply" for informational questions.

The questionnaire was offered using Google Forms, not requiring personal identification of respondents. The first choice respondents had to make was whether to fill out the "Individual Contributor" (IC) survey or the "Decision Maker" (DM). Several questions overlapped, but it was logistically unwieldy to create one survey that would fit both. It would have meant too many questions outright, several of which were not applicable to one or other group. In fact, respondents to either form were invited to fill out the other, if applicable, but it's not clear that anyone did.

### Advertising

Advertising of the survey project started with a lightning talk at NANOG 76 in Washington, DC, in June 2019. People were pointed at the webpage, which said the survey was "coming soon". Subsequent advertising was limited to social media (my own, and then boosts from friends who are much more influential in social media space!), a brief talk at the RIPE Open Source WG in Rotterdam in October 2019, and a posting on the NANOG mailing list.

All advertisements pointed to the <a href="https://possie.techark.org">https://possie.techark.org</a> website, which got 260 views in October and November, 180 of which included viewing the survey introduction/links page on the site.

#### Responses

With that, the survey ran from mid-October 2019 to the end of November 2019, and the final tally of responses exceeded project targets,<sup>1</sup> receiving a total of 48 responses:

- 34 responses for the Individual Contributor questionnaire
- 14 responses for the Decision Maker questionnaire

Contrary to advice that no one would fill out a survey form without prizes being offered, no prize was offered. From informal conversations, it seems that people were genuinely interested in the outcome of the survey, and therefore willing to contribute their thoughts.

#### (Potential) contexts or biases

Although the survey did not collect geographic information from respondents, it is clear from the identity of those who opted to share contact information that responses were collected from (at least) North America and Europe.

Respondents self-selected to provide answers, so it's clear that all respondents have at least some interest in OSS for their environment. The perspective shared can help paint a picture of what does and doesn't work for such a population. The collected responses don't, however, provide detailed insight into why operators may not be interested in or think of OSS at all.

### Individual Contributor Survey Results

### POSSIE Open Source Survey -- for individual contributors

This survey is gathering information about attractions and impediments to using, contributing to, and financially supporting Open Source Software.

There is a separate survey that is focused more particularly on OSS managers and corporate decision makers (URL was provided). Please complete whichever is more applicable, or both if you feel comfortable wearing either hat.

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<sup>&</sup>lt;sup>1</sup> The project target was 12 - 20 responses, total.

### Background

This section covers some simple demographics and calibrating questions about your context.

### 1. You are (please check all that apply)

- Working at a commercial network operator (ISP, backbone, IX, etc)
- Working in an enterprise network environment
- Working at a vendor (hardware or software)
- A network engineer
- A software developer
- A manager of technical staff
- Responsible for software development strategy
- Responsible for software tool acquisition and deployment

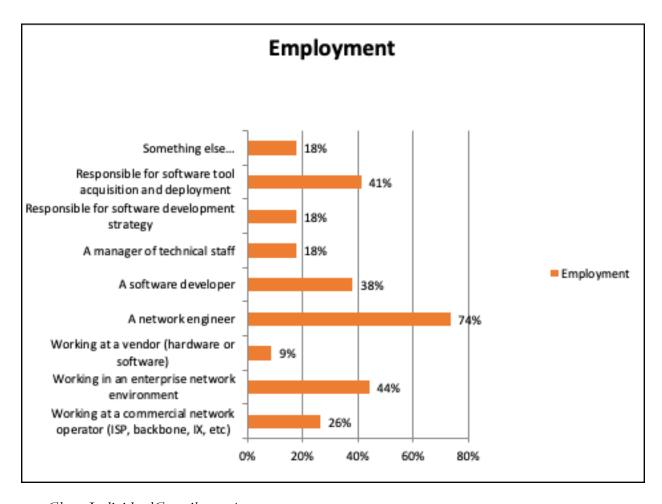


Chart IndividualContributor-1

### 2. Speaking for your own professional experience, you (check all that apply)

- Have never been actively involved in OSS software development
- Had some involvement in OSS a while back but stopped
- Have regularly been engaged in OSS projects for quite some time
- Occasionally choose to use OSS tools
- Choose to use OSS tools over commercial, whenever possible
- Refuse to use OSS software

#### 34 responses

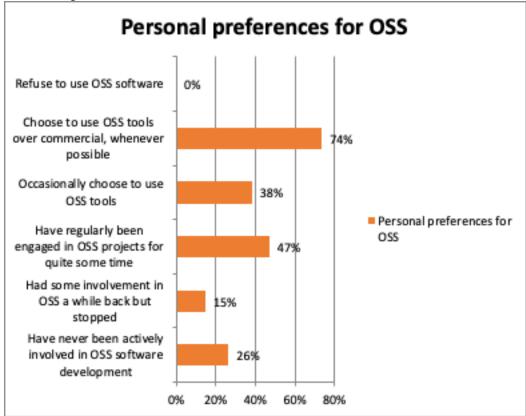


Chart IndividualContributor-2

## 3. The company that employs you, including self employment (check all that apply)

- Has never supported staff engaging in OSS development projects
- Supported some staff doing OSS development a while back but stopped
- Is considering supporting staff engaging in OSS development projects
- Has regularly supported staff engaging in OSS development projects for several years
- Has made financial contributions to OSS development platforms (e.g., Linux Foundation, Apache Foundation, GitHub, other)
- Has chosen not to make financial contributions to OSS development platforms

(e.g., Linux Foundation, Apache Foundation, GitHub, other)

- Uses OSS software regularly
- Has occasionally used OSS software
- Refuses to use OSS software
- Don't know/haven't asked



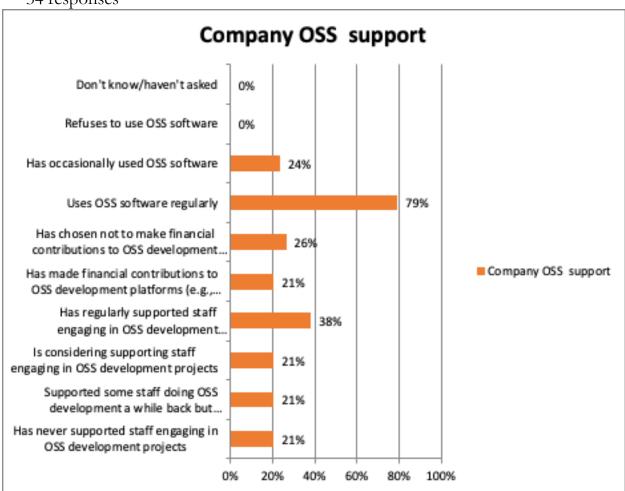


Chart IndividualContributor-3

#### Attractors

This section explores the general space of: what makes Open Source Software attractive -- to use and/or contribute to.

Please note that the questions come in pairs -- asking about your experiences with specific projects, and then with OSS projects in general.

# 4. If you were interested in a particular OSS tool, and all other things being equal, which of the following would you consider significant attractions to using the OSS tool

- The tool(s) to solve an operational challenge you have happen to be OSS
- When the industry standard tool/software happens to be OSS
- If it integrates well with my hardware vendor's software
- If it has paid support
- If it has a clear roadmap for future developments
- How recently contributions have been made
- Availability of helpful documentation
- Availability of active support discussion groups

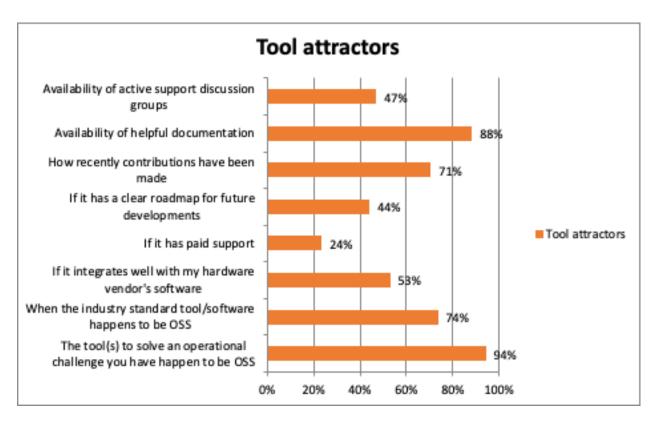


Chart IndividualContributor-4

## 5. Which of the following describe your organization's major attraction to using (existing) OSS tools? Select all that apply

