Enabling On-Device Confidential Computing
Accelerating the Adoption of CC on End User Devices

Annual Review

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Annual Review Questions

- The project's submission template or Technical Charter have changed? No change

- The project's progression status? Incubation stage

- Any budget allocations? None

- License? Apache-2.0 (The same as last year)

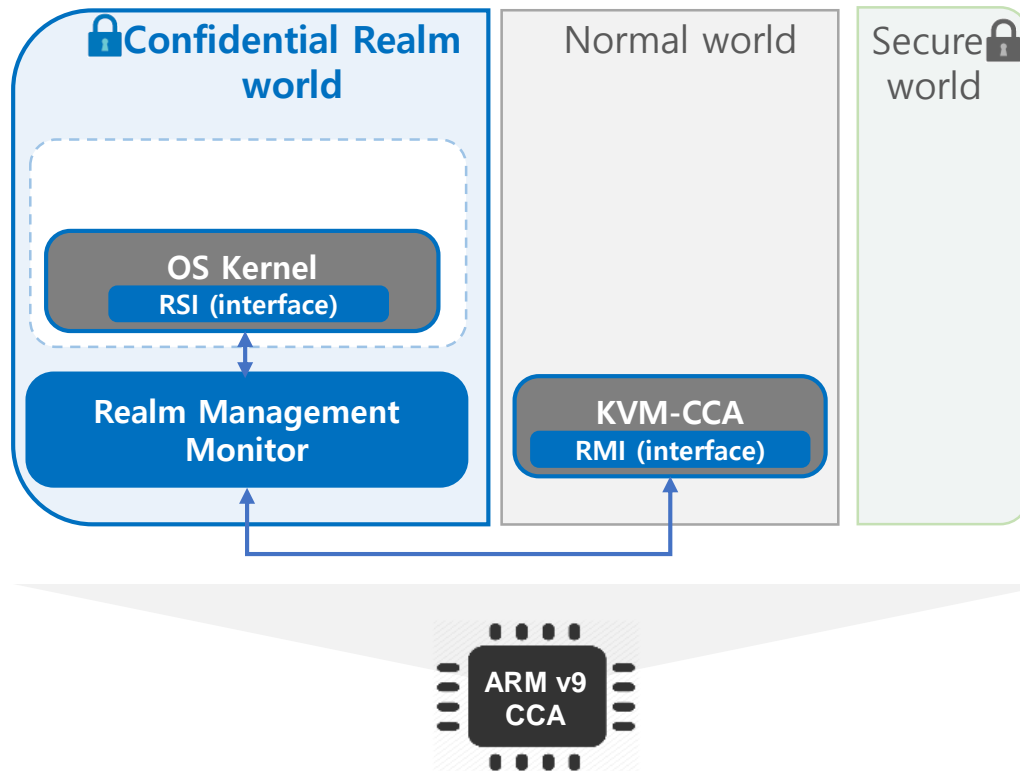- OpenSSF Best Practices Badge status

  - Improvement from 64% to 99%
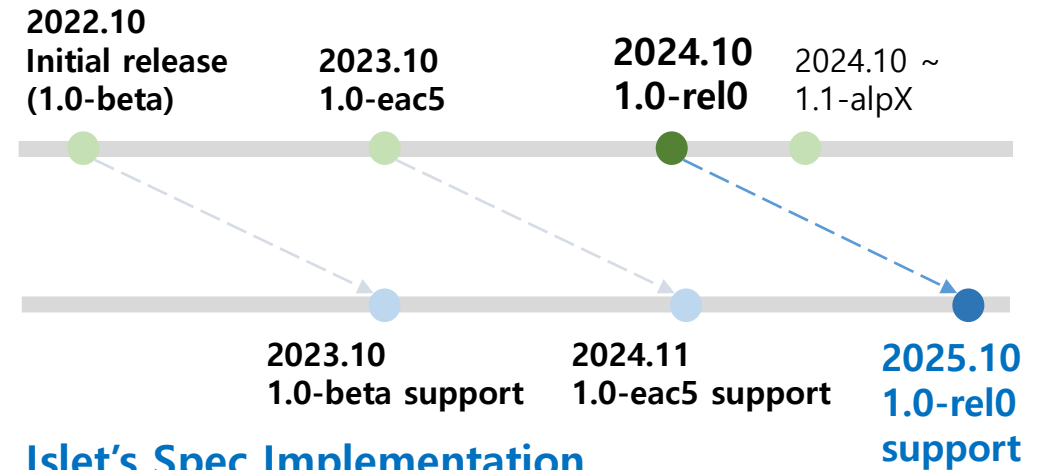
Community Activities

