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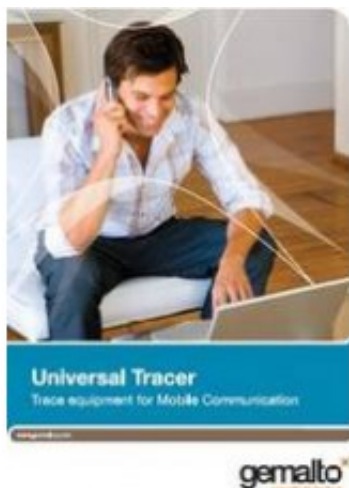**Phone: +46(8)41071230 - Email: order@smartjac.com**

Universal Tracer Tool Suite

Brand: Gemalto
Product Code: SMAGT118194

Short Description

Gemalto's Universal Tracer provides a convenient and simple way to trace and interpret communications between a handset and (U)SIM.

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Gemalto's Universal Tracer provides a convenient and simple way to trace and interpret communications between a handset and (U)SIM.

Main features

Handset - (U)SIM Tracing

Communication tracing between a Mobile Handset and Subscriber Identity Module (SIM) or Universal Subscriber Identity Module (USIM) when testing to ensure the interoperability between the 2 entities.

Card Readers Communication Tracing

Universal Tracer provides an easy way to trace the communication in card readers. All the communications between a PC application and a card reader can be easily captured and interpreted.

Card Simulators Communication Tracing

Aligned with Gemalto Telecom Products, Universal Tracer enables tracing and interpretation of communications in Card Simulators, which is provided in Gemalto Developer Suite and Simulation Suite. The support for Card Simulators is applicable to Developer Suite 3.4 / Simulation Suite 2.4 onwards.
Universal Tracer logs all the data exchanges and translates the trace into a comprehensive content and displays it in a user friendly way, facilitating the process of debugging.

Product Setup

Handset - (U)SIM Tracing

Handset - (U)SIM tracing is made possible with the Mobile-SIM Connector (MSC) which is a hardware set which is intended to be put between the Mobile Equipment (ME) and (U)SIM. Connected to the MSC is a probe that can be inserted to the (U)SIM slot inside the ME. The MSC also has a slot where the actual (U)SIM is inserted. With this configuration the MSC will facilitate the communication between the ME and (U)SIM. This allows the MSC to monitor communication exchanges between the ME and the (U)SIM. The MSC can be linked up with a computer (host PC) where it has the capability to post all the communication exchanges between the ME and the (U)SIM to the host PC.

Card Readers Communication Tracing

The capability to trace communication in PC/SC Card Readers is handled by the Universal Tracer software. No additional hardware is needed apart from a card reader with (U)SIM card. For non-PC/SC card readers, the communication tracing is achievable with MSC and Smart Adaptor hardware.

Card Simulators Communication Tracing

The capability to trace communications in the Card Simulator is handled by the Universal Tracer software. Communication tracing is possible for all card simulators provided in the Developer Suite or Simulation Suite. Simulators provided in Gemalto Developer Suite or Simulation Suite software do not require hardware.

Communication Interpretation

The MSC-(U)SIM communications translation can be customized depending on the user's preferences, by configuring the interpretation module selection and arrangement. Interpretation modules provided are listed as follows:

- APDU Name
- File System
- Card ATR
- PPS
- STK
- Spy Care
- MSC Events

Interpretation Modules Sharing

APIs for interpretation modules are made public, these enable users to create interpretation modules themselves and share among each other.

Timing Information

Universal Tracer has the capability to provide timing information corresponding to each communication event that it observes between the ME and (U)SIM.

There are 2 types of timing information that are captured:

- Duration: specifies the duration of the corresponding event
- Elapsed: specifies the time that has elapsed from the last event to the beginning of the corresponding event.

Universal tracer displays the timing information in milliseconds with up to 3 decimal digit precision.

Product Data Sheet

Capabilities

- Tracing of communication between Mobile Phone and (U)SIM card
- Tracing of communication in Card Readers
- Tracing of communication in Card Simulators
- Complete translation of command and response data
- Support views of ISO commands (raw and translated)
- Public API for interpretation modules development
- Advance search mechanism
- Support multiple formats for exporting traces, including txt and xml.

- User-friendly interface and easy navigation

Technical Details

- Supported Smart Card voltages class B, C
- Supported ISO protocols T=0 and T=1
- Timing measurements : Duration and Elapse time
- Fast trace with "FD" up to 97~440 Kbps
- Connections to host:
    - USB link (virtual serial link, recognized as virtual searial communication (COM) port)
    - USB connectivity Connector to Host PC with self-powering (USB bus-powering)

Dimensions (Mobile-SIM connectors, MSC)

- W x D x H : 120mm x 750mm x 23mm
- Weight : 0.15 kg

System Requirements

- Supported OS : Windows Vista (32-bit) or Windows XP SP3 (32-bit)
- Processor: Intel Pentium 4 processor (2.9 GHz or higher recommended)
- RAM: minimum of 1 GB (2 GB preferred)
- USB interface: minimum USB 2.0
- Hard Disk: minimum 400 MB free space (on installation), effective space used after installation 150 MB

Scope of Delivery (Universal Tracer Enterprise Kit)

- CD-ROM containing software, detailed user guide and API for interpretation module development
- Mobile-SIM-Connector (MSC)
- Set of 4 SIM Probes (4 different orientation)
- Smart Adaptor
- Gemalto USB Card Reader
- (U)SIM Card Adaptor
- 2 years license