- Getting software cheaply
- Having a codebase that is inspectable (unlike proprietary software tools)
- Getting a codebase that could be extended to the organization's need (I.e., without having to develop the whole thing in house)
- Prefer having community and self-support to commercial support
- Not applicable we don't generally use OSS

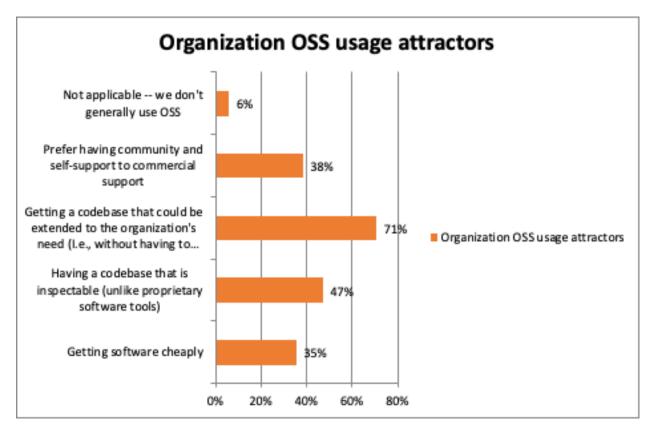


Chart IndividualContributor-5

### 6. All other things being equal, what attracts you to contributing to a specific OSS project (please select all that are most applicable)

- Not applicable -- you don't engage in OSS projects
- You need to tweak the OSS tool to suit your need
- You found a bug while using it -- fixed it, might as well submit the update
- There is a lively development community
- You know/respect the other developers on the project
- The project is clearly struggling and has a stagnant development community
- The project has an open and transparent governance structure

#### 34 responses

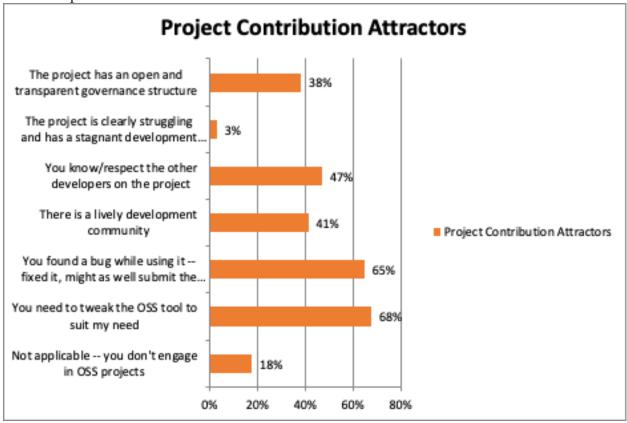


Chart IndividualContributor-6

## 7. Your purpose(s) in contributing to OSS projects includes (please select all that apply)

- Not applicable -- you don't engage in OSS projects
- Participating in OSS development has increased your skillsets and value
- You like to keep active outside of your employer's four walls
- You like the credit of being recognized as a contributor

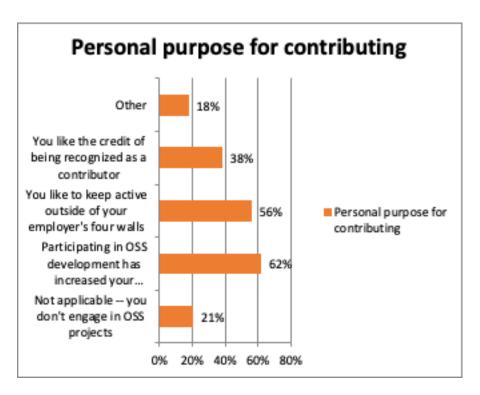


Chart IndividualContributor-7

### **Impediments**

This section explores the general space of: what impediments prevent or discourage using and/or contributing to Open Source Software.

Please note that the questions come in pairs -- asking about your experiences with specific projects, and then with OSS projects in general.

# 8. If you were interested in a particular OSS tool, and all other things being equal, which of the following would you consider significant impediments to using the OSS tool

- Can't actually find tools that are useful to me
- Lack of recent development on the project (abandonware)
- Don't know/trust the software development process/developers

- Unclear roadmap for future development
- Existing OSS tools don't align with open standards
- Lack of documentation for the software
- No service support (1-800 number, 24x7 responses, etc)
- Licensing (more on that later)
- Would take too much effort to tailor



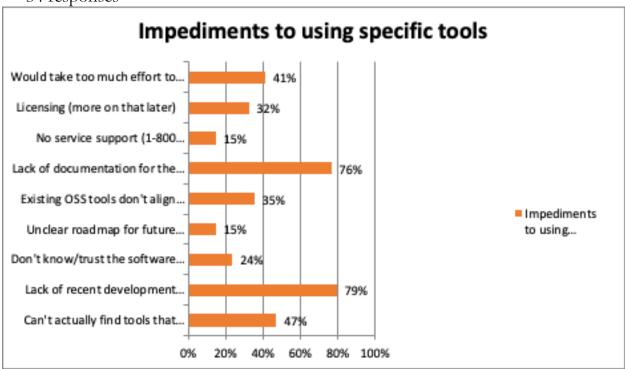


Chart IndividualContributor-8

### 9. Which of the following describe your major impediments to using (existing) OSS tools? Select all that apply

- Can't find OSS tools that solve my problems
- More than one OSS tool solves part of my problem but not all of it (too many

- choices but none is quite right)
- OSS tools that would solve my problem don't integrate with my vendor's software (lack of vendor integration)
- Don't trust OSS in general
- Can't find OSS with acceptable licensing (more questions on that later)
- Don't have the skillset or resources to validate, figure out, and configure OSS tools

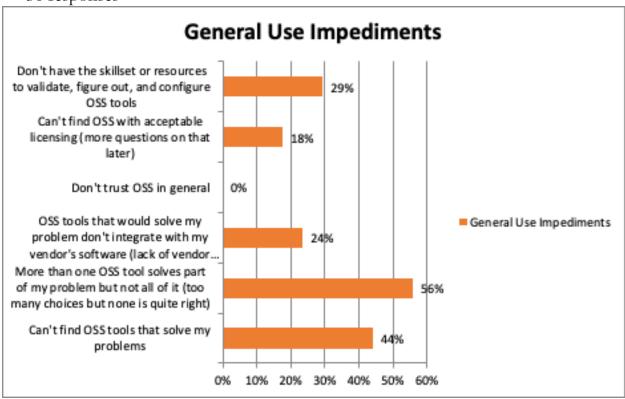


Chart IndividualContributor-9

# 10. If you were interested in a particular OSS project, and all other things being equal, which of the following would you consider significant impediments to contributing to the project (please select all that apply)

- Lack of skillset to contribute to the work
- Lack of recent development on the project (abandonware)
- Not happy with the project's governance structure
- Licensing (more on that later)
- Would take too much effort to tailor



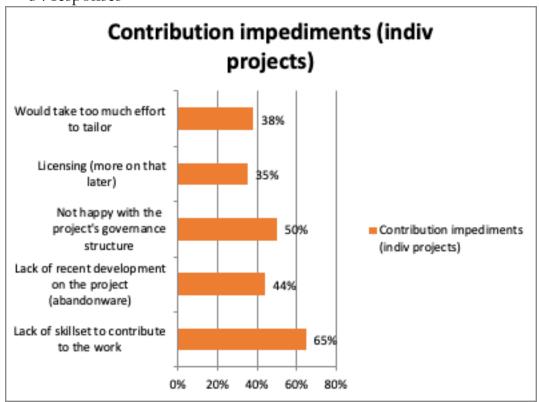


Chart IndividualContributor-10

### 11. What impediments do you face in contributing to OSS projects (please select all that apply)

- You and/or your management don't trust OSS in general
- You and/or your management don't see the value of contributing to external projects
- You just don't have the cycles to contribute
- You don't have any problems to solve with OSS
- You have no impediments to contributing to OSS projects



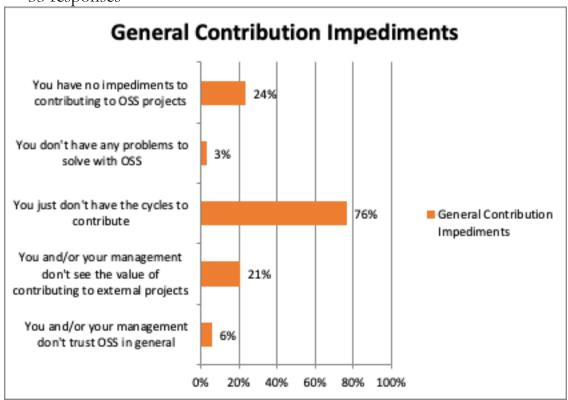


Chart IndividualContributor-11

### Requirements

This section explores any requirements you or your organization has for engaging in OSS projects.

