Kepler - Bug #5324

dcd_mgr buffer too small -- xxx Lost data.. messages

02/24/2011 05:56 PM - Derik Barseghian

Status:	Resolved		**Start date:**	02/24/2011
Priority:	Normal		**Due date:**	
Assignee:	Derik Barseghian		**% Done:**	0%
Category:	sensor-view		**Estimated time:**	0.00 hour
Target version:	sensor-view-0.9.0		**Spent time:**	0.00 hour
Bugzilla-Id:	5324			

Description

After running dcd_mgr for awhile I start getting messages like:
xxx Lost data: 2011-02-24T16:39:45.667Z   CR800_sq311_1   3.3662283421E-01

Looking at SPAN's data_storage.c, this looks like intended behavior, at a certain point old data is discarded in ring buffer fashion. Data is discarded when MAX_DATA_QUEUE_SIZE is reached, and it seems hardcoded to 256.

This seems problematically small, and should probably be user configurable.

Sampling 3 sensors at 1sps, gives you 85 seconds before old data starts expiring. And I think if the spanToDT process goes down, our current flow will lose this data.

History

#1 - 04/01/2011 12:45 PM - Derik Barseghian

Adding storage_interval=X to the cfg file enables writing files to gumstix disk. Data files are written as csv to spanddata/pending, and then sent out when a connection to the data port (55056) is made.

Dan's fixed 2 bugs wrt pending files:
1) empty files could be written to pending, and an error would occur when trying to send these.
2) files were not sent out in chronological order.

TODO: spanToDT's been using the live data port (55058); we'll have to change to use 55056.

#2 - 04/01/2011 04:59 PM - Daniel Crawl

spanToDT now uses 55056.

Before closing this bug, we need to test what happens if the buffer fills faster than the storage interval.

#3 - 04/04/2011 09:48 AM - Daniel Crawl

If there's no connection on the data port (55056), the buffer is written to storage every 5 seconds independent of the storage interval.

#4 - 03/27/2013 02:30 PM - Redmine Admin

Original Bugzilla ID was 5324