

IETF 118 – 6lo

# Generic Address Assignment Option for 6LowPAN Neighbor Discovery

~~draft-iannone-6lo-nd-gaao-00~~

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

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IETF 118 – Prague

# Since IETF 117

## Generic Address Assignment Option for 6LowPAN Neighbor Discovery draft-iannone-6lo-nd-gaao-01

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

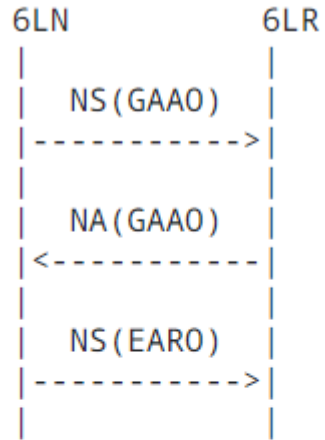
Versions:

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

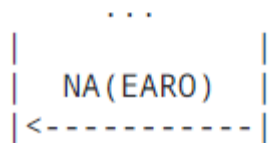


draft-iannone-6lo-nd-gaao-01.txt  
October 2023  
Main changes: ROVR

# Requesting and Confirming an Address Assignment



...  
Procedure According to [RFC8505](#),  
[I-D.ietf-6lo-multicast-registration](#), or  
[I-D.thubert-6lo-prefix-registration](#)  
depending on the type of address.



- At PASA node Bootstrap:

1. Node sends Multicast Router Solicitation
2. Node selects as parent one of the nodes responding with a Router Advertisement
  - FCFS may be sufficient...
3. Node sends Neighbor Solicitation with GAAO option
4. Selected Parent to send back Neighbor Advertisement with GAAO option
5. Address confirmed using existing EARO procedures (according to type of address requested)

- Address request can be done at any time (not only at boot strap)

# Looks like a new structure...

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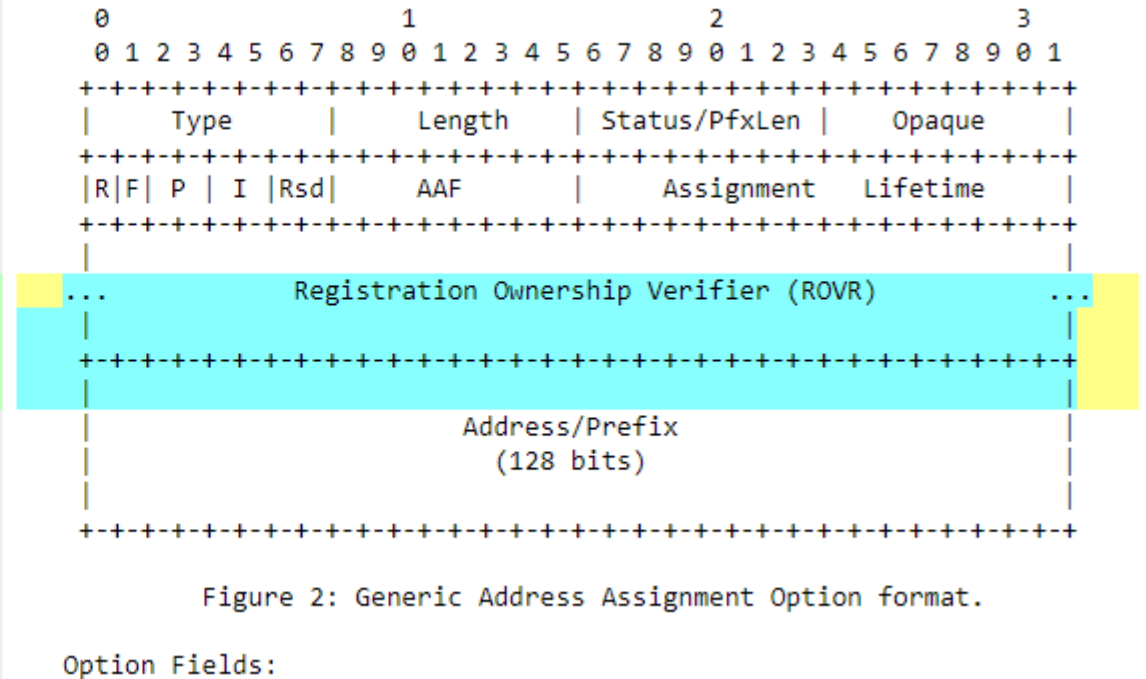
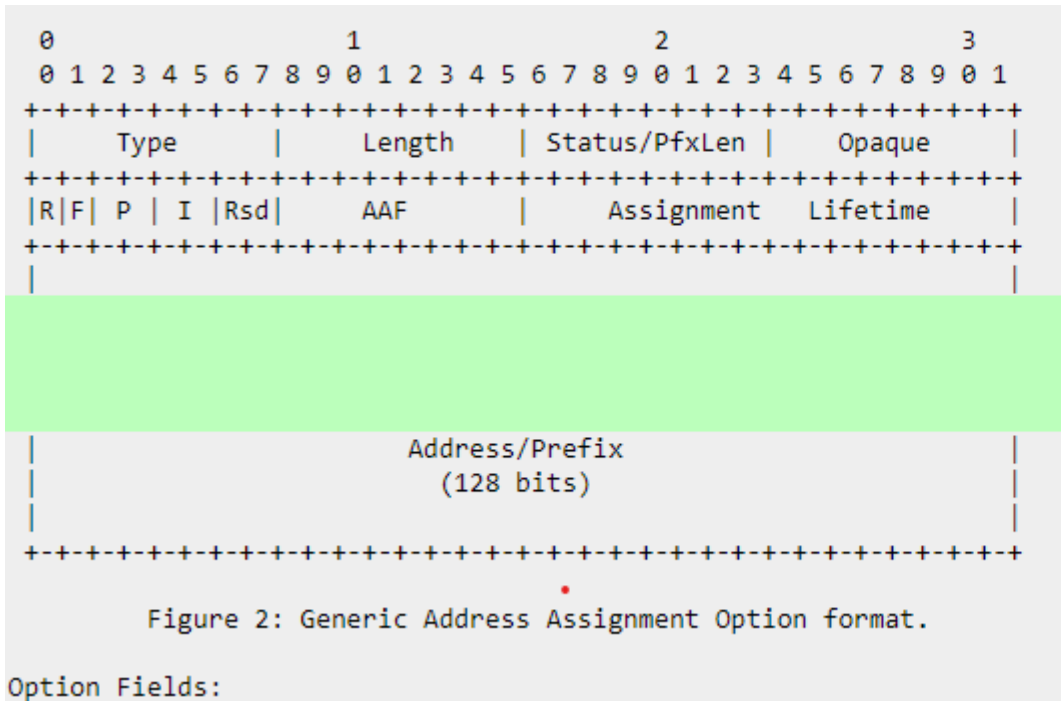
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- But actually was a Markdown issue.....

```
# Algorithmically Assigned Addresses
```