### 12. What licensing requirements does your organization have for using OSS (Please pick the option that most closely matches your situation)?

- None
- The umbrella license for the project must allow reasonable and nondiscriminatory re-use of the code
- The umbrella license for the project must allow FREE reasonable and nondiscriminatory re-use of the code

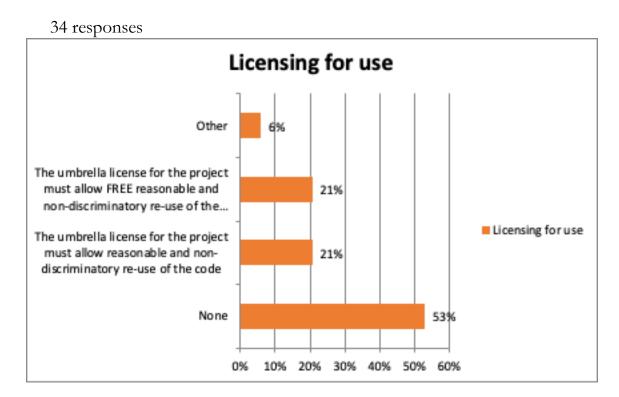


Chart IndividualContributor-12

# 13. What licensing requirements does your organization have for contributing code/coding resources to OSS (Please pick the option that most closely matches your situation)?

- None
- The umbrella license for the project must allow reasonable and nondiscriminatory re-use of the code
- The umbrella license for the project must allow FREE reasonable and nondiscriminatory re-use of the code



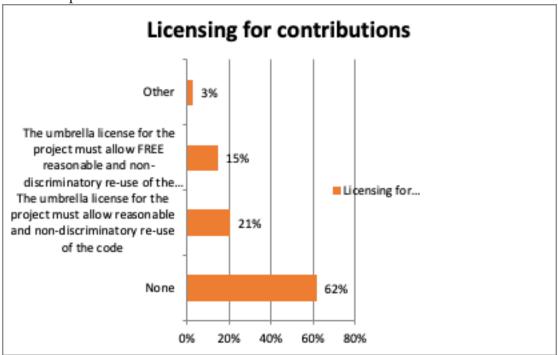


Chart IndividualContributor-13

- 14. What other (than licensing) requirements do you or your organization have for using OSS tools? These will be interpreted as impediments, or reasons not to use OSS, if the requirements can't be met (Please select all that apply)
  - None

- Require toll-free phone service for support (configuration)
- Require toll-free phone service for support (operation)
- Require 24x7 support availability



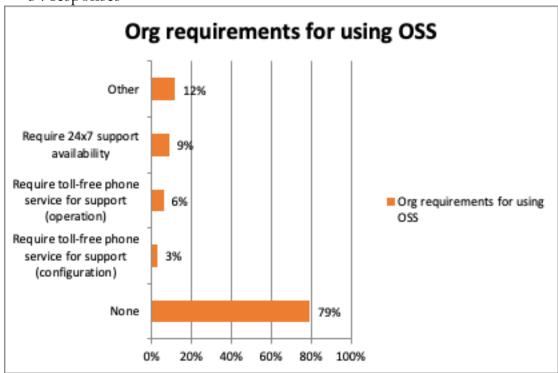


Chart IndividualContributor-14

# 15. What other requirements do you or your organization have for contributing to OSS projects (select all that apply)

- None
- Must be projects with other active contributors
- Must be projects with clear and published governance rules
- Must be projects within a designated platform (e.g., Linux Foundation, Apache, etc)

- Contributions must be acknowledged company
- Contributions must be acknowledge individual contributor
- Contributions must be anonymous

#### 32 responses

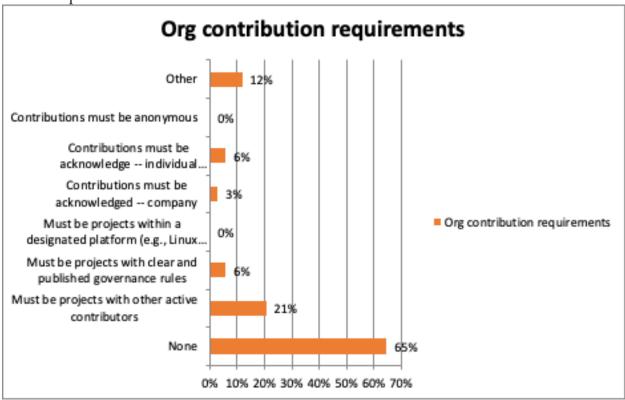


Chart IndividualContributor-15

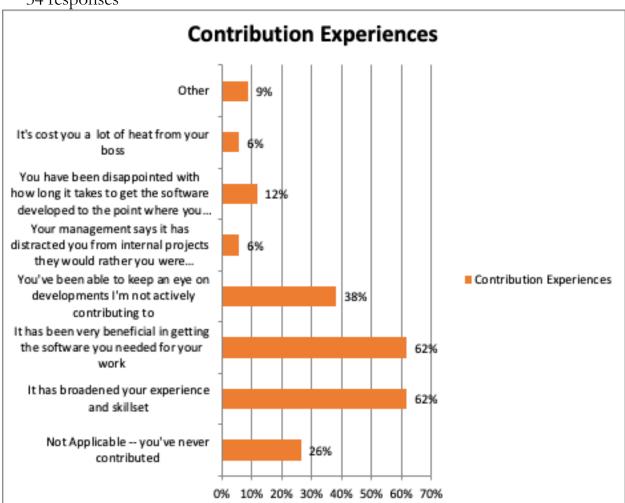
### **Experiences**

This section explores your, and your organization's, experiences in using and contributing to open source software.

## 16. Overall, which of the following best describe your experience in contributing to OSS projects (please select all that you feel strongly about)

• Not Applicable — you've never contributed

- It has broadened your experience and skillset
- It has been very beneficial in getting the software you needed for your work
- You've been able to keep an eye on developments I'm not actively contributing to
- Your management says it has distracted you from internal projects they would rather you were working on
- You have been disappointed with how long it takes to get the software developed to the point where you can use it for my group's work
- It's cost you a lot of heat from your boss



# 17. My experience in using OSS is best described by the following (please select all that are generally applicable)

- You have saved much time and resources by using OSS that your organization would not have been able to afford to buy or build
- You/your company have made use of the open nature of the source code of OSS tools to do security audits on the software before running it
- You have leveraged OSS, adjusting it in-house to meet the your specific needs (I.e., not contributing back any updates)
- You have occasionally had issues with relying on OSS that turned out to be abandonware
- You have often had issues with relying on OSS that turned out to be abandonware

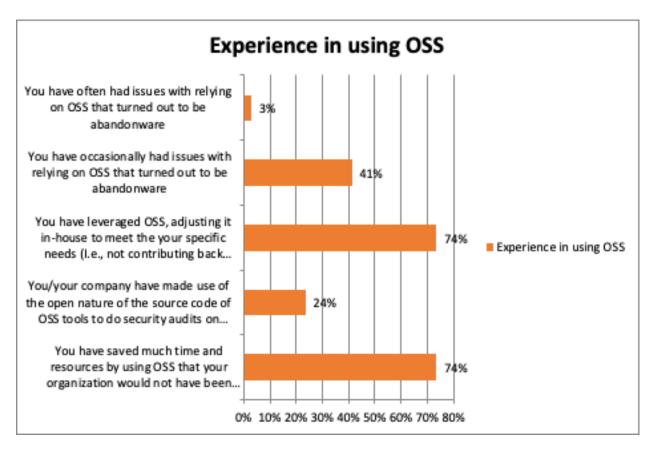


Chart IndividualContributor-17

### **OSS** in the Organizational Context

This section explores how OSS fits in to your organization's business workflow.

### 18. There is internal coordination at your organization to (please select all that apply)

- Keep track of OSS software that is in use/depended on
- Keep track of OSS software projects that are contributed to with engineering cycles
- Keep track of OSS software projects that are supported financially
- Manage participation go/no go; pull back; engage further?

