Checking the OpenLCB (Sample) Protocol

The OpenLCB Group

February 10, 2024

1 Introduction

This note documents the procedure for checking an OpenLCB implementation against the (Standard name here) Standard.

The checks are traceable to specific sections of the Standard.

The checking assumes that the Device Being Checked (DBC) is being exercised by other nodes on the message network, e.g. is responding to enquiries from other parts of the message network.

1.1 Required Equipment

See the separate "Installing the OpenLCB Checker Software" document for initial installation and set up of the checker program.

If a direct CAN connection will be used, a supported USB-CAN adapter ¹ is required. Connect the adapter to the DBC using a single UTP cable and connect two CAN terminators.

Provide power to the DBC using its recommended method.

2 Set Up

The following steps need to be done once to configure the checker program:.

- 1. Start the checker configuration program.
- 2. Select "Set Up".

¹See "Installing the OpenLCB Checker Software"

- 3. Get the Node ID from the DBC²
- 4. Enter that Node ID into the program.
- 5. Configure the checker program for the USB-CAN adapter's device address or the TCP hostname and port.
- 6. Return from the setup section and reply "Y" to "Save configuration?" when prompted.
- 7. Quit from the program.

The following steps need to be done at the start of each checking session.

- 1. Check that the DBC is ready for operation.
- 2. Start the checker program.

3 (specific content) Procedure

Select "(something) checking" in the checker program, then select each section below in turn. Follow the prompts for when to reset/restart the node and when to check outputs against the node documentation.

• • • •

²Where do we require this to be marked on a node?