Ethics in Computer Science

Ethics and Social Responsibility in this Computer Security (Honeynet) Workshop

Alexandre Dulaunoy

ASBL CSRRT-LU (Computer Security Research and Response Team Luxembourg)
http://www.csrrt.org/

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Computer Security Research and Response Team Luxembourg

- CSRRT-LU provides a cooperative and virtual organization for working with individuals, groups and industries. Everybody is welcome to participate in the various research projects in computer security.
- The association was initially created to host the Honeynet project of Luxembourg but has grown to host other security projects.
- One of the goals of CSRRT-LU is to try to find ways to improve technical approaches for identifying and preventing security flaws, for limiting the damage from attacks, and for ensuring that systems continue to provide essential services despite of compromises or failures.
- Current projects are : Honeylux, Mobile Security, Flowop, ...

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└─Introduction - Legal Framework

└─Computer Security Research and Response Team Luxembourg

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Notes

Scope of the course and the legal "instability" of Honeynet research

Copyright / Author Rights

- A copyright is a set of exclusive rights granted by "government" for a limited time (70 years after the death of the author) to protect the particular form, way or manner in which an idea or information is expressed by an author.
- Copyright is the anglo-saxon term for the patrimonial rights of the author in Europe.
- Copyright applies to any creative or artistic works like literary works, movies, painting, photographs... and software.

Software authors (including Malware authors) use copyright for licensing their software.

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Berne convention, Directive 2001/29/CE, law about authors rights

Privacy

- Privacy is the ability of an individual or group to stop information about themselves from becoming known to people other than those they choose to give the information to.
- Privacy laws exist in lot of countries including the Grand-Duchy of Luxembourg (a very strict transposition of the Privacy EU Directive).
- Computer Security is often seen as a tool for protecting privacy but also as a tool for limiting privacy.

Privacy is a fundamental right including the information society.

Honeynets/Honeypots - where do they stand ?

A (possible) definition : *A honeypot is an information system resource whose values lies in an unauthorized or illicit usage of that resource.*
Where are the Honeynets in the legal and social framework ?

- *Entrapment issues - inducing people to make action by providing vulnerable services.*
- *Data collected inside honeynets - what can we do to respect the laws ?*
- *Liability issue - Are honeynets operator liable for attacks launched from their honeynets ?*

Honeynets are mainly used for research purposes (like CSRRT-LU is doing) but this can be difficult to keep a high-level of ethics.

Example of legal issues in the Honeylux project

Here is a non-exhaustive list of legal issues

- Copyrighted materials provided by the attackers in a Honeynet
- Extracted exploits (software) from Honeynets - can we distribute the exploits ?
- Private information exchanged in private IRC channel or emails
- Attackers is attacking multiple host - when and how to inform the possible targets ?
- ...

Your ethical role in the workshop

- It's very difficult to define ethical behavior in new research area of computer science
- You often must rely on your sense of right and wrong
- The data provided for the workshop is covering a small scale of the common issues (privacy, author rights)
- You are playing an active role in the discipline : philosophical questions are also important in computer science...
- When doing analysis of the data captured, don't forget the social and ethical aspect.

Conclusion

- Risks are part of the Honeynet research but can be safely deployed
- Returns are quite important in learning new approach in computer security
- Legal framework is quite complex but basic concept can be understood by any computer scientist
- ...but don't hide the other aspects.
- The social aspect of Honeynet technologies is still evolving... you can be part of the evolution.
- Feel free to participate and add social aspect in the final report for the workshop.

Q and A

- Thanks for listening.
- http://www.csrrt.org.lu/
- adulau@foo.be