#### Organizational coordination Manage participation -go/no go; pull back; engage 3% further? Keep track of OSS software 15% projects that are supported financially Organizational coordination Keep track of OSS software projects that are 21% contributed to with... Keep track of OSS software 35% that is in use/depended on 0% 10% 20% 30% 40%

#### 16 responses

Chart IndividualContributor-18

### **OSS Project Gaps**

This section probes the types of OSS projects of interest to you/your organization that you feel are currently underrepresented in the OSS landscape.

### 19. What problem areas are you interested in seeing addressed by (as yet nonextant) open source software (check all that apply)

- I would like to have OSS reference implementations of new open standards
- I would like to have a credible (reliable) OSS networking stack to ensure that new devices (e.g., IoT) have a decent likelihood of doing networking properly
- I would like to have more network configuration tools available in OSS
- I would like to have more network management tools available in OSS
- I would like to be able to configure and manage my entire network through a solid OSS package

#### Nothing



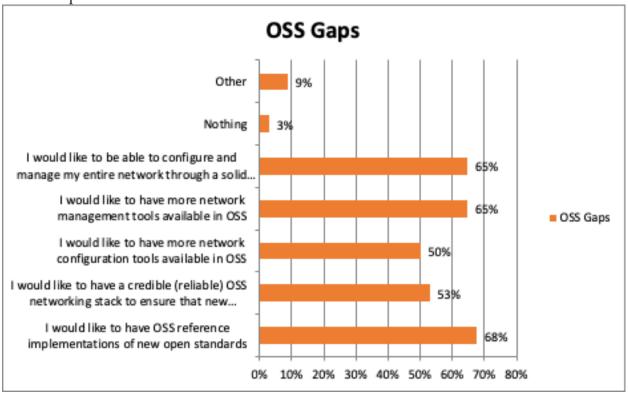


Chart IndividualContributor-19

### 20. Which of the following could solve an operations-critical problem for you today, if you could get an OSS package for it

- OSS reference implementations of new open standards
- A credible (reliable) OSS networking stack to ensure that new devices (e.g., IoT) have a decent likelihood of doing networking properly
- More network configuration tools available in OSS
- More network management tools available in OSS
- Ability to configure and manage my entire network through a solid OSS package

#### Nothing



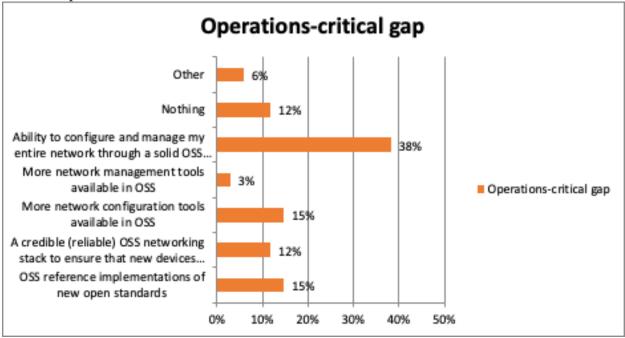


Chart IndividualContributor-20

### 21. Which of the following would you be interested in contributing to build

- OSS reference implementations of new open standards
- A credible (reliable) OSS networking stack to ensure that new devices (e.g., IoT) have a decent likelihood of doing networking properly
- More network configuration tools available in OSS
- More network management tools available in OSS
- A tool to configure and manage my entire network through a solid OSS package
- Nothing

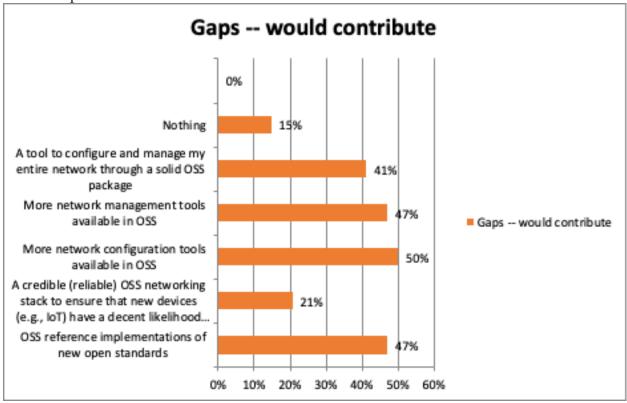


Chart IndividualContributor-21

## Composite views of Individual Contributor Perceptions of Gaps, Critical Gaps, and WIllingness to contribute

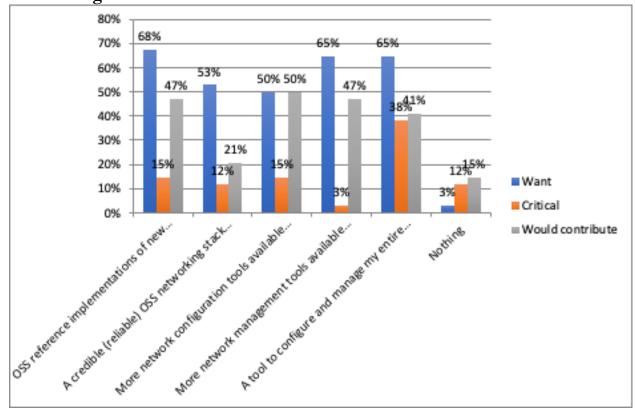


Chart IndividualContributor-22

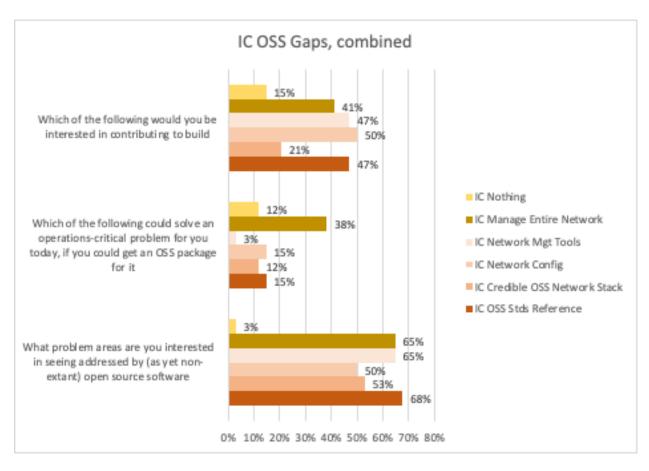


Chart IndividualContributor-23

Full report available at <a href="https://possie.techark.org">https://possie.techark.org</a>

### Decision Maker Survey Results

### POSSIE Open Source Survey -- for OSS decision makers

This survey is gathering information about attractions and impediments to using, contributing to, and financially supporting Open Source Software.

There is a separate survey that is focused more particularly on individual

contributors to OSS (URL was provided). Please complete whichever is more applicable, or both if you feel comfortable wearing either hat.

### **Background**

This section covers some simple demographics and calibrating questions about your context.

### 1. You are (please check all that apply)

- Working at a commercial network operator (ISP, backbone, IX, etc)
- Working in an enterprise network environment
- Working at a vendor (hardware or software)
- A manager of technical staff
- Responsible for software development strategy
- Responsible for software tool acquisition and deployment

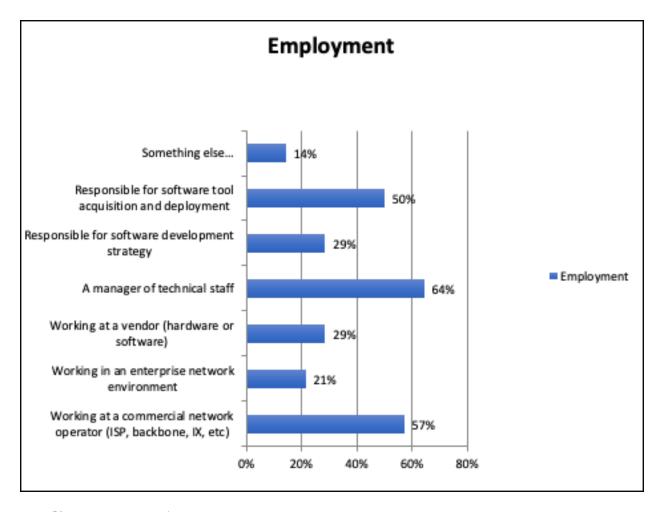


Chart DecisionMaker-1

## 2. Speaking for your own professional experience in managing technical resources/software implementation (check all that apply)

- Have never supported staff involvement in OSS software development
- Had some staff involved in OSS a while back but stopped
- Have regularly supported staff engaging in OSS projects for quite some time

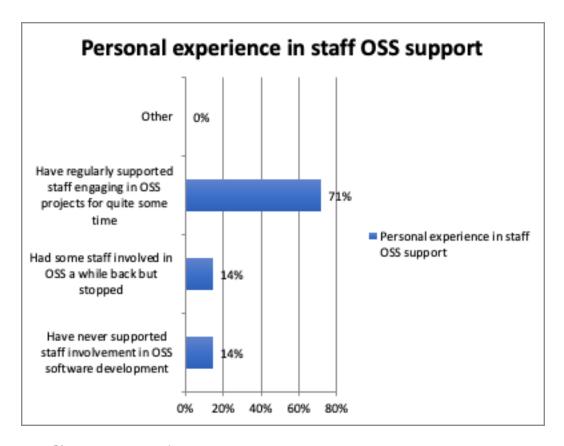


Chart DecisionMaker-2

3. Speaking for your own professional experience, how often do you use open source software in your infrastructure for each of the following functions?

