FeliCa Approval for Security and Trust (FAST) v2 Overview

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Introduction

- The security certification scheme called "FeliCa Approval for Security and Trust (FAST)" has been set up to enable the evaluation and certification of the mobile FeliCa product security aspects.
- The FAST v2 scheme is driven by the independent certification body and the certificate is issued as ISO/IEC 15408 (Common Criteria) certificate.
- The TOE are FeliCa Card product that consists of the security IC and FeliCa OS, and Mobile FeliCa product that consists of the Security IC, the operating system (such as Java Card OS), and the mobile FeliCa application (such as payment and transit applications) including relevant crypto libraries for AES and TDES/DES.
 - The FAST v2 scheme aims to give a high assurance of security level (i.e., AVA_VAN.5), in a timely manner, to the service providers who deploy FeliCa products for their payment and/or transit services.

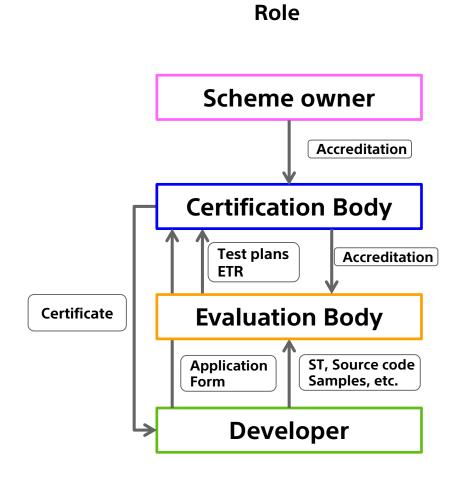
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Intent

- The intent of the scheme is to provide sufficient assurance for the certified products to protect the assets against potential threats.
- This scheme streamlines the process by focusing on specific threats that FeliCa products are exposed to.
- To maintain a consistent and state-of-the-art level of assurance, while reducing the time and cost of certification management, a streamlined certification process is defined.
- In this certification process, an ISO/IEC 17065 accredited certification body shall assess the evaluation results, and shall then determine whether the products provide sufficient assurance to be certified under this scheme.

FAST v2 roles and responsibilities



Responsibility

Scheme review Accredit a certification body

Operate certification process Accept application form Approve test plan Approve evaluation report (ETR) Issue certificate and publishment

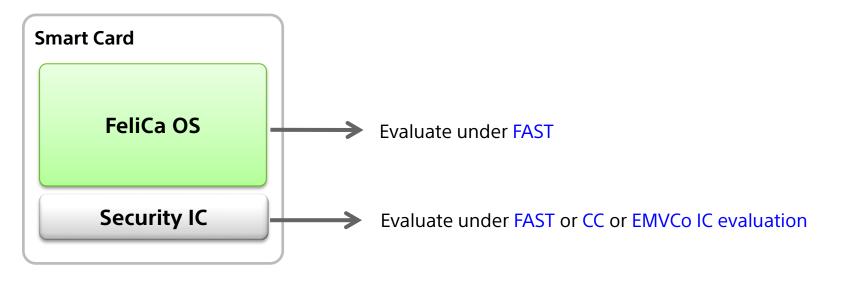
Evaluate FeliCa Applet / FeliCa CryptoLib Submit test plan to certifying lab Submit ETR to certifying lab

Develop FeliCa Card, FeliCa Applet, or FeliCa CL Submit ST, samples, source code and the required developer documents

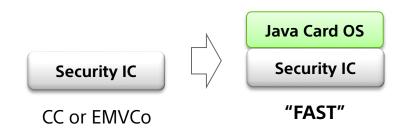


FAST v2 scope and process (FeliCa card)

Certification scope



Composite certification process



Product certification process

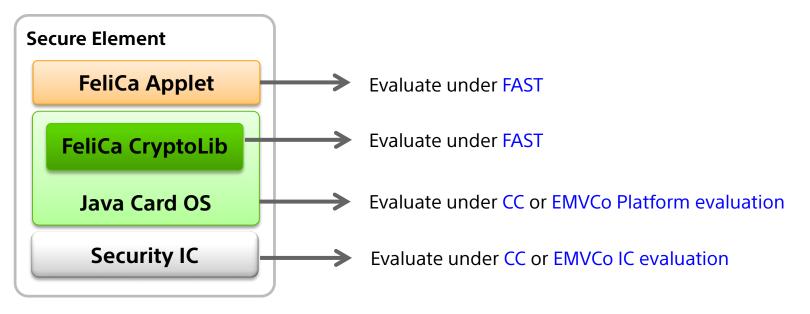


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FAST v2 scope and process (Mobile FeliCa)

Certification scope



Composite certification process Java Card OS Security IC CC or EMVCo CC or EMVCo

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Requirements (non-exhaustive list)

- All requirements for evaluation and certification are defined in the scheme document "FeliCa Approval for Security and Trust scheme v2.0" provided by the certification body.
- Key evaluation aspects:
 - TOEs are evaluated according to ISO/IEC 15408 (CC) and ISO/IEC 18045 (CEM)
 - Penetration test against high attack potential (AVA_VAN.5)
 - Site security (EMVCo site audit or the site certification under CC scheme can be reused)
 - AES and TDES/DES crypto protocol
- Certification validity
 - 5 years
 - Validity can be extended by 5 years through renewal process

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