

2. Introduction of Zero Trust by Design- Principles and beyond Practice and Zero Trust Hype

https://www.researchgate.net/profile/Dwight-Horne/publication/354054404_Introducing_Zero_Trust_by_Design_Principles_and_Practice_Beyond_the_Zero_Trust_Hype/links/627feade3a23744a727ffff6/Introducing-Zero-Trust-by-Design-Principles-and-Practice-Beyond-the-Zero-Trust-Hype.pdf

1. **Zero Trust (ZT) Threat Model Concept:** The paper discusses the zero trust model, which operates on the premise of no implicit trust, meaning trust is not automatically granted to users, devices, or network flows. This concept is increasingly relevant in contexts like remote work and major supply chain compromises.
2. **Challenges in Adoption Due to Lack of Standards:** Adoption of zero trust approaches has been potentially slowed due to a lack of open standards and consensus on the details and priorities of ZT, though recent standardization attempts are addressing this gap.
3. **Introduction of Zero Trust by Design (ZTBD):** The paper introduces ZTBD, which extends the principles of zero trust beyond network architecture to include software engineering and protocol design, aiming to maximize the potential benefits and synergies of ZT.
4. **ZTBD Principles and Practices:** ZTBD is not just a set of principles but also includes practices that link theory and guidelines with practical applications. This approach aims to provide a more holistic understanding and application of zero trust principles.
5. **Introduction of Zero Trust Patterns:** The paper introduces the concept of ZT patterns, which are reusable solutions to common challenges in implementing ZT. This initiative aims to build a large, openly available body of knowledge to support ZT initiatives.
6. **Importance of Full Lifecycle Security Integration:** The paper argues that the benefits of the ZT model can only be fully realized when the notion of zero trust is extended to include protocol design and full lifecycle software engineering, emphasizing security from the outset rather than as an afterthought.
7. **Invitation for Community Contribution:** The authors conclude with an open invitation to the community to contribute to the evolving body of knowledge on ZTBD, recognizing the importance of collective effort in refining and expanding the application of zero trust principles.