

IETF 119 – 6lo

Generic Address Assignment Option for 6LowPAN Neighbor Discovery

~~draft-iannone-6lo-nd-gaao-01~~

draft-iannone-6lo-nd-gaao-02

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Since IETF 118

Generic Address Assignment Option for 6LowPAN Neighbor Discovery draft-iannone-6lo-nd-gaao-02

Status [Email expansions](#) [History](#)

Versions:

[00](#) [01](#) [02](#)



draft-iannone-6lo-nd-gaao-02.txt
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Main changes: Document Beefed up!

Added content

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Address confirmation through registration now optional

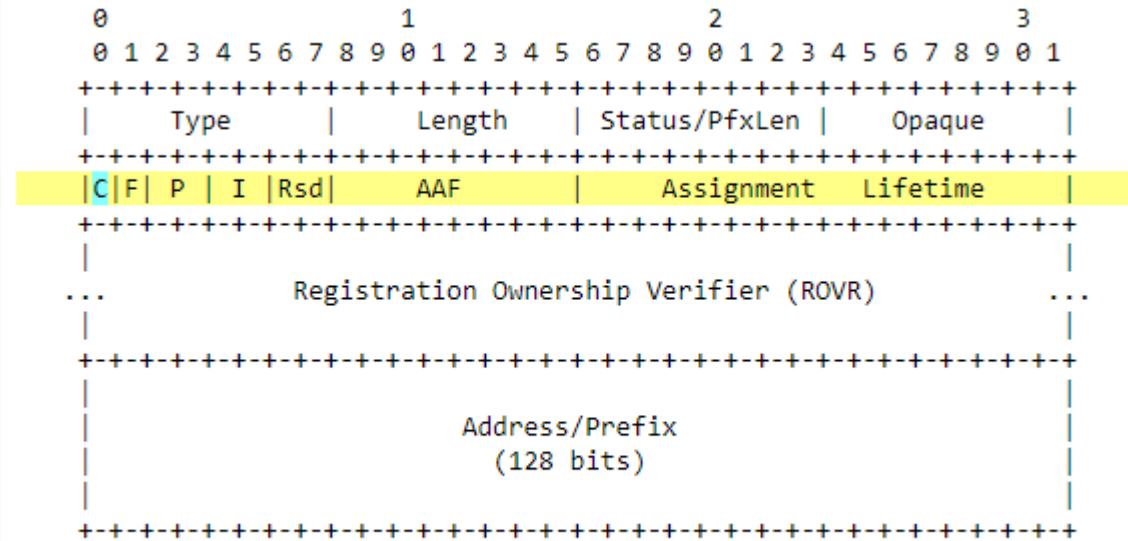
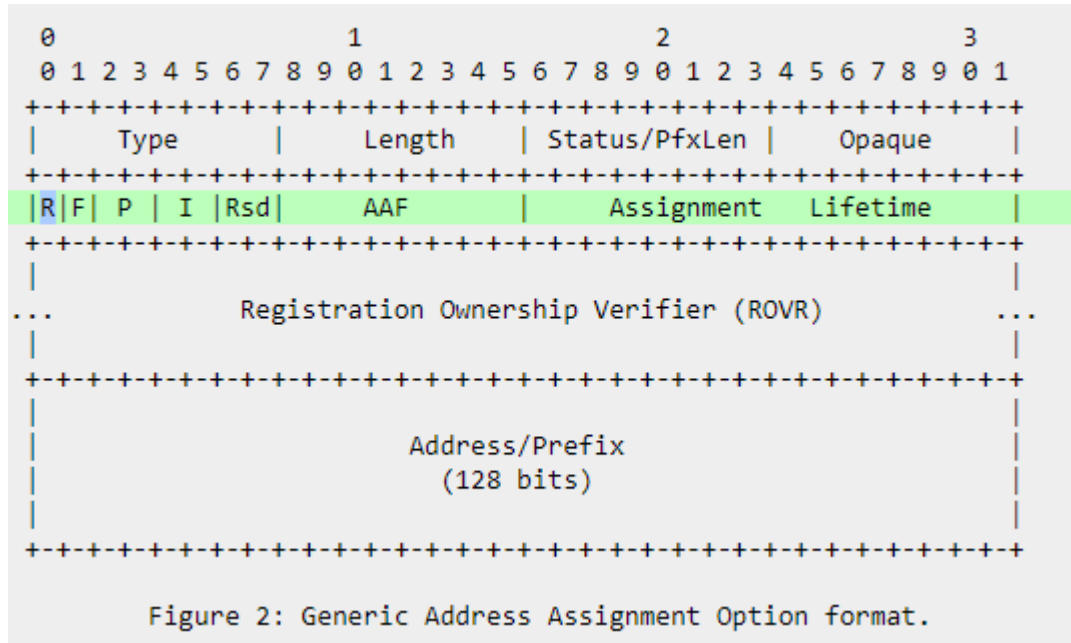


