

GlobalPlatform technology for the web

How browsers may benefit from GlobalPlatform TEE and SE

to offer secure and convenient services

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W3C WebCrypto.Next workshop
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www.linkedin.com/company/globalplatform

GlobalPlatform Positioning

GLOBALPLATFORM™

GlobalPlatform is ***the*** standard for managing applications on secure chip technology

TRUSTED EXECUTION ENVIRONMENT

MESSAGING

SECURE ELEMENT

Across several market sectors and in converging sectors

PREMIUM CONTENT | FINANCIAL | TELECOM | GOVERNMENT | AUTOMOTIVE | HEALTHCARE | RETAIL | TRANSIT

GlobalPlatform technologies

- Management of applications from multiple stakeholders on
  - Secure Element
  - Trusted Execution Environment (TEE)
- APIs specification for app development in TEE/SE
- Qualification processes
  - Interoperability
  - Security

SE/TEE head-end

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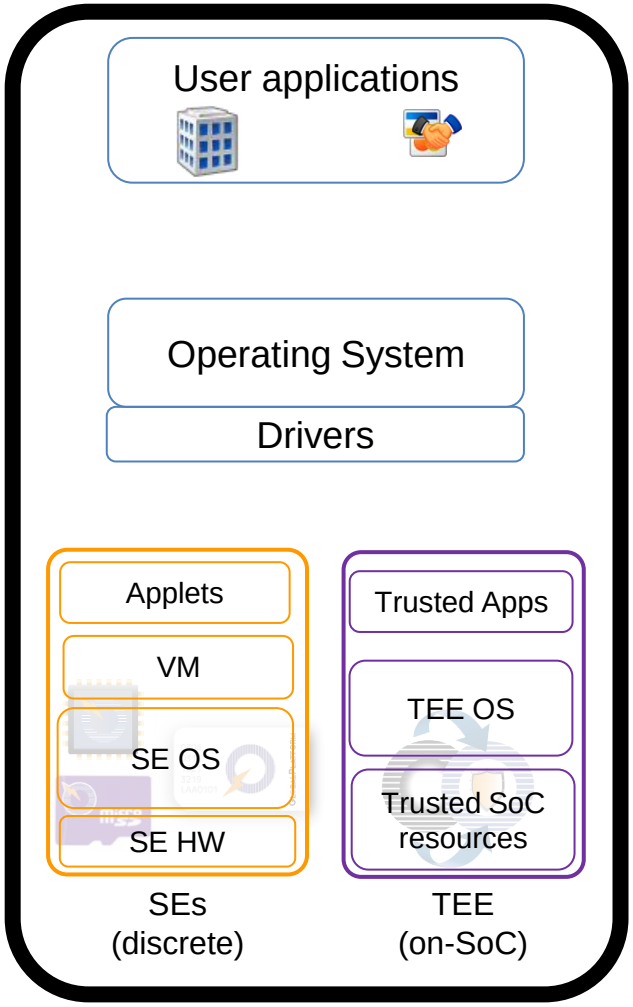

