Adventures of a Stolen Credential

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Overview

- There are currently an estimated 15 billion compromised credentials that are being sold on underground forums.
- This study gives an insight into what goes on in the underground forums to increase preparedness, response, and recovery.

Research Methods

- Underground forums (RAID and Hack) were analyzed to investigate recent and past activity with credential sharing.
- Different processes of how many types of credentials are shared amongst cybercriminals were identified.
- A clear graph that models the events and potential paths that were studied has been developed.
- A compromised dataset and database descriptions were used to find what kinds of information are being sold and/or shared in the underground forums.
- Interactions between users and subsections of the forums were studied to understand the behavior of users per forum.

Acknowledgements

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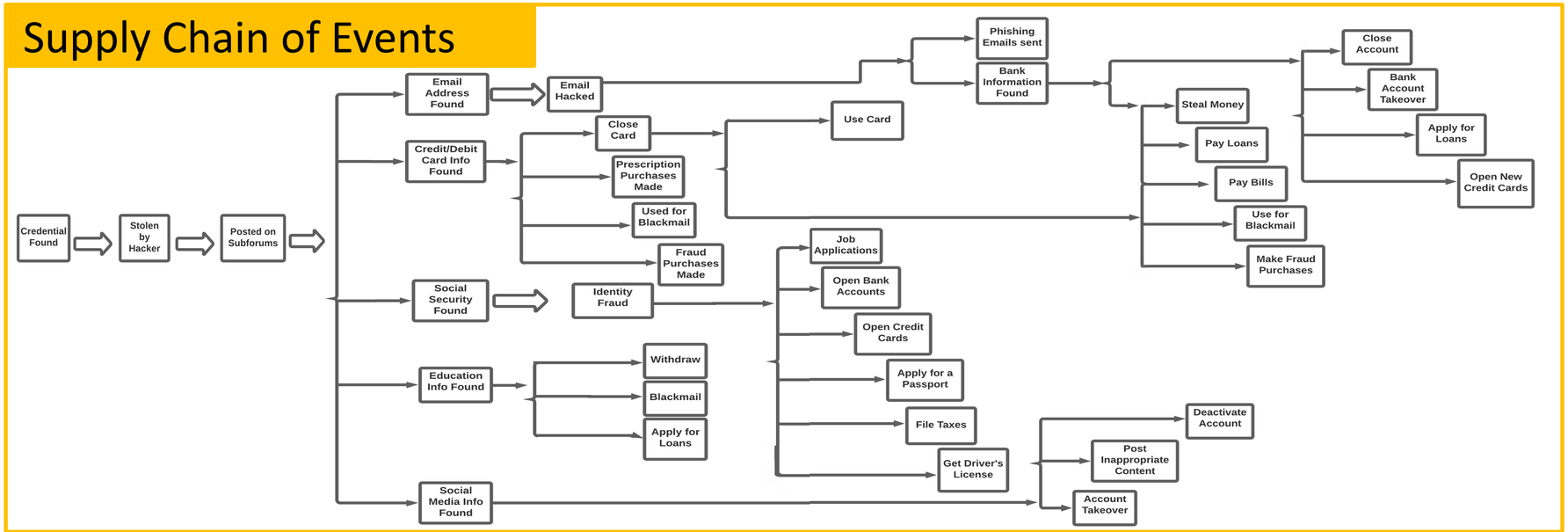
Future Work

- Further investigation on each of the five categories introduced below.
- Analyzing private messages in underground forums.
- Investigating if credentials move from platform-to-platform.

Results

- As seen in the graph to the right, the stolen credentials studied falls primarily into five categories: email, cards, SSN, education, and social media info.
- An overlap between some of the categories is apparent due to the nature of the credential; for example we see that card info can lead to many attacks that bank account information compromises can as well.

Supply Chain of Events



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