Bringing trust to the internet of things

IoT Security Assurance Framework

Solving Technical & Commercial Challenges in IoT

RED ALERT LABS
IoT Security

- **IoT Device Classes Security Profiles**
- **System Security Requirements Catalogue**
- **Process Requirements Catalogue**
- **Security Assurance Methodology**

Our IoT Security Assurance Framework covers the whole IoT solution from Chip to Cloud and could be integrated at any stage or your IoT solution life-cycle.

It consists of a set of strategic and technical guidelines, security profiles, tools, catalogues of security requirements, a risk-based evaluation methodology for each type of IoT devices, based on standards when they exist.

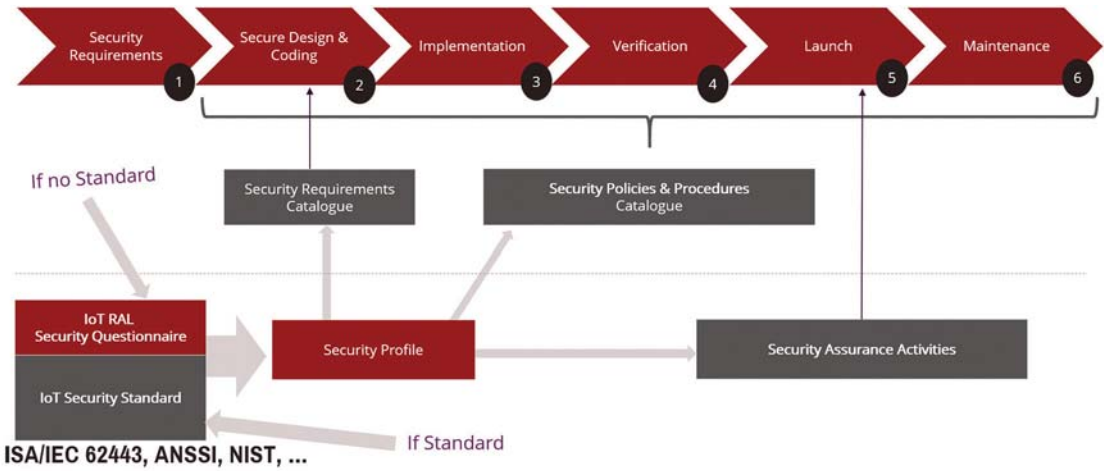
CONSUMER (Electronic connected devices, Smart Home, etc.)
Protection against remote scalable attacks through external interfaces, Data Confidentiality, IP Protection, etc.

ENTERPRISE (Companies, Education, Finance, Retail, etc.)
Secure Firmware updates / Reprogramming and Remote Access Authentication, etc.

INDUSTRIAL (Manufacturing, Oil & Gas,Predictive Maintenance, etc.)
Local Internal Interface Access Enforced Authentication, Assets Availability, Communication Integrity, etc.

CRITICAL (Healthcare, Transportation, Military, etc.)
Firmware Integrity, Secure Booting and Physical Access Authentication, etc.

IoT Security Assurance Framework //



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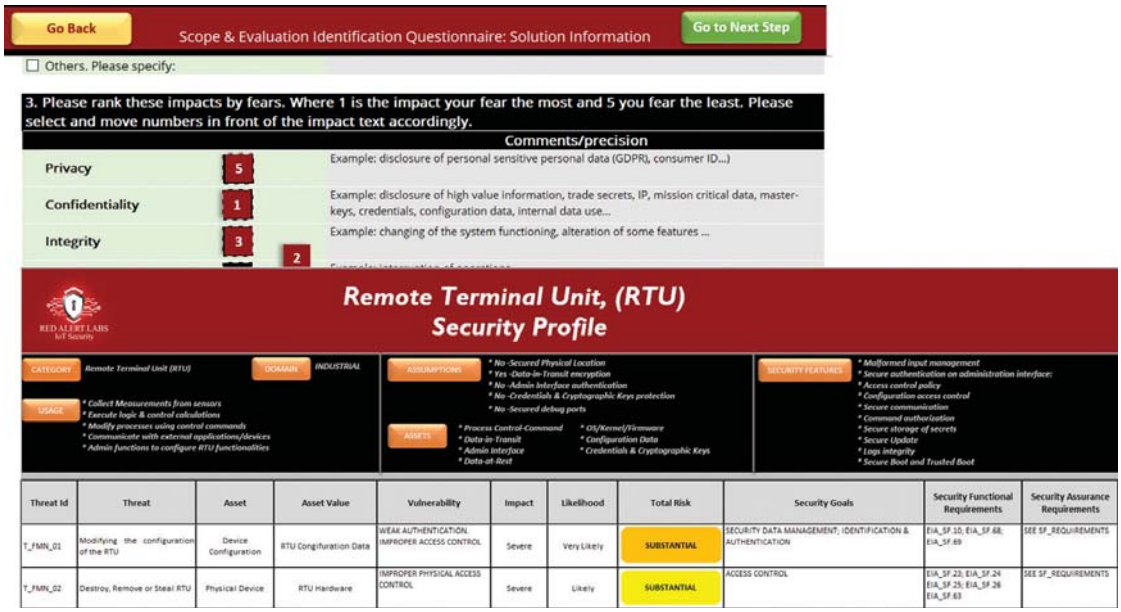
What is a security profile and how is it used ? //

It is a dashboard of security requirements relevant to a class of IoT product/solution (e.g. gateway, thermostat, smart camera, RTU, etc.). This approach takes into account the type and sensitivity of the assets, the attacks likelihood and impacts in a specific operational environment (e.g. consumer, enterprise, industrial, critical) and the risk factor.

This is a step forward towards an economical way of dealing with security assessment. It sets up security checks and security policies to be staggered according to the identified risks, i.e. to concentrate efforts where the risks are highest.

Security profiles can be agreed upon and standardized for certain product classes.

Finally, a Security Profile is the result of a detailed risk analysis for each new product instance. It provides a risk-accepted standard security properties for a type of IoT product/solution



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