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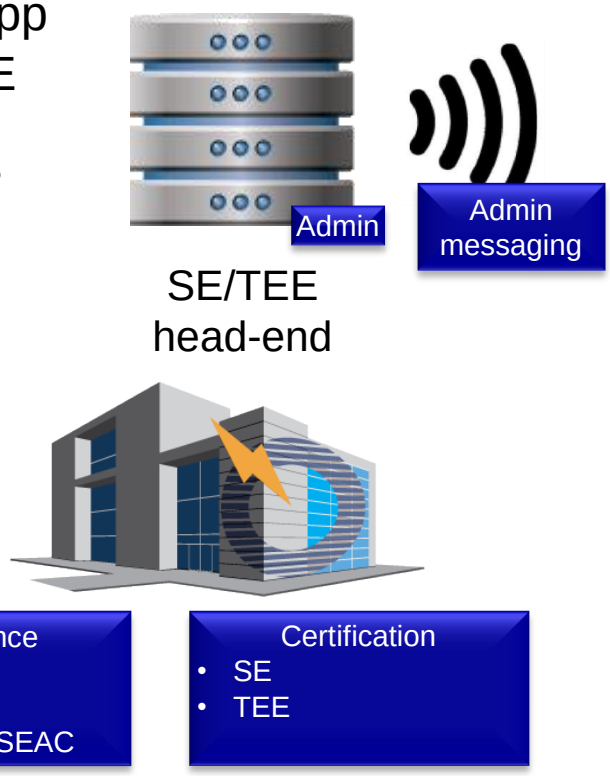
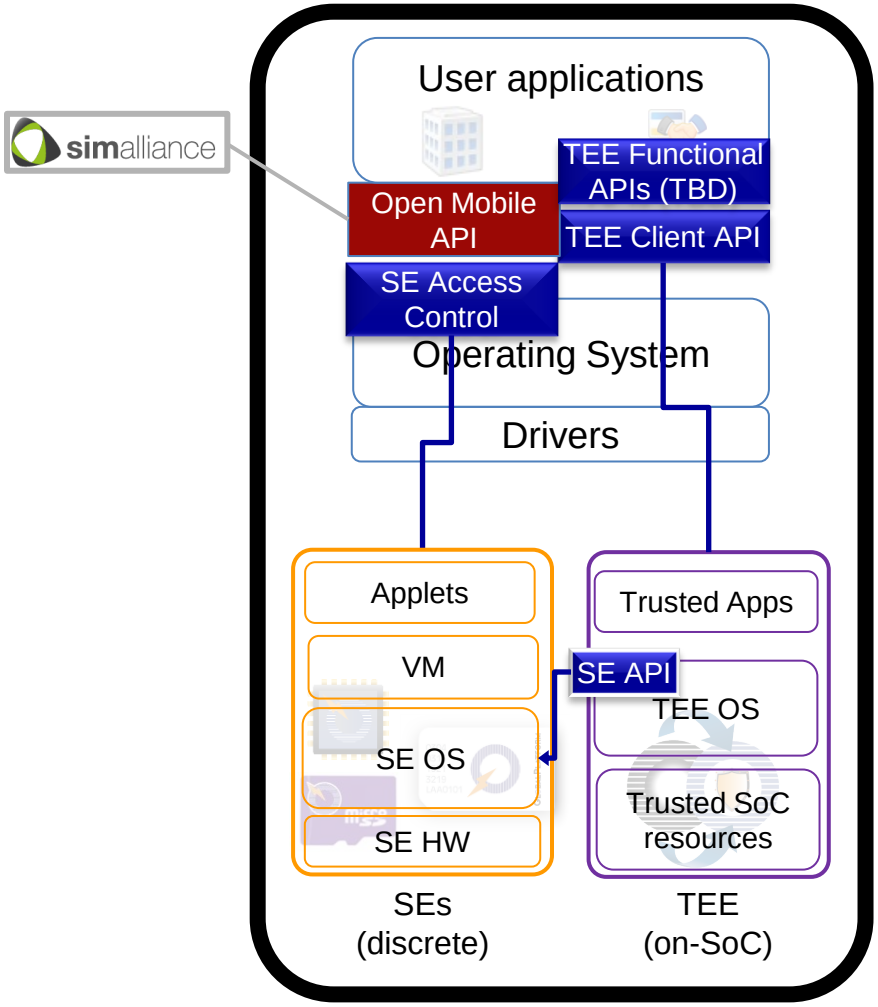


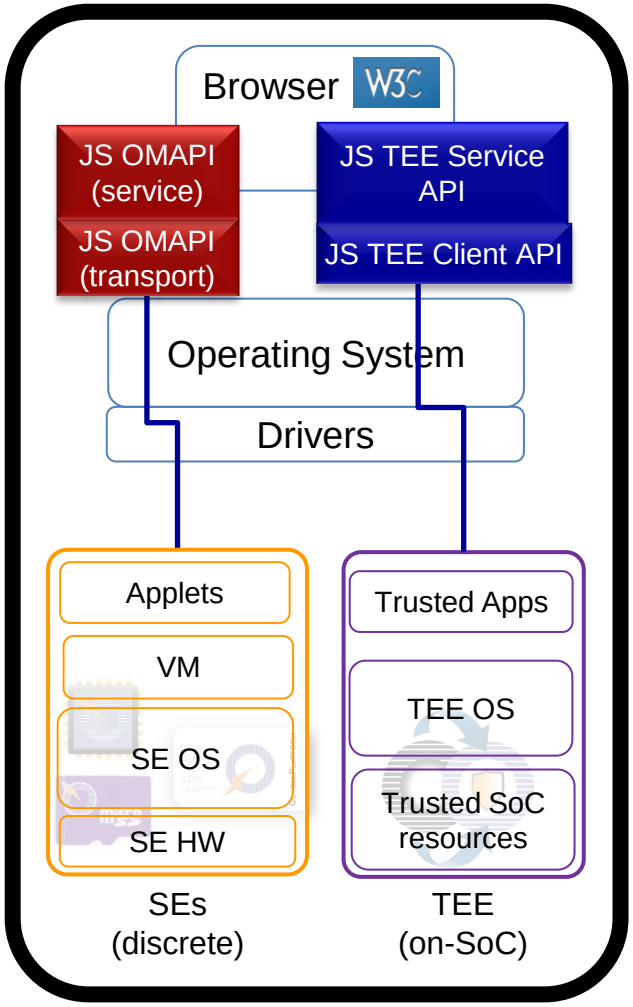
Interfaces to GP technologies

- TEE
  - TEE Client API: session management with a Trusted Application
    - Published in C,
    - JS binding available as draft (on hold)
  - TEE Functional APIs not specified yet
    - Access to services provided by the TEE
- SE
  - Open Mobile API: session management and functional services (SE discovery, secure storage, file system…)
    - Specification is language-agnostic
  - SE API in TEE: session management only (based on OMAPI), Secure Channel addition under drafting
- Access control enforcement
  - To TEE : OS security
  - To SE: SE Access Control



Proposals

- JS Open Mobile API (transport + SE discovery) and JS TEE Client API to manage sessions to SE/TEE
  - JS OMAPI may go through TEE or not (transparent to the client)
  - TEE JS Client API available as working draft of the TEE Spec WG
- JS Open Mobile API (service) and JS TEE Service API to provide access to SE/TEE services (crypto, secure storage…)
- Additional possible work items
  - Identification of security levels of SE/TEE
  - Additional TEE Service APIs for security UCs: Trusted UI, Trusted Video path (DRM)



Way of working

- For the browser APIS to GlobalPlatform Secure component, the Collaboration between both world is a key requirement for success :
  - Open-source group in GlobalPlatform with contribution of W3C members

  Or
  - W3C group with contribution of GlobalPlatform members

- Liaison between GP and W3C for the proposed work items to synchronize roadmaps.

