H.P.P.
the Hackers Profiling Project:
a general overview

Project Leaders
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Document Keywords
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Agenda

Who we are

Introduction to the H.P.P. Project

The questionnaire

The first outputs

Hackers Profiling Grid

Evaluation and correlation standards

Detail analysis and correlation of profiles

Conclusions

Bibliography and references

Contacts
Project Leaders

Raoul Chiesa

- Director of Communications at ISECOM
  - Institute for Security and Open Methodologies (Est. 2002)
  - Originally called the Ideahamster Organization (Est. 2001)
  - Non Profit Organization Registered in Spain and U.S.A.
  - Open Source Community Registered OSI

- Project Manager for H.P.P., OSSTMM Key Contributor
  - OPST, OPSA, ISECOM Authorized International Trainer

- Professor of IT Security at various Universities & Masters (Italy)

- Board of Directors Member at ISECOM, CLUSIT, Telecom Security Task Force (TSTF.net)
Project Leaders

Dr. Stefania Ducci

Stefania has a University degree in Law (University of Bologna - 2002), and a Master degree in Criminology (University of Turin - 2003).

She works for UNICRI (United Nations Interregional Crime And Justice Research Institute), a UN agency, dealing with crime and criminal justice.

In 2004 she began collaborating with Raoul Chiesa on personal basis. The studies carried out in team formed the core of H.P.P. Project.

For the Hacker’s Profiling Project, Stefania has used an independent research approach, providing her support and cooperation during her spare time, fascinated by the huge research possibilities and professional evolution offered by the Project.

Her principal interest consists in reading hacking and “classic” criminal profiling books.
The ISECOM Mission

• Our Mission:
  – To provide global, practical, useable security knowledge and knowledge-tools to solve problems caused by insecurity, privacy violations, ethical violations, and poor safety measures.

• Our Audience:
  – Governments, Corporations, Organizations (OSSTMM, HPP)
  – Professionals and quasi-professionals (Rules of Engagement, Metrics)
  – College students (Academic Alliance Program)
  – Teens and pre-teens (Hacker Highschool)
The ISECOM Projects

- **OSSTMM** - The Open Source Security Testing Methodology Manual
- **RAVs** - The Security Metrics
- **BIT** - Business Integrity Testing Methodology Manual
- **OPRP** - Open Protocol Resource Project
- **SIPES** - Security Incident Policy Enforcement System
- **SPSMM** - The Secure Programming Standards Methodology Manual
- **STICK** - Software Testing Checklist
- **ISM 3.0** - Information Security Maturity Model
- **HHS** - Hacker High School
- **HPP** - Hacker’s Profiling Project  New!
Scope

• This presentation will intentionally focus on a general introduction to the Hacker’s Profiling Project (HPP).

• Further public versions of the HPP are already available upon request and identification, since we are still covering the project’s core-development phases.

• At this time, the following releases of the HPP presentation have been developed:
  ✓ Basic
  ✓ Compact (this one)
  ✓ Standard
  ✓ Full
  ✓ HPP Book #1 (under development; expected JAN 2007)

• The HPP Presentations and Questionnaires are available in the following languages:
  ✓ English
  ✓ Italian
  ✓ Greek (translation in progress)
  ✓ Rumenian (translation in progress)
  ✓ German (under development)
  ✓ Russian (partnership in progress)
  ✓ Spanish (under development)
  ✓ French (partnership in progress)
Agenda

Who we are

**Introduction to the H.P.P. Project**

The questionnaire

The first outputs

Hackers Profiling Grid

Evaluation and correlation standards

Detail analysis and correlation of profiles

Conclusions

Bibliography and references

Contacts
The “cybercrime”

Dealing with “hacking-related” security problems from more than a decade, in the last years we observed with deep attention a series of phenomenon defined by us “worrying”:

✓ A dramatic decrease of the so called “window of exposure”, which is the time between the elaboration of “0-day” exploits and their use in massive attacks and/or distributed at worldwide level;

✓ Dangerous synergies among technologically advanced personalities, classic criminality (national and transnational) and terrorism;

✓ Continuous increase of the dependence between national stability (critical national infrastructures, homeland security, telecommunications, fundamental services, etc.) and the ICT Security issues.