- CCC Mentorship program:
  - Task: Strengthening Security through Fuzz Testing

- Poster presentation at CC Summit 2025
  - Title: A Security Monitor Framework For On-Device Confidential Computing

- Areas for improvement:
  - Not successfully expand maintainers or contributors

Technical Progress

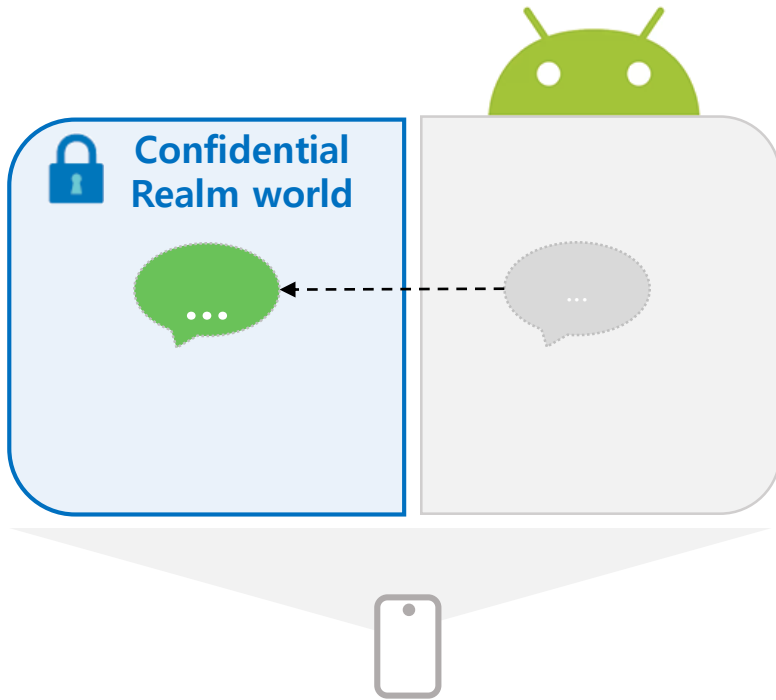1. Islet-RMM: Implementation updated to support Arm's RMM specification v1.0-rel0.

Confidential Realm world | **Normal world** | **Secure world**

OS Kernel — RSI (interface)

Realm Management Monitor

KVM-CCA — RMI (interface)

ARM v9 CCA

Arm's RMM Spec Release

2022.10 Initial release (1.0-beta)

2023.10 1.0-eac5

2024.10 1.0-rel0

2024.10 ~ 1.1-alpX

2023.10 1.0-beta support

2024.11 1.0-eac5 support

2025.10 1.0-rel0 support

Islet's Spec Implementation

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ISLET

Technical Progress

2. Enabled the Android app code to run inside Realm

Confidential Realm world

Apps that use AIDL binder communication can run confidentially with minimal changes.

```
@GenerateCCService(ClassName="CCService")
interface IExampleInterface {
    int addInt(int a, int b);
    int getRandomNumber();
}
```

Upcoming Release
- Currently being refined.
- Open it by the end of this year or early next year.
- To benefit App developers with On-device CC.
- And to encourage code contributions.

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ISLET

Plans for 2026

- Expand Android CC: applying it to real-world apps.
- Enhance performance of Islet.
- Improve documentation.

THANK YOU!

QUESTIONS?