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4. Algorithmically Assigned Addresses
```

# Looks like a new structure...



- Introduced the ROVR field and adapted the format description

# Requested feedback

- Mailing list
  - <https://mailarchive.ietf.org/arch/msg/6lo/uU6hp1LkQkB700fAmsMbjx-lgjQ/>

- Questions:

1) Type; Length; Status/Pfxlen; AAF; Assignment Lifetime, F (defined in draft-thubert-6lo-prefix-registration); P (defined in draft-6lo-multicast-registration)

They are the minima to make the mechanism work we do not see particular changes to be done on these. Anyone having a different opinion?

2) About flags I and Opaque:

RFC8505 defines them to be used: "I=0 indicates that the Opaque field carries an abstract index that is used to decide in which routing topology the address is expected to be injected."

This was also pointed out by Pascal during last meeting, imply that strict coherence with EARO format is not necessary.

Our thoughts were to use I+Opaque in GAAO to request a prefix/address in a specific routing topology, so that the same fields can be set in the registration following GAAO. Does it make sense?

Can be the default option I=0 + Opaque =0? Or is it not so useful?

3) Another question not discussed so far is about ROVR. Does it make sense to use it as an ID in prefix requests? To be used as a token for the transaction? Any opinion?

# Requested Feedback from the WG in this meeting

- Is GAAO useful and worth the effort ?

**NO**

Forget about it and move on with PASA

**YES**

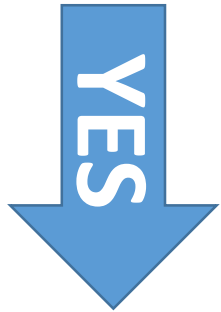
- By IETF 118
  - Revise PASA as a use case of GAAO
  - Work on GAAO document to make it WG adoption quality

# Next Steps

- Is GAAO useful and worth the effort ?



Forget about it and move on with PASA



- By IETF 118
  - Revise PASA as a use case of GAAO
  - Work on GAAO document to make it WG adoption quality

# THANKS!