Nevertheless, often the cybercrime and hi-tech crime phenomena are analysed in a wrong manner.
The H.P.P. Project

In this connection, we want to analyse the “cybercrime problem” by using an approach completely different from the ones used till now, going directly to the source.

In fact, the H.P.P. Project is aimed at:

- Analysing the hacking phenomenon – technological, social and economic – in its several aspects, through both technical and criminological approaches.
- Understanding the different motivations and identifying the actors involved;
- Observing “in the field” the (true) criminal actions;
- Applying the profiling methodology to the collected data;
- Learning by the acquired knowledge and disseminating it.
The H.P.P. Phases

The H.P.P. Project started in September 2004 and became an official ISECOM project on June 2006. Till now, we have identified 8 different project phases.

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>THEORICAL COLLECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elaboration and Distribution of the questionnaire, in different forms and towards different targets</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase 2</th>
<th>OBSERVATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation to “IT underground security” events (EU, Asia, USA, Australia) identifying correct research partners</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase 3</th>
<th>FILING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creation of a Data-base for the classification elaboration of data collected during Phase 1</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase 4</th>
<th>“Live” COLLECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elaboration and activation of Honey-Net Systems of new generation and highly customized</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase 5</th>
<th>G&amp;C ANALYSIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gap-Analysis and Correlation among datasets collected through the questionnaire, Honeynets and profiles deduced from the existing literature on the topic</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase 5/A</th>
<th>HCP “live” ASSESSMENT (24X7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous assessment of profiles and correlation of modus operandi, through data collected in Phase 4</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase 6</th>
<th>FINAL REPORTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Redefinition and fine-tuning of different hacker and profiles previously used as a “standard de-facto”</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase 7</th>
<th>DIFFUSION OF THE MODEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final elaboration of results, drafting and publication of the methodology, raising awareness (white papers, lectures, company awareness, training)</td>
<td></td>
</tr>
</tbody>
</table>
## Project phases: detail

<table>
<thead>
<tr>
<th>PHASE</th>
<th>CARRIED OUT</th>
<th>DURATION</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – Theoretical collection</td>
<td>YES</td>
<td>16 months</td>
<td>Distribution on more levels</td>
</tr>
<tr>
<td></td>
<td>ON-GOING</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 – Observation</td>
<td>YES</td>
<td>24 months</td>
<td>From different point of views</td>
</tr>
<tr>
<td></td>
<td>ON-GOING</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 – Filing</td>
<td>ON-GOING</td>
<td>Planning: 3 months</td>
<td>The funniest phase ☺</td>
</tr>
<tr>
<td></td>
<td>(PLANNING)</td>
<td>Implementation &amp; Fine Tuning: 18 months</td>
<td></td>
</tr>
<tr>
<td>4 – “Live” collection</td>
<td>ON-GOING</td>
<td>Planning: 3 months</td>
<td>The funniest phase</td>
</tr>
<tr>
<td></td>
<td>(EXISTING LAB)</td>
<td>Implementation: 18 months</td>
<td></td>
</tr>
<tr>
<td>5 – Gap &amp; Correlation Analysis</td>
<td>NO</td>
<td>18 months</td>
<td>The Next Thing</td>
</tr>
<tr>
<td>5/A – “Live” Assessment</td>
<td>NO</td>
<td>16 months</td>
<td>The biggest part of the Project</td>
</tr>
<tr>
<td>6 – Final Profiling</td>
<td>NO</td>
<td>12 months</td>
<td>“Satisfaction”</td>
</tr>
<tr>
<td>7 – Diffusion of the model</td>
<td>NO</td>
<td>GNU/FDL ;)</td>
<td>Methodology’s public release</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Agenda

Who we are

Introduction to the H.P.P. Project

The questionnaire

The first outputs

Hackers Profiling Grid

Evaluation and correlation standards

Detail analysis and correlation of profiles

Conclusions

Bibliography and references

Contacts
The HPP Questionnaire

- **Module “A”**

  **Personal data** (gender, age, social status, family context, study/work)

- **Module “B”**

  **Relational data** (relationship with: the Authorities, teachers/employers, friends/colleagues, other hackers)

- **Module “C”**

  **Technical and criminological data** (target, hacking techniques and tools, motivations, ethics, perception of the illegality of their own activity, crimes committed, deterrence)

