



OpenLCB Technical Note

Gateways Between OpenLCB Segments

Apr 30, 2021

Preliminary

1 Introduction

This Technical Note addresses topics of interest to people designing and implementing gateways between OpenLCB segments. It is not normative in any way.

2 Annotations to the Specification

- 5 There Technical Note is currently independent of any Specification.

3 General Considerations

What do you have to forward? What/when can you omit?

(Broadcast vs reply to request)

- 10 Initialization Complete may be a candidate for omission, particularly at startup when a lot happen at once. But if a gateway fails to deliver them, certain operations will be impossible e.g. contact new nodes automatically when they first come up.

Omitting PCER messages is right out; they must be delivered, because there's no way to get them to be resent.

- 15 Datagrams and streams have support build in for a temporarily failure to deliver. The protocol just has to be obeyed.

Startup and other Global Traffic

5K node analysis. Start up time.

MTI remap and reformatting. Size and buffering.

- 20 Speed Mismatch. Handling and reporting overruns. (Ken Cameron interested in reporting; Event-based mechanism?) This is the start of gateway-to-gateway protocols.

4 CAN-specific Considerations

Use of alias pools. Alias reuse.

Alias allocation time for large pools.

25 Datagram and Stream rebuffering.

Table of Contents

1 Introduction.....	1
2 Annotations to the Specification.....	1
3 General Considerations.....	1
3.1 Simple Nodes.....	1
3.1.1 Dropped Message Types.....	2
4 CAN-specific Considerations.....	2