

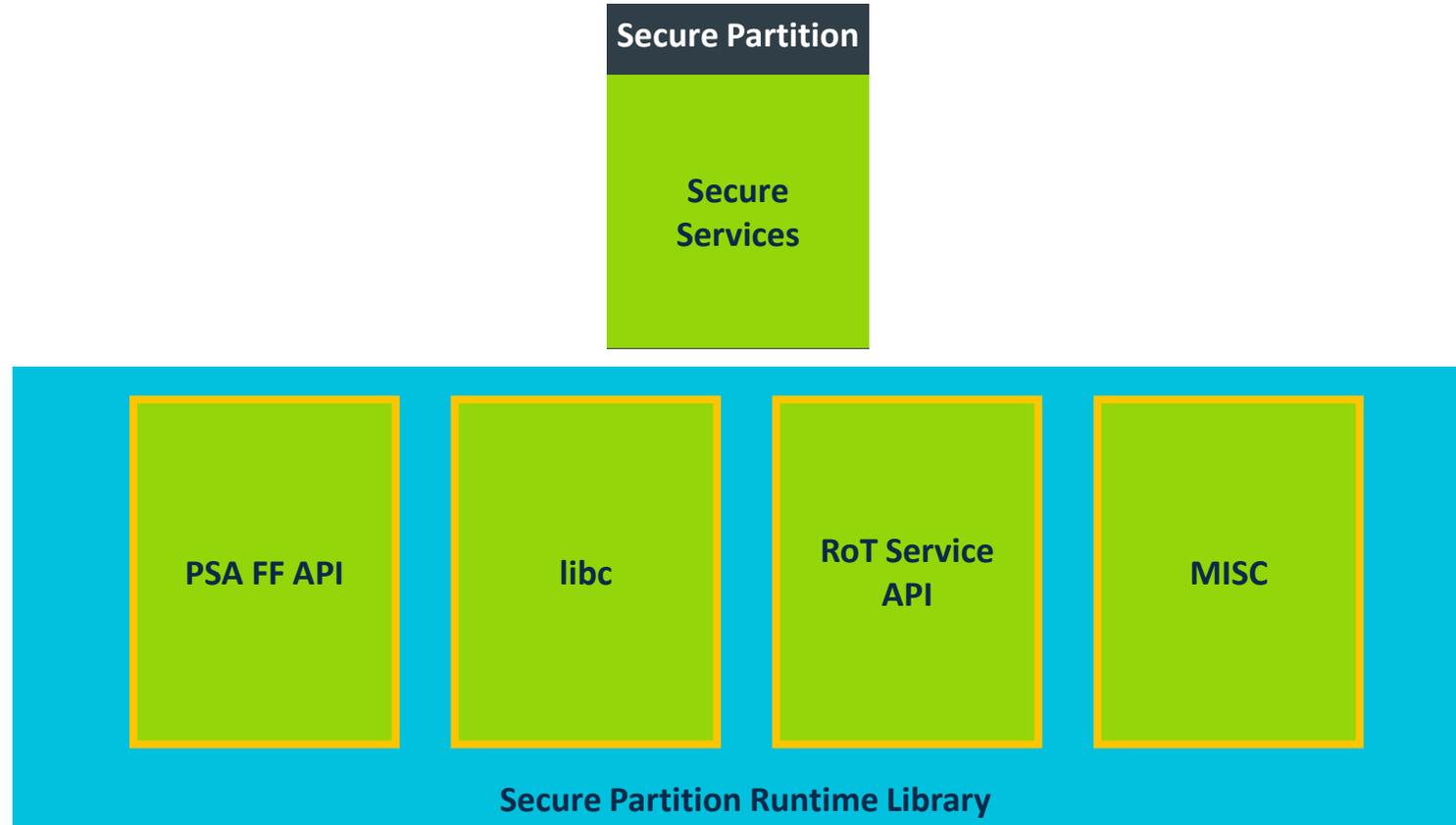
The ARM logo is displayed in a white, lowercase, sans-serif font. It is positioned on the left side of the slide, partially overlapping the silhouette of a wind turbine. The background of the slide is a photograph of a coastal wind farm at sunset or sunrise, with a line of wind turbines receding into the distance along a beach. The sky is filled with soft, white clouds, and the ocean waves are visible in the foreground.