  All the questions allow anonymous answers
HPP QUESTIONNAIRE - the delivery

✓ 3 questionnaire typologies:

☐ **Level 1**: Full Release
   - 25 pages, Modules A, B and C expected as “fully completed” (all fields are mandatory)

☐ **Level 2**: Compact Release
   - 10 pages, Modules A, B and C to be partially completed (some fields are mandatory)

☐ **Level 3**: Basic Release
   - 3 pages, Modules A and C to be partially completed, often uncorrected (few mandatory fields.)

✓ 3 delivery levels:

☐ **Known and/or verified**, “directly” or not (the QoQ is extremely high), IRL and on-line.

☐ **Underground/hacking general contacts** (the QoQ is medium), on-line.

☐ **Focused IT Magazines, Other** (the QoQ is low), hard-copy and on-line.
The questionnaire: excerpts

a) Sex:
   - Male
   - Female

b) Age:

c) Title of study (please, indicate the last):
   - Primary school leaving-certificate
   - Secondary school leaving-certificate
   - Professional qualification
   - Beyond (master, PhD, specialisation, etc.)

d) Country and place of residence (if you don't wish to specify your city, please, indicate the geographical area of residence). Specify also if you live in a city or in a village and, in the latter case, if this is far or not from a big urban centre.

(a) There are other persons in your family who are (or were) interested in IT?
   - Yes
   - No

(b) Are there other persons in your family who practise (or have practised) hacking/phreaking?

a) Awareness of your hacking/phreaking activity:
   1) (a) Among your acquaintances, who is (or was) aware of your hacking/phreaking activity? (teachers, employer(s), schoolmates, colleagues, friends, other members of the underground world, partner, and so on).

   2) (b) Are there other persons in your family who practise (or have practised) hacking/phreaking?

   - hacking Yes No
   - phreaking Yes No

d) Hacking, phreaking, carding:
   1) Do (or Did you) practise:
      - hacking Yes No
      - phreaking Yes No

e) Kinds of data nets, technologies and operative systems targeted and tools used:
   1) On what kind of data nets and technologies do (or did) you practise hacking/phreaking? For example: Internet, X.25, PSTN/ISDN, PBX, Wireless, “mobile” nets (GSM/GPRS/EDGE/UMTS), VoIP.
Q: Do you obey to the hacker’s ethics? If not, why?
A: I obey to my ethics and to my rules, not in ethics in general. The reason for that is that I don’t like to obey in what other people is obeying, ethics are like rules and laws, other people are writing them for you and even if some times they sound fair and correct, always behind the sweet and hypnotic words there is a trap for personal freedom. I am not a sheep to follow rules ethical or legal in general.

Q: How do you perceive your hacking/phreaking activity: legal or illegal?
A: I don’t accept the terms legal and illegal, for accepting this terms means that I have the same point of view with people who have nothing common with me. Ok, I’ll try to be more specific for helping you in this question. For me my activities are legal, for the others are illegal.
Agenda

Who we are

Introduction to the H.P.P. Project

The questionnaire

The first outputs

Hackers Profiling Grid

Evaluation and correlation standards

Detail analysis and correlation of profiles

Conclusions

Bibliography and references

Contacts
Hackers: an image still blurred

- **Yesterday:** hacking as an emerging phenomenon, unknown to people and ignored by researchers.

- **Today:** several researches and analysis about hacking and hackers but carried out in “mono”: from a psychological, sociological, or criminological perspective, particularly after the so called Hacker Crackdown → according to them, there is only one type of hackers, seen as ugly (thin, myope), bad (malicious, destructive and/or criminal purposes) and “dirty” (asocial, without ethics, anarchic).

