Timing and Synchronization Systems

Timing Regulatory Issues

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The complexities of R&D, product trials, business transactions and ongoing communications with partners, consumers and government agencies have prompted exacting requirements for validating electronic information exchanges and transactions within and between organizations. New and existing laws and regulations put every organization's approach to managing information under increased scrutiny. Many of these regulations require strict adherence to good time keeping practices.

The following is a list of regulatory issues that either have as part of their compliance a need for good time management or that would be well served with good time management.

**FDA 21 CFR Part 11**

21 CFR Part 11, the FDA guidelines for trustworthy electronic records, requires companies to employ procedures and controls designed to ensure the authenticity, integrity and when appropriate the confidentiality of electronic records, and to ensure that the signer cannot readily repudiate the signed record as not genuine.

To satisfy this requirement persons must, among other things, employ procedures and controls that include the use of computer generated time stamps.

*Download this PDF* to find out how Microsemi® NTP time servers and Domain Time II software can easily solve all of the time compliance requirements for 21 CFR Part 11.

**OATS**

NASD Rule 6953 requires member firms that record order, transaction, or related data required by the Bylaws or other rules of NASD to synchronize all business clocks, including both computer system clocks and mechanical time stamping devices, that are used to record the date and time of any market event. In addition, the Rule requires that member firms maintain the synchronization of such business clocks.

The SyncServer S100 is currently being used by a number of firms to comply with this OATS regulation. *Learn more about this regulation.*

**E-SIGN**


**UETA**

The UETA (Uniform Electronic Transactions Act) presents legal recognition of electronic records, electronic signatures, and electronic contracts.

- A record or signature may not be denied legal effect or enforceability solely because it is in electronic form.
- A contract may not be denied legal effect or enforceability solely because an electronic record was used in its formation.
- If a law requires a record to be in writing, an electronic record satisfies the law.
- If a law requires a signature, an electronic signature satisfies the law.

*Read the latest on the Uniform Electronic Transactions Act (UETA),*
Sarbanes-Oxley
The FDA has guidelines for establishing trustworthy electronic records. NASD has rules about how member firms record order, transaction, or related data. The Sarbanes-Oxley law legislates acceptable conduct regarding the retention of records; electronic and paper for public companies and their executives. All of these regulations, guidelines and laws have one thing in common when it comes to electronic records – the time on their systems must be accurate and auditable.

Microsemi's Domain Time II Audit Server software is specifically designed for companies that must comply with federal or industry-specific regulations. Domain Time II Audit Server is an audit collection system that reduces the potential for fraud by automatically establishing transaction validity in enterprise environments.

Audit Server is a system designed to work in conjunction with Microsemi's Domain Time II time synchronization suite to provide a secure, verifiable audit trail of the time synchronization of mission-critical networks. By automatically and routinely auditing the time synchronization accuracy of every computer on a network, Audit Server provides the clear, indisputable records needed to easily resolve any contested timestamp issue that may arise.

"Domain Time II Audit Server provides all types of organizations and their stakeholders with the needed confidence that the original time of their digital communication records can be proven accurate today and tomorrow," says Trent Henry, security analyst for the Burton Group. "Having a strong record of when an enterprise’s time was synchronized and with what time source contributes to the integrity of a digital audit trail within an enterprise."

The audit records collected by Microsemi's Audit Server include complete information to allow auditors to determine precisely when a machine was last synchronized, with what time source, as well as its variance from the reference time source.

Full time audit records can be collected and maintained from any machine running Domain Time II time sync components on Microsoft Windows (Nasdaq:MSFT), Sun Solaris (Nasdaq:SUNW), FreeBSD and Redhat Linux (Nasdaq:RHAT) platforms. In addition, Audit Server can collect information from Network Time Protocol sources (such as time servers, routers, national time authorities, etc.) so that all time devices used in synchronization are tracked.

"With regard to complying with regulations, the integrity of an IT network's time source is critical," says Paul Skoog, Microsemi's IP network timing product marketing manager. "The Audit Server integrates perfectly with the Domain Time II time synchronization suite which connects securely to a trusted network time source, such as a Microsemi dedicated GPS referenced network time server. This system integration meets or exceeds regulatory requirements for time keeping, while keeping the audit process relatively painless and with very low-overhead."

Currently, Microsemi is offering a free 30 day trial of the Audit Server Software along with a 30 day free trial of the complete Domain Time II suite. Find out how you can comply with your industry's regulations, without the added burden of ever having to worry about it again

17 CFR 240.17a-4
17 CFR 240.17a11 requires broker-dealers to give notice when certain specified events occur. Specifically, the rule requires a broker-dealer to give notice of a net capital deficiency on the same day that the net capital deficiency is discovered or a broker-dealer is informed by its designated examining authority or the Commission that it is, or has been, in violation of its minimum requirement under Rule 15c31.
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