Project Plan

DNS Abuse Transparency

-October 1st - November 15th

Phase 1: Research and Development

Activities:

- 1. Understanding DNS Abuse:
- Research the different forms of DNS abuse, including phishing, malware distribution, spam, typosquatting, domain hijacking, botnets, fast flux hosting, and domain generation algorithms.
- Study the impact of DNS abuse on users, such as identity theft, financial loss, data breaches, and system compromise.
- 2. Exploring Future Threats:
- Investigate potential future dangers of DNS abuse, like increased sophistication of attacks, IoT vulnerabilities, infrastructure attacks, and the use of deepfakes and AI in phishing.
- 3. Mitigation Strategies:
- Examine various strategies to mitigate DNS abuse, including monitoring and reporting, security awareness training, implementing DNSSEC, multi-factor authentication, blacklisting, collaboration among stakeholders, regular audits, and the use of machine learning.
- 4. LaTeX Documentation:
- Develop documentation skills using LaTeX, focusing on creating well-structured documents for your project.
- Learn to reference and cite sources correctly in LaTeX format.
- 5. Technical Skills Development:
- Enhance technical skills relevant to the project, such as understanding DNS infrastructure, security protocols, and possibly programming skills for simulation or analysis tools.

Goals:

- 1. Comprehensive Understanding:
- Gain a thorough understanding of the various aspects of DNS abuse, its impacts, and mitigation strategies.
- Develop a clear conceptual framework for your project.
- 2. Skill Development:
- Improve your LaTeX documentation skills, ensuring you can effectively present your research and findings.
- Enhance any technical skills necessary for the practical aspects of your project.
- 3. Foundation for Further Work:
- Create a solid foundation of knowledge and skills on which to build the rest of your project.
- Prepare for the next phase of drafting the interim report with a clear direction and substantial content.

Additional Considerations:

- 1. Regular Literature Review:
- Continuously review existing literature and recent developments in the field of DNS abuse.
- Stay updated with the latest trends and technologies in cybersecurity.

November 20th - December 20th

Phase 2: Focused Research and Survey Preparation

- November 16th - November 25th

Activities:

- 1. Preparing interview questions.
- Design a questionnaire to gather information from registries, registrars, and other stakeholders
- Ensure the questions are aligned with the project's goal of understanding transparency in DNS abuse mitigation.
- 2. Preliminary Research:
- Conduct a literature review to understand current practices and gaps in transparency reporting.
- Identify key stakeholders and entities that would be relevant for your interviews.
- List that we have:

Graeme Bunton, Graeme@dnsabuseinstitute.org

Michele Nealon, michele@blacknight.com

Michael Hausding, michael.hausding@first.org

Peter Koch <pk@denic.de>

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Sebastian Castro < scastro @ weare.ie >

Richard Clayton < richard@highwayman.com >

- 3. Outreach Preparation:
- Draft emails or communication templates for reaching out to interview participants.
- Plan the logistics of the question distribution (e.g., online platforms, email, etc.).

Goals:

- 1. Complete the preparing the questions.
- Have a clear understanding of the current state of transparency reporting in DNS abuse mitigation.
- -November 27th December 10th

Activities:

- 1. Stakeholder Engagement:
- Begin reaching out to identified stakeholders to participate in the interview.
- Track responses and follow up as necessary.

Goals:

- Finalize the questions for broader distribution if needed.
- Begin collecting data from stakeholders.

-December 11st - December 20th

Activities:

- 1. Data Collection and Analysis Preparation:
- Continue to interview more people if needed.
- Prepare for initial data analysis, including setting up data analysis tools or frameworks.
- November 16th January 19th

Phase 3: Interim Report Preparation

-December 25th - January 19th

- 1. Interim Report Drafting and Finalizing:
- Start drafting the interim report, incorporating your survey design, preliminary findings, and any initial analysis.
- This should include an introduction, methodology, progress to date, and a plan for the next steps.

Goals:

- Have a substantial amount of survey data collected.
- Begin drafting the interim report with preliminary findings.
- 2. Additional Considerations:
- Ethical Considerations: Ensure that your survey and research methods adhere to ethical standards, especially if dealing with sensitive data.
- Networking: Engage with professionals and experts in the field for insights and potential collaborations.
- Documentation: Keep detailed records of your research process, survey design, and stakeholder interactions for transparency and future reference.
- Have a rough draft of the interim report ready then final review and submission preparations.
- Submit the interim report by January 19th.

Phase 4: Data Collection and Analysis

-January 20th - February 28th

Activities:

- Data Collection: Begin gathering data from registries, registrars, and other entities involved in DNS abuse mitigation. This could involve sending out surveys, conducting interviews, or collecting data from transparency reports.
- Initial Analysis: Start analysing the collected data to identify patterns, common practices, and areas lacking transparency.

Goals:

Complete the data collection process.

 Develop a preliminary understanding of the current state of transparency in DNS abuse mitigation.

Phase 5: Deep Analysis and Drafting Findings and Project Demonstration Period

-March 1st - March 31st

Activities:

- In-depth Analysis: Dive deeper into the data to extract meaningful insights. Look for trends, best practices, and gaps in the current approach to DNS abuse transparency.
- Drafting Findings: Begin drafting the findings section of your final report. This should include detailed analysis and interpretations of the data collected.
- Presentation Preparation: Prepare a presentation that summarizes your project. Focus on key findings, conclusions, and recommendations.

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Goals:

- Complete a thorough analysis of the collected data.
- Have a draft of the findings section ready.
- Present your findings and project.
- Successfully demonstrate the outcomes of your project.
- Collect valuable feedback for future improvements or research.

Phase 6: Final Report Preparation

-April 1st - April 10th

Activities:

- Refining the Report: Incorporate the findings into your final report. Ensure that the report flows logically and includes all necessary sections (introduction, methodology, findings, conclusions, recommendations).
- Peer Review: Have peers or advisors review your report for feedback.

Goals:

- Finalize the content of the report.
- Incorporate feedback and make necessary revisions.

Phase 7: Presentation Preparation and Submission

-April 11th - April 15th

Activities:

- Final review.
- Submit your report.

Goals:

• Submission of the report