- **Tomorrow:** inter-disciplinary studies that put together criminology with information security → different typologies of hackers if we consider: action modalities (alone or in a group), technical skills, motivations, purposes, targets, obedience or not to the so called “Hacker Ethics”.
Hackers are generally intellectually brilliant, creative, decided and resolute

They are angry and rebel towards Authorities and narrow-minded people, seen as a menace for civil liberties

Hacking as: 1) a technique, a way of life with curiosity and a way to challenge themselves; 2) a tool of power useful to raise people's awareness on political and social problems

Usually they are motivated by the love for knowledge; but there are also hackers that have lucrative purposes and, therefore, practice phishing/pharming, carding and industrial espionage

Preferred targets: military/governmental systems; corporations; telcos; schools and Universities, but also end-users and SMEs

The biggest part of hackers (with a low level of technical skills) are deterred by technical difficulties: they prefer "easy" O.S.s such as Linux or Windows - elite hackers instead are stimulated only by systems considered "inviolable" (*BSD, Solaris, HP/UX, *VMS, IOS, Symbian) and by protocols...
They lay the blame of their attacks on SysAdmins (or on designers), because they were not able to protect the systems properly (or to design/define in a safe way a protocol or a standard).

Ethical hackers usually advise SysAdmins of the discovered system's vulnerabilities (or contribute to fix the security flaw), but generally only after communicating them to the other members of the underground world.

Ethical hackers want to increase systems' security and raise SysAdmins' awareness and attention on these issues.

Ethical hackers take possession of the violated systems and defend them from other attacks, making them secure.

Ethical hackers don't crash systems (if it happens is due only to their inexperience) and they don't steal/delete/change data.
Agenda

Who we are
Introduction to the H.P.P. Project
The questionnaire
The first outputs

**Hackers profiling Grid**
Evaluation and correlation standards
Detail analysis and correlation of profiles
Conclusions
Bibliography and references
Contacts
HPP Grid: the starting point

Know your Enemy: hackers’ profiling

<table>
<thead>
<tr>
<th>PSYCHOLOGICAL PROFILE</th>
<th>DANGEROUSNESS LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wannabe Lamer</td>
<td>NULL</td>
</tr>
<tr>
<td>(I’d like to be an hacker, but I can’t...)</td>
<td></td>
</tr>
<tr>
<td>Script Kiddie</td>
<td>LOW</td>
</tr>
<tr>
<td>(The script boy)</td>
<td></td>
</tr>
<tr>
<td>Cracker</td>
<td>HIGH</td>
</tr>
<tr>
<td>(Burned ground, the Distructor)</td>
<td></td>
</tr>
<tr>
<td>Ethical Hacker</td>
<td>MEDIUM</td>
</tr>
<tr>
<td>(The “ethical” hacker’s world)</td>
<td></td>
</tr>
<tr>
<td>Quiet, paranoid, skilled hacker</td>
<td>MEDIUM</td>
</tr>
<tr>
<td>(The very specialized and paranoid attacker)</td>
<td></td>
</tr>
<tr>
<td>Cyber-Warrior</td>
<td>HIGH</td>
</tr>
<tr>
<td>(The soldier, hacking for money)</td>
<td></td>
</tr>
<tr>
<td>Industrial Spy</td>
<td>HIGH</td>
</tr>
<tr>
<td>(Industrial espionage)</td>
<td></td>
</tr>
<tr>
<td>Government agent</td>
<td>HIGH</td>
</tr>
<tr>
<td>(Governative agent: CIA, Mossad, FBI, etc. – Cuckoo’s Egg docet)</td>
<td></td>
</tr>
</tbody>
</table>

