## Instructions for Grantees

This form is designed to help us understand the challenges, triumphs and insights you experienced and gained while running your funded project/program. Please be frank - while we absolutely want to know about and celebrate your successes, it's just important to us that we understand what did not work so well. This will help us to learn what we and others could do differently next time.

You must complete and submit this form no later than the date stipulated in your funding agreement. However, should you not be able to meet the deadline please contact Gertrud to arrange an alternative date. If you fail to do so you may not be eligible to apply for further grants from InternetNZ.

The completion of this form should be overseen by someone with an intimate knowledge of the funded project/program.

## Mid-project Report

#### **Research Title**

Longitudnal study of adoption of Top-level Domain (TLD) Names and Domain Name System Security Extensions (DNSSEC)

This question is read only.

### Amount of funding granted from InternetNZ?

\$10.000.00 Must be a dollar amount.

#### Please provide a short summary of the work that has been completed as part of this project/research

Our project was focused on understanding the evolution of DNS top-level domain names and security features. Our methodology was data-driven, where we collect DNS traces to understand the uptake of new top-level domain names, which have been approved by ICANN in recent years. Simultaneously we also focus on how these top-level domain names have adopted DNS security extensions. We have collected DNS traces and we are currently analyzing the top-level domain name adoptions and security features.

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

## When do you anticipate that your project will be completed?

31/05/2019

Must be a date.

Milestones

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

Milestone

#### Description

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DNS traces	We have collected DNS traces over several years to understand the evolution of top- level domain name use and the adoption of security extensions.
Analysis scripts	We have developed the base analysis scripts that would allow us to do complex analysis on the datasets. These scripts have allowed us to parse the pcap trace files, look at the respective fields, and produce charts.
Initial results	We have generated some initial results. We have looked at the usage of top-level domain names over the years. These results have been interesting at understanding the top-level domain name landscape on the Internet.
e.g. planning; major activities; evaluation	

## What findings have you made so far?

In our datasets, we have seen all the country code top-level domain names. We are noticing an exponential increase in the use of generic top-level domain names. We are also noticing the newly released generic top-level domain names in our datasets, although their frequency is low. We are also noticing a power-law distribution in the number of queries made for certain top-level domain names.

## What (if anything) did you change in your approach and practices as your project/ program/initiative proceeded, and why?

We are using well-defined measurement techniques. We started with data collection, scrutinizing the datasets, analyzing the datasets, and generating plots/charts to visualize our results. We are also using well-known statistical measures to analyze the datasets. Hence, the process has not changed from our initial planning phase.

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

# **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.

# Internet research 2017/18 Internet Research mid-year report Application IR170049 From Dr Aniket Mahanti

Income Description	Income Type	Confirmed Funding?	Income Amount (\$)	Notes
Internet NZ gran t	Other Income *	Confirmed *	\$10,000.00	Fund allocated b y Internet NZ for the project

Expenditure Type	Expenditure Amount (\$)	Notes
Salaries and Wages *	\$4,500.00	
Infrastructure and/or Hardware	\$750.00	
	Salaries and Wages * Infrastructure and/or	Amount (\$)Salaries and Wages *\$4,500.00Infrastructure and/or\$750.00

## Income and Expenditure Totals

### Total Income Amount

## Total Expenditure Amount Income - Expenditure

**\$10,000.00** This number/amount is calculated. \$5,250.00 This number/amount is calculated. \$4,750.00 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:

No, things are going as planned. We plan to expend the remaining allocated funds before completion of the project as our original plan.

## Certification and Feedback

## Feedback

You are almost at the end of our application process. Before **Submitting** your application, please take a few moments to provide some feedback.

## Please indicate how you found the acquittal process:

 $\circ$  Very easy  $\circ$  Easy  $\circ$  Neutral  $\circ$  Difficult  $\circ$  Very Difficult

# Internet research 2017/18 Internet Research mid-year report Application IR170049 From Dr Aniket Mahanti

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

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: