



Phone-Home PDF Documents

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Motivation

PDF documents are commonplace on today's internet, serving as the main standard for sending immutable documents. However, passing files around is always tricky – what if they are forwarded to someone else? What if someone feeds it to some external tool, like an LLM, violating data protection regulations?

We want to investigate to what extent we can make PDF documents “phone home”; notifying us that they were opened. Here, we want to focus on two prongs:

- > Personal-use PDF viewers (such as Adobe Reader)
- > AI tools (such as ChatGPT)

We want to investigate to what extent we, as authors, could notice that these tools have opened our document. Could we leave clever callbacks in the document that generate a ping-back to servers we control?

Goals and Tasks

-  Get familiar with the PDF standard
-  Think of ways we could use it to phone home
-  Test them out experimentally



Not like this. Probably.

Literature

- > [ISO Central Secretary](#)
Document management – Portable document format – Part 2: PDF 2.0
[ISO 32000-2:2020](#)
<https://www.iso.org/standard/75839.html>

Courses & Deliverables

- ☒ **Introduction to Scientific Working**
Short report on background
Short presentation
- ☒ **Bachelor Project**
Project code and documentation
- ☒ **Bachelor's Thesis**
Project code
Thesis
Final presentation

Recommended if you're studying

- ☒ CS ☒ ICE ☒ SEM

Prerequisites

- > Interest in practical privacy
- > Orthogonal thinking

Advisor Contact

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