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HPP Grid: yesterday

Know your Enemy: preferred targets

<table>
<thead>
<tr>
<th>PSYCHOLOGICAL PROFILE</th>
<th>TARGET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wannabe Lamer (I'd like to be an hacker, but I can't...)</td>
<td>End-user</td>
</tr>
<tr>
<td>Script Kiddie (The script boy)</td>
<td>SME/specific security flaws</td>
</tr>
<tr>
<td>Cracker (Burned ground, the Distructor)</td>
<td>Big Companies/PA/Finance/Telco</td>
</tr>
<tr>
<td>Ethical Hacker (The “ethical” hacker's world)</td>
<td>Vendor/System Integrator/Telco</td>
</tr>
<tr>
<td>Quiet, paranoid, skilled hacker (The very specialized and paranoid attacker)</td>
<td>Big Companies/PA/Finance/Telco/R&amp;D</td>
</tr>
<tr>
<td>Cyber-Warrior (The soldier, hacking for money)</td>
<td>Multinationals “symbol”</td>
</tr>
<tr>
<td>Industrial Spy (Industrial espionage)</td>
<td>Multinationals, ICT companies</td>
</tr>
<tr>
<td>Government agent (Governative agent: CIA, Mossad, FBI, etc. – Cuckoo’s Egg docet)</td>
<td>Multinationals/Governments</td>
</tr>
</tbody>
</table>

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## HPP Grid: today

<table>
<thead>
<tr>
<th>PROFILE</th>
<th>RANK</th>
<th>IMPACT LEVEL</th>
<th>TARGET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wanna Be Lamer</td>
<td>Amateur</td>
<td>NULL</td>
<td>End-User</td>
</tr>
<tr>
<td>Script Kiddie</td>
<td></td>
<td>LOW</td>
<td>SME, Specific security flaws</td>
</tr>
<tr>
<td>Cracker</td>
<td>Hobbies</td>
<td>MEDIUM HIGH</td>
<td>Business company</td>
</tr>
<tr>
<td>Ethical Hacker</td>
<td></td>
<td>MEDIUM</td>
<td>Vendor, Technology</td>
</tr>
<tr>
<td>Quiet, Paranoid Skilled Hacker</td>
<td></td>
<td>MEDIUM HIGH</td>
<td>On necessity</td>
</tr>
<tr>
<td>Cyber-Warrior</td>
<td></td>
<td>HIGH</td>
<td>“Symbol” business company, End-User</td>
</tr>
<tr>
<td>Industrial Spy</td>
<td></td>
<td>HIGH</td>
<td>Business company, Corporation</td>
</tr>
<tr>
<td>Government agent</td>
<td>Professional</td>
<td>HIGH</td>
<td>Government, Suspected Terrorist</td>
</tr>
<tr>
<td>Military Hacker</td>
<td></td>
<td>HIGH</td>
<td>Government, Strategic Company</td>
</tr>
</tbody>
</table>

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Level of technical skills

- Wannabe Lamer  Script Kiddie  Cracker

+ Ethical hacker  Q.P.S. Hacker  Cyber-Warrior  Industrial spy  Government Agent  Military Hacker
Level of dangerousness

- Wannabe Lamer  Script Kiddie  Ethical Hacker  Q.P.S. Hacker

+ Cracker  Cyber-Warrior  Industrial spy  Government Agent  Military Hackers
Agenda

Who we are
Introduction to the H.P.P. Project
The questionnaire
The first outputs
Hackers profiling

**Evaluation and correlation standards**
Detail analysis and correlation of profiles
Conclusions
Bibliography and references
Contacts
Evaluation and Correlation standards

• This release of HPP presentation does not cover this chapter.
• The Evaluation and Correlation standards have been based, as for now, on the following fields:
  ✓ Modus Operandi
  ✓ Lone Hacker or as a Member of a Group
  ✓ Motivations
  ✓ Main Targets
  ✓ Hacker career and selected targets
  ✓ Relations between targets and motivations
  ✓ Fundamentals principles of the so-called “Hacker Ethics”
  ✓ Crashed or Damaged Systems
  ✓ Perception of the illegality of the own activity
  ✓ Deterrence effect of Laws, Convictions and Technical Difficulties

• The Evaluation and Correlation standards are available to the public, upon request.
Agenda

Who we are
Introduction to the H.P.P. Project
The questionnaire
The first outputs
Hackers profiling
Evaluation and correlation standards

**Detail analysis and correlation of profiles**

Conclusions
Bibliography and references
Contacts
Detail Analysis and Correlation of the profiles

• This presentation will list a **resume** of all the analysed profiles and the correlations made.
• Since this is a compact version of the HPP presentation, here we **will not fully detail** the final profiling core.
• The “ID cards” and the detailed profiling and correlation elements at this time are freely available, upon identified request.
Detail Analysis and Correlation of the profiles: the "ID" card

