

# LISP EID Block

draft-ietf-lisp-block-04.txt

# IETF LC Result: More Work Needed

- How will this space be managed
  - Who will allocate the space?
  - How will be allocated?
  - What are the requirements?
- How long will the allocation last?
  - When will the experiment considered over?
- Rationale
  - More use cases would be helpful
- Size
  - (not looking like the main issue actually)

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Suggested to be kept separated in  
two different documents

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- To Discuss in the Next Slot:
  - `draft-iannone-lisp-eid-block-mgmt-01.txt`

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- To discuss Now
  - Let me give you first the updates....

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# Size

- Recap:
  - Asking /16 and reserve for future use the /12 covering it
- Opinions on keeping this size?



# Rationale

- Re-organized in use cases
  - (More are welcome!!!)
  - Forwarding
  - Avoid ITR -> PETR -> PITR -> ETR paths
  - TE/Filtering

There are several use cases for this address block, for instance:

- o In certain circumstances it is possible to configure the router so to natively forward all packets that have not a destination address in the block, without performing any lookup whatsoever. This
- o In some scenarios, in case of cache-miss packets, are routed toward a PETR until a mapping is obtained, if the destination is in a specific EID space packets may be dropped in order to avoid forwarding paths like ITR->PETR->PITR-ETR, avoiding the related overhead.
- o Improved traffic engineering capabilities with respect to LISP vs. non-LISP traffic.

Is worth to mention that new use cases can arise in the future, due to new and unforeseen scenarios. furthermore, this will give a tighter control over the traffic in the initial experimental phase, while facilitating its large-scale deployment.

# Rationale

- Prefix not supposed to be used (announced) in BGP without LISP
- May help in lowering the impact on BGP through large aggregation on PxTRs

As the LISP adoption progress, the EID prefix space will potentially help in reducing the impact on the BGP routing infrastructure with respect to the case of the same number of adopters using global unicast space allocated by RIRs ([MobiArch2007]). From a short-term perspective, the EID space offers potentially large aggregation capabilities since it is announced by PxTRs possibly concentrating several sites. contiguous prefixes. Such trend should continue with even lower impact from a long-term perspective, since more aggressive aggregation can be used, potentially leading at using few PxTRs announcing the whole EID space ([FIABook2010]).

The prefix is not supposed to be used as normal prefix announced in the BGP routing infrastructure without the use of LISP.

# Duration

- Allocate by September 2013
- Duration: ten (10) years
- By September 2023 IETF provide decision on:
  - Either return /12 to free pool
  - or make allocation permanent
    - might be not the whole /12, could be smaller than /16

**IANA should assign the requested address space by September 2013 for a duration of 10 (ten) years (through September 2023). By the end of this period, the IETF will provide a decision on whether to transform the prefix in a permanent assignment or to put it back in the free pool.**

**The allocation and management of the Global EID Space will be detailed in a separate document.**

# IANA Review

- Added registry format
  - draft-bonica-special-purpose-07.txt
    - for both /16 and /12
- Origin of the space:
  - 2000::/3 Global Unicast
- Block allocated:
  - first /16 of the /12
- AS0 ROA not requested
  - otherwise the prefix would be non-routable

Attribute	Value
Address Block	XXX0::/16 [1]
Name	EID Space for LISP
RFC	[This Document]
Allocation Date	September 2013
Termination Date	September 2023
Source	True
Destination	True
Forwardable	True
Global	True
Reserved-by-protocol	True [2]

- Please Comment