



Practical Threat Analysis

PTA Professional Edition Feature List

Easy Threat Modeling

- **User friendly** data entry screens and a specialized threat builder tool. Defining of assets, vulnerabilities, threats and countermeasures entities and composing threat scenarios is done in minutes.
- **Additional entities** such as entry points and attacker types can be added to the model to make it more comprehensive. Model entities can be adapted and customized to best fit the specific features of the analyzed system.
- Built-in **spell checking** and **search** capabilities.
- PTA supplies full descriptions of the practical steps of threat analysis. Well structured **context sensitive help** is available at any step of the modeling.
- Parts of the model can be easily excluded from the analysis to enable quick **intermediate results**.

Quantitative Threat Analysis

- The PTA **quantitative method** produces practical recommendations for reducing overall system risk. The method uses parameters such as threats probabilities, potential damages, countermeasures costs and countermeasures mitigation levels.
- The **financial value** of assets and cost of countermeasures can be presented as a combination of fixed and recurring values.
- The **risk-reduction optimization** algorithm produces a prioritized list of countermeasures with a combination of the most cost-effective countermeasures which reduce the overall system risk level to a minimum.

Predefined Security Entity Libraries

- **Predefined entities**, such as assets, vulnerabilities, threats and countermeasures, can be easily loaded from entity libraries. Each entity library suits a specific platform, environment, application type and architecture. For example Web applications, Linux/Microsoft, SQL/Oracle, banking, telecom and healthcare.
- **Import entities from text** enables importing data of threat model entities from comma delimited text files and partial automating of the threat analysis process. Analysts can combine standard scanners outputs with the PTA calculative model.
- Entity libraries can be **customized** by the user and **shared** among several projects to save the burden of re-entering common entities when building application-specific threat models.

Flexible Threat Model Database

- Threat models are stored in a **dynamic database** that can be shared between analysts and developers. There is no limit to the number of entities in the model. Model entities can be added, removed or changed at any time without disrupting the threat analysis process.
- The **model recovery** feature enables safe and easy roll back of changes. It also supports 'what if' research process that immediately updates the analysis outcome.

Rich Security Reporting and Audit Subsystem

- The **reporting subsystem** provides diverse views of threat model parameters and entities interrelations. For example vulnerabilities and their associated countermeasures, threats and assets, entities details, risk and mitigation statistics etc.
- Reports are displayed in a **viewer** equipped with wide paging, zoom and printing capabilities.
- Reports can be **exported** to common formats (such as text, HTML, Excel, and RTF) and sent as e-mail attachments.

Security Knowledge Management

- PTA professional edition can manage and maintain **numerous threat analysis projects**.
- Projects can **share entities** and parameters loaded from common predefined entities libraries created by experts.
- Projects properties support **versions management** and keywords qualifications.
- A variety of documents types (such as PDF, text, Word, Visio and Rational) can be associated with each of the threat model entities. This allows management of **additional unstructured information** and sharing of knowledge between collaborative parties.
- System risk status and project's "bottom lines" are **continuously monitored** based on the identified threats and rate of countermeasures implementation.
- **Project history** is displayed and the analysis progress is monitored throughout the system's lifecycle.