#### Functions:

- Server OSes
- Server Monitoring
- Server Management
- Network OSes
- Network Management
- Other

### Rating for each function (choice):

- N/A -- you don't make these choices
- Never
- OSS is equiv to COTS
- OSS is available
- OSS only option

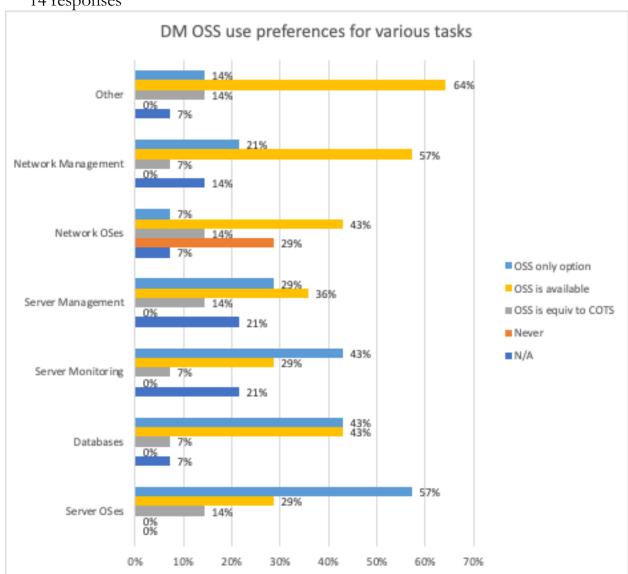


Chart DecisionMaker-3

# 4. The company that employs you, including self employment (check all that apply)

- Has never supported staff engaging in OSS development projects
- Supported some staff doing OSS development a while back but stopped
- Is considering supporting staff engaging in OSS development projects
- Has regularly supported staff engaging in OSS development projects for several years
- Has made financial contributions to OSS development platforms (e.g., Linux Foundation, Apache Foundation, GitHub, other)
- Has chosen not to make financial contributions to OSS development platforms (e.g., Linux Foundation, Apache Foundation, GitHub, other)
- Uses OSS software regularly
- Has occasionally used OSS software
- Refuses to use OSS software
- Don't know/haven't asked

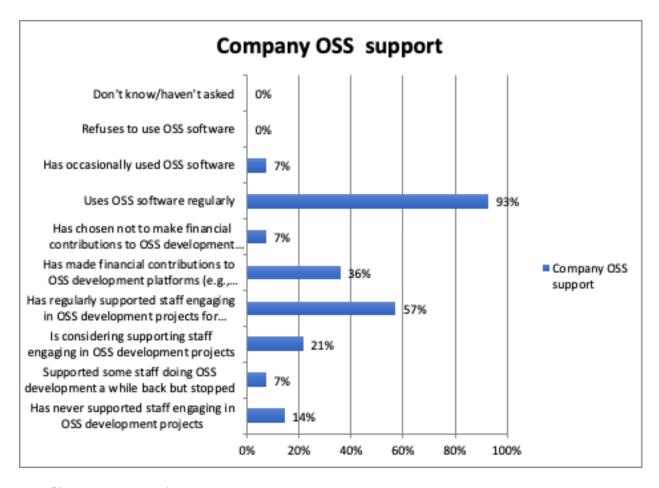


Chart DecisionMaker-4

### **Attractors**

This section explores the general space of: what makes Open Source Software attractive -- to use, contribute to, and/or support financially.

Please note that the questions come in pairs -- asking about your experiences with specific projects, and then with OSS projects in general.

- 5. If you were interested in a particular OSS tool, and all other things being equal, which of the following would you consider significant attractions to using the OSS tool
  - The tool(s) to solve an operational challenge you have happen to be OSS

- When the industry standard tool/software happens to be OSS
- If it integrates well with my hardware vendor's software
- If it has paid support
- If it has a clear roadmap for future developments
- How recently contributions have been made
- Availability of helpful documentation
- Availability of active support discussion groups



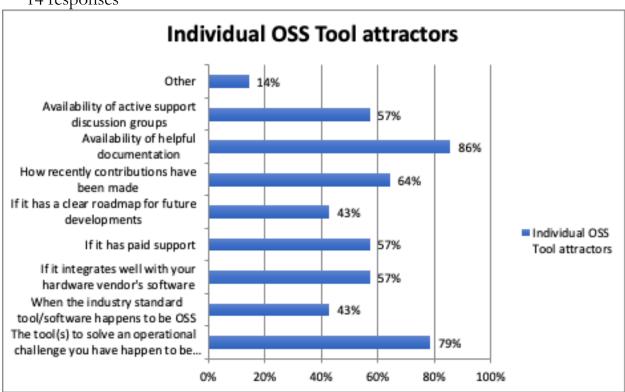


Chart DecisionMaker-5

## 6. Which of the following describe your organization's major attraction to using (existing) OSS tools? Select all that apply

- Pace of innovation is higher in OSS tools than proprietary software
- Getting software cheaply
- Having a codebase that is inspectable (unlike proprietary software tools)
- Getting a codebase that could be extended to the organization's need (I.e., without having to develop the whole thing in house)
- Not applicable we don't generally use OSS



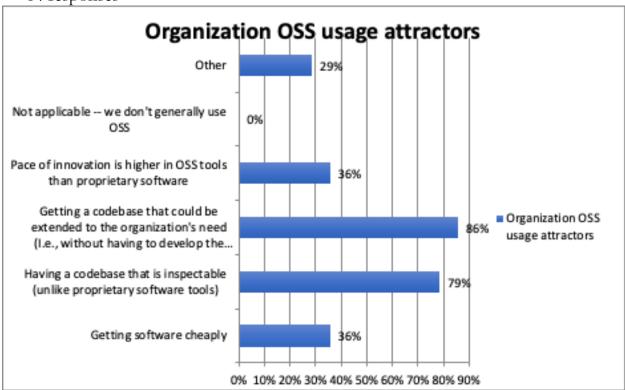


Chart DecisionMaker-6

## 7. All other things being equal, what attracts you to contributing engineering time to a specific OSS project (please select all that are most applicable)

- Not applicable -- the organization doesn't contribute engineering time to OSS projects
- The organization needs its engineers to contribute (to an OSS package of interest) code particular to the organization's needs
- If it is a requirement in order to be able to use the OSS codebase
- You were going to have to write the code in house, otherwise
- There is a lively development community
- You know/respect the other developers on the project
- The project is clearly struggling and has a stagnant development community
- The project has an open and transparent governance structure

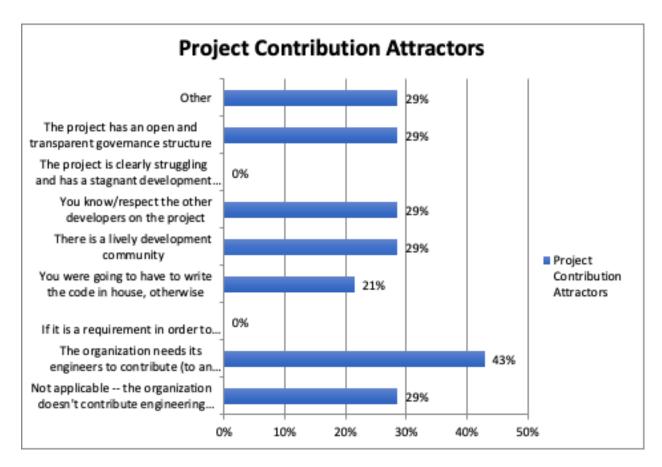


Chart DecisionMaker-7

# 8. The organization's purpose(s) in contributing engineering time to OSS projects includes (please select all that apply)

