



➤ Thales Time Source Master Clock

KEY BENEFITS

- > Secure, highly accurate network time appliance
- > Reputable source of time
- > Periodic calibration by Root Time Authority
- > Mutually authenticated chain to secure time source
- > Auditable time attestation certificate
- > Supports Thales Time Stamp Server

Secure network time appliance

Thales Time Source Master Clock (TSMC) is a network time appliance that securely distributes accurate time throughout an organization. Deploying a cryptographically authenticated version of the industry-standard network time protocol (NTP) ensures the secure delivery of auditable time to multiple Thales Time Stamp Servers from a single source. For organizations that require an audit record of periodic calibration by a Root Time Authority, the TSMC can also use this secure transport protocol to provide a certified record of synchronization to a recognized source of Coordinated Universal Time (UTC).



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Accuracy and integrity

Given that local computer time is easy to change, standard NTP communications are insecure and even wireless transmissions are open to compromise, a secure and verifiable pathway to a trusted source of time is an essential prerequisite for business processes. The TSMC incorporates a number of controls to maintain the integrity of time values.

- > A highly accurate reference clock ensures accurate time is maintained even if external time references become temporarily unavailable.
- > The TSMC uses a secure transport protocol, DS/NTP, incorporating mutual authentication, to establish a secure link to a Time Stamp Server or to a Secure Root Clock at a Root Time Authority. The cryptographic keys used in this authentication process are secured in a FIPS 140-2 Level 3 Hardware Security Module, ensuring that time values cannot be compromised in transit.
- > DS/NTP incorporates an automatic process of auditing and calibration to synchronize time. At the end of the process the TSMC issues a signed certificate attesting to the calibration and traceability of the time. The signing keys used in this process are protected by a FIPS 140-2 Level 3 Hardware Security Module.

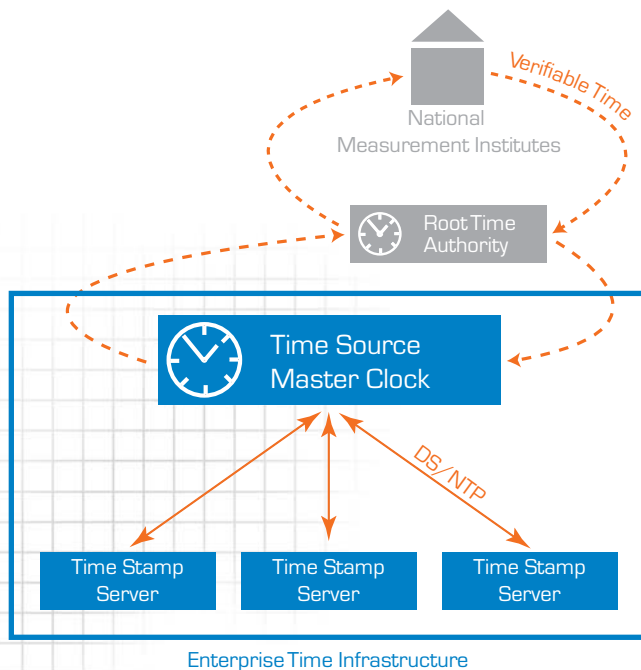
Verifiable time delivery

Time-stamping has emerged as one of the key components of public key infrastructure technology (PKI), delivering non-repudiation and ensuring the integrity of data is verifiable at a future point in time. TSMC is fully compatible with Thales Time Stamp Server (TSS), providing a central, verifiable time source for inclusion within digital time-stamp signatures. At the heart of the system is a secure time delivery protocol, DS/NTP, which protects time values from network attack.

Simple management

The TSMC is a networked appliance that is simple to set up and manage. Once the unit is connected and configured, management is achieved using a web-based user interface. Management functions may be carried out from any accessible point on the network.

For more information, please see www.thales-group.com/iss.



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