

TimeStamp Server

Version 2.2.22

Usage & field of application

The AuthentiDate TimeStamp Server is a complete system (software) for setting up a standard compliant time stamp service.

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, e.g. development documentation in the pharmaceutical and aviation sectors
- Archiving of data relevant to tax law on a low-cost storage medium (e.g., substitute for expensive WORM medium)
- Proof of 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"

Functional description

Electronic time stamps can be integrated into any applications and process solutions by using the TimeStamp Module or alternatively any RFC3161-standard-compliant client software thereby protecting electronic data in the most varied application cases. At the same time, electronic time stamps are requested from the TimeStamp Server and returned to the inquiring application. The eTimeStamp Server was designed for high transaction volumes and rates from the start so that high demands can also be met regarding this.

- Implementation of incoming and outgoing mail stamps in electronic communication
- Preservation of 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

Several instances of the TimeStamp Server can be operated in the network for replicating high-availability systems. By the same token, user-defined cascading of server instances is possible for implementing proxy concepts. With the option of using a modern, efficient Hardware Security Module (HSM), it is also possible to additionally meet high demands regarding the time stamp rate that has to be reached.

The AuthentiDate TimeStamp Server 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.



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 time stamped document and time stamp, the confidentiality of the time stamped data in the internal network – as is standard with time stamp services – is thus ensured.

**Range of functions and services**

- ▶ Large-scale generation of electronic time stamps based on internal certificates
- ▶ Large-scale, centralized verification of electronic time stamps
- ▶ 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 the cascading of several TimeStamp Server instances, or for the connection of the AuthentiDate time stamp service
- ▶ Support of the standard protocol RFC3161 via tcp/ip or http/s incl. HTTPAuth
- ▶ Generation of standard-compliant time stamp according to RFC3161 or PKCS#7
- ▶ Client compatibility: AuthentiDate eTimeStamp Module, RFC3161 Client
- ▶ Parallel operation of different signature generation units or tokens (SmartCard, HSM, Software-Keystores)

Standards and interfaces

- Certificate format X.509v3
- Time stamp format RFC3161, PKCS#7
- Time stamp protocol RFC3161 via http/s
- PKCS#12
- AuthentiDate eTimeStamp Module

System requirements

- Minimum hardware requirements: Intel Pentium processor 1.5GHz; min. 1GB RAM; 20GB HD
- Operating systems supported:
 - current Enterprise Linux (SuSE, Red Hat),
 - MS Windows NT/2000/XP
- Transparent communication via the HTTP/HTTPS protocol between client software and AuthentiDate TimeStamp Server

Delivery content

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

Related products

- eTimeStamp Module
- TimeStamp Proxy
- TimeStamp & Seal Server