Network Working Group	M. Andrews	
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TOC

Multi Match Label
draft-andrews-dnsext-multi-match-label-00

Abstract

Idn users have expressed a need to have multiple labels be treated as one in the DNS. This document presents a method to do this by defining a new label type that ties a set of labels together that need to be treated indentically.

Status of this Memo

Copyright Notice

Table of Contents

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1. Introduction

TOC

Multi Match Labels (MML) are intended to be used in owner names of records in the DNS to combine RFC 1035 labels that should be treated identically in a zone.

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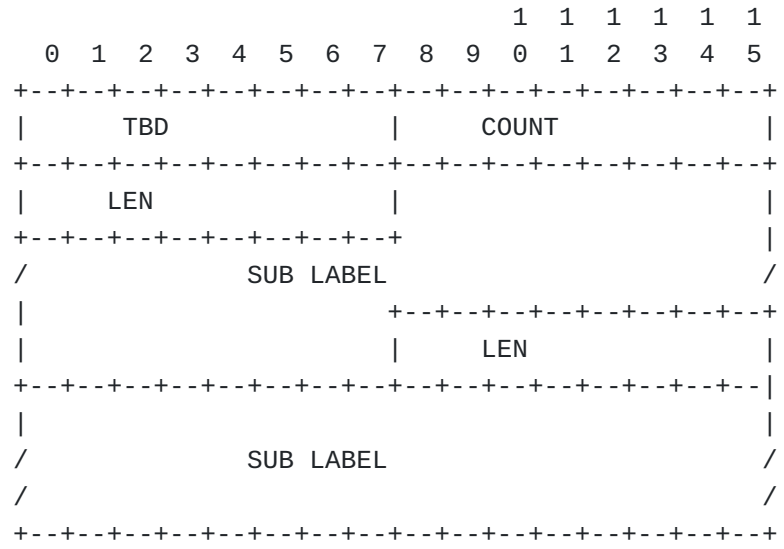
2. Wire Format

TOC

The MML has label type {TBD}. Following the label type there is a count of the number of sub labels, upto 255, (Note we could reduce this below 63 and encode in the first octet) followed by a series of RFC 1035 sub labels that make up the MML.



When used in a domain name, MMLs extend the maximum length of a domain name to 1024 octets with the restriction that all domain names constructed using the MML are still restricted to 255 octets. The makes the effective length of the MML be the length of the longest sub label in the MML.

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3. Master File Format

TOC

[To be fully described].
e.g. {sublabel1,sublabel2,sublabel3}

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4. Signaling client support for MML

TOC

Client side support for MML support is signaled using EDNS version 1. Clients that do not signal that they support MML labels will receive the RFC 1035 sub labels that match the query name.

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5. Interaction with DNSSEC

TOC

The cannonical format of a MML is the MML with each sub label in cannonical format as per RFC 4035.
Zones that use MML labels need to use DNSSEC algorithm types that signal the potential use of MML. MML zones are treated as insecure by validators that are not MML aware.
NSEC and NSEC3 chains are constructed as if all of the combinations of names in owner name exists seperately for all MMLs within the zone. MMLs within the zone name are NOT expanded but are kept as MMLs. This permits name error (NXDOMAIN) to be returned.
If the zone name contains MMLs the signer name and be any of the RFC 1035 names the MML maps to.

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6. Interaction with non MML parent zones

TOC

The parent zone delegates each of the zone names that makes up the names in the MML named zone.

TOC

7. Interaction with non MML child zones

The child server implements all of the potential zones names.

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8. IANA Considerations

TOC

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9. Security Considerations

TOC

TBD

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TOC

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