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# Secure Partition Runtime Library Status

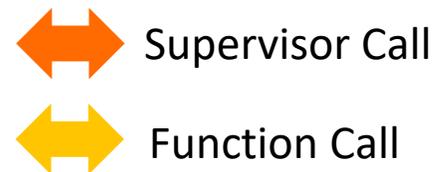
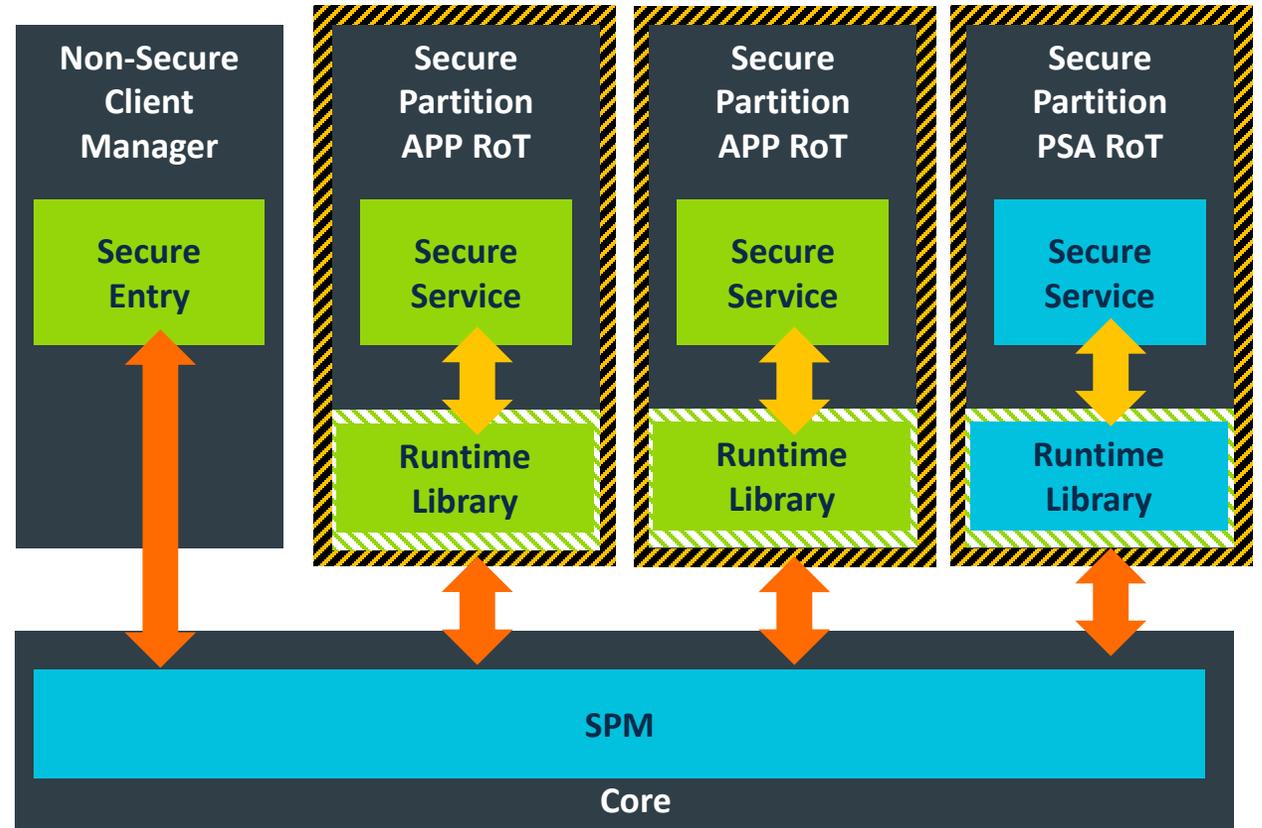
Ken Liu  
Jan 9th

