Memorandum of Understanding
between
LACNIC (the Latin America and Caribbean Network Information Centre, referred to here as "LACNIC")

and

Internet Systems Consortium, Inc. (referred to here as "ISC")

1. ISC and LACNIC agree to jointly pursue the installation and operation of new root name servers in the LACNIC service region. Locations are to be recommended by LACNIC and selected by ISC under its responsibility. The number of new servers is expected to be from 1 to 10. We will refer to locations of successful installations as "LACNIC-supported ISC Root Server Locations".

2. Each such server will answer as F.ROOT-SERVERS.NET (192.5.5.241 and 2001:500::1035) using wide area "anycast" from AS3557. No new root service identities (e.g., Z.ROOT-SERVERS.NET) are to be created by this agreement since the parties lack standing to do so.

3. Each location installed under this agreement will be so under the cooperation of LACNIC, ISC and a Local Host as described in attachment B.

4. LACNIC shall supply or support ISC and the Local Host in obtaining all AS3557-specific equipment including the BGP-speaking routers, and the DNS-speaking servers, and reasonable monitoring and control equipment such as console servers and network management stations as described in Attachment B. All equipment shall be under the sole administrative control of ISC during its use for provision of F.ROOT-SERVERS.NET service. ISC will have final selection and veto power over the brands and models of equipment to be used in each location. All the equipment that is dedicated to the purpose stated in this agreement remains the property of LACNIC or the corresponding local host as described in Attachment B.

5. ISC's costs under this agreement will be paid by LACNIC as described in attachment A. The first installment of ongoing management fees described above will be payable to ISC only when the first LACNIC-supported ISC Root Server Location becomes operational; and subsequent corresponding fees will be payable only while at least one LACNIC-supported ISC Root Server Location remains operational.

6. ISC will operate the BGP routers in such a way that all possible networks in the local region will "see" a very close and highly responsive edition of the F.ROOT-SERVERS.NET service. ISC will operate the DNS servers in such a way that all queries received are answered, subject only to normal security filtering such as ingress rate limiting, RFC1918 filtering, and other practices which are common for ISC's other F.ROOT-SERVERS.NET instances. Out of region DNS query traffic will also be answered, in the event of distant server failures or other anomalies.

7. LACNIC will endeavour, in its recommendation of locations for these new servers, to reach the largest possible ISP community in each region, including diverse IP transit.
providers, and neutral IP/BGP internet exchanges. Every effort will be made to see root DNS queries answered for as many local network operators as possible.

8. ISC will as far as possible include LACNIC's interests when setting or defending technical policies in the DNS root server community. This includes the provision of open, continuous, wide scale, high availability root name service based on unmodified root zone data as published by IANA.

9. In the event that LACNIC some day receives its own DNS root name service identifier (for example, N.ROOT-SERVERS.NET), ISC agrees to help LACNIC create and operate such a service, including renaming/renumbering the F.ROOT-SERVERS.NET infrastructure at some or all locations governed by this agreement.

10. In no event shall ISC's BGP autonomous system, or IP address space, or the F.ROOT-SERVERS.NET host name, be operated other than directly by ISC employees and contractors. No service identifier used by ISC in the provision of root name service is to be conveyed by this agreement. In the event of termination by either party, these service identifiers will immediately cease to be used in all LACNIC-supported ISC Root Server Locations, in order to transfer that region's root server traffic load to ISC's other, non-LACNIC locations.

This agreement signed on 1st day of April, 2004

By

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Raul Echeberria,
CEO
LACNIC

and

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Paul Vixie,
Chairman
ISC
Represented by Joao Damas
Attachment A

to
Memorandum of Understanding
between

LACNIC  (the Latin America & Caribbean Network Information Centre, referred to here as "LACNIC")

and

Internet Systems Consortium, Inc. (referred to here as "ISC")

A "Location Fee" will be paid for each LACNIC-supported ISC Root Server Location covered by this agreement, comprising an establishment fee of USD 7,000 paid up-front, and an ongoing management fee to be paid up-front as described below:

For the first 3 locations an ongoing management fee of USD 7,000 per location per year

For the fourth and fifth locations an ongoing management fee of USD 6,500 per location per year

For any additional locations and ongoing management fee of USD 6,000 per location per year

For each location, the duration of this fee agreement will be two years, after the end of the fee agreement, LACNIC shall not be obliged to pay any more fees to ISC and, each local host will be able to enter a direct relation with ISC under conditions to be defined at that time.

This attachment signed on 1st day of April, 2004

By

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Raul Echeberria,
CEO
LACNIC

and

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Paul Vixie,
Chairman
ISC
Represented by Joao Damas
Attachment B
To Memorandum of Understanding between

LACNIC (the Latin America & Caribbean Network Information Centre, referred to here as "LACNIC")

and

Internet Systems Consortium, Inc. (referred to here as "ISC")

1. Anycast mirrors of F root server installed under this agreement will be the result of cooperation between LACNIC, ISC and a location-specific local host.

2. LACNIC will put forward recommendations for local hosts in LACNIC’s region and ISC will undertake the technical evaluation of the local host regarding technical specifications of the installation location such as controlled environment, access security, network access to the local ISP community via direct peering and general operational capabilities (24x7 remote hands, etc). The result of the evaluation will be communicated to LACNIC and the local host and it will be the sole responsibility of ISC. It is expected that this evaluation can be carried remotely via dialogue with the local host and not require a site visit.

3. Equipment used in each anycast mirror will be provided by LACNIC, by LACNIC in conjunction with the corresponding local host or entirely by the local host. Property of the equipment will remain with LACNIC and/or the local host at all times and will be dedicated to the sole purpose of operation of the anycast mirror for the duration of this agreement. All equipment shall be under the sole administrative control of ISC during its use for provision of F.ROOT-SERVERS.NET service.

This attachment signed on 1st day of April, 2004

By

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Raul Echeberria,
CEO
LACNIC

and

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Paul Vixie,
Chairman
ISC
Represented by Joao Damas