

TimeStamp Proxy

Version 2.2.22

Usage and field of application

The TimeStamp Proxy enhances the functionality of an RFC3161-compliant time stamp service with essential functions that make it considerably easier to use time stamps in a business environment.

The legally binding time of recording and contents of electronic documents can be verified by qualified electronic time stamps. This verification of time and contents of electronic data is business-critical for many fields of application. The application cases are multifaceted:

- Protection of electronic documents, such as development documentation in the pharmaceutical and aviation sectors, for example
- Archiving of data relevant to tax law on a low-cost storage medium (e.g. substitute for expensive WORM medium)
- Proof for the completion of time-critical transactions, e.g. in the sector of commerce, finance and lotteries
- Proof of the time of recording - and thus of the validity - of personal, electronic signatures in closed "Public Key Infrastructures"
- Implementation of incoming and outgoing mail stamps in electronic communication
- Safeguarding the "intellectual capital" of a company
- Protection of information relevant to patent law
- Archiving of data relevant to tax law in compliance with the German Basic Regulations for Accessing Data and Auditing Digital Documents (GDPdU)
- Implementation of electronic receipt stamps in automated award and tendering procedures
- Re-signing of personal electronic signatures when changing cryptographic algorithms



Functional description

The AuthentiDate TimeStamp Proxy can enhance an existing RFC3161-compliant time stamp service with the following features:

- Setting up of customized accesses
- Access control by means of client authentication (http auth)
- Customized storage of invoice-relevant data
- Load distribution to several RFC3161-compliant time stamp servers
- Secure logging of all time stamps issued
- RFC3161 via tcp/ip, http, https, as well as compatibility with the AuthentiDate eTimeStamp Module
- Large scale, central verification of time stamps

Since a fingerprint ("hash") of the document is transferred to the time stamp service in the time stamp process and not the actual document itself, creating a unique connection between the time stamped document and the time stamp, the confidentiality of the time stamped data is preserved.

The AuthentiDate TimeStamp Proxy is designed for processing high transaction volumes and rates and is already in use at several time stamp services accredited according to national signature laws.

The AuthentiDate TimeStamp Proxy allows the connection of standard SQL databases for setting up and administering internal customer or user accounts as well as for tracking all transactions, e.g. for the purpose of account-related invoices.

Integrated safety logging is an essential performance feature that is particularly relevant if high demands are made upon a time stamp service as regards security and replicability.

Index-sequential log files containing all issued time stamps are generated here in configurable time intervals. After completion, each log file is protected by a time stamp which is logged again in the subsequent log file.

**Range of functions and services**

- ▶ Setting up and administering internal customer or user accounts as well as tracking all transactions, e.g. for the purpose of account-related invoices.
- ▶ Proxy-capability for load distribution to several RFC3161-compliant time stamp servers
- ▶ Secure logging of time stamps issued
- ▶ RFC3161 via tcp/ip, http, https, as well as compatibility with AuthentiDate eTimeStamp Module
- ▶ Large scale, central verification of electronic time stamps (when using the AuthentiDate eTimeStamp Module)

Standards and interfaces

- Certificate format X.509v3
- Time stamp format RFC3161, PKCS#7
- Time stamp protocol RFC3161 via tcp/ip, http, https
- Client authentication via http auth
- Compatibility with the AuthentiDate eTimeStamp Module

System requirements

- Minimum hardware requirements: Intel Pentium processor 1.5GHz; min. 1GB RAM; 80GB HD
- Operating system: current Enterprise Linux (SuSE, Red Hat), MS Windows NT/2000
- RFC3161-compliant time stamp server or service

Delivery content

- The software, license key and documentation are delivered by data carrier or electronically by email or FTP.

Related products

- eTimeStamp Module
- TimeStamp Server
- TimeStamp Server SP250
- TimeStamp & Seal Server
- Accredited time stamp service of AuthentiDate International AG

