veracity

The importance of accurate time for video surveillance and access control

Almost all video surveillance recording for security and monitoring purposes is ultimately carried out to provide a visual and sometimes audible record of events.

This can ultimately prove what happened, exactly when it happened, where it happened and if the resolution is good enough, to give some clue about the identity of the persons and/or vehicles involved.

Thus such recordings must be evidentially robust. The requirements for evidentially robust recordings include verifiable audit trails, controlled access to recordings, digital encryption to prevent tampering and well considered data transportation systems to ensure convenient yet evidentially sound methods of making exact digital copies for removing from site and for playback in a court of law.

Well-designed modern digital video recording systems from reputable manufacturers provide all of these things.

However, sometimes even the most high-end, sophisticated CCTV installations can be let down by something as simple as having the clocks set at the incorrect time. Many DVR systems are PC-based and PC-based clocks are notorious for drifting. It is also a fact that any CCTV installation recording is virtually useless for evidential purposes if you cannot prove that the time on the recordings is correct. Many criminals have escaped justice through a technicality connected with being unable to prove exactly when they were in a particular place.

Master reference time servers are commonplace in high-end installations in the UK, where the process of using digital images as evidence is highly-developed and well-established.

However, even there, most smaller systems do not have reference time servers due to the traditional high cost and relative complexity of such systems.

The established standard for time communication is now NTP (Network Time Protocol). There are many NTP Time servers on the internet, but of course high-security video surveillance systems are typically not directly connected to the internet, but are on closed networks.

Thus Veracity perceived a critical need for a simple, low-cost, accurate, traceable NTP master time server for digital video surveillance applications. The result of our development effort is TIMENET, a single integrated GPS processor and NTP server in a tiny compact format, with a cost around one-third of competing solutions. TIMENET is designed for simplicity, with only an IP address to set up. After that, it is fully automatic and will provide a time signal which is legally traceable to reference atomic clocks used by the GPS satellite system. TIMENET can be used with any network device which supports NTP protocol, and this can be used for alarm systems, access control, fire systems, intruder detection systems, vehicle license plate reader systems, in addition to standard analog CCTV and modern digital IP video systems.

Note also that due to it's extremely small size and low power use (less than 1W), TIMENET is also suitable for mobile security systems, such as mobile DVRs or vehicle based license plate readers.

UK : +44 (0)1292 264 967
USA : 1-800-679-1590
www.veracityglobal.com