Checking the OpenLCB Configuration Description Information Standard

The OpenLCB Group

February 11, 2024

1 Introduction

This note documents the procedure for checking an OpenLCB implementation against the Configuration Description Information 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.

2 Configuration Description Information Procedure

Select "CDI checking" in the program, then select each section below in turn.

A node which does not self-identify in PIP that it supports Configuration Description Information will be deemed to have passed these checks. [1]

This plan assumes that the Datagram Transport Protocol and the Memory Configuration Protocol have been separately checked. It uses those, but does not do any detailed checking of them.

2.1 Validation checking

This section checks the content of the CDI to make sure that it is valid XML. It reads the information from the 0xFF memory space, then validates it against the 1.3 XML Schema which is stored in a local "schema.xsd" file.

[1] Using the -p option or setting the checkpip default value False will skip this check.