**ID cards are composed by the results gained from the following fields:**

- Hacker Typology
- Offender ID
- Lone or Group Hacker
- Target
- Motivations & Purposes
- Obedience to the "hacker ethics"
- Crashing or Damaging systems?
- Perception of the illegality of their own activity
  and
- Deterrence effect to:
  - Laws
  - Convictions suffered by other hackers
  - Convictions suffered by them
  - Technical difficulties approach
The ID Card “puzzle”
Hacker top-level typologies view

1. **Wannabe Lamer**
2. **Script kiddie**: under development (Web Defacers, …)
3. **Cracker**: under development (Web Defacers, malicious hackers, phishers, …)
4. **Ethical hacker**: under development (security researcher, hacker groups)
5. **Quiet, paranoid, skilled hacker**
6. **Cyber-warrior**: to be developed
7. **Industrial spy**: to be developed
8. **Government agent**
9. **Military hacker**
## Detail Analysis and Correlation of the profiles: Table # 1

<table>
<thead>
<tr>
<th>OFFENDER ID</th>
<th>LONE / GROUP HACKER</th>
<th>TARGET</th>
<th>MOTIVATIONS / PURPOSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wanna Be Lamer</td>
<td>GROUP</td>
<td>End-User</td>
<td>For fashion, It's “cool” =&gt; to boast and brag</td>
</tr>
<tr>
<td>Script Kiddie</td>
<td>GROUP: but they act alone</td>
<td>SME / Specific security flaws</td>
<td>To give vent of their anger / attract mass-media attention</td>
</tr>
<tr>
<td>Cracker</td>
<td>LONE</td>
<td>Business company</td>
<td>To demonstrate their power / attract mass-media attention</td>
</tr>
<tr>
<td>Ethical Hacker</td>
<td>LONE / GROUP (only for fun)</td>
<td>Vendor / Technology</td>
<td>For curiosity (to learn) and altruistic purposes</td>
</tr>
<tr>
<td>Quiet, Paranoid, Skilled Hacker</td>
<td>LONE</td>
<td>On necessity</td>
<td>For curiosity (to learn) =&gt; egoistic purposes</td>
</tr>
<tr>
<td>Cyber-Warrior</td>
<td>LONE</td>
<td>“Symbol” business company / End-User</td>
<td>For profit</td>
</tr>
<tr>
<td>Industrial Spy</td>
<td>LONE</td>
<td>Business company / Corporation</td>
<td>For profit</td>
</tr>
<tr>
<td>Government Agent</td>
<td>LONE / GROUP</td>
<td>Government / Suspected Terrorist / Strategic company / Individual</td>
<td>Espionage / Counter-espionage / Vulnerability test / Activity-monitoring</td>
</tr>
<tr>
<td>Military Hacker</td>
<td>LONE / GROUP</td>
<td>Government / Strategic company</td>
<td>Monitoring / controlling / crashing systems</td>
</tr>
</tbody>
</table>
# Detail Analysis and Correlation of the profiles: Table # 2

