

Definition of Bachelor Thesis Project

WhatsApp in a Box

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Assignment Using today's messengers, i.e. WhatsApp seems to be a must in order to be able to participate in the western community, whereas WeChat is a must in China. The problem of such apps is their obvious lack of transparency in terms of security and privacy. This way, this thesis is building a true messenger relay, in a way oblivious to the operator of the app but fully operational for the user. This requires the targeted app running on real hardware with a somewhat realistic simulation of its surrounding.

In particular, this thesis tries to accomplish the following:

- A hardware setup that allows a true smartphone operating in a safe environment providing the service of the app in question, i.e. WhatsApp
- A software setup that allows any authorized user to access the smartphone from a distant without jeopardizing the user's privacy
- Providing as many services via this access line to be used from the remote user

Additionally, this thesis shall elaborate on the following:

- The possibility to allow a multi user access to the app operated at distance
- Hardware tweaks that allow the simulation of true movement i.e. acceleration, gyroscope, barometer, power supply, in order to deceive the 'virtualization'-checks made by the app in question
- Different fields of operation, where such an environment is of great usage. E.G. security analysis of stalker-ware within a safe environment.