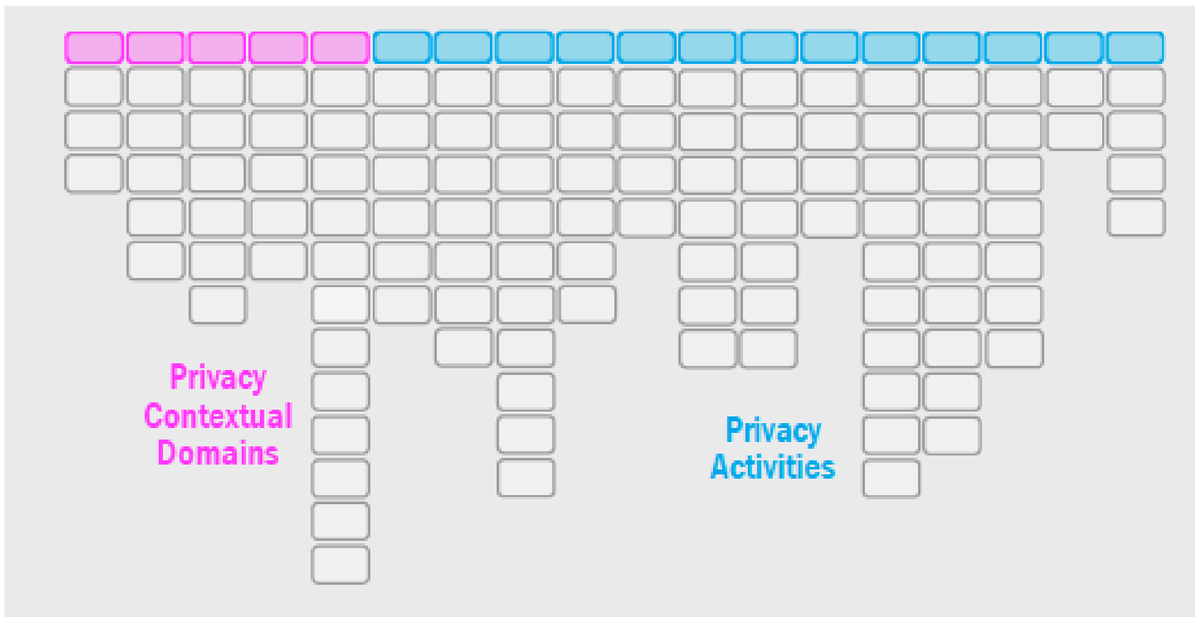
Cybersecurity

Privacy Threat Modeling for Everyone: MITRE PANOPTIC™

Samantha Katcher, Ben Ballard, Katie Isaacson , Julie McEwen, Stuart Shapiro, Shelby Slotter

Pattern and Action Nomenclature Of Privacy Threats In Context

The MITRE PANOPTIC™ privacy threat model is a unique data-driven structure that supports privacy threat assessment, holistic privacy risk modeling, and privacy red teaming. In conjunction with cybersecurity threat models, PANOPTIC enables the threat analysis needed to inform privacy defenses.



Privacy Threat Modeling

Privacy risks are associated with privacy events, including inappropriate collection, use, disclosure, and retention of personal data. Privacy and cybersecurity risks overlap when there are cybersecurity-related events, such as confidentiality attacks, that involve personal data. Cybersecurity threat modeling covers attacks on confidentiality, integrity, and availability of information systems. Because cybersecurity threat models already cover these kinds of attacks on personal information, PANOPTIC does not duplicate these efforts. Instead, PANOPTIC describes those attacks that cause privacy harms other than those arising solely from cybersecurity violations.

Privacy Threat Assessment

Evaluate systems and environments for actions and inactions that can lead to adverse privacy consequences. System threat assessments can be integrated into the systems engineering life cycle as part of the risk management process. Environmental threat assessments enable organizations to get in front of evolving threats.

Privacy Risk Modeling

Integrate the PANOPTIC threat model with vulnerability and adverse consequence models to holistically model privacy risks. Risk models that address all three provide the most robust basis for risk management decisions, but most privacy risk models only address consequences.

Privacy Red Teaming

Emulate privacy adversary behavior to proactively identify salient privacy threats.
Find the holes in privacy defenses before real threat actors do and close them.

PANOPTIC and supporting materials are available at https://ptmworkshop.gitlab.io/#/panoptic
Send questions to panoptic@mitre.org

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