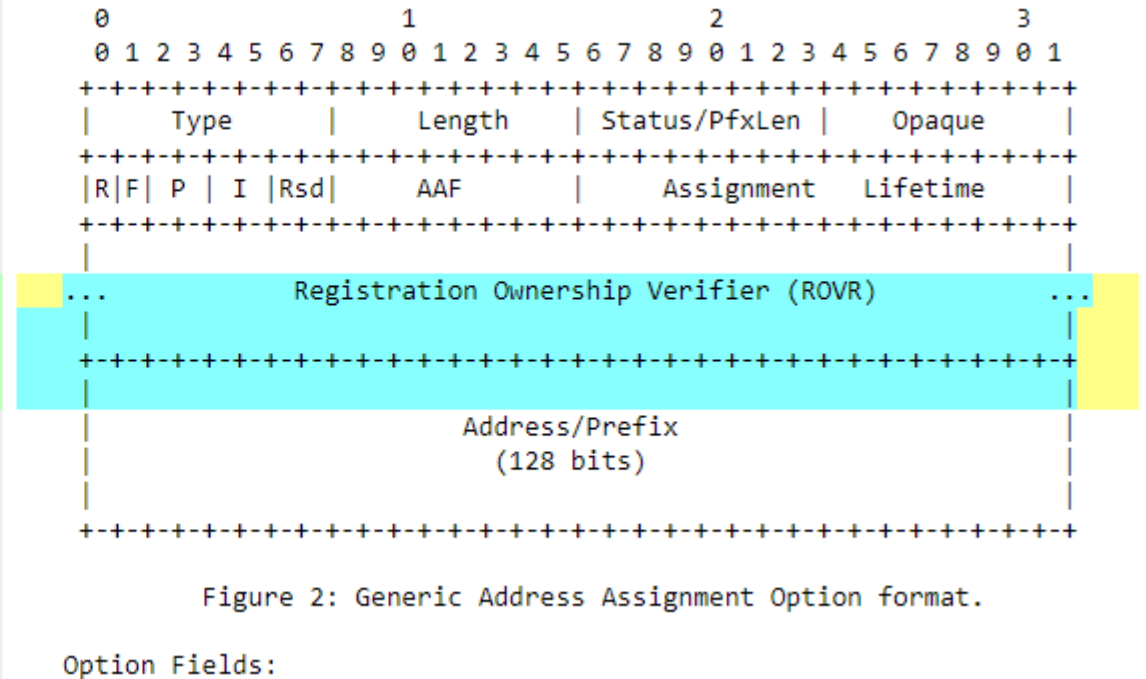
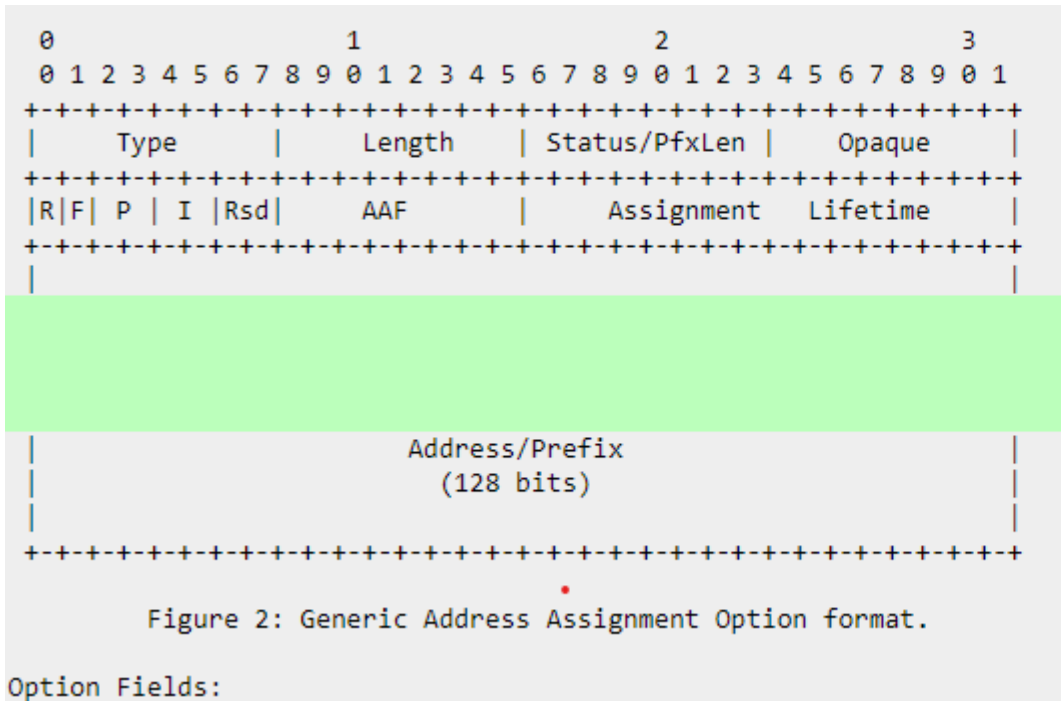
Figure 2: Generic Address Assignment Option format.

