

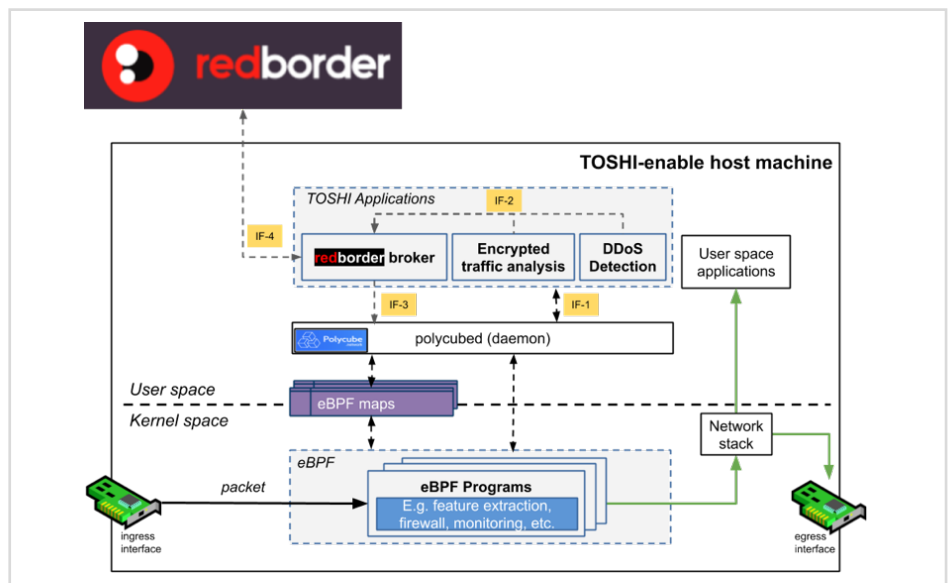
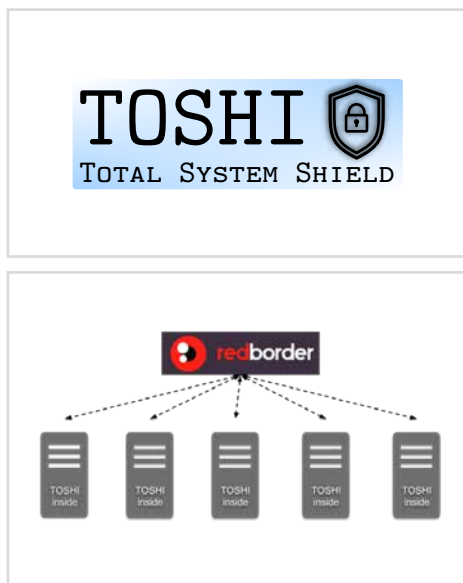
Digital Tech

TOSHI

Total System SHield

PRODUCT LAUNCH

PARTNERS: UPM (Spain), Telefonica (Spain), FBK (Italy), Innovalia (Spain), Politecnico di Torino (Italy)



Secure more with less

TOSHI combines recent Linux kernel technologies that are now reaching their maturity with AI/ML-based techniques to analyze events and detect anomalies. These two main pillars have not been integrated in any product to enforce host security and their unique combination has the potential to address a constantly growing security market.

In the security market, operators, verticals (e.g. Industry 4.0) and customers (e.g. SMIs) are moving from proprietary solutions to devices and hosts based on Linux, demanding for solutions such as TOSHI. TOSHI is an efficient, holistic (system-wide) monitoring and protection of Linux-based systems (e.g., servers, home gateways) thanks to the integration of novel in-kernel mechanisms.

TOSHI greatly reduces the attack surface by intercepting threats at the very beginning and minimize the necessity of human intervention (security experts) by means of AI/ML-driven responses. TOSHI enhances traditional security detection and countermeasures, reducing (1) downtimes, (2) threat detection times (>10% for both) and (3) the intervention of security experts.

Competitive Advantages

- TOSHI detection mechanisms can be executed more efficiently than other products due to its novel in-kernel implementation.
- TOSHI is linux based which offers a rather competitive monitoring and protection solution using cheap off-the-shelf hardware.

Target Markets

- Financial System
- Critical infrastructure
- Defense

- Target market is located in Spain and other EU countries, regarding the go-to-market strategy always taking into account current customers and partners in Spain and other EU countries.

Status/ Traction

- In 2020, the MVP will be tested in current customers and partners in Spain and other EU countries.
- Once the MVP has been validated and any necessary adjustments made, the base redborder AE solution will be launched.

Road Map

Assessment of the value key aspects as the business model requires. Study and evaluation of the value proposition (and the value capture that will actually differentiate TOSHI product from the competence) which is evolving with market needs, beginning with already identified gaps and facts. So the roadmap is based on the positioning of TOSHI as an innovative solution to a current problem. The go-to-market strategy is closely linked with the overall product development as real-world testing and validation will be fundamental to achieving the TOSHI product.

Leveraged Technologies

TOSHI combines novel in-kernel Linux technologies such as eBPF/XDP with AI/ML. The former enables the creation of a holistic and dynamic monitoring/enforcing system on the host, which can inspect any kernel event and be customized at runtime. With respect to the application of Machine and Deep Learning techniques, TOSS will deploy distributed complex AI detection and prediction mechanisms that will need massive amounts of resources when deployed in a centralised location.

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