<table>
<thead>
<tr>
<th>Profile</th>
<th>Obedience to the “Hacker Ethics”</th>
<th>Crashed / Damaged Systems</th>
<th>Perception of the Illegality of their Own Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wanna Be Lamer</td>
<td>NO: they don’t know “Hacker Ethics” principles</td>
<td>YES: voluntarily or not (inexperience, lack of technical skills)</td>
<td>YES: but they think they will never be caught</td>
</tr>
<tr>
<td>Script Kiddie</td>
<td>NO: they create their own ethics</td>
<td>NO: but they delete / modify data</td>
<td>YES: but they justify their actions</td>
</tr>
<tr>
<td>Cracker</td>
<td>NO: for them the “Hacker Ethics” doesn’t exist</td>
<td>YES: always voluntarily</td>
<td>YES but: MORAL DISCHARGE</td>
</tr>
<tr>
<td>Ethical Hacker</td>
<td>YES: they defend it</td>
<td>NEVER: it could happen only incidentally</td>
<td>YES: but they consider their activity morally acceptable</td>
</tr>
<tr>
<td>Quiet, Paranoid, Skilled Hacker</td>
<td>NO: they have their own personal ethics, often similar to the “Hacker Ethics”</td>
<td>NO</td>
<td>YES: they feel guilty for the upset caused to SysAdmins and victims</td>
</tr>
<tr>
<td>Cyber-Warrior</td>
<td>NO</td>
<td>YES: they also delete/modify/steal and sell data</td>
<td>YES: but they are without scruple</td>
</tr>
<tr>
<td>Industrial Spy</td>
<td>NO: but they follow some unwritten “professional” rules</td>
<td>NO: they only steal and sell data</td>
<td>YES: but they are without scruple</td>
</tr>
<tr>
<td>Government Agent</td>
<td>NO: they betray the “Hacker Ethics”</td>
<td>YES (including deleting/modifying/stealing data) / NO (in stealth attacks)</td>
<td></td>
</tr>
<tr>
<td>Military Hacker</td>
<td>NO: they betray the “Hacker Ethics”</td>
<td>YES (including deleting/modifying/stealing data) / NO (in stealth attacks)</td>
<td></td>
</tr>
</tbody>
</table>
## Detail Analysis and Correlation of the profiles: Table # 3

<table>
<thead>
<tr>
<th>DETERRENCE EFFECT OF:</th>
<th>LAWS</th>
<th>CONVICTIONS SUFFERED BY OTHER Hackers</th>
<th>CONVICTIONS SUFFERED BY THEM</th>
<th>TECHNICAL DIFFICULTIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wanna Be Lamer</td>
<td>NULL</td>
<td>NULL</td>
<td>ALMOST NULL</td>
<td>HIGH</td>
</tr>
<tr>
<td>Script Kiddie</td>
<td>NULL</td>
<td>NULL</td>
<td>HIGH: they stop after the 1st conviction</td>
<td>HIGH</td>
</tr>
<tr>
<td>Cracker</td>
<td>NULL</td>
<td>NULL</td>
<td>NULL</td>
<td>MEDIUM</td>
</tr>
<tr>
<td>Ethical Hacker</td>
<td>NULL</td>
<td>NULL</td>
<td>HIGH: they stop after the 1st conviction</td>
<td>NULL</td>
</tr>
<tr>
<td>Quiet, Paranoid, Skilled Hacker</td>
<td>NULL</td>
<td>NULL</td>
<td>NULL</td>
<td>NULL</td>
</tr>
<tr>
<td>Cyber-Warrior</td>
<td>NULL</td>
<td>NULL</td>
<td>NULL</td>
<td>NULL: they do it as a job</td>
</tr>
<tr>
<td>Industrial Spy</td>
<td>NULL</td>
<td>NULL</td>
<td>NULL</td>
<td>NULL: they do it as a job</td>
</tr>
</tbody>
</table>
Agenda

Who we are

Introduction to the H.P.P. Project

The questionnaire

The first outputs

Hackers profiling

Evaluation and correlation standards

Detail analysis and correlation of profiles

Conclusions

Bibliography and references

Contacts
Conclusions

The hacking world has not always been linked to criminal actions;

The researches carried out till today have not depicted properly a so complex, hierarchical and in continuous evolution phenomenon as the underground world;

The application of a profiling methodology is possible, but it needs a 360° analysis of the phenomenon, by analysing it from four principal point of views: Technological, Social, Psychological, Criminological;

We still have a lot of work to do and we need support: if by ourselves we have reached these results, imagine what we can do by joining our forces and experiences!

The Hacker’s Profiling Project is open to collaborations and research partnerships.
HPP Next Steps

GOALS
✓ Data-base delivery
✓ Honey-Net systems delivery

WHAT WE NEED
✓ Looking for contributors (attack logs, hacking tales, experience)
✓ Looking for volunteers (log analysis, forensics analysis, reverse engineering)
✓ Researching of sponsors and funds raising

CHALLENGES
✓ Identification and evaluation of vectors, techniques and attack-tools
✓ Data-correlation and identification of patterns
✓ Release of the methodology at a draft level and starting of the HPP_IRP (Hackers Profiling Project Internal Review Process)
✓ Public release of the HPP 1.0 methodology
Considerations

✓ **The whole HPP Project** is self-funded and based on independent research methodologies.

