



## Time Stamp Appliance

### Thales Time Stamp Server

#### KEY BENEFITS

- > Provides high-assurance hardware security
- > Seals data with origin and time
- > Extends the validity verification period of digital signatures
- > Turns electronic records into stronger evidence
- > Prevents unwanted rejection of signed code
- > Certified and traceable time
- > Creates auditable chain to central time source
- > Complies with FIPS and Common Criteria

Time Stamp Server, part of the Thales family of high security data protection solutions, is a turn-key network attached appliance that keeps accurate time and creates time stamps to attest the origin and time of electronic records and applications. The independently certified solution enables organizations to validate the accuracy of time stamps used for digital records, similarly to signing and dating a paper document. Unlike software-based systems in which administrators can easily manipulate time, Time Stamp Server protects time stamping keys in tamper-resistant hardware; the time stamping component is validated to FIPS 140-2 Level 3 and Common Criteria EAL 4+. Unlike other competing products, Thales Time Stamp Server is compatible with Microsoft Authenticode, the code signing standard for Windows platforms, and can provide highly accurate time stamps auditable to Universal Coordinated Time (UTC) for secure time traceability to independent national atomic clocks.



# > Thales Time Stamp Server

## Technical Specifications

### Functional Capabilities

- > Supports PKI-enabled applications, electronic records and code signing
- > Facilitates long-term auditability and enforces non-repudiation
- > Highly accurate and auditable to UTC
- > Provides secure time traceability to independent national atomic clocks
- > Tamper-resistant time stamping component

### Protocols and Interfaces

- > PKIX time stamp protocol (RFC 3161), ETSI TS 102 023 and 101 861
- > Support for custom applications using optional toolkit (Java and C)
- > Authenticode for code signing applications

### Compatibility and Upgradeability

- > Can be deployed with Thales Time Source Master clock
- > Integrates with Adobe Acrobat, LiveCycle, Microsoft Authenticode and Office 2010
- > Software upgradeable to latest releases

### Host Connectivity

- > Dual NIC (10/100/1000 MB) Ethernet ports
- > Six USB 2.0 ports
- > Serial port

### Cryptography

- > Time stamp signing algorithm: RSA (1024, 1536, 2048, 4096bit)
- > Support for P7B certificate chains

### Safety, Security and Environmental Compliance

- > UL, CE, FCC
- > RoHS, WEEE
- > FIPS 140-2 Level 3
- > Common Criteria EAL4+

### Integration

Time Stamp Server is easy to integrate with business applications that time-stamp digitally signed documents such as PDFs, and code including drivers and scripts. Common uses include financial transactions, lotteries and gaming, security logs, long-term archives, notarization, electronic lab books and code signing.

## Management and Monitoring

Time Stamp Server is remotely managed through a web interface to reduce operational costs and sends error notices to the administrator by email.

## Operating Systems

- > Time Stamp Server appliance uses Windows Server 2008 R2

## Physical Characteristics

- > Standard 1U 19in. rack mount appliance
- > Dimensions: 4.33 x 43.00 x 50.80 cm (1.70 x 16.93 x 20 in)
- > Weight: 15.88 kg (35 lb)
- > Input voltage: 100-240v AC auto switching 50-60Hz (nominal) / IEC 320 mains socket
- > Power consumption: 400W
- > Cooling required: 1660 BTU/hr
- > Temperature: operating 10 to 35°C (50 to 95°F), storage -40 to 70°C (-40 to 158°F)
- > Humidity: non-operating 90%, non-condensing at 35°C

## Performance

RSA signing key	Time stamps per second
1024bit	400
1536bit	250
2048bit	145

Note: Time Stamping feature also available as an Option Pack on nShield PCI 500 F3 (NC4033P-500) or nShield 500e F3 (NC4033E-500).

For more information please see [www.thales-eseurity.com](http://www.thales-eseurity.com) or scan the quick response (QR) code on your smart phone.



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