

DLM flowchart sketches

Calvin
Molitor

DLM-DAM startup interaction

DLM

DAM

Receive and
Decode
config file

TODO:
config files

send CAN command
to connect DAM to add
certain parameter to
a certain group (Based
on config table)

TODO: what will this
command look like? What
data will it contain?

Make clear standard for them

request all parameter
groups from DAM with
standard data request
command

; ;
; wait to RX
; param groups

confirm all parameters
were received as expected

TODO: How the DLM will check
if it received the expected
params from each request

On startup, send
command to DLM that
it needs configuration

; ;
; wait for config
; data

add connect parameters
to groups based on
the commands sent

; ;
; wait for
; DLM to request
; param groups

send parameter groups
as DLM requests

were all the parameters received as expected?

no

no
x2

yes

send CAN command to connect DLM to add that param to a certain group

continue to normal DLM-DAM behavior (shown below)

make some sort of note that configuration failed and how it failed

TODO: How will this error be recorded?

Normal DLM-DAM Behavior

DLM

DAM

TODO: How to handle all the different groups

Wait for the correct time to request a param group from a DLM

request param group from DAM with CAN command

+ wait for data

Send group parameter data

Record received data

General Notes:

- The DLM will need another auto-gen struct for ASCII names for all of the params to record them in data and error messages
- groups can have same name on different DAMs and must be treated separately
- Struct on DLM that matches the CAL file to store all of the groups

Gopher Logging config file

Param	ASSOC.	DAM	DAM ID	Req. Freq.	Group	Group ID
FL-wheelspd		DAM-FL	5	100 Hz	0	
FL-shock pot		DAM-FL	5	100 Hz	0	
FL-wing-pos		DAM-FL	5	60 Hz	1	
			⋮			
FR-wheelspd		DAM-FR	6	100 Hz	0	
FR-shock pot		DAM-FR	6	100 Hz	0	
FR-wing-pos		DAM-FR	6	60 Hz	1	
			⋮			
RPM		DAM-ENG	4	200 Hz	3	
Eng temp		DAM-ENG	4	10 Hz	4	
Calm-pos		DAM-ENG	4	200 Hz	3	

