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Container Data Items for DLEP
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Abstract

Several DLEP extensions are being suggested that require the ability to group a set of DLEP Data Items into a logical set or bag. This document species a generic method of defining such a bag of Data Items, in what this document defines as a Data Item Container. This document also describes what an extension using Data Item Containers must specify in the extension specification.

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[1.](#) Introduction

A DLEP Data Item Container defined by this document is a generic wrapper or container of DLEP Data Items, where the presence of the container around the Data Items implies a logical association between the Data Items in the Container.

This document does not define a new DLEP extension, but does instead define a set of guidelines for DLEP extension authors.

[1.1.](#) Conventions and Terminology

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [BCP 14](#), [RFC 2119](#) [[RFC2119](#)].

[2.](#) Container Data Item

The Container Data Item allows a DLEP extension to parenthesize a set of DLEP Data Items, implying a logical assocaition between the Data Items in the container.

The Container Data Item contains the following fields:

0	1	2	3
0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1			

```

+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+
| Data Item Type                | Length                |
+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+
:                               DLEP Data Items (zero or more)      :
+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+

```

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Data Item Type: Defined by the extension. Allocated from IANA "DLEP Data Item Values" registry.

Length: Sum of Lengths of contained DLEP Data Items, including header lengths, i.e. the total length of the Container Data Item

DLEP Data Items: 0 or more DLEP Data Items, as defined in [\[I-D.ietf-manet-dlep\]](#).

[2.1.](#) Specification of Conatiner Data Items

When the use of a Container Data Item is defined in a DLEP extension specification, the specification MUST define which DLEP Data Items are valid within the Conatiner, and also the multiplicity of Data Items in the Container.

Unless otherwise allowed by an individual DLEP extension specification, any Data Item not defined as allowed in the Container MUST NOT appear, and an implementation receiving such a Data Item MUST teminate the DLEP session, using the DLEP Status Code 'Invalid Data'.

[3.](#) Security Considerations

I'm not sure there are any.

[4.](#) IANA Considerations

None.

[5.](#) References

[5.1.](#) Normative References

[I-D.ietf-manet-dlep]

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[RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", [BCP 14](#), [RFC 2119](#), DOI 10.17487/RFC2119, March 1997, <<http://www.rfc-editor.org/info/rfc2119>>.

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[5.2.](#) Informative References

[RFC5226] Narten, T. and H. Alvestrand, "Guidelines for Writing an IANA Considerations Section in RFCs", [RFC 5226](#), DOI 10.17487/RFC5226, May 2008, <<http://www.rfc-editor.org/info/rfc5226>>.

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