- Not applicable -- the organization doesn't contribute engineering time to OSS projects
- Participating in OSS development has increased the organization's engineers' skillsets and value
- Some engineers made it a requirement of employment
- Participating in industry open source software projects helps ensure industry alignment in areas of interest to the organization

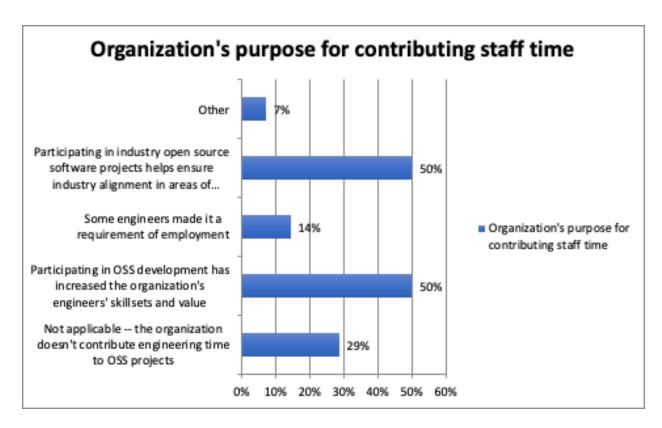


Chart DecisionMaker-8

# 9. The organization has provided financial support to specific OSS development projects/platforms because (please select all that apply)

- Not applicable -- the organization hasn't provided financial support
- Financial support was a requirement in order to gain access to the OSS codebase
- The organization believes in the OSS project and provided financial support to ensure its continued survival
- Financial support of the OSS project gave the organization more access to the governance of the project

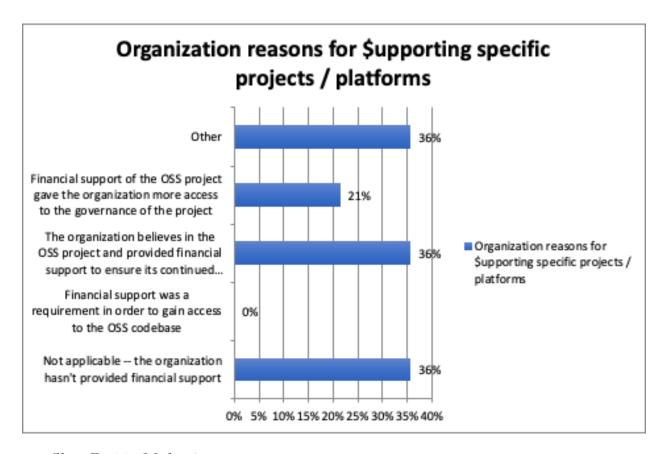


Chart DecisionMaker-9

# 10. The organization has generally provided financial support to OSS development projects/platforms because (please select all that apply)

- Not applicable -- the organization hasn't provided financial support
- To be a visible supporter
- Because our competitors were visible supporters

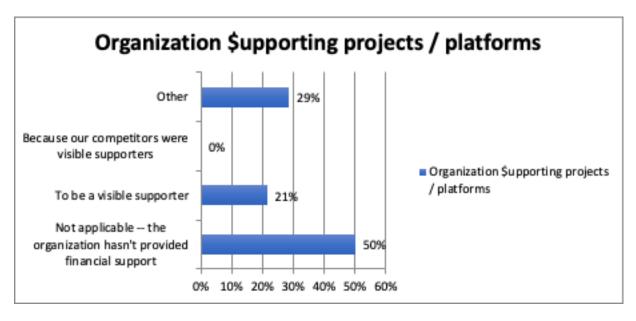


Chart DecisionMaker-10

## **Impediments**

This section explores the general space of: what impediments prevent or discourage using, contributing to, and/or providing financial support to Open Source Software.

Please note that the questions come in pairs -- asking about your experiences with specific projects, and then with OSS projects in general.

# 11. If you were interested in a particular OSS tool, and all other things being equal, which of the following would you consider significant impediments to using the OSS tool

- Can't actually find tools that are useful to me
- Lack of recent development on the project (abandonware)
- Don't know/trust the software development process/developers
- Unclear roadmap for future development
- Existing OSS tools don't align with open standards

- Lack of documentation for the software
- No service support (1-800 number, 24x7 responses, etc)
- Licensing (more on that later)
- Would take too much effort to tailor

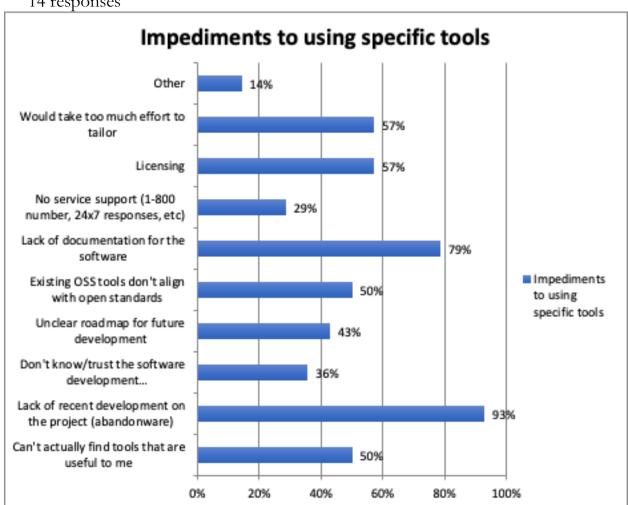


Chart DecisionMaker-11

# 12. Which of the following describe your major impediments to using (existing) OSS tools? Select all that apply

- Can't find OSS tools that solve my problems
- More than one OSS tool solves part of my problem but not all of it (too many choices but none is quite right)
- OSS tools that would solve my problem don't integrate with my vendor's software (lack of vendor integration)
- Don't trust OSS in general
- Can't find OSS with acceptable licensing (more questions on that later)
- Don't have in-house resources to validate, figure out, and configure OSS tools



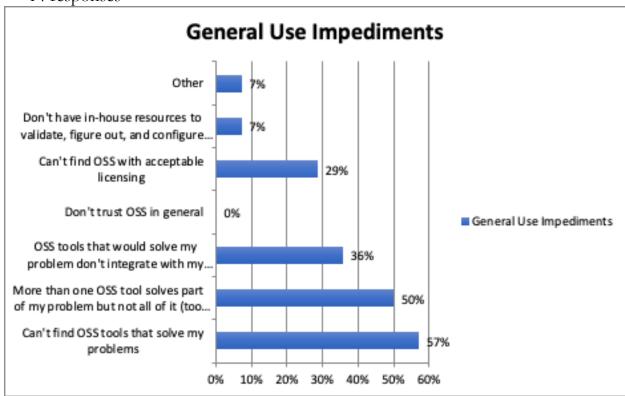


Chart DecisionMaker-12

- 13. If you were interested in a particular OSS project, and all other things being equal, which of the following would you consider significant impediments to contributing staff time to the project (please select all that apply)
  - Lack of properly-skilled in-house resources to contribute to the work
  - Lack of recent development on the project (abandonware)
  - Not happy with the project's governance structure
  - Licensing (more on that later)
  - Would take too much effort to tailor

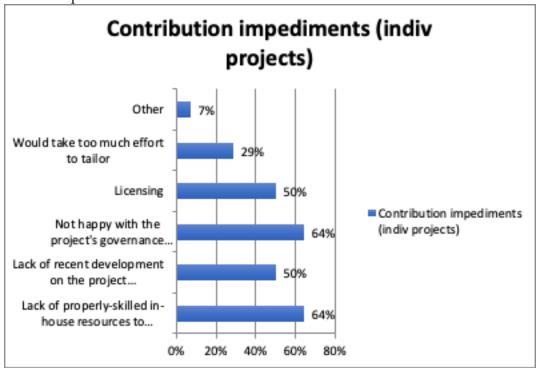


Chart DecisionMaker-13

## 14. What impediments do you face in contributing engineering resources to OSS projects (please select all that apply)

- I and/or my management don't trust OSS in general
- I and/or my management don't see the value of contributing to external projects
- I don't have people with requisite skills to assign to such projects
- People I might assign just don't have the cycles to contribute
- I don't have any problems to solve with OSS
- I have no impediments to contributing to OSS projects



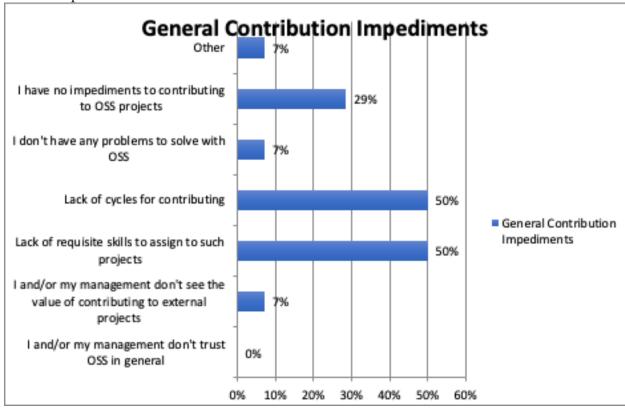


Chart DecisionMaker-14

# 15. Your decision not to (financially) support a particular OSS project is based on (select all that apply)

- I am already contributing staff resources, why would I contribute money as well
- Lack of transparency in the project accounting
- Lack of clarity about what the funding is needed for
- The project funding seems to be spent entirely on parties and pointless marketing exercises
- I'd love to support it but I don't have the financial resources



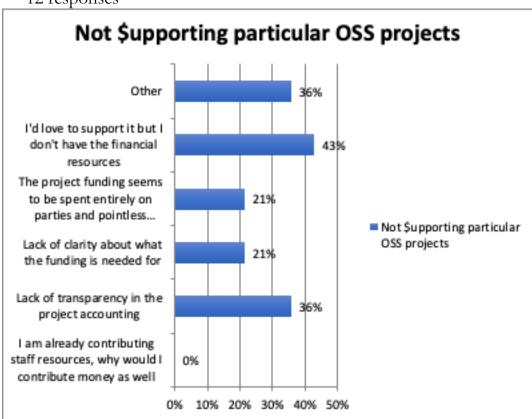


Chart DecisionMaker-15

# 16. You don't support OSS (financially), in general, because (please select all that apply)

- I would like to support some OSS projects, but I don't have funds to do so
- I don't have funds to support OSS projects, but I don't think they need the money anyway
- I don't care to advertise my company's support for OSS projects



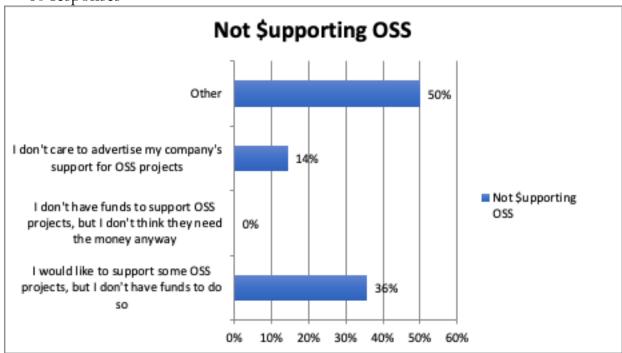


Chart DecisionMaker-16

## Requirements

This section explores any requirements your organization has for engaging in OSS projects.

# 17. What licensing requirements does your organization have for using OSS (Please pick the option that most closely matches your situation)?

- None
- The umbrella license for the project must allow reasonable and nondiscriminatory re-use of the code
- The umbrella license for the project must allow FREE reasonable and nondiscriminatory re-use of the code



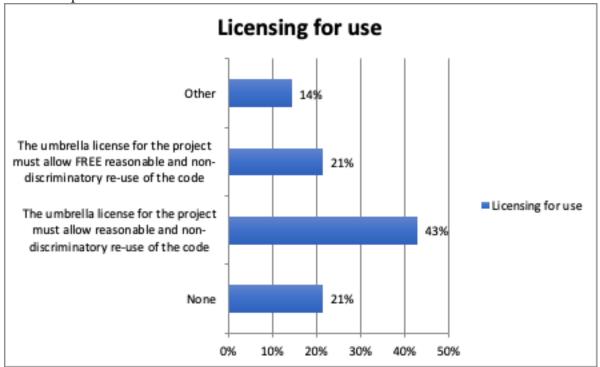


Chart DecisionMaker-17

# 18. What licensing requirements does your organization have for contributing code/coding resources to OSS (Please pick the option that most closely matches your situation)?

None

- The umbrella license for the project must allow reasonable and nondiscriminatory re-use of the code
- The umbrella license for the project must allow FREE reasonable and nondiscriminatory re-use of the code

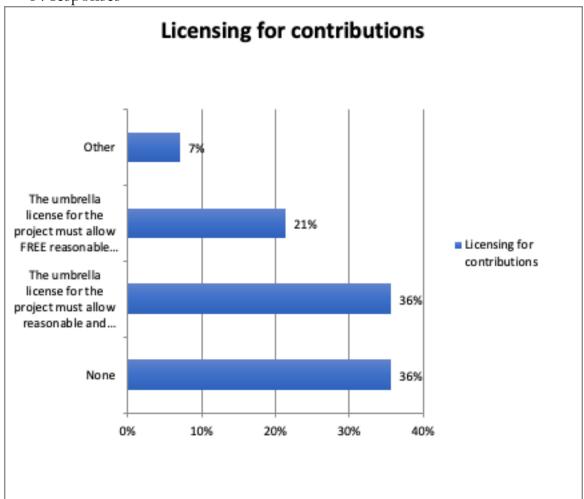


Chart DecisionMaker-18

- 19. What other (than licensing) requirements does your organization have for using OSS tools? These will be interpreted as impediments, or reasons not to use OSS, if the requirements can't be met (Please select all that apply)
  - None
  - Require toll-free phone service for support (configuration)
  - Require toll-free phone service for support (operation)
  - Require 24x7 support availability



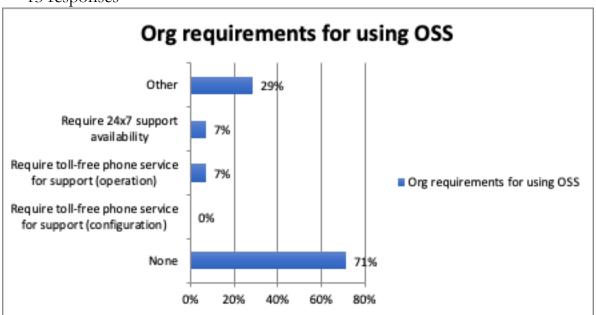


Chart DecisionMaker-19

- 20. What other requirements does your organization have for contributing coding resources to OSS projects (select all that apply)
  - None
  - Must be projects with other active contributors
  - Must be projects with clear and published governance rules

- Must be projects within a designated platform (e.g., Linux Foundation, Apache, etc)
- Contributions must be acknowledged company
- Contributions must be acknowledge individual contributor
- Contributions must be anonymous



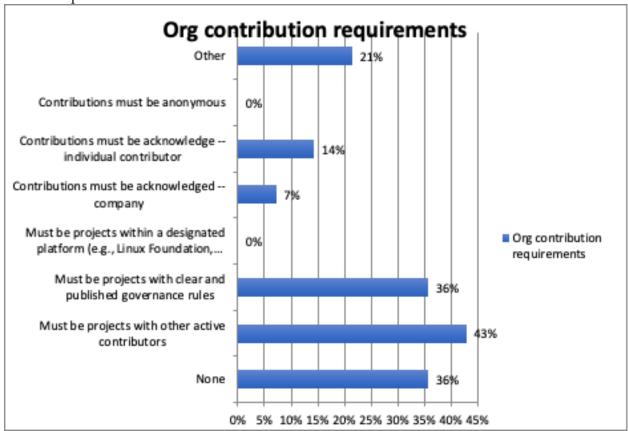


Chart DecisionMaker-20

## **Experiences**

This section explores your, and your organization's, experiences in using and contributing to open source software.

