Hierarchical J/P attributes

draft-ietf-pim-hierarchicaljoinattr-01.txt
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Introduction

• An hierarchical scheme with the following properties
  – If an attribute type and value applies to every (S,G) in the message, only include it once in the message
  – Also, if an attribute type and value applies to every (S,G) for a given group G, only include it once for the group G

• Changes since last version
  – Proposing a way of not inheriting selected attributes
### J/P message format

<table>
<thead>
<tr>
<th>PIM Ver</th>
<th>Type</th>
<th>Reserved</th>
<th>Checksum</th>
</tr>
</thead>
</table>

**Upstream Neighbor Address (Encoded-Unicast format)**

- Reserved
- Num groups
- Holdtime

Each message contains a single Upstream Neighbor Address and a number of group sets.

Each Group Set contains a Group Address followed by lists of joined sources and pruned sources.

We have 3 different address objects, all in an encoded format.

#### Upstream Neighbor Address

#### Multicast Group Address

#### Source Address
J/P Attribute Hierarchy

Attributes can be specified anywhere in the hierarchy. An attribute type/value applies to all the sources below.

If the same type is at multiple levels, the most specific applies.

Attributes that apply to each of the sources.
An attribute for all but 1 source?

This attribute will apply to all sources. How to have this attribute for all but one source?

Attribute applies to each of the sources. How to have it for all but one source?
Do Not Inherit (DNI) attribute

- Proposing an attribute that lists attributes that should not be inherited
- The value consists of a list of 1 or more attribute types
- The specified attributes will be ignored if they are specified at a higher level in the hierarchy
An attribute for all but 1 source

Upstream Neighbor Address

Group Address

Source Address

DNI blue

Attribute applies to all sources except the one with DNI blue

Here we have DNI attribute for the one source to not inherit
An attribute for all but 1 group?

Here we have DNI attribute for the one group to not inherit

Attribute applies to all sources except the one with DNI blue.
More complex example

Here we have DNI attribute for the one source to not inherit

Attribute applies to all sources except the one with DNI blue
Is Do Not Inherit a good idea?

- Too complex?
- Attributes can always be specified per source instead if needed
- Not that hard to parse
- The logic for using DNI when formatting a J/P more complex
Next steps?

• Keep Do Not Inherit or revert to previous version?
• If we keep DNI, is current draft ready for WGLC?
• If we revert to previous version I will post revision 02 similar to 00. Would it be OK to do WGLC on the new revision?