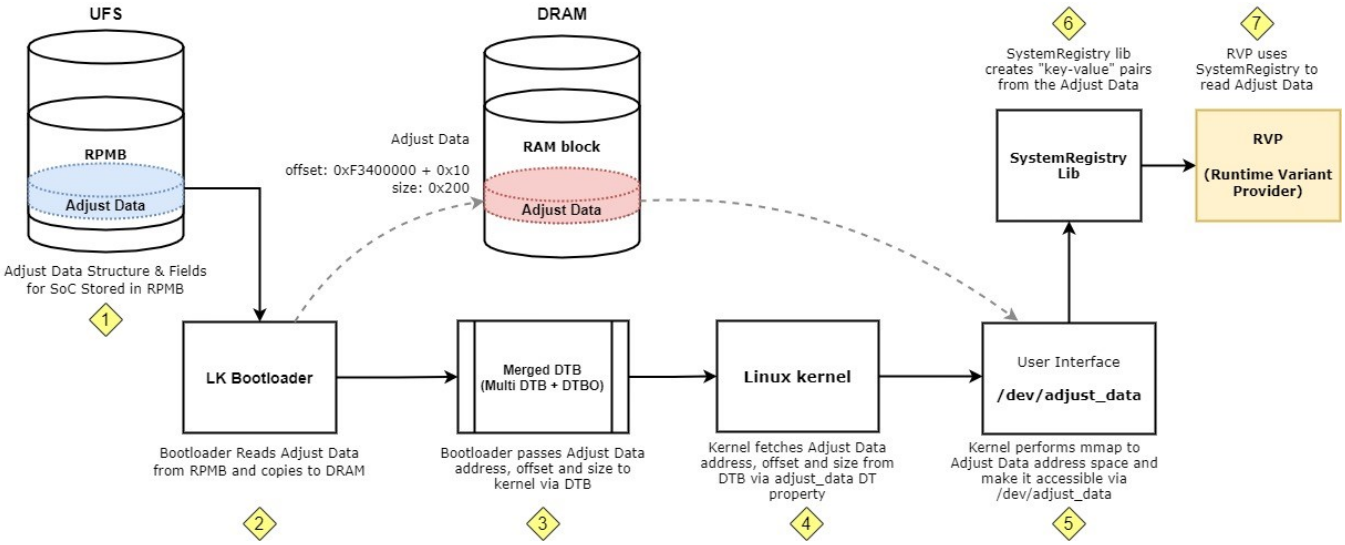
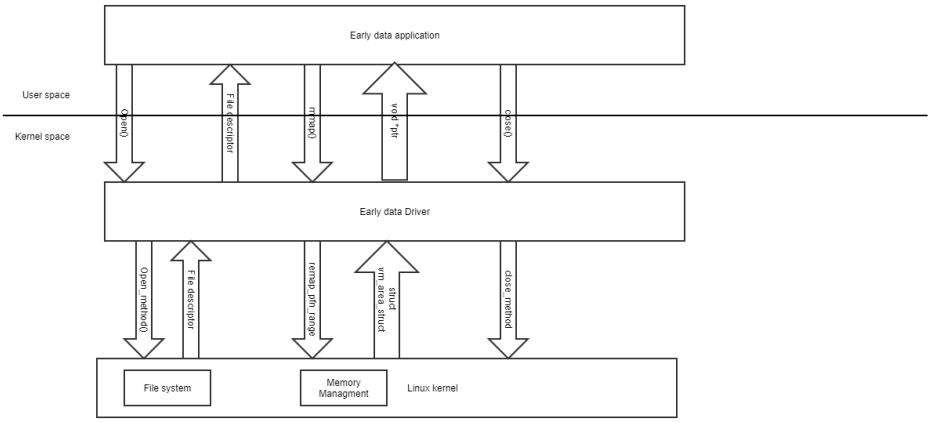
Earlydata driver Interface

This page explains the interface and usage of early data driver from user space.

Early data driver helps accessing adjust data stored in RPMB in UFS from user space. Basically this driver maps requested number of pages starting at physical memory "0xf3400000" on RAM to the address space of user process. Thus user process can access the adjust data seamlessly.



Usage or Interface from user space.



Source code : earlydata_idcevo.c

Test case logs: earlydata_validation_log_mmap.txt

Test application

1. Open device file /dev/adjust_data.
2. Perform mmap call. Note mmap always expects offset in page size.

   Ex: mmap(NULL, size, PROT_READ, MAP_PRIVATE, fd, offset*4096); ------ size: number of bytes to map in bytes, offset: page offset.

3. close device.

Note: The attached application expects offset as 1st and size as 2nd command line argument. Application source code and test case logs are also attached for reference.

Ex: ./adjustdat_app <page_offset> <size_bytes>

Test case has considered 4 cases.

case 1: Write to rpmb is blocked. Hence mmap fails here.

case 2 & 3 : Access beyond 16MB is blocked.

case4: reading 512 bytes is successful.