Factsheet

KUDELSKI LABS

Kudelski Labs - Threat Analysis and Risk Assessment (TARA)

Identify, Prioritize, and Mitigate Security Threats Early in the Product Lifecycle

Threat Analysis and Risk Assessment (TARA) is a required first step for achieving regulatory compliance and building secure, resilient connected products. It identifies the security threats and attack scenarios, evaluates their likelihood and impact, and prioritizes the right security controls.

Kudelski Labs performs TARA at device, product-range, and system levels, and can review and enhance existing TARAs with additional attack scenarios based on our deep experience across connected devices, semiconductors, and applied cryptography. Periodic updates keep your TARA valid as products evolve.

Identify and Prioritize Security Threats Early

- Identify and prioritise security threats to guide risk-based design
- Help define the right security controls for efficient engineering
- Support compliance across safety and security-regulated industries

Secure Your Design from the Start

- Key to achieving regulatory compliance
- Identify which threats could impact the business
- Prioritise the right security controls
- Make informed trade-offs between security, cost, time-to-market and usability
- Enable efficient secure-by-design development

Our TARA Methodology

Kudelski Labs conducts a structured, multi-layer analysis of your product or system architecture, interfaces, data flows, and deployment context. Using proven methodologies and industry-aligned attack modelling, we build a comprehensive threat picture and define the most relevant mitigations to support secure-by-design product development.

ASSESS
- Analyze the threat and constraints landscape
- Business model analysis
- Technology analysis
- Contextual analysis

UNDERSTAND
- Become aware of threat scenarios
- Identify attack surfaces, conditions, and actors

DEVELOP
- Enable your engineering team to reach security targets
- Prioritize and map required security controls

PROTECT
- Implement controls to safeguard critical assets and processes
- Strengthen design against relevant attack scenarios

Kudelski Labs applies a structured TARA methodology to deliver actionable, compliance-aligned security insights.

Where TARA Delivers Value

Our TARA service supports a wide range of product and system needs, from new product development to updates of existing deployments. It helps teams align with regulatory requirements, strengthen security architectures, make informed design decisions to avoid costly incidents, and enable a faster more predictable time-to-market.

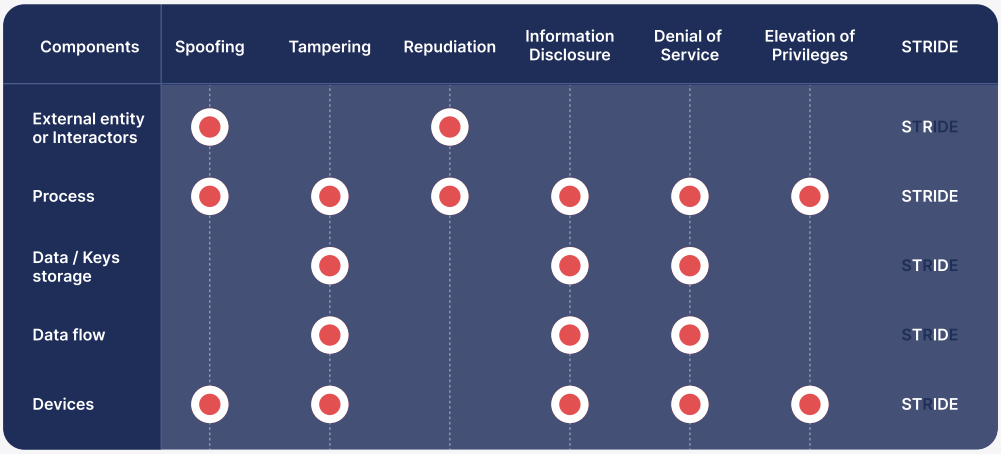
Typical applications include:

- Compliance-aligned security assessment for new products
- TARA covering entire product families
- Review and strengthening of existing TARAs
- Update after new feature or system changes
- Early-stage secure-by-design planning
- Risk assessment for new business deployment

Key Features

Our TARA service delivers comprehensive, actionable insight across devices, product families, and full systems.

- End-to-end analysis of hardware and software architecture, interfaces, and attack surface
- Threat identification and prioritization aligned with regulatory expectations
- Clear mapping to recommended security controls and mitigations
- Review and enhancement of existing TARAs with expanded attack scenarios
- Periodic TARA updates for new features, architecture changes, or markets
- Applicable to any connected product, range, or system



The TARA process evaluates how different components of your product or system may be exposed to key security threat categories. Using the industry-standard STRIDE methodology, we classify threats across spoofing, tampering, repudiation, information disclosure, denial of service, and elevation of privilege to build a clear, structured threat model.

Strategic Intelligence. Impactful Action.

Our embedded security expertise is rooted in more than three decades of hardware, software and cybersecurity experience. We use our expertise and technology to protect all key assets - devices, identity, data, decisions, commands and actions throughout the lifetime of the device and its ecosystem.

Explore Our Innovations

Contact Us

Kudelski Labs leverages the Kudelski Group's decades of experience in intelligent security to solve the world's most complex cyberthreat challenges at the intersection of connectivity and safety. Its mission is to secure the future—across land, air, space, and industry—through advanced research, real-world engineering, and global partnerships.

info@kudelskilabs.com | www.kudelskilabs.com

KUDELSKI LABS