# Runtime APIs for Secure Partition

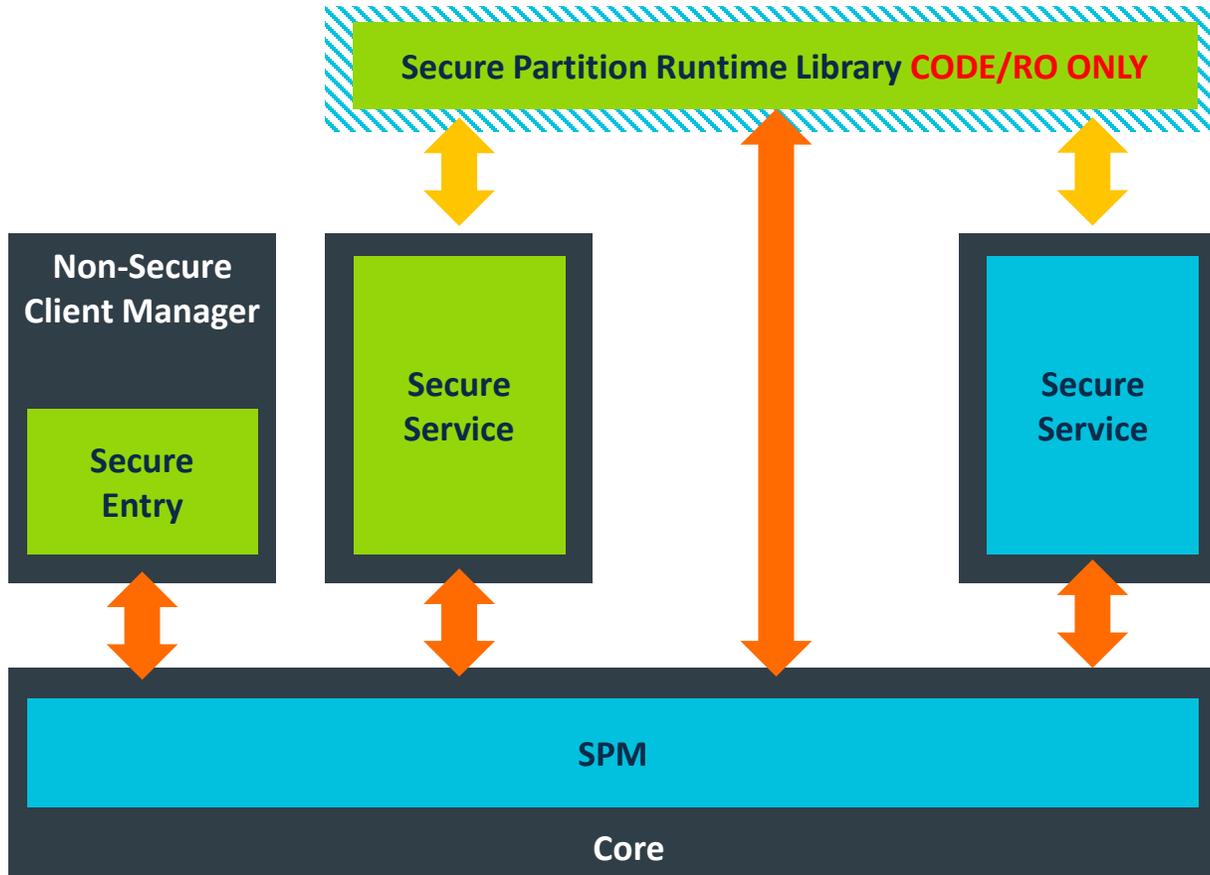


# Reasons for Creating SPRTL

- The Partitions are isolated – Duplicated Copy of Runtime Library?
- Toolchain provided libc symbols:
  - Some needs to be enhanced: comparing functions.
  - Some needs to be re-implemented: printf and related functions.
  - Auditing?
- Necessary part of the SP build

