Driver-specific callbacks

The planfw module relies on the device driver for implementing device specific behavior using the following operations.

.match record

The .match_record operation is used to determine whether a given PLDM record matches the device being updated. This requires comparing the record descriptors in the record with information from the device. Many record descriptors are defined by the PLDM standard, but it is also allowed for devices to implement their own descriptors.

The .match record operation should return true if a given record matches the device.

.send package data

The <code>.send_package_data</code> operation is used to send the device-specific package data in a record to the device firmware. If the matching record provides package data, <code>pldmfw</code> will call the <code>.send_package_data</code> function with a pointer to the package data and with the package data length. The device driver should send this data to firmware.

.send component table

The .send_component_table operation is used to forward component information to the device. It is called once for each applicable component, that is, for each component indicated by the matching record. The device driver should send the component information to the device firmware, and wait for a response. The provided transfer flag indicates whether this is the first, last, or a middle component, and is expected to be forwarded to firmware as part of the component table information. The driver should an error in the case when the firmware indicates that the component cannot be updated, or return zero if the component can be updated.

.flash component

The .flash_component operation is used to inform the device driver to flash a given component. The driver must perform any steps necessary to send the component data to the device.

.finalize update

The $.finalize_update$ operation is used by the pldmfw library in order to allow the device driver to perform any remaining device specific logic needed to finish the update.