Thank you!

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Access to the Experts! (Seminars)

GLOBALPLATFORM™

2nd Annual Trusted Execution Environment (TEE) Seminar
Tuesday, 30 September in Santa Clara, California

Pre-Seminar Technical Workshop on Monday, 29 September

GLOBALPLATFORM™
THE STANDARD FOR MANAGING APPLICATIONS ON SECURE CHIP TECHNOLOGY

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THE TRUSTED EXECUTION ENVIRONMENT (TEE):

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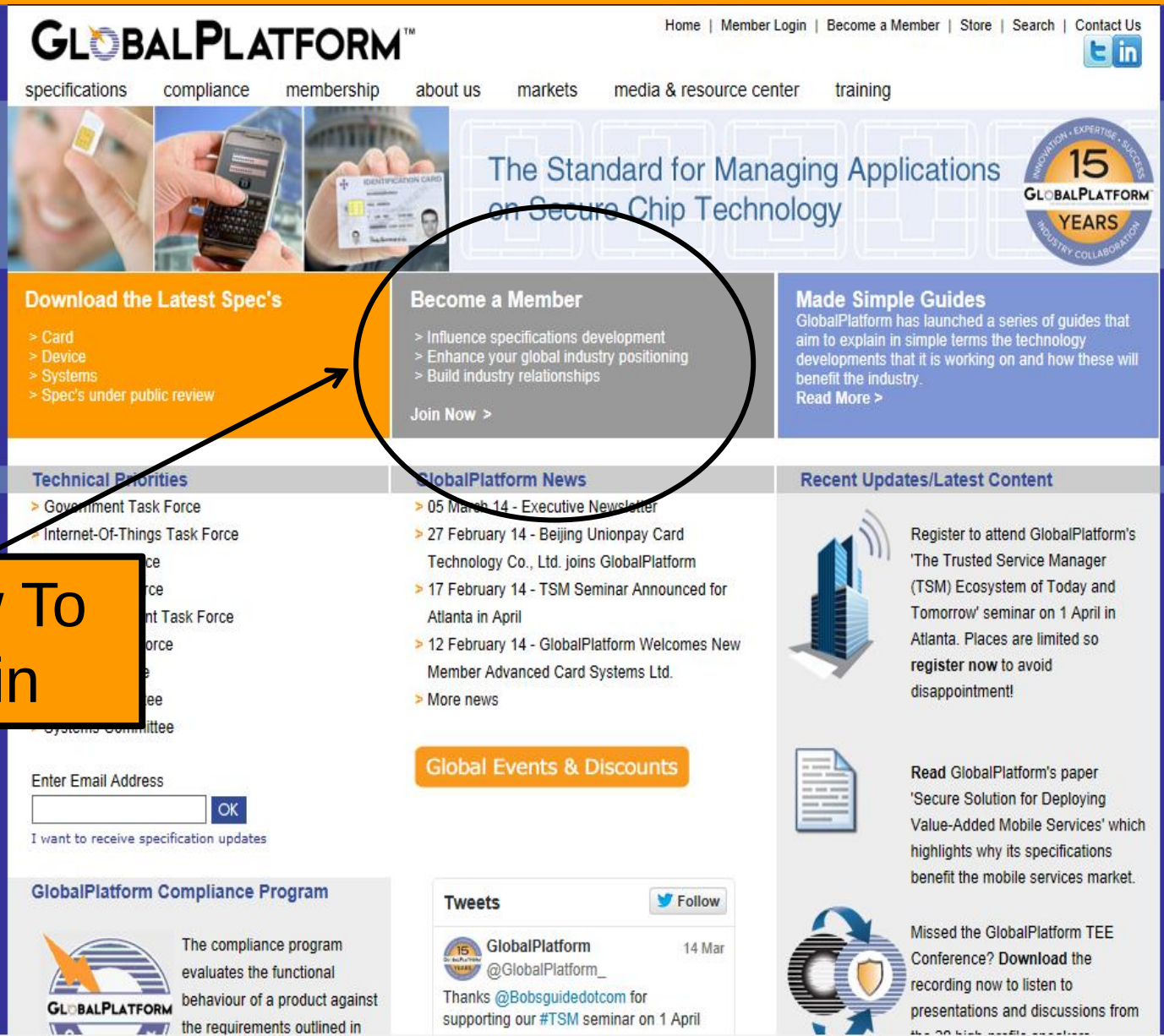

How To Join