



## - Clarinet Time-Stamping -

The Time-Stamp is done by the internal time-base of CLARINET-BOOK

At the beginning of the profile, the time is sent from the PC to CLARINET. During the execution of the profile, the time-stamping only depends on CLARINET clock (10<sup>ee-6</sup> oscillator, time-stamping accuracy .1mS). If there are several CLARINET connected to the bus, one of them acts as a master clock provider, and it synchronizes all others every second.

So, time-stamping synchronisation between several CLARINET is better than 1 mS. And any time-measurement between CLARINET events is very accurate.

As explained above, the synchronisation with the PC clock is done at the beginning of the profile. This is done by a specific DLL (w32\_time.dll), in the Clarinet\clatools directory, and this DLL can be customized to support synchronisation by other clock sources (we have some customers who use GPS to synchronize several CLARINET at different locations in the country).

The Clarinet Run-time software version 10.1 delivered until Dec 99, only the seconds of the PC system date are sent to Clarinet-Book at the beginning of the profile (due to the default version of w32\_time.dll).

The Clarinet Run-time released on February 19<sup>th</sup> (version 10.1/0049), the full system date is sent (hh/mm/ss and mS), so the synchronisation with the PC is better.

The accuracy of the synchronisation PC/CLARINET depends mainly on PC clock accuracy and PC performance (to take in account the time to send the date to the CLARINET). I think it should be about 10mS, but this hasn't been checked.