Shepard Test Stand - Feature # 234: Arduino - Move Timestamp Zero Control to Arduino Instead of Client

Status:	New	**Priority:**	Normal
Author:	Jeremy Wright	**Category:**	
Created:	12/10/2013	**Assignee:**	Jeremy Wright
Updated:	12/10/2013	**Due date:**	
Subject:	Arduino - Move Timestamp Zero Control to Arduino Instead of Client		

Description

Look at the conversation starting at 12-05-13 for details on this feature request.

https://opendesignengine.net/boards/4/topics/387

The summary is that currently, the client decides when to set the 0 point for the time stamp (essentially starting the timer). The current thought is that this should be done on the Arduino's side to keep the timestamp control as close to the data source as possible. There may be a performance trade-off for adding this overhead to the Arduino though.

History

12/10/2013 11:26 am - Christopher Sigman

I think this can still be done on the client side instead of changing anything on the Arduino. When the client enacts a record action, either via user input as the Java app does now or via automatic detection, the recorded timestamps can all be adjusted to reflect T-0 where specified. All times before than can be T-, and all times after be T+. Or, we could just store the T-0 and T+ events. Either way, I think this is something that the client can easily take care of.

My worry with handing this off to the Arduino is that some data will be essentially lost in the sync from the client sending the signal. The primary reason for this is the client doesn't read the data immediately as it's sent from the Arduino, but is buffered first, so there is some delay.