✓ Despite many problems, we have been carrying out the Project for **two years**.

✓ The final methodology is going to be released under **GNU/FDL** and distributed through the ISECOM.

✓ **It is welcomed** the research centres, public and private institutions, and governmental agencies' interest in this research project.

✓ We think that we are **developing something beautiful**...

  ...**something that does not exist**...

  ...and it seems - really - **to have a sense**! :)

✓ It is not a simply challenge. However, **we think to be on the right path**.
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Contacts
Bibliography and References (1)

During the different phases of bibliography research, the Authors have made reference (also) to the following publications and on-line resources:

- The H.C.P. Questionnaires (2004-2005)
- Stealing the Network: How to Own a Continent, (AA.VV), Syngress Publishing, 2004
- Stealing the Network: How to Own the Box, (AA.VV.), Syngress Publishing, 2003
- Masters of Deception: the Gang that Ruled Cyberspace, Michelle Stalilla e Joshua Quinttner, Harpercollins, 1995
- Kevin Poulsen, Serial Hacker, Jonathan Littman, Little & Brown, 1997
- Takedown: sulle tracce di Kevin Mitnick, John Markoff e Tsutomu Shimomura, Sperling & Kupfler, (Hyperion Books), 1996
- The Fugitive Game: online with Kevin Mitnick, Jonathan Littman, Little & Brown, 1997
- The Art of Intrusion, Kevin D. Mitnick and William L. Simon, Wiley, 2004
- Takedown: sulle tracce di Kevin Mitnick, John Markoff e Tsutomu Shimomura, Sperling & Kupfler, (Hyperion Books), 1996
- The Fugitive Game: online with Kevin Mitnick, Jonathan Littman, Little & Brown, 1997
- The Art of Intrusion, Kevin D. Mitnick and William L. Simon, Wiley, 2004
- @Large: the Strange Case of the World’s Biggest Internet Invasion, Charles Mann & David Freedman, Touchstone, 1998
- The Hacker Diaries: Confessions of Teenage Hackers, Dan Verton, McGraw-Hill Osborne Media, 2002
- SecurityFocus.com (BugTraq, VulnDev), Mitre.org (CVE), Isecom.org (OSSTMM), many “underground” web sites & mailing lists, private contacts & personal friendships, the Academy and Information Security worlds
During the different phases of bibliography research, the Authors have made reference (also) to the following publications and on-line resources:

- **Compendio di criminologia**, Ponti G., Raffaello Cortina, 1991
- **Criminal Profiling Research Site. Scientific Offender Profiling Resource in Switzerland. Criminology, Law, Psychology**, Täterpro
Acknowledgements

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- **Mailing lists:** SecurityFocus.com, Full-Disclosure, sikurezza.org, Italian LUGs, private m.ls.

- **Gurus:** Raist, Raptor, Inode, Synack, Cla'75, Lamerone, Dialtone, Pete Herzog, Stefano Chiccarelli, Emmanuel Gadaix, Dr. Gabriele Faggioni, Trek/3K, Philippe Langlois, Gabriella Mainardi, Antonis Anagnostopoulos, Marco Tracinà, Sentinel, Vittorio Pasteris, Pietro Gentile, Fabrizio Ciraolo, Alessandra Vitagliozzi, Jim Geovedi, Anthony Zboralski, the Grugq, Fabrice Marie, Roelef9 from SensePost, Dhillon Kannabhiran.

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HPP Partnerships

- Here we list the HPP signed partnerships as of September 2006.

- **Supporting Organizations**
  - Hack in the Box
  - APOGEOonline
  - Clusit
  - ISECOM
  - Phenoelit

- **Project Sponsors**
  - mediaservice.net
  - alba
  - APOGEO
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Detail analysis and correlation of profiles

Conclusions

Bibliography and references

Contacts
Links, contacts, Q&A

Hacker’s Profiling Project home page:
• http://www.isecom.org/hpp

Hacker’s Profiling Project Questionnaires Home for ASIA:
• http://hpp.hackinthebox.org/

QUESTIONS?

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