

RESULTS REPORT OF LACNIC'S WORK GROUP ON MICRO-ALLOCATIONS IN IPV6 AS OF APRIL 5,2003.

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Work Group Objectives:

To evaluate the feasibility of allocating IPv6 blocks smaller than a /32 to support the correct operation of infrastructure that is critical for Internet within LACNIC's region.

Work Group Conclusions as of Today:

1- In relation to the need of an IPv6 micro-allocation policy.

The work group has concluded that it is necessary for LACNIC to have a policy for making IPv6 micro-allocations to critical Internet infrastructure. These allocations are necessary for the adoption of the new IP protocol within the region covered by LACNIC, as they enable the operation within this new protocol of fundamental Internet components, such as DNS ccTLD servers.

2- Proposed IPv6 micro-allocation policy.

The proposed policy is essentially inspired by the IPv4 micro-allocation policy currently in use at LACNIC. The modifications needed to adapt it to the new protocol have been included. The text of the policy is as follows:

IPV6 MICRO-ALLOCATIONS.

LACNIC may make micro-allocations in case of projects and network infrastructure that are key or critical for the operation and development of IPv6 within the region, such as IXPs (Internet Exchange Points), NAPs (Network Access Points), RIRs (Regional Internet Registries), DNS ccTLD providers, among others. These allocations shall be made in blocks smaller than a /32 but always greater than or equal to a /48.

In the case of IXPs or NAPs, in order for them to be able to apply for these allocations, the organizations shall meet the following requirements:

1. Properly document the following aspects: 1.1. Prove by means of their bylaws their IXP or NAP status. They must have at least three members and an open policy for new member association. 1.2. Submit a diagram of the organization's network structure. 1.3. Document the numbering plan to be implemented.

2. Submit a utilization plan for the following three and six-month periods.

The rest of the applications shall be studied on the basis of the analysis of the documentation justifying critical and/or key aspects of the project.

All micro-allocations shall be allocated from address blocks specifically reserved for this type of allocation. LACNIC shall publish the list of these blocks and those micro-allocations already awarded.

Organizations receiving a micro-allocation may not suballocate these IP addresses.

3- Observations

Blocks resulting from micro-allocations are particularly valuable as they are not linked to a particular Local Internet Registry, consequently those receiving these blocks obtain a greater degree of independence. For this same reason blocks resulting from micro-allocations are costly for Internet. From this it is inferred that micro-allocated blocks are an expensive and scarce resource, and therefore they must be administered carefully. The policies for their management must prevent the incorrect use of this resource, limiting its use to infrastructure that is critical for the operation and development of IPv6. However, as IPv6 is in its initial development stage, it is desirable to strongly encourage its adoption through address allocation policies. All this leads us to propose an open micro-allocation policy that includes several cases and does not limit micro-allocations to a closed set of possible cases. All cases should be carefully studied by qualified personnel.

4- Recommendations.

We consider it is necessary to have an IPv6 micro-allocation policy as soon as possible in order to encourage the adoption of the IPv6 protocol within the region covered by LACNIC; this policy would enable the use of the protocol in infrastructure that is critical for Internet. Therefore, we recommend that the Public Forum discuss the possibility of immediately adopting the policy proposed in section 2 of this report. In addition, we consider that the present policy (and the arguments that led to its current form) must be revised not later than a year from now in order to assess its validity.