Online Tracking and Privacy

Capita Selecta in Cyber Security - NWI-IMC074

Lecture 11

15 May 2024

Güneş Acar - Digital Security group

Radboud University

Agenda

- Housekeeping

- Guest lectures

Housekeeping - Assignment 2

- Feedback session after today's lecture

  - 15 May, 15:30-16:15 (Mercator I 03.01)

Housekeeping - Assignment 3

- ℹ️ Grade weight: ~~3.5~~ **4**/10 of the final grade
- ⏱️ Group presentations: 22 and 29 May
  - ⚠️ Submit the slides before your presentation
- ⏱️ Individual reviews due: 29 May
  - Please mention your group name
- ⚠️ Follow the timeline given in the ✔️ Checklist

Assignment 3 - Group presentations

1. Paper 1: Group A3 14
2. Paper 2: Group A3 1
3. Paper 3: Group A3 3
4. Paper 5: Group A3 17
5. Paper 6: Group A3 15
6. Paper 7: Group A3 16
7. Paper 8: Group A3 5
8. Paper 10: Group A3 10

1. Paper 9: Group A3 2
2. Paper 1: Group A3 9
3. Paper 4: Group A3 18
4. Paper 5: Group A3 7
5. Paper 6: Group A3 4
6. Paper 7: Group A3 13
7. Paper 8: Group A3 12
8. Paper 9: Group A3 8
9. Paper 10: Group A3 11

Outlook

- Web, mobile, connected home devices (IoT)

- What else do we have tracking/analytics/telemetry:

    - Desktop programs

    - AI companions?

    - Programming languages?

Ultra-wide
12MP camera

Google's Go may add telemetry that's on by default

Some devs object because they don't trust Mountain View

Thomas Claburn

Russ Cox, a Google software engineer steering the development of the open source Go programming language, has presented a possible plan to implement telemetry in the Go toolchain.

However many in the Go community object because the plan calls for telemetry by default.

These alarmed developers would prefer an opt-in rather than an opt-out regime, a position the Go team rejects because it would ensure low adoption and would reduce the amount of telemetry data received to the point it would be of little value.

https://www.theregister.com/2023/02/10/googles_go_programming_language_telemetry_debate/

telemetry in the Go toolchain #58409

💬 Closed   🔒 Locked   **rsc** announced in **Discussions**

rsc on Feb 8, 2023   ⟨Maintainer⟩   edited by ianlancetaylor ⌄   •••

Feb 10 5pm US Eastern: Thanks for the lively discussion everyone. It has given me plenty to think about. We are starting to go in circles, and actually new comments are increasingly rare, so I've locked this to give everyone their weekend back. Thanks again.

If anyone feels like there's something important that wasn't said in these 506 comments, please feel free to email me at rsc@golang.org.

Feb 26 The current plan is to use some form of opt-in to collect telemetry.

How do software developers understand which parts of their software are being used and whether they are performing as expected? The modern answer is *telemetry*, which means software sending data to answer those questions back to a collection server.

I believe that open-source software projects need to explore new telemetry designs that help developers get the information they need to work efficiently and effectively, without collecting invasive traces of detailed user activity.

I have written a short series of blog posts about one such design, which I call *transparent telemetry*, because it collects as little as possible (kilobytes per year from each installation) and then publishes every bit that it collects, for public inspection and analysis.

I'd like to explore using transparent telemetry, or a system like it, in the Go toolchain, which I hope will help Go project developers and users alike. To be clear, I am only suggesting that the instrumentation be added to the Go command-line tools written and

Category

🦕 Discussions

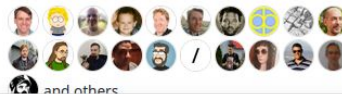**Labels**

None yet

126 participants

[participant avatars]

and others

Create issue from discussion

The original post will be copied into a new issue, and the discussion will remain active.

OK, got it!

⊙ Create issue from discussion

means that as new systems are added to the system, each system reports less often. With a conservative estimate of two million Go installations, about 16,000 reporting each week corresponds to an overall reporting rate of well under 2% per week, meaning each installation would upload a report on average less than once per year.

- The aggregate computed metrics are made public in graphical and tabular form.

- The full raw data as collected is made public, so that project maintainers have no proprietary advantage or insights in their role as the direct data collector.

- The system is on by default, but opting out is easy, effective, and persistent.

Please read the [introductory blog post](#) for more background before commenting here. You may also want to check out the [detailed design](#) and [list of use cases](#).

| ↑ 43 | 👍 159 | 👎 512 | 😄 4 | 😕 50 | ❤️ 40 | 🚀 4 | 👀 6 |

95 comments · 394 replies | Oldest | Newest | Top |

Stolas on Feb 8, 2023   edited ▾   ···

Should be off by default. There is no reason for a development chain to have any kind of telemetry on by default.
Or, as I do understand the need for it to be on by default, it should check what the user wants on first start.

One reason it should be off by default would be cases such as Jenkins farms, Bazel use, and other locations that arnt your regular development environment.

| ↑ 89 | 👍 284 | 👎 23 | 😕 5 | 23 replies

Feedback

- Please fill in the course evaluation forms

- What subjects do you want to be covered?

  - Privacy issues with GenAI, chatbots

  - Tracking by desktop programs

  - …

- What did you like and not like in the assignments in the lectures?

Guest lecture 1/2

Targeted and Troublesome: Tracking and Advertising on Children's Websites
WARNING: Contains potentially NSFW images

Zahra Moti
Radboud University

Asuman Senol
imec-COSIC, KU Leuven

Hamid Bostani
Radboud University

Frederik Zuiderveen Borgesius
Radboud University

Veelasha Moonsamy
Ruhr University Bochum

Arunesh Mathur
Independent Researcher

Gunes Acar
Radboud University

Zahra Moti

Guest lecture 2/2

Christine Utz

Privacy Rarely Considered: Exploring Considerations in the Adoption of Third-Party Services by Websites

Christine Utz
CISPA Helmholtz Center for
Information Security
Saarbrücken, Germany
christine.utz@cispa.de

Sabrina Amft
CISPA Helmholtz Center for
Information Security
Hannover, Germany
sabrina.amft@cispa.de

Martin Degeling
Ruhr University Bochum
Bochum, Germany
martin.degeling@rub.de

Thorsten Holz
CISPA Helmholtz Center for
Information Security
Saarbrücken, Germany
holz@cispa.de

Sascha Fahl
CISPA Helmholtz Center for
Information Security
Hannover, Germany
fahl@cispa.de

Florian Schaub
University of Michigan
School of Information
Ann Arbor, Michigan, USA
fschaub@umich.edu