# 21. Overall, which of the following best describe your experience in contributing staff resources and/or money to OSS projects (please select all that you feel strongly about)

- Not Applicable I've never contributed
- It has broadened my staff's experience and skillset
- It has been very beneficial in getting the software I needed for my group's work
- I've been able to keep an eye on developments I'm not actively contributing to
- It has distracted my staff resources from internal projects I would rather have them working on
- I have been disappointed with how long it takes to get the software developed to the point where we can use it for my group's work
- It's cost me a lot of heat from my boss



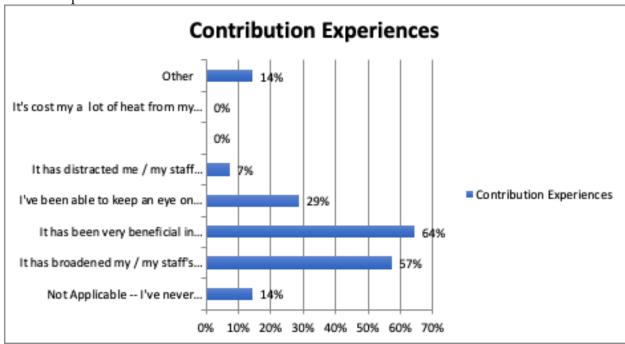
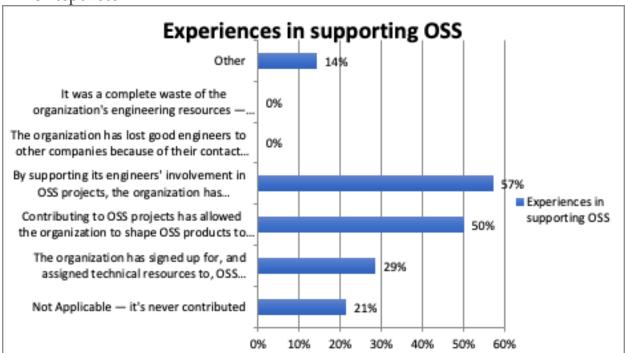


Chart DecisionMaker-21

# 22. In supporting OSS projects, which of the following best describe your organization's experiences (please select all that are generally applicable)

- Not Applicable its never contributed
- The organization has signed up for, and assigned technical resources to, OSS projects simply to keep an eye on the work as it develops (I.e., industry observation)
- Contributing to OSS projects has allowed the organization to shape OSS products to suit the organization's needs
- By supporting its engineers' involvement in OSS projects, the organization has benefited from the engineers' growth and expansion of experience
- The organization has lost good engineers to other companies because of their contact through OSS engagement
- It was a complete waste of the organization's engineering resources we never got anything usable from the OSS projects we engaged in





#### Chart DecisionMaker-22

# 23. My organization's experience in using OSS is best described by the following (please select all that are generally applicable)

- The organization has saved much time and resources by using OSS that it would not have been able to afford to buy or build
- The company has made use of the open nature of the source code of OSS tools to do security audits on the software before running it
- The organization has leveraged OSS, adjusting it in-house to meet the organization's specific needs (I.e., not contributing back any updates)
- The organization has occasionally had issues with relying on OSS that turned out to be abandonware
- The organization has often had issues with relying on OSS that turned out to be abandonware

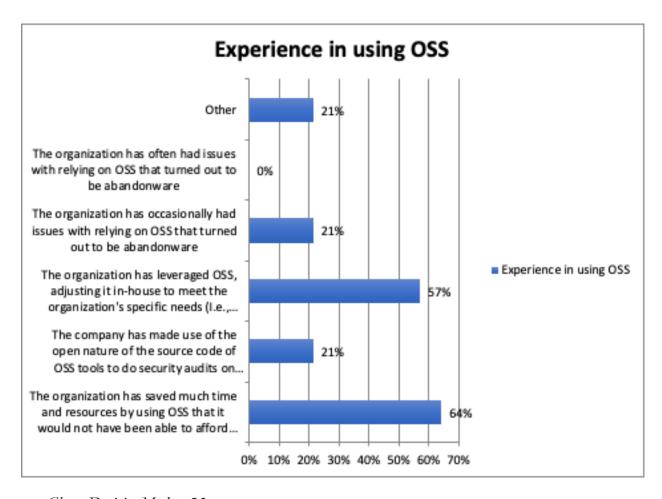


Chart DecisionMaker-23

## **OSS** in the Organizational Context

This section explores how OSS fits in to your organization's business workflow.

# 24. There is internal coordination at your organization to (please select all that apply)

- Keep track of OSS software that is in use/depended on
- Keep track of OSS software projects that are contributed to with engineering cycles
- Keep track of OSS software projects that are supported financially

Manage participation — go/no go; pull back; engage further?



### 12 responses

Chart DecisionMaker-24

0%

## **OSS Project Gaps**

This section probes the types of OSS projects of interest to you/your organization that you feel are currently underrepresented in the OSS landscape.

20%

40%

60%

80%

### 25. What problem areas are you interested in seeing addressed by (as yet nonextant) open source software (check all that apply)

- I would like to have OSS reference implementations of new open standards
- I would like to have a credible (reliable) OSS networking stack to ensure that new devices (e.g., IoT) have a decent likelihood of doing networking properly
- I would like to have more network configuration tools available in OSS

- I would like to have more network management tools available in OSS
- I would like to be able to configure and manage my entire network through a solid OSS package
- Nothing



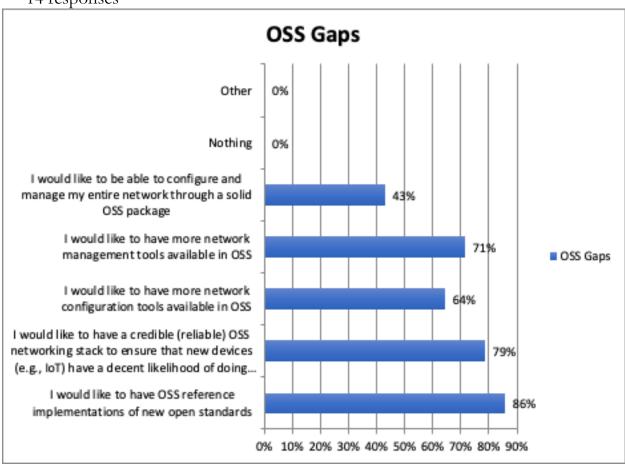


Chart DecisionMaker-25

# 26. Which of the following could solve an operations-critical problem for you today, if you could get an OSS package for it.

(Single choice allowed)

• OSS reference implementations of new open standards

- A credible (reliable) OSS networking stack to ensure that new devices (e.g., IoT) have a decent likelihood of doing networking properly
- More network configuration tools available in OSS
- More network management tools available in OSS
- Ability to configure and manage my entire network through a solid OSS package
- Nothing



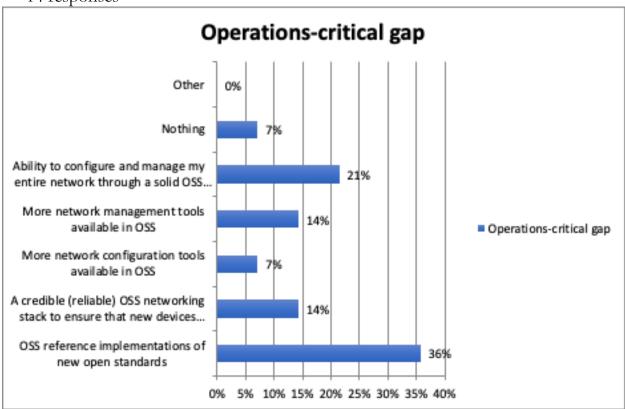


Chart DecisionMaker-26

# 27. Which of the following would you be interested in supporting (staff resources and or finances) to build

- OSS reference implementations of new open standards
- A credible (reliable) OSS networking stack to ensure that new devices (e.g., IoT) have a decent likelihood of doing networking properly
- More network configuration tools available in OSS
- More network management tools available in OSS
- A tool to configure and manage my entire network through a solid OSS package
- Nothing



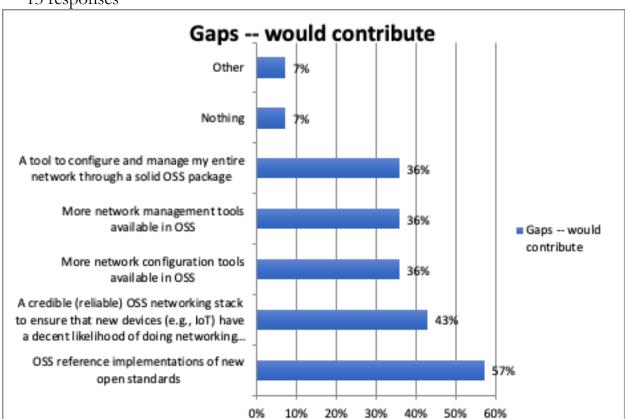


Chart DecisionMaker-27

Full report available at <a href="https://possie.techark.org">https://possie.techark.org</a>

Leslie Daigle

December 2020

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