

INFORMATION LETTER

Research title: Analysing LAN Behavior of Mobile Apps

Name and contact information supervisor and researcher(s):

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GENERAL OBJECTIVES OF THE RESEARCH

Our goal is to study how Android apps access the local network, and whether they do so for benign or malicious purposes. Apps that access the local network might only do so in certain scenarios. For example, a text editor might only scan the local network for printers when the user presses the print button. Apps with malicious intent might try to hide their behavior by only performing malicious actions after the user has used the app for some time.

For us to do a trustworthy analysis of both benign and harmful app behavior, it is thus required that analyzed apps are used by a human in a real-world context. By taking part in our user study, you'll give feedback to us on which apps try to interact with the local network by using an Android app developed by us, **LANShield**.

The LANShield app serves two purposes. First, it allows you, the user, to get insight on local network interactions by other apps on your device, and to possibly block this access if desired. Second, our app gives you the option to take part in our user study, where information is shared with us on local network access by the apps on your device.

INFORMATION ABOUT THE PROCESSING OF YOUR PERSONAL DATA

As a result of your participation in this study, personal data relating to you will be collected and processed. This processing will be done in accordance with the General Data Protection Regulation (GDPR). The following category of personal data will be processed during this study: the local network usage patterns of apps installed in an Android device.

Use of your personal data

Only personal data required for the purposes of this study will be collected and processed. Data collected for this study will be pseudonymized. This means that data that can identify you such as the model and brand of your mobile device will be separated from the other data in the study and replaced by a unique random code based on a cryptographic hash. In this way, the data can no longer easily be attributed to a specific data subject. You will not be identified in publications arising from the research.

The data will be processed on the basis of public interest. This means that the research will lead to advances in knowledge and generate insights that (directly or indirectly) benefit society. Ending your participation in the study means that the previously collected data can still be legally involved in the study and does not have to be deleted by KU Leuven.

Your data will be kept by the researchers for 10 years after the end of the study at a secure storage location at KU Leuven.

Your rights

You have the right to ask for more information about the use of your data. In addition, you may exercise the right to access and the right to rectify your data unless exercising these rights would render impossible or seriously impair the achievement of the research objectives.

If you wish to invoke any of these rights, please contact the researchers using the contact information at the top of this letter.

Reuse of your data

It may be possible that your pseudonymized data will be reused for scientific research by:

- Researchers and/or academic partners working with or receiving data from KU Leuven (including - under certain conditions - a master's or doctoral student),

Being able to make data available is essential for validating research findings and advancing scientific knowledge.

In case of reuse of your data, the necessary contractual arrangements will always be made to protect the personal data and determine the responsibilities and liabilities of the parties in accordance with relevant legislation.

In the context of re-use, your personal data may be transferred outside the European Economic Area, provided that appropriate measures have been taken to protect your personal data in accordance with the relevant legislation. In particular, such data will in principle only be transmitted in pseudonymized form, and all parties involved in the research will be obliged to respect the confidentiality of the personal data.

There will be transparent information about any reuse of your data. You will be notified of data reuse by a notification through the LANShield app and a message on our website, <https://lanshield.eu>.

Any reuse will always take place in accordance with the applicable legislation and in accordance with the relevant KU Leuven policy. This policy means, among other things, that an independent body will monitor the protection of personal data and your rights.

Note that your pseudonymized data may also be made available on certain data platforms for further scientific research under strictly secured and controlled access conditions. This may happen, for example, in the context of publications of the study results. The data platform provides an access policy and undertakes to regulate access to data in accordance with applicable legislation.

Contact details

For the purposes of this research, KU Leuven is the data controller. More specifically, only the researchers involved, Jeroen Robben, Angelos Beitis, Vik Vanderlinden and Mathy Vanhoef, will have access to your personal data. Should you have any specific questions about this study, including the processing of your personal data, please feel free to contact them.

For further questions and concerns regarding the processing of your personal data, please contact the Data Protection Officer for scientific research at KU Leuven (dpo@kuleuven.be). When doing so, please specify the study concerned by mentioning the title as well as the names of the researchers involved.

If, after contacting the data protection officer, you would still like to lodge a complaint about the use of your personal data, you can contact the Belgian Data Protection Authority (www.gegevensbeschermingsautoriteit.be).