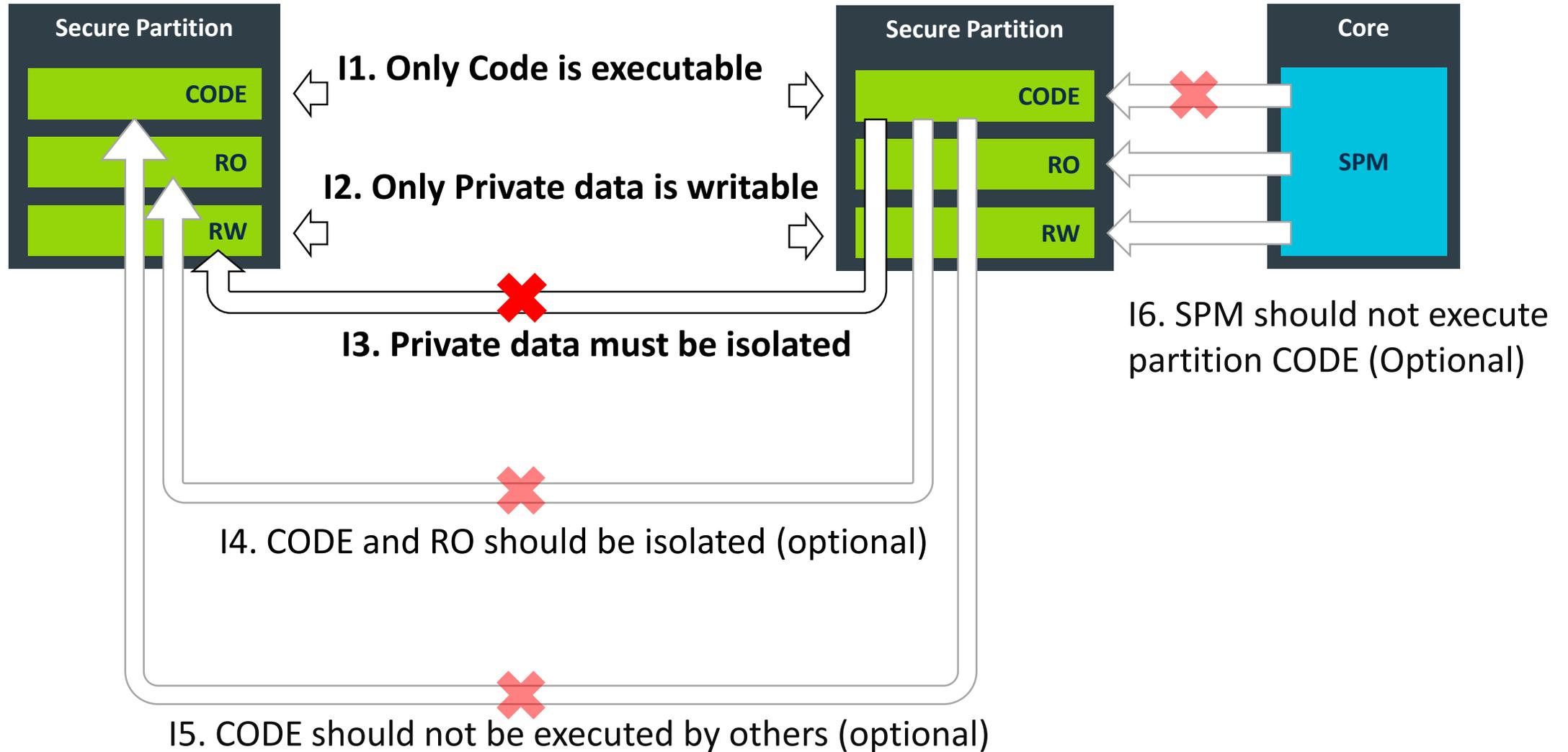


# Secure Partition Runtime – Library Design Guidelines

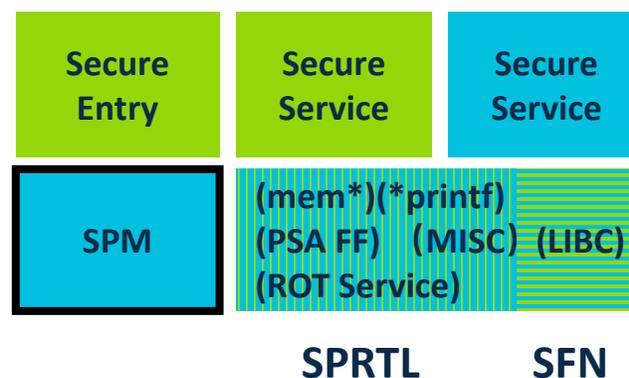
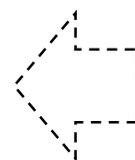
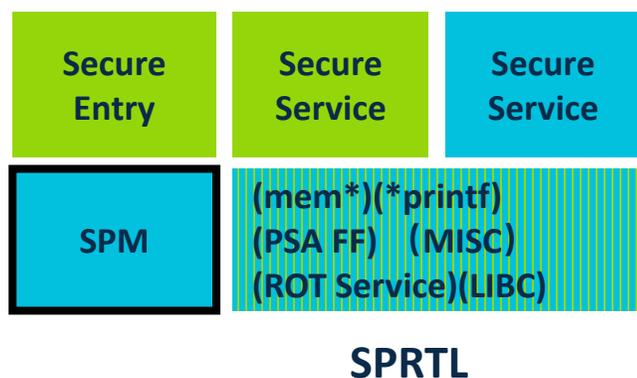
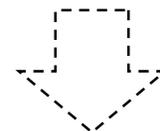
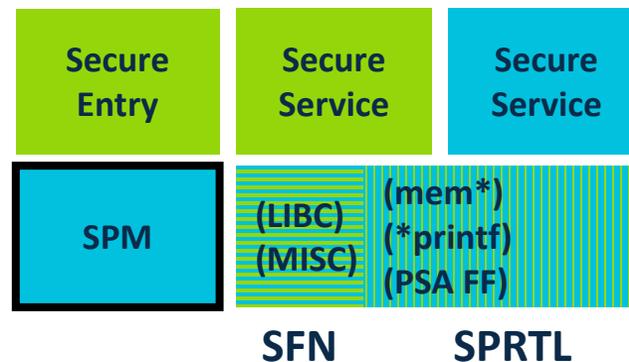
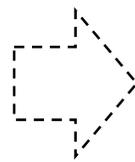
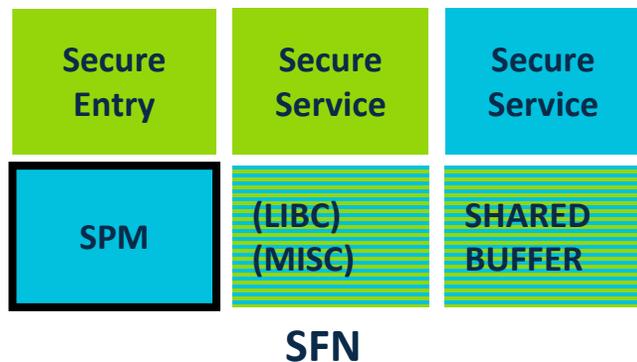


- Library contains CODE only
- No writeable private data
- Use caller stack

# Secure Partition Runtime – What does PSA FF say?



# Status of SPRTL



<= We are here :

- Structure is setup with necessary creating of makefiles and linker scripts.
- Part of libc candidates are ready for forwarding – toolchain built-in optimization needs to be avoided before this.
- PSA FF moved to this area for all partitions.

# Goal of SP Building

service/

- src/

> partition.json

Partition Description

> service.c

Partition Service Logic

- interface/

> service.h

Headers for Clients

- lib/

libsprt.a

Secure Partition Runtime Library

- generated/

Generated intermedia files while building

- psa\_manifest/

> sid.h

Service ID generated from manifest for Clients

> pid.h

Partition ID for Partition Interactive

> signals.h

Generated Signals for Partition internal usage

> partition\_info.h

Partition Information for Partition Database

> partition.ld

Partition position info for linker

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Thank You

Danke

Merci

谢谢

ありがとう

Gracias

Kiitos

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