Standard Operating Procedure
for
UL tracing and troubleshooting

Version Control

Document Name	Version	Date
SOP for UL tracing troubleshooting	V1.0	22-08-2022

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Revision History

Issue	Date	Reason for change
V1.0	22-08-2022	First Release

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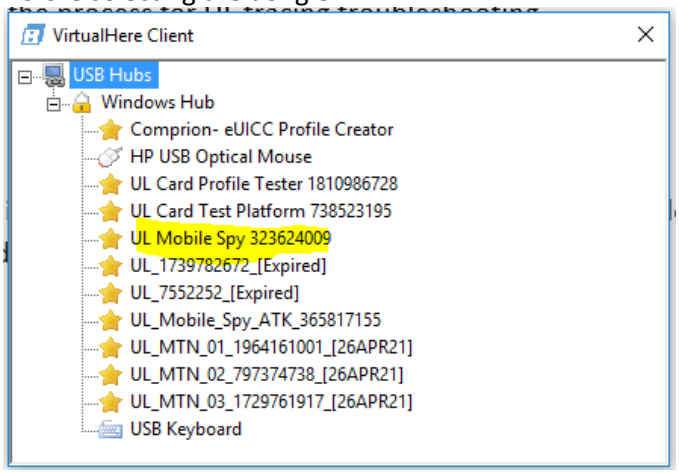
Introduction

This document outlines the procedure for UL tracing and troubleshooting for UICC and eUICC products.

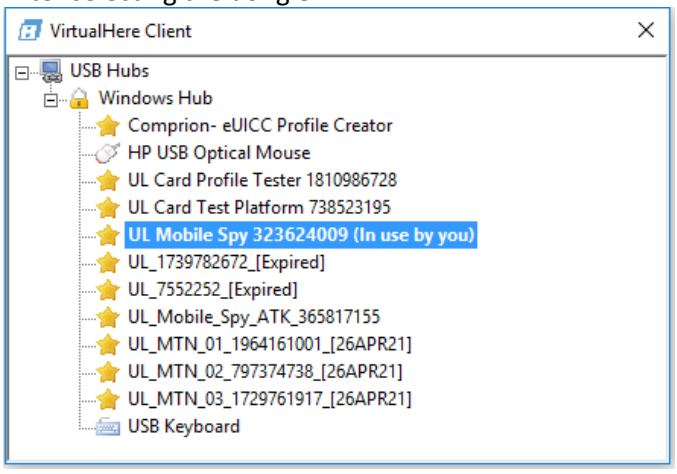
Procedure

1. Open VirtualHere client on your machine and select the dongle for Mobile Spy. This tool is used to access the shared USB licensed dongle for Mobile Spy tool by UL. Snippet below:

   Before selecting the dongle:



   After selecting the dongle:



2. Open Mobile Spy software (current version – 3.5.1).

3. Connect the hardware and click on Firebolt icon. Snippet below:

4. If the hardware is connected properly, it will enlist a serial number of the device. Click on OK and proceed.

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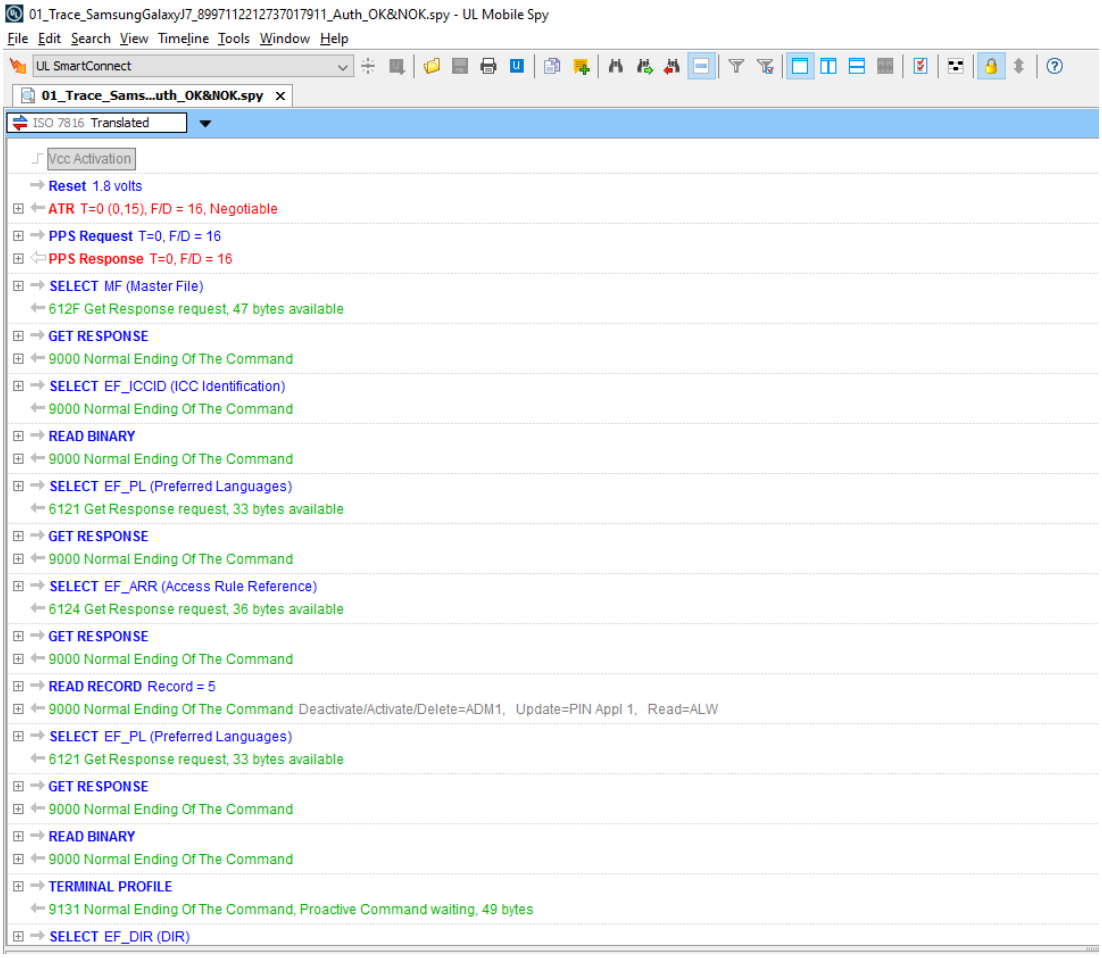
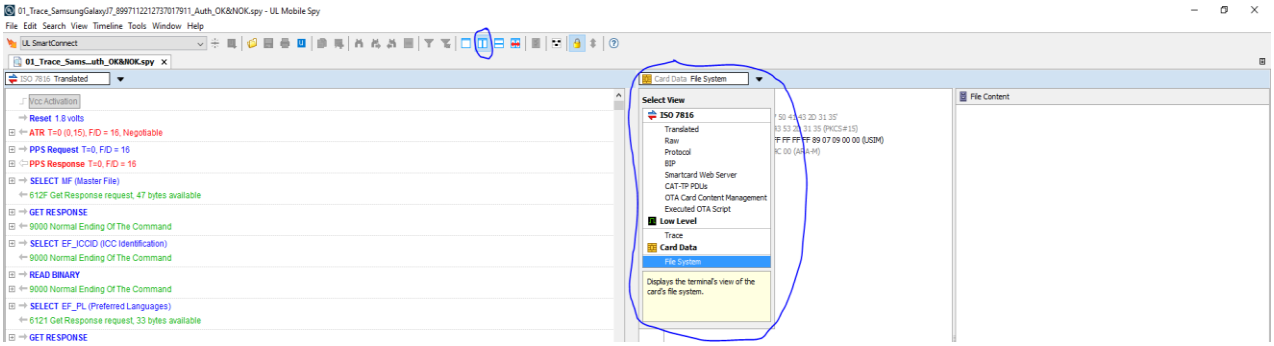
5. Once the ME is turned ON, the traces will start loading in the trace window. Snippet below:



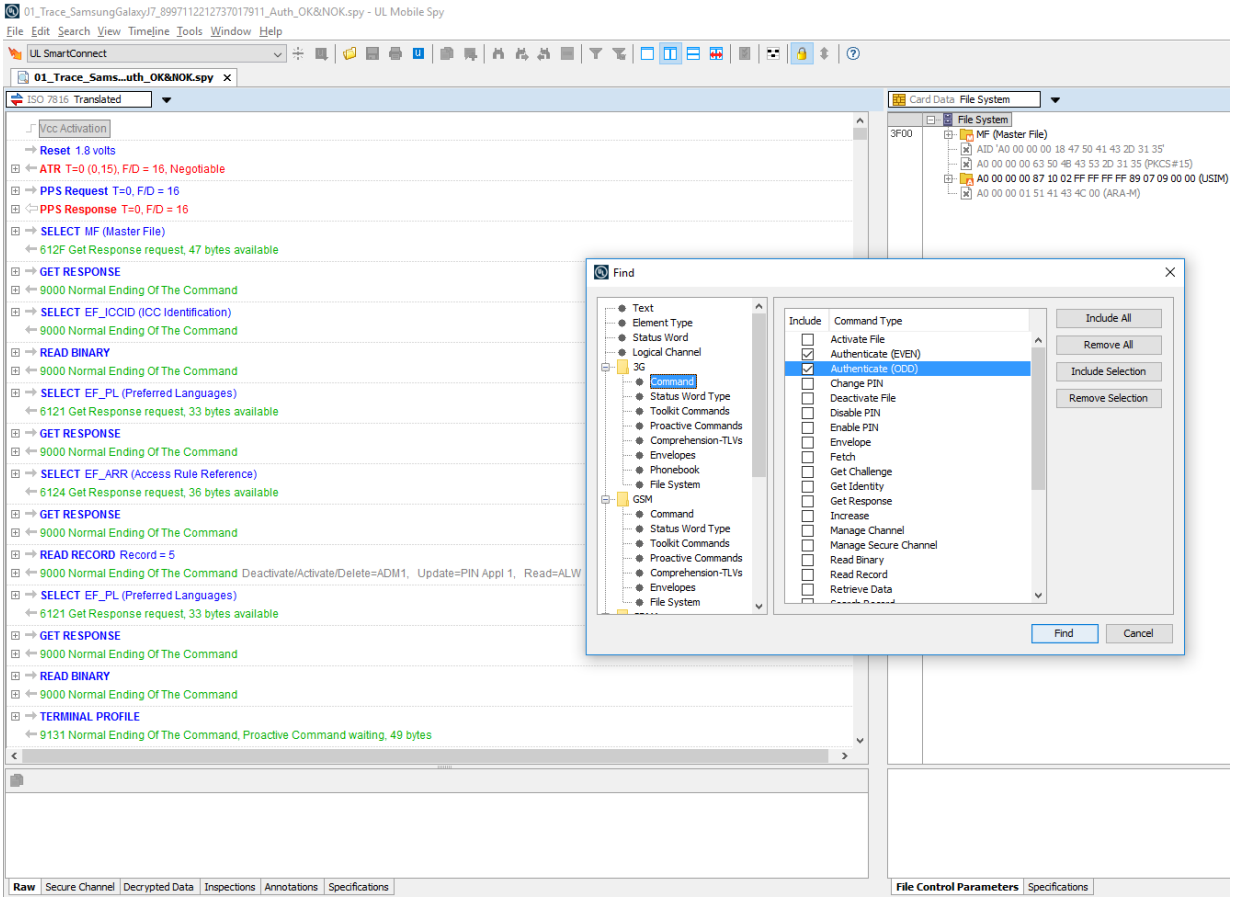
6. "Split Vertically" option can be used to open another view of the tracing session and accordingly different views of the trace can be selected. Snippet below:



7. It is useful to open "File System" view in this section to check the content of EF's in parallel, if needed.

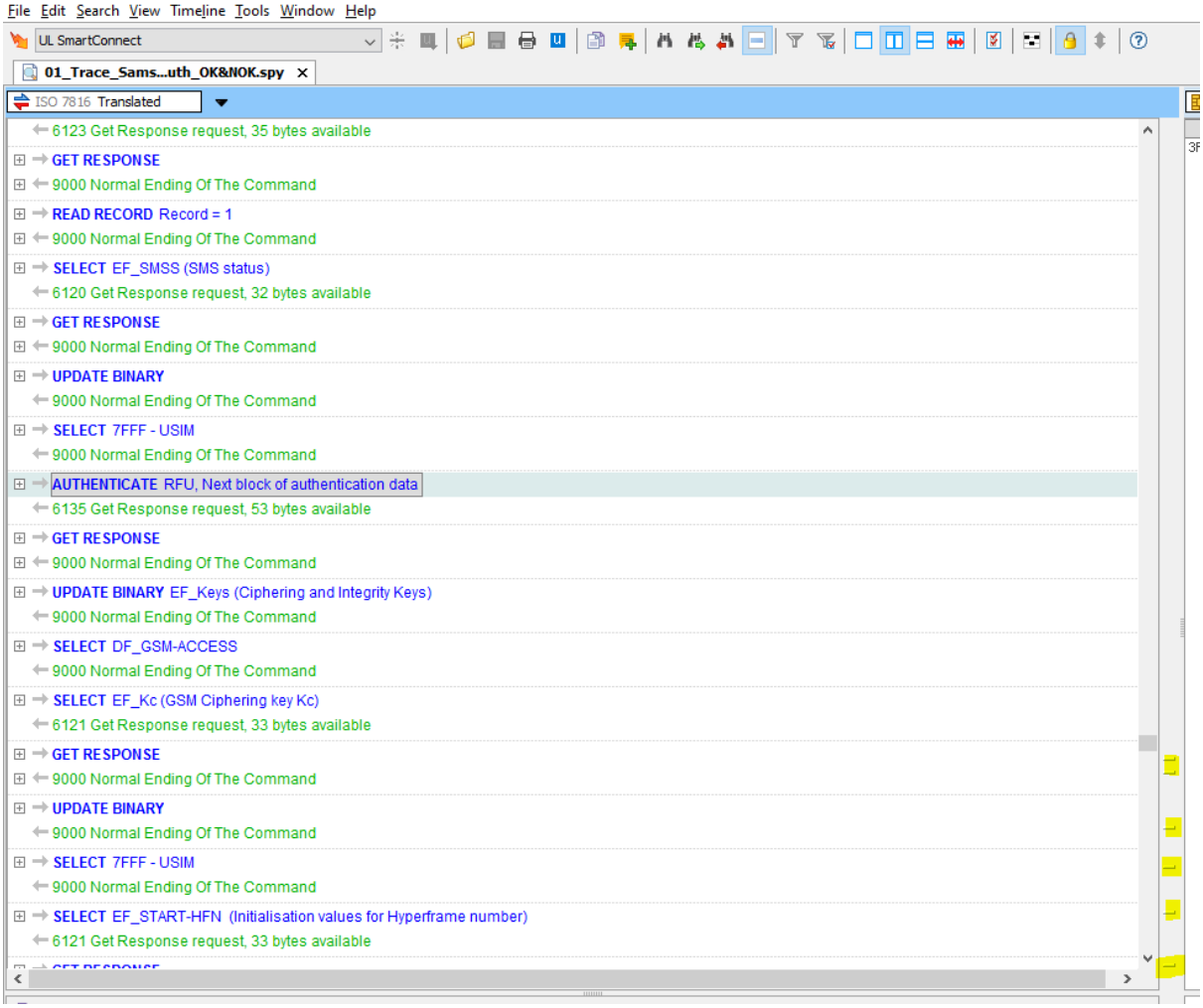
8. "Find" option can be used to search for any particular command. For ex: if you want to check for "Authentication", then "Authenticate" command can be filtered as shown below:

Doc ID: 79e172c93c7862153cc4f386d1ddb970ecb1e60d



Doc ID: 79e172c93c7862153cc4f386d1ddb970ecb1e60d

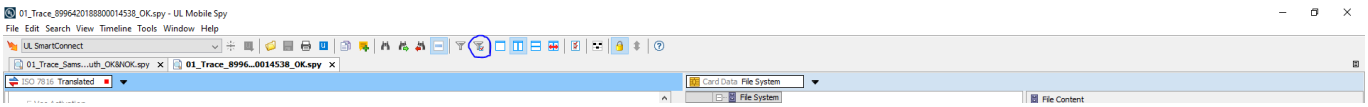
9. This would highlight the trace with small pointers on the right side, wherever the “Authenticate” command is present. See snippet below:



10. To navigate to these different sections in the trace, ‘F3’ can be used.

11. If the authentication has failed, a typical error would be shown as below:

12. Another useful option is to filter out “Toolkit Activity” in the trace which basically captures all the proactive commands in progress. This can be done by using the “Configure Filter” button. Snippet below:



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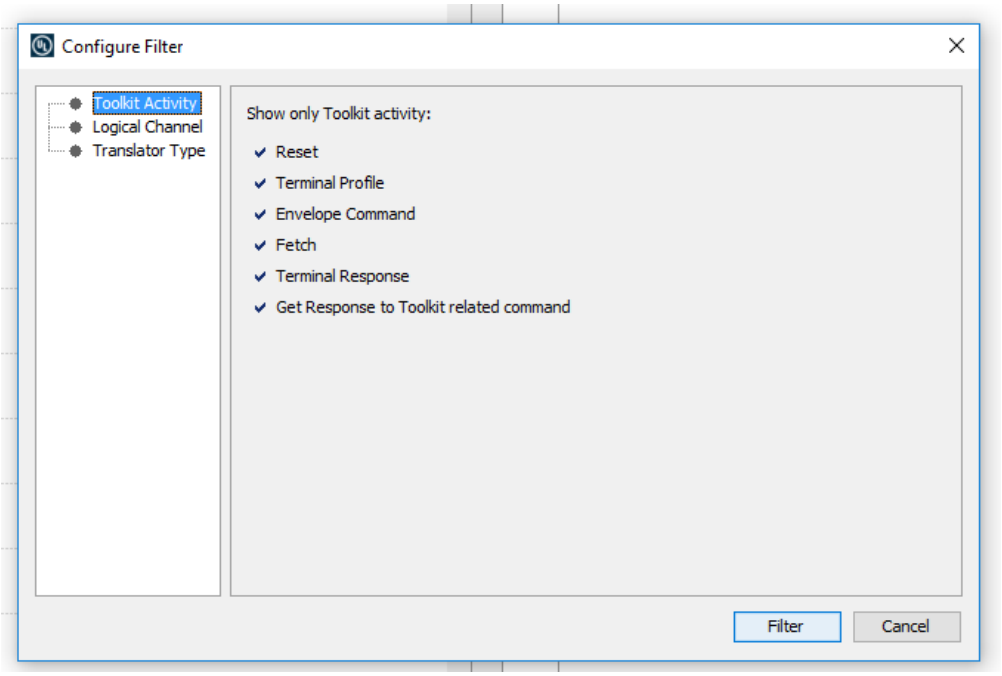
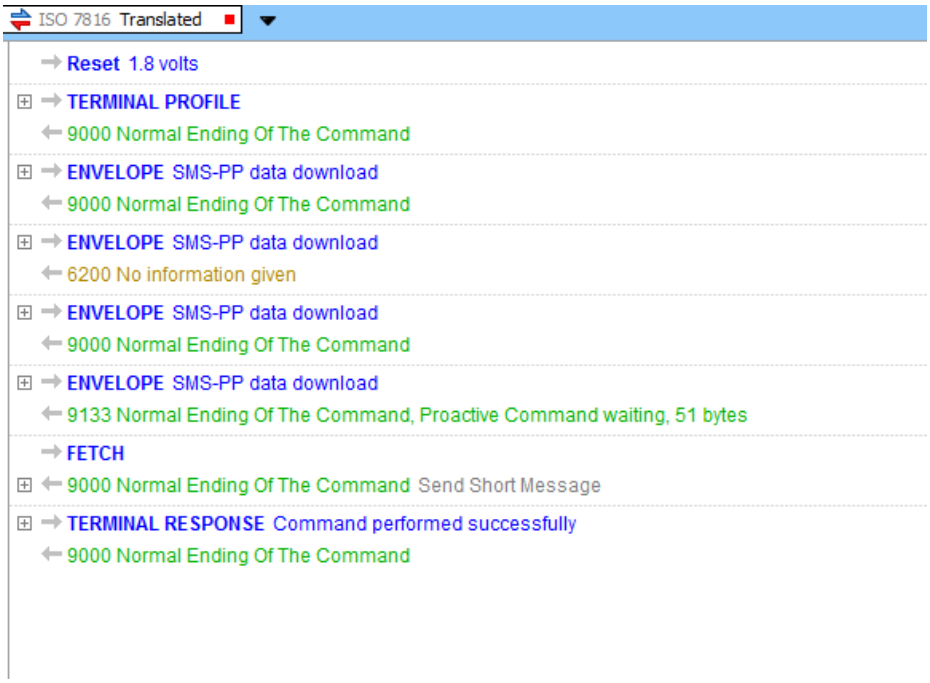


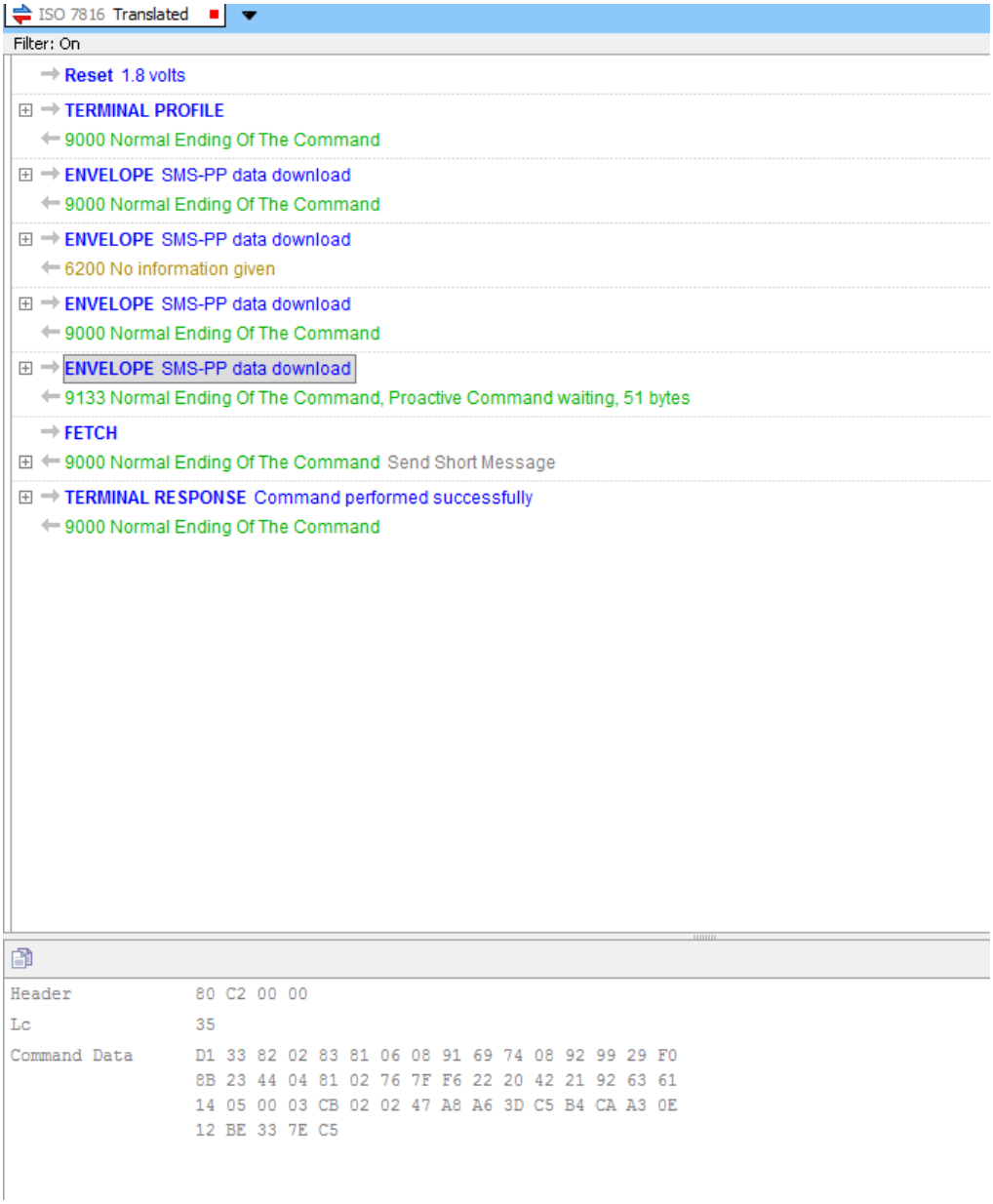
Select “Toolkit Activity” and “Filter” option and the trace logs will be filtered.

13. This can be useful if you want to troubleshoot OTA sessions. Example snippet below:



Doc ID: 79e172c93c7862153cc4f386d1ddb970ecb1e60d

14. In the above, the SMS-PP can be selected and expanded to see the contents of the SMSPP sent toward the ME/SIM card. Snippet below:



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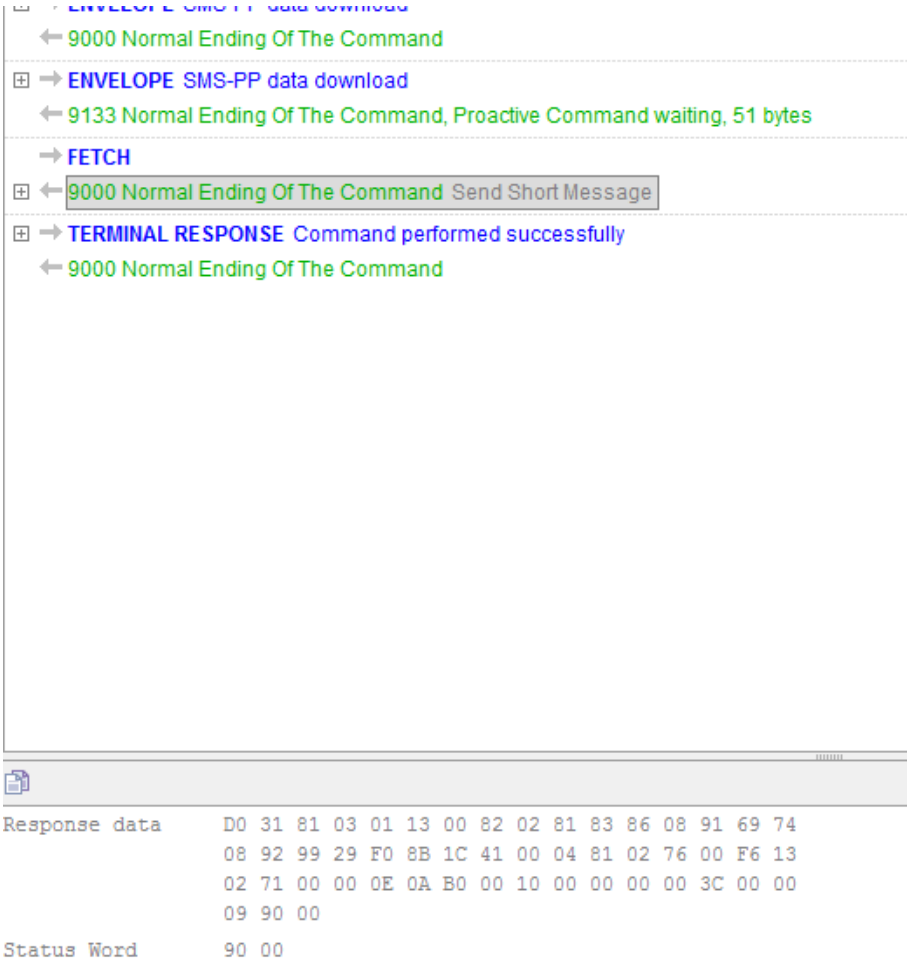
15. The PoR (if requested) and sent by the card can be seen in the ‘Fetch – Send Short Message’ section. Snippet below:



16. All the commands can be expanded using the “+” button next to each command. Sample snippet below:

17. If timing statistics is needed, then it can be viewed as below:
    a. Right click and select ‘View Preferences’.
    b. Check the option ‘System Time’ and click on ‘OK’.
    c. The system time will appear in the trace as below:

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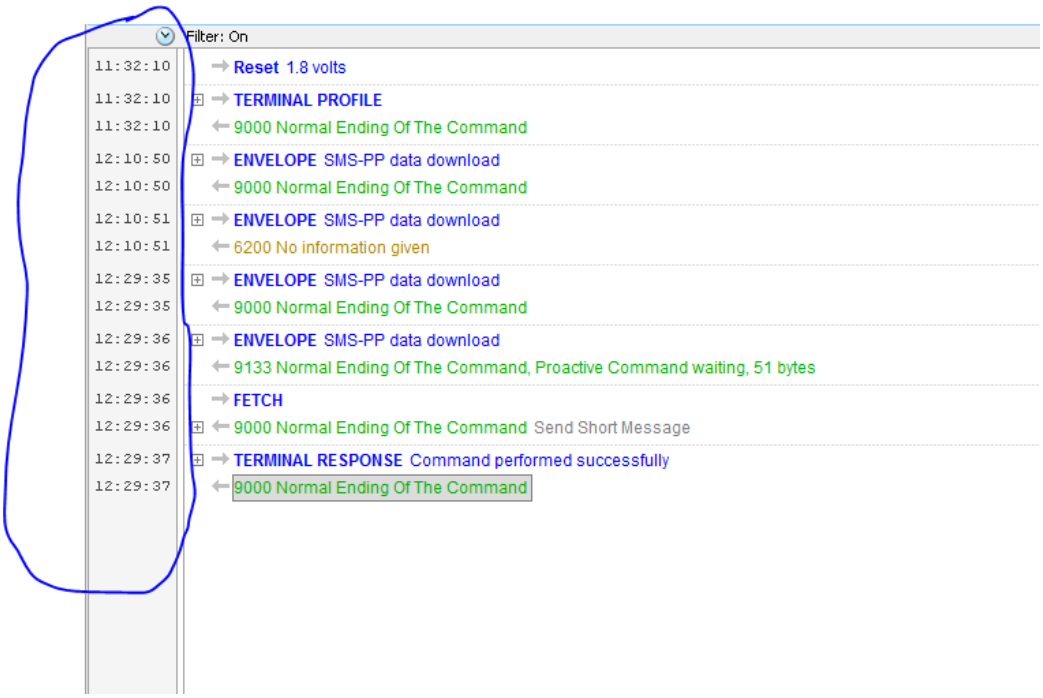

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