

Project Report

*** indicates a required field**

Project Title

OpenLI - Open Source Lawful Interception

This question is read only.

Please provide a short summary of the work that was completed as part of this project / research *

OpenLI has met all the initial aims for the project. We have released the software, with several updates to add functionality and fix bugs. We have fully documented it and presented it at NZNOG, RIPE and LCA.

Since the grant, we have added an API for configuring captures, added encryption to secure communication between modules, added new encoding options to improve performance and added support for captures from Juniper BNGs.

OpenLI is now installed at several NZ ISPs although we do not have direct feedback from all of them to know the exact number.

We also have international uptake with an MVNO from Brasil now sponsoring the project and another contributor adding support for video streams.

Describe the 'who, what, where, when and why' of your initiative

Timing

Is your project / research complete? *

Yes No

If your initiative is still in progress, pick 'no'

When do you anticipate that your project / research will be completed?

Must be a date.

Leave blank if this is an ongoing initiative or if finish date is unknown

Milestones

What have been the major steps / stages (i.e. milestones) involved in delivering your initiative to date?

| Milestone | Description |
|----------------------------|--|
| release 1.03 - August 2019 | First new feature release since OpenLI was first released. |
| Apricot 49 -Feb 2020 | Presentation by Shane Alcock at Apricot |
| Release 1.04 Jan 2020 | Major new feature release including remote API control and some support for mobile systems |
| | |

| | |
|---|--|
| | |
| e.g. planning; major activities; evaluation | |

Outcomes

What outcomes were generated as a result of this project / research?

Outcomes are the changes that have occurred for the beneficiaries of your initiative. Generally outcomes can be framed as an increase or decrease in one or more of the following:

- Skills, knowledge, confidence, aspiration, motivation, (these are generally **immediate** or short-term outcomes)
- Actions, behaviour, change in policy (these are generally **intermediate** or medium-term outcomes)
- Social, financial, environmental, physical conditions (these are generally **long-term** outcomes)

Immediate outcomes occur directly following an activity (e.g. within 1 month); intermediate outcomes are those that fall between the immediate and long-term (e.g. between 1 month and 2 years); and long-term outcomes are those we expect to see years later (e.g. 2, 5, 10 or 50 years after the activity).

We also want to learn more about how you tracked the outcomes of your initiative - what you measured and how.

If you need more help understanding what outcomes are, read the help sheets at www.ourcommunity.com.au/evaluation

List your initiative's outcomes and attached information in the following table. Leave blank any fields that do not apply to your project.

| Outcome | Were these outcomes anticipated? | Timeframe | Indicator | Verification Method |
|---|----------------------------------|--|--|---------------------------------------|
| Software improvements | Anticipated | Long-term | Released software | on github |
| Uptake by NZ ISPS | Anticipated | Long-term | | Direct Feedback |
| Commercial support | Unanticipated | Long-term | | Direct communications |
| | | | | |
| Outcomes are the changes that you believe were generated or influenced by your initiative. See information above. | Choose from the list | Choose from the list (see description above) | What you used to measure this outcome - e.g. 'change in teenage pregnancy rates from x to y' | e.g. survey; interviews; focus groups |

What (if anything) did you change in your approach and practices as your project research proceeded, and why? *

Not really applicable to this project.

We may use this information to help inform others undertaking similar work

What did you learn as a result of undertaking this project/program? *

We have had strong support and take up by industry of the project. Apart from the mobile network operators, most NZ ISPs are now using OpenLI.

There are now at least two companies providing commercial services to ISPs to install and operate OpenLI instances.

Direct feedback from operators is that they want us to provide software support contracts so they can pay to ensure the long term stability of the software.

We are particularly interested in lessons that may help others undertaking similar work. Think about what you learned about your inputs (money, skills, personnel, time - too much; too little; about right?); your assumptions (were they 100% right, only partly right, or were the results a complete surprise?); and the context of the project/program (timing; targeted beneficiaries; geographic settings - were they right; wrong; about right?)

How will you share your learnings from this project/research? *

We have a website and have made presentations to operator meetings including NZNOG, RIPE and Apricot.

We have had some international interests with one operator in Brazil.

We now have received further funding from ISIF Asia to investigate and ensure that it is useful in the APAC region.

What mediums were used to share the learnings? Have you reached the audience you expected?

We'd love to see some visual and audio representations of your work. Please share below.

Upload files:

No files have been uploaded

and/or

Provide web link:

<https://openli.nz/>

Must be a URL

and/or

Provide additional details:

Code is available on github <https://github.com/wanduow/openli>

Please include captions, if relevant

Can we use your media content in our own communications?

Yes No Please contact us first
e.g. in our annual report

Financial Report

* indicates a required field

Project Income & Expenditure

Please provide details of any project income (funds received) and project expenditure (funds spent) to date.

Use the 'Notes' column to provide any additional information you think we should be aware of.

| Income Description | Income Type | Confirmed Funding? | Income Amount (\$) | Notes |
|----------------------------|----------------------|--------------------|--------------------|-----------------|
| NZ ISP Sponsors | Other Income * | Confirmed * | \$92,000.00 | 11 companies |
| International sponsorships | Other Income | Confirmed | \$15,000.00 | Datora - Brazil |
| Internet NZ | Philanthropic Grants | Confirmed | \$20,000.00 | This grant |
| NZIX | Philanthropic Grants | Confirmed | \$10,000.00 | |
| | | | | |

| Expenditure Description | Expenditure Type | Expenditure Amount (\$) | Notes |
|-------------------------|------------------------|-------------------------|---------------|
| Lead Programmer | Salaries and Wages * | \$120,000.00 | |
| Other Programmers | Salaries and Wages | \$40,000.00 | |
| Travel | Project and Production | \$10,000.00 | Presentations |
| | | | |

Income and Expenditure Totals

Total Income Amount **Total Expenditure Amount** **Income - Expenditure**

\$137,000.00

This number/amount is calculated.

\$170,000.00

This number/amount is calculated.

-\$33,000.00

This number/amount is calculated.

Have you experienced any issues with your intended project budget to date? If so, please explain reasons for any major variances or for providing incomplete information:

Extra expenses covered from University of Waikato research funding.

Certification and Feedback

Feedback

You are now nearing the end of this form. Before you review your application and click the **SUBMIT** button please take a few moments to provide some feedback. (If you would rather provide anonymous feedback, please go to **{{ Grantmakers: provide a link to an anonymous survey or delete this sentence }}**)

Please indicate how you found the acquittal process:

Very easy Easy Neutral Difficult Very Difficult

How many minutes in total did it take you to complete this form?

90

Estimate in minutes (i.e. 1 hour = 60 minutes)

Please provide us with your suggestions about any improvements and/or additions to this form that you think we need to consider:

The form is fine.