AUTHOR DATA:

Name: Jordi Palet Martínez
Organization: Consulintel

PROPOSAL DATA:

Policy Proposal Title: Assignment of ULA-Central IPv6
Policy Proposal Type: Modification
Id (if exists): LAC-2007-06
Version: 1

Proposal Summary:
This policy is intended to allow the assignment of IPv6 blocks within the so-called "Centrally Assigned Unique Local IPv6 Unicast Addresses" (see http://tools.ietf.org/html/draft-ietf-ipv6-ula-central-01) to organizations or individuals requiring it.

These addresses are globally unique and intended for local communications, usually within a site or set of them and are not expected to be routable on the global Internet. Prefix FC00::/7 is already reserved by IANA for ULA (bit 8 determines if locally or centrally assigned, so ULA or ULA-central).

Rationale:
a. Arguments Supporting the Proposal

In some situations, especially large sites in organizations, which already may have Global Unicast IPv6 blocks, may require an additional block for their internal infrastructure.

This additional block can be used for a number of purposes, such as VPNs, site-to-site communications, avoiding dual/multiple faced DNSs, support for applications which are sensitive to long convergence times (such as VoIP), etc.

The "Micro-allocations for Internal Infrastructure" document from ARIN (policy proposal 2006-2, authored by Jason Schiller et al., available at http://www.arin.net/policy/proposals/2006_2.html), describes the need of this kind of additional block for purposes BGP Re-Convergence, Internal Infrastructure Security and why locally assigned ULAs (RFC4193) addresses are not appropriate.

Such policy proposal was accepted thru the PDP and it is already part of the ARIN NRPM. The usage of Global Unicast IPv6 blocks for this type of purposes must be considered as wasteful, especially when there is already an IANA reserved prefix (FC00::/7) for doing so.

b. Arguments Opposing the Proposal

None foreseen. However, it should be clear that the original scope of ULA-central is for large managed sites and all other cases should use locally assigned ULAs as per RFC4193. From the same document, it is clearly documented the rehaznos why this prefix will not be useful as IPv6 PI and will be filtered out in the global Internet.

Proposal Text:
New text, possibly as section 2.10

2.10. ULA-central

ULA-central refers to the Centrally Assigned Unique Local IPv6 Unicast Addresses as described in the IETF document “ietfipv6- ula-central” (whatever version is the most recent, as an Internet Draft, RFC or STD). The ULA-central block is within the prefix FC00::/7, with bit 8 set to 0.
New text, possibly as section 8

8. Assignment of ULA-central blocks

Any organization or individual requiring a /48 from the ULA-central block will be able to get it assigned, once the relevant contract is executed and related membership fees are paid (to be determined by the board).

Note that in most of the cases, locally assigned ULA addresses (RFC4193) are preferred, and it is only expected that large managed sites will prefer central assignments. It is also important to reinforce that the ULA prefix (FC00::/7) it is not routable in the global Internet (i.e., not designed to be used as IPv6 PI) and consequently must be filtered.

Acknowledgments:
I would like to acknowledge to the authors of the ULA-central work at IETF, Bob Hinden and Brian Haberman and all those who also contributed to that work.

ADDITIONAL INFORMATION:

Timetable:
Working Group: Policy Group
Related Previous Proposals: IPv6 Assignment Policy
References:
Change log: