Mobile Spy

Easily translate and visualize mobile device communication.

Test tool to interpret device to card communication.

Used by Fime Labs

Overview.

Mobile Spy serves as an easy-to-use tool that translates and visualizes communication between handsets and SIM/UICC cards, or contactless readers, M2M and Consumer RSP devices and eUICCs or any device and a smart card.

Evaluates interoperability between handset versus SIM or eSIM.

It is a flexible and intuitive tool, providing the most complete translation available in the market today. The various views in **Mobile Spy** make troubleshooting fast and easy. Its built-in inspections automatically help pinpoint problems.

How it works.

Mobile Spy translates ISO, GSM, 3G, CDMA, RFM/RAM over CAT_TP and SMS, HTTPS, SWP/HCI, Contactless/NFC, MIFARE, GSMA eUICC, GlobalPlatform, and Mobile Payments standards for EMVCo, Visa, Mastercard, AMEX and Discover.

Fime can help you at any stage of your project lifecycle.

Define Design **Deliver** Test

Key benefits

- Evaluate interoperability between handset vs SIM/eSIM.
- Assure quality through error detection.
- View clear, understandable communication between devices.
- Spy synchronously on SWP and contactless interfaces.
- Use advanced high-level translation (including toolkit, BIP, OTA RFM/RAM & contact/contactless payments).
- Share logs with other parties using Mobile Log Viewer at no additional cost.

Key features

- Dynamic decryption of active secure channels – SCP02, SCP03, SCP80 & SCP81.
- Support for GSMA M2M SGP.02 and Consumer eSIM SGP.22 interface functions.
- Translate against the latest 3GPP and ETSI Releases.
- Translate SAT / USAT in GSM, 3G–5G and CDMA2000 UICCs and eUICC.
- Spy on removable and non-removable MFF2 eUICC.
- Spy on any third party card test tool without the need for proprietary Fime hardware.

5G

Specifications.

Translation modules and standards supported.

- **Mobile Spy Core:** ISO 7816 translation of the T=0 and T=1 protocols.
- **GSM:** Translation of GSM session commands, files, SAT (SIM Application Toolkit) commands and the Bearer Independent Protocol (BIP) channel.
- **3G-5G:** Translation of 3G-5G (W-CDMA) USIM and ISIM commands, files, BIP and GlobalPlatform Secure Element Access Control (ARA-M and PKCS#15).
- **CDMA:** Translation of CDMA2000 commands, files and CDMA Card Application Toolkit (CCAT).
- **Contactless/NFC:** Translation of contactless sessions against ISO 14443 (including APDUs sent over the contactless interface).
- **GSMA:** eSIM Decryption and translation of SMS SCP80 and TLS SCP81 in M2M sessions on ES5, ES8 and ES6 plus translation of ASN.1 formatted function requests and responses in Consumer sessions on ES10x, ES6 and ES8+.
- **Card Management:** Translation of GlobalPlatform commands, OTA RFM/ RAM over CAT_TP and SMS, Secured Command Packets (ETSI 102 225 and 3GPP 31.115), RAM Over HTTP (GlobalPlatform Amd. B) including Remote APDU structures (ETSI 102 226 and 3GPP 31.116), SCP02, SCP03 (GlobalPlatform Amd. D) and GSMA's eUICC and related security protocols.
- **SWP:** Translation of SWP communication, views for LLC and HCI layers, decoding S1 and S2 signals, HCI pipes in the timeline view.
- **Mobile Payment:** Translation of mobile Visa payWave, Mastercard PayPass, American Express ExpressPay and Discover Contactless D-PAS applications for APDUs sent over the ISO 7816, contactless or SWP interfaces.
- **MIFARE:** Translation of MIFARE Classic and MIFARE DESFire based messages on both contactless and SWP interfaces; with the appropriate keys, you can decrypt MIFARE messages to view tag memory.
- **Customized translations:** Support for customized translations for proprietary applications or proprietary protocols.

What's in the box?

Hardware (depending on your choice of hardware)

- SmartConnect (contact spying for 3G-5G/GSM and contactless).
- SmartWave Box (contactless spying).
- National Instruments Corporation (NI) MP300 ACL1 and Digital Antenna (contactless spying).
- NI MP300 SC2 ISO and SWP SPY (contact spying for 3G-5G/GSM and SWP/HCI).

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