Activity and Incident Report for the ICANN Managed Root Server

Prepared by ICANN's Security and Network Engineering Department

For the Reporting Period of 2025-1-01 - 2025-1-31

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1 Executive Summary

This monthly report provides operational and statistical information on the ICANN Managed Root Server (IMRS), known within the Domain Name System (DNS) as L.ROOT-SERVERS.NET.

IMRS is a collection of servers and associated hardware with global presence managed, controlled and supervised by ICANN that provide information about the Root Zone, which is the apex of a hierarchical distributed database for the Domain Name System (DNS).

More information on the Root Server System and its organizations can be found at https://root-servers.org. and about IMRS at https://dns.icann.org/imrs

A deeper understanding of the statistics in this document can be gained by accessing the IMRS Statistics dashboard at https://stats.dns.icann.org.

For this reporting period:

- There were no outstanding issues related to security or unplanned downtime.
- There were no observed anomalies in DNS Traffic to the IMRS



2 Performance Indicators

2.1 DNS Queries for this Period

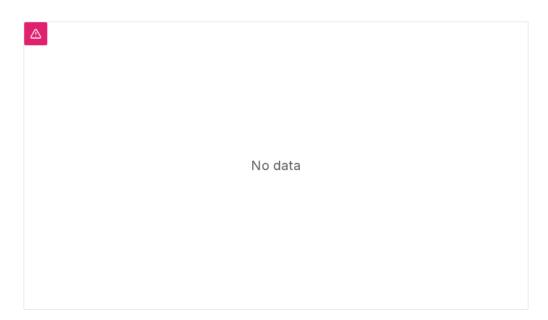


Figure 1: Number of daily DNS queries for this period



Figure 2: Total DNS queries distribution



2.2 DNS Query Distribution Trends

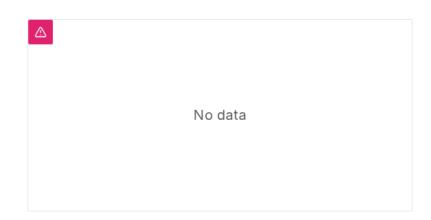


Figure 3: Query origins per ICANN Region

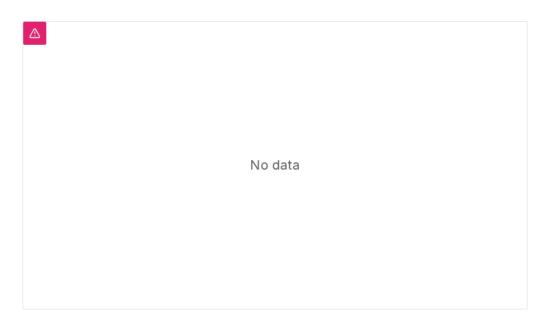


Figure 4: Query distribution percentage per ICANN region



3 Operational Indicators

3.1 Security Incidents related to IMRS

• During this period, no security incidents were reported, recorded nor published

For transparency, ICANN publishes a log of Information Security events at https://www.icann.org/cybersecurityincidentlog

3.2 Non-scheduled downtime events

• During this period, no irregular or unplanned downtime was observed



4 Size and location of the IMRS

4.1 Number of Instances

- 21 instance(s) were added in this period : Mahe (SC), San Miguel de Tucuman (AR), Geneva (CH), Chisinau (MD), San Salvador (SV), Mohali (IN), Harare (ZW), Islamabad-Rawalpindi (PK), CIUDAD DEL ESTE (PY), Dakar (SN), Guwahati (IN), Maseru (LS), Moroni (KM), Brazzaville (CG), Sana'a (YE), Carire (BR), Portland (US), Ranchi (IN), Ramallah (PS), Bekasi (ID), and Bangalore (IN)
- 0 instance(s) were retired in this period
- 240 instances are located in 70 countries at the end of this period

4.2 Number of IMRS Cluster Instances

A "Cluster" is an IMRS instance consisting of a set of servers and associated hardware providing the IMRS service at a single location which is designed to serve a larger DNS query load, community, or specific region.

An IMRS Cluster is completely managed, controlled and supervised by ICANN.

At the moment of writing this report, there are six (6) ICANN Cluster Instances located in:

- El Segundo, CA (US)
- Prague (CZ)
- Reston, VA (US)
- Singapore (SG)
- Nairobi (KE)
- Cairo (EG)

4.3 Number of countries that have at least one instance presence by ICANN region

- Africa (9)
- AsiaPacific (27)
- Europe (18)



- LatinAmericaCaribbean (12)
- NorthAmerica (4)



4.4 Location for IMRS Instances by city

Abidjan (CI) Alexandria (AU) Almaty (KZ) Amman (JO) Anchorage (US) Ancona (IT) Arlington County (US) Asuncion (PY) Atlanta (US) Baku (AZ) Bangkok (TH) Beijing (CN) Beirut (LB) Belem (BR) Belo Horizonte (BR) Blantyre (MW) Bogota (CO) Brasilia (BR) Bratislava (SK) Brisbane (AU) Brussels (BE) Cacador (BR) Cairo (EG) Callao (PE) Campinas (BR) Cape Town (ZA) Carolina (PR) Changsha City (CN) Chicago (US) Christchurch (NZ)

Cochabamba (BO) Colombo (LK) Curitiba (BR) Dammam (SA) Dar es Salaam (TZ) Dubai (AE) El Prat de Llobregat (ES) Erbil (IQ) Ezeiza (AR) Florianopolis (BR) Fortaleza (BR) Hagatna (GU) Haikou (CN) Hamburg (DE) Helsinki-Vantaa (FI) Heraklion (GR) Honiara (SB) Honolulu (US) Incheon (KR) Jaipur (IN) Johannesburg (ZA) Kalamazoo-Battle Creek (US) Kiev (UA) Kolonia (FM) Koror (PW) Kunming City (CN) Kuwait City (KW) Latina (IT) Lawrence (US)

Leeds-Bradford (GB) Londrina (BR) Longwood (US) Los Angeles (US) Madrid (ES) Majuro (MH) Mandalay (MM) Mangere (NZ) Mascot (AU) Melbourne (AU) Minsk (BY) Monterrey (MX) Montevideo (UY) Moscow (RU) Mumbai (IN) Nadi (FJ) Nairobi (KE) Natal (BR) New Taipei (TW) Noumea (NC) Odessa (UA) Otopeni (RO) Ouagadougou (BF) Papeete (PF) Paris (FR) Perth (AU) Plaisance (MU) Port Moresby (PG) Porto Alegre (BR) Prague (CZ)



Punta Caucedo (DO)	San Jose (US)	Tampere (FI)
Quito (EC)	San Juan (PR)	Toronto (CA)
Rabat (MA)	Santiago (CL)	Uberlandia (BR)
Rarotonga (CK)	Sao Paulo (BR)	Vancouver (CA)
Reno (US)	Seeb (OM)	Wilmington (US)
Reston (US)	Semey (KZ)	Winnipeg (CA)
Rio de Janeiro (BR)	Shanghai (CN)	Wuhan (CN)
Rostov-on-Don (RU)	Singapore (SG)	Xining (CN)
Saint Petersburg (RU)	Sofia (BG)	Yangon (MM)
Salvador (BR)	Stockholm (SE)	Yogyakarta (ID)
San Jose (CR)	Suva (FJ)	Zhengzhou (CN)

Detailed information on IMRS locations can be found at https://www.dns.icann.org/ imrs/locations/