

RFC3161 TimeStamping Client & Verifier for Android Mobile Phones

User Manual (v1.0)
ELPROMA

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Contents

1	Warning and Disclaimer	1
2	Trademarks	1
3	About Cryptographic Timestamping RFC3161	1
4	Installing	2
5	Stamping	3
6	Verifying	4

1 Warning and Disclaimer

Every effort has been made to make this manual and software as complete and accurate as possible, but no warranty or fitness is implied. The information provided is on an “as is” basis. The author shall have neither liability nor responsibility to any person or entity with respect to any loss or damages arising from the information contained in this manual. This is experimental software. Please use on your own risk and responsibility.

2 Trademarks

CLEPSYDRA TIME is trademark of Elproma Elektronika Sp. z o.o.

Product information: www.clepsydratime.com

Public TSA: <https://tsa.elpromaelectronics.com>

3 About Cryptographic Timestamping RFC3161

Time stamping RFC3161 is an important mechanism for time sealing to data objects as files. It supports any kind of data files incl. JPG, PNG, PDF, DOC, TXT, XLS etc. Size and content of file is not important for timestamping process. The purpose of using RFC3161 timestamping is to be able prove when file was received, made or modified. This is a way to protect Copyright (C) or Intellectual Property. It helps proving to be the first owner. Cryptographic timestamping RFC3161 is also suitable for electronic notarization and other e-services including financial transactions (B2B, B2C, B2G etc).

4 Installing

This software is set of 2 programs:

- *Client* for RFC3161 file TimeStamping. It produce name.TSR output file
- *Verifier* for RFC3161 cryptographic verification of .TSR stamps

both are available FREE. To install please search Google Play store using one of keywords: "rfc3161" or "Elproma" :

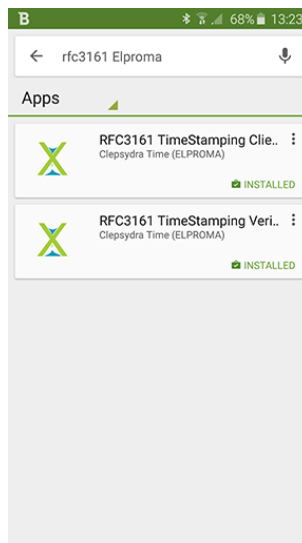


Figure 1: Searching RFC3161 Client & Verifier in Google Play Store



Figure 2: Android Mobile Phone Screen After Software Installation

5 Stamping

Please select Client for stamping your file. Your original files must be located at Device Storage (local mobile phone memory). This Client does not support external memory e.g. SD etc. For timestamping please select your source file.

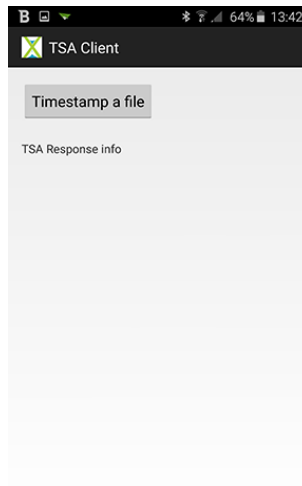


Figure 3: Main Menu - Selectig Files for TimeStamping

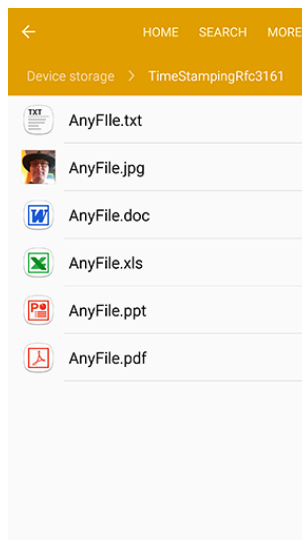


Figure 4: Device Storage File Search

Once slected input file is TimeStamped according to TSA at <https://tsa.elpromaelectronics.com> there is output stamp file produced with extention .tsr .The TimeStamp file includes date & time cryptographically sealed (e-signed) by TSA. Please take care

to archive all your .tsr target output files together with original input data files. Both files create a pair and they are required for future cryptographic verification.



Figure 5: TimeStamping Output Report (*.tsr)

6 Verifying

Verification is requiring a pair of files (original & .tsr stampfile). Verification is not requiring access to TSA. Verification process is similar to Client operation. The first and only step to do is selecting .tsr file produced by Client. Please note original input file (used at Client operation) must be located in same folder too.

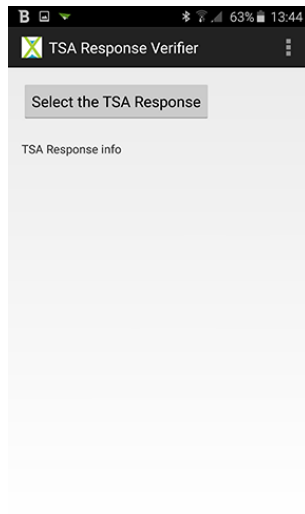


Figure 6: Verifier Main Screen

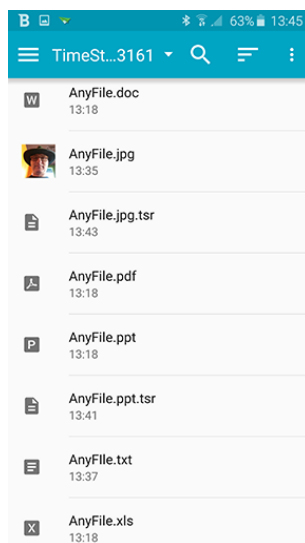


Figure 7: Searching For TSA Response Files (.tsr)

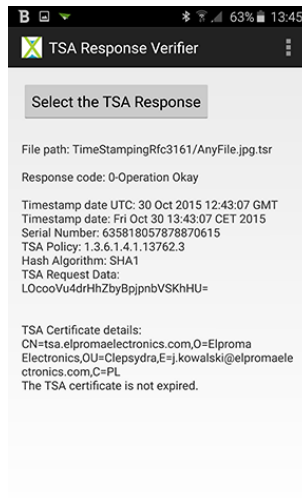


Figure 8: RFC3161 Verification Process Report

List of Figures

1	Searching RFC3161 Client & Verifier in Google Play Store	2
2	Android Mobile Phone Screen After Software Installation	2
3	Main Menu - Selecting Files for TimeStamping	3
4	Device Storage File Search	3
5	TimeStamping Output Report (*.tsr)	4
6	Verifier Main Screen	5
7	Searching For TSA Response Files (.tsr)	5
8	RFC3161 Verification Process Report	6