



Memorandum of Understanding Regarding Installation of i.root-servers.net

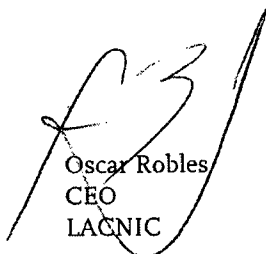
1. the Latin American and Caribbean Internet Addresses Registry ("LACNIC") and Netnod AB ("Netnod") agree to jointly pursue the installation and operation of multiple new root name servers in the LACNIC service region. Locations are to be chosen by LACNIC with Netnod having veto power on political or technical grounds. We will refer to locations of successful installations as "LACNIC-supported Netnod Root Server Locations".
2. Netnod servers at each Location will answer as i.root-servers.net using wide area "anycast" of the i.root-servers.net prefix. No new root service identities (e.g., z.root-servers.net) are to be created by this agreement.
3. All Netnod-specific equipment including routers providing BGP service, name servers providing DNS service, and monitoring and control equipment such as console servers and network management stations, shall be procured by Netnod and be under the sole ownership and administrative control of Netnod.
4. Each Location must have an identified party acting as a Location Host. The Location Host must be prepared to enter into a written agreement with Netnod that specifies the responsibilities of each party (Location Host, LACNIC and Netnod). A template agreement is attached to this MOU as an appendix.
5. Under this agreement LACNIC and Netnod will decide on the exact cost sharing details on a per Location basis. Costs to be covered include all network connectivity, rack space and power as specified by the operational requirements jointly determined by LACNIC and Netnod.
6. Under this agreement Netnod will cover, at its own expense, all operational costs, including NOC staff, monitoring and operations infrastructure, statistics and analysis, parts replacement, etc.

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7. As a cost recovering mechanism Netnod relies on providing anycast services, similar in nature to the `i.root-servers.net` service, on commercial terms, for other DNS zones, from all the anycast sites. This is of benefit to the Internet community around the Location in the same way that the `i.root-servers.net` service is.
8. Netnod uses a so-called open peering policy with the intent of providing the best possible service to each and every local network that wants to peer with us. Netnod 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 Netnod's other `i.root-servers.net` instances. Out of region DNS query traffic will also be answered, in the event of distant server failures or other anomalies.
9. While Netnod has every intention of providing the best possible service, Netnod does reserve the right to at any time take a site offline without prior notice for security reasons, technical maintenance or operational reasons. Because the provided service is anycast based this will not cause any problems.
10. LACNIC will endeavour, in its choice 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 DNS queries answered for as many local network operators as possible.
11. The Location Host at each Location will endeavour to reach the largest possible ISP community at the Location, including diverse IP transit providers. Every effort will be made to see DNS queries answered for as many local network operators as possible.
12. In no event shall Netnod's BGP autonomous system, or IP address space, or the `i.root-servers.net` host name, be operated other than directly by Netnod employees and contractors. No service identifier used by Netnod in the provision of root name service is to be conveyed by this agreement.
13. The Parties hereby acknowledge and agree that this MOU is nonbinding and does not create any obligations under law.

This agreement signed on 29 day of July, 2015 by


Oscar Robles
CEO
LACNIC

and


Kurt Erik Lindqvist
CEO
Netnod





**Memorandum of Understanding
Regarding Installation of
i.root-servers.net**

Between

Netnod Internet Exchange i Sverige AB

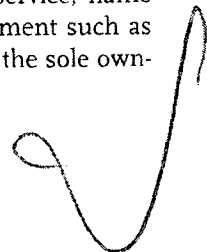
and

LACNIC

.....
("Location Host")

I Background

1. The the Latin American and Caribbean Internet Addresses Registry ("LACNIC") and Netnod AB ("Netnod") has agreed to cooperate regarding the installation and operation of multiple new root name servers in the LACNIC service region. Locations, which Netnod chooses, are referred to as "LACNIC-supported Netnod Root Server Locations".
2. Location Host is the Host of such a LACNIC-supported Netnod Root Server Location. Netnod and Location Host are together referred to as the "Parties".
3. Netnod servers hosted at Location Host will answer as i.root-servers.net using wide area "anycast" of the i.root-servers.net prefix. No new root service identities (e.g., z.root-servers.net) are to be created.
4. All Netnod-specific equipment including routers providing BGP service, name servers providing DNS service, and monitoring and control equipment such as console servers and network management stations, shall be under the sole ownership and administrative control of Netnod.



5. Under the agreement between LACNIC and Netnod the exact procurement, cost sharing and support details will be decided on a per Location basis. Costs to be covered include all network connectivity, rack space and power as specified by the operational requirements jointly determined by LACNIC and Netnod. The procurement process must lead to a state that fulfills (1.4). Support details include local physical support of the hardware including procurement and replacement of physical parts required for functionality with timely response.
6. Netnod will cover, at its own expense, all operational costs, including NOC staff, monitoring and operations infrastructure, statistics and analysis, etc.
7. As a cost recovering mechanism Netnod relies on providing anycast services, similar in nature to the i.root-servers.net service, on commercial terms, for other DNS zones, from all the anycast sites. This is of benefit to the Internet community around the Location in the same way that the i.root-servers.net service is.

2 Contact and Contact Information

1. Netnod and Location Host are obligated to at all time keep the other Party updated on its contact information as stated below for the purpose of this Memorandum of Understanding.
2. The Parties shall at all times respond in a professional manner to contacts from the other Party.

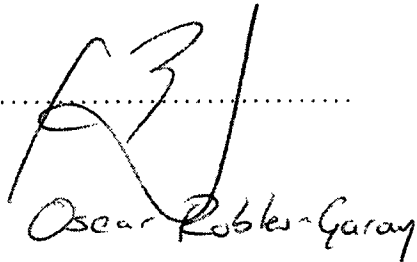
3 Termination of Anycast Services from Location

1. Netnod may at any time, regardless of reason, terminate its anycast services provided at the Location Host premises. Netnod have the right to, upon agreement with the Location Host recollect any servers and other hardware belonging to Netnod.

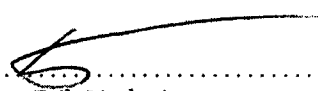
4 Miscellaneous

1. The Parties hereby acknowledge and agree that this MOU is nonbinding and does not create any obligations under law.

This agreement signed on 29 day of July, 2015 by


Oscar Robles-Garay

and


Kurt Erik Lindqvist
CEO
Netnod

