PROJECT INFORMATION

University of Nottingham
UK | CHINA | MALAYSIA

Date: 24/05/2021
Project: TANSEC Multifactor authentication study
School of Computer Science Ethics Reference:
Funded by: PETRAS

Purpose of the research. This study investigates new approaches to multi-factor authentication (i.e., using multiple means to verify that a user is allowed to perform a privileged task). The study presents a set of solutions that embed secrets within common household objects (such as tables, noticeboards, shelves, mirrors, pen pots). These secrets are used as a part of the process to permit users to perform tasks on their home network and smart devices, such as, for example, setting up a virtual private network (VPN).

Nature of participation. Participation in the research is voluntary and relies on the participant providing data through an online questionnaire.

Participant engagement. In taking part in this study, participants will first be asked two general questions about their security experience and the type of household they live in. They will then be presented with nine different solutions and will be asked a set of structured questions on each. These questions relate to a participant's perceptions on a solution's security and how easy it is to understand and use.

Benefits and risks of the research. This work will investigate whether household objects used in authentication is an acceptable and understandable approach to multifactor authentication. It will gather user perceptions and reactions to a range of solutions and determine whether there are a set of features of the solution that are more promising and warrant further study. This research may therefore result in new approaches to multifactor authentication that are both secure and usable and which may offer better approaches than those currently in use. There is very little risk involved in participating in this research. No personal identifiers are recorded during this research and no participants can be identified unless personal information is entered in response to free text questions (in which case it will be anonymised).

Use of your data. Aggregate results of the work will be discussed amongst a small group of researchers involved in the project. The results of the research will be disseminated in publications and presentations, but it will not be possible to identify any study participants in this material.

Future use of your data. The data may be archived and reused in future for purposes that are in the public interest, or for historical, scientific or statistical purposes.

Procedure for withdrawal from the research. You may withdraw from the study at any time and do not have to give reasons for why you no longer want to take part. If you wish to withdraw please contact the researcher who gathered the data, this can be done via email: thomas.lodge@nottingham.ac.uk. Because we do not seek any identifying information, you will need to provide the randomly generated identifier that

was created at the point that you undertook the study, so that we can locate your responses and delete them. If you receive no response from the researcher please contact the School of Computer Science's Ethics Committee.

This research is being conducted by a researcher in the Horizon Centre for Doctoral Training. It has been reviewed and approved by the University of Nottingham, School of Computer Science Research Ethics Committee.

Contact details of the ethics committee. If you wish to file a complaint or exercise your rights you can contact the Ethics Committee at the following address: cs-ethicsadmin@cs.nott.ac.uk