


Open Mobile API Specification

Errata for Version 3.2

Published by  simalliance now Trusted Connectivity Alliance

February 2016

Copyright © 2016 Trusted Connectivity Alliance Ltd.

The information contained in this document may be used, disclosed and reproduced without the prior written authorization of Trusted Connectivity Alliance. Readers are advised that Trusted Connectivity Alliance reserves the right to amend and update this document without prior notice. Ownership of the OMAPI Specification has been transferred to GlobalPlatform. All future releases will be available on the GlobalPlatform website.

Table of Contents

- 1. Introduction 3
- 2. List of modifications 3
 - 2.1 Chapter 6.1.1 General Rules for Handling of Status Word..... 3
 - 2.2 Chapter 6.2.7 f) Method: Channel openBasicChannel(byte[] aid, byte P2) 3
 - 2.3 Chapter 6.2.8 f) Method: void setTransmitBehaviour (boolean expectDataWithWarningSW) 4
 - 2.4 Chapter 6.3.7 f) OMAPI RESULT omapi_channel_set_transmit_behaviour(Handle hChannel, Boolean expectDataWithWarningSW) 4

1. Introduction

This document contains errata notes for Open Mobile API Specification v3.2. All the changes listed in this document will be integrated in the next version of the Open Mobile API specification. This document uses revision marks to show the new applicable content. The document contains only that part of the subchapters where the errata are made. All the other parts of the Open Mobile API Specification v3.2 remain unchanged and applicable.

2. List of modifications

2.1 Chapter 6.1.1 General Rules for Handling of Status Word

Rationale of the errata : In subchapter (b) Using Transport layer T=0 the references to ISO specification are updated using cross referencing instead of using text. The document with reference [10] is

[10]ISO/IEC 7816-3:2006	Identification cards — Integrated circuit cards — Part 3: Cards with contacts — Electrical interface and transmission protocols
-------------------------	---

Some protocol details are also deleted, as these are specified clearly in the referenced ISO specification. The changes are shown below with tracking mark:

(b) Using Transport layer T=0

Unless otherwise specified, when sending command APDU, SIMalliance's OMAPI Specification requires the following management for status word for all the methods defined in this document:

- For status word '61 XX' the API or underlying implementation shall issue a GET RESPONSE command as specified in [10] ~~by ISO 7816 standard with LE=XX~~. The same behaviour has to be applied for the scenario where the SE returns overall response data of more than 256 bytes to the APDU. If an Error SW is received to GET RESPONSE command, all data received so far shall be discarded and the Error SW shall be returned.
- For the status word '6C XX', the API or underlying implementation shall reissue the input command ~~with LE=XX~~ as specified in [10] ~~by ISO 7816 standard~~. If an Error SW is received to the reissued command, all data received so far shall be discarded and the Error SW shall be returned.

2.2 Chapter 6.2.7 f) Method: Channel openBasicChannel(byte[] aid, byte P2)

Rationale of the errata : It is an editorial correction. The changes are shown below with tracking mark:

(f) Method: Channel openBasicChannel(byte[] aid, byte P2)

When a ~~logical~~basic channel is opened the value of the attribute expectDataWithWarningSW shall be 'false'.

2.3 Chapter 6.2.8 f) Method: void setTransmitBehaviour (boolean expectDataWithWarningSW)

Rationale of the errata : A protocol detail is deleted, as this is an evident behaviour defined by ISO specification and it is not necessary to specify it by Open Mobile API specification. The changes are shown below with tracking mark:

(f) Method: void setTransmitBehaviour (boolean expectDataWithWarningSW)

Parameter:

expectDataWithWarningSW

- when set to false: the underlying implementation of the transmit() method shall only issue a GET RESPONSE command after receiving a 61XX SW (as defined in Chapter 6.1.1.).
- when set to true: ~~the underlying implementation of the transmit() method shall first cut off the Le field of the command APDU.~~

- In case the SE returns data and warning SW ('62XX' or '63XX'), the returned data and the warning SW shall be provided to the calling Mobile Application and no GET RESPONSE shall be sent.

- In case the SE returns a warning SW ('62XX' or '63XX') without data, the API shall issue a GET RESPONSE with Le='00'. After sending the GET RESPONSE with Le='00', general rules specified in Chapter 6.1.1 shall apply for retrieving the data. If all the available data was successfully retrieved - i.e. the last status word is '9000', or a warning status word (62 xx, 63 xx) - the API shall return the data together with the first received warning status word (i.e. the warning status word received for the command APDU sent in the transmit() method). In consequence the last success or warning status word shall be ignored.

Note: If the SE has no data to provide back after sending the warning SW, the GET RESPONSE will trigger an error on the SE. So, when setting the value to "true", it is strongly recommended to check that the SE applet will have data to provide back to the calling application in case of any warning status word returned by the applet.

2.4 Chapter 6.3.7 f) OMAPI RESULT omapi_channel_set_transmit_behaviour(Handle hChannel, Boolean expectDataWithWarningSW)

Rationale of the errata : Same change as in point 2.3 of this document applied for the procedural interface also. The changes are shown below with tracking mark:

(f) OMAPI RESULT omapi_channel_set_transmit_behaviour(Handle hChannel, Boolean expectDataWithWarningSW)

Parameters

[in] Boolean expectDataWithWarningSW

- when set to false: the underlying implementation of the `omapi_channel_transmit()` function shall only issue a GET RESPONSE command after receiving a 61XX SW (as defined in Chapter 6.1.1.).
- when set to true: ~~the underlying implementation of the `omapi_channel_transmit()` function shall first cut off the Le field of the command APDU.~~
 - In case the SE returns data and warning SW ('62XX' or '63XX'), the returned data and the warning SW shall be provided to the calling Mobile Application and no GET RESPONSE shall be sent.
 - In case the SE returns a warning SW ('62XX' or '63XX') without data, the API shall issue a GET RESPONSE with `Le='00'`. After sending the GET RESPONSE with `Le='00'`, general rules specified in Chapter 6.1.1 shall apply for retrieving the data. If all the available data was successfully retrieved - i.e. the last status word is '9000', or a warning status word (62 xx, 63 xx) - the API shall return the data together with the first received warning status word (i.e. the warning status word received for the command APDU sent in the `omapi_channel_transmit()`). In consequence the last success, or warning status word, shall be ignored.
Note: If the SE has no data to provide back after sending the warning SW, the GET RESPONSE will trigger an error on the SE. So, when setting the value to "true", it is strongly recommended to check that the SE applet will have data to provide back to the calling application in case of any warning status word returned by the applet.