R (Reserved): This field is unused. It MUST be initialized to 0 by the sender and MUST be ignored by the receiver.

C: Confirmation requested. It MUST be initialized to 0 by in NS messages by requester and MUST be ignored by the receiver. The 6LR replying to the request with an NA message MAY set this bit to indicate that it requests a confirmation that the address/prefix is accepted and will be used. When the requester receives an NA message with this bit set, it MUST explicitly register the received address/prefix to the same 6LR using the the procedures defined in [RFC8505], [I-D.thubert-6lo-prefix-registration], and [I-D.ietf-6lo-multicast-registration], according to the type of the assigned address/prefix.

- As for comment from Adnan 2 last meeting
 - Note: we are using a bit of the GAAO option

Looks like a new structure...



- Introduced the ROVR field and adapted the format description

Requested New error code needed

7. Signaling GAAO Support

A 6LowPAN node that supports this specification MUST set the A flag.

8. GAAO Error Conditions

The GAAO option uses error codes defined in [RFC6775] and [RFC8505], revised in [RFC9010]. This specification introduces a new status code when the AAF in the GAAO option in an NS message is not supported by 6LR, as follows (see also Section 10):

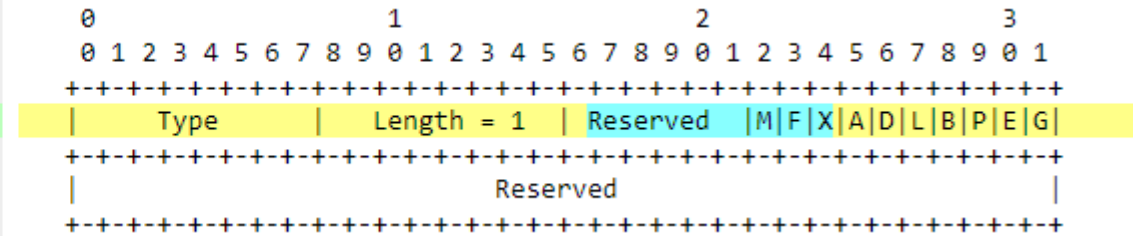
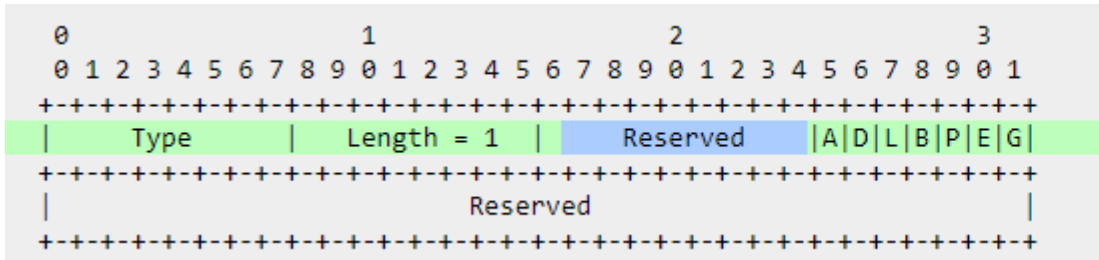
AAF Not Supported: The AAF in the GAAO option in the NS message is not supported by 6LR that received the message.

This status MUST be used when a node requesting an address/prefix did put an AAF value, in the corresponding field, which is not supported by the 6LR receiving the request. When the node receives this status back it can perform one of the following actions:

- * Re-issue the same request without specifying an AAF. Meaning set the AAF Field to 0.
- * Re-issue the same request with a different AAF.
- * Do nothing.

The action to be used is selected by configuration.

Signal GAAO support



- **We need a bit in 6CIO to signal GAAO support**

- "G" as of GAAO already taken
- "A" as of AAF already taken
- "L" as of Luigi taken

- We choose "M" as of Managed addresses

- Character is available but position is taken (we need an update here....)

IANA Section updated

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- **ND Option type for GAAO**
- **6CIO Bit**
- **GAAO Error code**
- **AAF Registry**

- IANA already reviewed the section we have a few changes to do

Next Steps

- We think we are going in the right direction
- There are a couple of things to fix
 - IANA
 - Security
- All help and feedback is welcome ;-)

THANKS!